SOMERSET MIDDLE SCHOOL

Preliminary Design Report
December 20, 2019

Ai3 Architects, LLC 526 Boston Post Road Wayland, MA 01778



Somerset Public School District

Jeffrey Schoonover, Superintendent 580 Whetstone Hill Road Somerset, MA 02726

SOMERSET MIDDLE SCHOOL

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Preliminary Design Report



Pride & Respect

Acknowledgements

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Report Prepared for

Somerset School Department 580 Whetstone Hill Road Somerset, MA 02726 December 20, 2019



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Project Summary

Somerset History

Somerset was first settled in 1677 on the Shawomet lands, and was officially incorporated in 1790. It was named for Somerset Square in Boston, which was in turn named for the county of Somerset in England. It was once a vital shipping point, and after the War of 1812 it was one of America's chief distribution points. In 1872 it became the site of a major coal port, and in the early 20th Century a large cannery existed in the town. However, as neighboring Fall River's industry grew, it absorbed much of Somerset's, and the town took on more of a suburban character. In fact, the town's population grew during the Great Depression, as many people from Fall River and other localities moved to the suburb.

The Town of Somerset occupies a total area of 12.0 square miles - 8.1 square miles is land and 3.9 square miles is water (Taunton River) - and its current population is approximately 18,150 people. Somerset is bordered by Swansea on the west,

Dighton on the north, Fall River on the east (across the Taunton River), and Bristol, Rhode Island, to the south. The border with Bristol is located in the middle of the bay. Cities close to Somerset include Fall River, New Bedford, and Providence, Rhode Island, and the town is one hour's drive south of Boston.







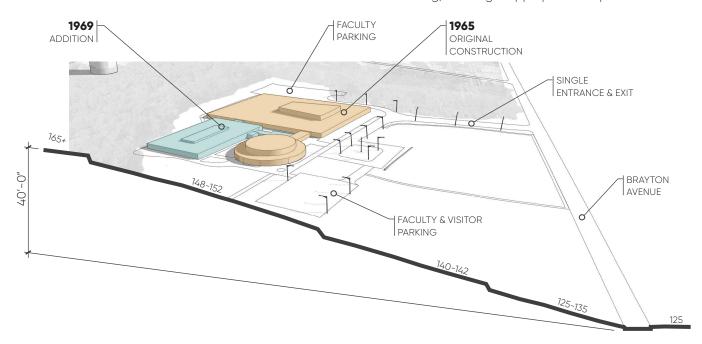
Module 3 - Preliminary Design Program

The existing Somerset Middle School, located on 1141 Brayton Avenue, was originally constructed in 1960, with an addition constructed in 1969. The school is centrally located within the Town of Somerset. The school is located in a densely populated residential neighborhood on a 25.21-Acre site and provides approximately 124,900 gross square feet of building space.

The school is accessible via one two-way driveway from Brayton Avenue and has frontage on Read Street. The site is furnished with two paved parking areas, paved driveways, pedestrian access from Brayton Avenue and Read Street, multiple grassed athletic fields, and landscaping surrounding the building incorporating concrete sidewalk access to Brayton and Read Streets.

The school site is bounded by the Montaup Electric Company power lines and Jeffrey Street to the north, Brayton Avenue to the east, Correia & Sons Market, South Elementary School, and Read Street to the south, and Hot and Cold Lane to the

The existing 1965 and 1969 building structure is constructed of lightweight steel, concrete masonry unit (CMU) walls, and brick masonry exterior veneer, without insulation. Other than the necessary alterations to address immediate building facility deficiencies due to evolving building deterioration, heating and cooling issues, sub-dividing open-classroom areas, etc., the building has not been substantially renovated, altered, expanded, or improved since its original construction. A brick repair project occurred in 1997. One of the original four boilers was replaced in 1999. Classroom HVAC system includes outdated, inefficient, and noisy unit ventilators located along the exterior wall, thereby creating acoustical and temperature fluctuation issues. The electrical service is undersized, original to the building, and in poor condition. The emergency power system is also original to the building and does not meet current codes. Classroom lighting is outdated and inefficient by today's standards. Significant amounts of asbestos-containing building materials remain within the building, although appropriate steps have been taken to



west. The other nearby uses are characterized by single-family housing and some religious institutions.

The topography of the site generally pitches gradually downgradient from the west to the east. The highest elevations on site appear to be at the west portion of the property at an approximate elevation of 163ft. The lowest elevation appears to be along the eastern property line along Brayton Avenue at elevation 123ft. There are a few moderately steep slopes throughout the site. The most significant grade change occurs to the east of the core academic building, adjacent to the wooded area of the site. There are also slopes within the site that define playfield areas and slopes between the original 1965 building and 1969 addition, requiring interior ramps and stairs (non-compliant).

contain any potential exposure. Many non-traditional spaces such as storage spaces and basement areas are utilized for maintenance staff and instructional spaces. Adequate meeting space for faculty, staff, and parents is non-existent.

Perhaps most importantly, the building is NOT designed and organized to support a modern 21st Century comprehensive middle school educational program, as further defined and detailed herein.

Although none of these features prohibit the renovation of the building, they do require a careful analysis to determine if any proposed re-use of the existing building is physically viable, financially feasible, and/or educationally appropriate.

6-8 vs. 5-8 Grade Configuration

Somerset Middle School was originally designed as a middle school for students in grades 5-8. It operated that way for 25 years until 1989, when two aging elementary schools were closed, one of the two middle schools became an elementary school, and fifth grade students were transitioned back to elementary. When this occurred, five elementary schools were ultimately reduced to four. In 2014, the oldest elementary school was closed, resulting in the further consolidation of four elementary schools to three. Since then, the elementary schools have been at or near their enrollment capacities, providing no room for growth and expansion. The MSBA and the Town of Somerset have agreed to study a grade 6-8 middle school configuration with an enrollment of 590 students and a grade 5-8 middle school configuration with an enrollment of 770 students.

The professional team and district administration conducted an initial capacity review of the existing three elementary school buildings (Chace, South, and North). The analysis considered the current student enrollment, and quantity of core classrooms and specialized spaces as compared with the MSBA recommended elementary school space guidelines. The preliminary conclusion is that all three schools are currently either at capacity or overcrowded and do not provide the District with the appropriate space for specialized programs, testing, and evaluation spaces – with grade five included in the elementary schools.

During the next phase of the middle school feasibility study process, the District will continue to explore the question of grade configuration and will conduct additional research, investigation, and vetted by the Town and the School Department. The Somerset K-8 School Committee has authorized the Superintendent of Schools to form a grade configuration advisory sub-committee to further investigate both the 6-8 and 5-8 grade configuration at the middle school level. A broad range of research and investigation will be completed including, for example, activities such as facility tours, staff questionnaires, educational best practices, adolescent developmental research, future enrollments, and facility capacity, among others. This research and investigation will be shared and debated among all interested parties. Multiple public presentations and discussions will take place, including School Building Committee meetings, community informational meetings, and School Committee meetings. The School Committee will ultimately take a vote during the next feasibility study phase in support of either a 6-8 grade configuration or a 5-8 grade configuration. The Town and the School Department's primary goal is to identify a grade configuration that will provide expanded educational opportunities to the greatest number of students while simultaneously resolving multiple other challenges across the District.

North	K - 5th Grade
461 w/o Pre-K	Current Enrollment
22	MSBA Recommended Quantity of General Classrooms
21*	Current Quantity of General Classrooms
20-22 Average	District Classroom Policy
South	K - 5th Grade
268	Current Enrollment
13	MSBA Recommended Quantity of General Classrooms
12	Current Quantity of General Classrooms
20-22 Average	District Classroom Policy
Chace	K - 5th Grade
363	Current Enrollment
18	MSBA Recommended Quantity of General Classrooms
17	Current Quantity of General Classrooms
20-22 Average	District Classroom Policy

Statement of Interset Summary (SOI)

On March 27, 2017, on behalf of the School Committee, former Director of Business and Finance, Lindsey Albernaz, submitted a Statement of Interest (SOI) to the Massachusetts School Building Authority (MSBA) for the Somerset Middle School. Please refer to Appendix A for a complete copy of the Statement of Interest. At the October 31, 2017 Board of Directors meeting, the MSBA Board voted to issue an invitation to Somerset to

enter into the Eligibility Period. Subsequently, at the October 31, 2018 Board of Directors meeting, the MSBA Board voted to issue an invitation to Somerset to conduct a Feasibility Study for Somerset Middle School and to identify and study possible solutions and, through a collaborative process with the MSBA, to reach a mutually-agreed-upon solution. Please refer to Appendix B for the Feasibility Study agreement between the MSBA and the Town of Somerset.

The SOI identified the following priorities which the Town of Somerset would like to address in the Feasibility Study:

 Replacement, renovation, or modernization of school facility systems such as roof, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.

The SOI identifies crucial Programs and Operations that cannot be implemented due to the facility constraints and issues. For example:

- Inability to regulate temperature fluctuations due to inefficient window systems and older ventilation system results in lower student and teacher attendance due to lower air quality throughout the building during parts of the school year.
- 2. The electrical system has hindered the ability to maximize the use of technology within the classroom setting. Many extension cords are required to run power between classrooms, and the outlets in the floor of the 1969 wing (6th grade area) have a history of sparking. The electrical conduit pipes running under the boiler room are rotting, which causes shortages in electricity and power failures throughout the building.
- Woodworking shop for the industrial arts courses are not utilized to capacity due to lighting and soundproofing issues.
- 4. Lecture hall is not utilized due to lighting and soundproofing issues.
- Areas are not ADA accessible and, given its 1960s construction, does not comply with current guidelines.
- The school is unable to add special education programs due to the inability to expand or modify existing areas. The DESE will not certify needed programs due to these deficiencies.

Science labs are very limited. The science labs are original, without renovation to any of the existing finishes (ceiling, wall, floor, etc.) and building services (gas, water, electrical). Although some of the science classrooms have been minimally

retrofitted with technology (although currently outdated) since the original construction, the lack of coverage, proper wiring, internet capacity, and current technology (needed to provide coursework in the STEM and engineering emerging areas) handicaps potential programming for students. Future science labs should be designed to meet the guidelines of mandated state requirements and include the appropriate amenities.

The building's closed-circuit television system (CCTV) is limited, outdated, and has been marginally operating with the majority of the cameras being six to eight years old. The intrusion detection system is inoperative. In 2018 the District installed a new video entry system and secure glass entry vestibule with multiple layers of screening and badging prior to a visitor's entry into the school, thereby enhancing the security of the building and environment for the school community.

The SOI identified the building's core academic spaces (i.e. general educational classrooms) as being organized by department (ELA, Math, Science, Social Studies, etc.). The classrooms vary considerably in size, averaging from between 650 to 1,100 square feet. The 1969 building design contained "open classroom" spaces in a wing configuration, which have since been sub-divided into individual classroom spaces with the use of storage cabinets and furniture. The current organization creates various "spaces" that are not conducive to student learning. Future classrooms will require interactive white boards, sound reinforcement, and wireless access for teacher and student devices.

The media center contains traditional open study, reading, and library spaces. The media space has significant temperature fluctuation and humidity issues, despite the District's several attempts to remediate the condition.

The SOI very clearly details the numerous building issues and limitations that the District has been challenged with for many years. These deficiencies and limitations have had significantly negative impacts on the educational environment.

The SOI indicates that the Town understands the need to study all possible options for resolving these deficiencies, but also correctly points out that there may be benefits associated with a proposed solution that renovates a portion of the existing middle school building. Please refer to **Appendix A** for the complete copy of the SOI the Town of Somerset Submitted to the MSBA on March 9, 2017.



Town-Wide Economic Master Plan

In the Fall of 2018, the Town of Somerset and their consultant (VHB) commenced work on a Comprehensive Master Plan for the Town. It is anticipated that the master planning process will conclude in the beginning of 2020. The middle school project design team and Owner's Project Manager met with the middle school project working group, District Administration, and Town Planner to review the status of the master plan and brainstorm how a proposed middle school project could integrate into the master plan's short-term and long-term goals and objectives. As a result of the meetings, the following list was generated:

Land Use and Development

 Maintain the existing Middle School site Historic Land Use designation as "Urban Open/Institutional/ Recreation" and Town-Owned Land for the development and location of the new Middle School project.

Natural, Cultural, and Historic Resources

- Maintain and improve onsite wooded areas and wetlands, topography, and introduction of native vegetation.
- Green Stormwater Infrastructure: bioswales, rain gardens, and bioretention
- Habitat Creation

Open Space & Recreation

- Playfields, fitness nodes (Bocce Ball Shuffleboard)
- Outdoor Learning Classrooms

Community Facility (Middle School Building)

- Auditorium
- · Library Media Center
- · Gymnasium / Fitness Center

Transportation & Circulation

- · Vehicular Transportation
 - Improvement of onsite vehicular/bus movement and circulation during dropoff and pick-up, resulting in a residual improvement of traffic flow along Brayton Avenue
- Walking Mobility
 - Continue sidewalks along project side of Brayton Avenue
 - On-site walking and fitness trails and pathways
 - Sidewalk Connections to Read Street

- Bicycle Mobility (Connection to bike paths and bike lanes)
 - East/West: Connection via Read Street to South Coast Bikeway (50-mile bike path connecting Cape Cod - RI)
 - North/South: Connection into Swansea via Brayton Avenue
 - "Off-road" Bike trails via existing utility easement to SBRHS (outside of project boundaries)
 - Bicycle parking on site
- Safe Routes to School Concepts



Sustainability and Climate Change

- USGBC Leadership in Energy and Environmental Design (LEEDv4.1) Certification
- On-site Renewable Energy: Photovoltaics
- Utility Company Rebates (NGRID)
- Green Communities Compliance (in anticipation of the Town's designation as a "Green Community" by DOER)
- Community Gardens
 - Area onsite designated for community and student gardens
- · Waste Management & Recycling
 - Compliance with the Town adoption of a mandatory Recycling By-law (Single-stream recycling program)

Feasibility Study Goals

The specific goals of this study include a review and investigation of the problems and challenges identified in the SOI, including exploration of the facility deficiencies and the development of the desired educational program. The strategic goals of the Somerset Public Schools and the educational program should be analyzed in conjunction with existing and available resources to determine which options should be further studied as potential long-term solutions for the District.

In order to formulate a plan to address the Town of Somerset's needs, Ai3 Architects, LLC proceeded with the following process and tasks:

- Document potential opportunities to integrate the middle school project into the Town-wide Economic Master Plan.
- Document detailing existing conditions at the Somerset Middle School building.
- Conduct a series of Educational Visioning sessions which included our educational consultant, David Stephen of New Vista Design.
- Document available capacity versus enrollment at existing elementary school buildings across grade levels pre-kindergarten through grade 5.
- · Summarize educational and facility challenges.
- Assist the Owner with the development of an educational program that describes grade and school configuration policies, class size policies, the use of grade level "teams", school policies, lunch programs, technology instruction policies and programs, creative arts, music and performing arts,

physical education, special education, transportation policies, functional and spatial relationships and adjacencies, security and visual access requirements, all while ensuring that the educational program is fully incorporated into the process.

- Conduct an initial space summary for each option, including both 6-8 and 5-8 grade level configurations to determine the space necessary to deliver the planned educational program.
- Generate options for resolving educational, site, and facility challenges.
- Develop costs for each of the options.
- Evaluate options based on their proposed cost versus their value in resolving District-wide educational and facility deficiencies.

The MSBA Board of Directors invited Somerset to begin a Feasibility Study for the Somerset Middle School on December 19, 2018. The Feasibility Study is one step in the MSBA's grant program process for school building construction and renovation projects. Please refer to **Appendix B** for the complete copy of the Massachusetts School Building Authority Feasibility Study Agreement that outlines the requirements of this phase of the process.

Enrollment Projections

On September 21, 2018, the Massachusetts School Building Authority issued the Somerset Middle School Design Enrollment Certification Letter to Town Administrator, Richard Brown. The Town of Somerset and the Massachusetts School Building Authority have agreed to review the following student enrollments and grade configurations for the potential project:

- 590 students in grades 6-8 configuration
- 770 students in grades 5-8 configuration

Please refer to **Appendix D** for a signed copy of the Design Enrollment Certification.

Board of Selectmen, School Building Committee, and School Committee

The Town of Somerset has a Board of Selectmen consisting of three members.

A School Building Committee was established, per the requirements of MSBA, on June 21, 2018. It is a 16-member body with representatives from the Town of Somerset's administration including the Town Manager, the School District, and private citizens with various areas of expertise including, but not limited to: engineering, architecture, interior design, education, and construction.

The School Committee consists of five members.



Somerset Public Schools

he Somerset Public Schools is a PreK-8 district with approximately 1,800 students in four schools – Chace Elementary School, North Elementary School, South Elementary School, and Somerset Middle School. Somerset-Berkley Regional High School enrolls approximately 1,000 students in grades 9-12. Somerset Public Schools Central Offices are located at North Elementary School.



Somerset-Berkley Regional High School

Grades 9-12, 1027 students 222,826 square feet Constructed 2014

North Elementary School

Grades PreK-5, 499 students 137,300 square feet Constructed 1973; Renovated 1988

Somerset Middle School

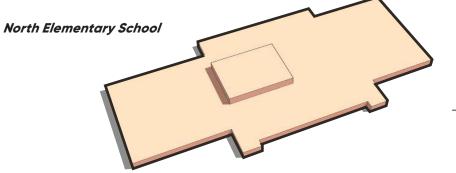
Grades 6-8, 651 students 124,900 square feet Constructed 1965; Addition constructed 1969

South Elementary School

Grades K-5, 268 students 29,900 square feet Constructed 1952; Renovated 1957

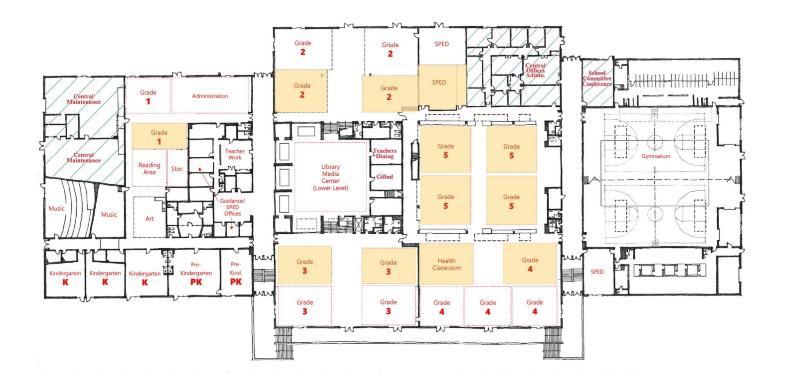
Chace Elementary School

Grades K-5, 363 students 53,800 square feet Constructed 1961; Renovated 1967 The following are floor plans of the elementary schools that are currently in use in Somerset.

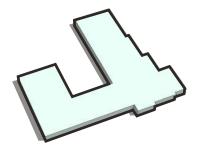


- 4.5 Pre-K Classes
 - Kindergarten Classes 2
 - 3 Grade 1 Classes
 - 4 Grade 2 Classes
 - 4 Grade 3 Classes
 - 4 Grade 4 Classes
 - Grade 5 Classes
- *21 Total General Classrooms

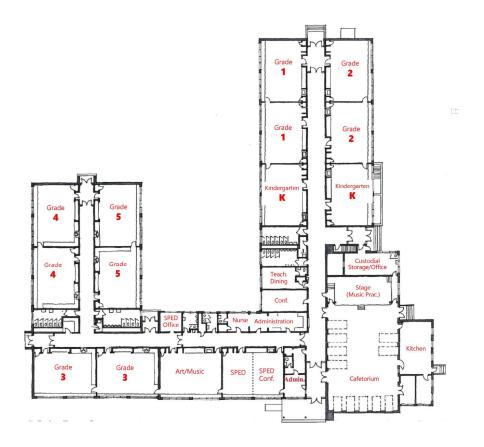
*11 Interior classrooms WITHOUT natural daylighting or views to the outside.



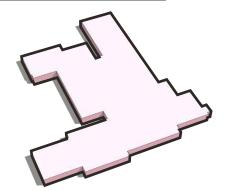
South Elementary School



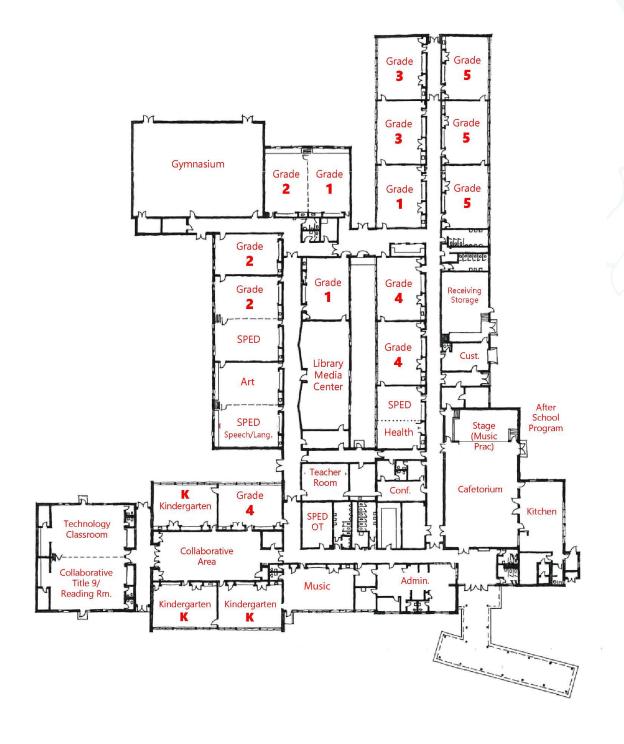
- Kindergarten Classes
- 2 Grade 1 Classes
- 2 Grade 2 Classes
- 2 Grade 3 Classes
- 2 Grade 4 Classes
- 2 Grade 5 Classes
- 12 Total General Classrooms



Chace Elementary School



- 3 Kindergarten Classes
- 3 Grade 1 Classes
- 3 Grade 2 Classes
- 2 Grade 3 Classes
- 3 Grade 4 Classes
- 3 Grade 5 Classes
- 17 Total General Classrooms



Capital Budget Statement

Based on early budgeting, the projected cost for the new Somerset Middle School could be on the order of \$85 million (6-8 middle school with 590 Students) and \$100 million (5-8 middle school with 770 students) exclusive of MSBA reimbursement. The Town of Somerset maintains a healthy balance sheet and its current debt load is well within the recommended level. Currently, the Town has a Moody's Investors Service rating of Aa2. Financing for this project will be based upon a successful debt exclusion override. The Town of Somerset is confident that it can acquire bonded financing in excess of \$100 million when it is approved by the citizens of Somerset in the Fall of 2020. The Town is not currently engaged in any other project at this time, but projects that the Town anticipates in the future include water and water pollution improvements in the order of \$100-\$130 million.



Feasibility Study Budget

EXHIBIT A

FEASIBILITY STUDY BUDGET

Town of Somerset Somerset Middle School

The total Budget for the Feasibility Study conducted pursuant to this Agreement, which is attached hereto and incorporated by reference herein, shall be no more than \$800,000 based upon the following estimates:

Owner's Project Manager: \$150,000 \$475,000 Designer: \$135,000 Environmental and Site Testing: \$40,000 Other:



Project Directory

TOWN OF SOMERSET

Somerset Town Hall

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Somerset, MA 02725

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Town of Somerset

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SCHOOL ADMINISTRATION

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Holly McNamara	Member	hmcnamara@town.somerset.ma.us	508-617-0539

SCHOOL BUILDING COMMITTEE

Town of Somerset

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Michael Botelho	Community Member	michael.botelho@somersetschools.org	508-951-2753
Non-Voting Members			
Richard M. Brown	Town Administrator	rbrown@town.somerset.ma.us	508-646-2800
Holly McNamara	Town Selectman	hmcnamara@town.somerset.ma.us	508-646-2800
			·

APPROVAL AUTHORITY MSBA

Massachusetts School Building Authority

40 Broad Street, Suite 500, Boston, MA 02109

Name	Title	Email	Phone
Christopher Alles	Senior Project Manager	chris.alles@massschoolbuildings.org	617-720-4466
Allison Jones	Senior Project Coordinator	allison.jones@massschoolbuildings.org	617-720-4466

ARCHITECT

Ai3 Architects, LLC

526 Boston Post Road, Wayland, MA 01778

Name	Title	Email	Phone
AP	Managing Partner/Principal	dunlap@ai3architects.com	(508) 358-0790
Troy Randall, AIA, LEED AP	Managing Partner/Principal/Designer	randall@ai3architects.com	(508) 358-0790
Jonathan Quell	Project Architect	quell@ai3architects.com	(508) 358-0790
John C. Jordan	Technology Designer & Security	john@ai3architects.com	(508) 358-0790
David Stephen, President	Educational Programming Consultant, New Vista Design	david@newvistadesign.net	(617) 733-0847
Arthur J. Eddy, Principal	Landscape Architect, Traverse Landscape Architects	aeddy@traversela.com	(401) 383-4950
Andrew J. Chagnon, P.E.	Vice President, Civil Engineering, Vertex	achagnon@vertexeng.com	(781) 952-6000
Amy J. Archer, P.E.	Senior Project Engineer, Traffic Consultant, Pare Corporation	aarcher@parecorp.com	(508) 543-1755
J. Matthew Bellisle, P.E.	Senior Vice President, Geotechnical Consultant, Pare Corporation		
Mehul Dhruv	Principal, Structural Engineering, Engineers Design Group, Inc.	mdhruv@edginc.com	(781) 396-9007
Wayne E. Mattson, P.E.	Principal, HVAC Engineering, Griffith & Vary, Inc.	wmattson@griffithandvary.com	(508) 295-0050
Wayne E. Mattson, P.E.	Department Manager, Fire Protection Engineering & Plumbing Engineering, Griffith & Vary, Inc.	wmattson@griffithandvary.com	(508) 295-0050
Robert C. Bravo	Principal, Electrical Engineering, Griffith & Vary, Inc.	rbravo@griffithandvary.com	(508) 295-0050
Madjid Lahlaf	Principal/Engineer, Geotechnical Consultant, Lahlaf Geotechnical Consulting, Inc.	madjid.lahlaf@lgcinc.net	(978) 330-5912
Ammar M. Dieb, President	Hazardous Materials, Universal Environmental Consultants	adieb@uec-env.com	(508) 628-5486
Peter Bradley, President	Cost Estimating, Project Management & Cost	peterbradley@pmc-ma.com	(781) 740-8007
John Sousa, Jr., President	Food Service Consultant, Crabtree McGrath Associates, Inc.	jsousa@crabtree-mcgrath.com	(987) 352-8500
Ioana Pieleanu	Acoustical Engineer, Consultant, Acentech, Inc.	ipieleanu@acentech.com	(617) 499-8000
Rockwood Edwards. P.E., Vice President	Code Consultants, Cosentini Associates, Inc.	redwards@cosentini-ma.com	(617) 494-9090
Robb Wilkinson	Specifications Consultant, Wil-Spec LLC	wilkinson@wil-spec.com	(781) 598-6789
Scott Stipetic	Systems Integrator/Theatrical Consultant, Barbizon Light of New England	stipetic@barbizon.com	(781) 935-3920
Magda Lelek	Sustainable/Green Design/Renewable Energy Consultant, A&L Engineering, Inc.	magda@andelmanlelek.com	(781) 769-8773
David Kessler	Principal, Code Consultant, Kessler McGuinness & Associates	dkessler@kmaccess.com	(617) 641-2802
Peter S. Constable	Principal-In-Charge, Point Line Space, Inc. (FF&E)	pconstable@point-line-space.com	

OWNER'S PROJECT MANAGER

CGA Project Management, LLC P.O. Box 3147, Fall River, MA 02722

508-617-8236

Name	Title	Email	Phone
Daniel Tavares AIA	Managing Partner/Project Director	dtavares@compassgrouparch.com	617-835-8528
Shannon Khoury	Assistant Project Manager	skhoury@compassgrouparch.com	508-989-3630
Marybeth Carney, PE	Assistant Project Manager	mcarney@compassgrouparch.com	508-284-2792
William Friar	Construction Project Representative	wfriar@compassgrouparch.com	508-989-0352



Project Schedule

he Project Schedule provided herein anticipates the MSBA Board of Directors' approval of the Preferred Schematic Report and authorization to proceed into Schematic Design at the June 24, 2020 MSBA Board Meeting, and the MSBA Board of Directors' approval of the Project Scope and Budget at their projected October 28, 2020 MSBA Board Meeting. The annual Town Meeting is planned for the month of November 2020. The ballot vote is planned for the month of December 2020.

Key delivery dates are as follows:

December 20, 2019	PDP Submission:
May 6, 2020	PSR Submission:
September 9, 2020	Schematic Design Submission:

The Project Team, District, and the Town have been working closely to ensure that sufficient time is being taken to review the data and options effectively and sufficiently. Throughout the process, the Project Team will notify the MSBA promptly if additional time is needed for any phase, and the Project Schedule will be modified as necessary.

The Preliminary Project Schedule provided herein indicates the timeframe for the various preliminary phases through Module 5: Funding the Project.

PROJECT SCHEDULE THROUGH MODULE 5

Somerset Middle School - Somerset MA

	Duration	i		2018 2019 2020
Activity Name	(Days)	Start Date	Finish Date	111212345678910112123456789101121234567891011212
MODULE 1: ELIGIBILITY PERIOD	266.00	12/13/17	12/19/18	
Board Authorization				
MSBA Board Vote: Invitation to Participate in Eligibility Period	00.00	12/13/17	12/13/17	•
Deferred Commencement of Eligibility Period	0.00	5/1/18	5/1/18	•
MSBA Board Vote: Invitation to Conduct Feasibility Study	00.00	10/31/18	10/31/18	•
Execution of Feasibility Study Agreement (FSA)	00.00	12/19/18	12/19/18	•
MODULE 2: FORMING THE PROJECT TEAM	149.00	12/19/18	7/15/19	ł
OPM Procurement				
Request for OPM Services Advertised	00.00	12/19/18	12/19/18	•
OPM Briefing Session	0.00	1/4/19	1/4/19	•
Request for OPM Services Due	00.00	1/11/19	1/11/19	•
Conduct OPM Interviews	0.00	1/23/19	1/23/19	•
Negotiate OPM Contract	7.00	1/28/19	2/5/19	
MSBA OPM Panel Review Meeting	0.00	3/4/19	3/4/19	•
OPM Approval by MSBA	0.00	3/5/19	3/5/19	•
Execute OPM Contract	00.0	3/11/19	3/11/19	•
Designer Selection	63.00	4/4/16	6/29/16	
MSBA Review/Approval of Designer RFS	14.00	3/26/19	4/12/19	•
SBC Approval of Designer RFS	0.00	4/22/19	4/22/19	•
Submit advertisement to Central Register/Newpaper	0.00	4/15/19	4/15/19	•
RFS for Designer Services Available	00.00	4/24/19	4/24/19	
Designer Briefing Session at 3:00PM (Non-Mandatory)	0.00	5/1/19	5/1/19	•
Deadline for RFS Questions (by 5:00PM)	00.00	5/17/19	5/17/19	•
RFS for Designer Services Submissions Due (by 10:00AM)	0.00	5/23/19	5/23/19	
Submit Designer RFS Responses to MSBA	00.00	5/30/19	5/30/19	•
DSP Review of Responses	10.00	5/30/19	6/12/19	
SMS Subcommittee Review Meeting #1	0.00	6/3/19	6/3/19	•
SMS Subcommittee Review Meeting #2	0.00	6/17/19	6/17/19	•
SMS Subcommittee Review Meeting #3	0.00	6/24/19	6/24/19	•

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PROJECT SCHEDULE THROUGH MODULE 5

Somerset Middle School - Somerset MA

Chayes Start Uales Frist		Duration	d	i	2018 2019	2020
Contract	Activity Name	(Days)	Start Date	Finish Date	1234567891011121234567891011121	3 4 5 6 7 8 91011121
ves/Select Architect 0.00 7/16/19	SBC Meeting to Discuss RFS Responses	00:00	6/24/19	6/24/19	•	
Auto-Native	Designer Selection Panel Application Review Meeting	00.0	6/18/19	6/18/19		
4.00 7/15/19	Designer Selection Panel Interviews/Select Architect	0.00	7/9/19	7/9/19		
Pagigner Contract 0.00 7/15/19	Negotiate Designer Contract	4.00	7/10/19	7/15/19		
133.00 7/15/19 1/17/19	SBC Meeting to Approve/Execute Designer Contract	0.00	7/15/19	7/15/19	•	
13.00 17.1519 17.500 17.1719	MODIII E 9. EEACIBII ITV STIIDV	00 870	7/15/10	00/100		
Tour with Owner/OPM/Designer 0.000 7/17/19 1/1	MODULE 3: FEASIBILITY STUDY	246.00	61/01//	0/24/20		
Tour with Owner/OPA/Designer 0.00 7/17/19 7/17	Preliminary Design Program	133.00	7/15/19	1/15/20		
Existing Conditions 77.00 71/71/9 10/31/19 10/31/19	Kick-Off Meeting & Building Tour with Owner/OPM/Designer	0.00	7/17/19	7/17/19	•	
Program Narrative 75.00 9/2/19 12/3/19 8/13/	Assessments/Evaluation of Existing Conditions	77.00	7/17/19	10/31/19		
Program Narrative 75.00 9/219 12/13/19 11/819 11/819 1	Educational Visioning Kick-Off Meeting	00.00	8/13/19	8/13/19	•	
# 8 Building Tour (6:00PM at SMS)	Development of Educational Program Narrative	75.00	9/2/19	12/13/19		
8. Building Tour (6:00PM at SMS) 0:00 9/27/19 9/27/19 9/27/19 9/27/19 0:00 1/1/12/19 11/12/1	Initial Educational Programming and Space Summary	45.00	9/9/19	11/8/19	1	
on #1 on #1 on #1 on #3 on #2 on #2 on #2 on #2 on #3 o	Community Public Forum #1 & Building Tour (6:00PM at SMS)	0.00	9/25/19	9/25/19	•	
nn #2 nn #3 no 00 11/12/19	Educational Visioning Session #1	00.00	9/27/19	9/27/19	•	
mon #2 0.00 11/5/19 10/18/19 10/18/19 11/5/19	Preliminary Evaluation of Alternatives	55.00	9/30/19	12/13/19		
on #3 Out of 11/5/19 11/5/19 11/12/19 11/	Educational Visioning Session #2	0.00	10/18/19	10/18/19	•	
Coopen at SMS O.00	Educational Visioning Session #3	0.00	11/5/19	11/5/19	•	
als - Vote to Approve PDP	School Committee Public Presentation (BOS in attendance)	0.00	11/12/19	11/12/19		
als - Vote to Approve PDP C and BOS Meeting) 0.00	Community Public Forum #2 (6:00PM at SMS)	0.00	11/13/19	11/13/19	•	
als - Vote to Approve PDP C and BOS Meeting) 0.00 12/20/19 12/20/19 Indar days) 0.00 12/20/19 12/20/19 Indar days) 10.00 12/20/19 11/2/20 Indar days) 10.00 12/20/19 11/2/20 Indar days) I	Final Selection of 2-3 Alternative Options	0.00	12/16/19	12/16/19	•	
indar days) 10.00 12/20/19 1/2/20 11.00 12/20/19 1/2/20 12.00/19 1/2/20 137.00 12/17/19 6/24/20 137.00 12/30/19 1/3/20 137.00 12/30/19 1/3/20 137.00 12/30/19 3/27/20 137.00 12/30/19 3/27/20 137.00 12/30/19 3/27/20 14.1212345678914111212345678914112123456789141121	Local Actions and Approvals - Vote to Approve PDP Submission (Joint SBC, SC and BOS Meeting)	0.00	12/16/19	12/16/19	•	
Index days) 14 calendar days) 15 calendar days) 16 calendar days) 17 calendar days) 18 calendar days) 19 calendar days) 19 calendar days) 19 calendar days) 19 calendar days) 10 calendar days) 10 calendar days) 11 calendar days) 12 calendar days) 13 calendar days) 14 calendar days) 15 calendar days) 16 calendar days) 17 calendar days) 17 calendar days) 18 calendar days) 18 calendar days) 19 calendar days) 10 calendar days) 10 calendar days) 11 calendar days) 12 calendar days) 12 calendar days) 13 calendar days) 14 calendar days) 15 calendar days) 16 calendar days) 17 calendar days)	Submit PDP to MSBA	00.0	12/20/19	12/20/19		
14 calendar days) 10.00 1/2/20 1/15/20 1/15/20 1/15/20 1/2/20	MSBA Staff Review (14 calendar days)	10.00	12/20/19	1/2/20		
s / Alternatives 137.00 12/17/19 6/24/20 18/	Address MSBA Comments (14 calendar days)	10.00	1/2/20	1/15/20		
5.00 12/30/19 1/3/20 65.00 12/30/19 3/27/20 65.00 12/30/19 3/27/20 11/21 2 3 4 5 6 7 8 910/11/21 2 3 4 5 6 7 8 910/11/21	Preferred Schematic Report	137.00	12/17/19	6/24/20		
65.00 12/23/19 3/20/20 65.00 12/33/19 3/27/20 11/31/234567891q11q11234567891q11q21	Final Evaluation of Options / Alternatives					
65.00 12/23/19 3/27/20 65.00 12/30/19 3/27/20 11/21 2 3 4 5 6 7 8 91011121 2 3 4 5 6 7 8 9101121	Sustainability and Energy Efficiency with Utility Companies	5.00	12/30/19	1/3/20		
65.00 12/30/19 3/27/20 11/121234567891q1121234567891q1121234567891q1121	Development of Alternative Site and Building Options	65.00	12/23/19	3/20/20		
2 3 4 5 6 7 8 9 1 0 1 1 2 1 2 3 4 5 6 7 8 9 1 0 1 1 2 1 2 3 4 5 6 7 8 9 1 0 1 1 2 1	Develop Proposed Building System Narratives	65.00	12/30/19	3/27/20		
					2 3 4 5 6 7 8 91011121 2 3 4 5 6 7	3 4 5 6 7 8 9101 112 1

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12/16/19

PROJECT SCHEDULE THROUGH MODULE 5

Somerset Middle School - Somerset MA

1 W - 77: 17 V	Duration	d		2018	2019	2020
Activity Name	(Days)	Start Date	FINISH Date	11121 2 3 4 5 6 7 8 9101112	12345678	91011121234567891011121
Final Evaluation of Existing Conditions	45.00	12/30/19	2/28/20			
Detailed Programming / Design Meetings	30.00	1/6/20	2/14/20			1
Community Public Forum #3 (tentative)	0.00	2/5/20	2/5/20			•
Final 5-8 and 6-8 Educational Space Summary	5.00	2/17/20	2/21/20			-
Community Public Forum #4 (tentative)	00.00	3/25/20	3/25/20			•
Develop Cost Estimates	8.00	4/1/20	4/10/20			-
SBC Meeting to Present Cost Estimates & Project Budget	00.00	4/13/20	4/13/20			•
Final Review & Evaluation of Options / Alternatives	15.00	4/6/20	4/24/20			
Local Actions and Approvals - Vote to Approve PSR Submission (Joint SBC/SC and BOS Meeting)	0.00	4/27/20	4/27/20			•
Submit PSR to MSBA	0.00	5/6/20	5/6/20			-
MSBA Staff Review (14 calendar days)	10.00	5/6/20	5/19/20			
Present to Facilities Assessment Subcommittee	0.00	5/20/20	5/20/20			•
Address MSBA FAS and PSR Comments (14 calendar days)	10.00	5/20/20	6/2/20			
MSBA BOARD MEETING	0.00	6/24/20	6/24/20			
MODULE 4: SCHEMATIC DESIGN	133.00	4/27/20	10/28/20			
Educational Programming/Design Meetings with Staff/Faculty	40.00	4/27/20	6/19/20			1
Develop Schematic Design	133.00	4/27/20	10/28/20			
Community Outreach	95.00	4/27/20	9/4/20			
Develop & Reconcile Schematic Design Cost Estimates	15.00	8/3/20	8/21/20			
Develop Overall Project Budget	2.00	8/24/20	8/28/20			
Local Actions and Approvals - SBC Vote to Approve SD Submission (Joint SBC/SC and BOS Meeting)	0.00	8/31/20	8/31/20			•
Submit SD to MSBA	00.00	9/9/20	9/9/20			
MSBA Staff Review (21 calendar days)	15.00	9/9/20	9/29/20			
Facilities Assessment Sub Committee Meeting	0.00	10/7/20	10/7/20			•
MSBA Review of DESE Submittal	7.00	9/9/20	9/17/20			
DESE Review and Approval	30.00	9/9/20	10/20/20			
PSB Conference Meeting (TBD)	0.00	10/15/20	10/15/20			•
Execute Project Scope & Budget Agreement (PSBA)	10.00	10/15/20	10/28/20			
MSBA BOARD MEETING	0.00	10/28/20	10/28/20			
				1112123456789101121	234567	8 91011121234567891011121

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PROJECT SCHEDULE THROUGH MODULE 5

Somerset Middle School - Somerset MA

:	Duration			2018		2019		2020		
Activity Name	(Days)	Start Date	Finish Date	121234567891011121234567891011121234567891011212	910111212	3 4 5 6 7 8 910	11121234	4 5 6 7 8	9101	121
MODULE 5: FUNDING THE PROJECT	55.00	9/7/20	11/20/20							
Final Community Outreach	20.00	9/7/20	11/13/20						I	
Town Meeting Vote on Funds for Total Project Budget (TBD)	0.00	11/3/20	11/3/20						•	
Town Referendum Vote on Funds (TBD)	0.00	11/16/20	11/16/20							
Execute Project Funding Agreement (PFA)	0.00	11/20/20	11/20/20 11/20/20							
			11.11	1121234567891011123456789101112345678910112	91011121	345678910	1112123	4 5 6 7 8	9101	121
										l

CGA PROJECT MANAGEMENT, LLC



Educational Program

Profile Questionnaire



Somerset Public Schools Somerset Berkley Regional School District

All Students Achieving Excellence

Massachusetts School Building Authority **School District Educational Profile Questionnaire**

Date: July 23, 2018

Name of School District: Somerset Public Schools

District Contact (Name, Title):

Jeffrey Schoonover, Superintendent of Schools

Lindsey Albernaz, Director of Business and Finance

As part of the District's invitation into the Eligibility Period, the MSBA is seeking the following information to further inform our understanding of the School District's facilities, teaching methodology, grade configurations and program offerings. If the below information is available in documents previously provided to the MSBA, please indicate in which document and on which page this information may be found.

SECTION ONE: Facilities

A. Plcase confirm the following MSBA 2016 Needs Survey information for all public schools in the District using a "Y" for accurate and "N" for not accurate:

Somerset	School Name Chace Street	Týpe ES	Year Founde 1961	d Last Reno	53,800	N
Somerset	North	ES	1973	1988	137,000	Υ
Somerset	Somerset Middle	MS	1965	1969	128,400	N
Somerset	South	ES	1952	1957	29,900	N
						-

Using the space below, provide additional information for any inaccurate or incomplete Needs Survey data.

The chart above was updated to include the years that additions to three of the four schools were completed. These include Chace Street School's addition in 1967, South Elementary School's addition in 1957, and Somerset Middle School's addition in 1969. These were not reflected in the information on hand.

Recent improvements that have been made in the schools include:

- Locker replacements at Somerset Middle School in 2016
- Asbestos tile removal and tile replacement in the main lobby at SMS in 2015
- New boiler at Chace Street School in 2017
- Asbestos tile removal and replacement at South Elementary and Chace Street School in 2016
- *The following school safety improvements have been made:*
 - o Chace Street School parking and driveway reconfiguration in 2017
 - o South Elementary parking and driveway reconfiguration in 2015
 - o North Elementary main office relocation in 2018
 - o Somerset Middle School main office relocation in 2018
 - o Card swipe access technology in each school and visitor approval technology upgrades, 2018
 - o Several internal door replacements and vestibule constructions for improved school security
- B. Using the chart below, list Charter Schools (Commonwealth, Innovative, or Horace Mann) and private schools located in the District.

Name of School	Type of	Year	Grades	Current
	School	Established	Served	Enrollment

SECTION TWO: Current Program, Grade Configuration, Teaching Methodology

A. For elementary and middle schools only In the chart below, provide information about the current grade configuration for each public school facility adding or editing cells and rows as appropriate. Check the boxes provided to indicate program offerings at each facility. Next to the check, please indicate the number of hours and days the program is offered.

Name of School, Grades Served	Art (Performi ng and Visual Art)	Music	Math, ELA, Social Studies, Science	Physical Educatio n (Adaptiv e PE)	Library (media) Classes	Worl d Lang uage	Extend ed Day Care	Lunch Seatings
Chace Street ES (PK-5)	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri			7:00 - 8:30 AM; 3:15 - 6:00 PM	3 lunches /day

North ES (K-5)	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri			7:00 - 8:30 AM; 3:15 - 6:00 PM	3 lunches /day
Somerset Middle (6-8)	X - 6.5 hours, Mon-Fri	X – 6.5 hours, Mon-Fri	X - 6.5 hrs, Mon- Pri	X - 6.5 hours, Mon-Fri	X-1 hour every day but open for students every period	X – 7 hours, Mon- Fri		X – 3 seatings for 30 min each
South ES (K-5)	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri	6.5 hrs/day; Mon - Fri			7:00 - 8:30 AM; 3:15 - 6:00 PM	3 lunches /day

For high schools only Attach to this questionnaire current program/scheduling information (core, non-core, enrichment and vocational).

	B. Does the District belong to a Collaborative? Yes ⊠ No □
	Does the District host a Collaborative? Yes ⊠ No ☐ If yes, please provide the name of the Collaborative: South Coast Educational Collaborative
	Does the District provide Pre-Kindergarten? Yes ⊠ No □
((Is Kindergarten fce based? Yes □No ⊠ If yes, please provide the fee structure
	Does the District provide transportation? Yes ⊠ No □ If yes, please provide the name of the provider(s) (District or vendor) Fisher Bus, Incorporated (vendor)
	C. Using the space below, provide information about the Priority Statement of Interest School's <u>teaching methodology</u> (i.e. sclf-contained classroom, team teaching, departmental, or cluster). Include class-size policy and if applicable, scheduling particulars.
	Somerset Middle School (SMS) follows a traditional middle school model, with several grade-level teams of teachers (ELA, Mathematics, Social Studies, Science, and Special Education). In addition to teachers working as part of a team, they are also members of content-based departments including ELA, Mathematics, Science and Technology, Social Studies, Special Education, Fine and Performing Arts, and Physical Education/Health. SMS offers several cotaught classes in ELA and Mathematics per grade level, teaming a special educator and general educator together. SMS also has one-two substantially separate classes along with hosting several classes to the South Coast Educational Collaborative (SCEC). SCEC utilizes three classrooms at SMS in return for tuition credits to SCEC programs.
	The collective bargaining agreement with the Somerset Teachers' Association does not contain any language requiring specific class size limits. However, the schedule is created each year

elementary grade level dispersed among three schools, would create enrollment efficiencies and would potentially lead to a reduction in staff.

As indicated previously, the district will be implementing a 1:1 technology program at Somerset Middle School beginning in 2019-2020 and is planning to extend this to lower grades as well.

As also indicated previously, Somerset Middle School – through recent contract negotiations with the Somerset Teachers' Association - has agreed to implement a new schedule in 2019-2020. This schedule will require teachers to have more instructional time with students than they have with the existing schedule, which will result in some staff reductions.

D. Using the space below, indicate any proposed changes to current technology offerings (e.g. "One to One" technology, WiFi hotspots, laptop carts, etc.).

As stated above, the district will be implementing a 1:1 program in grades 6-8 beginning in 2019-2020 and will likely be extending that to include grades 3-5 soon thereafter. Moreover, Somerset Middle School has begun to expand its regular technology program of study to include robotics and computer science.

SECTION FOUR: Space - District's Priority Statement of Interest

MIDDLE SCHOOL

A. Complete current information in the table provided below adding or editing cells and rows as

appropriate:

ROOM TYPE	No. of Rooms	Comments
<u>CORE ACADEMIC SPACES</u>		est substant savet
TOTAL SECTION OF THE	~- *:10 ** *	Alleria and the control of the contr
Mathematics 2 19 19 19 19 19 19 19 19 19 19 19 19 19	. 10 . se.	SPORE PROPERTY.
Social Studies	6	AND CONTRACTOR OF THE PROPERTY
Science	6-7	ACCOMPLIANCE AND ACCOMP
Engineering Technology	7. 3	
SPECIAL EDUCATION		1-2 self-contained
ART & MUSIC	and the	
General Artland Music	4	
Auditouum-for 1000	7.3	Seating for student body
HEALTH & PHYSICAL EDUCATION		A CONTRACTOR OF THE STATE OF TH
Gymnasium - Alexandra (1995)	ersteinspiele (j. 5)	With dividers for the multiple sports teams

ROOM TYPE	No. of Rooms	Comments
Health class		
MEDIA CENTER	**************************************	Hibrary/Media/eommon
DINING & FOOD SERVICE	第二十分	Searing for 300
MEDICALSUITE	Apple of the	
	-32	With 3 individual rooms,
Nurses Office	1.44	
ADMINISTRATION & GUIDANCE	102.00	
Principal, Assta Principal, Admin Assta		a and the fact of
conference room (1 large, 1 small), Waiting area	Suite - **	

B. If not offered within the District's Priority Statement of Interest school, indicate in the space provided below where the District's collaborative, special education, art, music, health/physical education, media center, dining/food service and technology spaces are offered. [Type text here...]

SECTION FIVE: Safety and Security Statement

Has the District formulated a school specific Multi-Hazard Evacuation Plan (Section 363 of the FY 02 State Budget) for each school under the superintendent's supervision?

Yes ⊠ No □

What was the date of the last review with local public safety and law enforcement officials? Date: Spring, 2018; the plan has been thoroughly reviewed and revised over the past six months and will be approved for the start of the 2018-2019 school year.

SECTION SIX: Attachments

Please attach to this completed questionnaire any Executive Reports or Conclusions of reports or studies that relate to accreditation, an assessment of facility conditions and/or findings as issued by the Department of Elementary and Secondary Education (DESE). Below, please list the documents attached (as applicable).

Documents attached:

The last instance of Somerset Public Schools having an assessment of facility conditions was in 2002. Administration does not believe the information included in that facility assessment report is relevant at this time, as we have since regionalized our high school and have performed some smaller capital projects identified in hat report.

The most recent finding issued by the Department of Elementary and Secondary Education (DESE) was related to our Food Service Program in 2012, where DESE recommended that our food service program be moved from an internal operation to hiring a contracted Food Service Management Company. We have since outsoureed our food service program and have seen significant improvements.

Should you have any questions about this questionnaire, please contact Project Coordinator Allison Jones at:

> Massachusetts School Building Authority 617-720-4466 www.massschoolbuildings.org

Educational Program

Educational Visioning Sessions

ducational Visioning is a process which brings together a large cross-section of stakeholders and educational leaders to review educational practices both locally and globally. The purpose of this process is to identify learning concepts, goals, and values which can help support a comprehensive, long-term educational program and planning tool for the School District. When a new project is being considered or proposed, educational visioning provides the cornerstone of all educational planning, and it defines the nature of school operations, functions, and opportunities for the future. It can provide a roadmap for the development of an educational facility, which can enhance and support the desired teaching and learning process, as well as shape school and community relationships for decades to come.

Educational Visioning is a catalyst for generating ideas regarding how the school might best be designed to foster 21st Century education while simultaneously incorporating the needs of the community. It challenges educators to think beyond their current practices and facility shortcomings by introducing them to successful 21st Century design patterns; encouraging the District to consider how such patterns can influence the educational environment and building design. It enables the architect to develop building plans which are consistent with the needs of the school, while incorporating the educational, community, organizational, and functional goals and values articulated in the Visioning sessions.

Educational Visioning for the Somerset Middle School was facilitated by Ai3 Architects, LLC and David Stephen of New Vista Design. David holds a Bachelor in Architecture Degree from Rhode Island School of Design and a Master in Education Degree from Lesley College. As an educator and licensed architect, David has collaborated with many architectural firms, playing a key role in the architectural design of over 40 new and redesigned elementary, middle, and high schools and has 20 years of experience partnering with some of the field's visionaries, working with schools nationwide to imagine, develop, and implement innovative school programs. At New Vista Design, David has helped districts, schools, and educators develop student-centered and inquiry-based curricula and programs.



Ai3 Architects, LLC

The Educational Visioning process involved an evaluation of the existing Somerset Middle School is educational delivery, a projection of an ideal educational middle school facility in the future, and an examination of the shortcomings of the current middle school facility. The Visioning process also examined how educational programs and environments can be structured to deliver positive educational, social, and emotional outcomes, and a study of the evolution of the middle school educational environment.

Ai3 Architects has worked with the Somerset School District on a previous school project, the new Somerset-Berkley Regional High School. The educational leadership and collective experience of the School District was evident in the Educational Visioning process. Over the past few months, in preparation for the Somerset Middle School project, the School District toured three local middle schools, which they have identified as examples of leading modern 21st Century middle school programs: Barrington Middle School in Barrington Rhode Island, South-West Middle School in Quincy Massachusetts, and Beverly Middle School in Beverly Massachusetts. The Somerset School District brought a wealth of ideas, information, and suggestions into the Educational Visioning process.

The following individuals are recognized for their commitment to and involvement in this comprehensive process. Their input and guidance proved invaluable and will become a key component in shaping the future of the Town of Somerset and Somerset Public Schools.



Jeffery Schoonover
Dr. Pauline Camara
Ashley Amado
Melissa Andresen
Susan Banalewicz
Chelsea Boucher
Kathleen Byers
Machael Cabral
Mary Caine

Edward Callahan Margaret Cardozo Melinda Coppellotti Sylienne Crisafulli Suzette Cruz-Augusto

Kristin DeChellis
Cheryl DeFarias
Alec Dorsey
Lori Dutra
Jill Dyl
Mark Falcon

Matthew Farinha Jessica Fletcher Matthew Forrest Sarah Giardino



Linda Hilliard Kaleigh Holt Michael Johnson Jessica Joynt Donna Keeney James LaMonde Audry Lariviere Tammi Lawrence

Kerry Beth Leatherwood

Brianna Longo Melissa Lorusso Justine MacKechnie

Erin Maia
David Marshall
John Medeiros
Nicole Mello
Cassey Monte
Leanne Mullin
Cormac Murphy
Deb Muse

Alyssa Pacheco Nicole Pacheco Kaleigh Penn Elizabeth Powers

Luann Pratas

Kathy Reao Alison Robidoux Andrea Ross Elaine Sabra Ira Schaefer Susan Schumann Susanna Silva Nicole Spear Alexandra Sullivan Kaitlyn Swift Andrea Teixeira Robert Tomassone Terry Tourigny Brianna Wehner Joy Windle Alicia French Michelle Ahern Barbara Cavaagh Martha Dagenais Nathaniel Dagenais David Stephen Troy Randall

Jonathan Quell

Andrew Redfearn

Workshops Overview

During the months of September through November 2019, the entire faculty of Somerset Middle School, as well as a number of Grade 5 teachers, district leadership, and community partners participated in three Educational Visioning Workshops run by New Vista Design and Ai3 Architects. Each workshop was a collaborative session designed to inform the Somerset Middle School MSBA Feasibility Study and Design process. Participants were led through a step-by-step visioning process aimed at capturing their best thinking about Somerset Middle School's current and future educational goals and priorities, and connecting them to best practices and possibilities in innovative school facility design.

On **September 27, 2019** the Somerset Middle School Faculty and SPS leadership participated in Educational Visioning Workshop One. The three-hour long workshop explored the following topics:

- Priority Goals for the renovated and/or new Somerset Middle School facility
- Strengths, Challenges, Opportunities, and Goals (SCOG Analysis) associated with SPS and SMS's current academic programs as well as the vision for its renovated and/or new facility
- **21st Century Learning Goals** that distill the group's best thinking with regard to Somerset Public Schools' current and future educational programming and priorities

On *October 18, 2019* the Somerset Middle School Faculty and SPS leadership participated in Educational Visioning Workshop Two. The three-hour long workshop explored the following topics:

- **21st Century Design Patterns 1.0** that innovative schools throughout the country have put into practice in order to support their forward-thinking educational practices and vision
- Guiding Principles 1.0 for design of the renovated and/or new Somerset Middle School facility

On **November 5, 2019** the Somerset Middle School Faculty and SPS leadership participated in Educational Visioning Workshop Three. The two-hour long workshop explored the following topics:

- Key Spaces and Adjacencies for the renovated and/or new Somerset Middle School facility
- Bubble and Adjacency Diagramming for the renovated and/or new Somerset Middle School facility

Somerset Middle School Educational Visioning Group Workshop #1 September 27, 2019

The agenda for the first visioning session included the following:

1. Workshop Goals and Introductions

- Workshop Overview
- The Design Process / Creating a Design Guide
- Introductions
 - Priority Goals for the SMS facility and planning process

2. 21st Century Schools and Learning Goals

- Interactive Presentation: 21st Century Teaching and Learning
- Video and Discussion
- Small group review of assorted 21st Century learning goals and outcomes and creation of priority listings
- Large group prioritization

3. SMS Present and Future Educational Priorities

Brief presentations of essential and innovative school programs and initiatives presently in practice within SPS and Somerset Middle School

4. SPS/SMS SCOG Analysis

Brainstorming of Somerset Public Schools' and Somerset Middle School's Strengths, Challenges, Opportunities, and Goals

5. Closing and Next Steps

Next Steps review and Q&A







Priorities and Considerations 1.0

The following list of priorities and considerations for the design of the renovated and/or new Somerset Middle School combines the responses of Somerset leadership during a Kick-Off Meeting that took place on August 13, 2019, as well as those of the approximately 65 SPS and SMS faculty members who participated in the Faculty Visioning Workshop One that took place on September 27, 2019. Priorities have been grouped by like themes.

Welcome and Warmth

- Warm and friendly environment
- Hallways and routes that limit "traffic jams"
- Hallways that are wide enough for traffic flow
- Natural light
- · Painted bulletin boards

Safety and Security

- · Analysis of safety and security measures
- Passive and active security, including non-visual aspects of security enhancement
- Cameras and security for every part of common spaces and outdoor space
- Bell system connected to clocks
- Intercom system that can be heard in all areas, including the auditorium, gym, and bathrooms
- Safe entry and security throughout the building
- Bulletproof windows
- Automatic closing doors in crisis
- Consider separate entries for 5/6 and 7/8
- Classrooms with doors that lock

Robust Technology

- Ease of technology integration
- Consider the ways in which technology is evolving and simplifying
- Quick moving working technology
- Integrated technology projection from ceiling, smart screens
- · Charging stations
- Multiple and multiuse power strips or outlets
- Tabletop outlets for Chromebook charging
- · High level technology that works all the time
- Up-to-date usable technology (user friendly)
- Stable school network with server access for student work/testing
- Bandwidth infrastructure
- 3D printing
- SMS 8th grade students are implementing a 1:1 Chromebook initiative this (2019–20) school year

Special Education

- Support differentiated instruction
 - We now have three sub-separate programs
- Many small rooms for OT, PT, Speech, individual help, testing
- SPED teacher space in co-taught room(s)
- Life skills classroom with kitchen
- Padded safe sensory room (soundproof)
- Therapy room for regularly occurring assessments and small group classes, including storage for therapeutic and testing supplies; includes office/desk space
- All Special Education / therapy rooms with natural light, locking cabinets, doors for confidentiality, tech/ wi-fi/printers with color ink
- Life Skills built-in or provided tools per classroom or student allowing more practical learning with knowledge of real-world scenarios

Agile Classrooms

- Large classrooms
- · Classrooms for each teacher
- · Multi-purpose teaching spaces
- Classroom structure easily changes from large to small groups
- · Sinks in all rooms
- Mounted projectors large whiteboards
- All classrooms are fitted with microphone and amplifier system
- Virtual reality space in every classroom or every other classroom
- No "hoteling" all teachers should have appropriate and designated classrooms/areas to call their own, no moving/sharing like SBRHS
- Plenty of white board space
- · Sinks with good drainage
- · Closets that lock for teachers' coats, purses, etc.
- Solid walls in every classroom (movable walls are not cost effective because of breakage and mold issues)
- · Special Chemical Disposal Sink
- Sinks and paper towel dispensers in every room
- Working blinds on windows

Universal Access and Design

 Classroom/building considerations for persons with disabilities including FM capabilities, low vision orientation and visibility, etc.

Social Emotional Learning

 We need (two) rooms for programs in which struggling students get support as they transition back into the mainstream classrooms after needing to be in separate programs outside of the school

Team Structure

- · Support Teaming / Clusters
- · Learning Neighborhoods
- Building set up in teams with curved benches for mini breakout spaces
- SMS has a teaming structure with two teams per grade
 - Each team consists of a cohort of students, core academic teachers, and Special Educational teachers

The Potential of a 5-8 Program

- The potential of a 5-8 solution for the renovated and/or new facility could alleviate crowding in SPS elementary schools and allow them to grow
- It would also facilitate a more streamlined approach to the delivery of Related Arts
- Consider zones for 5/6 and 7/8

Community Use and Access

- · The building should be a community resource
- Provide community spaces (i.e. gathering, gallery, performing arts center)

Thermal and Physical Comfort

- Good HVAC
- Climate control for heating and cooling
- · "Water-bottle filler" type bubblers
- Mold-free setting

Flexible Furniture

- Stand-up / movable desks (teacher & students)
- Enough space with flexible seating
- Flexible and modular furniture for students and staff
- Movable, adjustable furniture on wheels + height

Multipurpose Spaces

- Create multipurpose spaces for extended learning beyond classrooms
- Multiple spaces for use sign out throughout the building
- · Support anywhere, anytime learning

Collaborative Spaces

- For teaming teachers and for students
- Work spaces for teachers
- Faculty rooms that are inviting, spacious, and functional
- Centrally located teacher copy centers for each grade level
- Teacher areas for each grade level with conference table, technology to allow teams to collaborate with each other and parents

Breakout Spaces

- Paraprofessional break room with lockers
- Breakout spaces between each pair of classrooms to allow for small group instruction, remediation, small group testing
- Makerspace
- · Central English/Tech office for supplies and testing

Cafeteria / Dining Area

- Big, open cafeteria to fit all students
- Suitable teacher dining
- Dining area for teachers with comfortable chairs (near their rooms)
- Separate selling of food for adults / different food (i.e. soup, salad) where kids don't touch it
- Recycling plan

Outdoor Learning Spaces

- Consider the design of outdoor, protected courtyard(s)
- Common outdoor green space
- A "Fitness" Trail
- Gardens
- · Courtyards to eat in
- Hydroponics
- Community teaching and learning 'gardens'

Science Labs

- We specifically need labs for grades 7 and 8, but also the lower grades
- Consider how they fit into classroom neighborhoods
- Science classrooms without perimeter stations make them movable
- Science on a Sphere (like Buttonwood Park Zoo has)
- Dishwashers/sterilizers for science rooms
- Science classrooms with working safety equipment and lab station, ideally desks and lab benches
- Separate storage closets between science classrooms
 no lab/storage working around perimeter
- Virtual toolbox (sandbox) for science instruction and functioning outside learning spaces; easily manageable

STEM Programming

- SMS has been focusing on building its Robotics program and community science
- Consider a Makerspace for the new building
- Engineering Tech is now built into the curriculum consider how this will look moving forward
- Newton North High School's "Greengineering" program is an interesting model

Art, Music, and Performance

- The Arts are huge in the town
- An Art Gallery, as well as hallway spaces to showcase student work in general
- Storage for music instruments, equipment, art supplies
- Separate band room/string room/chorus room/Jazz room
- Lockers for instruments
- Band Room, Chorus Room, and PAC for our three genres of music ensemble
- Enough rehearsal rooms to provide for four concurrent rehearsals
- Vocal/Instrumental recording booth in Chorus rehearsal room
- Two General Music Classrooms with acoustic treatments
- · Guitar hangers on the wall
- Two Art rooms with projectors, slop sinks, pottery area, tech area, classroom supply storage, teacher demonstration area
- · Music practice rooms
- Production studio
- Performing Arts Center Multiuse music performances, school assemblies, drama productions, community

events

Auditorium

- It is important to maintain an auditorium at SMS that is as large or larger than the current one
- Big enough auditorium to fit the whole school
- Sound and lighting for auditorium Athletics

Athletics

- There are 13 sports teams at SMS and the present fields and outside usage is tight
- Gym that fits the entire student body
- Nicer playing fields
- Cross-country is offered at the high school and middle school, but the high school relies on use of the middle school track
- The track is presently used by the community at all times of the day and evening
- Adult / student fitness center
- Gymnasium set up
- Alternative PE space
- Weight room
- Long lockers for all students in the gym locker room
- Indoor/outdoor track, tennis courts
- Turf field for athletics (tennis court) and/or indoor track

Good Acoustics

- Noise absorbing ceiling tiles for group working in classroom
- Soundproof halls and classrooms that have walls (no open-concept)

Thoughtful Bathroom Locations

- No Bathrooms located directly in eye sight from classes
- No Bathrooms located off of where we eat

Outdoor Spaces and Connections

- Indoor-Outdoor connectivity
- · Usable outdoor space
- Outdoor spaces for learning opportunities

Library Media Center

Well-equipped, accessible library/media center

Transportation and Parking

- Parking / traffic patterns
- Traffic flow improvement
- · Parking for staff separate from parents
- Teacher-only in/out car/building access; not shared with parents/bus/drop-offs
- Separate parking entrance for teachers
- · More efficient traffic-flow parent drop off
- · Teacher parking with separate (private) entrance/exit
- Bigger parking lot

Good Storage and Lockers

- Storage in classrooms
- Adequate storage for supplies and projects
- Locker room privacy
- Lockers that are easily accessible and enough of them
- Spaces for student backpacks in each classroom
- Full length lockers for all students
- · Lockers spread out to coordinating classrooms
- Lockers that accommodate winter coats, backpacks
 no stacks and near appropriate grade
- Coaches locker rooms

<u>Delivery Area</u>

· Outside access for supply loading

Disciplinary Space

· In school suspension

Nursing Suite

School Store

Day Care for Staff



Future Ready Learning Goals 1.0

The following set of "Future Ready Learning Goals 1.0" for Somerset Middle School students was developed by the Faculty Visioning Group during Workshop One. Eight teams of 5-6 participants worked to create their own set of learning goals, after which each team presented to the larger group. Individual participants were then given the opportunity to prioritize their top six learning goals. Each team's list was then grouped by like goals, with each Learning Goal receiving six votes for appearing on an original list, and one additional point for each priority vote it received.

Self-Directed Learning

(101 Votes)

- Self-Motivation
- Disciplined Mind
- Self-Regulation
- · Academic Mindset
- · Learning to Learn
- Production of High-Quality Work
- · Prioritizing, Planning, and Managing
- · Increased Independence

Empathy and Caring

(85 Votes)

- · Integrity and Ethical Decision Making
- Cultural Awareness
- Global Perspective
- · Diversity and Inclusion
- · Service and Compassion
- Respectful Minds

Effective Communication

(62 Votes)

- Written and Oral Communication
- Digital Age Literacy

Critical Thinking and Problem Solving

(57 Votes)

- Analytical and Creative Problem Solving
- Empirical Reasoning Prove it!
- · Ask How Things are Connected
- Social Reasoning

Leadership and Collaboration

(39 Votes)

- Impersonal Skills
- Working in Teams

Creativity and Risk-Taking

(37 Votes)

- Curiosity and Imagination
- · Adaptability
- Creative Minds

Real-World Learning

(13 Votes)

- Effective Use of Real-World Tools
- Application

Mastery of Core Academics

(9 Votes)









SCOG Analysis

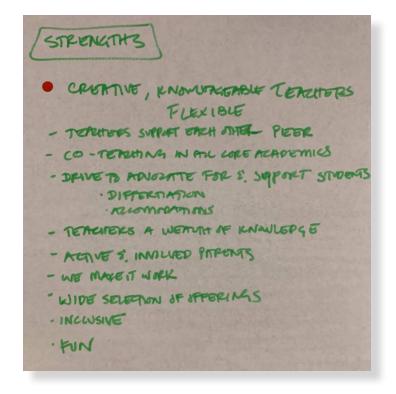
Somerset Middle School SCOG Analysis

The SCOG (Strengths, Challenges, Opportunities, and Goals) Analysis looks at the perceived Strengths and Challenges of the school program, the District, and the larger Somerset Middle School community, as well as the Opportunities and Goals that emerge from them, particularly regarding the new and/or renovated facility. The following is a summary of what the participants believed to be the Strengths, Challenges, Opportunities, and Goals within Somerset Middle School. The entire workshop's participants collectively collaborated and shared their thoughts with the Design Team.

The following list of Strengths, Challenges, and Opportunities & Goals with regard to Somerset Middle School's programming and facilities combines the responses of SMS faculty members during Workshop One.

Strengths

- Team model (class organization)
- · Interdisciplinary teams
- · Co-teaching in all core academics
- · Content planning time
- Strong staff with a wealth of knowledge
- "Good" students
- Inclusive culture
- · Creative and flexible teachers
- Peer support
- · Staff that pushes through adversity
- Good guidance counselors
- Strong curriculum that is aligned with state standards
- Staff that stays current to keep up with standards
- Wide selection of offerings
- Lots of different opportunities for students
- Lab-aids program (science)
- · Hands on projects STE
- Drive to advocate for and support students
 - Differentiation
 - Accommodations
- Constant reassessment of students' needs
- Meeting individual student needs
- · Related arts opportunities
- Strong music and art programs
- · Community support for music and art programs
- Talented staff in music and art that practice their crafts outside of the school and share these experiences with their classes
- Active and involved parents
- We make it work
- Fun



Challenges

- Limited and Insufficient
 - Funding
 - Materials and Equipment
 - Administrative support
 - Infrastructure
 - Access to technology
 - Relevant Training
 - Effective discipline protocols
 - Resources (books for students)
 - Social emotional support for students and teachers
- Schedule
 - Schedule not flexible enough for kids to move within it/differentiation
 - No time to meet with department coordinator during school day

- Limited teacher participation / planning time
- Lack of time to meet with content areas, coteachers
- · Teachers are overbooked
- Time for music performance and art spectrum instruction
- Musical instrumental feeder system (not enough time for individual/small group instruction)
- Trying to get done all that is needed to do during the school day without much "down" time

Class Size

- No cap (30+)
- Diversity of needs and lack of resources
- Increased number of students in a class including number of SPED / 504 students

Training

- · Not enough training for all the changes
- Unrealistic expectations
- We are hard workers with low pay

Special Education

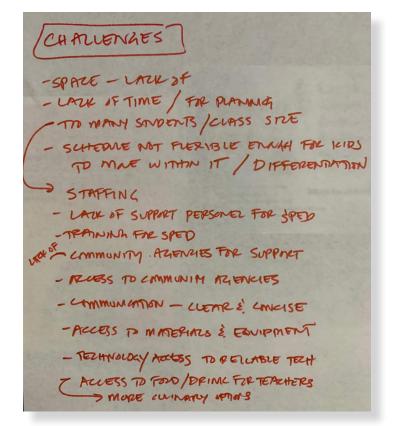
- Lack of support personnel for SPED
- Training for SPED
- Too many special ed. meetings
- Not enough paraprofessional support

Curricular

- Project based learning is not interdisciplinary
- State standards limit the amount of creative, valuable, authentic learning
- The amount of state standards required to cover mastery are counter-productive to additional or "off curricula" projects
- Lack of consistency across grade levels / teams
- · Too much change in a short period of time
- Creating new programs
- We need homogeneous lessons
- Grade focused community just "A's", not challenging work
- No food or fun days school learning should have rewards
- Rallies or Spirit Days
- · Technology Infrastructure
 - Tech stability
 - Access to reliable technology

Community

- Lack of community agencies for support
- Access to community agencies



- Public perception
- Meeting the needs of the community
- Challenging demographics of parents and guardians which can supersede our professional opinion

5/8 Model

- In a 5/8 model, elementary schools will focus on math and reading because of MCAS school
- Science is in grade 5

Communication

- Poor communication from administration
- · No clear and concise direction
- Poor moral
- PA announcement (AM) hard to hear and include "nonsense"

Food

- Access to food / drinks for teachers
- More culinary options

· Facility Related

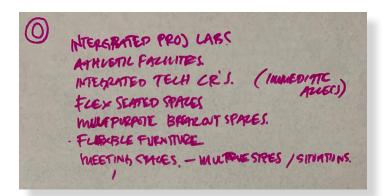
- Old building
- Circulation points of entry
- Lack of space
- Temperature control challenges

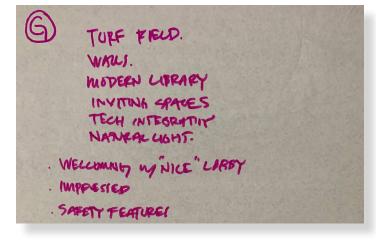
- Traffic and congestion
- Lack of storage space
 - for music and art departments especially
- Mold / Asbestos
 - Building is toxic physically
- Space issues SPED (specialized programs)
- Open classroom concept
 - Walls in grade 6 wing
 - · Open room concept art rooms
 - · Lack of walls and separate spaces
- Overcrowded classrooms and not enough room
- Lack of common planning time area
- Grade 6 lockers far from grade 6 classrooms
- No more "bulletin" boards bulletin bards are "old school"

Opportunities and Goals

- Curriculum Related
 - Teach kids to love learning
 - Real life applications through STEM projects
 - Using Google classroom
 - Technology integration and integrated tech classrooms with immediate access
 - Integrated project labs
 - Hands-on education in disciplines other than science and related arts
 - Gardening / landscaping / education with a purpose
 - More collaboration
 - More connection with students
 - · Share more ideas / teachers support
 - Address challenges listed i.e. co-teaching
 - · Increase ability to meet all students needs
 - More creative project-based learning
 - More flexibility
 - · Special teachers split by content
 - Special Ed. students scheduled / grouped appropriately
 - Transition conversations / Planning with previous grade level
 - Flexible seating will allow collaboration and privacy for testing, etc.
 - More engaging projects
 - Well rounded, responsible students
 - Department offices

- Facility Related
 - Spaces that foster good teaching and learning
 - Welcoming with "nice" lobby
 - Natural light
 - Making a good impression impressive
 - Modern library
 - Multi-purpose breakout spaces
 - Large and mini breakout spaces
 - Meeting spaces multiuse sizes / situations
 - Flexible seating spaces
 - Makerspace
 - Gallery space
 - Access to outdoor space
 - Athletic fields
 - Turf field
 - · Adaptive physical education equipment
 - · Shift public perception
 - · Community supports building / teacher
 - Inviting spaces
 - Safety features
 - More space
 - · Gross motor room





Somerset Middle School Educational Visioning Group Workshop #2 October 18, 2019

The agenda for the second visioning session included the following:

1. Workshop Goals and WS One Debrief

- Introduction of new members
- Review of:
 - Learning Goals
 - SCOG Analysis

2. 21st Century Schools Facility Design Patterns

Presentation and Q&A

3. Design Patterns for Somerset Middle School

- Small group review of assorted facility design patterns
- Creation of priority listings
- Large group prioritization

4. Guiding Principles for Design

Presentation and Q&A

5. Guiding Principles for Design

- Small group review of assorted Guiding Principles and creation of priority listings
- Large group sharing and prioritization

6. Closing and Next Steps

Next steps review and Q&A







Priorities and Considerations 2.0

The following list of priorities and considerations for the design of the renovated and/or new Somerset Middle School combines the responses of Somerset leadership during a Kick-Off Meeting that took place on August 13, 2019, as well as those of the approximately 65 SPS and SMS faculty members who participated in the Faculty Visioning Workshop One that took place on September 27, 2019 and **The Faculty Visioning Workshop Two** that took place on October 18, 2019. Priorities have been grouped by like themes.

Welcome and Warmth

- · Warm and friendly environment
- Hallways and routes that limit "traffic jams"
- · Hallways that are wide enough for traffic flow
- Natural light
- Painted bulletin boards

Safety and Security

- Analysis of safety and security measures
- Passive and active security, including non-visual aspects of security enhancement
- "Fog" windows for security, and/or blinds in glass
 - · Controlled by teachers and administration
- Cameras and security for every part of common spaces and outdoor space
- Fobs, rather then keys for classroom doors
- Bell system connected to clocks
- Intercom system that can be heard in all areas, including the auditorium, gym, and bathrooms
- · Safe entry and security throughout the building
- Bulletproof windows
- Automatic closing doors in crisis
- Consider separate entries for 5/6 and 7/8

- Classrooms with doors that lock
- Alarms for doors left open to the exterior
- "Airport" style student rest rooms

Robust Technology

- Ease of technology integration
- Consider the ways in which technology is evolving and simplifying
- Quick moving working technology
- Integrated technology projection from ceiling, smart screens
- Charging stations
- Multiple and multi-use power strips or outlets
- Tabletop outlets for Chromebook charging
- High level technology that works all the time
- Up-to-date usable technology (user friendly)
- Stable school network with server access for student work/testing
- · Bandwidth infrastructure
- 3D printing
- SMS 8th grade students are implementing a 1:1 Chromebook initiative this (2019–20) school year
- High ceilings in technology area for drones







Special Education

- Support differentiated instruction
 - We now have three sub-separate programs
- Many small rooms for OT, PT, Speech, individual help, testing
- SPED teacher space in co-taught room(s)
- Life skills classroom with kitchen
- Padded safe sensory room (soundproof)
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- Life Skills built-in or provided tools per classroom or student allowing more practical learning with knowledge of real-world scenarios

Agile Classrooms

- Large classrooms
- Classrooms for each teacher
- Multi-purpose teaching spaces
- Classroom structure easily changes from large to small aroups
- Sinks in all rooms
- Mounted projectors large whiteboards
- All classrooms are fitted with microphone and amplifier system
- Virtual reality space in every classroom or every other classroom
- No "hoteling" all teachers should have appropriate and designated classrooms/areas to call their own; no moving sharing like SBRHS

• Problem-based learning areas

- · Plenty of white board space
- · Sinks with good drainage
- · Closets that lock for teacher's coats, purses, etc.
- Solid walls in every classroom (movable walls are not cost effective because of breakage and mold issues)
- Special Chemical Disposal Sink
- Sinks and paper towel dispensers in every room
- Working blinds on windows
- Maker areas in classrooms

<u>Universal Access and Design</u>

 Classroom/building considerations for persons with disabilities including FM capabilities, low vision orientation and visibility, etc.

Sound buffers in the hall/lockers

Social Emotional Learning

 We need (two) rooms for programs in which struggling students get support as they transition back into the mainstream classrooms after needing to be in separate programs outside of the school

Team Structure

- Support Teaming / Clusters
- Learning Neighborhoods
- Grade level zones
- Teacher areas for grade level conference table
- Spacious Faculty Rooms
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- Good HVAC
- Climate control for heating and cooling
- "Water-bottle filler" type bubblers
- Mold free setting

Flexible Furniture

- Stand-up / movable desks (teacher & students)
- Enough space with flexible seating
- Flexible and modular furniture for students and staff

Movable, adjustable furniture on wheels + height

Multi-Purpose Spaces

- Create multi-purpose spaces for extended learning beyond classrooms
- Multiple spaces for use sign out throughout the building
- · Support anywhere, anytime learning

Collaborative Spaces

- For teaming teachers and for students
- Work spaces for teachers
- Faculty rooms that are inviting, spacious, and functional
- Centrally located teacher copy centers for each grade level
- Teacher areas for each grade level with conference table, technology to allow teams to collaborate with each other and parents

Breakout Spaces

- Paraprofessional break room with lockers
- Breakout spaces between each pair of classrooms to allow for small group instruction, remediation, small group testing
- Large breakout spaces for each team
- "Zen Den"
- Teacher Study Room
- Makerspace
- · Central English/Tech office for supplies and testing

Cafeteria / Dining Area

- Big, open cafeteria to fit all students
- Suitable teacher dining
- Dining area for teachers with comfortable chairs (near their rooms)
- Separate selling of food for adults / different food (i.e. soup, salad) where kids don't touch it
- · Recycling plan

Outdoor Learning Spaces

- Indoor-outdoor connectivity
- Usable outdoor space
- Outdoor spaces for learning opportunities
- Consider the design of outdoor, protected courtyard(s)
- Common outdoor green space

- · A "Fitness" Trail
- Gardens
- · Courtyards to eat in
- Hydroponics
- Community teaching and learning 'gardens'

Science Labs

- We specifically need labs for grades 7 and 8, but also the lower grades
- Consider how they fit into classroom neighborhoods
- Science classrooms without perimeter stations make them movable
- Science on a Sphere (like Buttonwood Park Zoo has)
- Dishwashers / sterilizers for science rooms
- Science classrooms with working safety equipment and lab station, ideally desks and lab benches
- Separate storage closets between science classrooms
 no lab/storage working around perimeter
- Virtual toolbox (sandbox) for science instruction and functioning outside learning spaces; easily manageable
- Greenhouses in Science

STEM Programming

- SMS has been focusing on building its Robotics program and community science
- · Consider a Makerspace for the new building
- Engineering Tech is now built into the curriculum consider how this will look moving forward
- Newton North High School's "Greengineering" program is an interesting model

Art, Music, and Performance

- The Arts are huge in the town
- An Art Gallery, as well as hallway spaces to showcase student work in general
- Storage for music instruments, equipment, art supplies
- Separate band room/string room/chorus room/Jazz room
- Lockers for instruments
- Band Room, Chorus Room, and PAC for our three genres of music ensemble
- Enough rehearsal rooms to provide for four concurrent rehearsals
- Vocal/Instrumental recording booth in Chorus rehearsal room
- Two General Music Classrooms with acoustic

treatments

- Guitar hangers on the wall
- Two Art rooms with projectors, slop sinks, pottery area, tech area, classroom supply storage, teacher demonstration area
- Soundproof music practice rooms
- Production studio
- Performing Arts Center Multiuse music performances, school assemblies, drama productions, community events
- Representation in design of "Music Town"

Auditorium

- It is important to maintain an auditorium at SMS that is as large or larger than the current one
- Big enough auditorium to fit the whole school
- · Sound and lighting for auditorium Athletics

Athletics

- There are 13 sports teams at SMS; and the present fields and outside usage is tight
- · Gym that fits the entire student body
- Nicer playing fields
- Cross-country is offered at the high school and middle school, but the high school relies on use of the middle school track
- The track is presently used by the community at all times of the day and evening
- Adult / student fitness center
- Gymnasium set up
- Alternative PE space
- Weight room
- Long lockers for all students in the gym locker room
- Indoor/outdoor track, tennis courts
- Turf field for athletics (tennis court) and/or indoor track

Good Acoustics

- Noise absorbing ceiling tiles for group working in classroom
- Soundproof halls and classrooms that have walls (no open-concept)

Thoughtful Bathroom Locations

- No Bathrooms located directly in eye sight from classes
- · No Bathrooms located off of where we eat

Library Media Center

Well-equipped, accessible library/media center

Transportation and Parking

- · Parking / traffic patterns
- Traffic flow improvement
- Parking for staff separate from parents
- Teacher-only in/out car/building access; not shared with parents/bus/drop-offs
- Separate parking entrance for teachers
- · More efficient traffic-flow parent drop off
- · Teacher parking with separate (private) entrance/exit
- Bigger parking lot

Good Storage and Lockers

- Storage in classrooms
- · Adequate storage for supplies and projects
- Locker room privacy
- Lockers that are easily accessible and enough of them
- Spaces for student backpacks in each classroom
- Full length lockers for all students
- Lockers spread out to coordinating classrooms
- Lockers that accommodate winter coats, backpacks no stacks and near appropriate grade
- Coaches locker rooms

Delivery Area

· Outside access for supply loading

Disciplinary Space

· In school suspension

Nursing Suite

School Store

Day Care for Staff

Guidance Suite

Understanding Aspects of 21st Century Schools

David Stephen presented the following eight aspects of 21st Century Schools after a brief video and examples of how these aspects were incorporated into past projects. Additionally, advantages and disadvantages of each aspect were discussed. The workshop members discussed the applicability of these ideas in their Educational Program. Further discussion of these aspects is provided in the "Architectural Review: Education Analysis" section of this report. The following is what Mr. Stephen explained to the participants:

Corridors

One could argue that the typical school corridor is one of the most underutilized spaces of the entire building. In a 21st Century school, these "corridors" should instead become part of the team learning environment with transparency to the classroom such that they can be utilized throughout the school day as an area for small group study, independent research, and numerous other academic pursuits.





Small Teams and Personalization

Teaching teams and flexible project or instructional spaces are key elements in the personalization of education for all students. One of the key components of a 21st Century School is how it addresses the need to break down the larger school population into grade level communities and even smaller learning teams.

These spaces will allow educators to meet the needs of all students in an engaging, creative, and collaborative way, and are critical to the successful personalization of the student experience. The student must feel a personal connection to the staff and students of their community, and such connection begins at arrival. These learning communities must be created in a manner which promotes safety, identity, personalization, pride, belonging, support, and confidence. They must recognize that these feelings can be fostered by a well-organized community which responds to student needs from morning arrival until end-of-day departure.



Community Connections

A 21st Century School must provide a welcoming environment for not only students and staff but also for community members. Successful facilities should be designed in a way that allows community members to experience student activity and work, and to provide support for such in meaningful ways. Being able to connect with the community through the presentation and display of student work is of vital importance. Because community members will not necessarily be privy to the day-to-day learning experiences of students, providing opportunities to view student work that is rigorous and engaging will build a sense of community between the school and the residents.



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Entry and Exhibit

The interaction of community members and parents, as well as the impression they receive during their visit to the school, are important. Most of the visitors will not have the opportunity to tour all areas of the school, and certainly will not have the opportunity to observe the activities and products of student academic work within the individual learning spaces. The ability for key public areas of the building to exhibit this work, both statically and dynamically, is a crucial component in allowing visitors to experience the learning which is taking place throughout the facility. The building should place education and student activity on display for all to absorb, such as by providing opportunities for fixed exhibits or video display. This exhibit opportunity should not be limited to just the displays at entry points accessible to visitors, but should be inherent within the academic zones, allowing students to present and display their project work to other students and to the public. This process instills student pride and enhances community relations.



Module 3 - Preliminary Design Program

STEAM

The modern 21st Century middle school environment supports the integration of the key subjects of Science, Technology, Engineering, Arts, and Mathematics (STEAM) into real word business and scientific applications. The integration of these programs not only helps students understand the importance of these topics individually, but also the way they support each other. A focus on STEAM initiatives allows teachers and students to collaborate more successfully by engaging the student population through a vibrant curriculum.



Media Center and the Distribution of Media

The library media center of a 21st Century learning facility should reinforce global media distribution and retrieval resources throughout the school environment. The functions of the library media center should be carefully considered throughout the planning process, as the focus on creating academic teams may warrant the need to satellite some resources to the individual teams or grade-level communities. Media research should occur in many places throughout the school environment, and distributing some resources while maintaining a core library media center has proven beneficial in creating a more dynamic environment in other 21st Century facilities.



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Socialization and Learning

Social skills and the need to communicate outside of the project/instructional environment are key elements in promoting positive student development. Students must have the opportunity to socialize with their peers without being confined to the traditional restrictions of a "cafeteria" where students are herded into a space and directed to function in a stereotypical way. Schools where social dining is distributed throughout the school environment with less restrictions and/or boundaries have proven to promote significantly more student collaboration while simultaneously reducing discipline problems. The student dining area can also play a significant role in parent and community interaction with the school by providing flexible space which supports presentations, programs, and events. It can serve as one of the primary social hubs of not only the school, but also the entire community.



<u>Flexible Project and Instructional Space; the Flexible Classroom</u>

Spaces utilized for 21st Century instructional practices should not segregate instruction from application. The modern comprehensive middle school environment must be a flexible space that accommodates both instruction and application. It should allow for students to be creative and grow as learners throughout the course of their day. The Maker/Builder spaces that are dedicated to project based learning should be highly integrated to the academic classrooms and/or environment.



Module 3 - Preliminary Design Program

Desired 21st Century Design Patterns 1.0

The following set of priority "21st Century Design Patterns" for the design of the renovated and/or new Somerset Middle School was developed by the Faculty Visioning Group during Workshop Two. Eight teams of 5-6 participants each worked to create their own set of 8-10 priority Design Patterns based on 40 patterns that were presented and discussed within the workshop. Design Patterns were then grouped by like themes and are listed below in order of the number of "votes" they received, with each pattern given 5 votes for every time that it appeared on a team's list.

Indoor/Outdoor Connections

(45 Votes)

- Outdoor Learning and Gathering Spaces
- · Outdoor Gardens
- Outdoor Learning

Agile Classrooms

(40 Votes)

· Large Classrooms

Flexible Furniture

(40 Votes)

· High Quality Seating

Classroom Neighborhoods

(35 Votes)

Learning Clusters

Safety and Security

(35 Votes)

- Secure Entrance
- No Community Access to Classrooms

Breakout Spaces

(35 Votes)

Good Sized Breakout Rooms

Extended Learning Spaces

(30 Votes)

Collaborative Spaces

Welcoming Arrival

(30 Votes)

- Greeting and Gate-keeping
- Welcoming Entry

Natural Light

(25 Votes)

Sustainability

Maker Spaces

(25 Votes)

Flexible Science Labs

Effective Storage

(25 Votes)

- Alternative Storage
- Storage Cubbies

Learning Commons

(25 Votes)

- Heart of the School
- Media Center Learning Commons

Cafeteria Forum

(25 Votes)

· Cyber Dining

Professional Work Areas

(20 Votes)

- Teacher Workspaces
- · With Full Kitchen

Display and Exhibition

(20 Votes)

Visible Learning and Transparency

Wayfinding and Streetscapes

(10 Votes)

- · Wide Hallways
- Good Flow

Enrichment Spaces

(10 Votes)

Varied Performance Venues

(10 Votes)

<u>Adequate Space</u>

(10 Votes)

- Classroom for Every Teacher
- Extra Rooms for Increase in Enrollment

Branding and Identity

(5 Votes)

Integrated Technology

(5 Votes)

- Bells and Intercoms in All Areas
- Lots of Outlets

Community Access

(5 Votes)

Separate Entry to Cafeteria for Community Events

Distributed Dining

(5 Votes)

• Smaller Dining Venues



Guiding Principles 1.0

The following set of DRAFT "Guiding Design Principles 1.0" for design of the renovated and/or new Somerset Middle School facility was developed by the Faculty Visioning Group during Workshop Two. Eight teams of 5-6 participants each worked to create their own set of 4-6 Guiding Principles. These were then grouped by like themes and are listed below in order of the number of "votes" they received, with each guiding principle given 5 votes for every time that it appeared on a team's list.

Guiding Design Principles offer a framework of educational priorities that prove invaluable in helping stakeholders and design team members to set design goals and focus their work. This first iteration of Guiding Principles may continue to develop as the design process unfolds.

21st Century Learning and Beyond

(70 Votes)

- Lifelong Learning
- Creative and Visible Learning
- Real-World Learning
- Intellectual Engagement
- Interdisciplinary Learning
- Connections to 21st Century Skills
- 21st Century Thinking and Doing
- Growth Mindset
- STEAM

Belonging and Ownership

(55 Votes)

- Warm, Safe, and Inviting
- Neighborhood Clusters
- Small School Feel, Large School Pride
- Learning Communities
- Personalization and Connection

Flexibility

(35 Votes)

Adaptable Space

Safety and Security

(35 Votes)

School as Community Resource

(20 Votes)

· Community Access

Outdoor Connections

(20 Votes)

Sustainability

(10 Votes)

Building as Teacher

Somerset Middle School Educational Visioning Group Workshop #3

November 5, 2019

The agenda for the second visioning session included the following:

1. Workshop Goals and WS Two Debrief

- · Introduction of new members
- Review of:
 - Priority Design Patterns 1.0
 - Guiding Principles for Design 1.0
- What Strikes Us? What's Missing?



- Individual and small group diagramming of key spaces and desired adjacencies within the renovated and/or new Somerset Middle School
- Large Group Sharing





Guiding Principles 2.0

The following set of DRAFT "Guiding Design Principles 2.0" for design of the renovated and/or new Somerset Middle School facility was developed by the Faculty Visioning Group during Workshop #2, edited during Workshop #3. Eight teams of 5-6 participants each worked to create their own set of 4-6 Guiding Principles. These were then grouped by like themes and are listed below in order of the number of "votes" they received, with each guiding principle given 5 votes for every time that it appeared on a team's list.

Educational Innovation

- Neighborhood/Grade Level Learning Communities (two teams per grade)
 - Visible Learning
 - Transparency between spaces
- Display of student work (digital and physical)
- Active / Hands-on learning experiences through the integration of neighborhood project labs
- Flexibility of space and furniture (adaptability and minimization of permanent built-ins)

Belonging and Ownership

- Warm, Safe, and Inviting
- Display of Student & School Pride (Pride and Respect)
- Student ownership of recycle program, technology help desk, student gardens, school store, etc.

Safety and Security

- Implementation of Passive and Active site and building security measures to enhance a secure, non-invasive building approach and entry sequence, and natural administrative oversight of student activity.
- Use of technologies that allow for daily transparency between classroom spaces and immediate opacity in the event of an emergency (ie. "Smart Glass")

Indoor/Outdoor School and Community Connections

- Building organization that maximizes views to the exterior and use of natural daylighting
- Site development for educational opportunities
 - Direct access from neighborhood learning communities (and project labs) to an exterior educational courtyard and amphitheater (use of existing site topography)

- Use of existing wooded area and trails to create fitness stations (connection to PE / Athletics / Sports programs)
- Community access and use of site amenities (athletic fields, fitness/walking trails, bocce ball, shuffleboard, community gardens)
- Community access and use of building's public spaces (ie. Art Gallery, Auditorium, Gymnasium/ Fitness Spaces)

Sustainability

- Maximize Energy Efficiency
- Integration of existing on-site renewable energy (Photovoltaics)
- Site and Building as a Teaching Tool
- Use of site topography and features for educational opportunities
- Strategic exposure of building systems
- · Integration of building technologies into curriculum

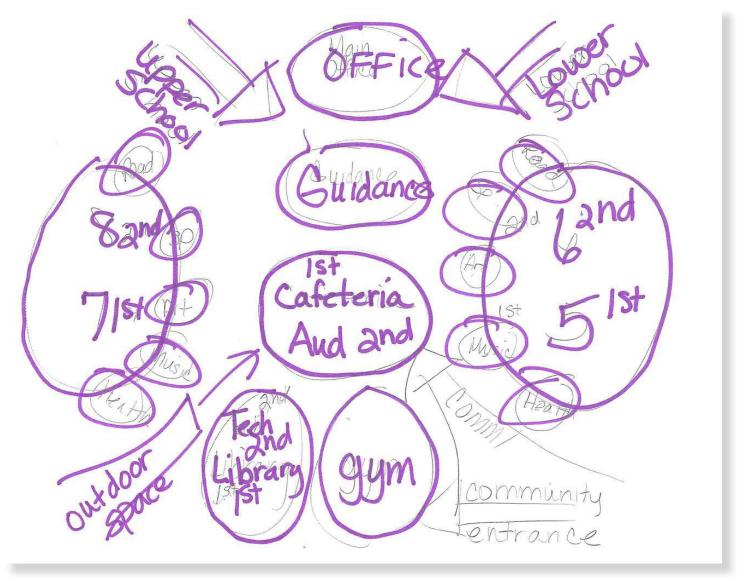


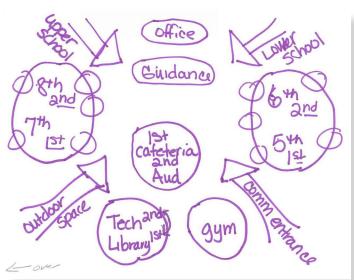


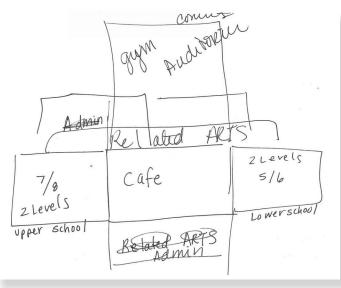




Whole School Diagrams

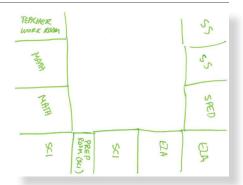


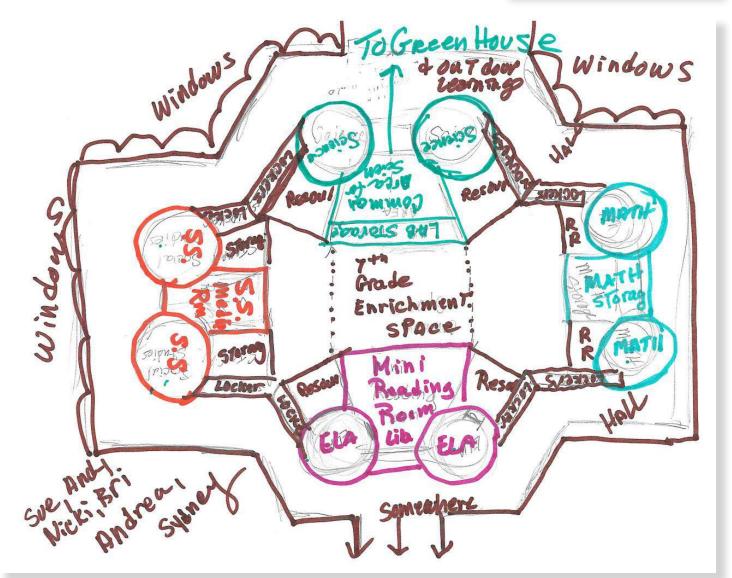


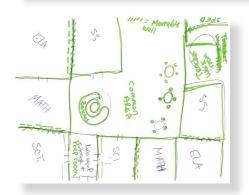


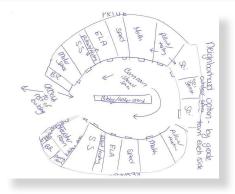
Module 3 - Preliminary Design Program

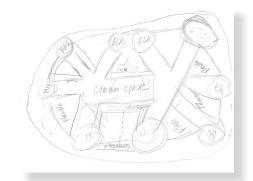
Neighborhood Diagrams



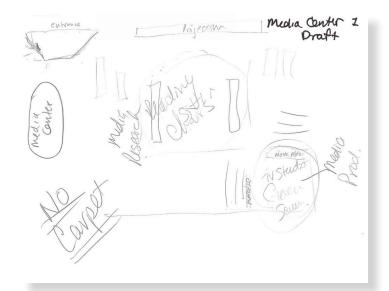


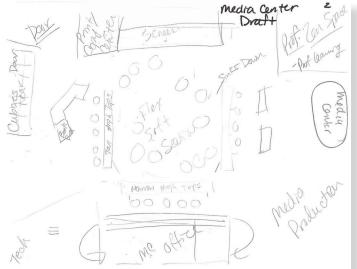


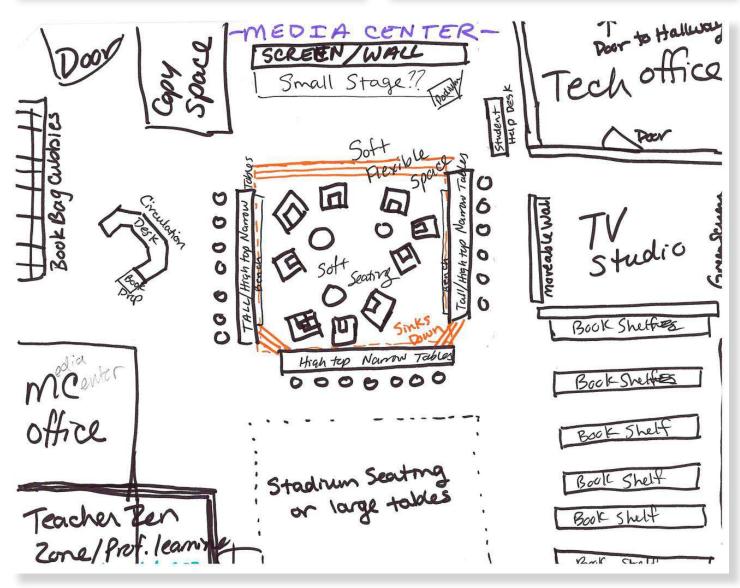




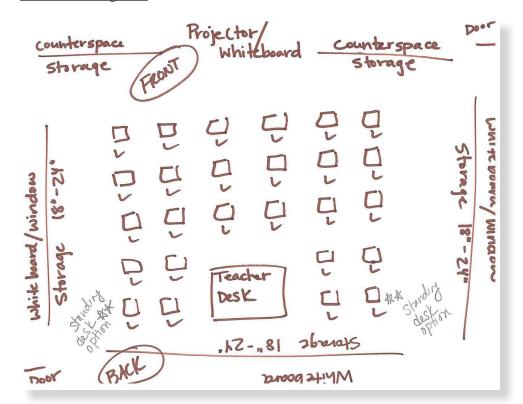
Media Center Diagrams

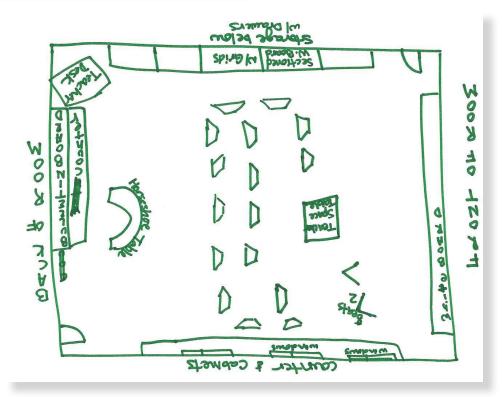




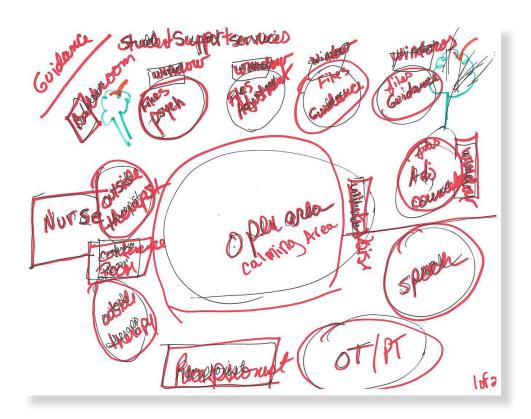


Classroom Diagrams



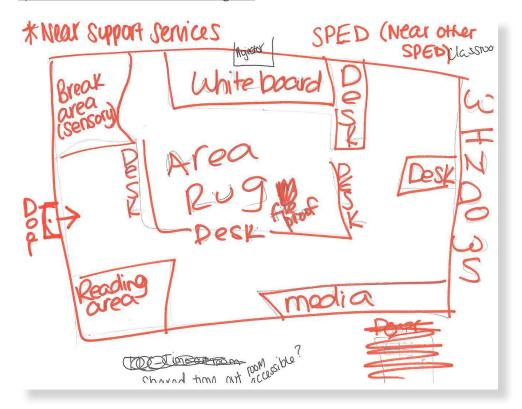


Life Skills Classroom Diagram

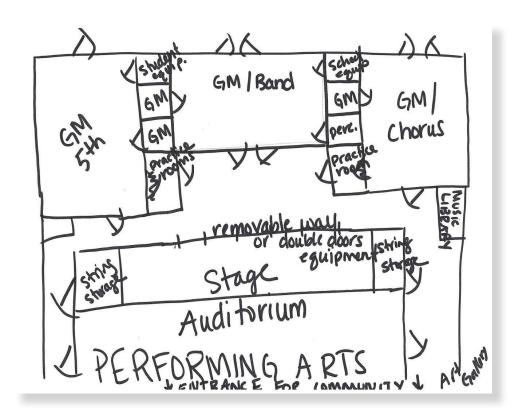


Bubble Diagramming

Special Education Classroom Diagram

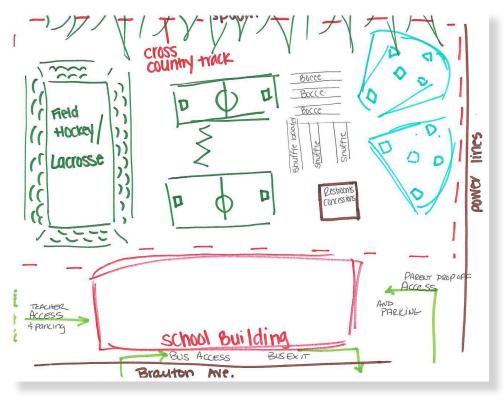


Life Skills Classroom Diagram

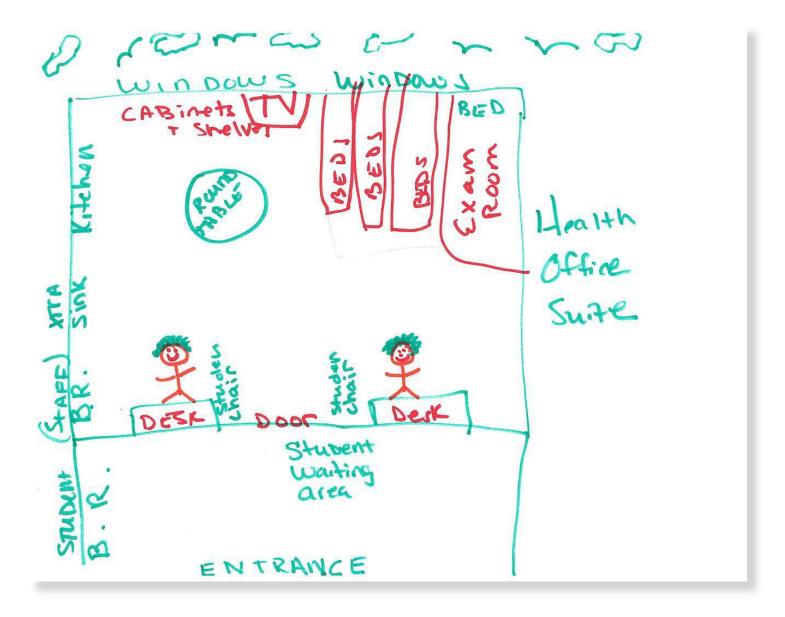


Bubble Diagramming

Special Education Classroom Diagram



Medical Suite Diagram



Educational Program

Educational Program

All Students Achieving Excellence

MODULE 3: PRELIMINARY DESIGN PROGRAM

1.2 EDUCATION PROGRAM

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A. Introduction:

Somerset Public Schools Vision Statement

The Somerset Public Schools will ensure that students and teachers pursue excellence, achieve their full potential, and cherish learning as students prepare to be high school, college, career, and life ready. Somerset's core values and beliefs can be summarized by the acronym PRIDE, as noted below.

Perseverance:

Our students will accept the challenge of a rigorous learning environment and work through those challenges until they experience success.

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Chace Street Elementary School · North Elementary School · South Elementary School · Somerset Middle School

All Students Achieving Excellence

Respect and Responsibility

- We will create a safe and supportive environment for all students and adults in which everyone feels valued and respected.
- All students will respect themselves, others, and their surroundings.
- We will create an environment in which everyone takes responsibility for their individual and collective actions.

Innovation

- Students and adults will be innovative problem solvers and purposeful and responsible users of technology.
- Students and staff will be skilled at and value collaborative problem solving.

Dedication to the Community

• We will help our students build character and learn respect as they become positive and caring contributors to society.

Excellence

- We will set high expectations for all students and staff.
- Our students will become effective communicators and independent, creative, and critical thinkers.

Historical Context and Future of Somerset

Somerset was first settled in 1677 and was officially incorporated in 1790. Located along the Taunton River and at the northern end of Mount Hope Bay, Somerset has a rich history of shipbuilding and was a leading shipping distribution point in the United States during the 19th Century. However, during the 20th Century the Town's major industry shifted to power generation, with two coal-burning power plants in town. Montaup Electric Company was founded in 1923 along the Taunton River and closed in 2010. The Brayton Point Power Station opened in 1963 at the southernmost point in town along Mount Hope Bay. Brayton Point was one of the largest producers of electricity in the northeast, but it was decommissioned in 2017. The closing of these two power plants has had a significant impact on the tax base in Somerset, with the loss of approximately \$15,000,000 annually in taxes.

Until 2011, Somerset Public Schools consisted of grades preschool through grade twelve. High school students from the town of Berkley attended Somerset High School through a special tuition agreement between the two towns. With the need to build a new high school, residents in Somerset and Berkley officially voted to create a new regional school district, Somerset Berkley Regional School District, that would house students from both communities in grades 9-12. Beginning in 2011, the Somerset Public Schools became a preschool through grade eight district. In 2014, the newly constructed Somerset Berkley Regional High School opened its doors to students.

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In 2014, the oldest of Somerset's four elementary schools, Wilbur Elementary, closed its doors rather than investing in numerous repairs and upgrades. Elementary students were redistricted within Somerset and consolidated into the remaining three elementary schools: South, Chace Street, and North. The 2014 closing of the Wilbur School followed the 1989 closing of the Pottersville and Village elementary schools due to declining enrollments in Somerset from its population peaks in the 1960's. To accommodate the elementary students at the time of these elementary school closures in 1989, Somerset's two middle schools, North Middle and South Middle, which each contained grades 5-8, were consolidated into one school. North Middle School became North Elementary School and all students in grade five were transitioned away from middle school to the elementary school, creating K-5 schools and one 6-8 middle school, which is now called Somerset Middle School (SMS).

Somerset is centrally located within Bristol County, situated immediately west of Fall River across the Taunton River. The Southeast Regional Planning Blueprint, which was published in 2018, identifies critical trends in occupational employment history and industries that are most important to the region's economic success. Among these critical industries are healthcare and professional and technical services, which include information technology. Within our southeastern Massachusetts region, these industries are experiencing high job growth, yet they have low ratios of qualified individuals per job opening.

This Planning Blueprint identifies among the top three challenges facing the region's business and industry over the next five years as the ability of employers to find workers with the right skills sets, the potential employees' lack of work readiness skills, and the need for workforce training and development of entry-level employees. The vision of our high school graduate is to be prepared for faster entry into this workforce through access to high school internships, specialized training, and access to college-level courses. This preparation does not begin in high school. Rather, it starts in middle school, if not sooner. The educational programming associated with a new or updated Somerset Middle School, as described in this document, will help us achieve this vision for the ongoing and future success of Somerset graduates within our region of the state.

Educational Vision

The Somerset Public Schools (District) has invested heavily in recent years to improve school safety and security as well as to modernize the curriculum to focus on Science, Technology, Engineering, the Arts, and Mathematics (STEAM). Five years ago, the District had limited and unreliable access to technology in each of our schools. Now, a robust network exists in each school, and enough devices are present that enable us to have approximately one device for every two students. Beginning in 2019, SMS distributed Chromebooks to every eighth grade student and plans to expand this in 2020 to include sixth and seventh grade students. Additionally, the District implemented technology education in recent years at the three elementary schools and hired three technology teachers. The technology program of studies at SMS has been updated to include robotics, coding, computer science, and drone technology. Furthermore, the science

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curriculum was recently updated to include research-based strategies and resources that allow students to learn science through hands-on activities and inquiry learning. We are committed to creating a relevant, hands-on, and engaging STEAM curriculum that best prepares students for high school and beyond.

The Town of Somerset has consistently and historically demonstrated enormous support for public education. As noted in the District's vision statement above, Somerset seeks to provide a rigorous yet safe and supportive learning environment for all students. We strategically challenge ourselves and work to provide innovative, personalized learning experiences utilizing technology. We prepare students to be innovative problem-solvers, effective communicators, collaborators, and critical thinkers and questioners, while students build character and learn to become positive contributors to their community. SMS has long used the phrase *Pride and Respect* to summarize its mission. This mission is found within the District's vision through the acronym PRIDE, which summarizes our core beliefs and values: Perseverance, RESPECT and responsibility, Innovation, Dedication to the community, and Excellence.

Through the educational visioning sessions held this fall, a successful SMS creates and celebrates community: from a community of learners within a neighborhood, team, or class to a resource utilized by the larger community of Somerset. Additionally, SMS establishes a sense of student ownership and belonging while establishing and maintaining a safe and secure facility. We value hands-on, engaging, and innovative teaching and learning strategies that extend beyond the interior classrooms walls. Lastly, at SMS and throughout the District, we focus on educating the whole child. Music and art education have been valuable components of our academic programs. Dubbed "Musictown" in 1974, Somerset has long celebrated the importance of music. Somerset is extremely proud of its music education program and the vast number of students, beginning in grade four, who participate in instrumental and performance-based music classes in addition to their general music courses. Maintaining and enhancing a fine arts program that celebrates music and art allowing for frequent student-led performances from concerts to drama productions is critical to SMS and the Town of Somerset.

B. Grade and School Configuration

Current:

The Somerset Public Schools is a pre-kindergarten to grade 8 school district with a present enrollment of 1,744 students. The District includes three elementary schools (Chace Street School, North Elementary, and South Elementary) and one middle school (Somerset Middle School). North Elementary School hosts the District's preschool program, which includes a combination of half-day and full-day tuition-based classes. Each elementary school has students in grades kindergarten through grade five with all students in the district attending SMS for grades 6-8. Current enrollment by school is as follows, with class averages rounded to the nearest whole number in parentheses:

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 $Chace\ Street\ Elementary\ School\cdot Somerset\ Middle\ School$

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Grade	Chace Street	North	South	SMS
K	44 (22)	65 (22)	39 (20)	
1	60 (20)	63 (21)	41 (21)	
2	65 (23)	64 (21)	46 (23)	
3	64 (21)	89 (22)	48 (24)	
4	57 (19)	70 (23)	35 (18)	
5	53 (27)	76 (25)	52 (26)	
6				221 (28)
7				211 (26)
8				218 (27)

Each of Somerset's four schools were built between 1951 and 1973, at the time when Somerset was experiencing significant growth in population. Following the closing of Wilbur School in 2014, the remaining three elementary schools absorbed the approximate 150 students and have since experienced larger class sizes and a lack of space for special education programs, small group settings, and areas for professional collaboration and meetings with families. Not only is Somerset reviewing the option of constructing or renovating a middle school consisting of grades six through eight, but we are also considering a 5-8 model to alleviate the overcrowding and lack of space that we currently face in each of our elementary schools.

During the 2018-2019 academic year, the District contracted with Colliers International to complete an elementary schools facilities conditions assessment. That assessment identified \$24.7 Million in repairs to the three existing elementary schools. This assessment did factor in any potential additions to accommodate the current and future educational needs of the District. Furthermore, during the summer of 2019, a Somerset School Committee established a subcommittee to study and make recommendations for redistricting the three elementary schools within Somerset, looking at the existing boundaries for each school's catchment area. The goal was to develop a model that allowed the district to have flexibility to move students who were traditionally districted to attend one elementary school to matriculate into another school. This effort was done simply because of overcrowding concerns in certain grade levels and allowed the District to move students into another school without having to hire additional staff. The District

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is making every conceivable effort to provide the best education to our students given our existing grade configurations and school assignments while working with the limitations imposed by the conditions and sizes of the educational facilities available in Somerset.

The school buildings have been well maintained, but many classrooms are undersized, room layouts and adjacencies are not conducive to a flexible learning programs emphasizing deeper learning strategies. The sixth-grade wing of Somerset Middle School and almost the entire space at North Elementary are open-classroom settings, which are far from conducive to active and collaborative learning. Many of our facilities simply do not fit the needs of today's educational practices.

Proposed:

Somerset Middle School was originally designed as a middle school for students in grades 5-8. It operated that way for 25 years until 1989, when two aging elementary schools were closed, one of the two middle schools became an elementary school, and fifth grade students were transitioned back to elementary. When this occurred, five elementary schools were ultimately reduced to four. In 2014, the oldest elementary school was closed, resulting in the further consolidation of four elementary schools to three. Since then, the elementary schools have been at or near their enrollment capacities providing no room for growth and expansion. This is a primary reason for the studying of both a grades 5-8 model and a grades 6-8 model for Somerset Middle School. If the 5-8 model is ultimately the preferred design, Somerset Middle School would be organized by an upper school containing grades seven and eight and a lower school for grades five and six.

Benefits of a 5-8 middle school include:

- Providing more consistent transitions for students as they progress through the various levels: Five years in elementary school (K-4); Four years in middle school; and four years in high school compared to the six years students currently attend elementary for and only three years at the middle level;
- The 5-8 model would also impact the three elementary schools. It would prevent the need to build any additions to South Elementary or Chace Street Elementary School because the required spaces would be found through the vacancy of the fifth grade classrooms there;
- A grade 5-8 model would allow fifth grade students more access to specialized courses, including technical education (e.g., computer science, robotics, and engineering design) and performance music such as marching band, as well as gaining access to middle school athletics and various extracurricular clubs and activities that do not exist at the elementary level; and
- Having all fifth-grade teachers in one building builds more opportunities for professional collaboration than currently exists among those grade level teachers as well as providing more opportunities for vertical collaboration among teachers in grades 5-8.

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For this reason, the proposed educational program is aligned with the 5-8 scenario, although much of the information contained herein would apply to any scenario, including 6-8.

Whether the school is 5-8 or 6-8, each neighborhood would consist of two teams: the PRIDE team and the RESPECT team. Each team would consist of four sections of students. Therefore, each grade-level neighborhood would be organized into eight sections of students with approximately 25 students per section.

C. Class Size Policies

The Somerset Public Schools recognize that class size is an important factor in quality education, and the District does, subject to space availability, staffing, and other educational considerations, strive to maintain class sizes conducive to an effective learning environment. Prior to this year, class sizes were between 20 and 26; currently class sizes are 27-30 due to additional enrollments. Class sizes of Special Education programming are compliant with the DESE regulations; however, the number of programs that can be developed are constrained due to the facility.

D. School Scheduling Method

Current:

The Somerset Middle School schedule is revisited annually and adjustments are made based upon enrollment, student and programming needs, staffing levels, and contractual agreements. The student day is from 8:00 a.m. to 2:40 p.m. The master schedule consists of a 6-day rotation with seven periods a day. Six periods are 50 minutes and one period is 45 minutes.

The students have English Language Arts, Mathematics, Science, Social Studies, and Raider Time every day. Twice in a 6-day schedule students have Art, General Music, Wellness, Engineering Technology, and Physical Education. Once in a 6-day cycle students have a 50 minute Advisory class, Math Enrichment class, and Grammar Enrichment class.

Offering a variety of student support at Somerset Middle School is a priority and this block of time is designed to benefit both students and teachers. All 6th, 7th, and 8th grade students are scheduled for a 45-minute Raider Time period every day. Students use this period to seek out assistance in any of their classes when they need additional support, extra practice, clarification, or enrichment. This period is also used by their grade level teachers, guidance counselors, and administration to offer special presentations that assist or enrich students in the area of academics, social skills, test preparation, course selection, student and community leadership, visual and performing arts, and Response to Intervention (RTI) using Responsive Classroom Advisory time.

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All teachers have one prep period per day and five common planning periods per 6-day cycle. The common plan time allows teachers to collaborate with their team and grade level colleagues. Wellplanned instruction and assessment is a priority of the Somerset staff, and all stakeholders benefit from the time to meet and develop the differentiated learning criteria needed to present the highest quality of education to all students in our classrooms, in all grades.

Grades 6, 7, and 8 consist of two teams of four sections each, pull out and Co-taught ELA, pull out and Co-taught Math, Co-taught Science, and Co-taught Social Studies classes. Reading and Speech consist of pull out and push in, and there are currently three sub separate classes at Somerset Middle School.

Academic Classes for Grades 6-8

Content Area	Time on	# of	Teaching Methodology
	Learning per 6-day cycle	Faculty	Tollowing,
Math	318 minutes	6	Whole class, small group, partners, use of technology by students and teachers. One to two classes at each grade level are cotaught with a special education teacher and a math teacher. One to two classes at each grade level are resource
ELA	318 minutes	6	room math with a special education teacher Whole class, small group, partners, use of technology by students and teachers. One to two classes at each grade level are cotaught with a special education teacher and a math teacher. One to two classes at each grade level are resource room ELA with a special education teacher
Social Studies	318 minutes	6	Whole class, small group, partners, use of technology by students and teachers. One to two classes at each grade level are cotaught with a special education teacher and a math teacher.

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Science	318 minutes	6	Whole class, small group, partners, use of technology by students and teachers, hands on labs. One to two classes at each grade level are cotaught with a special education teacher and a math teacher.
Engineering Technology	106 minutes	2	Whole class, small group, partners, use of technology by students and teachers, hands on projects.
Wellness	106 minutes	2	Whole class, small group, partners, use of technology by students and teachers, guest speakers, CPR certification for grade 7.
Physical Ed.	106 minutes	2	Whole class, small group, partners, limited use of technology by students and teachers, National fitness assessment, team building.
Art	106 minutes	2	Whole class, small group, partners, use of technology by students and teachers, various art projects including ceramics.
General Music	106 minutes	2	Whole class, small group, partners, use of technology by students and teachers, playing of instruments, singing, dancing.
Math Enrichment	53 minutes	1	Whole class, small group, partners, use of technology by students and teachers.
ELA Enrichment	53 minutes	1	Whole class, small group, partners, use of technology by students and teachers.
Reading	53 to 106 min.	1-2	Small group, individual, use of technology by students and teachers, testing.
Speech	53 to 106 min.	1-2	Small group, individual, use of technology by students and teachers, testing.
Instructional Strategies	53 to 265 minutes	1-5	Small group, individual, use of technology by students and teachers, social emotional strategies.
3 Sub-separate classes	All day	6	Small group, individual, use of technology by students and teachers, social emotional strategies.

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E. Current Spatial And Facility Deficiencies Which Impact Program:

The Somerset Middle School, located at 1141 Brayton Avenue, was originally constructed as a 5-8 junior high school in 1964 and was expanded in 1969. It is approximately 124,900sf, currently serves grades 6-8 with a total enrollment of approximately 625 students, and is located on a 26.2-Acre site.

The middle school was constructed in the later part of an era known as the "post-war boom" and the beginning of the "impulsive period". The "post-war boom" resulted in a significant number of school buildings constructed of single-story, flat-roofed structures enclosed in glass and metal windows and brick wall systems. Lightweight, single-story construction resulted in less expensive and easier-to-build school buildings that did not have the physical longevity of their predecessors. The "impulsive period" included the development of school buildings with experimental educational concepts, including open-space educational classrooms and open-space schools. The open-space educational classroom concept has since proven ineffective for teaching and learning. As a result of the inexpensive construction practices and "quick construction techniques", the building's exterior envelope includes lightweight structural steel, brick masonry construction and concrete masonry unit (CMU) backup without insulation, and single pane windows, contributing to high annual operating costs. The existing roof was replaced with a PVC membrane roof system in 2004; however, the system requires regular maintenance due to failing seams, standing water, and water infiltration. Mechanical and electrical systems are original, non-compliant, and beyond their useful life. In particular, the failing mechanical systems and the systems' inability to maintain temperatures have had a direct effect on teaching and learning, as well as student and teacher absenteeism. There is asbestos in the building, but it is contained.

Although the 1960's Somerset Middle School design did include some thoughtful and forwardthinking spaces (such as the auditorium with a wrap-around stage, and connecting lecture hall), the overall floor plan lacks the necessary organization and program adjacencies to support 21st Century middle school team teaching and learning. The academic areas fail to provide the necessary quantity of classrooms, special education spaces, and support space to truly formulate a complete middle school academic neighborhood or team. Teachers and administrators have worked diligently and successfully to implement teaming concepts and STEAM (Science, Technology, Engineering, Arts, and Math) integration of hands-on learning opportunities for students; however, the current building layout remains the most significant challenge in this endeavor. A modern middle school should include dedicated STEAM spaces and project labs integrated within the science and academic classroom areas in order to provide interdisciplinary instruction and hands-on learning experiences. All six existing science classrooms are below MSBA guidelines. The modern middle school environment recognizes the critical need for language instruction in an expanded global economy, but unfortunately Somerset Middle School has no such space and faces significant challenges to such instruction, as teachers transport language instruction around the building in order to find an available classroom.

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Many non-traditional spaces, including storage spaces and closet areas are utilized for instructional purposes. The art classrooms, all the sixth-grade general classrooms, and special education classrooms are located within the open-concept plan constructed in 1969. These spaces and related programs are significantly compromised due to the lack of acoustic separation and temperature fluctuations. All existing classrooms are not organized to support the kind of team teaching and interdisciplinary instruction identified within other sections herein. Special education program space is not appropriately integrated within the remaining educational space, and appropriately sized and located resource and inclusion rooms are non-existent. The Special Education program is lacking sub-separate rooms, testing and meeting spaces, pull-out and reading rooms, and a secure records room.

The gymnasium is awkwardly shaped in a circular form without any natural daylighting, and the adjacent boys' and girls' locker facilities wrap around the gymnasium in an equally awkward broad U-configuration. The boys' locker room lacks modern amenities with vintage gang-style showers and a toilet area with no doors and only half-height walls. The girls' locker room is antiquated with exposed water valve controls and inadequate temperature mix controls. The Special Education programs suffer the most, as the lack of available adaptive physical education space prohibits the integration of these programs into a mainstream physical education environment.

One of the universally accepted components to an appropriate and thriving middle school environment is teacher collaboration space. Research confirms that middle school environments that provide appropriate and dedicated space for teachers to collaborate on student challenges, instructional strategies, student needs, and interdisciplinary opportunities result in better student/teacher relationships where each student is well known and receives a customized educational experience that results in improved academic and social performance. Unfortunately, the Somerset Middle School lacks appropriate space for such collaboration and planning.

F. Teaching Methodology And Structure

Current:

English Language Arts: The ELA Department is currently using MyPerspectives (Pearson) as a curriculum resource for which a 1:1 device maximizes student access and student learning. The SMS ELA curriculum is based on the Massachusetts English Language Arts Curriculum Framework including reading, writing, language, speaking, and listening. The scope and sequence follow the path of whole group, small group, and independent learning. The Pearson program encourages students to take ownership of their learning, think independently, and work collaboratively.

Math Department: The Math Department follows the 2017 Massachusetts Mathematics Curriculum Framework. The department is piloting Reveal Math (McGraw Hill) this year, which is a rigorous integrated online program that provides experiences for students to use technology to

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model mathematics. Students are encouraged to work in small groups and to participate in class discussions to build understanding in mathematics. Classrooms should be flexible to allow for teachers to provide small group remediation as needed, and for students to work in small group and large group formations. A 1:1 device maximizes student access and student learning.

<u>Science</u>: The Science Department implements a hands-on, research-based curriculum using SEPUP as a resource to help promote the academic growth and success of all students. Units and lessons are aligned with the Massachusetts Science and Technology Curriculum Framework, which includes a three dimensions approach; the integration of Cross-Cutting Concepts, Science Practices, and Disciplinary Core Ideas.

<u>Technology</u>: The Technology Department incorporates the Massachusetts Digital Literacy and Technology & Engineering Standards into their instructional classes. Students' focus is on Manufacturing, Robotics, Engineering Design Process, as well as Computer Literacy.

<u>Social Studies:</u> The Social Studies curriculum aligns with the Massachusetts History and Social Science Curriculum Framework. The department uses the McGraw Hill 2019 curriculum resources (online and print) as a foundation for teaching Social Studies and Civics. In addition, the department focuses on skills that include literacy, reading, writing, research, and other student supported projects that meet the learning styles of learners within the classroom.

Each grade-level neighborhood would include an innovation lab and a common collaborative space that serves multiple purposes. This common, collaborative area would be a clearly defined neighborhood space that directly integrates into the classrooms and support areas and serves as the social and academic center of each neighborhood. The innovation lab should include provisions for project-based activity including a maker space, access to multimedia and presentation equipment, and arts integration. It will allow teams the ability to develop large physical projects in an environment where it is critical to have appropriate space to spread out without the need to break down and store projects each period. It will allow small groups to create multimedia projects that are part of the academic instruction being developed in the classrooms, with a group of students capturing and preparing a video component of their project while their peers work in the classroom or small resource rooms on other aspects of the same project. This innovation space would be an integral component of our STEAM-focused curriculum, as it allows students within the neighborhood to work actively on projects that include an integrated visual design component with technology, without the restriction of having to leave their neighborhood in order to have access to the necessary tools.

The vision for teaching and learning utilizes a strategic and diverse repertoire of research-based instructional practices in all classrooms that are collaborative and informed by student learning data and feedback. Instruction must respond to students when they need additional support, by

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acknowledging a shared responsibility to address and support the needs of struggling students, collaboratively diagnosing underlying issues, and prescribing and implementing appropriate intervention strategies as a core component of the regular education program. Additionally, teaching and learning practices will develop and nurture a culture for all members of the community, as well as promote and expect continuous learning opportunities that embrace and respect discourse as a pathway to growth. Somerset Middle School has been effectively implementing Responsive Classroom strategies to address the growing social and emotional needs of students.

As evidenced by the educational visioning sessions, teaching and learning strategies will continue to foster integration and implementation of the required core knowledge along with the skills necessary for future success in high school, college, and careers. These identified skills include self-directed learning, empathy and caring, effective communication, critical thinking and problem-solving, leadership and collaboration, and creativity and risk-taking.

G. Teacher Planning, Collaboration, Student Support, And Room Assignments

Current:

Current practices for teacher planning and collaboration include a highly collaborative approach across disciplines, grade levels, related arts, and student support staff which is essential to our teaming structure. Somerset Middle School currently has two guidance counselors (one full time, one 0.6 full time equivalent), one adjustment counselor, one school psychologist, one reading specialist, one speech pathologist, one school nurse, six special education teachers, and three substantially separate special education teachers. Guidance staff are available to students during the school day for academics, social and emotional concerns, and testing by the school psychologist.

The teachers in grade 6 have a small room with a copy machine, refrigerator, sink, and two adult restrooms, but it only has room for one small table that seats six people. The teachers must meet for team and content planning in a classroom that is not being used and usually eat lunch in their classrooms because there is not enough room to sit in the copy room. There is one shared conference room in the building that is shared with administration that can be used for conferences and professional development. This is exactly the same for grade 7 teachers and grade 8. Grade 8 teachers also use the grade 7 adult restrooms and have no space of their own. The 14 paraprofessionals also use the grade 6 and 7 adult restrooms and small space, or they look for an empty classroom in which to eat. These faculty copy rooms have sinks that do not have potable water. The staff work rooms do not have climate control and therefore the copy machines often are not functional during periods of high humidity. There are 84 adults in the building.

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The Guidance Office is centrally located in the building; however, it has no natural sunlight along with the Nurse's Office, which is one hallway away. The speech room is located in the grade 6 wing in a converted storage room, also with no natural light. The reading room is in a converted exit hallway that is overcrowded. There is only one conference room for all administration and guidance meetings, and there are no collaborative work areas or lunchroom.

Students and staff can access the Nurse anytime during the school day; however, parents do not have close or easy access due to the central location of the health office. The health office consists of one small open room with only one entrance and exit, one bathroom, and two sinks. There is a curtain divider to separate the two beds from the office and a non-confidential waiting area within the one room. There are approximately 4,000 documented student visits to the health office yearly.

Somerset has a 44-minute student support block called Raider Time every day for grades 6, 7, and 8. A Homework Club is available to all students Monday through Thursday after school. Guidance Counselors are essential components to Instructional Leadership teams, IEP team meetings, scheduling, transitioning new students, and parent communication. Through our student information system (ASPEN), an open line of communication between students, parents, and teachers relative to attendance, discipline, assignments, and grades are available. Team planning, content planning, and co-teaching planning is essential to Somerset Middle School.

Proposed:

Professional collaboration relies on a purposeful use of technology combined with physical spaces to meet and work with in-person. Somerset Middle School should provide meeting and work areas in each grade-level neighborhood for teachers to prepare, plan, and collaborate. This area is critical to the successful implementation of the co-teaching and teaming model that exists at Somerset Middle School. This space should be integrated into the neighborhoods such that teachers working within it can provide an additional layer of oversight and observation of students who may be working within the neighborhood commons or even the individual resource rooms. These collaboration and meeting spaces should include large wall-mounted monitors for presentation and collaboration purposes. Teacher dining areas should be organized to encourage collaboration and work while simultaneously providing the necessary dining opportunities. Teachers are professional workers and should have these collaborative and networking spaces that are typically found in the private sector for equally professional employees.

The PRIDE and RESPECT grade-level teams, which include special education staff and other support personnel, will be located in the grade-level neighborhoods around meeting areas, planning rooms, and teacher offices. These neighborhood areas will provide a visible and flexible learning environment for all grade-level teams. These neighborhoods are intended to provide students with a better sense of self and to promote confidence and security, as they are one of

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several strategies employed to break down the overall scale of the school and give students a more in-depth relationship with the teachers and their fellow students.

All neighborhood classrooms should be equipped with adequate windows to allow for proper natural lighting and should also provide as much transparency (glass) as possible into surrounding spaces to increase the opportunities for supervision of students in these spaces. Neighborhoods and the related classroom and support spaces should include ample storage space, movable furniture, and the ability to create flexible grouping. Each classroom should include ample access to electricity, whiteboards, and writable surfaces (walls and some desktops), as students and teachers are encouraged to write, collaborate, and explore beyond the boundaries of a single whiteboard or two. Neighborhood space will allow for the creation and delivery of student presentations, along with visual and physical access to neighborhood classrooms.

A student support staff suite of offices will include space for the guidance counselors, school adjustment counselors, the school psychologist, and other related service providers including speech and occupational therapy. The main administrative office will be located at the building entrance as a primary receiving, control, and security point, but will only include the administrative offices necessary to support this function. The location of the health office will likely be in or near either of these two areas (student support and main office) but will be dependent on the final layout of the building to ensure ease of access while providing necessary privacy. The health office should be located along the perimeter of the building so that students can be transported immediately away by first responders from the building without having to pass through the hallways of the school.

H. Student Dining and Food Service Program

Current:

The Somerset Public Schools District promotes students' physical, emotional, and social well-being. This includes good nutrition, as outlined in the District's wellness policy. It is important for the cafeteria environment to provide tasty and nutritional offerings to students and staff in a café setting that is pleasant, friendly, and warm.

Lunch currently consists of three separate 25-minute lunches separated by grade level with 210 to 230 students in each lunch. There are two serving areas for students and staff who purchase food/drink. Most cafeteria tables seat ten students each with the four handicap accessible tables possessing six seats each plus room for two wheelchairs. Lunchtime offers students the opportunity to socialize and decompress with classmates. The cafeteria is currently centrally located near the seventh and eighth grade sections of the school. It has natural lighting provided by a courtyard separating the cafeteria from the library/media center. The current kitchen facilities are adequate after the District made several recent upgrades in equipment, including two new freezers and a

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steam oven. Presently, Somerset Middle School serves about 50 breakfast meals and over 350 lunches per day to approximately 60% of the student population.

Proposed:

The student dining area would be located and designed in a manner that promotes all-day student use in lieu of being isolated and reserved for breakfast or lunch only. We envision the space being used for team meetings, small group assemblies and cultural events, student demonstration areas, and places to display student work. The student dining area should include presentation opportunities and indoor/outdoor connections. Consideration should be given to creating these areas as flexible space with multi-use potential, locating them close enough to the academic neighborhoods to promote their high utilization while taking precautions to ensure that their functions do not compromise security or the use of surrounding areas. The design and layout of the student dining center should promote ease of meal distribution from the kitchen and should be designed to avoid bottlenecking students and ensure that they are able to purchase their meals and be seated within a reasonable and efficient timeframe. This design would include several food service stations, each with its own point-of-sale location.

Student involvement and nutritional status could be further strengthened by the presence of a student and staff tended garden with direct physical and visual links to the kitchen and dining areas, as well as a greenhouse providing year-round fresh food production. The greenhouse would offer active learning opportunities through the science program of study as well as offer life-skills opportunities for students in select special education programs. The concept of using student-grown food fosters a positive and comprehensive experience about healthy eating. The greenhouse would be integrated into the desired requirement for outdoor learning and indoor/outdoor connections and could become an integral part of the exterior site design. This immediate source of food production would serve to strengthen the link between healthy fresh food production and consumption in support of the district wellness policy. It could also provide an added opportunity for community and business connections.

I. Technology and Security

Current Technology:

A few short years ago, Somerset Middle School had limited devices for students and an unreliable network to access the Internet. Through upgrades in servers, wireless access points, and wiring, the network, while still far from ideal, is more reliable than ever. Beginning this school year, each eighth-grade student received a Chromebook that can be transported to and from school, while there are enough devices for the remaining two grades to have roughly one device for every two students. SMS plans to further expand the personalized learning environment by issuing new Chromebooks to the remaining students in grades six and seven in 2020-2021. Having these devices in student hands allows for more collaboration between students and staff, more efficient

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means to conduct research and analyze information, and to communicate in new, non-traditional ways.

Somerset Middle School still has significant limitations when integrating technology into the classroom. SMS does not have any wall-mounted projectors or interactive monitors. All digital projectors are on carts and project onto either a whiteboard or a pull-down screen. There is limited access to electricity in classrooms. This is particularly true within the open-classroom sixth grade wing that has most outlets embedded in the floor and are no longer active due to sparking and fire-safety concerns.

Somerset Middle School is the main feeder school to Somerset Berkley Regional High School (SBRHS), which opened in 2014. SBRHS is state of the art high school, offering students a myriad of personalized learning opportunities utilizing technology. While the District has made great strides to improve student access to technology at Somerset Middle School, the school still has significant limitations in this area, which prevents students from having a seamless learning transition to the technology-rich high school.

Proposed Technology:

Somerset's technology plan is to create a robust environment that allows students to engage in deeper learning activities that incorporate the skills needed to be successful in high school, college, and careers. Somerset Middle School will be implementing a 1:1 environment in grades 6 through 7 beginning in 2020-2021 to build upon the 1:1 program that currently exists in grade 8. Teachers at Somerset Middle School have been engaged in high levels of professional development related to educational technology integration in order to produce high levels of student achievement. With each student having their own school-issued Chromebook, teachers utilize digital tools and resources to deliver the curriculum and, when necessary, textbooks are used as support material purchased as classroom sets and not for every student.

As part of the Somerset Middle School visioning sessions, the faculty and staff identified self-directed learning, effective communication, critical thinking and problem solving, and collaboration as some of the most impactful student learning goals. A student's ability to acquire and demonstrate his/her application of these highly important skills is contingent on their ability to access and use technology. The necessary technology-infused teaching and learning environment is not about the device, but how teachers and students use the device.

A typical classroom will be equipped with teacher and student technology that allows for ease of technology integration, including large interactive monitors accessible by anyone in the class or ceiling-mounted projectors. Classrooms will also have an audio system with speakers installed throughout the classroom, and the teacher will have access to wireless microphones for the hearing impaired. Each classroom should have ample access to electricity including charging stations for student devices. All of this is possible only when a robust and reliable network exists.

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Besides the standard instructional technology that will exist in each classroom, there will be special and unique technological resources that students will use to create and innovate in project-based learning situations. This includes access to 3D printing, green screens, and television production/audio-visual equipment. Students will also have access to virtual reality or augmented reality experiences to further explore and investigate in multiple academic programs and disciplines. Access to technology by teachers must also extend beyond the classroom. Professional collaboration areas will contain interactive monitors for collaboration and communication.

Current Security:

Providing a safe and secure environment is of the utmost importance within the Somerset Public Schools. Students who feel safe and secure in their environment will be better prepared to take advantage of the educational opportunities presented by the school's staff.

In 2018, the District made significant security improvements to all four schools. At Somerset Middle School, this included relocating the main office from a central location to a classroom with an exterior wall near the main entrance of the school. Previously, after visitors were allowed into the building through a secured door, they had access to several hallways and would pass by several classes before being checked in at the main office. Now, visitors are allowed to enter the school after a quick screening process that includes audio and visual communications. Visitors are allowed access into a secured vestibule at which time they present an identification, are matched against a federal database, and then are printed a visitor's pass that they must wear for their duration. Upon completing these steps, the visitor is then allowed through the second set of locked doors. Included in the 2018 security upgrades was the installation of keyless entry locations for faculty and staff, who were issued identification badges that grant them access to the building, which is limited to certain days and timeframes.

Somerset Middle School also has had video surveillance equipment for a number of years, being one of the first middle schools in our region to have video surveillance equipment. However, advances in video technology have made this equipment nearly obsolete with lower quality images from what most people are accustomed to and with 48 internal cameras and only three exterior cameras.

Each classroom has a means of communication to the office through an internal phone system. Teachers cannot communicate room to room, only directly to the office. The current intercom and phone systems are old and will require upgrading or replacing in the near future. The sixth-grade wing of the building was designed as an open classroom area. There are very few interior walls, with the only division between adjacent classrooms being six-foot-tall storage units.

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Proposed Security:

Safety and security at the school are together one of the most critical aspects of operating a successful school environment. If students do not feel safe socially and emotionally, secure, and confident, they will not learn to their fullest potential. However, providing this sense of safety and security without including overly-restrictive physical barriers is also important. Students must be and feel safe without restricting the desired open and transparent connections within and between the neighborhoods and learning areas.

Safety and security start upon entry to the school grounds from Brayton Avenue and Read Street. It is important to provide vehicles and visitors to Somerset Middle School, including school buses, teachers and staff, and parents, with distinct drop-off, pick-up, and parking locations. This will ensure for efficient, timely, and safe arrival and dismissal procedures each day. Upon arrival to Somerset Middle School, a clear approach for students and visitors that promotes supervision and observation at the point of entry will be important while providing natural barriers to vehicular traffic.

Somerset Middle School will continue to utilize and enhance existing security measures without impacting the building's physical organization or appearance as an inviting and open learning environment for students, teachers, parents, and visitors. Passive, natural obstructions outside main entrances will be used to prevent vehicles from getting too close to or impacting the school. Having exterior windows on the ground level of the building that are reinforced and/or are designed to be shatter-resistant is also critically important to the security of the school. For use during a lockdown event, Somerset Middle School would like to install security measures for the windows that separate classrooms from the hallways. This might include using privacy glass or other automatic means to quickly prevent someone in a hallway from viewing into a classroom.

It is essential to have a video surveillance system that includes cameras at locations along the exterior of the building, in the parking lots, hallways, stairwells, the administrative area, in select areas around the school, and at the road entrances to the property.

All exterior doors must be lockable, with those located at main entrance locations to have the keyless entry access via identification badges. A single main entry for visitors that includes a double-entry system is essential to control who enters the school. Video surveillance located at the main entrance and at select locations around the exterior perimeter of the building will allow the main office, the School Resource Officer, and the Somerset Police Department to monitor exterior activity as it currently exists. We will maintain our visitor check-in procedures that includes a check against a federal sex offender database along with the printing of a visitor's badge. Panic buttons, which can trigger a lockdown event, will likely be located in select areas around the school. The school will be able to be secure during after school hours when community events take place in the gymnasium or other areas used for community gatherings. This would occur

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through the use of hallway doors that can be locked from one side, preventing access throughout the school.

J. Music

Current:

There are two general music teachers who each teach half of the 654 students twice in a six-day cycle. Additionally, Somerset Middle School has exceptional performing instrumental and vocal music programs that consist of a grade 6 band, grade 7 & 8 band, grade 6 chorus, grade 7 & 8 chorus, grade 6 strings (orchestra), grade 7 & 8 strings (orchestra), jazz band, select strings, select chorus, and an annual drama production. We host a winter and spring concert for grade 6 students and, on separate evenings, a winter and spring grade 7 & 8 concert, two to four end of year performances, and a two-night drama production, all of which are attended by 300 to 600 family members, friends, and community members. Many of the performing music groups perform for various community events including local nursing homes, shopping areas, ceremonies, and parades.

Performing groups rehearse two to three times in a six-day cycle during Raider Time. There are more than 200 students participating in one or more of the performing groups. Appropriate and adequate space for these programs is a necessity. Currently, there are no professional work areas. There are two general music classrooms and an auditorium that is used almost every period, as well as before and after school.

The Town of Somerset has an active and supportive "Friends of Music" community organization. Through our long-standing celebration of music in our schools, Somerset has been known as "Musictown" since 1974.

The music curriculum is aligned with the 1999 Massachusetts Arts Curriculum Framework and was created collaboratively by our teachers. The last three years, teachers have been working to update music lessons that incorporate the National Core Arts Anchor Standards, the basis of the newly revised Massachusetts Curriculum Standards released in the summer of 2019. We plan to redesign our SMS music curriculum beginning in 2019 in alignment with the newly released standards. Rollout of those standards has begun this fall including Professional Development shared on November 21, 2019.

Proposed:

The Music Education Program at Somerset Middle School is a vital component of the total education a student receives. Its integration into a "STEAM conscious" curriculum, which recognizes the value of the arts within science, technology, math, and engineering, provides a

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broader learning environment where students with varying learning styles and strengths can be engaged and energized. Through the study of music, all students develop knowledge and skills that prepare them to experience the power of music in human existence. Students discover music as a unique form of communication and as a means of self-expression not afforded by any other discipline. They learn of the universal role of music in the transmission of culture and the chronicling of history. The study of music gives children a broadened world vision and an appreciation of other points of view. As a performing art, music builds self-discipline and promotes self-esteem in ways that are not inherent in other curricular offerings. Because of the ordered nature of the elements of music, students learn to think with increased complexity; because of the creative potential in music, they learn to think in divergent ways.

Music benefits the overall learning process of every child. Research suggests that more areas of the brain become active when children engage in playing music. Program effectiveness is determined through collection and interpretation of data, which shows continual improvement in:

- The number of students in advanced courses
- The number of students who qualify for after-school and Gifted and Talented ensembles
- Participation and achievement in festivals and adjudications

The music program can foster and reinforce the four C's (Critical Thinking, Communication, Collaboration, and Creativity) by providing opportunities in four broad areas:

Creativity:

- Imagine generate musical ideas for various purposes and contexts.
- Plan and Make select and develop musical ideas for defined purposes and contexts.
- Evaluate and Refine selected musical ideas to create musical work that meets appropriate criteria.
- Present creative musical work that conveys intent, demonstrates craftsmanship, and exhibits originality.

Performance:

- Select varied musical works to present based on interest, knowledge, technical skill, and context. Analyze the structure and context of varied musical works and their implications for performance.
- Interpret develop personal interpretations that consider creators' intent.
- Rehearse, evaluate, and refine personal and ensemble performances, individually or in collaboration with others.

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• Perform expressively with appropriate interpretation and technical accuracy, and in a manner appropriate to the audience and context.

Response:

Select music appropriate for a specific purpose or context.

- Analyze how the structure and context of varied musical works inform the response.
- Support interpretations of musical works that reflect creators'/performers' expressive intent. Support evaluations of musical works and performances based on analysis, interpretation, and established criteria.

Connections:

- Synthesize and relate knowledge and personal experiences to make music.
- Relate musical ideas and works to varied contexts and daily life to deepen understanding.

Each of the project labs should include opportunities for the exploration of music (not necessarily in the traditional sense of vocal and stage performance, as there will be specialized program areas within the building such as the auditorium for this purpose). The project lab should allow for exploring the incorporation of music into projects, presentations, exhibits, engineering, and discovery. For example, a project or presentation may require music to reinforce a particular idea, solicit a particular audience response, or invoke a specific mood or tone. Each space should also be flexible enough to serve as an ad-hoc MIDI (Musical Instrument Digital Interface) lab, allowing students to use technology to integrate keyboards, electronic musical devices, composition software, projection, and printing as a means of communication and exploration.

The proposed building should also include a dedicated music space which provides students the opportunity to explore and master each of the discipline-specific standards. This dedicated space should include instrument areas, visuals, music technology space, secure storage, teacher work area, and movement space. Students can be allowed to develop in a specialized environment working to compose, play instruments, move, and critique within a lesson to deepen their understanding. Students of differing abilities and understandings can learn using multiple instruments and supports. Students excelling in a particular area can expand and extend their learning through composition, conducting, or critique. A music classroom in addition to a choral stage with risers (auditorium stage) gives the teacher many more tools to reach students and allows such to occur with a more controlled environment. This music room should be located near the performance space (auditorium) to allow for smooth transitions from independent growth to ensembles skills development. Consideration should also be given to possible indoor/outdoor connections which may provide opportunities for outdoor performances as described as part of the guiding design principles. When students can play or sing together, they learn social and emotional

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skills that transfer out of the music classroom. When a classroom is designed thoughtfully, all students benefit from greater understanding and skills development.

An auditorium with appropriate acoustics that will hold a minimum of 600 people is necessary. The stage constructed of wood will be large enough to accommodate at least 50 musicians as well as percussion equipment for 125 choral music participants. The stage area should include state-of-the-art curtains, lighting, sound, recording, and video equipment. Ideally this space will support full multimedia presentations with a screen that lowers from the ceiling and the ability to project from connected devices. The space would lend itself to professional development and distance learning in addition to providing students the opportunity to attend professional presentations or performances. As mentioned previously, the music room should be attached to the auditorium in a way that provides a strong connection to the auditorium house or stage. The chorus program will utilize the stage as a practice and performance venue from time-to-time but will utilize the dedicated music room as an efficient way to obtain the much-needed specialized instruction area. Creating versatile musical practice and performance space allows Somerset Middle School to produce school and community programs, and feed Somerset Berkley Regional High School's award winning band, string, and choral programs.

K. Art

Current:

There are two art teachers who each instruct half of the 654 students twice in a six-day cycle. Instruction takes place in one classroom space located in the open classroom wing of the school. These two classrooms are separated by storage cupboards on wheels. The age, condition, layout, and physical condition of this space will need attention within a new design. The art curriculum consists of many art mediums including drawing, painting, mural work, ceramics including a kiln, ceiling tiles, and photography which are displayed in art exhibit areas, and areas to showcase student work. Student work is featured in a 6th Grade Art Show, 7th / 8th Grade Art Show, and an Art Spectrum Showing which is held each spring in the art gallery at Somerset Berkley Regional High School. Student artwork is also on display on the ceiling tiles of the Somerset Middle School cafeteria.

The visual art curriculum is aligned with the 1999 Massachusetts Arts Curriculum Framework and was created collaboratively by our teachers. The last three years, teachers have been working to update visual arts lessons that incorporate the National Core Arts Anchor Standards, the basis of the newly revised Massachusetts Curriculum Standards released in the summer of 2019. We plan to redesign our SMS visual arts curriculum beginning in 2019 in alignment with the newly released standards. Rollout of those standards has begun this fall including Professional Development shared on November 21, 2019.

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Proposed:

One of the priority goals established as part of the visioning sessions was the continued support for STEAM within the Somerset Public Schools, specifically including the integration of the Arts, both visual and performing. These Arts foster creativity, providing one of the primary components of the four C's (Critical Thinking, Communication, Collaboration, and Creativity). In the case of the visual arts, students must have opportunities to integrate their creativity into hands-on projectbased learning and investigation that will be occurring in the Project Lab. Each such space within the academic neighborhoods should include all of the necessary support amenities to allow it to serve as a sort of satellite studio for the execution of painting, assembly, graphic design, and the numerous arrays of visual arts activities that the students will have at their disposal. These functional amenities will include sinks, material storage, worktables, etc. The goal is not to turn the Project Lab into an art room, but to allow students to execute skills they are fostering in the specialized art room as part of their daily exploration and discovery in other disciplines. Additionally, the school should have a primary and specialized art classroom which becomes the hub of visual art instruction but also remains in close proximity to the academic neighborhoods. In order for this specialized art classroom to serve the entire school, as well as the individual academic neighborhood, it should meet the following criteria:

- Be in close proximity to the other Expressive Arts classrooms and integrate into the academic neighborhoods, possibly integrating one classroom into the 5/6 area and one classroom into the 7/8 area.
- Art room on the ground floor with access to an outdoor space, if practical.
- Art room equipped with good natural and artificial lighting (including track lighting for spotting still-lifes), cleanable surfaces, plenty of table space, and flexible furniture configuration.
- Easy to clean flooring.
- Increased built-in storage for 2D, 3D projects, and resource materials.
- Multiple tack display boards throughout the room and around the school for displaying resource materials and student work.
- State of the art technology, including, but not limited to: electrical outlets in the walls, a mounted projector, surround sound, high capacity color printer, scanner, and at least two computer stations for students.
- Large storage room separate from the classroom that includes an assortment of utility cabinets, flat files, racks, and tables as well as built-in storage.
- Space for two kilns and a ventilation system.
- At least two large stainless-steel industrial sinks with backsplashes, sediment traps, and faucets that swivel.
- Space for storage of larger art furniture (i.e., multiple pottery wheels, light table, etc.).
- A dedicated kiln room.

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The Visual Arts also maintains a strong connection to media and video production, a program which is likely to have physical existence within the library media center function but be supported by the Art educators. For this reason, a strong connection to the media center and other graphic arts programs and components should be considered as part of the proposed new facility design. This graphic/media/video production space should include the following:

- A dedicated technology area with video projection and surround sound
- 20 Chromebook laptops or appropriate mobile devices
- 20 digital cameras
- Enough electrical outlets for charging devices
- At least two high capacity color printers
- At least four scanners
- At least one large format printer
- 3D printer
- Photo/video editing and 3D design software

L. Physical Education And Wellness (Health)

Current:

There are currently two physical education and two wellness teachers, with instruction taking place in the gymnasium and two health classrooms.

Our physical education program includes content that will allow students to experience progressive levels of achievement toward standards. Not only will students achieve competence in a variety of movement activities, but they also will understand the conceptual basis and principles that contribute to effective movement and fitness. Our goal is to ensure that students fully recognize and understand the significance of physical activity in maintaining a healthy lifestyle. They also should have developed the skills, knowledge, interest, and desire to participate in meaningful activity for a lifetime. We create activity experiences that develop personal and social behaviors consistent with responsible behavior in physical activity and in society. This includes an understanding of conflict resolution, the importance of rules and ethical behavior, and positive social interaction required in physical activity settings. The Somerset Middle School program also focuses on cross-curricular connections with science, mathematics, social studies, civics, dance, sports, and music; all in an effort to expand students' understanding and appreciation of physical education.

The existing Somerset Middle School building provides space that is inadequate for the safe

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delivery of physical education programs. The gymnasium has a partially functionable subdivider (parts are no longer available), the floor is dangerous for our students due to water damage, and the locker rooms are essentially unused. The locker rooms are on each side of the gymnasium; girls have changing stalls, and boys have an open area.

The gymnasium is not handicap accessible and is difficult for the teachers and students in adaptive PE or physical therapy to be successful. As indicated in the special education summary, there are no available spaces for the delivery of adaptive physical education and the incorporation of required occupational therapy and physical therapy spaces. Existing gymnasium space is too crowded and over-scheduled to incorporate adaptive PE, and there is insufficient space to integrate some OT/PT activities into mainstream physical education courses.

The two wellness (health) classrooms are large enough; however, the functionality of the rooms is limited.

Proposed:

Physical education is a component of the curriculum that is designed to educate all students, from the physically and/or mentally gifted to the physically and/or mentally challenged. A developmentally and instructionally appropriate physical education program promotes a physically active lifestyle. It accommodates a variety of individual differences, such as: cultural identity; previous movement experiences; fitness and skill levels; and intellectual, physical, and social/emotional maturity. Appropriate instruction in physical education incorporates best practices derived from both research and experience for teaching in ways that facilitate success for all students. Providing a safe and inclusive learning environment allows all students to experience positive, challenging, and enjoyable physical activities while learning skills and developing an understanding of the benefits and importance of physical activity. In conjunction with these activity experiences, students develop a positive self-image and social skills that will provide personal competence in work and leisure situations.

For purposes of physical education and activity, the newly proposed 5-8 school will essentially operate as two independent student populations: a 5/6 population of approximately 215 pupils, and a 7/8 population of approximately 215 pupils. In order to accommodate two distinct groups, a full-size gymnasium which can be subdivided into multiple teaching stations will be required. The proposed program offerings for adaptive PE and OT/PT require that consideration be given to further subdividing one half of the gymnasium into two areas. If possible, indoor walking space should be provided on the perimeter of the gymnasium to accommodate adaptive programs that run simultaneously to non-adaptive programs.

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Some specific program areas and amenities include:

- Full-size subdividable gymnasium space (3 areas)
- Mat hoists to allow for the delivery of stretching, yoga, dance, etc.
- Dedicated health classroom with close proximity to the gymnasium as an activity lab
- Men's and women's PE office and storage space
- Health storage space to accommodate support materials
- Changing stalls in both locker rooms
- Outdoor walk/jog and fitness trail
- Outdoor playfields

M. Special Education

Current:

The special education office/conference area is one relatively small room with no natural lighting, no storage for special education official records, and is not large enough for team meetings consisting of eight or more people.

There are currently three sub-separate programs in classrooms that are not appropriate spaces for the needs of the students. For example: inappropriate safe space, no restrooms connected to the rooms or nearby, not handicapped accessible, and lack of kitchen/laundry area for life skills.

We currently have 205-235 IEP In-House Team Meetings annually in the special education office/conference room which is located in the center of the building. This is a safety concern when outsiders are walking through the building to attend a meeting.

There is no service delivery space for Sp/L, OT, PT. Grade 6 resource room programs are in open spaces with no walls. This is difficult for all students yet especially difficult for students with attention disorders. We currently have 107 IEP students in house and 45 students with a 504.

We also have three classrooms used by South Coast Collaborative of which their students also push into Somerset Middle School general education classes. This year there are 11 students from SCC attending general education classes ranging from science, technology, art, PE, and music. During the 2018-19 year there were three students, 2017-18 eleven students, and 2016-17 eight students.

We are in our second year of a unified sports team with little space to meet and practice.

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Proposed:

The proposed building project will afford the special education program to be an integral part of the school community and be fully integrated into the academic neighborhoods. Ample classroom space is anticipated as follows:

5-8 Middle School Model

- Four (4) Learning Center Spaces (Resource Rooms)
- Eight (8) adequately equipped sub-separate spaces with bathrooms and kitchen areas (Self-contained SPED)
- Eight (8) Speech/Testing Rooms
- Four (4) Small Group Reading Rooms
- One (1) Occupational/Physical Therapy Room (could be near gymnasium)

6-8 Middle School Model

- Three (3) Learning Center Spaces (Resource Rooms)
- Six (6) adequately equipped sub-separate spaces with bathrooms and kitchen areas (Self-contained SPED)
- Six (6) Speech/Testing Rooms
- Three (3) Small Group Reading Rooms
- One (1) Occupational/Physical Therapy Room

In addition, meeting/conference space, de-escalation space, and adaptive PE/occupational therapy space will be provided in order to best meet the educational needs of all students. Where possible, this program should be delivered within the same space utilized by all students. In instances where a specialized space is required for Occupational and Physical Therapy, this motor skills room should be adequate in size and would be similar to a half-size classroom; accommodating both gross and fine motor activities taught simultaneously. The IEP needs for students often recommend specialized motor equipment. The motor room should also allow space for gross motor activities, as well as individual and/or small group therapy sessions. There would also need to be equipment for the children, including a large floor mat, balance beam, a swing, and a ball pit, as well as ample room for gross motor movement. Sensory motor activities and/or fine motor work would require a space for up to two tables and up to eight student chairs. If possible, one of the walls should be mirrored to allow students to model and demonstrate their skills. This design will afford more opportunities for students and staff to work horizontally and vertically, and to incorporate interdisciplinary ways to fully integrate special needs programming, while having the capacity to expand current program and develop new programming as populations change and increase.

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One of the goals of integrating the special education classrooms into the academic neighborhoods is to also give these students opportunities for hands-on project instruction at a pace which is appropriate to their developmental needs and skill set. By allotting a small amount of space to the special education program (SPED Project Applications) within the project labs, the goal would be to ensure that there is sufficient area within the project lab to allow these students to work either independently or as part of the general education group, with sufficient space to accommodate their specialized needs.

The Somerset Middle School will continue to support a full continuum of services for students through 8th grade. The implementation of a comprehensive interdisciplinary model will allow students to access the general curriculum in classes taught by both a general education content area teacher and a special education teacher. Self-contained programs will be strategically located in areas of the building to best support student access. All special education programs need to be located close enough to content and elective general education programming so that inclusive opportunities can be realized when possible. Programs for students with severe cognitive and communication disabilities will have a newly designed daily living support area to include kitchen and laundry within a semi-private space with a designated de-escalation area to support a more protected and dignified learning space.

Professional office and testing spaces will be designated for related service providers in the areas of: Speech and Language Pathologists, Occupational Therapists, Physical Therapists, Behavior Specialists, Vision and Hearing Specialists, Reading Specialists, Adaptive Physical Education, School Adjustment Counselors, School Psychologist, etc., as well as for the SPED Director.

The new middle school will include many smaller meeting rooms (designated as "speech/testing" within the proposed space summary) for individual and small group tutorials, outside therapists, and specialists. These rooms may be used for regular teacher/tutor meetings and for small group testing environments and will be fully immersed within the academic neighborhoods. Along with special education teachers, para-educators and tutors will have shared space in an office with computer access for storing materials, etc.

Lastly, critical to the success of special education programs and related service providers is the ability to observe students in their school environment. Consideration to the structure of learning spaces will provide opportunities for parents, teachers, and consultants who work closely and carefully with the special education population to observe and learn from one another.

N. Extra Curricular Activities

Current:

Many Somerset Middle School students are on school grounds well beyond the official school day for various extracurricular activities. These activities include music, performance, athletics,

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academic extensions, tutoring, and numerous extracurricular activities. Many students study after school as they await upcoming practices, performances, or activities that involve them or their friends. The school also becomes a safe haven for spending time in social and recreational activities. Providing appropriate and safe indoor and outdoor spaces for such activities is a key component of a successful Somerset Middle School environment. The following is a summary of the programs offered before and after school, covering a wide variety of academic and enrichment programs.

- Homework Club
- Community Service Club
- Green Team
- Student Council
- Intramural Sports
- Peer Leadership
- Book Club
- Yearbook Club
- Math Team
- Newspaper Club
- Technology Engineering (ROV)
- Tutoring and mentoring made available through community service with former students
- Drama Coach
- Science Fair
- Washington DC
- Grade 6 Band
- Grade 7 & 8 Band
- Jazz Band
- Grade 6 Chorus
- Grade 7 & 8 Chorus
- Select Chorus
- Grade 6 Strings
- Grade 7 & 8 Strings
- Select Strings

O. Competitive Athletic Programs

Current:

Participation in athletics helps our students develop personal strengths, such as a sense of competence, affiliation, and pride, leadership and team skills, communication and problem

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resolution skills, respect for authority and for diversity, character, commitment, accountability, confidence, sportsmanship, physical fitness, and general happiness. In the pursuit of nurturing individual interests, these activities serve as mini life skills labs where students can practice social interaction, share talents, and work with caring, principled adults outside the home. We view these activities as a unifying force within the school community, affecting not just those who take an active part in the program, but the entire community. While winning is laudable, the primary priority is learning and growth in the pursuit of excellence. We invite all students to take part in extracurricular activities such as athletic programs.

Somerset Middle School is one of 13 schools in the Massasoit League. The league affords the students opportunities to be part of competitive teams in a structured learning environment. Students learn respect and concern for rules and officials, opponents, and the spirit of the sport they play. The following sports teams are available to our students.

- Baseball
- Softball
- Soccer-Boys
- Soccer-Girls
- Field Hockey
- Cross Country (spring & fall)
- Basketball-Girls
- Basketball-Boys
- Tennis
- Bocce / Baggo (unified sports, community)
- Cross Country Path / (community & SBRHS use)
- Athletic Fields/ (community use)

Proposed:

Somerset Middle School will continue to make available to our students a wide variety of opportunities to participate in afterschool programs including the current and future athletic teams. The indoor and outdoor facilities and grounds will need to accommodate the needs of all athletic teams which should include a concession building and restrooms. Outdoor playfields to accommodate all our athletic offerings, with a modified track along the perimeter of the field connecting to a cross-country course.

P. Media, Vocations And Technology

Current:

Somerset Middle School has recently shifted the engineering technology to include computer science, programming, and robotics. There is a manufacturing lab (woodshop) students use to

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construct and test bridges, and where they learn how to use various tools which is part of the Massachusetts frameworks. There are two computer labs that are used for AutoCAD, coding, software applications, web page design, and publishing.

The media center is significantly limited by the current facility. It is partially used as a grade 7 science class, as well as for podcasting and video recording in addition to book circulation and student work/study areas. There are no walls or dividers to separate the various areas. This space is not designed for optimal collaboration and project-based learning, operates as a dual-purpose setting, and is significantly undersized for project based learning.

Proposed:

The media center needs to be a dynamic and vibrant classroom where students can compete in the 21st Century. This space is envisioned to provide the following:

Academic research will occur in the media center where teachers can bring classes that will have 21st Century tools at their disposal. In addition, media broadcasting, video editing, and video productions are part of the core offerings which will occur in the Media Center. During the educational visioning sessions, there were many project-based activities that involved strong media and data content. The library media center may ultimately be the best place for support of these activities.

Vocations and Technology

The role of vocations and technology education in the middle school environment continues to ensure that students are offered STEAM exploratory courses in technology applications, digital citizenship, engineering, and execution. This project-based learning environment will be a place where students are learning, working, and building within the technology lab. Vocations and technology requires a more advanced and specialized space for the delivery of certain applications that are beyond the capabilities offered within the academic space.

In closing, for Somerset to offer the desired program in media, vocations, and technology, the following spaces are necessary:

- Full-scale Library Media Center including a Media Production Lab/separate teaching area
- Full-scale technology education room with workshop
- Full-scale technology/media literacy

Vocational education will continue to offer young adolescents with self-understanding of who they are, a social understanding of an individual's life work, and the commencement of goal development in terms of identifying what they might want to become. The vocational education

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program at the middle school level will provide students with a correlation between the academic subjects they are studying, the projects and hands-on experiences they are developing, and the professional careers that are evolving in a global world. The specific program space dedicated to vocations and technology should be highly flexible and should be integrated into the neighborhood teams and their maker spaces as much as possible. They include:

Integrated Academic Production Labs

As noted above, the vocational technology programs will have an active an integrated role in the delivery of STEAM within the academic neighborhoods. The academic production labs included within each neighborhood are not a designated technology and vocations space; however, they do include an expanded component that is designated as a vocations and technology space. Each application lab will include an adjacent vocations and technology space that allows for the required connectivity between the applications lab and the vocations and technology skills. Such space should accommodate a small group of students working in direct proximity to the applications lab. This space will be referred to in the space summary as "Project Lab Support Area".

Multimedia and Video & Production (VAP) Lab

As media and video become more heavily integrated into many career and technology applications, the need to offer specific instruction in this area remains very relevant. This space will have a strong connection to the media center and be located such that it can potentially be supported by instruction and equipment provided by local business partners and the Town's cable broadcasting entity.

Technology Education - Applications and Production Lab

This will be a flexible lab environment which resembles a traditional vocations lab and includes numerous building and production tools. It will include focused hands-on career opportunities to participate in developing both kinesthetic learning through tactile experiences but also applying cognitive learning in technology career applications. The instructor will work collaboratively with the academic leadership to integrate lesson plans which allow students to support their project-based inquiry and learning assignments within their integrated academic production labs and to have opportunities to expand that exposure within the technology applications and production lab.

Tech Literacy

Technology Literacy is a more traditional computer lab environment where students are exposed to advanced levels of graphic application, basic software development and application strategies, computer programming, and application development.

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Q. Functional And Spatial Relationships And Key Adjacencies

Current:

Somerset Middle School, as currently configured, is often referred to as the Industrial Model approach to educational design and jokingly referred to as "Cells and Bells" because it organized classrooms along a corridor, much like holding cells. Corridors are lined with Industrial-style lockers for each student. Each classroom space exists in a state of isolation, with no visual connection to the corridor other than a door. Students move from "cell-to-cell" under the direction of bells...hence the name "Cells and Bells". This organizational structure has many disadvantages and includes an outdated approach to many 21st Century educational practices including:

- The evolution of technology has almost eliminated the need for student lockers. Lockers were created to hold books and personal belongings, all of which are minimized for the modern middle school student. The use of this valuable space for numerous underutilized lockers is a waste, and one goal of the new middle school will be to reduce to an appropriate size and strategically place lockers; utilizing technology to reduce the need for books and other storage solutions to address personal belongings.
- The middle school staff has seen increasing success with students who are able to work in small groups outside of the boundaries of the classroom. These students currently only have the corridor space available to them, which unfortunately limits the circumstances under which they can be allowed to complete small group study outside the classroom. However, the results associated with allowing students to assemble in small workgroups outside of the classroom have been very positive despite the spatial limitations. There should really be no "corridors" in a modern facility, as one could argue that this space is the most underutilized space in the entire building. These "Corridors" should become part of the "Neighborhood Commons" area with transparency to the classroom, such that they can be utilized during the entire school day as an area for small group study, independent research, and numerous other academic pursuits. One of the goals of the new middle school is to eliminate these "Corridors" and convert them to viable, usable, learning-supportive spaces in each neighborhood.

The current team consists of four general education teachers (Mathematics, Science, English Language Arts, and Social Studies) as well as Special Education Liaison(s) associated with Special Education programs connected to that particular team. While a team approach is utilized, the physical layout of the building inhibits teachers' ability to provide interdisciplinary opportunities on a regular basis.

The existing building is heavily utilized for various school and community activities, including:

• SSYSL (Somerset-Swansea Youth Soccer League)

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- SYBA (Somerset Youth Basketball Association
- PAL (Police Athletic League) Wrestling
- Police exam, Police training
- Cross Country path
- Rooms in building by Somerset Town Meetings, School Committee meetings, SBRHS groups, Somerset Teachers Association meetings, Girl Scouts, Boy Scouts, Basketball leagues, local dance studio performances

The existing building layout and organization does not provide administration with the ability to secure sections of the building from the public during public events, thereby allowing any visitor to "roam" the corridors and entire building.

Proposed:

The educational visioning sessions conducted with faculty, staff, administrators, and building committee members in September, October, and November 2019 provided much insight into the aspects of the proposed educational environment and its ability to support the desired educational program. Much of this insight is captured in the above-defined requirements for specific program areas. However, there are also overall functional, spatial, and adjacency requirements not mentioned above that were identified throughout the discussions and are important to capture in the overall planning process. These items are either guiding design principles or are keys to ensuring that the guiding design principles can be achieved. These concepts are summarized below in no particular order or prioritization.

Educational Innovation:

There has been much discussion herein about the academic grade-level neighborhoods that were discussed throughout the educational visioning process and that have long been inherent in the Somerset Middle School program. The current school embraces a model that emphasizes teaming students. The team consists of four general education disciplines (Mathematics, Science, English Language Arts, and Social Studies) as well as Special Education Liaison(s) associated with Special Education programs connected to that particular team.

While a team approach is utilized in the current facility, the physical layout of the building inhibits teachers' ability to provide interdisciplinary opportunities on a regular basis and does not allow the teams to exist within their own dedicated academic neighborhood. In order for teachers to be able to facilitate the blending of multiple disciplines of academic instruction, the proposed new facility should organize the teams into grade-level "Teaching and Learning Neighborhoods". These neighborhoods will include two teams (PRIDE and RESPECT), with each team consisting of Math, Science, English Language Arts, and Social Studies. Each grade-level academic neighborhood will include a dedicated hands-on project lab with a specific theme. Each

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neighborhood will include opportunities for small group work and study areas which allow students to move in and out of the classroom area without interruption. Special Education spaces for reading, resource, and inclusion will be an inherent part of each neighborhood. A shared teacher work, planning, and collaboration area in each neighborhood is an integral piece of the design and will allow collaboration on assignments, student progress, and the planning of rigorous cross-disciplinary opportunities. There was much discussion about how the individual grade-level teachers remain connected without being isolated into their individual neighborhoods, and the design process should explore the possibility of creating collaborative planning areas that keep teachers close to their neighborhoods but also allow them to collaborate across all grade levels. Although some separation is desired for individual grades, the visioning group agreed that there were strong benefits to some connections between grade levels and that this connectivity should be explored during the design process.

Although many of the specific discussions surrounding the proposed classrooms and the hands-on STEM Labs (grade-level project labs) are captured in other sections of the Educational Program, there were some conceptual ideas and visions that are equally as important. Based on experimental strategies tested within Somerset's current middle school, it is strongly believed that 21st Century instructional practices should not segregate instruction from application. The modern middle school classroom should be large enough to accommodate both instruction and application. It has been discovered that many successful instructional applications require groups of students to be able to seamlessly and quickly transition from instruction to application without leaving the classroom. Teaching methodologies vary widely and are designed to engage students in critical thinking practices and applications. This requires the classroom to be flexible enough to allow for seamless and frequent transitions from whole group facilitation, to small group facilitation, and to peer-assisted collaboration and interaction. This flexibility requires additional classroom space and is why it has been requested that classroom sizes be within the upper range of MSBA guidelines. The hands-on STEM labs are an important program element of each academic neighborhood, but they cannot be the sole avenue for hands-on instruction. This would require too much time for student movement and transition and would require complex scheduling that eliminates teacher and/or student spontaneity. Much has been said and written about the "Flexible 21st Century Classroom". It includes highly flexible furniture and floor plan, transparency to the academic neighborhood, sufficient space for hands-on learning, and the necessary functional attributes such as lighting and acoustics. It also includes ubiquitous technology and large-scale instructional walls which allow "every wall to be a teaching and collaboration wall". The goal is to continue to advance this evolving model as part of the new middle school design. There has been much discussion about the need for small group spaces integrated within the classrooms and neighborhoods. Some of these spaces require a high level of transparency for supervision and connectivity to remaining neighborhood spaces, while others may require more privacy but the same level of connectivity in terms of adjacency. These spaces will become an extension of the flexible classroom in many areas, as they offer opportunity for pull-out instruction that remains closely integrated into the classroom.

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Belonging and Ownership:

The visioning group felt strongly that one of the key attributes of a strong school community involves the ability to personalize the school environment. This fosters a sense of ownership, belonging, and pride. The grade-level academic neighborhoods and project spaces will provide an enormous canvas for the personalization of the school environment. They also will afford an opportunity to personalize the specific instruction being offered at each grade level. These spaces will allow educators to meet the needs of all students in an engaging, creative, and collaborative way. They should be flexible enough for the students to influence their organization and appearance, as they become reflective of the work being produced by the students. They should include opportunities for both short- and long-term exhibits and have the feel of a productive workshop for learning and exploration.

The visioning group also felt strongly that the students should continue with the ownership of and participation in various activities occurring throughout the school, including; 1) Student Gardens, 2) Recycling Program, 3) Technology Help Desk, and 4) School Store.

Participation in these activities provides a sense of involvement, responsibility, and community.

Safety and Security:

The new middle school will provide students and staff with a safe and secure environment by including measures that support and foster safety and confidence. Students and staff must feel safe and confident in their environment, without the inclusion of over-restrictive physical barriers that compromise the educational environment. Providing clear and controlled entry will be important, including entry separation between grade(s) 6 or 5/6 (lower school) and grades 7/8 (upper school), but, within the academic neighborhoods, safety should prevail without restricting the desired open and transparent connections between the learning areas. A clear approach for students and visitors which promotes supervision and observation at the point on entry will be key to allowing all to access the necessary support services. Safety also includes providing adequate and appropriately located space for support services staff and outside providers who provide needed mental health support for our students. Students face and are presented with a wide array of mental health issues at early ages; it is vital that space is provided for these services to commence in a suitable space.

As part of the discussions on safety and security, several building systems were discussed as being critical to security in the school environment. They include:

1. <u>Access Control System.</u> All exterior doors will be lockable, and some will be electrified to be locked and unlocked by the access control system. Doors that do not have electrified door hardware will be locked and unlocked by keys. Main entry doors will be electrified. The grade level (upper school and lower school) doors will be

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electrified. They will have a card reader if having these doors locked at all times is desired. The inner set of doors in the main entry vestibule will be locked at all times, except for drop-off and pick-up times, where these doors are planned to be scheduled locked and unlocked during specific times by the access control system. This set of doors has a card reader as well. There will be a video entry station at these inner doors to allow administrative staff to buzz people past them in order to enter the administrative area. There may be a third set of doors beyond the administrative area which would be locked in a similar fashion as the inner set. Panic buttons, which can trigger a lockdown event in access control (examples of what a lockdown event can trigger are the presentation of a PA announcement, dialing 911, locking all unlocked electrified doors, disabling card readers below a certain access level, sending email alerts, etc.), will likely be located in the following areas: administration; Principal's office; certain secretarial staff; custodian's office; Assistant Principal's office. Stairwell doors can be pulled off magnetic holders and programmed locked by access control, securing upper floors from remaining areas. Activation of the fire alarm system will de-energize these stairwell doors for fire safety and they will become unlocked. Exterior doors DO NOT become unlocked upon fire alarm activation. Depending on the IPTV system for the school, it is planned that a lockdown condition in access control shall trigger the IPTV system to turn on all projectors and televisions in the school and present a video file for lockdown purposes.

- 2. <u>Intrusion Detection System.</u> The intrusion detection system is the burglar alarm system that is armed when the building is unoccupied. This system will likely include motion detectors in every room on the first floor with windows, door contacts on every exterior door, and door contacts on every interior door shown on the drawings (stairwells, and any room with a card reader). The intrusion system will be programmed to dial the central office when an alarm condition is detected, either by a motion detector or door being forced open. Panic buttons in the administrative area can be programmed to have the intrusion system dial 911 in an emergency during occupied times for lockdown purposes if desired.
- 3. <u>CCTV System.</u> Cameras will be placed around the exterior of the building, the parking lots, hallways, stairwells, the administrative area, student dining, auditorium, courtyard, physical education areas, media center, and any identified road entrances to the property. A camera will be placed on all entry doors into the building. A forced door alarm will call up the video of a camera assigned to cover the door at the security station PC.
- 4. A bi-directional amplifier and antenna system will be installed for police and fire radios to function within the building without interruption.

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Indoor/Outdoor School and Community Connections:

The connection of indoor and outdoor spaces is important to creating a vibrant and energized educational environment. Students can become more engaged in utilizing outdoor space if an effort is made to ensure the appropriate visual and physical connection. Outdoor space can be used beyond recreational use and can provide project space, social space, classrooms, amphitheater, study areas, and other support areas for the educational environment. This could provide numerous educational, environmental, and fitness opportunities, even forming a pathway that flows into the proposed building. This would also provide an even better opportunity to utilize elements of the outdoor environment in specific science and environmental instruction, as the site and existing topography offers many unique environmental features, including wetland areas that can create outdoor "bio labs" closely integrated to indoor science opportunities. We would propose that the school campus include numerous outdoor rain gardens, as these have been successfully integrated into science labs, outdoor learning labs, and outdoor dining spaces at numerous school campuses in the Commonwealth.

Sustainability:

The Town of Somerset has clearly established their commitment to sustainability, energy efficiency, and on-site renewable energy. In 2015, the District invested in the design and installation of a 350kW rooftop photovoltaic system on the new Somerset-Berkley Regional High School roof and a 300kW photovoltaic system (936 solar modules) on the existing middle school roof. Most recently, the community included goals in the Town-wide Master Plan of becoming a "Green Community" as designated by the Massachusetts Department of Energy and Resources (DOER). The educational visioning group expressed their desire to continue this commitment with the design of the new middle school project and generated several goals to implement in the proposed project's site and building design, including;

- Maximizing the building's energy efficiency
- Integrating and expanding the existing building's rooftop photovolatic array
- Using the site and building as a sustainable teaching tool
 - o Use of the existing site's topography and features for educational opportunities
 - Strategic exposure of building systems and promotion of building operational efficiencies
 - o Integration of building technologies into the existing educational curriculum

Educational Technology Campus Wide:

Campus-wide wireless access is key to creating a flexible environment where students can complete assignments without the confines or boundaries of a fixed computer lab. The seamless integration of technology through both a high-capacity wireless network coupled with durable small devices (i.e., iPad, Chromebooks, laptops) for each student will allow students to access

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information more readily to assist in the production of rigorous performance-based tasks that foster creativity and the development of 21st Century skills. The technology goals described previously herein will apply to the entire campus...indoors and outdoors. Additionally, media broadcasting, video editing, and video production are all academic endeavors which will be supported within the academic neighborhoods and through the provisions of the video production lab. This will also allow students to create and engage in a variety of community events through the use of a variety of media.

The School as a Whole Day Support Entity:

For many of the students within the Somerset Middle School community, the school becomes a full-day support system from early in the morning until late into the evening. This often places students both inside and outside the building well beyond the official school day and should be considered as part of the building and campus design. As parents have more daily demands and students become more involved in school-related activities, the time they spend on the academic campus has expanded. These activities include music, performance, athletics, research, science, academics, tutoring, and numerous extracurricular activities previously outlined in the educational program. Many students study after school as they await upcoming practices, performances, or activities that involve them or their friends. The school also becomes a safe haven for spending time in social and recreational activities. Providing appropriate and safe indoor and outdoor spaces for such activities is a key component of a successful Somerset Middle School environment.

R. Transportation Policies

The Somerset Public Schools provides transportation to all students in Somerset at no cost to the family. Presently, 15 school buses are used to provide transportation for Somerset Middle School students. Additionally, some students are provided special transportation using vans as required by some students' individualized education programs. A number of families choose to drive their child(ren) to school daily. Currently, Somerset Middle School has a single driveway for all incoming and outgoing traffic, including all school buses, special education vans, and parent dropoffs and pick-ups. This creates significant traffic delays each morning and afternoon. Any proposed design would incorporate multiple entrances/exits from the site, including the separation of bus, vehicular, and pedestrian activities.

S. Social Emotional Needs

Current:

Current Student Service space includes an open area for secretary with conference tables (currently not a confidential space); off this area is the school psychologist's office, in-school-suspension room, and 6th grade guidance counselor office. This open conference area adjoins to a hallway with a men's and women's room, record room and supply room. In addition, down the hall is an

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adjustment counselor's office, the 7th and 8th grade guidance counselor's office, and School Resource Officer's office.

- This year there are 59 students on 504's who are monitored for grades, social emotional health, or medical. Currently there are 107 students on IEP's who are monitored for grades and/or social emotional reasons.
- In a typical day 16 students are serviced based on raw data of the sign-in sheets this year.
- In 2018-19:
 - 1,578 documented visits to the student service center in the 2018-2019 school year
 - o 20 IEP meetings attended by student service providers monthly
 - o 63 504 meetings were facilitated by guidance counselors annually
- Family meetings take place in classrooms or the main office conference area due to lack of confidential space with student service providers.
- Small group counseling provided by adjustment and psychologist is provided in offices now
- PSAT's, NAEP, MCAS assessments, and ASPEN school scheduling are all organized in the guidance conference space by guidance counselors; secure space and storage is needed to facilitate this process
- Secretarial space is currently part of the conference area in the guidance suite

T. Community Use of Facilities

Campus Connections to the Community

The sense of community among the students, staff, educators, and administrators at the Somerset Middle School was identified by all as being extremely strong, and one of the guiding design principles would be to promote the contagious spread of this strong sense of community to the entire neighborhood outside of the boundaries of the school campus. Parents and community members who are currently participating in school activities are highly involved and provide a strong sense of support. However, the planning of the newly proposed facility should include considerations for how to facilitate stronger engagement of the parents and residents. It must be a welcoming environment for not only students and staff but also for all residents of the neighborhood and associated businesses. The proposed facility should be designed in a way that allows visitors to experience student activity and work and to provide support for such in meaningful ways. Being able to strengthen the greater community through both ease of use of facilities and the presentation and display of student work is of vital importance. Because visitors will not necessarily be privy to the day-to-day learning experiences of students, providing opportunities to view student work that is rigorous and engaging will help to build a sense of community between the school and the neighborhood residents. Other strategies for strengthening

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community may include a more accessible campus, shared work and conference areas for parents, program areas which can be shared by the neighborhood during non-school hours, exhibit areas for local businesses, and numerous other possibilities.

The site on which Somerset Middle School stands served as the Somerset Town Farm from about 1850-1950. This town farm was an ongoing project used to generate revenue that was used to "provide shelter and care to Somerset residents who were unable to support themselves due to illness, poverty, and special needs." From early on in its history and to this day, a strength of the Town of Somerset has been the way it comes together as a community to support each other in times of need. A well-planned Somerset Middle School will honor its historical sense of community by making all efforts to connect the school campus to the surrounding neighborhoods and create new connections to the town community for access and use. Such uses may include fitness trails, a community garden, and access to other athletic and leisure activities for residents, thereby providing fitness opportunities for both the community and the school. It is important to note that Somerset Middle School is located on a Town parcel that is also occupied by the South Elementary School and the South Athletic Complex, which is home to three baseball fields, two soccer fields, an outdoor basketball court, and a playground. The Somerset Middle School campus and the woods adjacent to the school to the west are home to the Somerset Berkley Regional High School and Somerset Middle School cross-country routes. The Somerset Middle School site is also connected to the Somerset Berkley Regional High School campus by means of a wide path (utility easement) of land used by National Grid for energy transmission. We envision connecting these two schools via a bicycle/walking trail along this swath of land.

To honor the history of the site and to provide strong curricular connections in science, we propose that Somerset Middle School contain a community garden and/or greenhouse. This would provide an opportunity to utilize elements of the outdoor environment in specific science and environmental instruction as well as with our special education programs.

With limited open space in Somerset, we propose that Somerset Middle School also host several outdoor areas to accommodate outdoor activities such as Bocce and Pickleball. Not only would community members have access to these areas, but Somerset Middle School would also incorporate them into extracurricular activities including intramural sports and Special Olympics Unified athletics.

Somerset Middle School is frequently used by organizations in town for youth and community activities. The Somerset Middle School gymnasium hosts Somerset Youth Basketball games nearly every weeknight from the start of November through March and often on weekends, too. The Police Athletic League utilizes the gym every weekend throughout the winter for floor hockey. Additionally, the Town of Somerset often uses the middle school auditorium for community purposes, such as two very well attended public meetings that took place on November 19 and

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November 21, 2019; the middle school auditorium is the only large public space owned by the Town of Somerset to host such meetings.

The importance of music in a student's overall education is certainly evident throughout Somerset. This can be seen in several rounds of student musical performances each fall and spring at Somerset Middle School as well as with the middle school's annual spring musical drama production. These events are always at capacity as they bring together members of the community, from parents and grandparents to others who no longer have immediate familial connections to the school. It is essential to the future success of students to maintain the ability to demonstrate their proficiency in music and performance arts. Somerset Middle School must create a warm and welcoming environment immediately upon entrance into the building. This building must promote safety, pride, identity, and belonging upon arrival through the display and celebration of student work.

Schools are becoming more often a place where students spend a substantial amount of time beyond the regular school day; Somerset Middle School is no different. Students spend ample time after school engaged in athletics, performing arts, extracurricular activities, intramural sports, and homework club. Somerset Middle School provides daily late buses for students who stay after school to make it easier for them to have positive, structured experiences each afternoon.

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Initial Space Summary

Space Summary

						ROPOSED					Date: 12 16 19	New Construction Preliminary Design Program
Somerset Middle School	Existing Conditions ((8-8)	Existing to Rer	nain/Renovated		New			Total	(refe	MSB Educational P	A Guidelines rogram & Space Standard Guidelines)
ROOM TYPE	ROOM # OFRMS a	area totals	ROOM #OFF	IMS area totals	ROOM **	OF RMS are	R totals	ROOM #(OF RMS area totals	ROOM NFA ¹	# OF RMS area totals	Comments
CORE ACADEMIC SPACES (List classrooms of different sizes separately)		30,718		0			35,585		0		37 31,460	
Classroom - General 5th Grade CR										920	23 21,850	850 SF min - 950 SF max
6th Grade CR 6th Grade CR 7th Grade CR 7th Grade CR	861 6 916 3 756 3	5,166 2,748 2,268 790			850	9 9	5,100					
7th Grade CR 7th Grade CR 8th Grade CR	1,040 1 827 1 762 2	1,040 827 1,524			850	9	5,100					
8th Grade CR 8th Grade CR 8th Grade CR	840 3 828 1 821 1	2,520 828 821										
All Grades Classroom South Coast Education Collaborative (SCEC)	1,146 1	1,146			850	ď	2.550					
Small Group Seminar STE Room- Grade 6		î			100	2 2 2	1,200			500	1 500) Refer to STE Quicklines
6th Grade Science CR STE Storage	861 2	1,722			120	2 .	240			120	2 240	Refer to STE Guidelines
Science Classroom / Lab- Grades / -6 7th Grade Science CR 8th Grade Science CR	1,040 2 1,045 2	2,080			1,4440	4	9,760			1,4440	9,700	J 1 period / day / student
Prep Room Central Chemical Storage Rm	196 1	196			200	4 -	150			200	4 800	
Greenhouse / Aquaponics / Hydroponics					850	-	850					
6th Grade Project Lab 7th Grade Project Lab 8th Grade Project Lab					1,200 1,200 1,200		1,200 1,200 1,200					
6th Grade Teacher Collaboration 7th Grade Teacher Collaboration	277 1	277			425		425					
/th Grade Teacher Collaboration 8th Grade Teacher Collaboration	405 1	405			425 425		425					
6th Grade Health/Wellness CR 7th/8th Grade Health/Wellness CR	920 1	920			850		850					
SPECIAL EDUCATION (List classrooms of different sizes separately)		9,534		0			11,135		0		6,040	
Self-Contained SPED 6th Grade SPED CR	916 2	1,832			850	2	1,700			920	4 3,800	850-950 SF equal to surrounding classrooms
6th Grade SPED CR 7th Grade SPED CR 7th Grade SPED CR	727 1	1,722 756 727			850	2	1,700					
7th Grade SPED CR 7th Grade SPED CR	378 1	348			C	c	7					
Self-Contained SPED Toilet Resource Room	60 2	120			850 60 425	3 6 2	360			900	4 240 3 1,500) 1/2 size Genl, Clm.
Speech/Testing Speech/Testing	167 1	167			100	φ .	009					
SPED Office (Speech/Language) Psychologist Output	193	193			125		125					
OT/PT SPED Directors Office / Storage SPED Conference	129 1 176 1 342 1	129 176 342			425 200 325		425 200 325					
SPED Storage SPED Storage Adaptive PE	184 1 63 1 1,285 1	184 63 1,285			2,000	-	2,000					
Small Group Room / Reading Room Small Group Room / Reading	117 1	117			200	ъ	009			200	1 500	1/2 size Geni, Cirm.
ART & MUSIC Art Classroom	1269	6,388		0	1 200	-	5,050		0	1 200	3,050	aceimad itea - £7%, novilation 2 times / weak
Art Workroom w/ Storage & Kiln Band / Chorus - 100 seats	7	2,5			150		150			150	1 150	assumed use - 50% population 2 times / week
Music - 6th Grade Music - 7th/8th Grades	1,875 1	1,283			1,400		1,400			S		
Music Practice / Ensemble Band/Choral Storage	175 2	350			250	4 -	250			007	-	
Music Office	186 1	186		c	250	-	250	+			7 220	
Technology/Engineering (Coding & Robotics)	1,870	1,870			1,800	-	1,800			1,440	3 4,320	Assumed use - 50% Population - 5 times/week; 850 SF - 12,000 SF
I echnology/Engineering (Manufacturing) Technology/Engineering (Computer Literacy) Technology/Engineering Testing Space	1,870	1,870			1,800 1,200 400		1,800					
Technology Engineering Office Technology Engieering Storage Robotics Lab	100 1 95 3 682 1	100 285 682			120	1 2	120 400					
HEALTH & PHYSICAL EDUCATION Gymnasium	7,594	1 0,737 7,594		0	000'9	-	8,400 6,000		0	000'9	8,400 1 6,000	Excess PE Spaces Policy
Gym Storeroom Health Instructor's Office w/ Shower & Toilet Locker Rooms - Boys / Girls w/ Toilets	379 1 90 2 1,292 2	379 180 2,584			150 250 1,000	2 1 1	150 250 2,000			150 250 1,000	1 150 1 250 2 2,000	0
MEDIA CENTER Media Center / Reading Room	3,130 1	3,757 3,130		0	1,800	-	3,773 1,800		0	3,773	3,773 1 3,773	
Professional Library / Research / Mindfull Space Video Recording/TV Studio / Video Editing Media Project Lab					423 425 425		423 425 425					
Office/Work Room Student Tech Help/Repair Desk Tech Office	185 1 185 1 257 1	185 185 257			300 150 250		300 150 250					
DINING & FOOD SERVICE Cafetorium / Dining Stane	3,762 1	3,762 2,618		0	4,425		8,312 4,425		0	4,425	8,559 1 4,425 1 1,600	2 seatings - 15SF per seat
Chair, Table / Equipment Storage Kitchen Staff Lunch Room	91 1 3,202 1 525 1	3,202			397		397			397 1,890 248	1 1,890	1 600 SF for first 300 + 1 SF/student Add1 2.0 SF/Occupant
MEDICAL Medical Suite Toilet		458 60		0	09	-	610 60		0	09	610 1 610	
Nurses' Office / Waiting Room Nurses' Office Examination Room	398	398			150 100 100		150 100 100			250	1 256	
Resting Area ADMINISTRATION & GUIDANCE		3,769		0	200	-	3,290		0	100	3 300	
General Office / Walting Room / Toilet Teachers' Mail and Time Room Duplicating Room	94 1	94			395 80 200		395 80 200			395 200 200	1 395	
Principal's Office w/ Conference Area Principal's Secretary / Waiting	418 1	418			375	-	375			375 125	1 378	
Assistant Principal's Office - AP1 Assistant Principal's Office - AP2 Supervisory / Spare Office (in School Suspension)	323 1	323			150 150	2	150 150 200			150 150	1 150	
Conterence Room Guidance Office Guidance Office	549 1 91 1	608 249 91			350 150	- e	350 450			320 150	3 456	
Guidance Waiting Room Guidance Student Self-regulation Room Admin/Guidance Storeroom (Secure Files)	569 1	569			100 80 110		100			100	1 100	
Outside Conselors Unice Guidance Group Counseling Conference Adjustment Counselor School Recurse Officer (SRO)	325 1	325			250 150 100	121	300			ng	-	
Teachers' Work Room CUSTODIA! & MAINTENANCE	-	1 140			8	-	2 065			445	1 445	
Custodian's Office Custodian's Office Custodian's Overkshop Custodian's Yorkshop	181 1	181			150 250 375		250 375	Н		150 250 375	2,000 1 150 1 250 1 375	
Recycling Room / Trash Recycling and General Supply Storeroom					400 297 393		400 297 393			400 297 393	1 290	
Exterior Storage Network / Telecom Room	618 1	618			200		200			200	1 200	
OTHER Auditorium (600 Seats)	4,852	6,981 4,852		0	6,000	+	6,250 6,000		0			

Proposed Space Summary - Middle Schools

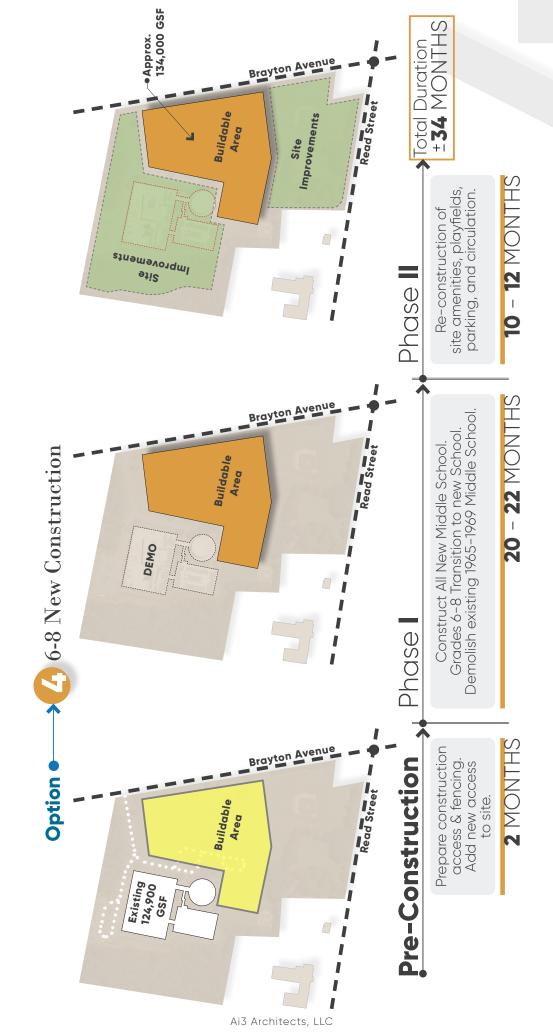
OPTION 4

Somerset Middle School	Existi	Existing Conditions (6-8)	(6-8)	Exi	Existing to	
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	MC PA	
uditorium Storage	96	2	192		l	
uditorium Storage	34	2	89			
ecture Hall	1,869	1	1,869			
otal Building Net Floor Area (NFA)			88,487			
roposed Student Capacity / Enrollment						
					1	
-PROGRAMMED SPACES						0,
ther Occupied Rooms (list separately)						
noccupied MEP/FP Spaces						
noccupied Closets, Supply Rooms & Storage Rooms						
oilet Rooms						
irculation (corridors, stairs, ramps & elevators)						
emaining ³						
otal Building Gross Floor Area (GFA) ²			126,980			
rossing factor (GFA/NFA)			1.44			

		E -		Ш																
								_												
		area totals			٥	>			0									0	0	#DIV/0i
	Total	# OF RMS							% of GFA	#DIV/0i	#DIV/0!	#DIV/0i	#DIV/0i	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0i	#DIV/0i		
		ROOM NFA ¹																		
0		area totals	250		700	90,190			43,291									43,291	133,481	1.48
PROPOSED	New	# OF RMS	_						% of GFA	%0	%0	%0	%0	%0	%0	%0	%0	35%		
		ROOM NFA ¹	250																	
	Renovated	area totals			•	0			0									0	0	#DIV/0!
	Existing to Remain/Renovated	# OF RMS							% of GFA	#DIV/0i										
	Existing	ROOM NFA ¹																		

RNS area totals NFA ¹ # OF RNS area totals Comments	area totals NFA ¹ # OF RWS 0 0 0	# OF RMS area totals
0 0 0 0 0 0 0 1102,491	0	
0 77,567 206 206 286 386 0 0 0 0 #DV/0!		
0 77,567 2050 2050 2050 2050 2050 2050 2050 205		
0 771,567 2690 2690 360 360 360 360 360 360 360 360 360 36		
0 200 200 200 386 0 0 0 0 102,491 143	0	
0 0 0 0 0 0 #DV/0I 1.43	0	71.567
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	
205 286 286 0 0 0 0 4DV/01 1.43		
986 0 102,491 #DV/0! 1.43		
0 0 0 #DV/0! 143	0	
#DV/01 1.43		
0 102,491 491 1.43		
0 0 0 #DIV/01 1.43		Non-Programmed space areas are
#DIV/01 143		required to be included in the
#DIV/0! 1.43		following submittals:
0 102,481 #DIV/0! 1.43		Schematic Design Submittal
0 0 0 #DIVIO! 1.43		Design Development Submittal
0 102,491 #DIV/0! 1.43		60% Construction Documents
0 102,491 #DIV/0! 1.43		90% Construction Documents
0 102 #DIV/0!		Final Construction Documents
102		
102		
		102,491
	#DIV/0i	1.43

¹ Individual Room Net Floor Area (NFA)	Includes the net square foolage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal tollets and storage rooms.
² Total Building Gross Floor Area (GFA)	Includes the entire building gross square footage measured from the outside face of exterior walls
³ Remaining	Includes exterior walls, interior partitions, chases, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.
Architect Certification	I hereby certify that all of the information provided in this "Proposed Space Summany" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury. Name of Architect Firm: Ack Architect. Name of Principal Architect. Signature of Principal Architect. Signature of Principal Architect.



OPTION 7
Proposed Space Summary - Middle Schools

								PROPOSED				<u>-</u> П	Dat	te: 12.16.19	Preliminary Design Program
Somerset Middle School	Existin	ng Conditions	(6-8)	Existing 1	to Remain/R	enovated	_	New		-	Total		(refer to MSBA	MS A Educational	BA Guidelines Program & Space Standard Guidelines)
ROOM TYPE	ROOM NFA ¹	#OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	#OFRMS a	rea totals	ROOM NFA ¹	# OF RMS area t	totals	ROOM #0FRI	RMS area total	S
CORE ACADEMIC SPACES (List classrooms of different sizes separately)			30,718			0			45,110			0	48	40,760	05
Classroom - General 5th Grade CR							850	9	5,100				950 31	29,4	50 850 SF min - 950 SF max
6th Grade CR 6th Grade CR 7th Grade CR	861 916 756	3 3 8	5,166 2,748 2,268				850	9 9	5,100						
7th Grade CR 7th Grade CR 7th Grade CR	790 1,040 827		1,040												
8th Grade CR 8th Grade CR	762	3 8	1,524				850	9	5,100						
out Grade CR 8th Grades Classroom	821 1,146		821 1,146												
South Coast Education Collaborative (SCEC)	835	8	2,505		\dagger		850	е	2,550	\dagger					
Small Group Seminar STE Room- Grades 5-6							100	16	1,600				500 2 1,080 3	1,000	00 Refer to STE Guidelines
6th Grade Science CR STE Storage	861	2	1,722				120	4 -	480				120 3	360	Refer
Science CR 7th Grade Science CR 8th Grade Science CR	1,040	2 0	2,080				0,440	4	001'c				0,440	o'c'	1 period / day
Per Chemical Storage Rm	196	4 -	196				200	4 -	800				200 4	80 4-	000
Greenhouse / Aquaponics / Hydroponics							850	-	850						
5th Grade Project Lab							1,200	-	1,200						
oth Grade Project Lab							1,200		1,200	\parallel		П			
on Grade Project Lab							1,200	- 4	1,200						
6th Grade Teacher Collaboration 7th Grade Teacher Collaboration	277	-	277				425		425						
8th Grade Teacher Collaboration	405	-	405				425		425						
5th/6th Grade Heatth/Wellness CR 7th/8th Grade Heatth/Wellness CR	845		845				850		850						
	030	-	0 534			•		-	13 780					8	
(List classrooms of different sizes separately) Self-Contained SPF0								Н	200			ì	950	7.5	00 860-950 SF eersal to surrounding classerooms
5th Grade SPED CR 6th Grade SPED CR	916	2	1,832				850 850	2	1,700						
6th Grade SPED CR 7th Grade SPED CR	861 756	1	1,722				850	2	1,700						
7th Grade SPED CR 7th Grade SPED CR	727 378		727 378												
7th Grade SPED CR 8th Grade SPED CR	348 830		348				850	2	1,700						
Self-Contained SPED Toilet Resource Room	09	2	120				60	8 4	1,700				60 6 500 4	3,0	60 1/2 size Genl. Clm.
Speech esting Speech Testing COPIN COMMENT SPEECH C	104		104				100	π -	800						
Psychologist OT/PT	193		193				125		125						
SPED Directors Office / Storage SPED Conference	176		176				325		325						
SPED Storage SPED Storage	184	1 1	184												
Adaptive PE Small Group Room / Reading Room	1,285		1,285				2,000	- 4	2,000				500 2	1,000	00 1/2 size Genl. Clm.
Small Group Koom / Keading	Lo	-	19			•			6	$\dagger \dagger$					
Art Modernoon w/ Streets & Film	1,269	2	2,538				1,200	2 0	2,400				1,200 2	2,4	00 assumed use - 50% population 2 times / week
Band Chrouts - 100 seats Music - 5th/6th Grade	1.283	-	1.283				1.400		1.400				1,500 1	1,5	00 assumed use - 50% population 2 times / week
Music - 7th/8th Grades Music Practice / Ensemble	1,875	1 2	1,875				1,400	1 4	1,400				200 2	4	00
Music Practice / Ensemble Band/Choral Storage	175	2	350				250	-	250						
Music Office	186	-	186			-	250	-	250					7	
Technology/Engineering (Coding & Robotics)	1,870	-	1,870			•	1,800	-	1,800			>	1,440 3	6,4	Assumed use - 50% Population - 5 times/week; 850 S 20 2:000 SF
Technology/Engineering (Manufacturing) Technology/Engineering (Computer Literacy)	1,870	-	1,870				1,800		1,800						
Technology/Engineering Testing Space Technology Engineering Office Technology Engineering Storage	100	- 8	100		Ħ		400 120 200	1 - 2	400 400						
Robotics Lab	682	-	682												1
HEALTH & PHYSICAL EDUCATION Gymnasium	7,594		10,737 7,594			0	6,000		8,400 6,000			0	6,000	8,400 6,000	00 Excess PE Spaces Policy
Gym Stoffordom Health Instructor's Office w/ Shower & Tollet Locker Rooms - Boys / Girls w/ Tollets	379 90 1,292	2 2 1	379 180 2,584				250 1,000	1 - 2	150 250 2,000				150 1 250 1 1,000 2	150 250 2,000	000
MEDIA CENTER Media Center / Reading Room	3.130	-	3,757 3,130			0	2.208	-	4,808	t		0	4.808	4,80	86
Professional Library / Research / Mindfull Space Professional Library / Research / Mindfull Space Madia Descripting TV Studio / Video Editing Madia Descripting 1							425 625 850		425 625 850						
Office/Work Room Student Tech Help/Repair Desk Tech Office	185 185 257		185 185 257				300 150 250		300						
DINING & FOOD SERVICE Cafetorium / Dining	3.762	+	10,198			0	5.775	+	9,902			0	5.775	10,194	34 Seatings - 15SF per seat
Stage Stage Control of the Control o	2,618		2,618				1,600		1,600				1,600 1 457 1	4,6	00 57 57
Nicheri Staff Lunch Room	525		525				2,070	-	7,070				293 1	2,0	7.0 1600 St. for first 300 + 1 St/student Add1 93 20 SF/Occupant
Medical Suite Toilet Nurses' Office / Waiting Room	398		398				150		150				60 1	2	09
Nurses Office Examination Room Resting Area							300		300				100 4	4	00
ADMINISTRATION & GUIDANCE General Office / Walting Room / Toilet	822	-	3,769 822			0	485	-	3,570 485			0	485 1	3,57	70 85
Teachers' Mail and Time Room Duplicating Room Records Room	96	-	94				200		200				200 1	- 2 2	00 00
Principal's Office w/ Conference Area Principal's Seoretary / Walting Assistant Principal's Office - AP1	418		418				375		375				375 1 125 1	8 1-1-	75 25 50
Assistant Principal's Office - AP2 Supervisory / Spare Office (In School Suspension) Conference Room	809		809				100	2 -	200 200 400				150 1 150 1 350 1		50
Guidance Office Guidance Office Guidance Waiting Room	249 91 569		249 91 569				150	e -	450				150 4	9 -	00
Guidance Student Self-regulation Room Admin/Guidance Storencom (Secure Files) Outside Conselors Office	131	-	131				150		150				50 1		209
Guidance Group Counseling Conference Adjustment Counselor School Resource Officer (SRO)	325 139		325				250 150 100	- 2 -	250 300 100						
Teachers' Work Room CUSTODIAL & MAINTENANCE			1,140			0			2,245			0	535 1	2,2	35
Custodian's Office Custodian's Workshop Custodian's Storage	341		341				150 250 375		150 250 375				150 1 250 1 375 1	2 8	50 50 75
Recycling Room / Trash Receiving and General Supply Storeroom	, i		,				400 357 513		400 357 513				400 1 357 1 513 1	4 8 6	00 57 13
Exterior Storage Network / Telecom Room	618	-	618				200	-	200				200 1	2	00
OTHER			6,981			0			6,250			0			0

Proposed 5-8 Program New Construction

Proposed Space Summary - Middle Schools

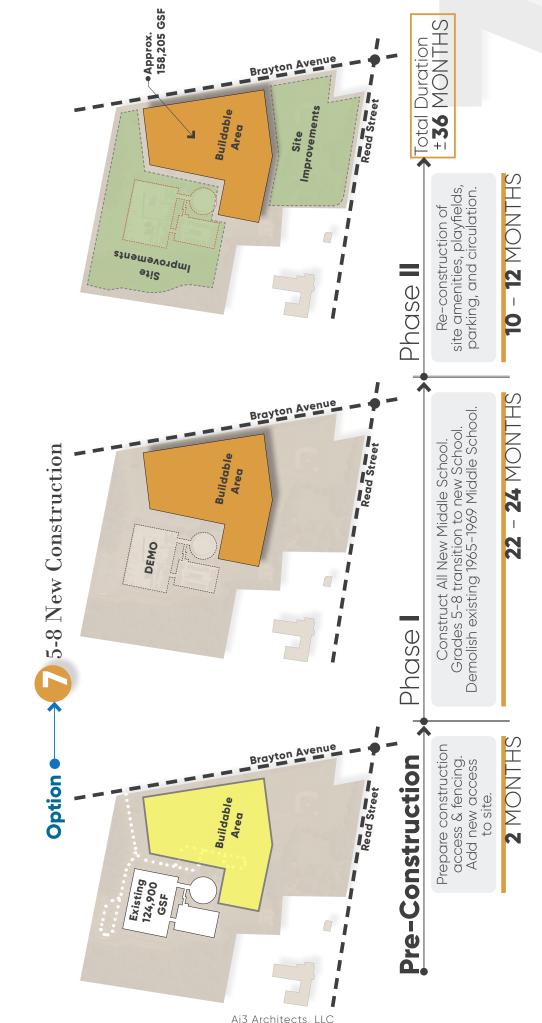
OPTION

Somerset Middle School	Existi	Existing Conditions (6-8)	s (6-8)	Existi	Existing to Ren	Ren
ROOM TYPE	ROOM NFA ¹	#OFRMS	area totals	ROOM NFA ¹		# 0F F
(a) Social	4 050	*	A 050		ł	ı
uditorium (boo seats)	4,032	- 0	700'4		+	
uditorium Storage	96	2	192		-	
uditorium Storage	34	2	99			
ecture Hall	1,869	+	1,869			
					ł	ı
otal Building Net Floor Area (NFA)			88 487		+	
(;)						
roposed Student Capacity / Enrollment						
					H	Ш
-PROGRAMMED SPACES					%	% of G
ther Occupied Rooms (list separately)					#	#DIV
					#	NG#
					#	ADIA
					#	A W
noccupied MEP/FP Spaces					#	#DIV
noccupied Closets, Supply Rooms & Storage Rooms					#	#DIV
oilet Rooms					#	#DIV
irculation (corridors, stairs, ramps & elevators)					#	#DIV
emaining ³					#	AQIA
otal Building Gross Floor Area (GFA) 2			126,980			
(,		+	
rossing ractor (GPA/NPA)			1.44		+	

		_	ш	_	_	_		_	_	_	_	_		_									_
	area totals					Ī	0					0									0	0	#DIV/0
Total	# OF RMS											% of GFA	#DIV/0i										
	ROOM NFA ¹																						
	area totals	00009	250				106,895					51,310									51,310	158,205	1.48
New	#OF RMS	-	-									% of GFA	%0	%0	%0	%0	%0	%0	%0	%0	32%		
	ROOM NFA ¹	6,000	250																				
Existing to Remain/Renovated	area totals						0					0									0	0	#DIV/0i
to Remain/	# OF RMS											% of GFA	#DIV/0i										
Existing	ROOM NFA ¹																						

	(refer	to MSBA	-ducational r10	(refer to MSBA Educational Program & Space Standard Guidelines)
area totals	ROOM NFA ¹	#OF RMS	area totals	Comments
0			88,667	
			770	Enter grade enrollments below
			385	Lower Middle; Grades 5-6
			385	Upper Middle; Grades 7-8
0				
				Non-Programmed space areas are
				required to be included in the
				following submittals:
				Schematic Design Submittal
				Design Development Submittal
				60% Construction Documents
				90% Construction Documents
				Final Construction Documents
0				
0			123,200	
#DIV/0!			1.39	

			_											Date.	Date: 12.10.19	rieiiiiilai y Desigii riogiaiii
Somerset Middle School	Existing C	Existing Conditions (6-8)		Existing to	Existing to Remain/Renovated	novated		New			Total		(refe	r to MSBA E	MSB ducational P	MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)
ROOM TYPE	ROOM #	#OF RMS area totals	tals	ROOM #	# OF RMS a	area totals	ROOM NFA ¹	#OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	#OF RMS	area totals	Comments
Auditorium (600 Seats)	4,852		4,852			П	0,000		6,000							
Auditorium Storage Auditorium Storage	34	2	192				067		067							
Lecture Hall	1,869	1 1	698'													
Total Building Net Floor Area (NFA)		88.487	487			0			106.895			0			88.667	
(,,,,,)																
Proposed Student Capacity / Enrollment			<u> </u>												77	770 Enter grade enrollments below 385 Lower Middle: Grades 5-6
															38	-
NON-PROGRAMMED SPACES				6	% of GFA	0		% of GFA	51,310		% of GFA	0				
Other Occupied Rooms (list separately)					#DIV/0i			%0			#DIV/0i					Non-Programmed space areas are
					#DIV/0i			%0			#DIV/0i					required to be included in the
					#DIV/0!			%0			#DIV/0i					following submittals:
				-	#DIV/0i			%0			#DIV/0i					Schematic Design Submittal
Unoccupied MEP/FP Spaces				*	#DIV/0i			%0			#DIV/0i					Design Development Submittal
Unoccupied Closets, Supply Rooms & Storage Rooms				-	#DIV/0i			%0			#DIV/0i					60% Construction Documents
Toilet Rooms				-	#DIV/0i			%0	Ī		#DIV/0i					90% Construction Documents
Circulation (corridors, stairs, ramps & elevators)				-	#DIV/0i			%0			#DIV/0i					Final Construction Documents
Kemaining					#DIV/0i	0		32%	51,310		#DIV/0i	0				
Total Building Gross Floor Area (GFA) ²		126	126.980			C			158.205			0			123.200	
						,										
Grossing factor (GFA/NFA)		_	1.44			#DIV/0i			1.48			#DIV/0i			1.39	
			_]			1										
¹ Individual Room Net Floor Area (NFA)	Includes the net so	Includes the net square foolage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal totels and storage rooms.	sured from t	he inside face	of the perir	neter walls an	d includes all	specific space	s assigned to a p	articular prog	ram area incli	uding such spa	ces as non-com	munal toilets	s and storage	rooms.
² Total Building Gross Floor Area (GFA)	Includes the entire	Includes the entire building gross square foolage measured from the outside face of exterior walls	uare footage	measured fr	om the outsi	de face of exte	riorwalls									
³ Remaining	Includes exterior w	includes exterior walls, interior partitions, chasses, and other areas not listed above. Do not calculate this area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.	ons, chases	and other ar	eas not liste	d above. Do r	not calculate th	nis area, it is a	ssumed to equal	the difference	between the	Total Building	Gross Floor Are	a and area	not accounted	for above.
Architect Certification	I hereby certify the	hereby certify that all of the information provided in this Propries of the Massachusetts School Building Authority M.	tion provided	tin this "Pop	osed Space	Summary" is	true, complet	e and accurate	and, except as	agreed to in v	vriting by the I	Aassachusetts	School Building	Authority, ir	accordance v	posed Space Surmary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and has been of A true statement made under the nonlines of notion.
		Name of Architect Firm:	ect Firm: A	Ai3 Architects, LLC	, 2	,										
	Z	Name of Principal Arcidtect:	rchitect:	Troy L. Randall	Randall, AIA, LEED AP BD+C	AP BD+C										1 1
	Signat	Signature of Principal Aychitect:	ychitect:													
			Date:	M-Ded-19												



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Module 3 - Preliminary Design Program Ai3 Architects, LLC



Initial Space Summary

Space Summary Narrative

Core Academic Spaces

The proposed Somerset Middle School Space Summary includes 45,110sf of Core Academic space, exceeding the MSBA guideline of 40,760sf by 4,350sf. This overage is primarily due to the inclusion of grade level project based learning labs, as well as teacher planning, collaboration, and workrooms within this category.

Project Based Learning Labs

The Somerset Middle School program includes grade-level project labs that are closely integrated to the academic classrooms and two team neighborhoods, labeled 'Pride' and 'Respect'. These are similar to the hands-on project labs incorporated into many modern middle schools; however, based on curriculum and application testing within the current middle schools, the staff and Administration feel strongly that these labs should not be a "generic or multipurpose space" but instead should have a specifically defined theme and purpose that is integrated into the grade level curriculum. They should be flexible, as their themes will certainly change and evolve over time, but will contain the specific tools and components to support their curriculum application at any given time. Additionally, these spaces should not be open common areas that can be interrupted by student flow or noise, but instead should be visible (transparent) spaces that include sound separation from other team and academic neighborhood activities. However, the inclusion of operable glass partitions will allow the labs to open up to each grade level neighborhood when desired.

Teacher Planning, Collaboration, and Workrooms

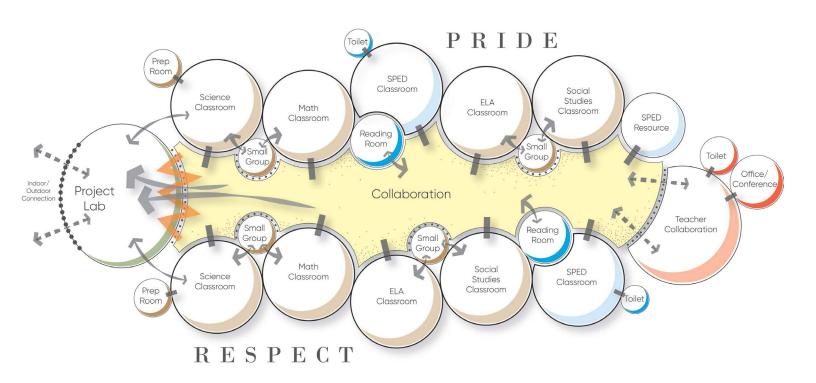
Teacher collaboration and work spaces should be incorporated into each grade-level neighborhood in a way that would allow teachers to interact, create, plan, collaborate, and complete their work. This space is critical to the successful implementation of a co-teaching and teaming model. Although these spaces should be in close proximity to the team neighborhood, consideration should be given to the challenges identified herein such that teachers across all grade levels have opportunities for formal and informal interaction. Given grades 5 and 6 neighborhood organization as a lower school and grades 7 and 8 neighborhood organization as an upper school, sensible and effective design for these collaborative work spaces would allow grades 5/6 teachers a large workspace connecting the neighborhoods, and 7/8 should have the same.

Distributing this space throughout the academic areas can provide an additional layer of oversight and visual observation of students who may be working or circulating within the neighborhood, project labs, work areas, or even the individual resource rooms. Smaller satellite conference areas interspersed in other more common parts of the building (such as the media arts center and the main administration and guidance areas) could also provide space for parent/teacher conferences and support a better integration of parent involvement. Teacher dining areas should be organized as adjunct to the workrooms to encourage collaboration and work while simultaneously providing the necessary dining opportunities. Separation should be minimal with sight lines across collaborative teams for visibility, but allow for private conference when necessary.

All classrooms and collaborative spaces should be equipped with adequate windows to allow for proper natural lighting and should also provide transparency (glass) into surrounding spaces when it is functionally advantageous, which has the potential to increase the opportunities for supervision of students. The Educational Visioning sessions included discussions on the value of transparency, but also on the need for privacy and how to balance these needs. Design solutions should be explored and additional discussions should take place to determine the correct balance for these spaces. Such design solutions like "smartglass" have been discussed to allow transparency into the classroom, but also instant privacy from the touch of a button when required. Neighborhoods and the related classroom and support spaces should include ample storage space, movable furniture, some movable walls for co-teaching, team teaching, and flexible grouping as defined above. Movable walls should be further explored to determine the specific areas of the building where they may offer value. Classrooms should include functional amenities such as ample electrical outlets, and all available walls should include expanded floor-to-ceiling whiteboard or writable glass space as students and teachers are encouraged to write, collaborate, and explore beyond the

boundaries of a 4'x8' single whiteboard. Common planning time is built into the schedule for all teams, including related arts and science. Neighborhood Commons and Lab space should allow for the creation and delivery of student presentations, along with visual and physical access to neighborhood classrooms.

In a 5-8 middle school model, the grades 5 and 6 neighborhood should have some separation from the 7 and 8 neighborhoods, but a careful balance of separation and adjacency is necessary as they should still be convenient to all grade levels for access to advanced placement and mentoring opportunities. Within the neighborhoods of the grade-level teams there should be some consideration for adjoining grade 5 Math and Science classrooms, along with possible adjoining of English and History classrooms. Access to project spaces is pivotal to promote the desired STEAM initiatives, and the necessary support amenities should be provided within the neighborhood commons as The inclusion of teacher collaboration discussed above. work/dining/planning/conference rooms in each of these neighborhoods should exist for both convenience (reducing the distance staff must travel and therefore increasing efficiency and ease of use) and also as an additional strategy for visual observation of students at all times.



Special Education

The proposed Somerset Middle School Space Summary includes 13,780sf of Special Education space, exceeding the MSBA guideline of 9,060sf by 4,720sf. The Somerset Middle School (SMS) is one of five Schools in the Somerset Public Schools that offers special education programming to students with disabilities. SMS currently lacks the space required to house SPED programs for students with autism, and with its current space constraints and the lack of necessary classroom adaptations, there is no room for future growth. This proposal will include the space needed for expansion to offer services as required under state and federal special education laws, while also relieving space constraints currently present in the three elementary schools needed for their own future expansion. SMS includes a continuum of services that include academic services ranging from general education support, inclusion support provided by a paraprofessional, co-taught classes with a general educator and a special educator, and small group classes in a learning center. SMS is currently lacking necessary substantially separate classrooms. Additionally, related services such as speech and language, physical therapy, occupational therapy, and behavioral services are provided for students in need.

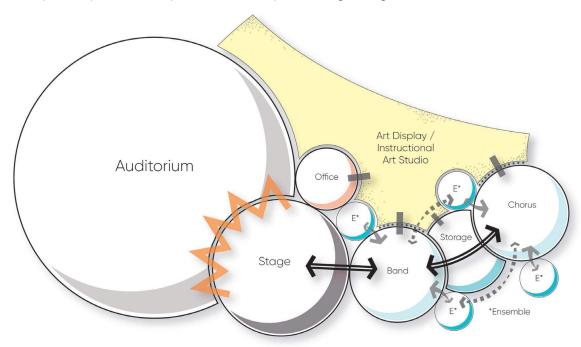
The proposed building project of more than 590 students in the 6-8 model (110+ in Special Education, 1-5+ ELL students) and 770 students in the 5-8 model (140+ in Special Education, 2-7+ ELL students) will afford the growing program to be an integral part of the school community and fully integrated into the academic neighborhoods. Ample classroom space, anticipated at four Learning Center spaces (Resource Rooms), eight adequately equipped sub-separate spaces with bathrooms and kitchen areas (self-contained SPED), eight Speech/Testing rooms, one Occupational/Physical Therapy room, four small group reading rooms, and one Adaptive Physical Education space will be provided in order to best meet the educational needs of all students. The Somerset Public Schools are committed to offering all students the most complete spectrum of fitness activities available, and the Adaptive Physical Education space will allow students with physical challenges to participate in many of the same activities as their peers. This program will be delivered in a space that can be utilized by all students, but will require separate and dedicated use for special education during many periods in order to appropriately accommodate the special education population. It should be in direct proximity to the OT/PT Therapy room in order to allow special education students to seamlessly move between the two spaces. In instances where a highly specialized space is required for Occupational and Physical Therapy, this OT/PT skills room should be adequate in size and would be similar to a full-size classroom, accommodating both gross and fine motor activities taught simultaneously. The IEP needs for students often include specialized motor equipment. The motor room should also allow space for gross motor activities and individual and/ or small group therapy sessions. There would also need to be equipment for the children, including a large floor mat, balance beam, a swing, and a ball pit, as well as ample room for gross motor movement. Sensory motor activities and/or fine motor work would require a space for up to two tables and up to eight student chairs. If possible, one of the walls should be mirrored to allow students to model and demonstrate their skills. This design will afford more opportunities for students and staff to work horizontally and vertically, and to incorporate interdisciplinary ways to fully integrate special needs programming, while having the capacity to expand current program and develop new programming as population changes and increases.

The application labs within each general academic neighborhood should include a dedicated "Integrated SPED Project Lab" to ensure there is sufficient space within the project labs to include the integration of special education students. This space should be integral to the remaining lab space and provide the necessary physical, visual, and/or auditory amenities to ensure the best possible experience for students within these lab spaces and to allow special education students to integrate with their peers.

The Somerset Middle School will continue to support a full continuum of services for students through 8th grade. The implementation of a comprehensive interdisciplinary model will allow students to access the general curriculum in classes taught by both a general education content area teacher and a special education teacher. Substantially separate programs will be strategically located in areas of the building to best support student access. All special education programs need to be located close enough to content and elective general education programming so that inclusive opportunities can be realized when possible. Programs for students with severe cognitive and communication disabilities will have a newly designed daily living support area to include kitchen, laundry, and bathroom within a semi-private space with a designated de-escalation area to support a more protected and dignified learning space.

Art & Music

The proposed Somerset Middle School Space Summary includes 6,400sf of Art and Music space, exceeding the MSBA guideline of 4,600sf by 1,800sf. This overage is resulting from the high participation levels present within the art and music curriculum and support from the Town. The Town of Somerset prides itself on the 'Music Town' legacy it has established, and the art and music department has become a vital part of the curriculum offered at Somerset Middle School. This proposal will include the space needed for the growing art and music programs with two art classrooms, two music spaces for upper and lower schools, four practice/ensemble spaces, and ample instrument storage. With its proposed adjacency to the auditorium and stage, students will have direct access from practice space to performance space without disruption to neighboring classrooms.



Vocations & Technology

The proposed Somerset Middle School Space Summary includes 5,720sf of Vocations and Technology space, exceeding the MSBA guideline of 4,320sf by 1,400sf. The vocational education program at the Somerset Middle School will provide students with a correlation between the academic subjects they are studying, the projects and hands-on experiences they are developing, and the professional careers that are evolving in a global world. The specific program space dedicated to vocations and technology should be highly flexible and should be integrated into the neighborhood teams and their maker spaces as much as possible. The spaces required for Vocations and Technology at SMS are the following:

Coding and Robotics

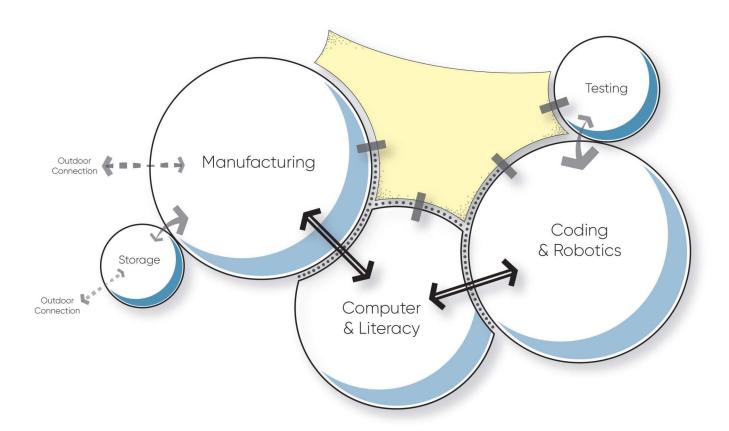
This will be a flexible lab space which resembles that of a computer lab environment with the space required to develop and test the work associated with the curriculum. As the program expands, students will have the opportunity to apply their knowledge outside of the curriculum, developing social and collaborative skills necessary for successful teamwork.

Manufacturing

This will be a flexible lab environment which resembles a traditional vocations lab and will include numerous building and production tools. It will include focused hands-on career opportunities for students to participate in developing kinesthetic learning through tactile experiences and applying cognitive learning in technology career applications. The instructor will work collaboratively with the academic leadership to integrate lesson plans which would allow students to support their project-based inquiry and learning assignments within their integrated academic production labs and to have opportunities to expand that exposure within the technology applications and production lab.

Computer Literacy

Computer Literacy is a more traditional computer lab environment where students are exposed to advanced levels of graphic application, basic software development, and application strategies, computer programming, and application development.



Health & Physical Education

The proposed Somerset Middle School Space Summary includes 8,400sf of Health and Physical Education space, matching the MSBA guideline of 8,400sf. The physical education and fitness classes at Somerset are part of the core educational program. Currently Somerset Middle School has 14 sports teams that use both the indoor and outdoor facilities throughout the year.

Current programming is as follows:

Physical Education

Grades 6 - 60 days

Grades 7 & 8 - 60 days

Health

Grades 6 - 60 days

Grades 7 & 8 - 60 days

The existing Somerset Middle School building provides insufficient space for the delivery of physical education and fitness programs. The building includes only a single gymnasium and no fitness center. Though some may consider it as forward thinking in the 1960's when it was built, the circular form that houses the existing gymnasium is a layout and design that lacks efficiency and does not provide the space required for current Physical Education standards and curriculum. The gym space can only be subdivided in two and lacks the necessary flexibility with only one folding partition to provide as many spaces as possible. The lack of physical education space requires that many classes be configured to hold over 40 students. These

students must be confined to half of the available area when special education students are utilizing portions of the gymnasium for adaptive PE or physical therapy. At other times, multiple classes of 40 students utilize the available space simultaneously. Because of the required separation between grades 6 students (or 5/6 students) and 7/8 students, programs within the gym are greatly limited by its small size and the inability to divide available space into two distinct areas.

As the gymnasium and locker room areas are antiquated, and the health classroom lacks an appropriate and adequate educational environment, attention to these important areas is critical.

There are locker rooms; girls have changing stalls, and boys have an open area. This area is circa 1960s and does not represent current standards and practices. Students are hesitant to use these areas.

Currently, there are only two dedicated health classrooms both of which are not adjacent to the gymnasium and are insufficient for the size and population of the school. Many educational programs have a strong link to the gymnasium as a support space but there is rarely a classroom available near the gymnasium.

As indicated in the special education summary, there are no available spaces for the delivery of adaptive physical education and the incorporation of required occupational therapy and physical therapy spaces. Existing gymnasium space is too crowded and over-scheduled to incorporate adaptive PE, and

there is insufficient space to integrate some OT/PT activities into mainstream physical education courses.

For purposes of physical education and activity, the newly proposed 5-8 school will essentially operate as two independent student populations - a 5/6 population of approximately 385 pupils and a 7/8 population of approximately 385 pupils (a 6-8 middle school configuration will also operate as two independent student populations - a grade 6 population of approximately 205 students and a 7/8 population of approximately 385 students). To accommodate two distinct groups, two full-size (3,000sf) teaching stations will be required. The proposed program offerings for adaptive PE and OT/ PT require that this program have a dedicated fitness space (identified and described herein under special education) that can meet students' specific needs and also allow them to integrate with their peers. In addition, a full-service health center is critical to the implementation of the school's fitness program.

Some specific program areas and amenities include:

- Two full-size (3,000sf) teaching stations within a gymnasium-style environment that is sub-dividable and that includes a wood floor (two areas)
- Mat hoists to allow for the delivery of cheering stretching, fitness testing, wrestling, etc.
- Dedicated health classrooms (5/6 & 7/8) with connection to the Adaptive PE space as an activity lab
- Fully equipped Adaptive PE room with both cardio equipment and age-and-needs appropriate fitness equipment outfitted with a turf area; high ceilings
- Men's and women's PE office and storage space; ideally the men's and women's office will be combined for planning purposes and central to the locker rooms
- Health storage space to accommodate support materials
- Changing stalls in both locker rooms
- Outdoor playfields to accommodate all our athletic offerings; with a cross country track within site area

Other

The proposed Somerset Middle School Space Summary includes 6,250sf of Other space. This overage is resulting from the inclusion of a 6,000sf Auditorium (600 seats), and 250sf for storage to replace the capacity of the existing auditorium. As described elsewhere in the program, music and performance has a long history and tradition in Somerset in which it has been known as "Music Town" for nearly fifty (50) years.

Site Development

Legal Title of Property

he approximately 25.21-Acre lot, including the Middle School building, entrance drive, parking area, athletic fields, and the Protected Resource Area, is owned by the Town of Somerset. Historical information shared with the project team indicated that the property was once part of the Somerset Town Farm in the mid-1800's. There is historical reference that, at a Town Meeting in 1911, the Selectmen authorized to sell a portion of Town Farm and, in 1914, the original South School located on Read Street was built on Town Farm property. Additional parcels of land were purchased or donated to be used for "school" purposes. In 1952 the current South School was constructed. On March 11, 1963, Town Meeting voted to take "23 acres more or less" from the "Old Town Farm" to be used for school purposes. The same meeting voted to construct a new Junior-Senior High School, which is the current Somerset Middle School. Although, an extensive effort was made by the project team and Owner to research property records and Deed of the property, an actual legal Property Title could not be located. A copy of the Commercial Property Record Card is included in this report, which confirms the Owner of the parcel to be the Town of Somerset.

Availability of Property for Development

Based on the research performed, we are not aware of any restrictions and that the noted Somerset Middle School property is available for development of a new school or the renovation with additions of the existing facility.

Development Restrictions Investigation

The design team conducted a thorough investigation of the possible development restrictions of the property as it relates to zoning regulations, natural environment pertaining to topography, soils, wetlands, rare species, and cultural resources, utility and roadway infrastructure, and site planning requirements pertaining to local, state, environmental, and historic requirements. Based on these findings, there are no constraints which prohibit this site from serving as a viable location for a newly constructed school or the renovation with additions of the existing facility. Additional information can be found in Sections 4 and 5 of this report.

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> By WILLIAM A. HART

> > PUBLISHED BY TOWN OF SOMERSET 1940

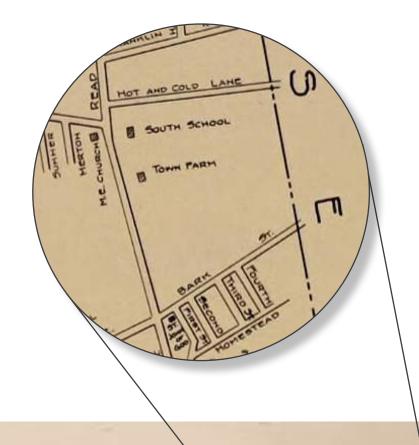
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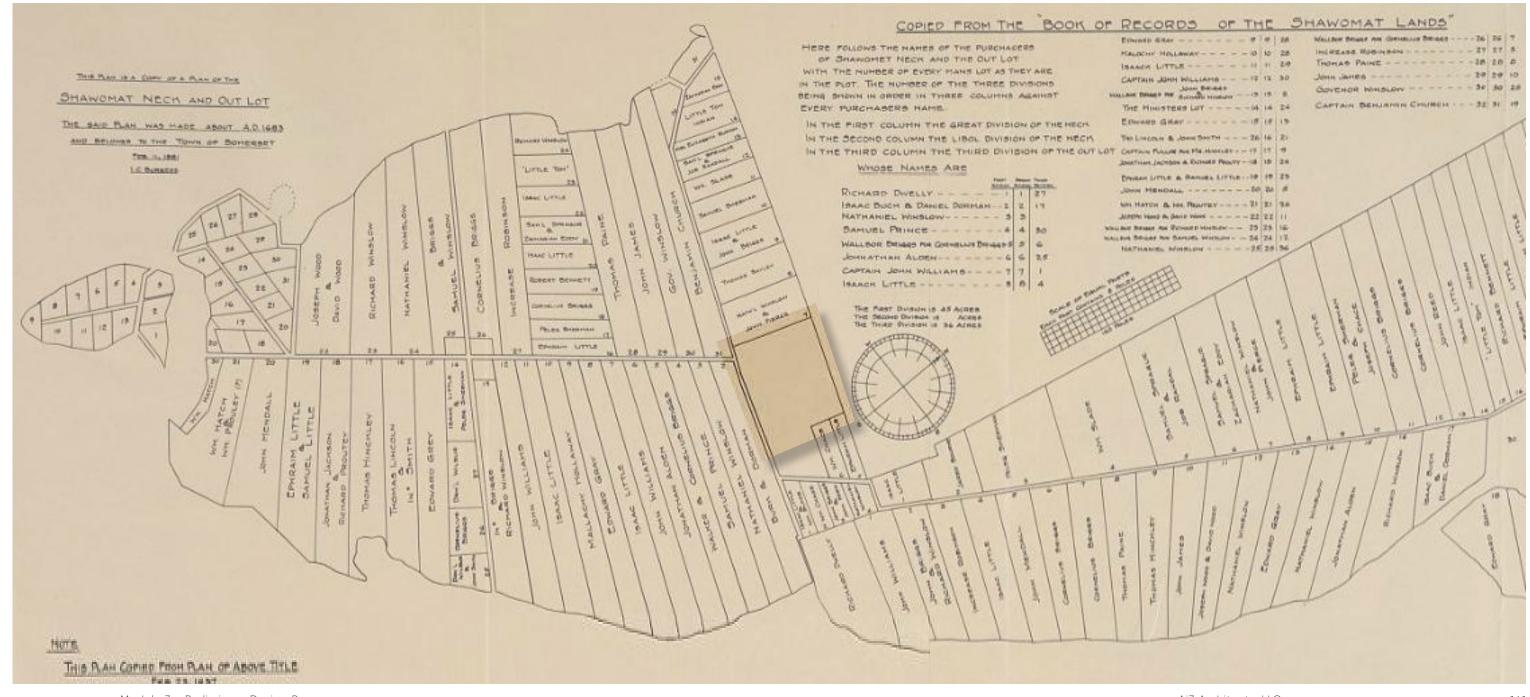
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Module 3 - Preliminary Design Program

Ai3 Architects, LLC

SHAWOMET PURCHASE

THE same English legal logic that had ordered the quartering of King Philip as a traitor declared that the lands of all Indians participating in the war should be forfeited to the Colonies. They were to be sold and the proceeds used either to reimburse the Colonies for the war's expense or for the relief of disabled soldiers and the families of those killed.

Lands in this immediate vicinity thus seized and sold included those choice possessions of the Indians, no part of which they had ever been willing to sell: Assonet, Pokanoket, including Mt. Hope, and Shawomet Lands,

Mt. Hope was purchased mainly by men of Boston; Assonet by residents principally of Taunton and Dighton; and Shawomet by men of Plymouth, Marshfield and other contiguous Plymouth colony settlements.

As a means of disposing of Shawomet Lands without charge of favoritism; and possibly of increasing the proceeds; the Shawomet area was offered in a lottery in which 31 full shares were designated including a share for Captain Benjamin Church and one for Governor Winslow, Governor Josiah Winslow was the third generation of his family in succession to be governor of Plymouth colony; and the grandson of the first White Man to set foot on Shawomet Lands.

The gift to Captain Church combined an expression of admiration for that doughty warrior's achievements on behalf of the Colony with payment in part for the financial debt it owed him; a debt which it never came anywhere near paying and which finally ruined him.

Not all of the purchasers received a full share. Some had to be content with a half or a quarter while others had two and three full units. The method by which this division was arrived at does not appear.

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Site Development

Site Analysis Narrative

he existing Somerset Middle School building was constructed in 1965, expanded in 1969, and is located on approximately 25.21 acres of land. The building is located at 1141 Brayton Avenue (Assessor's Parcel ID 273/005.B-0000-0344.0) in Somerset, Massachusetts. The school is accessible via one two-way driveway from Brayton Avenue and has frontage on Read Street. The site is furnished with two paved parking areas, paved driveways, pedestrian access from Brayton Avenue and Read Street, multiple grassed athletic fields, and

landscaping surrounding the building incorporating concrete sidewalk access to Brayton and Read Streets.

The school site is bounded by the Montaup Electric Company power lines and Jeffrey Street to the north, Brayton Avenue to the east, Correia & Sons Market, South Elementary School and Read Street to the south, and Hot and Cold Lane to the west. The other nearby uses are characterized by single-family housing and some religious institutions.

Zoning Regulations

According to the "Official Zoning Map Town of Somerset, MA – As Amended March 19, 2018" the Site is located in an area zoned Residence District (RD). The Zoning Ordinance indicates the following would control the development on this Site:

RES - Residence District

Minimum Lot Area in Square Feet	20,000
Minimum Frontage in Feet	100
Minimum Front Yard in Feet	25
Minimum Side Yard in Feet	15
Minimum Rear Yard in Feet	15
Distance Between Buildings in Feet	15
Maximum Percent Lot Coverage	25
Maximum Building Height Feet	35
Maximum Building Height Stories	3
Maximum Height, Towers, Water Tanks, Antennae, Spires, Chimneys in Feet	65 ²

¹ A minimum side and rear yard requirement of 5 feet for buildings not exceeding 120 sqft in gross floor area and 12 feet in height.

² Detached Chimneys and antennae may not exceed 35 feet.

The off-street parking capacity requirements for schools in the Somerset Zoning By-Law are one space per 250 square feet of gross floor area. Off-street parking must be provided to service the net increase in parking demand created by new construction, additions, or change of use. All parking spaces must be clearly marked, and the lines must be maintained to be clearly visible at all times. The aisle between rows of parking spaces shall be a minimum of 22 feet wide. No open parking or loading space shall be located less than five feet from any lot line.

Natural Environment

Topography

A review of the 2012 USGS Topographic Quadrangle Map of Somerset, Massachusetts indicates that the surface elevation of the site is approximately 120 to 150 feet above mean sea level. The topography of the site generally slopes to the east. This information has been verified by a preliminary survey of portions of the site.

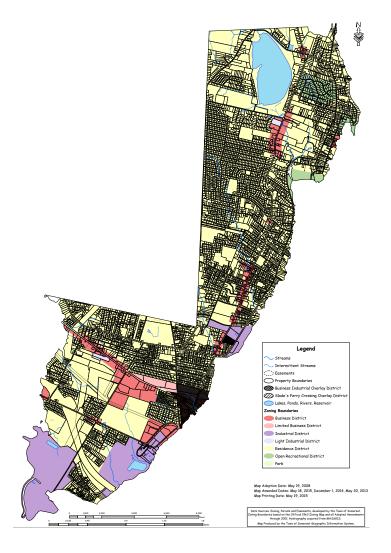
Soils

Seasonal high groundwater is 20-25 inches deep in these soils, and soil textures in the Cd horizon are fine sandy loam. Not ideal for infiltration based on groundwater depth. Further testing to be performed. This information has been verified by a preliminary geotechnical investigation of portions of the site.

Wetlands

After review of the Massachusetts GIS data layers (MassGIS) as well as a site visit by a wetland scientist, it does appear that there are wetlands located in the north western quadrant of the Site in undeveloped forest. A Notice of Intent (NOI) shall be filed with the Conservation Commission for any work proposed within one hundred feet of the Protected Resource Area in accordance with the Massachusetts Wetlands Protection Act. The presence of the wetlands does not prohibit proposed work; however, they may require a permit and request for determination through the Conservation Commission.

According to the Flood Insurance Rate Maps available through FEMA (Federal Emergency Management Agency), this Site is located entirely in Zone X (Figure 1). A Zone X is defined by FEMA as area determined to be outside the 500-year flood and protected by levee from 100-year flood. There are no restrictions for development in the Zone X area.



Rare Species & Cultural Resources

Information regarding rare species was obtained from the MassGIS Rare Species and Priority Habitat data layer showing data recorded by the NHESP in the State Registry. Review of this information indicates that there are no areas of Estimated or Priority Habitat mapped on or in the vicinity of the site.

Infrastructure

Roadways and Parking Lots

The school is accessible via one two-way driveway from Brayton Avenue and also has frontage on Read Street.

The site is furnished with paved parking areas and paved driveways off Brayton Avenue. Future development and parking options could look to Brayton Ave and Read Street as potential entrance/exit locations for vehicles.

Utilities

The existing conditions utility information was found using aerial imagery. Future development options would require that the existing utilities be verified, located, and included in design plans. Streets, drainage, and utilities shall be constructed pursuant to a special permit and shall be designed and installed in accordance with the standards of the Subdivision Regulations of the Planning Board in effect at the time of the filing of an application for a special permit or revision authorization as the case may be.

Sewer

During design, the capacity of the existing sewer line will need to be evaluated to determine if it can handle the increased use. Future development would require the replacement and/or removal of the sewer services, the installation of an appropriately-sized PVC sewer service, and the installation of a new exterior grease trap to service cafeteria functions.

Water

Three fire hydrants are located on Brayton Avenue. During design, a hydrant flow test will be required to determine available flow for fire suppression system design. For development, additional information is needed to determine the size and location of the existing domestic and fire protection connections. Once this information is in hand, the need to relocate or replace the existing services to service the new school can be evaluated.

Drainage

Aerial imagery shows two catch basins in the landscaped area along Brayton Avenue and within the street, as well as in the parking lot due north of the school building, and within the driveway. The future development drainage design will need to be re-designed to meet the Massachusetts Department of Environmental Protection stormwater standards, the Town of Somerset Standards of the Subdivision Regulations of the Planning Board, and will require quantity and quality mitigation measures.

<u>Gas</u>

Liberty Utilities is the supplier of natural gas to the Town of Somerset. Future development options would require that the existing system be located and analyzed for capacity. Coordination should occur with National Grid regarding any service improvements.

Electric

NSTAR Electric is the supplier of electricity to the Town of Somerset. Electricity also appears to be supplied via solar panels on the roof of the building. A transformer is located on the north side of the school building, and the main electrical room for the school is located in the basement. Future development options would require that the existing system be located and analyzed for capacity, and the need for a new transformer should be evaluated prior to finalizing site plans. Coordination should occur with NSTAR Electricity regarding any service improvements.

Telecommunications

Future development options would require that the existing system be located and analyzed for applicability to current needs. Coordination should occur with the Somerset Schools Information Technology Officer and the relevant telecommunication companies regarding any service improvements.

Site Planning Requirements

Somerset Zoning Board of Appeals

The project is considered an institutional use, which is a permitted use in the zoning districts noted previously.

Somerset Planning Board

The Somerset Planning Board will review plans for the construction of ways or the installation of municipal services, and will involve Town departments in their review process.

Somerset Conservation Commission

Should any proposed construction activity fall within a jurisdictional area, it will trigger review by the Conservation Commission. If this is the case, VERTEX will prepare and submit a Notice of Intent (NOI) to the Somerset Conservation Commission for review under the Massachusetts Wetlands Protection Act.

Somerset Highway Department

The project may require permitting through the Highway Department for a curb cutting permit, or a permit to enter the street drain. The Contractor awarded the contract will be responsible for obtaining these permits.

Somerset Fire Department

The project requires a commercial plan review by the Somerset Fire Department. A meeting with the Fire Chief will be arranged to review emergency vehicle accessibility.

Somerset Building Department Certificate of Occupancy

The Somerset Building Department is responsible for reviewing and issuing all Building, Mechanical, Plumbing, Gas, and Electrical Permits. Zoning compliance and code enforcement issues are also addressed by this department. Upon substantial completion of the project, the Contractor shall submit certification from the Professional Engineer who prepared the Final Site Plan to the Building Inspector for approval. Upon approval, the Building Inspector will issue a Certificate of Occupancy.

Somerset Historic Commission

The school site does not include any historic buildings, nor does it abut any historic districts or parcels.



<u>Massachusetts Department of Environmental Protection</u> (MassDEP):

It is not anticipated that any proposed construction activity will trigger review by Mass DEP.

<u>US EPA National Pollutant Discharge Elimination System</u> (NPDES)

It is anticipated that this project will result in the disturbance of one or more acres of land and therefore will require filing a NPDES construction general permit with the EPA. The Contractor awarded the contract will be responsible for filing the NPDES General Permits and preparing project-specific Stormwater Pollution Prevention Plans. The Contractor must submit a Notice of Intent fourteen days prior to any earth disturbing activities.

<u>Massachusetts Environmental Policy Act (MEPA)</u>

It is not anticipated that any proposed construction activity at the site will trigger MEPA review.

Summary

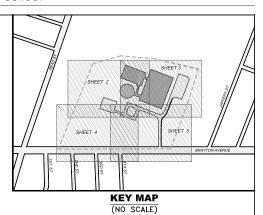
There are no constraints which prohibit this site from serving as a viable location for a newly constructed school. The soil conditions that are expected to be found during soil evaluations will limit the amount of stormwater infiltration possible, so the focus should be on stormwater quality improvements and reducing runoff rates from the site via infiltration. If these considerations are addressed, we do not believe there are any constraints which preclude this site from being a viable candidate for future school development.

Commercial Property Record Card

		Parcel ID:	273/005.B-0	1000-0344.0	MAP: 00	5.B	BLOCK:	0000	LOT:	0344.0	Parcel Addre	ss: 1141	BRAYTON A	VE	FY:	2020		
PARCEL INF	ORMATION		U	se-Code:	934	Sale	Price:			Book:	0		Road Typ	e:	Т	Inspect Date	: 09/	29/2019
Owner:			Ta	ax Class:	E	Sale	Date:			Page:	0		Rd Condit	ion:	Р	Meas Date:		
TOWN OF S	OMERSET		Te	ot Fin Area:	105949	Sale	Type:			Cert/Doc:			Traffic:		M	Entrance:	х	
Address:			Te	ot Land Area:	25.210	Sale	· Valid:						Water:		PS	Collect Id:	RG	
140 WOOD 9	ST		S	ewer:		Gran	ntor:						Sewer:		sw	Inspect Reas	S:	
SOMERSET	MA 02726		E	xempt-B/L%		Resi	id-B/L%			Comm-B/L	-%		Indust-B/L	.%		Open Sp-B/L	.%	
		CC	MMERCIAL	_SECTIONS/G	ROUPS								LAND I	NFORMA	TION			
Section:	ID:101		Use-Co	de:351					NBHD	CODE:	3	NBHD C	LASS:	3	ZONE:	R1		
Category	Grnd-FI-	Story Height	Bldg-Cla	ass Yr-Built	Eff-Yr-Bui	t Cost	Bldg		Seg	Type	Code	Method	Sq-Ft	Acres	Influ-Y/N	Value	Class	
e	Area	1.0	С	1965	1990	20040	200		1	P	904	V	435600	10.000	N	2,200,000		
Crounce	105229	1.0	C	1965	1990	20019	9300		2	R	904	Α	662548	15.210	N	121,680		
Groups:	Cd	B-FL-A	Firs	Firs								DETA	CHED STR	UCTURE	INFORMATI	ION		
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,	351	29809	1	1					AS	S	87120		1980	Α	Α	25///25	62,500	3
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													VALUATIO	N INFOR	MATION			
									Curre	nt Total:	22,434,100	Bldg:	20,112,400	Land:	2,321,700	MktLnd:	2,321,700	
									Prior 7	Total:	21,788,600	Bldg:	19,466,900	Land:	2,321,700	MktLnd:	2,321,700	

Site Development

Site Survey

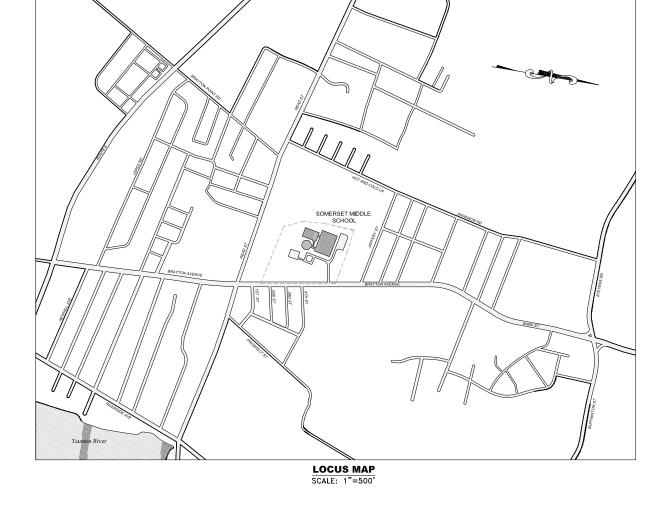




SYMBOL LEGEND
● CB · · · · · · · · CATCH BASIN
○ GG········ GAS GATE
-Ç- · · · · · · · · · · · · HYDRANT
☆ LP LIGHT POLE
MANHOLE
S · · · · · · · SEWER MANHOLE
ØS · · · · · · · SIGN
★TS····· TRAFFIC SIGNAL
TRAFFIC FLOW
A · · · · · · · · · · · TRAVERSE POINT
O UTILITY POLE
O WG · · · · · · · · · · · · · WATER GATE

	LEGEND
CC	BITUMINOUS CONCRETE BERM BITUMINOUS CONCRETE WALK CONC BITUMINOUS CONCRETE CONCRETE CURB CHAIN LINK FENCE CONCRETE CURB CONCRETE
GC GR GW MHR	GRANIE CURB GRASS GUY WIRE METAL HANDRAIL
RFL S SGC	OVERHEAD WIRES REFLECTOR SIGN SLOPED GRANITE CURB
TRAN TYP UG UGC UC UP	

	TRAVERSE	POINT TABL	E
POINT #	NORTHING	EASTING	DESCRIPTION
1	2729010.0018	748618.2984	MN-SET
2	2729354.1947	748626.2117	MN-SET
3	2729831.7422	748542.6061	MN-SET
4	2730291.1932	748462.6587	MN-SET
5	2730734.4110	748342.0138	MN-SET
6	2730260.2508	748052.7391	MN-SET
7	2730479.9044	747629.4891	RBP-SET
8	2730128.9992	747650.0833	RBP-SET
9	2729825.6271	747650.8777	MN-FND
10	2729589.7143	747665.1514	MN-SET
11	2729181.1033	747493.9884	MN-SET
12	2729097.0851	748019.6161	MN-SET



PARCEL DATA ASSESSOR'S PARCEL ID: 273//005.B-0000-0344.0 PLAN REFERENCE:

2. THE COORDINATES SHOWN ON THIS SURVEY ARE BASED ON THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM — MAINLAND ZONE 2001 AS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83). THE COORDINATES WERE GENERATED VA RIK OFFS SURVEY MEASUREMENTS MADE USING LEICA 6515 RECEIVERS IN CONJUNCTION WITH THE SMARTINET NORTH AMERICA RTK NETWORK.

3. SITE IMPROVEMENTS & TOPOGRAPHY SHOWN HEREON ARE BASED ON AERIAL MAPPING PREPARED BY EASTERN TOPOGRAPHICS USING DIGITAL TERRAIN MODELING (DTM) METHODS WITH KLT ALLAS SOFTWARE BUILDING OUTUMES REPRESANT PERIMETER ROOF LINES. WITH THE EXCEPTION OF LABELING SITE IMPROVEMENTS, NO FIELD EDITING OF THE AERIAL MAPPING WAS PERFORMED BY WELCH ASSOCIATES LAND SURVEYORS, INC...

4. TRAVERSE POINTS, MONUMENTS, & CONTROL POINTS USED FOR AERIAL MAPPING ARE BASED ON AN ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY WELCH ASSOCIATES LAND SURVEYORS, INC. BETWEEN AUGUST 22, 2018 & AUGUST 27, 2019.

5. PROPERTY & STREET LINES SHOWN HEREON ARE APPROXIMATE ONLY. WELCH ASSOCIATES LAND SURVEYORS, INC. HAS NOT PERFORMED A PROPERTY LINE RETRACEMENT AS PART OF THIS SURVEY.

6. CIRCLED LOT NUMBERS ARE TOWN OF SOMERSET ASSESSOR'S LOT IDENTIFICATION NUMBERS.

PROGRESS 11-18-19

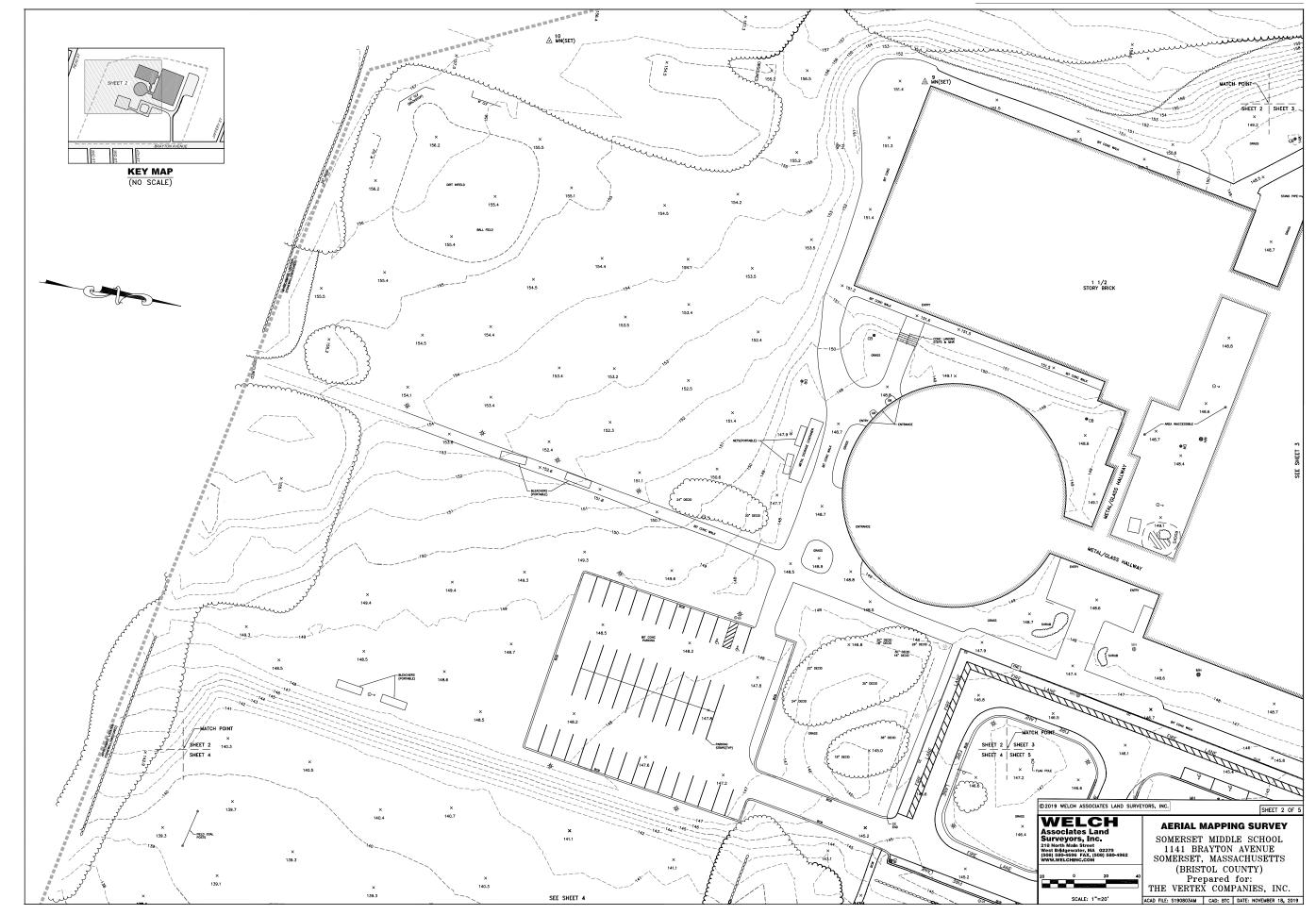
PAMELA M. WELCH AS AGENT FOR WELCH ASSOCIATES LAND SURVEYORS, INC. REGISTRATION NUMBER 36129

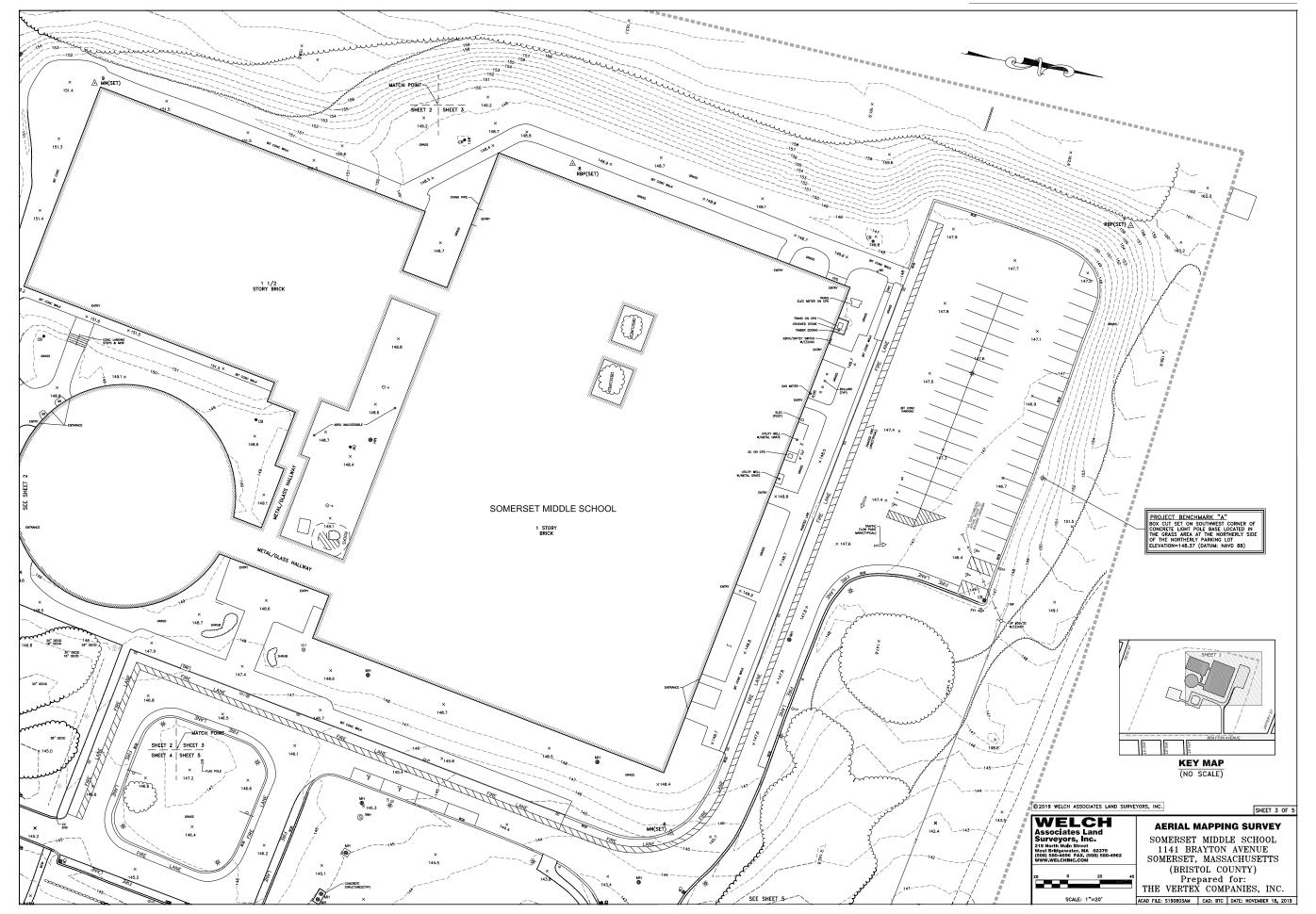
©2019 WELCH ASSOCIATES LAND SURVEYORS, INC. Associates Land
Surveyors, Inc.
218 North Main Street
West Bridgewater, MA 02379
(500) 580-4962 PAX, (500) 580-4962
WWW.WELCHIRC.COM

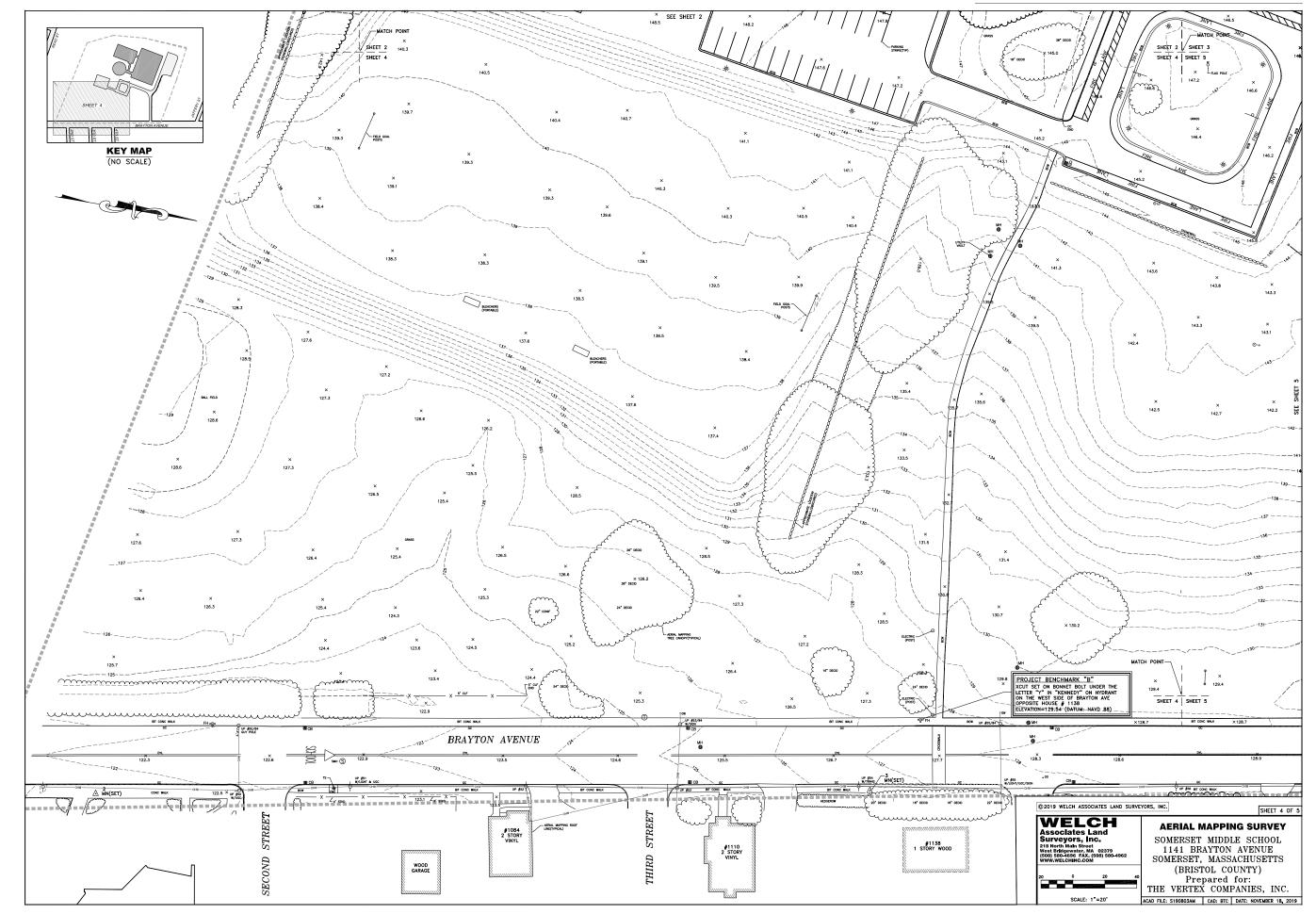
AERIAL MAPPING SURVEY

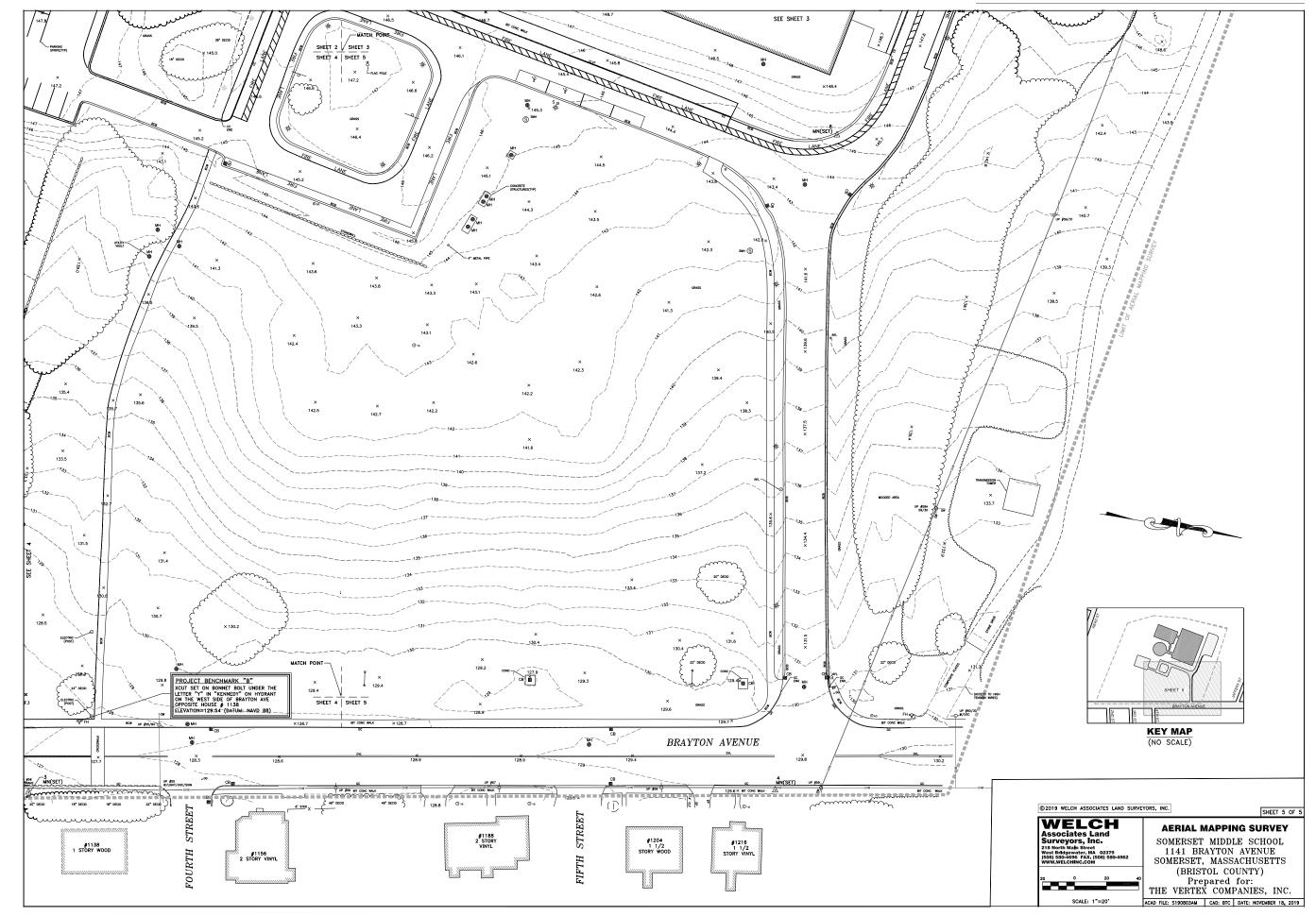
SOMERSET MIDDLE SCHOOL 1141 BRAYTON AVENUE SOMERSET, MASSACHUSETTS (BRISTOL COUNTY) Prepared for:
THE VERTEX COMPANIES, INC. ACAD FILE: S190803AM CAD: BTC DATE: NOVEMBER 18, 2019

SHEET 1 OF 5















Geotechnical Evaluation

i3 Architects, LLC secured the services of Pare Corporation to conduct a preliminary geotechnical report for the Somerset Middle School located on 1141 Brayton Avenue in Somerset, Massachusetts. Pare completed preliminary explorations at the Site in an attempt to obtain preliminary subsurface information and to provide preliminary recommendations for foundation design and construction. Pare performed the following services:

- Coordinated field explorations with Ai3 Architects, LLC;
 Pare Corporation; and the Town of Somerset.
- Engaged a drilling subcontractor to provide borings.
- Provided geotechnical engineers at the Site to coordinate and observe the borings, describe the soil samples, and prepare field logs.
- · Submitted soil samples for grain-size analysis.
- Prepared the geotechnical report containing the results of the preliminary subsurface explorations and the preliminary recommendations for foundation design and construction.

These tests and samplings were performed in compliance with MSBA regulations identified in Module 3, Feasibility Study: Article 3.1.4 Evaluation of Existing Conditions. A second phase of geotechnical investigation will be performed in the Design Development phase of the project.

For a complete copy of the Preliminary Geotechnical Report, refer to **Appendix G.**



Site Development VER 1

Phase I ESA Report

i3 Architects, LLC secured the services of The Vertex Companies, Inc. ("VERTEX") to conduct a Phase I Environmental Site Assessment (ESA) for the Somerset Middle School located on 1141 Brayton Avenue in Somerset, Massachusetts. The purpose of the ESA is to evaluate the Site with respect to potential presence of "Recognized Environmental Conditions" (REC). The ESA included review of the following:

- Records review: Review of historical and regulatory records readily available from state, federal, and local agencies concerning the site and nearby properties.
- Site Reconnaissance: Evaluation of the Site for indications of REC and to identify general uses of abutting parcels.
- Interviews/Inquiries: Interview of readily available persons associated with the Site Owner and occupants of the Site relative to Site history and use.
- Interviews with local government officials: Collect information and conduct inquiries of the local regulatory/licensing agencies regarding the Site.

The ESA was performed in compliance with MSBA regulations identified in Module 3, Feasibility Study: Article 3.1.4 Evaluation of Existing Conditions.

For a complete copy of the Phase I ESA Report, refer to **Appendix H.**

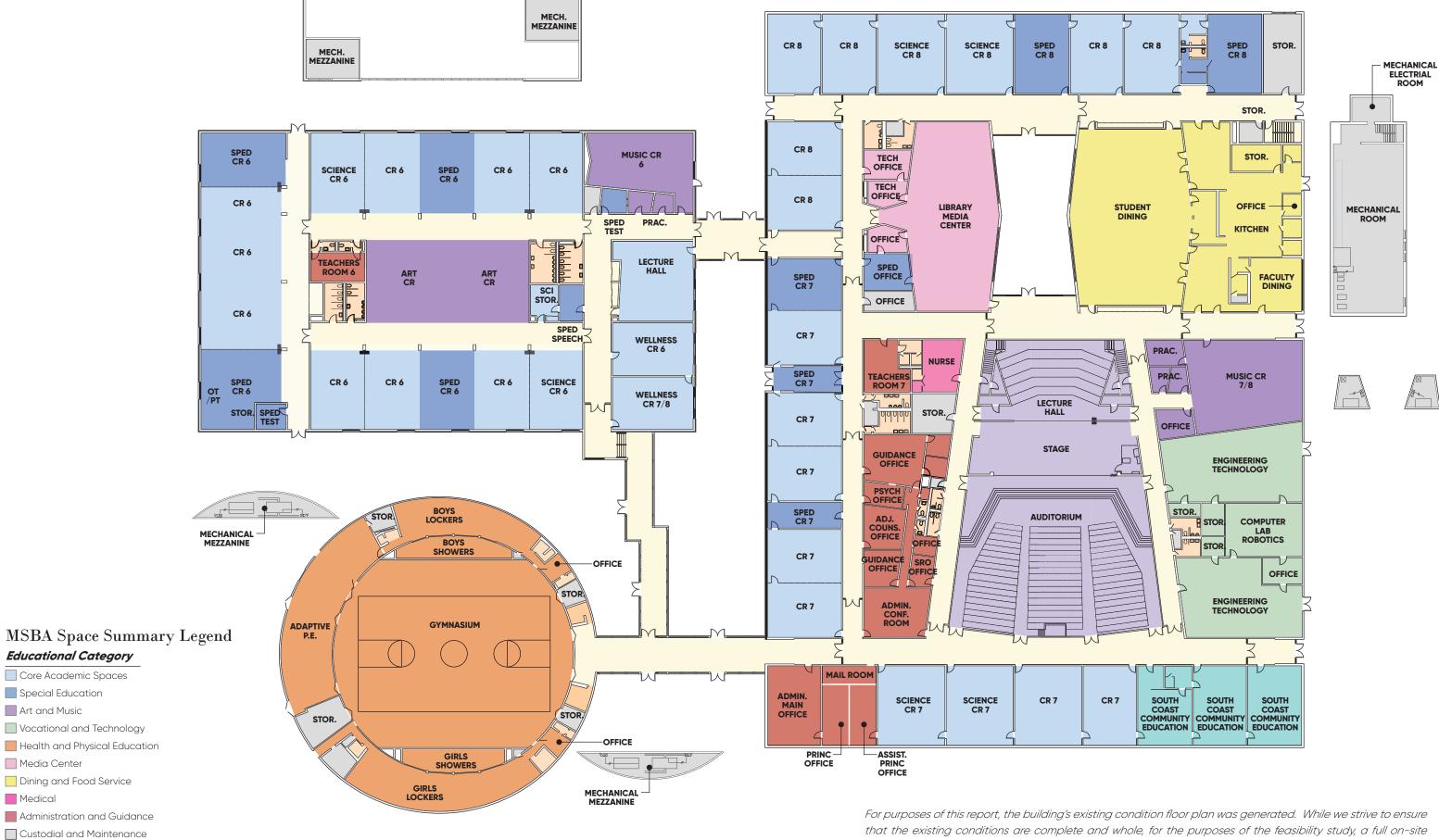


Evaluation of Existing Conditions

Floor Plans

Existing Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts 02726

- Single-story concrete and masonry structure
- Situated on 26 acres of land
- Total of 124,900 square feet
- Serves grades 6-8: Currently 651 students



that the existing conditions are complete and whole, for the purposes of the feasibility study, a full on-site existing conditions survey was not conducted to confirm exact locations and dimensions of every wall, door, or other element. The plans provide a starting point for the evaluation of space uses and adjacencies and existing program square footages.

Circulation

Toilet rooms



Evaluation of Existing Conditions

Architectural Review: Educational Analysis

The existing Somerset Middle School is located on a parcel with a total area of 26+/- acres. The campus contains the Somerset Middle School, South Elementary School, athletic fields, and a largely undeveloped forest. The site is bound by residential properties to the north and east, and town-owned parcels to the west and south. The site is accessible by vehicles from the north and south by Brayton Avenue. There is a footpath to the south of the site which connects to the sidewalk along Read Street and a second footpath to the east of the site which connects to the sidewalk along Brayton Avenue. The single-story, 124,900 square foot building was originally constructed in 1964, with an "openclassroom" concept addition constructed in 1969. The building's structural system consists of a steel structrual frame (beams & columns), and masonry (CMU) walls supporting concrete floor (mechanical room) and roof slabs. The classrooms are vastly undersized based on the current educational guidelines and requirements, and the building's structural system would make it extremely difficult and cost-prohibitive to reconfigure. The exterior walls consist of masonry (brick) and large spans of single pane glazing resulting in thermal loss throughout.

21st Century Middle School Learning Environments

The ideal middle school educational environment includes many key factors. Modern 21st Century middle schools include classrooms that are "Laboratories for Learning" where all of the necessary environmental factors, technology integration, and spatial configurations work to create "ideal" settings to teach and to learn. These modern classrooms allow teachers to introduce "real world" examples of instructional material through

the seamless integration of video Internet technology. They also allow students to present and facilitate with their peers, giving them invaluable exposure to learning, presentation, and collaboration skills. Lighting, ventilation, and carbon dioxide levels are all monitored in a modern middle school and adjusted automatically to create ideal environmental conditions. Teachers have collaborative planning and work areas that allow them to share critical planning and development ideas for their coursework. Team teaching and presentation areas are integrated into the academic environment in a manner similar to that of a corporate planning and work environment. Core facilities such as Library/Media Centers have become highly advanced media retrieval centers and are located in close proximity to all academic functions to allow for key sharing of valuable resources. Academic zones are organized for quiet separation from noise-generating zones such as cafeterias Their layouts and plan organizations and gymnasiums. are structured to allow flexible teaming and grade level configurations. Corridors and hallways are organized and designed to create "experience and exposure" in addition to providing functional movement patterns. Performing and practical arts facilities include highly advanced opportunities for students to explore their talents at a critical age when many of their future professional talents are evolving.

The Somerset Middle School is an old, "tired" building that has been well maintained. The organization and layout of the existing Somerset Middle School does not easily lend itself to conversion as a 21st Century middle school based on the current student enrollment. Today, middle school students work in groups and teams, completing projects and utilizing technology that could never have been imagined when the building was designed. Unfortunately, the classrooms created in 1965 and 1969 are extremely inadequate in providing necessary space, amenities, technology, acoustics, lighting, and security found in a modern middle school classroom. Its walls cannot be efficiently relocated due to the existing structural system. The 50-year-old mechanical, electrical, and plumbing systems are well beyond their intended life expectancy and are failing. The poor condition of these systems is detailed in the following sections of this report in the Electrical, Mechanical, and Plumbing review.

The building requires a comprehensive renovation of the building systems and components, the cost of which would trigger full handicap accessibility and state fire code compliance throughout the building. The required comprehensive renovation at the school is a significant project and extends well beyond a series of capital improvements.

Somerset Middle School's Learning Environment

This 50+ year old building was at the forefront of educational design in the early 1960s. The building was designed with one central student dining area and two courtyards with oversized corridors adjacent to the courtyard areas. The distribution of the courtyard areas allowed for abundant levels of natural light into the library media center and student dining. The Visioning session attendees agreed that the ideal dining configuration for the Somerset Middle School was a single student commons area that could potentially be subdivided into two dining areas. This would allow for two school lunch periods and the separation of 5th & 6th grades from the 7th & 8th grades.

Socialization and Learning

Social skills and the need to communicate outside of the project/instructional environment is a key element in promoting positive student development. Students must have the opportunity to socialize with their peers without being confined to the traditional restrictions of a "cafeteria", where students are "herded" into a space and directed to function in a stereotypical way. Schools where social dining is distributed throughout the school environment with less restrictions and/or boundaries have proven to promote significantly more student collaboration while simultaneously reducing discipline problems. The student dining area can also play a significant role in parent and community interaction with the school community by providing flexible space which supports

presentations, programs, and events. It can serve as one of the primary social hubs of not only the school, but also the entire Somerset community.

Expanded Educational Space

One could argue that the typical school corridor is one of the most underutilized spaces in a typical educational facility. In a 21st Century school, these "corridors" should instead become part of the team learning environment with transparency to the classroom such that they can be utilized throughout the school day as an area for small group study, independent research, and numerous other academic pursuits.

The Somerset Middle School staff has access to two exterior courtyard areas and one student dining area. The staff has taken full advantage of these spaces and utilize them not only for student dining but also for break-out classrooms, team learning environments, after-school programs, robotics, aquaponics & hydroponics, and gardening.

The school staff frequently works with students in small groups outside a typical classroom environment. One of the goals of the new and/or renovated middle school is to eliminate these "corridors" as much as possible and keep the concept of the break-out spaces that are currently being utilized in the existing middle school. The architecture should support these spaces as viable, usable teaching environments; something the existing school is currently lacking as they were initially designed strictly as student dining areas. The staff recommended these breakout areas be embedded in the academic neighborhoods and have visible connections with the adjacent classrooms.

Community Connections Through Entry & Exhibit

The new and/or renovated Somerset Middle School must be a welcoming environment for not only students and staff but also for community members. The interaction of community members and parents, as well as the impression they receive during their visit to the school, is important. Most visitors will not have the opportunity to tour throughout all areas of the school, and certainly will not have the opportunity to observe the activities and products of student academic work within the individual learning spaces.

The new and/or renovated building should place education and student activity on display for all to absorb by providing opportunities for fixed exhibits or video display. This kind of exhibit opportunity should not be limited to just the displays at entry points accessible to visitors, but should also be inherent within the academic zones; allowing students to present and display their project work to other students and to the public.

The art instructional studio incorporated and developed at the High School has been an incredible success within the community as part of the educational program, and the participants, content coordinators, and administrators have identified the positive educational impact this type of space would have at the middle school level and expressed their desire to incorporate it into a proposed solution.

Small Teams & Personalization / The Integration of STEAM

Teaching teams and flexible project or instructional spaces are key elements in the personalization of education for all students. One of the key components of a 21st Century school is how the building addresses the need to break down the larger school population into grade level communities and even smaller learning teams. These learning communities must be created in a manner which promotes safety, identity, personalization, pride, respect, belonging, support, and confidence. They must recognize that these feelings can be fostered by a well-organized community which responds to student needs from morning arrival until end-of-day departure.

The Somerset School District recognizes the importance of establishing a positive connection between each student and staff member, which is why the school organization is currently broken down into grade levels and teams.

The modern 21st Century middle school environment supports the integration of the key subjects of Science, Technology, Engineering, Arts, and Math (STEAM) into real world business and scientific applications to help students understand not only the importance of these topics individually, but also the way they support each other. A focus on STEAM initiatives allows teachers and students to collaborate more successfully and engages the student population through a vibrant curriculum. The Media Center should include a video recording studio and technology project lab (virtual reality) that includes a student participating tech repair area.

Media Center and the Distribution of Media

The library media center should be a technology-rich media distribution and retrieval resource which students can utilize throughout the school environment. The functions of the library media center should be carefully considered throughout the planning process, as the focus on creating academic teams may warrant the need to satellite some resources to the individual teams or grade-level communities. Media research will occur in many places throughout the school environment, and distributing some resources while maintaining a core library media center may prove beneficial in creating a more dynamic environment.

Flexible Project & Instruction Space: The Flexible Classroom

Spaces utilized for 21st Century instructional practices should not segregate instruction from application. The modern comprehensive middle school environment must be a flexible space that accommodates both instruction and application. It should allow for students to be creative and grow as learners throughout the course of their day. The Project Based Learning Labs that are dedicated to project based learning should be highly integrated into the academic classroom environment. During the Visioning session workshops, there was much discussion about the need for small group spaces integrated within the classrooms and classroom teams. These spaces require a high level of transparency for supervision and connectivity to remaining team spaces. There are also numerous physical characteristics required within these classrooms including ubiquitous technology and large-scale instructional walls allowing teachers to collaborate with both their students and their colleagues more easily.

The value and benefits of outdoor learning environments were discussed at the Visioning session workshops. The visioning participants, content coordinators, and administration expressed a desire to incorporate outdoor science classrooms, outdoor biolabs, fitness and nature trails, amphitheater, and grow gardens to enhance the science, health, and wellness curriculum.

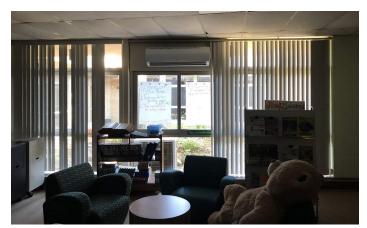
The Somerset Middle School is a 124,900 square foot, single-story

Educational Plan Organization (Deficiencies)

building serving grades 6-8. The physical size and available classrooms suggest that it has a capacity of approximately 590 students based on current educational standards and the MSBA (Massachusetts School Building Authority) guidelines. Recent enrollment has been approximately 651 students, far exceeding the facility's capacity. The single-story facility includes one undersized student dining space, gymnasium, 600 seat auditorium and connecting lecture hall, music classroom and practice spaces for each grade level, art classrooms, tech & engineering labs, and academic classrooms, including an "open-concept" 1969 addition serving the 6th grade population. The current building organization does not support a modern 21st Century middle school program. The majority of the educational spaces do not meet the minimum square foot size identified by the MSBA. Moreover, the classrooms are not organized in a manner that fosters collaboration, team teaching, and handson learning experiences. Additionally, the classrooms are not organized to allow the student population to be subdivided into smaller neighborhoods and teams of approximately 85-90 students. Research indicates that separating students into smaller teams allows teachers and facilitators to more closely monitor and foster student development and easily combine classrooms to facilitate cross discipline instruction. Students within a team have the ability to collaborate on the development of hands-on projects, which fosters a further understanding of the subjects they are studying.









Module 3 - Preliminary Design Program

Over the past twenty years, middle schools across the country have been migrating to this proven, successful model. Even schools that have poorly organized facilities such as the Somerset Middle School do the best they can to organize their students and teachers in teams to take advantage of the benefits of this approach. Unfortunately with the overcrowding and current building configuration, the Somerset Middle School cannot fully capitalize on this team configuration. Due to the existing building configuration, isolated math/science classrooms in the building require students to walk from one end of the facility to the other to attend these other related classes, and in turn, removes the students from a team environment.

The Library/Media Center is centrally located, and is in close proximity to the academic classrooms. Todays library/media center seeks an even more central and convenient location for use by students, educators, parents, and the general public. Fifty years ago, the "Library" included 10,000 volumes of hardcopy books and a card catalogue reference system. Today, it is a technology driven, data based, media retrieval center that promotes inquiry and research by teachers, students, parents, and the general public, with no limitation on subject matter or breadth of information. It is also a media and data distribution center where students create, direct, and broadcast information, presentations, and performances. In addition to being poorly located and lacking all modern amenities, the existing Somerset Middle School library is half of the required program size.

The building's adminstration area is located in the southeast portion of the original building, occupying former instructional classrooms. The building's public entrance is non-descript and not clearly identifiable from the site entrance or approach to the building. The entry door is a single door located on an interior corner of the glass corridor and solid brick exterior wall. In 2017, the District retrofitted the main office area to include a glass "holding area" / vestibule and transaction window to increase safety and security. Additionally, the School Resource Officer's office is located farther down the corridor with no direct view of either the main entrance or the Main Office.

Educational, Spatial, & Organizational Capacity

Capacity at the middle school is calculated by multiplying the number of available general classrooms and support areas by the appropriate number of students in each classroom. The Somerset Middle School has a current capacity of approximately 580 students under current educational standards, but recent enrollment has been approximately 651 students for grades 6-8, with projections remaining steady when construction is complete.

The Somerset Middle School is obviously housing significantly more students than the identified capacity. Additional educational space has been added in the existing building by converting spaces not originally intended as general Ai3 Architects, LLC

classrooms into classroom space and increasing the number of students in the classrooms. Storage rooms and closets have been converted into small group instruction, testing, and counseling areas.

In addition to being overcrowded, the following conditions exist:

General Classrooms

To address the lack of classroom space, open area spaces within the addition (not intended for classrooms) were converted into four classrooms. These additional classroom spaces are undersized, lack natural daylighting, and the demising walls were not constructed to provide minimum acoustical separation between the classrooms. The mechanical system was not retrofitted or updated to accommodate these additional classrooms.

Special Education

The current Special Education Program is undersized and is utilizing inadequate space for instructional, tutorial, and testing areas. The program and associated spaces do not meet square foot guidelines. IEP team meetings, professional meetings, data meetings, and departmental meetings are held in classrooms, hallways, or cafeteria space, severely hampering efficiency and productivity, and potentially compromising confidentiality. The current program severly lacks sub-separate classrooms and differentiated instruction and small group testing/instruction/reading pull-out spaces within neighborhoods/teams. Many non-traditional spaces are utilized for instructional purposes for the Special Education program.

Science Classrooms

The current science classrooms have limited plumbing and do not provide an adequate space for delivering the science curriculum. The science lab plumbing is exposed and unprotected. A handicap accessible sink is not provided in the science classrooms. The science spaces also lack a connection to project labs or outside classroom space.

Gymnasium

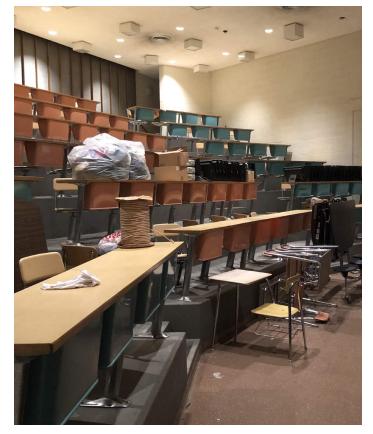
The existing middle school has 14 competitive athletic programs. Although the existing athletic and physical education square footage meets the MSBA regulations, its design in a circular building is extremely inefficient and results in functional compromises.









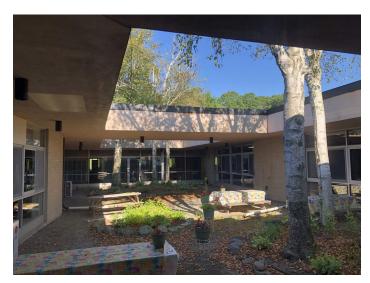


Specialized Instruction (Art/Music)

The current art classrooms and band classroom are located in their original rooms since the facility opened in 1965 and expanded in 1969. The art room kiln has been moved into a storage closet and lacks sufficient ventilation. A science classroom adjacent to the band room has been converted into a choral classroom. The school does not have any culinary spaces and has limited technology education spaces.







Module 3 - Preliminary Design Program

Planning Space

Due to the significant shortage of available education space, rooms that would normally be available for planning and storage have become classrooms. The school has a limited amount of conference rooms and two undersized teacher work rooms which are currently used as copy centers and general storage. The limited available space in these workrooms do not allow for teacher collaboration, forcing the staff to meet elsewhere. The building lacks professional planning and collaboration space; with IEP team meetings, professional meetings, data meetings, and departmental meetings being held in hallways, storage rooms, or cafeteria space.



Receiving & Storage

The receiving area for the school is serviced by an overhead door at ground level. All deliveries, whether food or cleaning supplies, occur at this location. There is no palette unloading area, making deliveries difficult. Storage space in the school is extremely limited as many of the storage spaces have become educational spaces.





Evaluation of Existing Conditions

Architectural Review: Building Analysis

he original Somerset Middle School was completed in 1965 with a gross square footage of 95,000 sf. The middle school was constructed in the later part of an era known as the "post-war boom" and the beginning of the "impulsive period". The "post-war boom" resulted in a significant number of school buildings constructed of single-story, flat roofed structures enclosed in glass and metal windows and brick wall systems. Lightweight construction resulted in less expensive and easier to build school buildings that did not have the physical longevity of their predecessors. The "impulsive

period" included the development of school buildings with experimental educational concepts, including open-space educational classrooms and open-space schools. The Town of Somerset Facilities Department and School Department have maintained the facility exceptionally well over the past 50+years. There is significant visible wear-and-tear as expected in a middle school of this period but, overall, the condition of the building illustrates the commitment and dedication from the Town in understanding the importance of maintenance and upkeep.

The following capital improvements have occurred since initial construction:

1969 6th grade wing of approximately 32,000 square feet was constructed

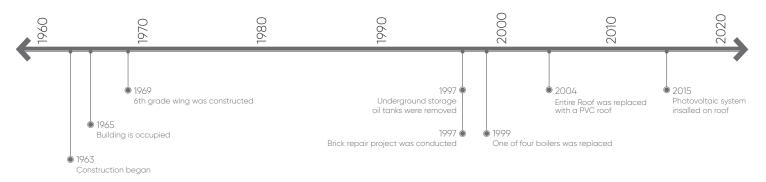
1997 Underground storage oil tanks were removed

1997 Brick repair project was conducted

One of the original four boilers was replaced with an AirCo Benchmark boiler to increase efficiency of the existing HVAC system

2004 The entire roof was replaced with a PVC roof

2015 PV system (936 solar modules at 300kw) was installed on the roof



Exterior Review

Foundation

The existing poured concrete foundation walls appear to be in good condition where visible. There are a few locations around the perimeter of the building where there are visual cracks and spalling concrete. There are localized instances of major deterioration such as at the loading dock slab. The structural evaluation in this report should be referred to for additional information.

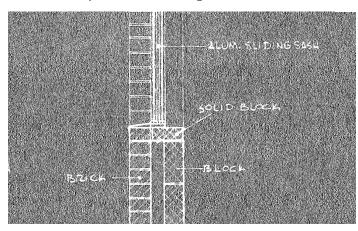
Exterior Walls

The 50+ year old exterior envelope is composed of 4" brick veneer, 2" air space, and 4" and 6" concrete masonry units (CMU).

Based on site inspections and review of the as-built documents, the exterior wall assembly appears to not have insulation. Extensive investigation would have to occur to ensure that the current air / vapor barrier is adequate and its integrity has not been compromised over time. The R-values of the wall system with 4" CMU are 3.73 +/-, respectively. These values would not meet current energy code and would need a major retrofit to comply with current standards.

Potential condensation is not the only source of water infiltration into the wall system. This building is lacking control joints at critical locations which has caused cracking in the exterior brick veneer. Some of these cracks have been sealed as part of the building maintenance plan but many remain open to allow moisture into the wall system.

Penetrations that are not properly sealed, incorrect flashing details, and failed sealant are all visible throughout the building, allowing water to get into the wall system. Efflorescence is evident in many locations, which is the product of moisture in the wall assembly. Once a crack develops, water infiltration becomes much easier as the freeze/thaw cycle exerts pressure on the masonry and the situation gets exacerbated.



Module 3 - Preliminary Design Program















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Roof

The existing roof system is supported by 11/2" steel decking on light gauge steel joists. The original roof was replaced in 2004 as part of the Town's maintenance plan. The original built-up roof was replaced with a white single-ply PVC membrane roof, typical of this building type. There are signs of water infiltration from the inside of the building, and it is assumed the water is penetrating at failed seams in the roof membrane. Additionally, there are many ceilings throughout that are non-accessible, so a thorough investigation could not be performed without selective demolition. The membrane, as observed from the roof, appears to be in good condition; however, there are details which show signs of potential failure.

Overall, the replacement membrane roof appears to be in good condition as it is roughly halfway through its life span. Patching was observed in various locations. It is unknown if these were because of leaks or have been there since the installation. There were low spots observed with ponding water at locations without roof drains. The existing roof slope should be reviewed, as these low spots create standing water which increases the risk of a leak.

Roof drainage is achieved through roof drains which transport the water to the storm drain system. Most of the roof drains have strainers, but some are missing this necessary component which prevents the introduction of debris into the system. All roof drains should be inspected and strainers provided, where missing, to prevent the possibility of debris clogging the system.

Aluminum Windows

The original single pane exterior windows remain in place today. The energy standards did not exist when the middle school was built over 50 years ago. These windows are far beyond the end of their useful life as there is visible deterioration in the sealant and glazing beads allowing water to infiltrate during heavy rain events. The windows would not meet current energy code, leak, and in select locations would provide an avenue for moisture to get into the building, which is a concern. All of the exterior windows should be replaced on this building.



Module 3 - Preliminary Design Program

Doors

The exterior hollow metal doors are hung within a metal frame. Some of the doors have single pane glass vision panels while others are solid. The doors are in poor condition with visible signs of wear including worn or peeling paint, dents, broken glass, and chips. Many doors do not have a canopy, which exposes them to the harsh New England elements. These doors have rusted through the outer metal layer and should be replaced. The metal frames are in very poor condition, as those too are exposed to the elements. All of the exterior doors and frames should be replaced.

The door hardware appears to have been replaced at different time periods as nothing matches. Some of the hardware remains non-compliant with the Massachusetts Architectural Access Board (MAAB) and is further discussed in the handicap accessibility portion of this report.













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Interior Review

Floors

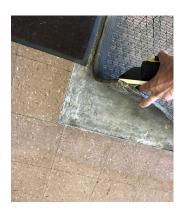
There are numerous flooring materials throughout the building including the following: Vinyl Composition Tile (VCT), Hardwood, Concrete, Carpet, Quarry Tile, and Vinyl Asbestos Tile (VAT). Although the Vinyl Asbestos Tile (VAT) is non-friable and poses no threat to the students or staff, most school districts have developed schedules for periodic removal and replacement of such finishes over time with the ultimate goal of full abatement of asbestos containing materials. Areas within the building that still contain some asbestos materials should be considered as part of any future renovation plans.

The corridor and classroom floors are primarily VAT and VCT. Various locations have been patched with VCT. With the exception of high traffic locations (around doors, intersecting hallways, and room entrances, all of which show excessive wear), the floors in the corridor are in good condition and well maintained. The condition of the VCT and VAT varies throughout each classroom. At select locations, the subfloor is failing and is telegraphing through the flooring material. There are numerous patches in the floor, some with VAT and others with VCT. In certain conditions, the patch itself has already been dented, chipped, etc. These floors are in poor condition and should be replaced in their entirety.

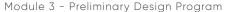
There are instances throughout the school where the concrete slab was left exposed as the finish material. Since there is no finish material applied to the concrete slab, cracks are visible. The concrete floors should be refinished with epoxy paint formulated for high traffic areas after the cracks are filled and sealed with a self-leveling agent.







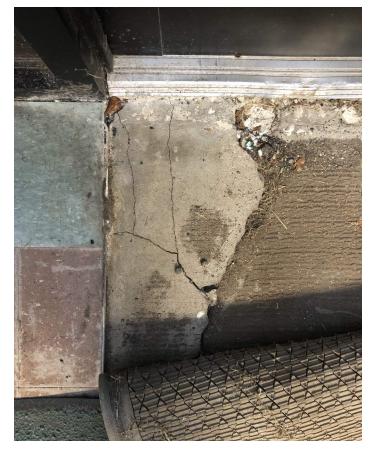












Hardwood flooring was originally installed in the gymnasium. The original hardwood floors remain and show signs of excessive wear. The wood flooring in the gymnasium visually appears to be in poor condition, and with closer examination reveals there are numerous "dead spots", separation between boards, and buckling scattered throughout due to water damage. Many older gym wood flooring systems had a limited number of wood sleepers (support members) underneath and relied heavily on the integrity of the finished tongue-and-groove wood flooring. However, as part of regular maintenance, this system most likely has been sanded many times, reducing its overall thickness and strength. Inevitably, this weakens the tongue-and-grove joints. The stage floor, which appears to be VCT, is in fair condition but, again, closer examination reveals signs of wear, unavoidable weathering, and numerous scratches from the construction/ deconstruction of set designs and repetitive moving of chairs for each choir/band concert.

The kitchen floor and associated toilet rooms are made of

quarry tile. There is minor damage from normal wear and tear but, overall, the floors are in fair condition and remain serviceable. The joints between dissimilar flooring materials often see the brunt of the abuse, and the Somerset Middle School is no exception. The joints vary significantly resulting in abrupt flooring transitions and deterioration of the grout. Each transition from one material to another should be investigated to confirm whether or not it meets accessibility requirements. Abrupt transitions create handicap accessibility challenges and will need to be addressed as part of any future renovations, if non-compliant.















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Walls

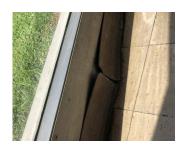
The walls throughout the school are a combination of painted, non-painted, and glazed concrete masonry units (CMU), painted plaster, and gypsum wallboard. Each contains a rubber base, tile base, or carpet cove base (depending on finished flooring material). Most walls appear to be in good condition; however, the age of the walls is apparent as modern retrofitted amenities are exposed. These amenities are needed to meet life safety, electrical, technology, plumbing, and heating/cooling needs; more specifically, wiring for fire alarm devices, power, light switches, and technology. These items are attached directly to the face of the wall and, in some cases, result in non-compliant accessibility issues, which will be discussed later in this report. Typically, the devices would be fully encased within the walls.

The walls in the auditorium and lecture hall are a combination of painted and non-painted CMU, perforated metal panels, and wood baffles. There were signs of moisture at these locations along with damage caused by school productions and stage sets. These walls also remain serviceable but should be investigated further for the cause of the moisture damage.

The walls of the gymnasium are a combination of painted and non-painted CMU, and brick, each treated with a row of athletic wall pads. The athletic wall pads are limited to each of the short sides, directly under the basketball hoops. Along both of the long sides of the gymnasium, there are telescoping wood bleachers. The bleachers appear to be original and are showing signs of wear and tear. Additionally, the bleachers do not meet ADA requirements regarding handrails, stair rise/run dimensions, and wheelchair location accommodations.



















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Doors

The interior doors and frames throughout the school are original and vary in style. Some classroom entry doors have vision panels and transom glass, others are equipped only with vision panels, and certain entries have no glazing whatsoever. Though the metal frames are durable and regularly painted, the original wood doors (and transoms where applicable) are in poor condition. Many of them are worn, scratched, gouged, dented, chipped, etc. These original doors do not provide adequate acoustical separation between the classroom and corridor, as well as classroom to classroom where applicable under current construction standards. The acoustic separation of a classroom is imperative to a successful student learning environment and the current doors offer very minimal acoustic separation, if any at all, as there are visual gaps between the door and the frame.

Although the wired glass found in many of the corridors represent typical standards at the time of installation, modern codes and regulations would require a greater degree of fire separation between the zones of the building. There are double doors located within corridors that conflict with adjacent doors and lockers when open. This configuration has the potential to block a means of egress unknowingly to staff and students. This is especially concerning from a life safety aspect and should be brought to code immediately. In addition, some fire exits were locked and could not be opened from the interior. This too is a concern from a life safety aspect and should also be addressed immediately.



Module 3 - Preliminary Design Program

While some of the original door hardware appears to have been replaced over time, the current door hardware still lacks many of the modern safety and security features and is difficult to operate. As regulations have continued to evolve over the recent past, much of the door hardware remains non-compliant, and this is further discussed in the handicap accessibility portion of this report.









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Ceilings

There are a variety of ceiling systems throughout the building, including: 2'x2' suspended acoustical ceiling tile (ACT), 2'x4' suspended acoustical ceiling tile (ACT), plaster applied to drywall, and corrugated metal panels with perforations.

The most prevalent ceiling system is 2'x4' suspended acoustical ceiling tile (ACT). This ceiling system is found throughout the corridors, the main entry, band room, choral room, general academic classrooms, etc.

The ceiling tiles throughout the building have continually been updated to keep up with the occurring water damage presented at each heavy rain fall. Many past and currently active roof leaks have resulted in stained and/or damaged ceiling tiles. The system remains in fair to good condition, but investigation should be part of any renovation project to avoid larger problems in the future. In addition to the administrative offices, the suspended acoustic ceiling tile (ACT) is located in the kitchen, the modular classrooms and connecting corridor, a select number of bathrooms, and portions of the library.

The plaster ceilings are located in some of the bathrooms, portions of the shower areas, and in some of the storage closets. Within each space, damage is evident, ranging from mild to severe. Investigation is needed to determine whether the stains, flaking of ceiling paint, and bubbling of the plaster is a result of water infiltration or from normal wear and tear over the past 50+ years.

The primary ceiling in the gymnasium is the structure itself (48" long-span joists). The structure is an exposed wide flange beam roof structure (refer to structural evaluation for additional information) with a painted finish and exposed 1 1/2" metal roof deck. The elements that were visible show signs of water infiltration where paint is peeling or has chipped off.

plumbing systems, or installation of a fire suppression system, will likely require that all the lay-in and hard plaster ceilings be removed/replaced, and will also likely require new lay-in ceilings with grid in all areas that do not currently have such. In addition, acoustical ceiling or wall treatments would better enhance the sound quality of these learning environments, as the multiple layers of paint on the ceiling tile have likely compromised much of their acoustical qualities.

Any upgrades to the building's mechanical, electrical, and













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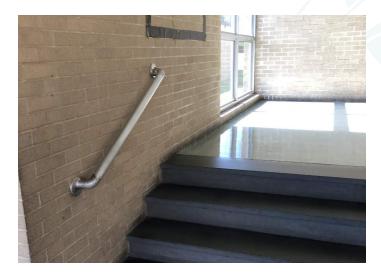


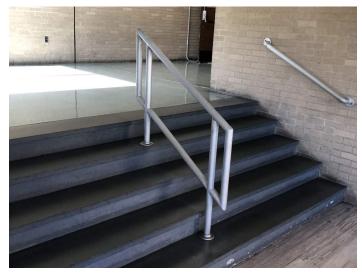


Stairs

With the progression of building codes and life safety standards, the egress stairs that were once deemed "safe" are no longer code compliant. In order to be in compliance, the stair modifications would include installing a guardrail at an appropriate height, providing continuous handrails that extend 12" (minimum) past the upper most and bottom most riser, providing intermediate handrails for any stair greater than 60" in width, limiting the space of each guard to disallow the passage of a 4" (in diameter) sphere, etc. Detailed and in depth explanations/restrictions can be found under Section 10 of the current building code.

In addition to compliance issues, damage on the stairs is also evident. Further investigation is needed to determine the cause of damage.





ram Ai3 Architects, LLC

Existing Conditions Engineers Design Group Inc.



Structural Review

 \P he purpose of this report is to describe, in broad terms, the structure of the existing building; to comment on the condition of the existing building and on the feasibility of renovation and expansion of the school.

The following topics will be discussed throughout this structural assessment:

- 1. Description of Existing Structure
- 2. Comments on the Existing Condition
- 3. Comments on the Feasibility of Renovation and Expansion

Basis of the Report

This report is based on our visual observations during our site visit on August 20, 2019, as well as a review of the existing drawings of the original construction dated March 1964 and the drawings of the addition dated January 1969 prepared by Warren H. Ashley Architect.

During our site visit, we did not remove any finishes or take measurements, so our understanding of the structure is limited to the available drawings and observations of the exposed structure and the exterior facade.

Building Description

The school is located on Brayton Avenue in Somerset, Massachusetts. The entire school is essentially a single story, steel and concrete structure.

The original school was constructed in 1964 and a single story addition was constructed in 1969. The typical roof structure is metal deck spanning between open web steel bar joists supported on wide flange steel girders and steel columns. The supported floor in the small lecture room and the Auditorium is a reinforced, cast-in-place, concrete slab. The lowest level slab is a concrete slab-on-grade. The exterior walls of the addition are load bearing concrete masonry walls. The foundations supporting the columns and the load bearing walls of the original structure and the addition are reinforced concrete foundations

Existing Conditions

Based on our observations, the school structure is performing well based on the age of the school. We observed signs of water leakage at a few locations. We observed cracks in the interior masonry walls at some locations. We observed cracks in the exterior masonry facade and signs of past repairs. We observed some minor spalling of concrete at the corners. We









Module 3 - Preliminary Design Program

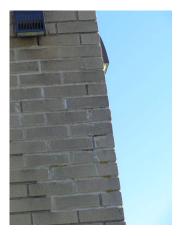
observed exposed reinforcing in the exterior roof beams at some locations. We observed some rust at the edges of the steel lintels above the exterior doors and windows.

We did not perceive any undue vibrations at the supported floors nor did we observe any signs of foundation settlement.

Proposed Schemes

Based on our observations and our analysis of the existing drawings, no structural upgrades are required for any proposed scheme that has limited renovation scope and does not require any structural modifications. The extent of the coderequired structural upgrades is dependent on the extents of the proposed renovations. The following is a description of the compliance methods that may be triggered depending on the extents of the proposed schemes as dictated by other disciplines.







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General Code Considerations

<u>Primary Structural Code Issues Related To the Existing</u> <u>Structure</u>

If any repairs, renovations, additions, or change of occupancy or use are made to the existing structures, a check for compliance with 780 CMR, Chapter 34 "Existing Building Code" (Massachusetts Amendments to The International Existing Building Code 2015) of the Massachusetts Amendments to the International Building Code 2015 (IBC 2015) and reference code "International Existing Building Code 2015" (IEBC 2015) is required. The intent of the IEBC and the related Massachusetts Amendments to IEBC is to provide alternative approaches to alterations, repairs, additions, and/or a change of occupancy or use without requiring full compliance with the code requirements for new construction.

The IEBC provides three compliance methods for the repair, alteration, change of use, or additions to an existing structure. Compliance is required with only one of the three compliance alternatives. Once the compliance alternative is selected, the project will have to comply with all requirements of that particular method. The requirements from the three compliance alternatives cannot be applied in combination with each other.

The three compliance methods are as follows:

- 1. Prescription Compliance Method.
- 2. Work Area Compliance Method.
- 3. Performance Compliance Method.

Comment

The approach is to evaluate the compliance requirements for each of the three methods and select the method that would yield the most cost effective solution for the structural scope of the project. The selection of the compliance method may have to be re-evaluated after the impact of the selected method is understood and after analyzing the compliance requirements of the other disciplines: Architectural, Mechanical, Fire Protection, Electrical, and Plumbing.

Since the existing building contains non-reinforced masonry wall structures, the anchorage of the walls to the floor and roof structure will have to be evaluated if the work area of the project exceeds 50 percent of the aggregate floor and roof area of the building.

Prescriptive Compliance Method

In this method, compliance with Chapter 4 of the IEBC is required. As part of the scope of this report, the extent of the compliance requirements identified are limited to the structural requirements of this chapter.

Additions

Based on the project scope, the following structural issues have to be addressed:

- All additions should comply with the code requirements for new construction in the IBC.
- For additions that are not structurally independent of an existing structure, the existing structure and its addition, acting as a single structure, shall meet the requirements of the Code for New Construction for resisting lateral loads, except for the existing lateral load-carrying structural elements whose demandcapacity ratio is not increased by more than 10 percent; these elements can remain unaltered.
- Any existing gravity, load-carrying structural element for which an addition or its related alterations causes an increase in the design gravity load of more than 5 percent shall be strengthened, supplemented, or replaced.

Alterations

- Any existing gravity, load-carrying structural element for which an addition or its related alterations causes an increase in the design gravity load of more than 5 percent shall be strengthened, supplemented, or replaced.
- For alterations that would increase the design lateral loads or cause a structural irregularity or decrease the capacity of any lateral load-carrying structural element, the structure of the altered building shall meet the requirements of the Code for New Construction, except for the existing lateral load-carrying structural elements whose demand-capacity ratio is not increased by more than 10 percent; these elements can remain unaltered.

Work Area Compliance Method

In this method, compliance with Chapter 5 through 13 of the IEBC is required. As part of the scope of this report, the extent of the compliance requirements identified are limited to the structural requirements of these chapters.

In this method, the extent of alterations has to be classified into LEVELS OF WORK based on the scope and extent of the alterations to the existing structure. The LEVEL OF WORK can be classified into LEVEL 1, LEVEL 2, or LEVEL 3 Alterations. In addition, there are requirements that have to be satisfied for additions to the existing structure.

The extent of the renovations (includes Architectural, FP, and MEP renovations) for this project exceeds 50 percent of the aggregate area of the building; thus, the LEVEL OF WORK for

this project would be classified as LEVEL 3 Alterations. This would require compliance with the provisions of Chapter 7, 8 and 9 of the IEBC. If the scope of the project includes new additions to the existing structure, this would trigger compliance with provisions in Chapter 11 of the IEBC.

Level 3 Alterations

- Any existing gravity, load-carrying structural element for which an alteration causes an increase in the design gravity load of more than 5 percent shall be strengthened, supplemented, or replaced.
- For alterations where more than 30 percent of the total floor area and roof areas of a building or structure have been or are proposed to be involved in structural alterations within a 12-month period, the evaluation and analysis shall demonstrate that the altered building complies with the full design wind loads as per the code requirements for new construction and with reduced IBC level seismic forces.
- For alterations where not more than 30 percent of the total floor and roof areas of a building are involved in structural alterations within a 12-month period, the evaluation and analysis shall demonstrate that the altered building or structure complies with the loads at the time of the original construction or the most recent substantial alteration (more than 30 percent of total floor and roof area). If these alterations increase the seismic demand-capacity ratio on any structural element by more than 10 percent, that particular structural element shall comply with reduced IBC level seismic forces.
- Existing anchorage of all non-reinforced masonry walls to the structure have to be evaluated.

Additions

- All additions shall comply with the requirements of the Code for New Construction in the IBC.
- Any existing gravity, load-carrying structural element for which an addition or its related alterations cause an increase in design gravity load of more than 5 percent shall be strengthened, supplemented, or replaced.
- For additions that are not structurally independent of any existing structures, the existing structure and its additions, acting as a single structure, shall meet the requirements of the Code for New Construction in the IBC for resisting wind loads and IBC Level Seismic Forces (may be lower than loads from the Code for New Construction in the IBC), except for small additions that would not increase the lateral force story shear in any story by more than 10 percent cumulative. In this case, the existing lateral load resisting system can

remain unaltered.

Performance Compliance Method

Following the requirements of this method for the alterations and additions may be onerous on the project because this method requires that the altered existing structure and the additions meet the requirements of the Code for New Construction in the IBC.

Particular Requirements of Compliance Methods

For our project, in order to meet compliance with one of the two compliance methods, "Prescriptive Compliance Method" or "Work Area Compliance Method", we have to address the following:

Prescriptive Compliance Method

Additions

- The proposed additions would be designed structurally independent of the existing structures, thus, would not impart any additional lateral loads on the existing structure.
- If the proposed alterations are such that the alterations increase the design lateral loads on the existing building or cause any structural irregularity or decrease the lateral load-carrying capacity of the building, the structure of the altered building shall meet the requirements of the Code for New Construction in the IBC.
- If the proposed additions increase the design gravity load on portions of the existing roof members, these members would have to be reinforced and this incidental structural alteration of the existing structures would have to be accounted for in the scope of the alterations to the existing school and would trigger requirements for alterations.

Alterations

- Alterations that would increase the design gravity loads by more than 5 percent on any structural members would have to be reinforced.
- If the proposed alterations of the structure increases the demand-capacity ratio of any lateral load resisting element by more than 10 percent, the structure of the altered building or structure shall meet the requirements of the Code for New Construction.

Work Area Compliance Method

Level 3 Alterations

- If the proposed structural alterations of an existing structure are less than 30 percent of the total floor and roof areas of the existing structure, we have to demonstrate that the altered structure complies with the loads applicable at the time of the original construction and that the seismic demand-capacity ratio is not increased by more than 10 percent on any existing structural element. Those structural elements whose seismic demand-capacity ratio is increased by more than 10 percent shall comply with reduced IBC level seismic forces.
- If the proposed structural alterations of an existing structure exceed 30 percent of the total floor and roof areas of an existing structure, we have to demonstrate that the altered structure complies with the IBC for wind loading and with reduced IBC level seismic forces.
- Existing anchorage of all unreinforced masonry walls to the structure have to be evaluated. If the existing anchorage of the walls to the structure is deficient, the tops of the masonry walls will require new connections to the structure.

Additions

 Any proposed additions would be designed structurally independent of the existing structures, thus, they would not impart any additional lateral loads on the existing structures.

Comment

• The compliance requirements of the two methods, in most respects, are very similar. The Prescriptive Compliance Method would require that the existing lateral load resisting systems meet the requirements of the Code for New Construction of the IBC, even for small increases of design lateral loads. The requirements of both methods will require anchorage of all existing masonry walls. Based on this, we would recommend the Work Area Compliance Method for the project.

Summary

The existing school structure appears to be performing well. All of the structural components that are visible appear in sound condition. We observed some rusting at the edges of the exterior lintels over door and window openings.

Any major, proposed renovations and additions would likely require that the structure be updated to meet the requirements of the Code for New Construction. This may require addition of some shear walls, connecting the roof diaphragms to the existing masonry walls, and the clipping of non-structural masonry walls to the structure. All of the existing masonry walls would have to be adequately connected to the roof structure.

Evaluation of Existing Conditions



Electrical, Mechanical, Plumbing & Fire Protection Review

Electrical

Electric Service

The primary electric service which originates from a riser conduit on an electric utility co. pole feeds the pad mounted electric utility co. transformer via underground conduit/cabling. The pole and the transformer are located on the site. The electric service appears to be original to the building and appears to be in poor condition.

Normal Power System

The switchboard is fed by the electric utility co. transformer via underground conduit/cabling. The switchboard rated at 1200 amp, 120/208 volt, three phase, four wire has a 1200 amp main switch and feeds panelboards located in the Main Electric Room and panelboards throughout the building. The photovoltaic panels which are located on the roof are connected ahead of the switchboard main via exterior mounted pad mounted transformer and disconnect switch. The distribution sections of the switchboard are made up of circuit breakers. Most of the original normal power distribution is manufactured by Westinghouse, while the most recent addition's normal power distribution is manufactured by Eaton. It appears that when





the addition was built a transformer was provided in the Main Electric Room to step up the voltage to 277/480 volt, three phase, four wire to feed the transformer in the addition's Electric Room with the transformer stepping down the voltage to 120/208 volt, three phase, four wire to feed the addition's main distribution panelboard. The electric utility co. meter is also located on the electric utility co. transformer. Most of the normal power system appears to be original to the building and appears to be in poor condition, while the most recent addition's normal power distribution appears to be in fair condition.













Module 3 - Preliminary Design Program

Emergency Power System

The building has a 120/208 volt, three phase, four wire, 75 kW natural gas generator as manufactured by Kohler. The generator provides power to the emergency lighting, the hot water tank, and other equipment via automatic transfer switch and panelboards upon loss of normal electric utility power. The automatic transfer switch is rated at 400 amps and is manufactured by Zenith. The generator and the automatic transfer switch are located in the Boiler Room, while the emergency panelboards are located in the Main Electric Room, the addition's Electric Room, and the Boiler Room.

Deficiencies as they relate to current Codes:

- Emergency panelboards need to have dedicated two hour rated emergency electric rooms and cannot share space with normal panelboards.
- Emergency panelboards require two hour feeders such as MI Cable and are required to be housed in two hour rated electric rooms.
- The generator is natural gas fired which according to the National Electric Code cannot serve emergency loads, as natural gas is considered to be an interruptible fuel source. Diesel generators can serve emergency loads.
- Emergency panelboards are required to be protected by surge suppressors.
- Emergency and optional standby loads are mixed in panelboards. Emergency loads and optional standby loads need to be in separate panelboards.

Most of the emergency power system appears to be original to the building and appears to be in poor condition, while the most recent addition's emergency power system appears to be in fair condition.

As described above, the emergency power system does not meet current Codes.

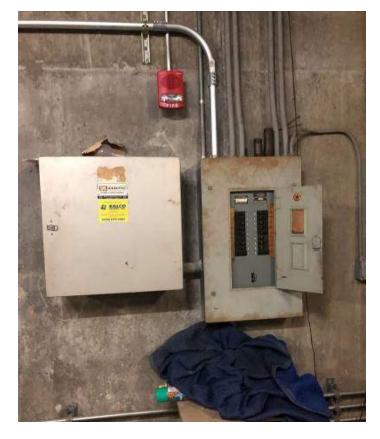
Fire Alarm

The two addressable fire alarm control panels as manufactured by Simplex series 4100ES do not appear to be original to the building. The fire alarm system has been upgraded and consists of an interior radio master box, smoke detectors, heat detectors, duct smoke detectors, pull stations, strobes, and horn/strobes. It appears that the building has detection throughout as required for an educational occupancy.

The fire alarm system appears to be in good condition.











Module 3 - Preliminary Design Program

Lighting

Interior

The interior lighting consists of wraparounds, strips, linear high bays, RLM's, recessed prismatic lens troffers and surface mounted lighting fixtures, wall mounted lighting fixtures, and downlights. Exit signs provide for direction to paths of egress.

Lighting is not the most efficient as it relates to current standards, as most of the lamps are fluorescent type. The interior lighting appears to be in fair condition.

Exterior

Lighting consists of recess mounted canopy lighting, wall mounted lighting fixtures, and path and site lighting fixtures on poles. Most of the lighting fixtures are original to the building with high intensity discharge lamps.

Most of the exterior lighting appears to be in poor condition.

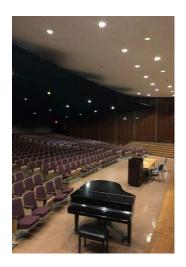




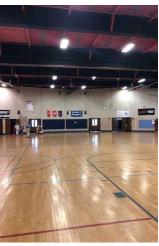












Switching

Interior lighting is controlled by local wall switches.

Exterior lighting is controlled by timeclocks.

Deficiencies as they relate to current Codes:

- The current building switching does not meet the International Energy Conservation Code.
- Automatic shutoff of lighting fixtures is required.
- Automatic daylight harvesting is required as per the International Energy Conservation Code.

The switching appears to be original to the building and is in poor condition. As described above, the switching does not meet current Codes.

Receptacles

Receptacles are ground type. Receptacles have been added over the years through the use of EMT conduit with surface boxes, tele-power poles, plugmold, and wiremold. Receptacles appear to be in fair condition.

Lightning Protection

The building does not have a lightning protection system which would include air terminals on the roof with downlead conductors to ground and surge protection.

Bi-directional Amplifier System

The building does not have a bi-directional amplifier system which would include an amplifier and cabling above ceilings for amplifying police and fire alarm radio signals as required by the International Building Code.

Wiring

Wiring is made up of MC cabling, FA MC cabling, EMT, Rigid, and PVC conduit.

Heating, Ventilation, and Air Conditioning

Boiler Plant

The building was originally designed to be heated by three dual fuel (natural gas & heavy fuel oil) cast iron boilers installed as part of the school's original construction. The cast iron boilers were manufactured by H.B. Smith, model Mills 640. These three boilers have been fit with Industrial Combustion Burners each having a maximum input capacity of 8,400 MBH. Firing on oil was discontinued in 1997 at the same time the buried fuel oil tanks were removed. Of the three boilers, one is operational, the second boiler has a bad section, and the third boiler is permanently off-line. All three boilers have outlived their service life, are very inefficient to operate, and are in poor condition.

In addition to the three cast iron boilers, a high efficiency, gas fired, stainless steel condensing boiler was installed in 1998. This boiler was manufactured by Benchmark, model 2.0, which has an input of 2,000 MBH. Presently, this boiler handles 90% of the building's heating load and only one of the cast iron boilers is put online during very cold days when the heating loads exceed the capacity of the high efficiency boiler. This boiler is in good condition but is now 21 years old and is approximately 84% through its normal service life.

The boilers provide hot water for heating to the building which is pumped by two sets of pumps. Each set is arranged in a primary/stand-by configuration located in the boiler room. Overall, the pumps appear to be in fair condition and appear to have received proper maintenance, but they have outlived their useful service life.

Combustion air for the boilers is provided through a wall louver with low and high air inlets. The lower opening has been partially blocked-off with rigid foam insulation to reduce cold air infiltration. This condition compromises the free area requirement mandated by code.



Module 3 - Preliminary Design Program







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Controls

The automatic temperature controls system is primarily pneumatic. There are some DDC controls that had been added in 1998 but this was done mostly for monitoring building temperatures. The entire system is outdated and is unsuitable for upgrades.

HVAC System

Classrooms

Classrooms located along the exterior of the building are heated and ventilated by classroom unit ventilators. Outside air is supplied to the unit ventilators via wall louvers located below the windows. Each unit ventilator has hot water coil, filters, outside/return air dampers, and supply fans. Valve and damper actuators are pneumatic. The classroom unit ventilators were manufactured by Nesbitt and appear to be original to the building. The unit ventilators have outlived their useful service life.





Module 3 - Preliminary Design Program

General exhaust for the classrooms is provided by a system consisting of low wall exhaust grilles, ductwork, and roof exhaust fans. The exhaust fans appear to be old and beyond their serviceable life expectancy.

Some classrooms have been furnished with wall/window mounted air conditioning units, which are marginally effective but are inefficient in operation and generate excessive noise, which can be distracting to teachers and students.

Gymnasium

The gymnasium is heated and ventilated by two central station air handling units. Each unit serves one half of the gym and a locker room (either the girls' or boys' locker room). The air handling units are original to the construction of the school and are operational. However, they have outlived their useful service life.

Sixth Grade

The heating and ventilation for the sixth grade section of the school is provided by central station air handling units installed in a penthouse. Access for service is via the ceiling and catwalks. Control of these units is accomplished with pneumatic thermostats. Air is supplied by ceiling diffusers and returned at low wall return grilles. This system is operational but due to its confined location and limited access, maintenance is difficult.

Library

Heat and ventilation for the library is provided by a central station air handling unit installed in a closet with additional heat provided by perimeter fintube radiation. This system is functional but has outlived its service life.

Air conditioning for this space is provided by ductless split fancoil units.



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<u>Auditorium & Lecture Hall</u>

The HVAC needs of these spaces are met by central station air handling units which supply air through a system of ductwork and ceiling mounted supply diffusers. The auditorium system generates excessive noise during operation. Although operational, the air handling units have outlived their useful service life

Corridors & Toilet Rooms

Heat for the corridors and bathrooms is accomplished with ceiling and/or wall mounted convectors, which were installed as part of the original construction. Units are functional but have outlived their useful service life.

The toilet rooms are exhausted through a system of ceiling grilles, ductwork, and roof mounted centrifugal exhaust fans. Based on the odors present during the survey, the system does not appear to be effective.

Piping Systems

The heating hot water distribution piping is for the most part original and as such, piping leaks are becoming more prevalent as the systems age and the inevitable corrosion increases.

Plumbing

Domestic Water Service

A six-inch water service enters the school through the Boiler Room wall with a flanged OS&Y main shut-off valve. After the valve, the pipe runs thru 4-inch water meter. There was no visible backflow preventer on the service. The water service appears original and has exceeded its life expectancy.

Domestic Water Distribution

The domestic water system is made up of copper piping with either sweat or press fittings. Most of the visible piping was noted to be insulated. The domestic water piping includes gate valves for isolation purposes. The domestic water piping is in fair condition, but due to the age, there is potentially lead content in the drinking water. It is recommended that the domestic water piping, including insulation and valves, be replaced.

Domestic Water Heaters

The main domestic hot water is generated with a natural gas fired water heater with 350 gallon storage tank and recirculation loop. The water heater and storage tank are located in the Boiler Room. The storage tank was installed last summer the water heater appears to be original to the building. The water heaters provide hot water to the entire school including the kitchen and science class rooms. The kitchen is equipped with a booster heater for dishwashing. A new water heater for the science rooms should be fed from a non-potable system to prevent cross connections with harmful fluids.



Sanitary Waste and Vent System

The sanitary, waste, and vent drainage is made up of cast iron with lead and oakum joints. An 8" sanitary service exits the building by gravity and ties into the site sanitary system. The sanitary, waste, and vent piping appears to be in fair condition. The piping has served its useful life and should be replaced.

Special Waste and Vent System

The Science Classrooms' drainage does not have a neutralizing basin prior to connecting to the sanitary system. This is a code requirement, but maybe chemicals are not typically used in the middle school and was considered exempt by the Sewer Dept.





Kitchen Waste and Vent System

The pot washing sink drainage is directed to an in-floor grease interceptor which appears to be original to the building and is in good condition. The grease trap may be undersized for the size of the pot sink. The kitchen fixtures appear to be in good condition. An exterior grease trap may be required to collect all drainage from the kitchen per local Sewer Authority.

Roof Drainage System

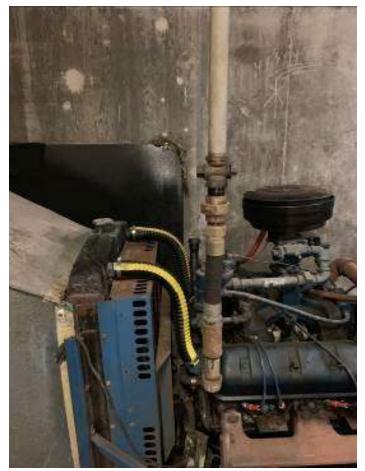
The storm drainage is made up of cast iron with lead and oakum joints. Multiple storm drains exit the building by gravity and ties into the site storm system. The storm drainage piping appears to be in fair condition. The storm piping has served its lifetime and should be replaced.

Natural Gas System

A 6" gas service is located outside of the Boiler Room. The service includes a couple of pressure regulators and gas meter. The gas pressure from the service is regulated down to a pressure suitable for the gas fired equipment in the building which include the domestic water heaters, boilers, kitchen equipment, an emergency generator, and science classroom turrets. The science classroom turrets are isolated with a manual shutoff valve under teacher demo desk. This does not meet requirements of current Codes. Gas piping is steel with threaded or welded joints.







Plumbing Fixtures

Water closets and urinals are wall hung, vitreous china with manually operated flush valves and in fair condition

Lavatories are wall hung, vitreous china with a mix of manual metering faucets in fair condition.

Janitor's sinks are floor receptors fitted with faucet having threaded connection and vacuum breakers. They are in poor condition and lack backflow preventers on their soap systems. Drinking fountains are painted steel and stainless-steel receptors in fair condition

Some classrooms include stainless steel drop-in sinks.











Science classrooms include sinks without vacuum breakers. There are no cross-control devices. The main water lines may be subject to backwater conditions that would contaminate the piping system without backflow prevention.

The Science classrooms include an emergency shower and eyewash station which is fed from a tempered water. It was unclear if the existing mixing valve was ANSE rated. Current Codes and ANSE require tepid water to serve emergency fixtures. Tepid water is achieved by supplying hot and cold water to the fixtures and blending the water to an acceptable temperature and a minimum of 30 gpm flowing.

Showers are no longer in use for Boys Showers and Girls Showers in locker rooms. They have been decommissioned.

There are large art room sinks but no sediment traps were observed.

In general, plumbing fixtures are in fair condition but have exceeded their life expectancy. Although not required, high efficiency fixtures are recommended.





EMERSENCY SHOWER





Fire Protection

General Evaluation

The existing school is not protected by an automatic sprinkler system.

Code Compliance Assessment

Per the State Building Code, the facility is required to be fully sprinklered. The facility is not in compliance with the existing Building Code.

Recommendations

Install a complete automatic sprinkler system. The existing water supply must be evaluated to determine flow and pressure capacities for the proposed fire protection system.

Applicable Codes and Regulations:

• 780 CMR, Ninth Edition

Chapter 9, Fire Protection Systems, Table 903.2: Buildings of Use Group E greater than 12,000 square feet shall be provided with a complete automatic sprinkler system designed in accordance with NFPA 13. This requirement negates alternatives or exceptions allowed under Section 901.2 where a partial system may be installed or alternative means of compliance may be considered.

Chapter 34, Existing Structures (International Existing Building Code 2009), Section 102.2.1.1: When existing buildings or portions thereof undergo additions or alterations, M.G.L. c. 148, § 26G may apply with respect to automatic sprinkler requirements. Requirements of this statute are enforced by the Fire Official.

M.G.L. c. 148 § 26G: Every building or structure, including any additions or major alterations thereto, which totals in the aggregate more than 7,500 gross square feet in floor area shall be protected throughout with an adequate system of automatic sprinklers in accordance with the provisions of the State Building Code.

"Major Alterations" has been defined in an advisory memorandum issued by the State Automatic Sprinklers Appeals Board as where the scope of work affects 33 percent or more of the total gross square footage or the costs not including sprinkler installation are estimated to be 33 percent or more than the assessed value of the building.



Evaluation of Existing Conditions

Technology Review

Existing Conditions

Security

Access Control (Proprietary)

S2 is being leveraged from the Somerset High School via a VPN connection over Comcast internet fiber. S2 will be proprietary at the new Middle School. Proximity cards are in use, and three doors currently have card access. A video entry system is in place and being used for entry to the building. Visitors are contained in an entry vestibule, with the interior door being released after security screening and badging.

Intrusion Detection

The intrusion detection system is inoperative. Not every exterior door has door contacts, greatly reducing situational awareness during occupied times.

There are currently no panic buttons in the building, but panic buttons are desired at locations throughout the building.

Video Surveillance

There are currently 48 cameras in use in and around the building. They are power over coax, IP integrated cameras. 2 cameras are new; the rest are six to eight years old. Two entrances and some halls have cameras. There are only two cameras in the cafeteria, and none in the gym, auditorium, or media center. There are many areas of concern with no camera coverage (other entries, large group spaces, and the abovementioned areas with no coverage). There is no district-wide video surveillance solution in place. The police do have access to all cameras. Storage is approximately 30-45 days. There is no parking lot coverage, but it is desired. Some cameras are actively monitored in the main office and SRO office.

Network

There is no existing district WAN fiber. Comcast is used for internet access at each school.

The current school network cabling is predominantly category 5 cable that is a few decades old. It is generally unreliable and there are not enough data drops to support current computing needs in the building.

Any new fiber shall have LC type connectors.

Switches (Proprietary)

The school has some HP/Aruba chassis switches, and some 48 port switches. They are connected by multi-mode fiber to form the school network environment. HP/Aruba switches will be proprietary. Any new switches are desired to be provided and installed, with the owner programming the switches themselves.

Phone System

An old analog/digital phone system is currently in use at the school. It is semi-reliable. It has no redundancy. It is not a district-wide system. All classrooms have wall-mounted phones. The phone system does currently integrate with he PA system. A new VoIP phone system is desired, with PA integration being maintained, and with devices placed by the doors of each classroom.

Public Address System

An old unreliable Simplex PA system is currently installed in the building. Classrooms do not have call buttons to initiate a call to admin. The wired clocks no longer work, so wireless analog clocks with digital insets are provided in the school. The wireless clocks continually lose time synch. PA speakers are missing in the gym, outside of the building, the auditorium, and in some hallways. The Cafeteria is either too loud (when empty) or too quiet (when full).

Wireless (Proprietary)

The building has new Aerohive wireless access points. Aerohive is a district standard and will be proprietary. All classrooms have a wireless access point, but only one cable drop is in each classroom for the wireless access points. Four data drops are required per classroom.

IPTV

The building does not have a video distribution system nor does it have a digital signage solution. Digital signage is desired in halls, student neighborhoods, the cafeteria, at entrances, and at other locations.

Classroom Technology

There is currently no interactivity equipment in the classrooms. Some rooms have a projector and document camera on a cart. Voicelift, a system to amplify a teacher's voice, is not available at the school. Currently, there is only 1 data drop for teacher use in the room. Teacher's devices are currently laptops.

The desired classroom technology is an interactive LCD display, wall mounted VoIP phone by each door, a PA system call button opposite the phone, a voicelift system for teacher and student use, a presentation camera, wireless science labs (no hard wire student data drops), two data drops at the teacher location, two data drops on the opposite side of the room, 4 data drops for wireless access points in the ceiling, and 3 data drops behind the display.

Other Systems and Information

The building does not have a generator for back-up power. UPS devices are used in racks for equipment.

There is a very small break fix area for technology. It needs to be increased in size. The school plans to implement a 1:1 environment next year, and the current break fix area will not support this initiative.

One part-time person is on staff for current technology support. This is inadequate and will need to be increased when a more robust technology environment is in place.

The owner anticipates one Netshelter 4 post rack will be required after consolidation of services is complete. Cage nuts are preferred over threaded holes in all racks/Nethselters.

The desired network cable color scheme will be Data-Blue/Voice-White/WAP-Green/CCTV-Yellow.

Data requirements at administrative locations need to be two data and one voice port.

It is not anticipated that any equipment will be reused from the current project on a new project.

Proposed Technology

27 10 00 Structured Cabling

The new network design will support a 10GHZ backbone over single-mode and multi-mode fiber and up to 10G over Category 6A to the desktop.

Twelve pairs of single-mode fiber and twelve pairs of multimode fiber will be provided from the MDF to each IDF.

Cat 6A cabling will be provided for data, voice, CCTV, and wireless access points (four data drops at each wireless access point location). Wireless access point outlet placements are intended to provide the capability for complete wireless coverage throughout the school.

Each teacher location will be wired with two data ports. Two data ports shall be provided on the opposite side of the room. Three data ports will be provided behind each display. Each staff location shall have two data and one voice port. Labs will be hard wired for one data port at each student location. Category 6A cabling will be provided for the Owner-provided phone system (support for Voice over IP).

27 21 00 Network Switches

Network electronics (switches) shall be provided and installed, but programmed by the Owner. Switches shall be proprietary, HP/Aruba.

27 21 33 Wireless Access Points

Wireless access points, and a controller if applicable, will be provided; one access point in each classroom, and three in each large group space. Office suites shall have an access point. Access points shall be proprietary, Aerohive. Each access point location shall have four data ports. Labs will have a wireless access point outlet and a wireless access point device in each room.

27 30 00 Voice Communications

The phone system and handsets shall be provided and installed by the Owner. The building shall be cabled to support a voice over IP phone system using Cat 6A. Wall mounted phones by classroom doors are desired.

27 40 00 Audio-Visual Communications

Video and audio presentation equipment (75" Interactive LCD, voice lift system with microphones and amplifier, and up to four ceiling speakers) will be permanently installed in classrooms, labs, and designated rooms. The PC/laptop devices in each classroom shall be provided by the Owner. A presentation camera will be provided in each interactive classroom and in designated spaces.

The Auditorium shall have a permanently mounted high lumen (min 10k lumen) theater level projector provided.

A sound system (either permanent or portable) shall be provided in the Gym.

Assistive listening systems shall be provided in large group spaces with sound systems, and a portable system shall be provided.



27 50 00 Public Address System

A public address system shall be provided. Digital clocks synchronized with a master clock shall be provided in every classroom and conference room, and where designated on the drawings. The PA system shall be integrated with the Owner-provided phone system to allow the use of the phone system for paging within the building. If an emergency call button is to be provided, it will be opposite the phone location.



27 70 00 Digital Signage

A digital signage package shall be included, to include displays and playback devices, as well as head end equipment required. Locations for digital signs shall be on the technology drawings.

28 00 00 Electronic Safety & Security

The S2 access control system located at the Somerset-Berkley Regional High School shall be licensed to support the access control requirements at the Somerset Middle School. Panels, card readers, relays, motions sensors, and other devices will be required at the Somerset Middle School, but the server at Somerset-Berkley Regional High shall manage the system at the Middle School. The system at the Middle School shall be proprietary, S2, to integrate with the S2 system at Somerset-Berkley Regional High School. The main entry shall be equipped with a video entry system.



Module 3 - Preliminary Design Program



The Middle School shall have an intrusion detection system, with door contacts on every exterior door at a minimum. The school will be partitioned for after-hours use where possible.

The Middle School shall have a Video Surveillance System, consisting of building perimeter, hallway, vestibule, entry, and stairwell cameras. Parking surveillance may be obtained by building-mounted cameras instead of pole-mounted cameras where possible. Large group areas will also have video surveillance.



Evaluation of Existing Conditions

Building Code Analysis

he Massachusetts State Building Code (780 CMR) did not exist in 1965 when the original Somerset Junior High School (currently Somerset Middle School) or the addition in 1969 was constructed. The State Building Code has been updated and amended multiple time since the first edition was established in 1972. The State Board of Building Regulations and Standards regularly updates and amends its regulations. Based on these regulations, we found the following items to be in non-compliance:

- Boiler and adjacent electrical room does not have a tested one-hour rated fire separation assembly from each other and existing spaces above.
- Fire extinguishers
- Fire separation assembly between Use Group E (Educational) and Use Group A-3 (Assembly – Cafeteria, Gymnasium, Auditorium) (one-hour fire separation required)
- No sprinkler system
- Handrail and guardrail at stairways and ramps
- Electrical panels in classrooms and corridors

Code Requirements for Alterations to Existing Building

Massachusetts State Building Code (2015 International Existing Building Code with Massachusetts Amendments (IEBC)) states that it is the intent of the Code to provide flexibility to permit the use of alternative approaches to achieve compliance with the minimum requirements to safeguard the public's health, safety, and welfare insofar as they are affected by the repair, alteration, or addition of an existing building.

Section 104.4.2 of the IEBC states that "Buildings previously occupied. The legal occupancy of any building existing on the date of the adoption of this Code shall be permitted to continue without change, except as is specifically covered in this Code, the International Fire Code, or the International Property Maintenance Code, or as is deemed necessary by the code official for the general safety and welfare of the occupants and the public."

The goal of the building code review is to assess the existing conditions and the ability to expand the building to comprehensively renovate and alter the existing building to meet the programmatic needs of a middle school serving 770 (5-8 Middle School) / 590 (6-8 Middle School) students. A comprehensive code review was performed due to the proposed structural modifications, rehabilitation of the building and systems, and reconfiguration of spaces to accommodate the educational program requirements. Ai3 Architects, LLC performed a Code Analysis for the proposed comprehensive renovation and addition scheme. Further code analysis should be performed as the project develops.

Applicable Codes

Building

780 CMR, Massachusetts State Building Code (MSBC) 9th Edition (2015 International Building Code (IBC) and 2015 International Existing Building Code (IEBC))

Energy Efficiency

2015 International Energy Conservation Code with Massachusetts Amendments (IECC)

Buildings shall be designed and constructed in accordance with the 2015 International Energy Conservation Code (IECC), as amended by the Massachusetts State Building Code 780 CMR 13.00. These amendments apply to the IECC and to ANSI/ASHRAE/ IESNA 90.1-2013. IECC Chapter 4 (Commercial Energy Efficiency) must be adhered to as this building is a Commercial Building.

521 CMR: Massachusetts Architectural Access Board Regulations Accessibility

Elevator 524 CMR: Massachusetts Elevator Code (2004 ASMEA17.1)

Fire Prevention 527 CMR: Massachusetts Fire Prevention Regulations (2012 NFPA 1)

Plumbing Code 248 CMR: Massachusetts Plumbing Code

Electrical Code 527 CMR 12.00: Massachusetts Electrical Code (2017 National Electrical Code)

Mechanical Code 2009 International Mechanical Code (IMC)

Use And Occupancy Classification

Educational (E), Assembly (A-1, A-2, and A-3)

Current Construction

Type 2B, Unprotected, Non-Combustible, Non-Separated Mixed Use (original building)

Building Height and Allowable Stories (Table 503)

This is measured from the Grade Plane to the average height of the highest roof surface. The original building can be classified as a one-story building which complies with the maximum allowable height of 55 feet or one story for Type 2B Construction.

Evaluation of Existing Conditions

Energy Code Review

Buildings shall be designed and constructed in accordance with the 2015 International Energy Conservation Code (IECC), as amended by the Massachusetts State Building Code 780 CMR 13.00. These amendments apply to the IECC and to ANSI/ASHRAE/IESNA 90.1-2013. IECC Chapter 4 (Commercial Energy Efficiency) must be adhered to as this building is a Commercial Building.

According to 2015 IECC Chapter 3 – Climate Zones, the existing Somerset Middle School site is in Climate Zone 5 (as is the entire state of Massachusetts).

The Somerset Middle School was constructed in 1965 (addition in 1969), which was prior to the historic energy shortages of the 1970s and escalating oil prices of 2005. The emergence of a new energy code in 2000, which promoted an increased knowledge of exterior building envelope construction techniques and materials, has dramatically changed the way in which buildings respond to energy efficiency issues. The existing Somerset Middle School does not include a single component that would meet the current energy code or any of the typical guidelines for conscientious energy consumption, including the exterior walls, single pane aluminum windows, roof, heating and ventilation systems, and lighting systems.

An example of the deficiencies is the current exterior wall assembly. The IECC requires an R-13 and R-7.5 continuous insulation on the exterior walls. The existing walls currently do not have any thermal insulation. The wall assembly materials alone provide either an R-3.83 or an R-3.93, depending on wall thickness. These values are significantly lower than Code requirements and would require a large retrofit just to bring the values up to Code minimum.

The following are the 2015 IECC thermal requirements for a building envelope.

Roof: R-30ci (continuous insulation)

Walls (above grade): R-13+ 7.5ci

· Floors: R-10ci

· Slab on Grade: R-10











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Evaluation of Existing Conditions

Handicap Accessibility & Code Review

Requirements for handicap accessibility in building planning and design were non-existent in 1965 when the Somerset Middle School was originally designed and constructed. On January 26, 1992, however, the Department of Justice implemented Title III of the Americans with Disabilities Act (ADA) into Public Law. Additionally, on September 1, 1996, the Commonwealth of Massachusetts developed its own accessibility regulations: 521 CMR Architectural Access Board (AAB), which in some instances is more restrictive than ADA guidelines. The ADA and AAB regularly update and amend their regulations.

These regulations "prohibit discrimination on the basis of disability by private entities in places of public accommodation." The regulations require that all new places of public accommodation, including schools, be designed and constructed so as to be readily accessible to and usable by persons with disabilities. Existing structures being renovated that exceed 30 percent of the equitized assessment of the building or its replacement value must fully comply with the regulations for new construction.

Somerset Middle School's assessed building value is \$19,466,900; therefore, any renovations or additions to the existing school that exceed the cost of \$5,840,070 (30% of value) would require full compliance with the regulations for new construction. Somerset Middle School is identified as 1141 Brayton Avenue within the Town of Somerset assessors database.

As defined in the AAB Regulations, the Somerset Middle School building is defined as an "Educational Facility". The access regulations in section 12.1 define an "Educational Facility" as a public and private school, nursery, pre-school, day care facility, colleges and universities, libraries, galleries, museums, and training facilities. All Educational Buildings with spaces that are open to the public are required to be accessible.

"Full Compliance" in the AAB Regulations requires that all public entrances and at least two exits from the building be accessible, that there be an accessible route throughout all public areas of the building, and that classrooms and offices be in full compliance with the AAB Regulations. In addition, synchronized fire alarm strobe lights are required throughout the building, and assisted listening devices must be available for the hearing impaired.

Based on these regulations, the following items were found to be non-compliant or not accessible to the disabled:

521 CMR 12.00 Educational Facilities

Sinks, Counters, and Other Work Areas

At least 5%, with a minimum of one of each type of element, must be made accessible within a space. Countertops and sinks in classrooms must provide clear floor space, knee clearances, and meet specific height requirements to be considered accessible. While not all classrooms provide sink fixtures, those that do are non-compliant. Countertop heights for sinks are adequate; however, none of the fixtures meet knee clearance requirements.









521 CMR 14.00 Places of Assembly

Accessible Seating and Wheelchair Spaces

The existing auditorium has fixed seating to accommodate up to 600 people, and should therefore contain at least six wheelchair spaces. These accessible seats are to be dispersed throughout all seating areas, and each location must have at least one identified companion seat. Supplying wheelchair seating options in multiple locations is vital to providing equivalent sightlines for wheelchair users. The existing auditorium has zero wheelchair seating spaces in addition to the companion seating required by code. They should all be evenly dispersed throughout the auditorium, providing multiple options for wheelchair users. Additionally, the companion seating should provide adequate signage, as the code requires.



No accessible seating is provided at the retractable spectator bleachers.

Assisted Listening Systems

An assembly area that accommodates at least 50 people must have a permanently installed assisted listening system and signage to notify of the system. No signage is visible and no listening system is installed.









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521 CMR 19.00 Recreational Facilities

Locker Rooms

There must be a 36" wide accessible route around all lockers, including between benches and lockers. In the Girl's and Boy's Locker Rooms, no benches exist. An accessible bench seat must measure at least 42" long by 20-24" deep, which if located in the current locker room layout, would make the conditions non-compliant. Changing/toilet room openings are too narrow (24" wide), making them inaccessible and non-compliant, while multiple toilets rooms do not have a door to begin with.







521 CMR 20.00 Accessible Route

Accessible Route from Parking Lot

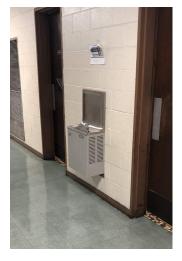
Every building should have clear identifiable designated accessible parking spaces (number based on max building occupants) within a certain distance from the main entrance. The route from those spaces to the main entrance should be fully ADA compliant and follow the guidelines set fourth by the International Building Code.

Area of Rescue Assistance

Each area of rescue assistance shall be identified by a sign that states "area of rescue assistance" and displays the international symbol of accessibility. The sign shall be illuminated when exit sign illumination is required. No areas of rescue assistance are currently identified. Signage shall also be installed at all inaccessible exits and where otherwise necessary to clearly indicate the direction to areas of rescue assistance. This signage is not provided.

Protruding Objects

Objects projecting from walls with their leading edges between 27 inches and 80 inches above the finished floor shall protrude no more than 4 inches into walks, halls, corridors, passageways, or aisles and shall not have sharp or abrupt edges. Many existing drinking fountains in numerous locations throughout the building are non-compliant.





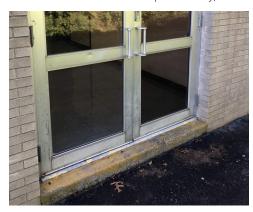
<u>Headroom</u>

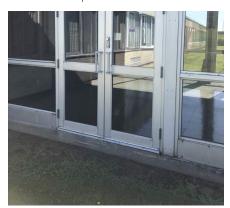
Walks, halls, corridors, passageways, aisles, or other circulation space shall have a minimum of 80 inches clear headroom. When the clear headroom is not provided, a guardrail or other cane detectable barrier must be present to avert head injury. One existing interior staircase does not meet the minimum 80 inch clearance at the first riser, making it non-compliant.

Egress

The exit discharge shall provide a continuous path of travel from an exit to a public way by means of a walkway or a ramp. Many of the exit discharge locations (egress doors) of the existing building have a single step with no ramps, or a curb greater than 1/4 inch, therefore not providing an accessible path of travel from the exit to a public way, making them non-compliant.







521 CMR 24.00 Ramps

Any part of an accessible route with a slope steeper than 1:20 shall be considered a ramp and shall comply with 521 CMR 24: RAMPS. Several of the existing interior and exterior ramps have one or more non-compliant components, such as the ramp slope and rise ratio, landing size, handrail heights/location or lack thereof, surface and handrail grip profile.



Maneuvering Clearance

All entries into classrooms require clear floor space adjacent to latch side of door for entry and exit. For the pull side, the requirement is 18 inches of clear floor space, while on the push side of a door the requirement is 12" of clear floor space. A large quantity of classroom and bathroom doors in the existing building provide no more than 4" of clearance, making them non-compliant. To retrofit the existing classroom entries to meet accessibility requirements would be extremely expensive, as all adjacent interior walls would have to be demolished and reconstructed. All entries into classrooms and toilet rooms require a clear width no less than 36". All of the existing toilet room entries are 24" max in width, making them non-compliant.



Changes in floor finish material require an edge strip that is beveled at a ratio of 1:2. Some door thresholds where a material change occurs do not include the required edge strip.















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Most of the existing door hardware in the school is non-compliant. Non-conforming knob-type hardware currently exists; lever-operated mechanisms, push type mechanisms, and U-shaped handles are acceptable designs.

Doors opening into hazardous areas shall have door-opening hardware which is knurled or has a roughened surface to give tactile warning to persons with visual impairments. Existing door hardware leading to spaces such as the loading dock, mechanical rooms, and electrical rooms are non-compliant

521 CMR 27.00 Stairs

Handrails

All of the exterior and interior stair handrails are non-compliant due to a lack of handrail extensions at the top and/or bottom of the run or the shape of the handrail grip.

Railing systems do not include an adequate 42" guardrail.





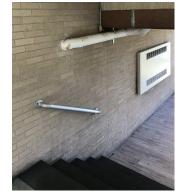




521 CMR 21.00 Floor Surfaces

Level Changes

Changes in level grade are not allowed unless a ramp, walkway, or other means of vertical access is provided. The existing Band room space is not fully-compliant due to a step up within the space without a ramp to provide access.





521 CMR 30.00 Public Toilet Rooms

Multi-user and single-user toilet rooms are non-compliant as a result of not providing the required clear turning space within the toilet room, required clear egress width into the toilet room, accessible faucet controls (lever type), grab bars at an accessible water closet, toilet paper dispenser, knee clearance at sinks, and mirrors, dispensers, and receptacles at the appropriate heights.



Module 3 - Preliminary Design Program



Ai3 Architects, LLC









Toilet Stalls

Men's and Women's multi-use toilet rooms are non-compliant and do not provide an accessible toilet stall (clear floor space, grab bars, water closet, appropriate heights of controls), a compliant single user toilet stall (minimum 32" clear width, grab bars, location of water closet, etc.), an accessible sink with required knee clearance, appropriate height mirrors, dispensers and receptacles.

<u>Urinals</u>

Men's toilet rooms do not provide an accessible urinal.

<u>Sinks</u>

The majority of toilet rooms do not provide an accessible sink.









521 CMR 31.00 Bathing Rooms

Shower Stalls

Existing locker room showers are non-compliant, lacking an accessible shower (current shower area accessed over a raised curb), accessible controls, grab bars, etc.

521 CMR 36.00 Drinking Fountains

Existing drinking fountains are non-compliant. The drinking fountains do not provide the required clear foot area (knee space), "high-low" fountain, required spout height/locations and controls. As reported earlier in the accessibility review, several of the existing drinking fountains are considered protruding objects within the corridors and provide a hazard to visually impaired individuals.

521 CMR 41.00 Signage

Most of the existing room designation signage is non-compliant due to either the lack of proper permanent signage or existing signage that is not compliant with the mounting height and location, character proportion and height, lack of raised braille lettering, finish and contrast and/or symbol of accessibility.





Each of the inaccessible features listed above has an impact on the ability of disabled students or members of the community to access various spaces throughout the school independently. Disabled persons may include students with permanent handicap conditions, students that are temporarily disabled from athletic activity, and parents, staff, or other visitors that could have any form of disability. Any future plans should incorporate as many items as possible to accommodate disabled people to the fullest extent possible.



Existing Conditions



Hazardous Materials Identification Study

i3 Architects, LLC secured the services of Universal Environmental Consultants, Inc. (UEC) to conduct a comprehensive hazardous materials identification study for the Somerset Middle School building located on 1141 Brayton Avenue in Somerset, Massachusetts. The report included sampling and testing for Lead Based Paint (LBP) Inspection, PCBs, mercury, radon sampling, airborne mold sampling, and asbestos containing materials (ACM) inspection and sampling. These tests and samplings were in compliance with MSBA regulations identified in Module 3, Feasibility Study: Article 3.1.4 Evaluation of Existing Conditions.

The scope of work included the inspection of accessible ACM, collection of bulk samples, determination and quantities of types of ACM found, and cost estimates for remediation. 55 bulk samples were collected from materials suspected of containing asbestos, five samples were collected for testing of Radon, and six samples were collected for testing of Airborne mold and particulate, each of which were tested in an EPA approved lab. Results contained herein.

REPORT FOR HAZARDOUS MATERIALS IDENTIFICATION STUDY ΑT **SOMERSET MIDDLE SCHOOL SOMERSET, MA**

PROJECT NUMBER: 219 409.00

SURVEY DATES: July 18, 22 – August 26-27

STUDY CONDUCTED BY:

UNIVERSAL ENVIRONMENTAL CONSULTANTS 12 BREWSTER ROAD FRAMINGHAM, MASSACHUSETTS



August 30, 2019

Mr. Troy Randall Ai3 Architects LLC 526 Boston Post Road Wayland, MA 01778

Reference: **Hazardous Materials Identification Survey**

Somerset Middle School, Somerset, MA

Dear Mr. Randall:

Thank you for the opportunity for Universal Environmental Consultants (UEC) to provide professional services.

Enclosed please find the report for the Identification Survey for Hazardous Materials at Somerset Middle School, Somerset, MA.

Please do not hesitate to contact me at (508) 628-5486 if you have any questions.

Very truly yours,

Universal Environmental Consultants

Ammar Dieb President

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Enclosure

1.0 INTRODUCTION:

Universal Environmental Consultants (UEC) has been providing comprehensive asbestos services since 2001 and has completed projects throughout New England. We have completed projects for a variety of clients including commercial, industrial, municipal, and public and private schools. We maintain appropriate asbestos licenses and staff with a minimum of thirty years of experience.

UEC was contracted by Ai3 Architects LLC to conduct the following services at the Somerset Middle School, Somerset, Massachusetts:

- Asbestos Containing Materials (ACM) inspection and sampling;
- Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures inspection;
- PCB's Caulking inspection;
- Lead Based Paint (LBP) inspection;
- Airborne Mold sampling;
- Mercury in Rubber Flooring inspection and sampling;
- Radon sampling;

The scope of work included the inspection of accessible ACM, collection of bulk samples, determination and quantities of types of ACM found and cost estimates for remediation. A comprehensive survey including roofing and destructive sampling per the Environmental Protection Agency (EPA) NESHAP regulation would be required prior to any renovation or demolition activities.

Bulk samples analyses for asbestos were performed using the standard Polarized Light Microscopy (PLM) Method in accordance with EPA standard. Bulk samples were collected by a Massachusetts licensed asbestos inspector Mr. Leonard J. Busa (AI-030673) and analyzed by a Massachusetts licensed laboratory Asbestos Identification Laboratory, Woburn, MA.

Airborne mold samples were analyzed by an EPA trained laboratory EMSL, Woburn, MA.

Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

Samples results are attached.

2.0 FINDINGS:

Asbestos Containing Materials (ACM):

The regulations for asbestos inspection are based on representative sampling. It would be impractical and costly to sample all materials in all areas. Therefore, representative samples of each homogenous area were collected and analyzed or assumed.

All suspect materials were grouped into homogenous areas. By definition a homogenous area is one in which the materials are evenly mixed and similar in appearance and texture throughout. A homogeneous area shall be determined to contain asbestos based on findings that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1 percent in accordance with EPA regulations. Per the Department of Environmental Protection (DEP) any amount of asbestos found must be disposed as asbestos.

No additional suspect and accessible ACM were found during this survey. However, hidden ACM may be found during the renovation and demolition activities.

Number of Samples Collected:

Fifty-five (55) bulk samples were collected from materials suspected of containing asbestos, including:

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Type and Location of Suspect Material

- 1. Grey sink coating at teacher's room
- 2. Grey sink coating at classroom 3
- 3. Interior window framing caulking in double assembly door at hallway
- 4. Interior glazing caulking for window in wood door at stairs
- 5. Interior window glazing caulking in double assembly door at hallway
- 6. Interior vertical caulking between steel column and CMU at hallway by music
- 7. Interior vertical caulking between steel column and CMU at classroom 41
- 8. Black glue in fiberglass insulated duct at boiler room
- 9. Black glue in fiberglass insulated pipe at boy's room pipe chase
- 10. Black glue in fiberglass insulated duct at kitchen storage
- 11. Brown 9 x 9" vinyl floor tile at gymnasium storage
- 12. Mastic for brown 9 x 9" vinyl floor tile at gymnasium storage
- 13. Ceiling plaster at auditorium
- 14. Ceiling plaster at lecture hall
- 15. Black glue in fiberglass insulated pipe at girl's room by gymnasium
- 16. Hard joint insulation off fiberglass insulated pipe at boiler room
- 17. Boiler insulation
- 18. Boiler breeching insulation
- 19. Debris on top of ceiling plaster at lecture hall
- 20. Blue 12" x 12" vinyl floor tile at hall to classroom 51
- 21. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 51
- 22. Blue 12" x 12" vinyl floor tile at hall to classroom 60
- 23. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 60
- 24. Blue 12" x 12" vinyl floor tile at hall to classroom 62
- 25. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 62
 26. While leveler for blue 12" x 12" vinyl floor tile at hall to classroom 62
- 27. Exterior window framing caulking
- 28. Exterior window framing caulking
- 29. Exterior window framing caulking
- 30. Exterior soft white window glazing caulking
- 31. Exterior soft grey window glazing caulking
- 32. Exterior door framing caulking
- 33. Exterior unit vent grille caulking
- 34. Exterior window framing caulking
- 35. Exterior window framing caulking
- 36. Exterior window framing caulking
- 37. Exterior window framing caulking
- 38. Exterior door framing caulking
- 39. Hard joint insulation off fiberglass insulated pipe above ceiling
- 40. Wood fire door at hall to girl's room
- 41. 2'x 4' Suspended acoustical ceiling tile
- 42. Wall plaster at classroom 59
- 43. Wall plaster at faculty dining
- 44. Ceiling plaster at men's room
- 45. 2'x 4' Suspended acoustical ceiling tile
- 46. 2'x 4' Suspended acoustical ceiling tile
- 47. 2'x 4' Suspended acoustical ceiling tile
- 48. Debris on floor at girl's locker room loft mechanical room
- 49. Black glue in fiberglass insulated duct at girl's locker room loft mechanical room
- 50. Glue tab for fiberglass insulated duct at girl's locker room loft mechanical room
- 51. Glue tab fiberglass insulated duct at girl's locker room loft mechanical room
- 52. Mastic for 9" x 9" vinyl floor tile at girl's locker exit hall
- 53. Wall plaster at conference room
- 54. Interior window glazing caulking at main office

55. Ceiling plaster at incinerator room

Sample Results:

Type and Location of Suspect Material	Sample Result
1. Grey sink coating at teacher's room	5% Asbestos
2. Grey sink coating at classroom 3	5% Asbestos
3. Interior window framing caulking in double assembly door at hallway	2% Asbestos
4. Interior glazing caulking for window in wood door at stairs	2% Asbestos
5. Interior window glazing caulking in double assembly door at hallway	2% Asbestos
6. Interior vertical caulking between steel column and CMU at hallway by music	3% Asbestos
7. Interior vertical caulking between steel column and CMU at classroom 41	2% Asbestos
8. Black glue in fiberglass insulated duct at boiler room	No Asbestos Detected
9. Black glue in fiberglass insulated pipe at boy's room pipe chase	No Asbestos Detected
10. Black glue in fiberglass insulated duct at kitchen storage	No Asbestos Detected
11. Brown 9 x 9" vinyl floor tile at gymnasium storage	2% Asbestos
12. Mastic for brown 9 x 9" vinyl floor tile at gymnasium storage	No Asbestos Detected
13. Ceiling plaster at auditorium	No Asbestos Detected
14. Ceiling plaster at lecture hall	No Asbestos Detected
15. Black glue in fiberglass insulated pipe at girl's room by gymnasium	No Asbestos Detected
16. Hard joint insulation off fiberglass insulated pipe at boiler room	<1% Asbestos
17. Boiler insulation	50% Asbestos
18. Boiler breeching insulation	60% Asbestos
19. Debris on top of ceiling plaster at lecture hall	60% Asbestos
20. Blue 12" x 12" vinyl floor tile at hall to classroom 51	No Asbestos Detected
21. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 51	No Asbestos Detected
22. Blue 12" x 12" vinyl floor tile at hall to classroom 60	No Asbestos Detected
23. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 60	No Asbestos Detected
24. Blue 12" x 12" vinyl floor tile at hall to classroom 62	No Asbestos Detected
25. Mastic for blue 12" x 12" vinyl floor tile at hall to classroom 62	No Asbestos Detected
26. While leveler for blue 12" x 12" vinyl floor tile at hall to classroom 62	No Asbestos Detected
27. Exterior window framing caulking	2% Asbestos
28. Exterior window framing caulking	3% Asbestos
29. Exterior window framing caulking	2% Asbestos
30. Exterior soft white window glazing caulking	10% Asbestos
31. Exterior soft grey window glazing caulking	No Asbestos Detected
32. Exterior door framing caulking	3% Asbestos
33. Exterior unit vent grille caulking	3% Asbestos
34. Exterior window framing caulking	2% Asbestos
35. Exterior window framing caulking	3% Asbestos
36. Exterior window framing caulking	No Asbestos Detected
37. Exterior window framing caulking	No Asbestos Detected
38. Exterior door framing caulking	No Asbestos Detected
39. Hard joint insulation off fiberglass insulated pipe above ceiling	No Asbestos Detected
40. Wood fire door at hall to girl's room	35% Asbestos
41. 2'x 4' Suspended acoustical ceiling tile	No Asbestos Detected
42. Wall plaster at classroom 59	No Asbestos Detected
43. Wall plaster at faculty dining	No Asbestos Detected
44. Ceiling plaster at men's room	No Asbestos Detected
45. 2'x 4' Suspended acoustical ceiling tile	No Asbestos Detected
46. 2'x 4' Suspended acoustical ceiling tile	No Asbestos Detected
47. 2'x 4' Suspended acoustical ceiling tile	No Asbestos Detected
48. Debris on floor at girl's locker room loft mechanical room	70% Asbestos
49. Black glue in fiberglass insulated duct at girl's locker room loft mechanical room	No Asbestos Detected
50. Glue tab for fiberglass insulated duct at girl's locker room loft mechanical room	15% Asbestos

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- 51. Glue tab fiberglass insulated duct at girl's locker room loft mechanical room
- 52. Mastic for 9" x 9" vinyl floor tile at girl's locker exit hall
- 53. Wall plaster at conference room
- 54. Interior window glazing caulking at main office
- 55. Ceiling plaster at incinerator room

15% Asbestos No Asbestos Detected No Asbestos Detected No Asbestos Detected No Asbestos Detected

Observations and Conclusions:

The condition of ACM is very important. ACM in good condition does not present a health issue unless it is disturbed. Therefore, it is not necessary to remediate ACM in good condition unless it will be disturbed through renovation, demolition or other activity.

Refer to the AHERA Management Plan for condition of ACM.

- 1. Mastic for tan cove base was previously found to contain asbestos.
- 2. Building caulking was previously found to contain asbestos.
- 3. Dark tan 12" x 12" vinyl floor tile was previously found to contain asbestos.
- 4. Boiler insulation was found to contain asbestos.
- 5. Incinerator exhaust stack insulation was previously found to contain asbestos.
- 6. Flexible connector was previously found to contain asbestos.
- 7. Hard joint insulation was previously found to contain asbestos.
- 8. Brown 9" x 9" vinyl floor tile was previously found to contain asbestos.
- 9. Mastic for brown 9" x 9" vinyl floor tile was previously found to contain asbestos.
- 10. Tan 9" x 9" vinyl floor tile was previously found to contain asbestos.
- 11. Mastic for tan 9" x 9" vinyl floor tile was previously found to contain asbestos.
- 12. Grey sink coating was found to contain asbestos.
- 13. Interior window framing caulking in double assembly door was found to contain asbestos.
- 14. Interior glazing caulking for window in wood door was found to contain asbestos.
- 15. Interior vertical caulking between steel column and CMU was found to contain asbestos.
- 16. Hard joint insulation off fiberglass insulated pipe was found to contain <1% Asbestos. Per DEP the material shall be disposed as asbestos.
- 17. Exterior window framing caulking was found to contain asbestos.
- 18. Debris on top of ceiling plaster at lecture hall was found to contain asbestos.
- 19. Exterior soft white window glazing caulking was found to contain asbestos.
- 20. Exterior door framing caulking was found to contain asbestos.
- 21. Exterior unit vent grille caulking was found to contain asbestos.
- 22. Wood fire door was found to contain asbestos.
- 23. Debris on floor at girl's locker room loft mechanical room was found to contain asbestos.
- 24. Glue tab for fiberglass insulated duct was found to contain asbestos.
- 25. Insulation/rope inside boilers were assumed to contain asbestos.
- 26. Insulation/rope inside incinerator were assumed to contain asbestos.
- 27. Stage fire curtain was assumed to contain asbestos.
- 28. Flexible connectors were assumed to contain asbestos.
- 29. Insulation/glue inside walk-in refrigerators were assumed to contain asbestos.
- 30. Glue for 1' x 1' ceiling tile was assumed to contain asbestos.
- 31. Paper/glue under hardwood floor were assumed to contain asbestos.
- 32. Chalkboard glue was assumed to contain asbestos.
- 33. Underground sewer pipes were assumed to contain asbestos.
- 34. Exterior damproofing on foundation/exterior walls was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
- 35. Exterior building flashing was assumed to contain asbestos. The demolition contractor will have to segregate the ACM from non-ACM building surfaces for proper disposal. A non-traditional abatement plan would have to be prepared and submitted to the DEP for approval.
- 36. Roofing material was assumed to contain asbestos.
- 37. All other suspect materials were found not to contain asbestos. Hidden ACM may be found during renovation and demolition activities.

Polychlorinated Biphenyls (PCB's)-Electrical Equipment and Light Fixtures: Observations and Conclusions

Visual inspection of various equipments such as light fixtures, thermostats, exit signs and switches was performed for the presence of PCB's and mercury. Ballasts in light fixtures were assumed not to contain PCB's since there were labels indicating that "No PCB's" was found. Tubes in light fixtures, thermostats, signs and switches were assumed to contain mercury. It would be very costly to test those equipments and dismantling would be required to access. Therefore, the above mentioned equipments should be disposed in an EPA approved landfill as part of the demolition project.

PCB's in Caulking:

PCB's are manmade chemicals that were widely produced and distributed across the country from the 1950s to 1977 until the production of PCB's was banned by the US Environmental Protection Agency (EPA) law which became effective in 1978. PCB's are a class of chemicals made up of more than 200 different compounds. PCB's are non-flammable, stable, and good insulators so they were widely used in a variety of products including electrical transformers and capacitors, cable and wire coverings, sealants and caulking, and household products such as television sets and fluorescent light fixtures. Because of their chemical properties, PCB's are not very soluble in water and they do not break down easily in the environment. PCB's also do not readily evaporate into air but tend to remain as solids or thick liquids. Even though PCB's have not been produced or used in the country for more than 30 years, they are still present in the environment in the air, soil, and water and in our food. EPA requires that all construction waste including caulking be disposed as PCB's if PCB's level exceed 50 mg/kg (ppm). An abatement plan might also be required as part of renovations.

Observations and Conclusions:

Caulking was assumed to contain PCB's.

Lead Based Paint (LBP):

Observations and Conclusions

LBP was assumed to exit on painted surfaces. A school is not considered a regulated facility. All LBP activities performed, including waste disposal, should be in accordance with applicable Federal, State, or local laws, ordinances, codes or regulations governing evaluation and hazard reduction. In the event of discrepancies, the most protective requirements prevail. These requirements can be found in OSHA 29 CFR 1926-Construction Industry Standards, 29 CFR 1926.62-Construction Industry Lead Standards, 29 CFR 1910.1200-Hazards Communication, 40 CFR 261-EPA Regulations. According to OSHA, any amount of LBP triggers compliance.

Airborne Mold:

Airborne mold testing was performed utilizing Zefon International Incorporated's Air-O-Cell® sampling device following all manufacturer supplied recommended sampling procedures.

The Air-O-Cell® is a direct read total particulate air sampling device. It works using the inertial impaction principle similar to other spore trap devices. It is designed for the rapid collection and analysis of airborne particulate including bioaerosols. The particulate includes fibers (e.g. asbestos, fiberglass, cellulose, clothing fibers) opaque particles (e.g. fly ash, combustion particles, copy toner, oil droplets, paint), and bioaerosols (e.g. mold spores, pollen, insect parts, skin cell fragments).¹

The method involves drawing a known quantity of air through a sterile sampling cassette. Subsequent to sampling, the cassette is sealed and transferred to a microbiology laboratory under chain of custody protocol for microscopic analysis. This method counts both viable and nonviable mold spores.

AIRBORNE MOLD and PARTICULATE

Lab ID #	Location	Total Mold Counts/M ³	Pollen	Insect Fragment	Hyphal Fragments
131905297-0001	Room 34	650	7	ND	ND

¹ Zefon International Inc. <www.zefon.com>

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Lab ID #	Location	Total Mold Counts/M ³	Pollen	Insect Fragment	Hyphal Fragments
131905297-0002	Room 32	720	ND	ND	ND
131905297-0003	Room 15	1,180	ND	ND	ND
131905297-0004	Room 11	3,010	ND	ND	ND
131905297-0005	Room 7	790	ND	ND	ND
131905297-0006	Outside	16,427	ND	ND	ND

AIRBORNE MOLD and PARTICULATE (Subjective Scales)

Lab ID #	Location	Skin Fragment Density (SFD)	Fibrous Particulates (FP)	Total Background Particulate (TBP)
131905297-0001	Room 34	1	1	1
131905297-0002	Room 32	1	1	1
131905297-0003	Room 15	1	1	1
131905297-0004	Room 11	1	1	1
131905297-0005	Room 7	1	1	1
131905297-0006	Outside	1	1	1

Legend:

ND - Not Detected

Observations:

There are currently no guidelines or standards promulgated by a government agency or widely recognized scientific organization for the interpretation of airborne mold spore levels. The most commonly employed tool used to assess if mold growth is occurring in a structure is to compare quantities and species of mold outdoors to indoor. If there were more mold indoor, and/or if species were present indoor which were not present outdoors, then growth is occurring, and remediation is recommended.

Indoor airborne mold spore concentrations were found to be much lower than the outside sample. Based on comparisons with historical data from projects of similar type, building utilization, geographic location and season, the indoor airborne levels are considered low. Indoor mold spore counts in the summer are typically in the 2,500-6,500-spores/cubic meter range.

Pollen, insect fragments and Hyphal fragments were either not present or low in the samples. Hyphal fragment is a non-reproductive part of the mold.

Total background particulate on all samples was assessed as "1" on a scale of 1-5 where 1 is low and 5 is high. Skin fragment density on all samples was assessed as "1" on a scale of 1-4 where 1 is low and 4 is high. The total background levels are measured to determine airborne dust not related to airborne mold. Skin fragments are measured to determine proper housing cleaning.

Mercury in Rubber Flooring: Observations and Conclusions:

No rubber flooring exists in the school.

Radon:

Number of Samples Collected

Five (5) air samples were collected at the following locations:

Location of Sample

- 1. Ground floor room 34
- 2. Ground floor room 32
- 3. Ground floor room 15
- 4. Ground floor room 11
- 5. Ground floor room 4

·	Sample Result	
1. Ground floor room 34 <0.4	pCi\L	
2. Ground floor room 32 <0.4	pCi\L	
3. Ground floor room 15 <0.4	pCi\L	
4. Ground floor room 11 <0.4	pCi\L	
5. Ground floor room 4 <0.4	pCi\L	

Observations and Conclusions:

The measured radon concentrations of the samples were found to be much lower than the EPA guideline of 4 picoCuris of radon per liter of air (pCi/L). No further action is required based on the results.

3.0 COST ESTIMATES:

The cost includes removal and disposal of all accessible ACM, other hazardous material and an allowance for removal of inaccessible or hidden ACM that may be found during renovation or demolition project.

Location	Material	Approximate Quantity	Cost Estimate (\$)
Thurson have	O'' O'' Nice of Electric Tile and Marchia	CO 000 CF	220,000,00
Throughout	9" x 9" Vinyl Floor Tile and Mastic	68,000 SF	238,000.00
	Interior Windows	100 Total	20,000.00
	Interior Doors with Windows	80 Total	12,000.00
	Interior Caulking on Doors	350 LF	3,500.00
	Sinks	21 Total	4,200.00
	Flexible Connectors	10 Total	1,000.00
	Wood Fire Doors	24 Total	4,800.00
	Vertical Caulking	5,000 LF	50,000.00
	Hard Joint Insulation	1,800 Total	36,000.00
	Miscellaneous Hazardous Materials	Unknown	25,000.00
	Miscellaneous Hidden ACM	Unknown	25,000.00
	Tubes in Light Fixtures	Unknown	30,000.00
	Blackboards	100 Total	30,000.00
Stage	Fire Curtain	2 Total	10,000.00
Kitchen	Walk-In Refrigerators	2 Total	18,000.00
Various Locations	Glue Tab on Fiberglass Insulated Duct	600 SF	6,000.00
	1' x 1' Acoustical Ceiling Tile	800 SF	4,000.00
Incinerator Room	Incinerator	1 Total	9,500.00
Gymnasium	Hardwood Floor/Paper/Mastic	9,000 SF	74,000.00
Lecture Hall	Debris above Ceiling Tiles	2,200 SF	11,000.00

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Location	Material A	Approximate Quantity	Cost Estimate (\$)
Boiler Room	Boiler Insulation	750 SF	15,000.00
	Tank Insulation	220 SF	5,500.00
	Duct Insulation	800 SF	16,000.00
	Glue Tabs on Fiberglass Insulated Duct	450 SF	4,500.00
	Flexible Connectors	5 Total	1,000.00
	Boilers	3 Total	27,000.00
Exterior	Old Windows	300 Total	75,000.00
	Doors	30 Total	6,000.00
	Unit Vent Grille	40 Total	4,000.00
	Transite Sewer Pipes	Unknown ¹	50,000.00
	Damproofing on Exterior/Foundation Wa	ills Unknown ¹	425,000.00
Estimated costs for NE	ESHAP Inspection, Destructive and Testing Service	es	17,000.00
	esign, Construction Monitoring and Air Sampling S		130,000.00
	TOTAL:		\$ 1,390,000.00

^{1:} Part of total demolition.

4.0 DESCRIPTION OF SURVEY METHODS AND LABORATORY ANALYSES:

Asbestos:

Asbestos samples were collected using a method that prevents fiber release. Homogeneous sample areas were determined by criteria outlined in EPA document 560/5-85-030a. Bulk material samples were analyzed using PLM and dispersion staining techniques with EPA method 600/M4-82-020.

Airborne Mold:

The samples were analyzed by an EPA approved laboratory EMSL, Woburn, MA.

Radon:

Radon samples were analyzed by an EPA licensed laboratory AccuStar, Ward Hill, MA.

Inspected By:

Leonard J. Busa Asbestos Inspector

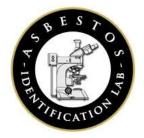
(AI-030673)

5.0 LIMITATIONS AND CONDITIONS:

This report has been completed based on visual and physical observations made and information available at the time of the site visits, as well as an interview with the Owner's representatives. This report is intended to be used as a summary of available information on existing conditions with conclusions based on a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state and federal protocols, and within the scope and budget established by the client. Any additional data obtained by further review must be reviewed by UEC and the conclusions presented herein may be modified accordingly.

This report and attachments, prepared for the exclusive use of Owner for use in an environmental evaluation of the subject site, are an integral part of the inspections and opinions should not be formulated without reading the report in its entirety. No part of this report may be altered, used, copied or relied upon without prior written permission from UEC, except that this report may be conveyed in its entirety to parties associated with Owner for this subject study.

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Asbestos Identification Laboratory

165 New Boston St., Ste 227 Woburn, MA 01801 781-932-9600

Web: www.asbestosidentificationlab.com Email: mikemanning@asbestosidentificationlab.com **Batch:** 46012



August 29, 2019

Ammar Dieb Universal Environmental Consultants 12 Brewster Road Framingham, MA 01702 Project Name: Somerset Middle School, Somerset, MA

Project Number:

 Date Sampled:
 2019-08-27

 Work Received:
 2019-08-28

 Work Analyzed:
 2019-08-28

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

Dear Ammar Dieb,

Asbestos Identification Laboratory has completed the analysis of the samples from your office for the above referenced project. The information and analysis contained in this report have been generated using the EPA /600/R-93/116 Method for the Determination of Asbestos in Bulk Building Materials. Materials or products that contain more than 1% of any kind or combination of asbestos are considered an asbestos containing building material as determined by the EPA. This Polarized Light Microscope (PLM) technique may be performed either by visual estimation or point counting. Point counting provides a determination of the area percentage of asbestos in a sample. If the asbestos is estimated to be less than 10% by visual estimation of friable material, the determination may be repeated using the point counting technique. The results of the point counting supersede visual PLM results. Results in this report only relate to the items tested. This report may not be used by the customer to claim product endorsement by NVLAP or any other U.S. Government Agency.

Laboratory results represent the analysis of samples as submitted by the customer. Information regarding sample location, description, area, volume, etc., was provided by the customer. Asbestos Identification Laboratory is not responsible for sample collection activities or analytical method limitations. Unless notified in writing to return samples, Asbestos Identification Laboratory discards customer samples after 30 days. Samples containing subsamples or layers will be analyzed separately when applicable. Reports are kept at Asbestos Identification Laboratory for three years. This report shall not be reproduced, except in full, without the written consent of Asbestos Identification Laboratory.

- NVLAP Lab Code: 200919-0
- Massachusetts Certification License: AA000208
- State of Connecticut, Department of Public Health Approved Environmental Laboratory Registration Number: PH-0142
- State of Maine, Department of Environmental Protection Asbestos Analytical Laboratory License Number: LB-0078(Bulk) LA-0087(Air)
- State of Rhode Island and Providence Plantations. Department of Health Certification: AAL-121
- State of Vermont, Department of Health Environmental Health License AL934461

Thank you Ammar Dieb for your business.

Michael Thamy

Michael Manning Owner/Director August 29, 2019

Ammar Dieb Universal Environmental Consultants 12 Brewster Road Framingham, MA 01702

Project Name: Project Number: Date Sampled:

Somerset Middle School, Somerset, MA

2019-08-27 2019-08-28

Work Received: Work Analyzed:

2019-08-28

Analysis Method: BULK PLM ANALYSIS EPA/600/R-93/116

FieldID		Material	Location Co		Non-Asbestos %	Asbestos %
	LabID					
1		Grey Sink DP	Teacher's Rm Addition (ADD)	gray	Non-Fibrous 9	5 Detected Chrysotile 5
2	510566	Grey Sink DP	C'rm-3	gray	Non-Fibrous 9	5 Detected Chrysotile 5
	510567					
3		Interior Win FR @ Hall Door Ass'y	By C'rm 11	gray	Non-Fibrous 9	8 Detected Chrysotile 2
	510568					
4		Glaze for Win in Wood Door	Stairs by C'rm 40 Up to Upper Lecture Hall	multi	Non-Fibrous 9	8 Detected Chrysotile 2
5	510569	Int Win GL? for Win in Hall Door Ass'y	Outside Cafe	multi	Non-Fibrous 9	8 Detected Chrysotile 2
6	510570	Verticle Caulk Betwix Steel Column & CMU	Hall by Music	multi	Non-Fibrous 9	7 Detected Chrysotile 3
	510571					
7		Vert Caulk Betwix Steel Column & CMU	C'rm 41	multi	Non-Fibrous 9	8 Detected Chrysotile 2
8	510572	Disak in EC Di	Deiler Dre		T'1 1 0	0.07
0	510553	Black in FG DI	Boiler Rm	multi		0 None Detected 0
9	510573	Black in FG PI	Boy's Pipe Chase by C'rm- 13 Pl	multi	1	0 None Detected 0
	510574				Non-Fibrous 7	0
10		Black in FG DI	Kitchen Storage	multi		0 None Detected 0
11	510575	9" Brown VT	Gym Storage	brown	Non-Fibrous 9	8 Detected Chrysotile 2
	510576					
12		Mastic #1	Boiler Rm	black	Non-Fibrous 10	0 None Detected
	510577					
13		Ceiling Plaster (CP)	Auditorium	white		2 None Detected 8
14	510578	СР	Lecture Hall	white	Non-Fibrous 10	0 None Detected
	510579					
Thur	sday 29 Aug	gust				Page 1 of 4

Fiel	dID	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
15		Blak in FG PI	Girl's Rm by Gym (Pipe Chase)	multi	Fiberglass 30	None Detected
	510580		Oliase)		Non-Fibrous 70	
16		E Off FG	Boiler Rm	gray		Detected Chrysotile < 1
	510581					
17		Boiler Insul	Boiler Rm	white	Non-Fibrous 50	Detected Chrysotile 20 Amosite 30
18	510582	Boiler Breech	Boiler Rm	gray	Non-Fibrous 40	Detected
	510583		Solio, Full	9.47		Chrysotile 60
19	310363	E Debris (Roof Drain)	Top of CP (Lecture Hall)	gray	Non-Fibrous 40	Detected Chrysotile 60
	510584					
20		12" Blue VT	By Hall Doorr to C'rm 51 (ADD)	blue	Non-Fibrous 100	None Detected
21	510585	Mastic #20	Hall Door to C'rm 51 (ADD)	vellow	Non-Fibrous 100	None Detected
		- Madde #20	Trail Book to Office (182)	yoo	non ribroup roo	none Beeceda
22	510586	12" Blue VT	Hall by C'rm 60 (ADD)	blue	Non-Fibrous 100	None Detected
23	510587	Mastic #22	Hall by C'rm 60 (ADD)	yellow	Non-Fibrous 100	None Detected
		- IMASIIC #ZZ	I fall by C fill 60 (ADD)	yenow	Non-Fibrous 100	None Detected
24	510588	12" Blue VT	Hall by C'rm 62 (ADD)	blue	Non-Fibrous 100	None Detected
			(, (, , , , , , , , , , , , , , , , , ,	Diag.	1.011 1 121 0 0 2 1 0 0	none Beeceda
25	510589	Mastic #24	Hall by C'rm 62 (ADD)	yellow	Non-Fibrous 100	None Detected
20			I fall by CTIT 02 (ADD)	yellow	Non-Fibrous 100	None Detected
26	510590	White Leveler #24	Hall by C'rm 62 (ADD)	white	Non-Fibrous 100	None Detected
			(, 122)	Willia	1.011 1 1.01 0 0 0 1 0 0	none beceeeu
27	510591	Win FR Caulk	Small Courtyard, Exterior	multi	Non-Fibrous 98	Detected
		- VIII I I Cadik	Omaii Gourtyard, Exterior	India	Non Fibrous 90	Chrysotile 2
28	510592	Win FR Caulk	Large C'tyd, Exterior	multi	Non-Fibrous 97	Detected
20		- Will FR Caulk	Large C tyu, Exterior	mulu	Non-Fibrous 97	Chrysotile 3
29	510593	Win FD @ Cround Lovel	Laws Office Exterior		Mara Editoria con con	Detected
29		Win FR @ Ground Level	Large C'tyd, Exterior	multi	Non-Fibrous 98	Chrysotile 2
30	510594	Soft White Glaze for	Large City de Exterior	multi	Non Fibraria 00	Detected
30		Window	Large C'tyd, Exterior	mulu	Non-Fibrous 90	Chrysotile 10
31	510595	Soft Grey Glaze for	By Door W2, Exterior	gray	Non-Fibrous 100	None Detected
			Dy Door WZ, Exterior	gray	TOTT PIDIOUS 100	Mone Deceded
32	510596	Door FR Caulk	Door W2, Exterior	multi	Non-Fibrous 97	Detected Chrysotile 3
	510597					Chrysotile 3
			_L		D	1

Thursday 29 August Page 2 of 4

Field	dic	Material	Location	Color	Non-Asbestos %	Asbestos %
	LabID					
33		Grilled Caulk	Main Office Wing, Exterior	multi	Non-Fibrous 97	Detected Chrysotile 3
	510598					
34		Win FR Caulk	By Door N4, Exterior	multi	Non-Fibrous 98	Detected Chrysotile 2
35	510599	Win FD Coult	Main Office Wines Futeries		Non-Fibrous 97	Detected
33	510600	Win FR Caulk	Main Office Winer, Exterior	muiu	Non-Fibrous 97	Chrysotile 3
36	310600	Win FR	Window #55 (ADD), Exteiror	gray	Non-Fibrous 100	None Detected
	510601		LAtellol			
37		Win FR	Win #54 (ADD), Exterior	gray	Non-Fibrous 100	None Detected
38	510602	Door FR	Door E-2 (ADD), Exerior	gray	Non-Fibrous 100	None Detected
	510602					
39	510603	E Off FG	(ADD) AC y 78	gray	Mineral Wool 50	None Detected
40	510604	Oversized Wood Fire Door	(ADD) Hall by Girl's Rm	white	Non-Fibrous 65	Detected Chrysotile 30
	510605			<u> </u>		Amosite 5
41	540505	2x4 FG SAT	(ADD) Random	yellow	Fiberglass 95 Non-Fibrous 5	None Detected
42	510606	Wall Plaster (WP)	(ADD) C'rm 59	multi	Non-Fibrous 100	None Detected
	510607					
43		WP	Faculty Dining	gray	Cellulose 2	
4.4	510608	0.0		1	Non-Fibrous 96	
44	510609	CP	Men's Rm by 41	white	Cellulose 2 Non-Fibrous 98	None Detected
45	510610	2x4 SAT (Orig w/ Side Fissures?)	Hall by C'rm 6 (Pink?)	brown	Mineral Wool 70 Cellulose 20 Non-Fibrous 10	
46	310010	2x4 SAT (Orig w/ Side —Fissures?)	Conference Rm (Brown?)	brown	Cellulose 20	
47	510611	2x4 SAT (Orig w/ Side Fissures?)	C'r-11 (Brown)	brown	Non-Fibrous 10 Mineral Wool 70 Cellulose 20	None Detected
	510612	,,			Non-Fibrous 10	
48		TSI Debris on Floor	Girl's Locker Loft Mech Rm	multi		Detected Chrysotile 70
10	510613	D	0.11 1 1 2 2 2 2	100		
49	F1055:	Black in FG DI	Girl's Locker Loft Mech Rm	multi	Fiberglass 30 Non-Fibrous 70	None Detected
50	510614	Assoc Glue Tab #49	Girl's Locker Loft Mech Rm	brown	Non-Fibrous 85	Detected Chrysotile 15
	510615					curysocite 15

Thursday 29 August Page 3 of 4

FieldID	Material	Location	Color	Non-Asbestos %	Asbestos %		
LabID							
51	Glue Tab for FG DI	Girl's Locker Loft Mech Rm	brown	Non-Fibrous 85	Detected		
510616					Chrysotile 15		
52	Mastic for 9" VT	Girl's Locker Exit Hall	black	Non-Fibrous 100	None Detected		
510617							
53	WP	Conference Rm	white	Non-Fibrous 100	None Detected		
510618							
54	Int Win GL	Mai Office/Principal	multi	Non-Fibrous 100	None Detected		
510619							
55	СР	Incinerator Rm	gray		None Detected		
510620				Non-Fibrous 97			

Thursday 29 August

Erik Gorgas

End of Report

Page 4 of 4

Analyzed by:

Batch: 46012

CHAIN OF CUSTODY

Universal Environmental Consultants	
12 Brewster Road	
Framingham, MA 01702	
Tel: (508) 628-5486 - Fax: (508) 628-5488	
adieb@uec-env.com	
Sand Ma	Building Name Someset Middle School
Town/City:	Building Name

Sample	Result	Description of Material	Sample Location
1		grey sink do	Teacher's Rm apprion (100)
2		arey sink on	den-3
3	(interior win fr a hall door	255'4 by crn 11
4		glose for wisin wood door	
Í	(wing of ? for wine in ball do	or Assig gorside care
6		1 47	bolumi con hall by Misc
7		VETT, CAUIK " "	" " crm 41
8		Blackin Fla (DI)	Boleson
. 9		Blacking FG (P)	Boys in porchase by orm-13 (PI)
10		Blackin FG (DI)	Kitchen Storage
11	-	9" Brown UT	l
12		mastic #11	64m 5701.99E
13		caising plasser (cp)	auditación
14		ce	Lacrose hall
15		Black in FG (PI)	Girlison by sym (pipe chase)
16		(E) OFF FG	Riles Cm
17		Briler insul	
18		Bile; Breech	y y
19		(E) de bris (rout dans)	Top of or (because hall)
20		12" Blue VT	by Hall dove to com 51 (ADD)
Reported	BY	Date: - 8/	21/19 Due Date: 24-hr
Received	I By: —	Date: -8/2	8/19

CHAIN OF CUSTODY

	Universal Environmental Consultants	
	12 Brewster Road	
	Framingham, MA 01702	
	Tel: (508) 628-5486 - Fax: (508) 628-5488	
	adieb@uec-env.com	·
	5 / M	$\leq 1 MS$
•	Town/City:	Building Name

Sample Res	sult Description of Material	Sample Location
2.50 3.00 2.00 2.00 2.00 2.00 2.00 2.00 2.0	mastic #20	hall door to cim SI (ADD)
21		
22	12" Blue 57	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
23	mASTIC = ZZ	(4)
24	12" Blue UT	hall by crm 62 (ADD)
25	mastic + 24	
26	white levelor 24	
27	winte coulk	court jaid (EXTERIOR)
28	winte "	la c'tyd
29	winto a good level	Large c'tid
3	soft white above for a	isday Lorge cityd
31	soft arey glosse for a	indoa by Thorne
32	Jan fr caulk	Dost WZ
33	Grille Cholk	moin office whing
34	winte caulk	By down N4
35	winter early	(Inding Fire wing o
36	cuin fr	window # 55 (ADD)
37	win fo	win # 54
38	doorfe	door E-2 6
39	(e) OFF FG	
40	overgized wood Fire Door	
Reported By:	1/1/	8/27/19 Due Date: 24-hr
Received By:	Date:	

CHAIN OF CUSTODY

Universal Environmental Consultan	ts
12 Brewster Road	
Framingham, MA 01702	
Tel: (508) 628-5486 - Fax: (508) 628-5	488
adieb@uec-env.com	

Sample	Result Description of Material	Sample Location
41	2x4 FG SAT	(ADD) condon
42	wall plasted (UP)	(ADD) cm59
43	ast	FACULTY Dining
44	CP	men's um by 41
45	2×4 SAT lorg whide first	
46	2x45AT(" ") conference on (Brown)
47	Zx45AT (" ") c'im-11 (som)
48	TSI debois on Floor	Gielie locker Loft mech im
. 49	Black in Flo (DI)	1 / /
رخی ا	ASSOC glas top # 49	
51	glue Tas for FG(D)	b b
52	massic for 9" ur	Gil's locker exist hall
53	GIP.	conference in
54	int wind	manoffice/ Principal
-55	CP	auciberator em
·		

Reported By: Lean Course	Date: 8/27/19	Due Date: 24-hr
Received By:	Date:	



universal environmental consultants

12 Brewster Road Framingham, MA 01702 Phone: 508.628.5486 Fax: 508.628.5488

CHAIN OF CUSTODY

A Valley of the Control of the Contr	行政的概念				企业为3条件 或35	建筑的设计的 计设置信息				发表的	ARTHUR AND MAN	histopia bila
Analysis Type	6-8 Hr	Turna 12 Hr	round Ti	me (x)	72 hr		Speci	fic Projec	t Notes			
EM / AHERA	0-6 111	12 M	24 111	40 111	72 111	\$						
EM / Level II	\ \											
TEM / Dust			_									
TEM / Bulk												
TEM / Water												
PLM Mold			×									
Other:			^									
CELERACIES NO.	erenessy.	ENTERNAMENTAL SERVER		2663765764	A) S(4) PS(4)	The second second second		The second	CHARLENGE	AND A CONT.	TO KIND OF THE STATE OF	全种政治的 (2)
SAMPLE ID	MA	TERIAL D	ESCRIPTI	ON		SAMPLE LOCA	TION .	START	STOP	TIME	L/MIN	VOLUM
6			2765	7082	tron	n:34		0911	0721	10	15	150
				700	1100							
(2)			2764	1724	room	1.32		0923	0933	10	15	150
3		-	2765	8673	room	:15		0472	0945	10	15	150
4			2765	8663	roon	u: \\		0147	0957	10	15	150
(5)			2765 9	8713	roim	:7		(00)	bu	10	15	150
6		_	2765	8721	aufsi	de		Lory	1034	10	ir	150
												(a
								+				-
								7				
		deh				DATE/TIME: RECEI						

Page 1 Of

JUL 1 8 2019



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 131905297 Customer ID: UEC63

Customer PO: Project ID:

Phone:

Attn: Ammar Dieb

Universal Environmental Consultants

12 Brewster Road Framingham, MA 01702 Fax: (508) 628-5488

Collected: 07/18/2019 Received: 07/18/2019

(617) 984-9772

Analyzed: 07/19/2019

Project: Somerset Middle School., Somerset, MA

Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	1 150			131905297-0002 2 150 ROOM:32			131905297-0003 3 150 ROOM:15		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	<u> </u>	-	-	<u> </u>	-	-	-
Ascospores	-	-	-	-	-	-	1	20	1.7
Aspergillus/Penicillium	17	350	53.8	25	510	70.8	3	60	5.1
Basidiospores	8	200	30.8	8	200	27.8	56	1100	93.2
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	6	100	15.4	2*	10*	1.4	-	-	-
Curvularia	-	-	-	-	-	-	-	-	-
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	-	-	-	-	-	-	-	-	-
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	-	-	-
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	31	650	100	35	720	100	60	1180	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	1*	7*	-	-	-	-	-	-	-
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	-	1	-	-	1	-	-	1	-

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager or other approved signatory

Samples received in good condition unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "." Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA-LAP, LLC --EMLAP Accredited #180179

(Initial report from: 07/19/2019 13:05:39

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801 Tel/Fax: (781) 933-8411 / (781) 933-8412 http://www.EMSL.com / bostonlab@emsl.com

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Fax:

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Attn: Ammar Dieb

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12 Brewster Road Framingham, MA 01702

Received: 07/18/2019 Analyzed: 07/19/2019

Collected: 07/18/2019

Phone: (617) 984-9772

(508) 628-5488

Project: Somerset Middle School., Somerset, MA

Test Report: Air-O-Cell(™) Analysis of Fungal Spores & Particulates by Optical Microscopy (Methods MICRO-SOP-201, ASTM D7391)

Lab Sample Number: Client Sample ID: Volume (L): Sample Location	131905297-0004 4 150 ROOM:11			131905297-0005 5 150 ROOM:7			131905297-0006 6 150 OUTSIDE		
Spore Types	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total	Raw Count	Count/m³	% of Total
Alternaria (Ulocladium)	-	-	-	1	20	2.5	-	-	· -
Ascospores	12	250	8.3	-	-	-	67	1400	8.5
Aspergillus/Penicillium	4	80	2.7	8	200	25.3	8	200	1.2
Basidiospores	125	2560	85	25	510	64.6	678	13900	84.6
Bipolaris++	-	-	-	-	-	-	-	-	-
Chaetomium	-	-	-	-	-	-	-	-	-
Cladosporium	5	100	3.3	3	60	7.6	39	800	4.9
Curvularia	-	-	-	-	-	-	1	20	0.1
Epicoccum	-	-	-	-	-	-	-	-	-
Fusarium	-	-	-	-	-	-	-	-	-
Ganoderma	1	20	0.7	-	-	-	7	100	0.6
Myxomycetes++	-	-	-	-	-	-	-	-	-
Pithomyces++	-	-	-	-	-	-	-	-	-
Rust	-	-	-	-	-	-	1*	7*	0
Scopulariopsis/Microascus	-	-	-	-	-	-	-	-	-
Stachybotrys/Memnoniella	-	-	-	-	-	-	-	-	-
Unidentifiable Spores	-	-	-	-	-	-	-	-	-
Zygomycetes	-	-	-	-	-	-	-	-	-
Total Fungi	147	3010	100	37	790	100	801	16427	100
Hyphal Fragment	-	-	-	-	-	-	-	-	-
Insect Fragment	-	-	-	-	-	-	-	-	-
Pollen	-	-	_	-	-	_	-	-	_
Analyt. Sensitivity 600x	-	21	-	-	21	-	-	21	-
Analyt. Sensitivity 300x	-	7*	-	-	7*	-	-	7*	-
Skin Fragments (1-4)	-	1	-	-	1	-	-	1	-
Fibrous Particulate (1-4)	-	1	-	-	1	-	-	1	-
Background (1-5)	_	1	-	-	1	-	-	1	_

++ Includes other spores with similar morphology; see EMSL's fungal glossary for each specific category.

No discernable field blank was submitted with this group of samples.

Steve Grise, Laboratory Manager or other approved signatory

Samples received in good condition unless otherwise noted. High levels of background particulate can obscure spores and other particulates, leading to underestimation. Background levels of 5 indicate an overloading of background particulates, prohibiting accurate detection and quantification. Present = Spores detected on overloaded samples. Results are not blank corrected unless otherwise noted. The detection limit is equal to one fungal spore, structure, pollen, fiber particle or insect fragment. "*" Denotes particles found at 300X. "-" Denotes not detected. Due to method stopping rules, raw counts in excess of 100 are extrapolated based on the percentage analyzed. EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the result, it will be noted on the report.

Samples analyzed by EMSL Analytical, Inc. Woburn, MA AIHA-LAP, LLC --EMLAP Accredited #180179

Initial report from: 07/19/2019 13:05:39

For information on the fungi listed in this report, please visit the Resources section at www.emsl.com



Radon in Air

NELAC NY 11769 NRPP 103216 AL NRSB ARL0017 EPA Method #402-R-92-004 Liquid Scintillation NRPP Device Code 8088 NRSB Device Code 12193

Laboratory Report for:

Property Tested: Project # 219409.00

Universal Environmental Consultant 12 Brewster Road Framingham MA 01702 Somerset Middle School 1141 Brayton Avenue Somerset MA 02725

Log Number	Device Number		Test Expo	sure Duratio	on:	Area Tested	Result pCi/L
2532995	4044805	07/18/2019	9:24 am	07/22/2019	8:03 am	Bldg. SMS Ground Floor Room 34	< 0.4
2532996	4044794	07/18/2019	9:27 am	07/22/2019	8:09 am	Bldg. SMS Ground Floor Room 32	< 0.4
2532997	4044807	07/18/2019	9:38 am	07/22/2019	8:10 am	Bldg. SMS Ground Floor Room 15	< 0.4
2532998	4044784	07/18/2019	9:42 am	07/22/2019	8:13 am	Bldg. SMS Ground Floor Room 11	< 0.4
2532999	4044798	07/18/2019	9:45 am	07/22/2019	8:15 am	Bldg. SMS Ground Floor Room 4	< 0.4

Comment: Universal Environmental Consultant was emailed a copy of this report.

Test Performed By: Laith Odeh

Distributed by: Universal Environmental Consultant

Report Approved By:

Shawn Price, Director of Laboratory Operations, AccuStar Labs

The uncertainty of this radon measurement is ~+/- 10 %. Factors contributing to uncertainty include statistical variations, daily and seasonal variations in radon concentrations, sample collection techniques and operation of the dwelling. Interference with test conditions may influence the test results.

This report may only be transferred to a third party in its entirety. Analytical results relate to the samples AS RECEIVED BY THE LABORATORY. Results shown on this report represent levels of radon gas measured between the dates shown in the room or area of the site identified above as "Property Tested". Incorrect information will affect results. The results may not be construed as either predictive or supportive of measurements conducted in any area of this structure at any other time. AccuStar Labs, its employees and agents are not responsible for the consequences of any action taken or not taken based upon the results reported or any verbal or written interpretation of the results.

Rev 1802

Disclaimer:

2 Saber Way Ward Hill MA 01835 888-480-8812

Evaluation of Existing Conditions

Historical Analysis

he Somerset Middle School is not listed on the National Register of Historic Places and does not appear in the Massachusetts Cultural Resource Information System. (Please reference attached MACRIS listing document below).

Although the property is not listed on either of these databases, it may not preclude it from review by the Massachusetts Historical Commission.

Per 950 CMR 71.00, any project that is undertaken by a local government that seeks the provision of the financial assistance by a state body (MSBA) is required to submit a "Project Notification Form".

As part of this process, either the state body or the local government is required to provide a notice to the Massachusetts

Historical Commission (MHC) of the project. After the receipt of notice, the MHC will review any adverse effects, direct or indirect, from the proposed project on any property listed in the State Register of Historic Places. If the MHC determines that a project will have an adverse effect on a State Register property, the MHC, the state body, and the local government will consult to discuss ways to eliminate, minimize, or mitigate the adverse effects. The local government must adopt all prudent and feasible means to eliminate, minimize, or mitigate the adverse effects.

The Project Notification Form will be completed during the Schematic Design phase of the process once a proposed project direction has been identified.

Massachusetts Cultural Resource Information System

MHC Home | MACRIS Home

Results

Get Results in Report Format

OPDF Spreadsheet

Below are the results of your search, using the following search criteria:

Street No: 1141

Street Name: Brayton Ave **Name:** Somerset Middle School

Year Built: 1965

For more information about this page and how to use it, click here

No Results Found.

New Search — Same Town(s) Previous

MHC Home | MACRIS Home



Student School Assignment Practices

¶he Somerset Public Schools does not participate in School Choice. At the elementary school level, students are mainly divided into three regions, each one having its own elementary school for enrollment. In 2019, the District implemented two main "buffer zones" as they have been called which created two other areas in town for which newly enrolled students could be assigned to one of two schools. One of these zones is assigned to both South Elementary and Chace Street School. Both North Elementary and Chace Street School are assigned to the second buffer zone. This process was necessary to control and provide more equity between kindergarten class sizes. Additionally, some elementary students requiring specialized programs may attend an elementary school outside of their assigned zone. The District provides transportation to all students, whether they live in the buffer zone or not. All students in Somerset enrolled in grades 6-8 attend Somerset Middle School.



Available Space in Other Schools

he Somerset Public Schools has no available space in any of its existing schools. In fact, the Somerset Public Schools has long partnered with the South Coast Educational Collaborative (SCEC), leasing SCEC some space at North Elementary School for one of SCEC's programs. Due to increasing enrollments at Chace Street School and no space remaining for the needed classrooms, the preschool program transitioned this year from Chace Street School to North Elementary School. As a result, Somerset Public Schools was forced to end the lease with the SCEC in order to utilize this classroom space.



Tuition Agreements

he Somerset Public School District does not have any tuition agreements with neighboring school districts. We do have agreements in place for our Special Education out-of-District placement students.



Rental / Acquisition of Existing Buildings

he Somerset Public School District does not rent any space nor has it acquired any existing buildings. The District owns five buildings: North Elementary School, which is also home to the District Administration Office; Chace Street School; South Elementary School and its detached library building; and Somerset Middle School.



Base Repair Option

he Base Repair Option **IS NOT** intended to be a viable solution for the Town of Somerset. It does not resolve the Facility or Educational Deficiencies within the Somerset Middle School. It does not provide any additional or new educational space, and does not modernize any existing educational space. It does not provide new instructional technology, needed programs, expanded community resources, or many of the educational and community benefits inherent in a viable solution.

The Base Repair Option IS intended to identify the significant expenditures required to resolve basic infrastructure, accessibility, and code compliance issues within the existing Somerset Middle School over the next several years. The MSBA requires that a Base Repair option be evaluated in order to compare it to viable options which address the comprehensive needs of the district. In the case of Somerset, the significant cost of the Base Repair Option makes it obvious that the Town of Somerset will have to expend an enormous amount of money in the near future to address significant infrastructure, accessibility, and code compliance issues. This expenditure of Somerset funds for basic repairs on a building that has proven to be a poorly organized educational facility with is extremely inefficient to operate would be a poor investment. The significant cost of basic repairs at the Somerset Middle School make it obvious that a more comprehensive solution that addresses all needs and includes MSBA grant reimbursement funding is the more educationally appropriate and financially responsible approach.

Somerset Middle School

Sitework

Demolition Asbestos Removal Lead Removal Concrete

Masonry

Structural Steel

Light gage Framing

Misc. Metals Stair and Ramps

Rough Carpentry Finish Carpentry Waterproof/Sealants Insulation Roofing/Flashing Doors (Wood & HM) Alum. Entrances Alum. Windows Door Hardware Glass & Glazing

Drywall Fire Proofing

Ceramic / Quarry Tile

Acoustical Ceilings Acoustical Panels Wood Flooring

Resilient Flooring Carpet Painting

Theatrical Equipment Misc. Specialties

Food Service Equip. Gym Equipment Casework / Fixed

Auditorium seating

		BASE REPAIR OPTION Existing 1964-1969 Buildings: 126,650 gsf
		Renovation - Code and Regulatory compliance
	120,000 -	
0	126,650 s	3 3 1 3 1
Cost/SF	Cost	Comments
	¢625 000 00	MA Accessibility compliance on parking, sidewalks, field access, building
	\$625,000.00	entries All major building entries require modifications, as they are elevated from the
		adjacent exterior grade. Selective demolition for access to replacement of building systems.
	\$316,625.00	ADA/MAAB modifications to door entries, corridors, toilets
	\$850,000.00	contained selective abatement
	\$85,000.00	contained selective abatement at exterior windows
	\$275,000.00	sidewalk/entry/stair/ramping/modifications
	\$275,000.00	Masonry repointing and repair at exterior. Masonry modification to interior
		door openings ADA/MAAB compliance. Replacement of deteriorated
	\$1,125,000.00	locations
	\$1,125,000.00	locations
		Masonry modification related to removal / replacement of plumbing systems
	\$425,000.00	Seismic modifications at building interior.
	. ==,===	Interior modifications for ADA/MAAB compliance. Restore selective demo
	\$325,000.00	areas where systems have been replaced.
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	i i i i i i i i i i i i i i i i i i i
	\$126,650.00	Exterior lintel restoration and/or replacement @ windows, doors and louvers
	\$275,000.00	ADA/MAAB compliance on stairs and landings
		Misc. rough blocking at elec./mech. Modifications, door openings, casework,
	\$55,100.00	etc.
	\$120,000.00	Repairs at areas modified for accessibility
	\$68,000.00	replace exterior sealants at joints
	\$253,300.00	Repairs to existing roof system
	\$89,500.00	Interior doors, exterior doors & Fire rated doors required for compliance
	\$65,000.00	Replace aluminum storefronts at entries
	\$1,450,000.00	Replacement of existing exterior windows
	\$145,000.00	ADA/MAAB compliance
	\$52,200.00	Rated glass required at fire door assemblies
		Interior modifications for ADA/MAAB compliance. Restore selective demo
	\$550,000.00	areas where systems have been replaced.
	\$55,000.00	System utility penetrations in rated walls
		Bathroom plumbing walls, adjacent to entries, and handicap toilet
	\$250,000.00	modifications
	*coc === 00	Full Replacement of existing ceiling system due to disturbance associated with
	\$696,575.00	systems replacement and ACM removal.
	\$200,000,00	Poplesoment of existing (buckling) we ad athletic fleering
	\$200,000.00	Replacement of existing (buckling) wood athletic flooring
	¢10F F00 00	Selective replacement where door entries have been modified for accessibility,
	\$105,500.00	removal of delaminating asbestos vinyl floor tile
 	\$379,950.00	
 	φ <i>513,33</i> 0.00	
	\$225,000.00	Equipment, lighting and rigging modifications required for code compliance
 	\$75,000.00	Interior ADA/MAAB signage
 	<i>413,000.00</i>	Some reconfiguration and equipment replacement required for code
	\$85,000.00	compliance
 	\$75,000.00	
1	\$275,000.00	ADA/MAAB modifications to non-compliant cabinets, counters, casework
1	4213,000.00	ADA/MAAB Compliance modifications at Auditorium Seating (150 seats -
	\$275,000.00	approx. 25%)
<u>ii </u>	ΨL13,000.00	app. 5/4 = 5/0/

Renovation - Code and Regul 126,650 sf Major systems requiring replation of Cost/SF Cost Cost/SF Cost Comments ADA/MAAB Compliance mod Installation of new system to itoller kirture replace, vacuum replacement, hot water code automated controls Electrical & Telecom. Total Building cost Total Site cost General Conditions Total Building & Site Construction Phasing Escalation Allowance A/E Fees Owner's Project Manager (OPM) fees Topographical survey Geotech investigation Permitting Move Management Owner admin. Costs Printing / Advertising Construction testing Furniture & Equipment Renovation - Code and Regul Major systems requiring replations ADA/MAAB Compliance mod toilet fixture replace, vacuum toilet fixture replace, vacuum toilet fixture replace, vacuum atomate valle fixeur epidece, vacuum toilet fixture replace, vacuum atomate valle fixeur epidece, vacuum diolet system toilet fixture replace, vacuum toilet fixture replace, vacuum toilet fixture replace, vacuum atomate valle fixeur epidece, vacuum diolet fixeur epidece, vacuum toilet fixeur epidement, valuum toilet fixeur epidece, vacuum toilet fixeur epidece, vacuum toilet fixeur epidece mot toilet fixeur epidece mot toilet fixeur epidece mot toilet fixeur epidece mot totalet, vacuum totalet, vacuum totalet, vacuum totalet, vacuum totalet, vacuu	Existing 1964-1969 Buildings: 126,650 gsf
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	ols for new ADA/MAAB doors and hardware
Project Contingency \$2,336,420.63 project and construction cont	
	ngency
Project Management/Commissioning	
Total Project Cost \$292.60 \$37,058,220.44	
MSBA Reimbursement \$171.92 \$21,082,421.61 56.89%	
Total Cost to Town of Somerset \$126.14 \$15,975,798.83	

^{*} Costs are derived from a database of Massachusetts Public School projects which were bid during the past three years.

^{*} Costs do not include interest and other borrowing costs

Summary of Options Considered

any options were considered as part of the overall analysis of the best possible option for solving the educational and physical deficiencies at the middle school and overcrowding within the elementary school facilities in the Town of Somerset. However, each of these options was really a variation of one or two different scenarios considered by the Town: 1) a grades 5 through 8 middle school solution, or 2) a grades 6 through 8 middle school solution. Within each of these two scenarios, there were three different variations on the construction approach considered. The three different approaches to the construction were: 1) a comprehensive renovation/addition approach, 2) a comprehensive renovation of the existing auditorium, stage, and lecture hall ONLY / addition (all remaining GSF) approach, and 3) an all-new construction approach. As a result of these construction variations on the two scenarios, there are a total of six options considered (seven options if the base repair option is included).

Several primary objectives emerged as part of the analysis, and these objectives provided clear criteria for consideration and evaluation of the options. The objectives include, but are not limited to:

- 1. Provide sufficient 21st Century educational space for middle school students within the Town of Somerset.
 - Provide new/renovated facilities to accommodate current/future middle school students.
 - Provide a middle school environment which includes all of the necessary program space and adjacencies to

- achieve the highly detailed goals and guiding design principles established in the educational plan and the educational visioning workshops.
- 2. Maximize the proposed middle school project's integration into the short-term and long-term goals of the Town-wide Economic Master Plan.
- 3. Expand outdoor educational opportunities with playfields, recreation space, and secure outdoor educational areas.
- 4. Improve safety of the overall school environment by providing appropriate auto and bus circulation on site, as well as by providing sufficient distributed parking for visitors, staff, and administration. More available site area also translates into an ability to create more secure boundaries with buffer zones between school areas and adjacent streets and neighborhoods.
- 5. Minimize impact to the Town, community, and School Department throughout construction.
 - Although it is understood that there will be some impact as part of the development of any new project, options which minimize such impact are desirable.
 - Minimize impact to the educational environment by limiting construction in direct proximity to school occupied spaces. Shorter construction durations which minimize impact to the school and community are obviously more desirable.

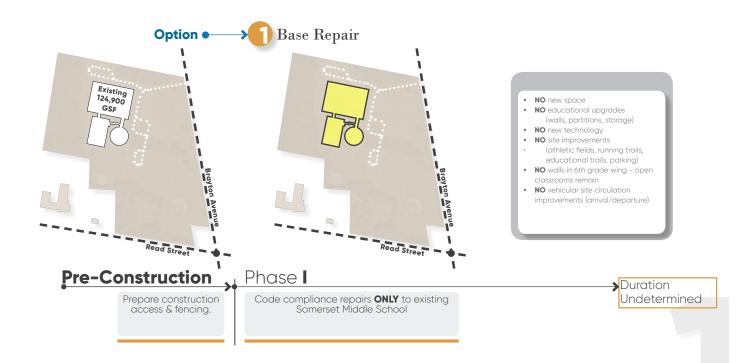
- 6. Maximize MSBA support and available grant funding.
 - Although it is understood that some portions of the project may not be eligible for MSBA grant reimbursement funding, options which maximize the available grant reimbursement funding are highly desirable.
- 7. Resolve overcrowding at the elementary school grade levels and middle school educational and physical building challenges with a single project.
 - The initial capacity and enrollment analysis indicates that removing 5th grade from the three elementary schools and placing it within newly created middle school space relieves current overcrowding in Grades K through 5. Furthermore, removing 5th grade from the elementary school environment creates sufficient capacity in the elementary schools to offer muchneeded specialized programs.
 - The District plans to continue the evaluation of a 5-8 middle school model vs. a 6-8 middle school model and the educational advantages and disadvantages for each through the next design phase, Preferred Schematic Report (PSR).
- 8. Execute a single project which maximizes impact across all grade levels.
 - Multiple projects would require that the Town approve each project independently. The MSBA procedures for reimbursement and support recognize one project per submittal. If multiple projects are being considered, each one would need to be submitted independently, and there is no guarantee that future projects will be considered/approved.
 - The options analysis demonstrates that scenarios that include multiple school projects on multiple sites results in a longer timeline, inflationary increases, and more uncertainty.
- 9. Any proposed option should be educationally appropriate, fiscally responsible, sustainable, and provide a solid long-term solution to school and facility needs in the Town.

The following is a summary of initial options considered as part of a review of facility and school needs:

Base Repair Option

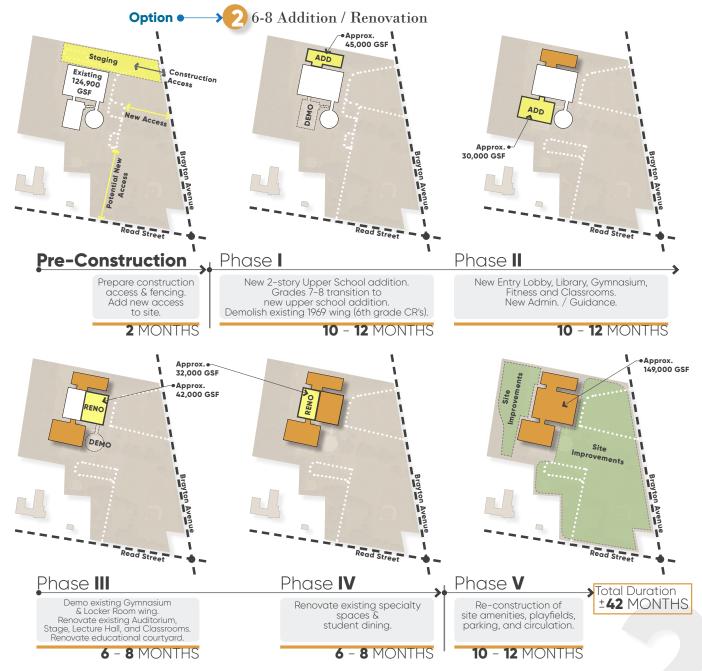
This option was rejected by the Town, School Department, School Committee, Building Committee, Board of Selectmen, and design team because it is significantly more expensive in the long run, does not resolve the educational space needs deficiencies, and defers the creation of much-needed educational adjacencies and space.

Of the following options, Options 2, 3 and 4 consider a grade 6-8 middle school model, and Options 5, 6 and 7 consider a grade 5-8 middle school model. Each of the 6-8 middle school options (Options 2, 3 and 4) include three separate building projects; the proposed middle school project and an independent project at two of the three existing Somerset Elementary Schools (South Elementary and Chace Elementary) to resolve current and growing issues of overcrowding and lack of special education space. As a long-term solution, this condition will need to be considered as part of the final evaluation and selection of a single option during the next design phase, Preferred Schematic Report (PSR).



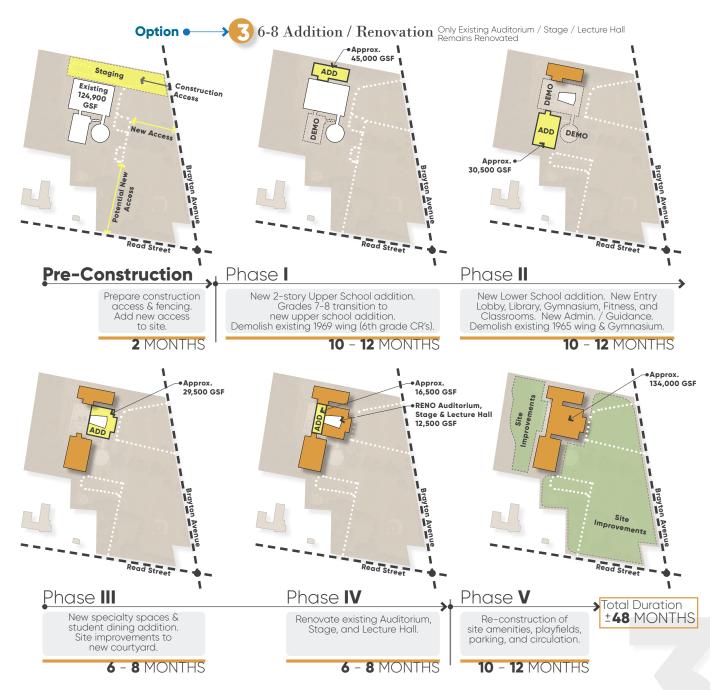
- <u>Project 1</u>: Renovate and expand the existing Somerset Middle School building and site for use as a 6-8 middle school. This option would require the existing middle school building to be incorporated into the proposed new construction.
- <u>Project 2</u>: Construct a new addition at the existing South Elementary School. (Independent of the proposed middle school project)
- <u>Project 3</u>: Construct a new addition at the existing Chace Elementary School. (Independent of the proposed middle school project)

This option has been accepted by the Town, School Department, School Committee, School Building Committee, Board of Selectmen, and design team as one of the three alternatives (options) considered in the Preferred Schematic Report (PSR) phase because of its economical benefit to the Town, its potential to maximize the available grant reimbursement funding, and, of the four addition/renovation options considered, this option allows for greater design opportunities and liberties while considering the priorities and goals captured in the visioning sessions from the potential educational innovation to the integration of the Town-wide Economic Masterplan.



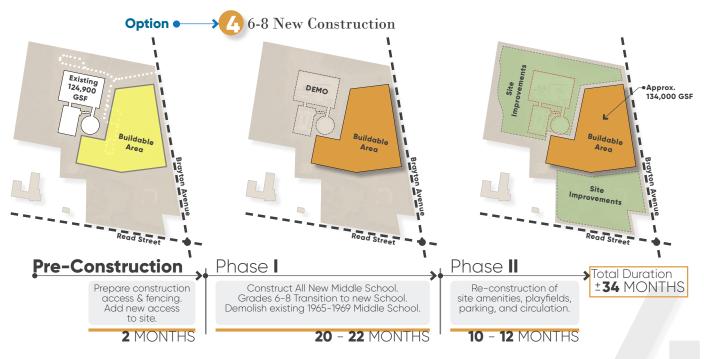
- Project 1: Renovate the existing auditorium, stage, and lecture hall only, and expand the existing Somerset Middle School building and site to create a new 6-8 middle school. This option would require approximately 10,000 gsf of the existing middle school building to be incorporated into the proposed new building. The remaining proposed gross floor area would be new construction.
- <u>Project 2</u>: Construct a new addition at the existing South Elementary School. (Independent of the proposed middle school project)
- <u>Project 3</u>: Construct a new addition at the existing Chace Elementary School. (Independent of the proposed middle school project)

This option was rejected by the Town, School Department, School Committee, School Building Committee, Board of Selectmen, and design team because it is significantly more expensive, it involves substantial educational disruption that would occur due to the multi-phased occupied construction, and it has a total project duration of approximately 48 months.

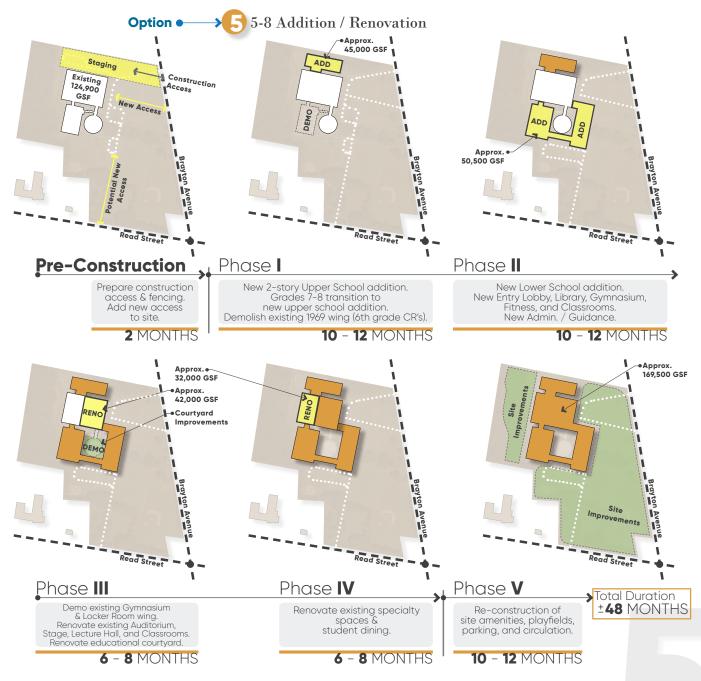


- <u>Project 1</u>: Construct an all-new 6-8 middle school on the existing Somerset Middle School site. The existing Somerset Middle School would be demolished upon completion of the new facility.
- <u>Project 2</u>: Construct a new addition at the existing South Elementary School. (Independent of the proposed middle school project)
- <u>Project 3</u>: Construct a new addition at the existing Chace Elementary School. (Independent of the proposed middle school project)

This option has been accepted by the Town, School Department, School Committee, School Building Committee, Board of Selectmen, and design team as one of the three alternatives (options) considered in the Preferred Schematic Report (PSR) phase because of its economic benefit to the Town (both short-term and long-term) and, of the grades 6-8 middle school options, it's the most sustainable and energy-efficient, resolves site vehicular circulation and parking challenges, and has the least impact to the Town, Community, and School during construction.

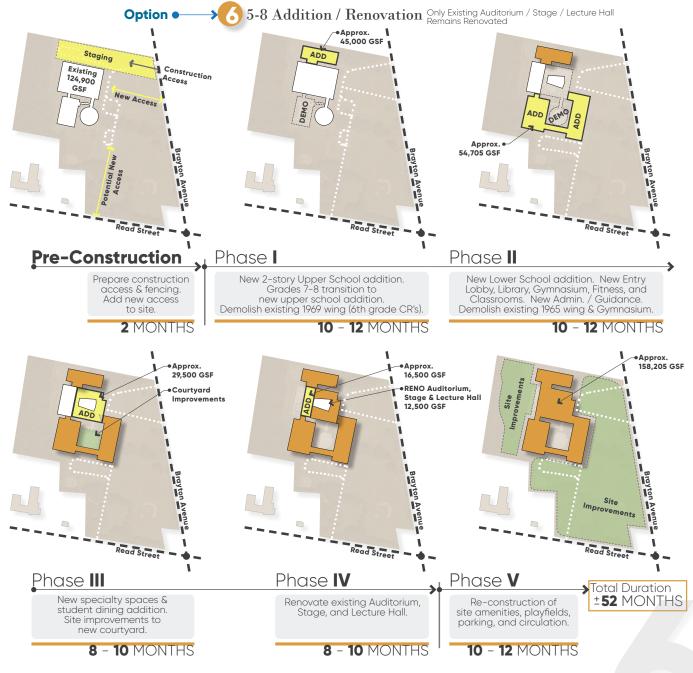


 Project 1: Renovate and expand the existing Somerset Middle School building and site for use as a 5-8 middle school (a co-located 5/6 and 7/8 school). This option would require the existing middle school building to be incorporated into the proposed new construction. Although similar to Option 2, this option has been rejected by the Town, School Department, School Committee, School Building Committee, Board of Selectmen, and design team because it is significantly more expensive in the long run, includes an extended construction schedule, and is educationally disruptive. This option is not fiscally and educationally responsible and therefore is not considered as an option moving forward.



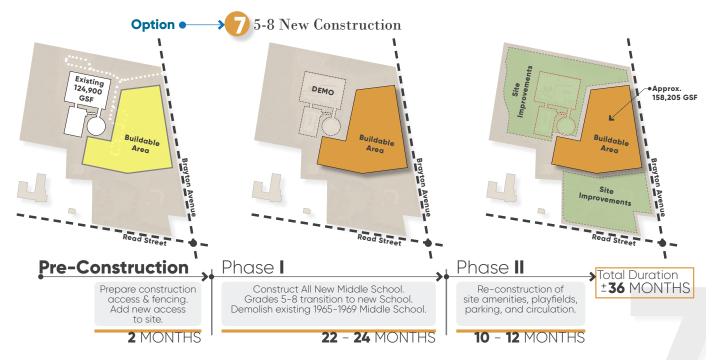
Renovate the existing auditorium, stage, and lecture hall only, and expand the existing Somerset Middle School building and site to create a new 5-8 middle school. This option would require approximately 10,000 gsf of the existing middle school building to be incorporated into the proposed new building. The remaining proposed gross floor area would be new construction.

Similar to Option 3, this option was rejected by the Town, School Department, School Committee, Building Committee, Board of Selectmen, and design team because it is significantly more expensive, it involves substantial educational disruption that would occur due to the multi-phased occupied construction, and it has a total project duration of approximately 52 months with the addition of the 5th grade class.



<u>Project 1</u>: Construct a new 5-8 middle school (a colocated 5/6 and 7/8 school) on the existing Somerset Middle School site. The existing Somerset Middle School would be demolished upon completion of the new facility.

This option has been accepted by the Town, School Department, School Committee, School Building Committee, Board of Selectmen, and design team as one of the three alternatives (options) considered in the Preferred Schematic Report (PSR) phase because of its short-term and long-term economic benefit to the Town. Of the three options that consider a grades 5–8 middle school model, this option is the least educationally disruptive, most sustainable and energy-efficient, resolves current site vehicular circulation and parking challenges, and has the least overall impact to the Town, Community, and School during construction.



Conclusion

Upon review of the options, the Town, School Department, School Committee, School Building Committee, and Board of Selectmen unanimously determined that pursuit of any options other than those defined in Options 2, 4, and 7 would be a waste of time and resources. The evidence shows that the existing middle school lacks the educational innovation, required program space, necessary program adjacencies, energy efficiency, and sustainability with which a newly constructed school would be outfitted. Although an addition/renovation was an option the Town desired to pursue, no option other than Option 2 was as fiscally responsible and would best meet the District's needs and future goals. This eliminates Options 1, 3, 5, and 6 as a consideration for any further development.

An evaluation of the scoring matrix (included at the end of this section) established as part of the Preliminary Design Program evaluation of options also provides a clear determination for Options 2, 4, and 7 as the best choices for the District. The evaluation criteria were established by many vested parties in the process and were determined to be an accurate depiction of the viability of potential options moving forward. As a result of these reasons and evaluations, Options 1, 3, 5, and 6 were eliminated from further consideration.

Therefore, the District is proposing that the three alternatives (options) considered in the Preferred Schematic Report (PSR) phase be as follows:

Option 2

Renovation and addition to the existing Somerset Middle School Building, creating a 6-8 middle school.

Option 4

New Construction of a 6-8 middle school on the existing middle school site. Demolish the existing middle school building.

Option 7

New Construction of a 5-8 middle school on the existing middle school site. Demolish the existing middle school building.

Preliminary Evaluation of Alternatives

Project Evaluation Criteria / Matrix

Project Evaluation Criteria / Matrix	Ontion 1	Ontion 2	Ontion 3	/ uoituO	Ontion 5	Ontion 6	Ontion 7
Somerset Public Schools, Somerset MA							
12.16.2019	Base Repair	6-8 Add/Reno	6-8 Add/Reno (Auditorium)	6-8 New	5-8 Add/Reno	5-8 Add/Reno (Auditorium)	5-8 New
Does the option integrate the current Town-wide Economic Masterplan attributes directly related to the Middle School site?	0	10	8	10	10	∞	10
2 Does the option sustain and/or expand playfield opportunities for the school and community?	0	8	9	10	8	9	10
Does the option reconfigure the existing Somerset Middle School site to maximize indoor/outdoor 3 space and amenities? The opportunities include: outdoor activity zone (educational space), outdoor dining area, amphitheater, fitness and running trails, and an outdoor entry plaza.	0	8	8	10	∞	∞	10
Does the option improve safety of the overall school environment by providing appropriate 4 automobile and bus circulation on site, as well as by providing sufficient parking for visitors, staff,	0	10	10	10	10	10	10
	0	8	4	10	8	4	10
Although it is understood that there will be some impact as part of the development of any new 6 project, does the option minimize impact to the Town, community, and School Department throughout construction?	0	9	2	10	9	2	10
7 Will the option have an immediate and recognizable impact on the K-8 school communities?	0	7	2	8	7	2	10
8 Does the option create a street presence and clearly identifiable main entrance to the building?	0	8	10	10	8	10	10
Does the option create a secure, safe, and welcoming entrance environment (greeting and gatekeeping) as identified during the educational visioning process?	0	10	10	10	10	10	10
Does the option create the necessary site organization and circulation to satisfy the safety and security concerns identified during the educational visioning process?	0	6	6	10	6	6	10
The sharing of resources among the school and community is one of the primary goals identified during the educational visioning process. The Town identified a strong desire to provide clear and 11 distinct separation between the community functions in the building from the core academic spaces. Does the proposed option provide clear access to the community while providing separation from the academic core of the building?	0	∞	Ŋ	10	∞	5	10
Does the option provide sufficient 21st Century educational space for middle school students within the Town of Somerset? Specifically, creating the much-needed project labs and hands-on 12 learning environments with fully integrated classrooms, as identified in the educational visioning sessions and educational program, and which are grossly absent from the existing middle school facility.	0	6	8	10	9	80	10
e option create the necessary adjacencies, program areas, transparency, exhibit space ey elements that were identified in the educational visioning and programming prot were deemed vital to an appropriate $21^{\rm st}$ Century learning environment?	0	4	9	10	4	9	10
Does the option create the necessary program space and adjacencies to support critical team teaching, collaboration, and parent engagement, which were identified in the educational visioning and programming process, and which were deemed vital to an appropriate 21st Century learning environment?	0	4	9	10	4	9	10
Does the option provide a middle school environment that includes all of the necessary program space and adjacencies to achieve the highly detailed goals and guiding principles established in the educational plan and the educational visioning workshops? Specifically, addressing the ideal educational environment for the serviced student population and any of their specialized needs.	0	4	9	10	4	Ø	10
16 Does the option provide swing space to eliminate the need for phased occupied construction?	0	8	9	10	∞	∞	10
Does the option avoid complicated and educationally disruptive phased occupied construction, which would negatively impact the teaching and learning environments during construction?	0	0	0	8	0	0	8
Does the option minimize impact to the educational environment by limiting construction 18 duration? (Shorter construction durations, which minimize impact to the school and community, are obviously more desirable.)	0	9	0	10	7	0	10
19 Does the option provide future expansion possibilities?	0	10	10	10	10	10	10
20 Does the option satisfy the School Committee's future planning goals?	0	8	4	10	80	4	10
Although it is understood that some portions of the project may not be eligible for MSBA grant 21 reimbursement funding, does the option maximize the available grant reimbursement funding? (Options which maximize the available grant reimbursement funding are highly desirable.)	0	10	ω	10	10	ω	10
Does the option minimize the Town's financial exposure by avoiding inflation or future changes/unknowns?	0	5	_	10	5	~	10
23 Is the option economical (cost to Somerset) compared to the other options? Does the option provide the most energy efficient solution, thereby minimizing long-term	0	8	0	10	9	0	10
_	o c	+ 9	ο α	21 01	+ (9	ο α	2 0
desig Does	0	4	8	10	4	- ω	10
Does the option create a middle school that will allow the 5/6 grade or 6th grade population to co-exist with the 7/8 grade population? Does the option resolve current adjacency challenges in the existing building by allowing all grade levels to share resources and educational opportunities, while simultaneously maintaining the necessary separations?	0	4	4	10	4	4	10
ls the proposed option educationally appropriate, fiscally responsible, and does it provide a solid long-term solution to school and facility needs in the Town?	0	8	0	10	∞	0	10
TOTALS	0	191	157	276	185	159	278



Preliminary Evaluation of Alternatives

Conceptual Cost Projections

		_					
	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
	Base Repair	6-8 Add/Reno	6-8 Add/Reno (Auditorium)	6-8 New Construction	5-8 Add/Reno	5-8 Add/Reno (Auditorium)	5-8 New Construction
New Construction GSF	0 SF	75,000 SF	120,981 SF	133,481 SF	95,500 SF	145,705 SF	158,205 SF
Renovation GSF	126,650 SF	74,000 SF	12,500 SF	0 SF	74,000 SF	12,500 SF	0 SF
Total GSF	126,650 SF	149,000 SF	133,481 SF	133,481 SF	169,500 SF	158,205 SF	158,205 SF
Hard Costs (Approx.)	\$31,200,000	\$71,000,000	\$66,000,000	\$66,500,000	\$81,000,000	\$78,500,000	\$79,500,000
Soft Costs (Approx.)	\$7,200,000	\$16,000,000	\$15,000,000	\$15,500,000	\$18,500,000	\$18,000,000	\$18,500,000
Occupied Phase Construction Premium	\$1,600,000	\$3,500,000	\$4,000,000	\$0	\$4,000,000	\$4,700,000	\$0
Subtotal Individual Project Cost (Range)	\$37 - \$42 million	\$ 88 - \$ 93	\$ 82 – \$ 87 million	\$ 80 – \$ 85 million	\$101 - \$106 million	\$ 98 – \$ 103 million	\$ 95 - \$ 100 million
Anticipated total INELIGIBLE costs	\$1,000,000	\$26,800,000	\$22,600,000	\$24,900,000	* \$32,500,000	* \$33,500,000	* \$36,000,000
Individual Project ELIGIBLE COSTS	\$36,000,000	\$64,000,000	\$62,500,000	\$57,000,000	\$71,000,000	\$67,700,000	\$62,000,000
MSBA Reimbursement on ELIGIBLE costs (56.89%)	\$20,500,000	\$36,500,000	\$35,500,000	\$32,500,000	\$40,400,000	\$38,500,000	\$35,200,000
Anticipated total ADDITIONAL MSBA REIMBURSEMENT	\$0	\$2,800,000	\$1,500,000	\$1,200,000	\$2,500,000	\$1,600,000	\$1,300,000
Adjusted TOTAL MSBA REIMBURSEMENT	\$20,500,000	\$39,000,000	\$37,000,000	\$33,700,000	\$42,900,000	\$40,100,000	\$36,500,000
Estimated Cost to Town of Somerset (Middle School Project)	\$14.5 - \$18.5 million	\$48.5 - \$54.5 million	\$ 45 – \$ 51 million	\$ 45.5 – \$ 51.5 million	\$ 57.5 – \$ 63.5 million	\$ 58.5 – \$ 64.5 million	\$ 58 - \$ 64 million
	Option	Option	Option	Option	Option	Option	Option

*Includes +/-30,000 GSF of 5th grade Program Space and associated Soft Costs - **Approx. \$11,500,000**

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Module 3 - Preliminary Design Program



Preliminary Evaluation of Alternatives

Recommendations for Further Work

rchitects, LLC recommends that a number of components in the feasibility study receive further and more detailed analysis during the next phase of the study and leading up to any recommendations regarding a Preferred Solution as follows:

- A preliminary site and building plan should be developed and analyzed for each option. This will enable an evaluation of the educational benefits that can be provided in the various options and the ability of each option to meet primary objectives defined in the educational visioning and the educational programming. A preliminary site plan will also allow an evaluation of the specific impact on existing playfields, parking, site security, site circulation.
- Cost estimates should be refined to reflect the specific preliminary site and building plans developed within the next phase of the feasibility study. These estimates should also be reviewed with MSBA to refine soft costs and potential eligible vs ineligible costs. Current costs estimates assume a specific \$/sf construction cost based on the existing site and building conditions and a database of similar projects. The renovation/ addition costs, along with the proposed costs of a new facility, should be evaluated in more detail in the next phase of the feasibility study.
- The district provided the professional team with a geotechnical report conducted in December 2005 on the existing high school site. This information has been reviewed and a subsequent letter provided with the team's analysis of the information. During the next phase of the feasibility study, the subsurface conditions should be further evaluated during the next phase to more specifically coordinate with the evaluation of the proposed options. This information will assist the design team with further recommendations regarding the type of foundations that should be considered. The information will also assist with refining the potential cost impact.
- A traffic impact analysis should be completed to analyze the existing onsite and offsite roadway conditions, traffic volumes, capacity analysis, and safety analysis. The traffic impact analysis should also review the "build conditions" and provide recommendations for improvements related to a newly proposed project.



Local Actions & Approvals

Local Actions & Approvals

he Local Actions and Approvals Certification Letter has been executed by the Town's Chief Executive Officer, the Superintendent of Schools, and the School Committee Chair, and is included herein. The meeting minutes for all Somerset Middle School Building Committee (SMSBC) Meetings noted on the certification letter are also included in this section. Each meeting packet includes the agenda, the meeting minutes, and handouts provided to and reviewed with the SMSBC. Each set of meeting minutes are approved by a vote of the committee at the beginning of the subsequent meeting. The vote approving and certifying the minutes are recorded in the minutes. All actions taken by the SMSBC are also recorded in the SMSBC meeting minutes. Actions are authorized by a vote of the committee, and the meeting minutes record the specific vote language and resulting vote.

In addition to the SMSBC Meetings, several other meetings were held during the development of the Preliminary Design Program with the various subcommittees, OPM, Designers, Town and State Officials, School Administrators and Staff.

This section includes the following:

- 1. Signed Local Actions and Approvals Certification
- 2. Somerset Middle School Building Committee Agendas and Meeting Minutes
- 3. Community Forum #1 Presentation Handout
- 4. Community Forum #2 Presentation Handout

Refer to **Appendix B** for all MSBA Board Actions and Approvals



Local Actions & Approvals

Certification Letter



Somerset Public Schools Somerset Berkley Regional School District

All Students Achieving Excellence

December 20, 2019

Ms. Mary Pichetti

Director of Capital Planning 40 Broad Street Boston, Massachusetts 02109

Dear Ms. Pichetti:

The Somerset Middle School Building Committee ("SBC") has completed its review of the Feasibility Study Preliminary Design Program Report for the Somerset Middle School project (the "Project"), and on December 16, 2019, the SBC voted to approve and authorize the Owner's Project Manager to submit the Feasibility Study related materials to the MSBA for its consideration. A certified copy of the SBC meeting minutes, which includes the specific language of the vote and the number of votes in favor, opposed, and abstained, are attached.

Since the MSBA's Board of Directors invited the District to conduct a Feasibility Study on October 31, 2018, the SBC has held sixteen (16) meetings regarding the proposed project, in compliance with the state Open Meeting Law. These meetings include:

School Building Committee Meetings

June 21, 2018	December 10, 2018	July 15, 2019
August 27, 2018	January 23, 2019	September 16, 2019
September 17, 2018	March 18, 2019	October 7, 2019
October 15, 2018	April 22, 2019	November 4, 2019
November 19, 2018	June 24, 2019	November 25, 2019
		December 16, 2019

Building Committee meetings and agendas were posted on the Town of Somerset website (townofsomerset.org), Somerset Town Hall outdoor bulletin, and on the School District website (somersetschools.org). Agendas and certified Meeting Minutes are enclosed. The presentation materials for each meeting, meeting minutes, and summary materials related to the Project are available locally for public review at the Superintendent's Office and on the District's website.



Local Actions & Approvals

SMSBC Meeting Minutes



TOWN OF SOMERSET MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Date & Time of Meeting:

Somerset Middle School Building Committee Thursday, June 21, 2018 at 6:00 pm

Location of Meeting:

Somerset Middle School Media Center, 1141 Brayton Ave., Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Administrative Assistant to the Superintendent

June 4, 2018

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Formal Establishment of Building Committee
- Recommendations and Vote of Building Committee Chair and Recording Secretary II.
- Next Steps with Feasibility Study III.
- IV. Other Matters

MEETING NO. __001

PROJECT:	Somerset Middle School Building
LOCATION:	1141 Brayton Avenue, Somerset, MA
MEETING LOCATION:	Somerset North Elementary School
TIME:	6:30 pm
DATE:	06/21/2018
NEXT MEETING:	08/27/2018
DISTRIBUTION:	Attendees; Richard Brown (rbrown@town.somerset.ma.us); Michael Botelho (michael.botelho@somersetschools.org); Holly McNamara (hmcnamara@town.somerset.ma.us); Paulina Camara (paulina.camara@somersetschools.org)

NAME	TITLE	TELEPHONE	E-Mail
JEFF SCHOONOVER	Superintendent of Schools	508-324-3100 (215)	schoonoverj@sbregional.org
LINDSEY ALBERNAZ	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
VICTOR MACHADO	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
EDWARD CALLAHAN	Assistant Principal @ SMS	508-324-3140	Edward.callahan@somersetschools.org
CHRIS GODET	Chair of Somerset Advisory	508-646-2800	Chr1513@msn.com
	and Finance Committee		
CARLOS CAMPOS	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
KATHLEEN BYERS	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
CASSEY MONTE	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
STEVEN MEDEIROS	Registered Architect	508-496-5027	smedeiros@bkaarchs.com
ROBERT LIMA	Superintendent of Somerset	508-	Rlma27351@yahoo.com
	HW/Water Dept., Retired		
KEVIN SCANLON	Licensed Mass. Construction	401-447-6446	Krscanlon819@yahoo.com
	Supervisor		

No.	DATE	ISSUES	ACTION
1.01	06/21/18	The Building Committee recommended and voted: 1. Steven Medeiros will be the Recording Secretary. 2. Lindsey Albernaz will be the Building Committee Chair. 3. Jeff Schoonover will be the Building Committee Vice-Chair.	Record
1.02	06/21/18	There will be thirteen (13) voting members including Mr. Edward Callahan. More than half voting members will be needed for a quorum.	Record

4 02	0//21/10	Statement of Interest submitted in March which states work	Lindsov
1.03	06/21/18	Statement of Interest submitted in March which states work needing to be addressed including, but not limited to, required maintenance.	Lindsey
		 May 1st is the start of the 270-day Eligibility Period which is broken out as follows: Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. Up to 90 days to submit the Educational Profile form (due July 31st). Up to 180 days to submit the Maintenance Document and Enrollment Certification. 	
		 Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21 st. 	
1.04	06/21/18	Chris Godet indicated that the SBC should be looking to accelerate the schedule, if possible. Lindsey indicated that the MSBA Board of Directors meet monthly and submission to the MSBA Board of Directors in October is realistic. The SBC will aim for October.	Record
1.05	06/21/18	Kevin Scanlon stated that the study should include 5 to 8 option s.	Record
1.06	06/21/18	It was stated that there are twelve classes at the South Elementary School (Two for each grade).	
1.07	06/21/18	Lindsey to begin work on Request for Qualifications (RFQ) for an Owner's Project Manager (OPM).	Lindsey
1.08	06/21/18	Two-year-old Capital Plan to be updated.	Record

ATTACHMENTS:

- 1. Draft of the Somerset Building Committee Form handed out to the Building Committee Members.
- 2. Town of Somerset Meeting Notice with documents from the Massachusetts School Building Authority (MSBA) website attached.

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.





TOWN OF SOMERSET **MEETING NOTICE**

Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee – SMS MSBA Building Committee Meeting Monday, August 27, 2018 at 6:30 pm Date & Time of Meeting:

Location of Meeting: Superintendent's Conference Room in North Elementary School,

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary August 14, 2018

Clerk/Board Member posting notice & date

Cancelled or postponed to:	
(circle cancelled/postponed)	
Clerk/Board Member cancelli	ing/postponing meeting

AGENDA / LIST OF TOPICS

- MSBA Deliverables I.
- Timeline II.
- Other Items III.

SMS: Somerset Middle School

MSBA: Massachusetts School Building Authority

MEETING NO. __002

PROJECT:	Somerset Middle School Building
LOCATION:	1141 Brayton Avenue, Somerset, MA
MEETING LOCATION:	Somerset North Elementary School
TIME:	6:30 pm
DATE:	08/27/2018
NEXT MEETING:	09/17/2018
UPCOMING MEETINGS:	10/15/2018 12/17/2018
DISTRIBUTION:	Attendees; Richard Brown (<u>rbrown@town.somerset.ma.us</u>); Edward Callahan (<u>Edward.callahan@somersetschools.org</u>)

NAME	TITLE	TELEPHONE	E-MAIL
HOLLY MCNAMARA	Chair of the Somerset Board	508-646-2800	hmcnamara@town.somerset.ma.us
	of Selectmen		
JEFF SCHOONOVER	Superintendent of Schools	508-324-3100 (215)	schoonoverj@sbregional.org
LINDSEY ALBERNAZ	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
VICTOR MACHADO	School Committee Member	774-488-4349	<u>Victor.machado@somersetschools.org</u>
MICHAEL BOTELHO	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
PAULINE CAMARA	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
CHRIS GODET	Chair of Somerset Advisory	508-646-2800	Chr1513@msn.com
	and Finance Committee		
CARLOS CAMPOS	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
KATHLEEN BYERS	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
CASSEY MONTE	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
STEVEN MEDEIROS	Registered Architect	508-496-5027	smedeiros@bkaarchs.com
ROBERT LIMA	Superintendent of Somerset	508-	Rlma27351@yahoo.com
	HW/Water Dept., Retired		
KEVIN SCANLON	Licensed Mass. Construction	401-447-6446	Krscanlon819@yahoo.com
	Supervisor		

No.	DATE	ISSUES	ACTION
1.03			Lindsey
		There will be a Monday, September 10 th Meeting with the MSBC who are looking to hear from the Town. Jeff Schoonover, Lindsey Albernaz and Victor Machado will attend the meeting and present floor plans of the elementary schools and show that there is not much extra space in these schools. The group will give Enrollment Certificate for completion and provide enrollment numbers and projected numbers based on Somerset birth rates. Jeff Schoonover distributed copies of the MSBA Enrollment Projection – Somerset dated August, 2018 to the group which shows historic enrollment data.	Jeff, Lindsey, Victor

	06/21/18	Statement of Interest submitted in March which states work needing to be addressed including, but not limited to, required maintenance. May 1 st is the start of the 270-day Eligibility Period which is broken out as follows: 1. Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. 2. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. 3. Up to 90 days to submit the Educational Profile form (due July 31 st). 4. Up to 180 days to submit the Maintenance Document and Enrollment Certification. 5. Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21 st .	Lindsey
1.04	08/27/18	Paperwork will be filed on October 30th to get on the docket for the December meeting.	Record
	06/21/18	Chris Godet indicated that the SBC should be looking to accelerate the schedule, if possible. Lindsey indicated that the MSBA Board of Directors meet monthly and submission to the MSBA Board of Directors in October is realistic. The SBC will aim for October.	Record
1.07	08/27/18	Work on the RFQ will pick up later; the focus at this time is the submission to the MSBC. This item will pick back up after the December MSBC meeting.	
	06/21/18	Lindsey to begin work on Request for Qualifications (RFQ) for an Owner's Project Manager (OPM).	Lindsey

II NEW BUSINESS ITEMS				
No.	DATE	ISSUES	ACTION	
2.01	08/27/18	Victor Machado motioned to approve the SMS Building Committee Meeting Minutes No. 001. The content of the meeting minutes was approved and passed by the SBC.	Record	

ATTACHMENTS:

1. MSBA Enrollment Projection – Somerset dated August, 2018

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



TOWN OF SOMERSET

MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee:

Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting:

Monday, September 17, 2018 at 6:30 pm

Location of Meeting:

Superintendent's Conference Room in North Elementary School,

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Administrative Assistant to the Superintendent

September 5, 2018

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

GENDA / LIST OF TOPICS

- MSBA Deliverables I.
- II. Timeline
- III. Other Matters

MSBA: Massachusetts School Building Authority

MEETING NO. _003

Project:	Somerset Middle School Building		
Project Location: 1141 Brayton Avenue, Somerset			
Meeting Location: Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA			
Time: 6:30 pm			
Date:	09/17/2018		
Next Meeting:	10/15/2018		
Upcoming	11/19/2018		
Meetings:	12/17/2018		

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools	508-324-3100 (215)	schoonoverj@sbregional.org
Lindsey Albernaz	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara (Absent)	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet	Chair of Somerset Advisory and Finance Committee	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros (Absent)	Registered Architect	508-496-5027	smedeiros@bkaarchs.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting)	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

I OLD BUSINESS ITEMS				
No.	Date	Issues	Action	
1.03	09/17/18	Meeting held on September 10 th with the MSBA with Lindsey Albernaz, Victor Machado and Jeff Schoonover to discuss the enrollment projections for the Middle School utilizing a 6-8 grade structure and a 5-8 grade structure. The MSBA indicated the max population projection for the 6-8 grade configuration to be 595 students on average for the next 10 years.	N/a	

	Enrollment Projection sheets shared at the meeting were circulated to members of the Building Committee for review. MSBA projected a decline of population over the next 10 years. Jeff Schoonover indicated that Families are moving into Town and more kids are coming in to the District than moving out, which is not indicated on the MSBA projection sheet. MSBA assumes birth rates for the majority of projections. Lindsey Albernaz discussed the maintenance document and indicated it would be finalized by the end of the week of 09/19/2018.	Lindsey and Jeff
	Both the Maintenance Document and Signed Enrollment Certificate would need to be signed 10/30/18 and submitted to meet the December MSBA Board of Directors meeting.	Record
	Kevin Scanlon made a motion to authorize the building committee to look at both options of the Middle School grade configuration (6-8 and 5-8), seconded by Victor Machado. Board voted unanimously in favor.	Record
08/27/18	The Educational Profile and Maintenance Documents & Enrollment Certification will be submitted on October 30th to get on the MSBC Board meeting on Wednesday, December 12th.	Lindsey
	There will be a Monday, September 10 th Meeting with the MSBC who are looking to hear from the Town. Jeff Schoonover, Lindsey Albernaz and Victor Machado will attend the meeting and present floor plans of the elementary schools and show that there is not much extra space in these schools. The group will give Enrollment Certificate for completion and provide enrollment numbers and projected numbers based on Somerset birth rates. Jeff Schoonover distributed copies of the MSBA Enrollment Projection – Somerset dated August, 2018 to the group which shows historic enrollment data.	Jeff, Lindsey, Victor
06/21/18	Statement of Interest submitted in March which states work needing to be addressed including, but not limited to, required maintenance. May 1st is the start of the 270-day Eligibility Period which is broken out as follows: 1. Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. 2. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. 3. Up to 90 days to submit the Educational Profile form (due July 31st). 4. Up to 180 days to submit the Maintenance Document and Enrollment Certification. 5. Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21st.	Lindsey

	W BUSINES		
No.	Date	Issues	Action

Lindsey Albernaz made a motion to adjourn meeting. Seconded by Jeff Schoonover. Voted unanimously to adjourn meeting at 7:15pm.

ATTACHMENTS:

1. MSBA Enrollment Projection – Dated September 2018

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Lindsey Albernaz if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



TOWN OF SOMERSET **MEETING NOTICE**

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Somerset School Committee - Somerset Middle School MSBA Building Name of Board or Committee:

Committee

Date & Time of Meeting: Monday, October 15, 2018 at 6:30 pm

Location of Meeting: Superintendent's Conference Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Administrative Assistant to the Superintendent

October 4, 2018

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- MSBA Deliverables I.
- II. Timeline
- III. Other Matters

MSBA: Massachusetts School Building Authority

MEETING NO. __004

Project:	Somerset Middle School Building			
Project Location:	on: 1141 Brayton Avenue, Somerset, MA			
Meeting Location: Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA				
Time:	6:30 pm			
Date:	10/27/2018			
Next Meeting: 11/19/2018				
Upcoming Meetings:	12/17/2018			
Distribution: Attendees; Richard Brown (rbrown@town.somerset.ma.us); Edward Callahan (Edward.callahan@somersetschools.org)				

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools	508-324-3100 (215)	schoonoverj@sbregional.org
Lindsey Albernaz	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet	Chair of Somerset Advisory and Finance Committee	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte	Teacher at SMS	508-324-3140	Cassey.montedsomersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@bkaarchs.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting)	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

No.	Date	Issues	Action
1.03	10/15/18	Maintenance Document and Signed Enrollment Certificate were submitted on the week of September 24 th . Projection numbers were included in the Enrollment Letter.	Record

		Lindsey Albernaz, Michael Botelho, Victor Machado and Jeff Schoonover to attend board meeting on October 31 st. Looking to get the approval to move forward. SMS Committee will review next meeting.	Lindsey/ Michael/ Victor/Jeff
4 1	an advanta parent parant parent parant parent parant parent parant parent parant parent paren	Exhibit A was sent in by October 10 th .	Record
	eres investigation and the control of the control o	Cost of grade 5 will not be reimbursed by the MSBC; The MSBC will only reimburse for grades 6 – 8 option. Kevin Scanlon indicated that the grade 5 option should be included in the study.	Record
	09/17/18	Meeting held on September 10 th with the MSBA with Lindsey Albernaz, Victor Machado and Jeff Schoonover to discuss the enrollment projections for the Middle School utilizing a 6-8 grade structure and a 5-8 grade structure. The MSBA indicated the max population projection for the 6-8 grade configuration to be 595 students on average for the next 10 years.	N/a
		Enrollment Projection sheets shared at the meeting were circulated to members of the Building Committee for review. MSBA projected a decline of population over the next 10 years. Jeff Schoonover indicated that Families are moving into Town and more kids are coming in to the District than moving out, which is not indicated on the MSBA projection sheet. MSBA assumes birth rates for the majority of projections. Lindsey Albernaz discussed the maintenance document and indicated it would be finalized by the end of the week of 09/19/2018.	Lindsey and Jeff
		Both the Maintenance Document and Signed Enrollment Certificate would need to be signed 10/30/18 and submitted to meet the December MSBA Board of Directors meeting.	Record
		Kevin Scanlon made a motion to authorize the building committee to look at both options of the Middle School grade configuration (6-8 and 5-8), seconded by Victor Machado. Board voted unanimously in favor.	Recor d
	08/27/18	The Educational Profile and Maintenance Documents & Enrollment Certification will be submitted on October 30th to get on the MSBC Board meeting on Wednesday, December 12th.	Lindsey
		There will be a Monday, September 10 th Meeting with the MSBC who are looking to hear from the Town. Jeff Schoonover, Lindsey Albernaz and Victor Machado will attend the meeting and present floor plans of the elementary schools and show that there is not much extra space in these schools. The group will give Enrollment Certificate for completion and provide enrollment numbers and projected numbers based on Somerset birth rates. Jeff Schoonover distributed copies of the MSBA Enrollment Projection – Somerset dated August, 2018 to the group which shows historic enrollment data.	Jeff, Lindsey, Victor
Consideration and white the constant and		Statement of Interest submitted in March which states work needing to be addressed including, but not limited to, required maintenance.	

	06/21/18	 May 1st is the start of the 270-day Eligibility Period which is broken out as follows: Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. Up to 90 days to submit the Educational Profile form (due July 31st). Up to 180 days to submit the Maintenance Document and Enrollment Certification. Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21st. 			
1.04	10/15/18	Close; Refer to line item 1.03.	Closed		
	08/27/18	Paperwork will be filed on October 30th to get on the docket for the December meeting.	Record		
	06/21/18	Chris Godet indicated that the SBC should be looking to accelerate the schedule, if possible. Lindsey indicated that the MSBA Board of Directors meet monthly and submission to the MSBA Board of Directors in October is realistic. The SBC will aim for October.			
1.07	10/15/18	Group reviewed OPM and Architect selection process. Subcommittee to be discussed at the next meeting.	Record		
	08/27/18	Work on the RFQ will pick up later; the focus at this time is the submission to the MSBC. This item will pick back up after the December MSBC meeting.			
	06/21/18	Lindsey to begin work on Request for Qualifications (RFQ) for an Owner's Project Manager (OPM).	Lindsey		
3.01	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record		

II NEV	W BUSINESS	ITEMS	
No.	Date	Issues	Action
4.01	10/15/18	SMS Building Committee Meeting Minutes No. 002 and 003 were reviewed and passed by the SBC.	Record

ATTACHMENTS:

1. None

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



TOWN OF SOMERSET MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Monday, November 19, 2018 at 6:00 pm Date & Time of Meeting:

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vacearo, Administrative Assistant to the Superintendent November 7, 2018

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- October 31 MSBA Board of Directors Meeting Result I.
- Feasibility Study Timeline II.
- III. Owner's Project Manager (OPM) Review Subcommittee
- Request for Services (RFS) Template Review Meeting Schedule IV.
- V. Minutes Review and Approval
- Other Items VI.

MSBA: Massachusetts School Building Authority

MEETING NO. <u>005</u>

Project:	Somerset Middle School Building		
Project Location: 1141 Brayton Avenue, Somerset, MA			
Meeting Location: Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA			
Time:	6:00 pm – 7:00 pm		
Date:	11/19/2018		
Next Meeting:	12/10/2018		
Upcoming Meetings:	01/23/2019 02/04/2019		

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools	508-324-3100 (215)	schoonoveri@sbregional.org
Lindsey Albernaz (OPM Selection Sub-Committee)	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara (Absent)	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal ด SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet (Absent)	Chair of Somerset Advisory and Finance Committee	508-646-2800	<u>Chr1513@msn.com</u>
Carlos Campos (OPM Selection Sub-Committee)	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.montedsomersetschools.org
Steven Medeiros (OPM Selection Sub-Committee)	Registered Architect	508-496-5027	smedeiros@bkaarchs.com
Robert Lima (OPM Selection Sub-Committee)	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon (OPM Selection Sub-Committee)	Licensed Mass. Construction Supervisor	401-447-6446	<u>Krscanlon819@yahoo.com</u>
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting) - Absent	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

Vo.	Date	Issues	Action
.03	11/19/18	SMSBC members who volunteered to meet with the MSBA Board were not required to travel into Boston for the October 31 st meeting. Instead the MSBA Board discussed and approved the SMSBC's moving forward via a conference call. (Close.)	Record/ Close
	10/15/18	Maintenance Document and Signed Enrollment Certificate were submitted on the week of September 24 th . Projection numbers were included in the Enrollment Letter.	Record
		Lindsey Albernaz, Michael Botelho, Victor Machado and Jeff Schoonover to attend board meeting on October 31 st . Looking to get the approval to move forward. SMS Committee will review next meeting.	Lindsey/ Michael/ Victor/Jef
		Exhibit A was sent in by October 10 th .	Record
		Cost of grade 5 will not be reimbursed by the MSBC; The MSBC will only reimburse for grades 6 – 8 option. Kevin Scanlon indicated that the grade 5 option should be included in the study.	Record
	09/17/18	Meeting held on September 10 th with the MSBA with Lindsey Albernaz, Victor Machado and Jeff Schoonover to discuss the enrollment projections for the Middle School utilizing a 6-8 grade structure and a 5-8 grade structure. The MSBA indicated the max population projection for the 6-8 grade configuration to be 595 students on average for the next 10 years.	N/a
		Enrollment Projection sheets shared at the meeting were circulated to members of the Building Committee for review. MSBA projected a decline of population over the next 10 years. Jeff Schoonover indicated that Families are moving into Town and more kids are coming in to the District than moving out, which is not indicated on the MSBA projection sheet. MSBA assumes birth rates for the majority of projections. Lindsey Albernaz discussed the maintenance document and indicated it would be finalized by the end of the week of 09/19/2018.	Lindsey and Jeff
	To refer the control of the control	Both the Maintenance Document and Signed Enrollment Certificate would need to be signed 10/30/18 and submitted to meet the December MSBA Board of Directors meeting.	Record
	TOTAL TOTAL CONTINUES OF THE STATE OF THE ST	Kevin Scanlon made a motion to authorize the building committee to look at both options of the Middle School grade configuration (6-8 and 5-8), seconded by Victor Machado. Board voted unanimously in favor.	Record
	08/27/18	The Educational Profile and Maintenance Documents & Enrollment Certification will be submitted on October 30th to get on the MSBC Board meeting on Wednesday, December 12th.	Lindsey

and Victor Machado will attend the meeting and present floor plans of the elementary schools and show that there is not much extra space in these schools. The group will give Enrollment Certificate for completion and provide enrollment numbers and projected numbers based on Somerset birth rates. Jeff Schoonover distributed copies of the MSBA Enrollment Projection – Somerset dated August, 2018 to the group which shows historic enrollment data. Statement of Interest submitted in March which states work needing to be addressed including, but not limited to, required maintenance. May 1st is the start of the 270-day Eligibility Period which is broken out as follows: 1. Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. 2. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. 3. Up to 90 days to submit the Educational Profile form (due July 31st). 4. Up to 180 days to submit the Maintenance Document and Enrollment Certification. 5. Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21st. 1.07 11/19/18 The SMSBC discussed potential candidates for the five member OPM Selection Sub-Committee for a vote. After discussion Victor Machado motioned to have the Sub-Committee Members be Lindsey Albernaz, Carlos Campos, Robert Lima, Kevin Scanlon and Steven Medeiros. Michael Botelho seconded the motion. All SMSBC voting members present voted unanimously in favor. Lindsey Albernaz to discuss OPM Selection Sub-Committee at the School Committee Meeting tomorrow (11/20) night. Kevin Scanlon recommended that the OPM Selection Sub-			to the State of the Colon State
May 1st is the start of the 270-day Eligibility Period which is broken out as follows: 1. Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. 2. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. 3. Up to 90 days to submit the Educational Profile form (due July 31st). 4. Up to 180 days to submit the Maintenance Document and Enrollment Certification. 5. Up to 270 days to submit Local Authorization of Funding. This item was completed on May 21st. 1.07 11/19/18 The SMSBC discussed potential candidates for the five member OPM Selection Sub-Committee Members be Lindsey Albernaz, Carlos Campos, Robert Lima, Kevin Scanlon and Steven Medeiros. Michael Botelho seconded the motion. All SMSBC voting members present voted unanimously in favor. Lindsey Albernaz to discuss OPM Selection Sub-Committee at the School Committee Meeting tomorrow (11/20) night. Kevin Scanlon recommended that the OPM Selection Sub-		are looking to hear from the Town. Jeff Schoonover, Lindsey Albernaz and Victor Machado will attend the meeting and present floor plans of the elementary schools and show that there is not much extra space in these schools. The group will give Enrollment Certificate for completion and provide enrollment numbers and projected numbers based on Somerset birth rates. Jeff Schoonover distributed copies of the MSBA Enrollment Projection – Somerset dated August, 2018 to the group which shows historic enrollment data. Statement of Interest submitted in March which states work needing	Lindsey,
1.07 11/19/18 The SMSBC discussed potential candidates for the five member OPM Selection Sub-Committee for a vote. After discussion Victor Machado motioned to have the Sub-Committee Members be Lindsey Albernaz, Carlos Campos, Robert Lima, Kevin Scanlon and Steven Medeiros. Michael Botelho seconded the motion. All SMSBC voting members present voted unanimously in favor. Lindsey Albernaz to discuss OPM Selection Sub-Committee at the School Committee Meeting tomorrow (11/20) night. Kevin Scanlon recommended that the OPM Selection Sub-Record	06/21/1	 May 1st is the start of the 270-day Eligibility Period which is broken out as follows: Up to 30 days to submit Initial Compliance Certification (ICC) form. The form has been submitted. Up to 60 days to submit School Building Committee (SBC) form. Copy of the document distributed to the group for their record and review. Who should sign the document? Lindsey Albernaz to look into the Somerset By-Laws. Up to 90 days to submit the Educational Profile form (due July 31st). Up to 180 days to submit the Maintenance Document and Enrollment Certification. Up to 270 days to submit Local Authorization of Funding. This 	Lindsey
School Committee Meeting tomorrow (11/20) night. Kevin Scanlon recommended that the OPM Selection Sub-	1.07 11/19/1	OPM Selection Sub-Committee for a vote. After discussion Victor Machado motioned to have the Sub-Committee Members be Lindsey Albernaz, Carlos Campos, Robert Lima, Kevin Scanlon and Steven Medeiros. Michael Botelho seconded the motion. All	Record
			Lindsey
Committee short list the applications received down to three candidates to be interviewed by the entire SMSBC.		Committee short list the applications received down to three	Record
Lindsey Albernaz to have a MSBA OPM Selection Panel Review conference call with Alison Jones (MSBA) on Monday, March 4 th .		Lindsey Albernaz to have a MSBA OPM Selection Panel Review conference call with Alison Jones (MSBA) on Monday, March 4 th .	Lindsey
10/15/18 Group reviewed OPM and Architect selection process. Subcommittee to be discussed at the next meeting.	10/15/18		Record
08/27/18 Work on the RFQ will pick up later; the focus at this time is the submission to the MSBC. This item will pick back up after the December MSBC meeting.	08/27/18	submission to the MSBC. This item will pick back up after the	Record
06/21/18 Lindsey to begin work on Request for Qualifications (RFQ) for an Owner's Project Manager (OPM).	06/21/18	Lindsey to begin work on Request for Qualifications (RFQ) for an	Lindsey

3.01	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 Record allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	
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Nο.	Date	Issues	Action
5.01	11/19/18	The SMS Building Committee Meeting Minutes No. 004 dated 10/27/18 were reviewed. Kevin Scanlon motioned to approve the minutes. Lindsey Albernaz seconded the motion. All SMSBC members present voted unanimously in favor.	Record
5.02	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades 5 – 8 or grades 6 – 8. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
5.03	11/19/18	The SMSBC reviewed the proposed timeline. The following changes were suggested: Submit for the Central Registry Advertisement on or before Thursday, December 13th by 4:00 pm so that the advertisement is posted on Wednesday, December 19th. Week of January 17th: Sub-Committee meets to rate and evaluate respondents. Tuesday, January 23rd (5pm - 8pm - Tentative): Candidates interviewed by the SMSBC. (Snow day: Wednesday, January 24th.	Record

- Narrative of Selection Process
 Feasibility Study Timeline 11.19.2018 Building Committee Meeting (Dates to be Updated)

The proceeding represents the place discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above placerrect or unclear passe placers shall be accepted as accurate unless Medeiros if any of the above Macorrect or unclear corrections or additions a Tale of issue.

DATE: 2/21/2019



MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, December 10, 2018 at 5:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, December 6, 2018 Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

GENDA / LIST OF TOPICS

- Interviews for Owner's Project Manager I.
- II. Review and Approval of Minutes
- III. Other Items

MEETING NO. <u>006</u>

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, S80 Whetstone Hill Road, Somerset, MA (Conference Room)
Time:	6:00 pm - 6:15 pm
Date:	12/10/2018
Next Meeting:	01/23/2019
Upcoming Meetings:	To be Determined

ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools	508-324-3100 (215)	schoonoveri@sbregional.org
Lindsey Albernaz (OPM Selection Sub- Committee)	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara (Absent)	Principal @ SMS	S08-324-3140	Paulina.camara@somersetschools.org
Edward Callahan	Vice Principal @ SMS	508-324-3140	Edward Callahan@somersetschools.org
Chris Godet	Chair of Somerset Advisory and Finance Committee	S08-646-2800	Chr1S13@msn.com
Carlos Campos (OPM Selection Sub- Committee)	Supervisor Bldgs & Grounds	S08-965-3541	camposc@sbregional.org
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey monte@somersetschools.org
Steven Medeiros (OPM Selection Sub- Committee)	Registered Architect	S08-496-S027	smedeiros@civitects.com
Robert Lima (OPM Selection Sub- Committee)	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma273S1@yahoo.com
Kevin Scanlon (OPM Selection Sub- Committee)	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting) - Absent	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

No.	Date	Issues	Action
1.07	12/10/18	The members of the OPM Selection Sub-Committee provided their comments regarding the RFS for an OPM. Suggested changes were made and distributed to the SMSBC for their review prior to the meeting. Members in attendance were asked if there were any additional comments or suggested changes. There were no comments or suggested changes. Kevin Scanlon motioned to approve the proposed RFS. Robert Lima seconded the motion. SMSBC voted to unanimously approve the RSF for an OPM.	Record/ Close
	11/19/18	The SMSBC discussed potential candidates for the five member OPM Selection Sub-Committee for a vote. After discussion Victor Machado motioned to have the Sub-Committee Members be Lindsey Albernaz, Carlos Campos, Robert Lima, Kevin Scanlon and Steven Medeiros. Michael Botelho seconded the motion. All SMSBC voting members present voted unanimously in favor.	Record
		Lindsey Albernaz to discuss OPM Selection Sub-Committee at the School Committee Meeting tomorrow (11/20) night.	Lindsey
		Kevin Scanlon recommended that the OPM Selection Sub-Committee short list the applications received down to three candidates to be interviewed by the entire SMSBC.	Record
		Lindsey Albernaz to have a MSBA OPM Selection Panel Review conference call with Alison Jones (MSBA) on Monday, March 4 th .	Lindsey
	10/15/18	Group reviewed OPM and Architect selection process. Subcommittee to be discussed at the next meeting.	Record
	08/27/18	Work on the RFQ will pick up later; the focus at this time is the submission to the MSBC. This item will pick back up after the December MSBC meeting.	Record
	06/21/18	Lindsey to begin work on Request for Qualifications (RFQ) for an Owner's Project Manager (OPM).	Lindsey
.01	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated \$7% reimbursement rate for the Feasibility Study process.	Record
.01	11/19/18	The SMS Building Committee Meeting Minutes No. 004 dated 10/27/18 were reviewed. Kevin Scanlon motioned to approve the minutes. Lindsey Albernaz seconded the motion. All SMSBC members present voted unanimously in favor.	Record
02	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades 5 – 8 or grades 6 – 8. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record

		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
5.03	11/19/18	The SMSBC reviewed the proposed timeline. The following changes were suggested: Submit for the Central Registry Advertisement on or before Thursday, December 13th by 4:00 pm so that the advertisement is posted on Wednesday, December 19th. Week of January 17th: Sub-Committee meets to rate and evaluate respondents. Tuesday, January 23rd (5pm – 8pm – Tentative): Candidates interviewed by the SMSBC. (Snow day: Wednesday, January 24th.	Record

I NEW BUSINESS ITEMS		
Date	Issues	Action
12/10/18	There was no new business.	
	Date	Date Issues

1. No attachments.

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as occurate unless corrections or additions ore received with one week of the date of issue.

Steven Medeiros

Date



TOWN OF SOMERSET MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Somerset School Committee - Somerset Middle School MSBA Building Name of Board or Committee:

Committee

Monday, January 23, 2019 at 6:30 pm Date & Time of Meeting:

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, March 12, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Owner's Project Manager Contract
- Owner's Project Manager Timeline II.
- Owner's Project Manager Update Compass Group Architecture (CGA) III.
- Approval of Minutes of December 10, 2018 and January 23, 2019 IV.
- V. Other Items

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	5:00 pm – 8:15 pm
Date:	01/23/2019
Next Meeting:	03/18/2019
Upcoming Meetings:	To be Determined

ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools	508-324-3100 (215)	schoonoverj@sbregional.org
Lindsey Albernaz	Dir. of Business & Fin., SPS	508-324-3100 (212)	albernazl@sbregional.org
(OPM Selection			
Sub-Committee)			
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	School Committee Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
(Absent)			
Chris Godet	Chair of Somerset Advisory	508-646-2800	Chr1513@msn.com
(Absent)	and Finance Committee	-	
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
(OPM Selection			
Sub-Committee)			
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
(Absent)			
Cassey Monte	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
(OPM Selection			
Sub-Committee)			
Robert Lima	Superintendent of Somerset	508-672-1272	Rlma27351@yahoo.com
(OPM Selection	Water Dept., Retired	774-713-0480	
Sub-Committee)			
Kevin Scanlon	Licensed Mass.	401-447-6446	Krscanlon819@yahoo.com
(OPM Selection	Construction Supervisor		
Sub-Committee)			
Holly McNamara	Chair of the Somerset	508-646-2800	hmcnamara@town.somerset.ma.us
(Non-Voting) -	Board of Selectmen		
Absent			
Steve Moniz	Board of Selectmen,	508-646-2800	smoniz@town.somerset.ma.us
(Non-Voting) -	Member		
Absent	STORY DESCRIPTION OF THE STORY		
Richard Brown	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us
[Non-voting] -		Construction of Allice Constitution	
Absent			

No.	Date	Issues	Action
3.01	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades 5 – 8 or grades 6 – 8. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
5.03	01/23/19	The sub-committee met on the morning of Wednesday, January 16 th to review scores provided by each member of the Committee. The top scores went to Colliers International, Hill International and CGA. Lindsey Albernaz contacted each candidate to notify them of the results and schedule interviews with the SMSBC.	Record/ Close
	11/19/18	The SMSBC reviewed the proposed timeline. The following changes were suggested: Submit for the Central Registry Advertisement on or before Thursday, December 13th by 4:00 pm so that the advertisement is posted on Wednesday, December 19th. Week of January 17th: Sub-Committee meets to rate and evaluate respondents. Tuesday, January 23rd (5pm – 8pm – Tentative): Candidates interviewed by the SMSBC. (Snow day: Wednesday, January 24th.	Record

II NE	W BUSINESS	ITEMS	
No.	Date	Issues	Action
7.01	01/23/19	Meeting minutes from the interview in the order in which the interviews were held:	
		I. Colliers International (CI)	Record
		Presenters: Ken Guyette, MCPPO (Project Director) Charlie Roberts (Project Manager) Dan Daisy, LEED AP (Construction Representative) One page hand-out and copy of the presentation was handed out to the Committee.	

- CI noted MSBA Experience and knowledge of MSBA Form 3011
 - A. CI noted that they have not had an MSBA project that has gone over budget.
- 3. C! highlighted the following projects:
 - A. West Bridgewater Middle/Senior High School
 - Renovation project with \$3,000,000 savings. CI noted that this project is very similar the upcoming Somerset Middle School Project.
 - B. Colegrave Park Elementary School (Grades K-7)
 - CI had a big issue with the General Contractor.
 - C. West Springfield, MA High School
 - CI noted that this was a model school and that the project finishes early.
 - D. Cape Cod Tech. New School Building
 - Twelve Districts were involved.
 - \$128,000,000 project.
- 4. CI stressed focus on project cost, quality and schedule.
- 5. Cl aggressively went after contractors to bid the projects.
- CI noted that there needs to be a health balance between the Contractor and the General Contractor. CI stressed that they are not contractors or architects acting as OPMs. They are only OPMs.
- 7. SMSBC Questions and responses:
 - A. With your group's current ongoing projects, how will
 you make the Somerset Middle School project a priority
 and accommodate our timeline?
 CI Response: CI considers themselves an extension of
 the SMSBC and will be available for the project.
 - B. How will your group manage the Committee's desire to look at dual track work, specific to a Grade 5-Grade 8 Middle School project and also Grade 6 Grade 8 Middle School project?

 CI Response: CI will work with the Committee to determine the best method of going forward.
 - C. How does your group approach issues with Change Orders, whether brought on by unexpected project issues or through specific Owner requests? CI Response: CI recommended creating a change order committee at the start of construction. CI has documents that contain strong language which, they feel, will mitigate change orders.

- D. What type of assistance do you provide to the Committee to move projects along and obtain Town support?
 - Cl Response: Cl noted that social media is a very important tool. Listening sessions are key and need to include students, parents and staff/administration.
- E. How does CI handle people leaving the company? CI Response: CI has several locations. CI handles the project as a team and not as individuals.
- F. You mentioned that there was a big issue with the contractor for the Colegrave Park Elementary School. What was the issue and how was it resolved? CI Response: The GC mismanaged the project schedule. To resolve the issue CI stayed on top of the issue until it was resolved.

II. Hill International (HI)

Record

Presenters:

- Paul Kalous, AIA, MCPPO (Project Director)
- Inger Hamre-Foley, MCPPO (Project Manager)
- Jim Devol, LEED AP (Public Outreach Lead)
- 1. One page hand-out and copy of the presentation was handed out to the Committee.
- 2. HI indicated that the projects that they have worked on in the past have come in on-time, on schedule and under budget.
- 3. HI stressed the need to:
 - A. set up a web site for the project with links and a FAQ section. They indicated that it is important to defuse "the noise"
 - B. Use local media
 - C. Use public forums Touch points throughout the project; also an MSBA requirement.
 - D. Use Community Surveys
- 4. Public Charter:
 - A. Checklist
 - B. Benchmarks
- 5. MSBA Form 3011

- 6. SMSBC Questions and responses:
 - A. With your group's current ongoing projects, how will you make the Somerset Middle School project a priority and accommodate our timeline?

 HI Response: HI indicated that although they have other projects on the boards they will work closely with the SMSBC on the project.
 - B. How will your group manage the Committee's desire to look at dual track work, specific to a Grade 5-Grade 8 Middle School project and also Grade 6 Grade 8 Middle School project?

 HI Response:
 - 1. Education and Programming:
 - Gather as much information as possible to develop an education plan.
 - Community support was critical.
 - HI will review current challenges and opportunities.
 - Design options overview.
 - · Final option comparison.
 - C. How does your group approach issues with Change Orders, whether brought on by unexpected project issues or through specific Owner requests? HI Response: HI stressed that a good set of documents need to go out. HI will facilitate negotiations between architect and GC.
 - D. What type of assistance do you provide to the Committee to move projects along and obtain Town support?

 HI Response: HI indicated that they responded to this question in their presentation. (See above.)
 - E. How does HI handle people leaving the company?
 HI Response: HI does not anticipate change in the team in the near future.

III. CGA Project Management

Presenters:

- Dan Tavares, AIA, LEED AP, MCPPO, CDT (Project Director)
- Andrew DiGiammo, AIA, MCPPO, Licensed Contractor (Project Manager)
- Marybeth Carney, Professional Engineer, MCPPO (Assistant Project Manager)
- Bill Friar, Licenced Construction Supervisor (Project Representative)

Record

- Bound document was distributed to the Committee which include a copy of the presentation and samples of past reporting documents which include School Building Committee (SBC) Agenda, OPM Report to the SBC, Meeting Minutes from SBC, Construction Cost Estimate (CCE) Summary, CCE Comparison Spreadsheet, Proprietary Approval Form, Total Project Budget, Comp. Project Schedule and Testimonials.
- 2. CGA will also have Daedalus on the team. They will be able to tap into the Daedalus' resources when needed for the project.
- 3. CGA has worked on the Somerset-Berkley Regional High School Project and is familiar with the Town.
- 4. Management Process:
 - A. Selection of an Architect.
- 5. Committee Participation:
 - A. Need to reach out to the Community.
 - B. Social media is important.
 - C. CGA was very successful in using social media in the Freetown police Station Project.
- 6. SMSBC Questions and responses:
 - A. With you group's current ongoing projects, how will you make the Somerset Middle School project a priority and accommodate our timeline? CGA Response: CGA indicated that they are a local company (in Fall River) and will always be available and accessible.
 - B. How will your group manage the Committee's desire to look at dual track work, specific to a Grade 5-Grade 8 Middle School project and also Grade 6 Grade 8 Middle School project?

 CGA Response: CGA will work closely with the group to determine the pros and cons of both options.
 - C. How does your group approach issues with Change Orders, whether brought on by unexpected project issues or through specific Owner requests? CGA Response: CGA will review all change orders and provide feedback to the committee on each change order.

1	1		
		D. What type of assistance do you provide to the Committee to move projects along and obtain Town support? CGA Response: CGA will constantly participate in dialogue. Building a web-site and placing information on thee website to provide facts in response to any challenges.	
TOTAL PROPERTY CONTRACTOR AND ADMINISTRATIVE PROPERTY CONTRACTOR ADMINISTRATIVE PROPERTY CONTRACTOR AND ADMINISTRATIVE PROPERTY CONTRACTOR ADMINISTRATIVE PROPERTY CONTRACTOR AND ADMINISTRATIVE PROPERTY ADMINISTRATIVE	AND THE PROPERTY OF THE PROPER	E. What is CGA's experience with Construction Manager (CM) at Risk Projects? CGA Response: CGA does not have direct experience with CM at Risk; however, are very knowledgeable in the alternate process (MGL 149A) of moving the project forward.	
		F. What are MSBA incentives that can be sought after? CGA Response: CGA indicated that MSBA incentives have decreased over time.	
7.02	01/23/19	Post Interview Discussion and Vote:	Record
		 Carlos Campos indicated that he worked closely with CGA on the Somerset-Berkley Regional High School Project. CGA was on site all the time. 	
		Victor Botelho noted that all candidates had experience in existing and new construction.	
		3. Lindsey Albernaz noted that CGA references were outstanding.	
		4. Based on the group discussion, Jeff Schoonover noted that the order appeared to be CGA first, CI second and HI third. Victor Machado asked the Committee if there were any members who disagreed with the order and had any comments. No Committee Members had any disagreement with the order.	
	Control of the Contro	 Robert Lima motioned for the order be CGA first, CI second and HI third based on discussions and presentations. Victor seconded the motion. The Committee voted unanimously on the order. 	
THE PROPERTY OF THE PROPERTY O		 Kevin Scanlon motioned to have CGA be the OPM for the project. Pauline Camara seconded the motion. The Committee voted unanimously in favor of CGA becoming the OPM for the project. 	
		7. Victor Machado motioned to start negotiations with CGA. Robert Lima seconded the motion. The Committee voted unanimously to start negotiations with CGA.	

7,03	01/23/19	Make-up of the Committee:	Record
		 School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC. 	
7.04	01/23/19	Lindsey Albernaz noted that the next MSBA meeting will be held on March 4^{th} , 2019.	Record

1. No attachments.

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, March 18, 2019 at 6:30 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, March 13, 2019 Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Owner's Project Manager Update - CGA Project Management, LLC
- Approval of Minutes of November 19, 2018, December 10, 2018 and January 23, II. 2019
- III. Building Committee Chair Recommendations
- IV. Other Items

MEETING NO. __008

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:30 pm – 7:45 pm
Date:	03/18/2019
Next Meeting:	04/22/2019
Upcoming Meetings:	06/03/2019 – SMSBC and/or Sub-Committee Meet (Tentative) 06/24/2019 - SMSBC and/or Sub-Committee Meet (Tentative)

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	<u>schoonoverj@sbregional.org</u>
Lindsey Albernaz	Dir. of Business & Fin., SPS/ SMSBC Chairwoman	508-324-3100 (212)	<u>albernazl@sbregional.org</u>
Victor Machado	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet	Chair of Somerset Advisory and Finance Committee	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting) - Absent	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

OPM ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo	Project Manager	Not Provided	adigiammo@compassgrouparch.com
Shannon Khoury	Not Provided	Not Provided	skhoury@compassgrouparch.com

٠ ٧٥.	Date	Issues	Action
.01	03/18/19	57.48% reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
.02	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades $5-8$ or grades $6-8$. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
7.01	03/18/19	Close	Close
	01/23/19	Meeting minutes from the interview in the order in which the interviews were held:	Record
		I. Colliers International (CI)	
		Presenters: Ken Guyette, MCPPO (Project Director) Charlie Roberts (Project Manager) Dan Daisy, LEED AP (Construction Representative)	
		 One page hand-out and copy of the presentation was handed out to the Committee. CI noted MSBA Experience and knowledge of MSBA Form 3011. 	
		A. CI noted that they have not had an MSBA project that has gone over budget.	
		3. CI highlighted the following projects:	
		 A. West Bridgewater Middle/Senior High School Renovation project with \$3,000,000 savings. CI noted that this project is very similar the upcoming Somerset Middle School Project. 	
		B. Colegrave Park Elementary School (Grades K-7)CI had a big issue with the General Contractor.	

- C. West Springfield, MA High School
 - CI noted that this was a model school and that the project finishes early.
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 - \$128,000,000 project.
- 4. CI stressed focus on project cost, quality and schedule.
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- 6. CI noted that there needs to be a health balance between the Contractor and the General Contractor. CI stressed that they are not contractors or architects acting as OPMs. They are only OPMs.
- 7. SMSBC Questions and responses:
 - A. With your group's current ongoing projects, how will you make the Somerset Middle School project a priority and accommodate our timeline? CI Response: CI considers themselves an extension of the SMSBC and will be available for the project.
 - B. How will your group manage the Committee's desire to look at dual track work, specific to a Grade 5-Grade 8 Middle School project and also Grade 6 - Grade 8 Middle School project? CI Response: CI will work with the Committee to determine the best method of going forward.
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 - D. What type of assistance do you provide to the Committee to move projects along and obtain Town support? CI Response: CI noted that social media is a very important tool. Listening sessions are key and need to include students, parents and staff/administration.
 - E. How does CI handle people leaving the company? CI Response: CI has several locations. CI handles the project as a team and not as individuals.
 - F. You mentioned that there was a big issue with the contractor for the Colegrave Park Elementary School. What was the issue and how was it resolved? CI Response: The GC mismanaged the project schedule. To resolve the issue CI stayed on top of the issue until it was resolved.

I. Hill International (HI)	Record
Presenters:	
 Paul Kalous, AIA, MCPPO (Project Director) Inger Hamre-Foley, MCPPO (Project Manager) Jim Devol, LEED AP (Public Outreach Lead) 	
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C. Use public forums – Touch points throughout the proje also an MSBA requirement.	ct;
D. Use Community Surveys	THE PARTY OF THE PARTY.
4. Public Charter:	
A. Checklist	
B. Benchmarks	
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Design options overview. Final option comparison.

- C. How does your group approach issues with Change Orders, whether brought on by unexpected project issues or through specific Owner requests? HI Response: HI stressed that a good set of documents need to go out. HI will facilitate negotiations between architect and GC.
- D. What type of assistance do you provide to the Committee to move projects along and obtain Town support? HI Response: HI indicated that they responded to this question in their presentation. (See above.)
- E. How does HI handle people leaving the company? HI Response: HI does not anticipate change in the team in the near future.

III. CGA Project Management

Record

Presenters:

- Dan Tavares, AIA, LEED AP, MCPPO, CDT (Project Director)
- Andrew DiGiammo, AIA, MCPPO, Licensed Contractor (Project Manager)
- Marybeth Carney, Professional Engineer, MCPPO (Assistant Project Manager)
- Bill Friar, Licenced Construction Supervisor (Project Representative)
- 1. Bound document was distributed to the Committee which include a copy of the presentation and samples of past reporting documents which include School Building Committee (SBC) Agenda, OPM Report to the SBC, Meeting Minutes from SBC, Construction Cost Estimate (CCE) Summary, CCE Comparison Spreadsheet, Proprietary Approval Form, Total Project Budget, Comp. Project Schedule and Testimonials.
- 2. CGA will also have Daedalus on the team. They will be able to tap into the Daedalus' resources when needed for the project.
- 3. CGA has worked on the Somerset-Berkley Regional High School Project and is familiar with the Town.
- 4. Management Process:
 - A. Selection of an Architect.
- 5. Committee Participation:
 - A. Need to reach out to the Community.
 - B. Social media is important.
 - C. CGA was very successful in using social media in the Freetown police Station Project.

		6. SMSBC Questions and responses:	
		 6. SMSBC Questions and responses: A. With you group's current ongoing projects, how will you make the Somerset Middle School project a priority and accommodate our timeline? CGA Response: CGA indicated that they are a local company (in Fall River) and will always be available and accessible. B. How will your group manage the Committee's desire to look at dual track work, specific to a Grade 5-Grade 8 Middle School project? CGA Response: CGA will work closely with the group to determine the pros and cons of both options. C. How does your group approach issues with Change Orders, whether brought on by unexpected project issues or through specific Owner requests? CGA Response: CGA will review all change orders and provide feedback to the committee on each change order. D. What type of assistance do you provide to the Committee to move projects along and obtain Town support? CGA Response: CGA will constantly participate in dialogue. Building a web-site and placing information on thee website to provide facts in response to any challenges. E. What is CGA's experience with Construction Manager (CM) at Risk Projects? CGA Response: CGA does not have direct experience with CM at Risk; however, are very knowledgeable in the alternate process (MGL 149A) of moving the project forward. F. What are MSBA incentives that can be sought after? CGA Response: CGA indicated that MSBA incentives have 	
	44	decreased over time.	
7.02	03/18/19	CGA updated the SMSBC regarding the OPM Contract. The contract has been signed by all parties and sent to MSBA. Close	Close
and provide the state of the st	01/23/19	Post Interview Discussion and Vote:	Record
		Carlos Campos indicated that he worked closely with CGA on the Somerset-Berkley Regional High School Project. CGA was on site all the time.	
	***************************************	Victor Botelho noted that all candidates had experience in existing and new construction.	and the second state of th
**************************************		Lindsey Albernaz noted that CGA references were outstanding.	***************************************
	-		

		4. Based on the group discussion, Jeff Schoonover noted that the order appeared to be CGA first, CI second and HI third. Victor Machado asked the Committee if there were any members who disagreed with the order and had any comments. No Committee Members had any disagreement with the order.	
		 Robert Lima motioned for the order be CGA first, CI second and HI third based on discussions and presentations. Victor seconded the motion. The Committee voted unanimously on the order. 	
		 Kevin Scanlon motioned to have CGA be the OPM for the project. Pauline Camara seconded the motion. The Committee voted unanimously in favor of CGA becoming the OPM for the project. 	
		7. Victor Machado motioned to start negotiations with CGA. Robert Lima seconded the motion. The Committee voted unanimously to start negotiations with CGA.	
7.03	03/18/19	Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1 st . Robert Lima seconded the motion. The SMSBC unanimously voted to approve.	Record
	01/23/19	School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC.	Record
7.04	03/18/19	CGA provided a brief update to the SMSBC regarding the MSBA OPM Panel Review Conference Call Meeting with the MSBA held on March 4 th . The MSBA updated CGA on regulations including the required RFS procedures for designer selection.	Record
Antipology and antipology antipology and antipology antipology antipology and antipology antipology and antipology and antipology and antipology antipology antipology antipology antipology and antipology antipolog	01/23/19	Lindsey Albernaz noted that the next MSBA meeting will be held on March 4 th , 2019.	Record

No.	Date	Issues	Action
8.01	03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
8.02	03/18/19	Designer Selection (Request for Designer Services - RFS)	
		CGA has a draft copy of the Request for Designer Services for the SMSBC review and comment.	CGA
		At the April 22 nd meeting the SMSBC should vote and approve final Request for Designer Services (RFS).	SMSBC
		CGA can reach out to the architects prior to the RFS being advertised/published to let them know that the RFS will be coming out but cannot reach out after the RFS is advertised/published.	CGA
		The group has determined that Wednesday, May 8 th at 3pm is when the Designer walk-thru should take place. Pauline Camara noted that after school would be best since the school will be empty.	All
	100 mm m m m m m m m m m m m m m m m m m	CGA indicated that the MSBA Designer Selection Panel will handle selection of the designers, but there will need to be three (3) representatives from the SMSBC in attendance.	Record
		CGA recommends one SMSBC member, the Superintendent and the CFO, but who needs to attend is not set in stone. The SMSBC does not need to come to a decision as to who will be representatives before the RFS is issued, but will need to identify the representatives after the RFS is issued. One representative will need to have interest in the review of the design process. Jeff Schoonover will reach out to Richard Brown and ask if he would like to be the third person on the committee. He will update the group at the next meeting.	Jeff S.
		Important: CGA indicated that the SMSBC should not rank the designer (preferred to weak RFS). Instead they should just provide feedback.	Record
		Interviews do not need to take place if there is a large gap between firms who are qualified to not qualified, but if interviews do take place they usually last 45 minutes per interview.	Record
		At this time the dates are as follows, but could possibly be pushed up to early June: • June 18 th – Review and rank proposals • July 9 th – Interviews if needed.	Record

8.03	03/18/19	Approval of the Meeting Minutes	Record/ Close
		 Victor Machado motioned to approve SMSBC Meeting Minutes No. 005. Robert Lima seconded the motion. The SMSBC unanimously voted to approve the minutes. Victor Machado motioned to approve SMSBC Meeting Minutes No. 006. Pauline Camara seconded the motion. The SMSBC unanimously voted to approve the minutes. Victor Machado motioned to approve SMSBC Meeting Minutes No. 007. Michael Botelho seconded the motion. The SMSBC unanimously voted to approve the minutes. 	
8.04	03/18/19	CGA will look into recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA

1. CGA Project Management - OPM Progress Report Dated 03.18.2019

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



MEETING NOTICE

Received & Posted	Time:
**************************************	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, April 22, 2019 at 6:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, April 19, 2019 Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Vote on Request for Service Bid for Design Services
- Timeline of Designer Selection Process II.
- III. Other Items

MEETING NO. __009

Somerset Middle School Building	
1141 Brayton Avenue, Somerset, MA	
Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA	
6:30 pm – 7:45 pm	
04/22/2019	
06/24/2019	
T.B.D.	

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	schoonoverj@sbregional.org
Lindsey Albernaz	Dir. of Business & Fin., SPS/ SMSBC Chairwoman	508-324-3100 (212)	albernazl@sbregional.org
Victor Machado (via Conf. Call)	School Committee Member	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet (Abstain from vote)	Chair of Somerset Advisory and Finance Committee	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting) - Absent	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

OPM ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo	Project Manager	774.244.1101	adigiammo@compassgrouparch.com
Absent			
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

No.	Date	Issues	Action
3.01	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades $5-8$ or grades $6-8$. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
7.03	04/22/19	Chris Godet let the committee know that he will be resigning from advisory and finance committee.	Record
	03/18/19	Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1st. Robert Lima seconded the motion. The SMSBC unanimously voted to approve.	Record
	01/23/19	Make-up of the Committee:	Record
		 School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC. 	

7.04	04/22/19	CGA provided a brief update to the SMSBC regarding MSBA Model School Program, Designer RFS and the Designer Selection Process. CGA also provided a look-ahead project schedule.	Record
The second statement of the se	03/18/19	CGA provided a brief update to the SMSBC regarding the MSBA OPM Panel Review Conference Call Meeting with the MSBA held on March 4 th . The MSBA updated CGA on regulations including the required RFS procedures for designer selection.	Record
to the same of the	01/23/19	Lindsey Albernaz noted that the next MSBA meeting will be held on March $4^{\rm th}$, 2019.	Record
8.01	04/22/19	Ongoing.	Record
	03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
8.02	04/22/19	Victor Machado motioned to approve the RFS. Kevin Scanlon seconded the motion. The SMSBC unanimously voted to approve the RFS.	Record
	10 mm m m m m m m m m m m m m m m m m m	Submissions are due on May 23 rd .	Record
	03/18/19	Designer Selection (Request for Designer Services - RFS)	CGA
	The state of the s	CGA has a draft copy of the Request for Designer Services for the SMSBC review and comment.	SMSBC
		At the April 22 nd meeting the SMSBC should vote and approve final Request for Designer Services (RFS).	CGA
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		The group has determined that Wednesday, May 8 th at 3pm is when the Designer walk-thru should take place. Pauline Camara noted that after school would be best since the school will be empty.	Record
		CGA indicated that the MSBA Designer Selection Panel will handle selection of the designers, but there will need to be three (3) representatives from the SMSBC in attendance.	Jeff S.
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		CGA recommends one SMSBC member, the Superintendent and the CFO, but who needs to attend is not set in stone. The SMSBC does not need to come to a decision as to who will be representatives before the RFS is issued, but will need to identify the representatives after the RFS is issued. One representative will need to have interest in the review of the design process. Jeff Schoonover will reach out to Richard Brown and ask if he would like to be the third person on the committee. He will update the group at the next meeting.	Record
		Important: CGA indicated that the SMSBC should not rank the designer (preferred to weak RFS). Instead they should just provide feedback.	Record
		Interviews might not (corrected in 04/22/2019 meeting) take place if there is a large gap between firms who are qualified to not qualified, but if interviews do take place they usually last 45 minutes per interview.	Record
		At this time the dates are as follows, but could possibly be pushed up to early June: • June 18 th – Review and rank proposals • July 9 th – Interviews if needed.	
8.04	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
	03/18/19	CGA will look into recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA

No.	Date	Issues	Action
9.01	04/22/19	Approval of the Meeting Minutes	Record/ Close
		 Victor Machado motioned to approve SMSBC Meeting Minutes No. 008. Kevin Scanlon seconded the motion. The SMSBC unanimously voted to approve the minutes with discussed changes. 	***************************************
9.02	04/22/19	Kevin Scanlon motioned to adjourn the meeting. Chris Godet seconded the motion. All approved.	Record/ Close

1. CGA Project Management – OPM Progress Report Dated 04.22.2019

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



MEETING NOTICE

Received & Posted	Time:
· · · · · · · · · · · · · · · · · · ·	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, June 24, 2019 at 6:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, June 19, 2019 Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

GENDA / LIST OF TOPICS

- I. MSBA Designer Selection Committee Update
- II. Owner's Project Manager Report
- III. Approval of Minutes of April 22, 2019
- Other Items IV.

MEETING NO. __010

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:00 pm – 6:45 pm
Date:	06/24/2019
Next Meeting:	07/15/2019
Upcoming Meetings:	T.B.D.

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	schoonoverj@sbregional.org
Victor Machado	SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan (Absent)	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet	School Committee Member	508-646-2800	<u>Chr1513@msn.com</u>
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	camposc@sbregional.org
Kathleen Byers (Absent)	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa (Abstain from Vote)	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Holly McNamara (Non-Voting)	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting)	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

OPM ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo (Absent)	Project Manager	774.244.1101	adigiammo@compassgrouparch.com
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney (Absent)	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

Committee Guest: Michael McDonald, School Committee Member

No.	Date	Issues	Action
3.01	06/24/19	No change/Not discussed.	Record
0.01	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	04/22/19- 06/24/19	No change/Not discussed.	Record
	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades $5-8$ or grades $6-8$. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
7.03	06/24/19	Nick Raffa will be joining the committee as the advisory and finance committee member. On April 26 th Lindsey Albernaz sent an updated organization chart to the MSBA for review and approval. On May 23 rd the MSBA reviewed and approved the organization chart which included Nick Raffa's information.	Record
		Victor Machado entertained a motion to formally remove L. Albernaz from the SMSBC. Michael Botelho moved the motion forward. R. Lima seconded the motion. The SMSBC unanimously approved the motion.	Record
		With L. Albernaz being removed from the SMSBC a member from the district with MCPPO certification is required to be part of the committee. After discussion, it was determined that Richard Brown be the member with the MCPPO certification. Chris Godet motioned to have R. Brown be the SMSBC member with MCPPO Certificate. Pauline Camara seconded the motion. The motion was unanimously approved by the committee. The organization chart will be updated and resubmitted to the MSBA for review and approval.	Record

	04/22/19	Chris Godet let the committee know that he will be resigning from	Record
	-	advisory and finance committee.	**************************************
	03/18/19	Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1 st . Robert Lima seconded the motion. The SMSBC unanimously voted to approve.	Record
	01/23/19	Make-up of the Committee:	er e de la companya d
		School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC.	
7.04	06/24/19	CGA provided a brief update to the SMSBC regarding MSBA model school program and the designer selection including both meeting and Studio G letter. CGA also provided a look-ahead project schedule and update on budget. Regarding the MSBA model school program refer to item 8.04.	Record
		On June 18 the MSBA and SMSBC panel members reviewed the submitted RFQs and voted. Ai3 had the most votes with 34, Studio G had the second most with 14 votes. D&W, Kaestle Boos and LaVallee Brensinger Architects received 10 votes each, but the panel determined that for record D&W would be considered the firm to receive the third most votes. The panel agreed to interview with Ai3 and Studio G.	Record
		Dan Tavares let the Committee know that the MSBA sent out a letter this afternoon that they received from Studio G stating that they will respectfully not interview. (They noted that this would be the third interview in six months and noted that they would keep submitting for future projects.) D. Tavares noted that he did reach out to the MSBA regarding what will be required next and did get feedback that the MSBA will reach out to him and let him know what the next step will be which may require the SMSBC panel members to attend another meeting to officially vote Ai3 as the selected designer to begin negotiations with.	Record
		Chris Godet asked who will be sitting at the table to negotiate with the architect. Dan Tavares noted that the standard MSBA contract will be used will not be changed very much, if at all. The meeting will be to ensure that all the scope of services will be provided in the fee. Jeff Schoonover and Victor Machado volunteered to sit in on the negotiations.	Record
		Refer to new business regarding schedule and budget.	

	04/22/19	CGA provided a brief update to the SMSBC regarding MSBA Model School Program, Designer RFS and the Designer Selection Process. CGA also provided a look-ahead project schedule.	Record
	03/18/19	CGA provided a brief update to the SMSBC regarding the MSBA OPM Panel Review Conference Call Meeting with the MSBA held on March 4 th . The MSBA updated CGA on regulations including the required RFS procedures for designer selection.	Record
100 a. d. 100 a.	01/23/19	Lindsey Albernaz noted that the next MSBA meeting will be held on March 4 th , 2019.	Record
8.01	04/22/19	Ongoing.	Record
	03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
8.02	06/23/19	Daniel Tavares noted that forty-one (41) requests were made of the RFS with twenty-six (26) being from design firms. There were six (6) respondents to the RFS. Close.	Record/ Close
	04/22/19	Victor Machado motioned to approve the RFS. Kevin Scanlon seconded the motion. The SMSBC unanimously voted to approve the RFS.	Record
	10 mg * 20 mg	Submissions are due on May 23 rd .	Record
	03/18/19	Designer Selection (Request for Designer Services - RFS)	CGA
	T ()	CGA has a draft copy of the Request for Designer Services for the SMSBC review and comment.	SMSBC
		At the April 22 nd meeting the SMSBC should vote and approve final Request for Designer Services (RFS).	CGA
		CGA can reach out to the architects prior to the RFS being advertised/published to let them know that the RFS will be coming out but cannot reach out after the RFS is advertised/published.	All
		The group has determined that Wednesday, May 8 th at 3pm is when the Designer walk-thru should take place. Pauline Camara noted that after school would be best since the school will be empty.	Record
		CGA indicated that the MSBA Designer Selection Panel will handle selection of the designers, but there will need to be three (3) representatives from the SMSBC in attendance.	Jeff S.

		CGA recommends one SMSBC member, the Superintendent and the CFO, but who needs to attend is not set in stone. The SMSBC does not need to come to a decision as to who will be representatives before the RFS is issued, but will need to identify the representatives after the RFS is issued. One representative will need to have interest in the review of the design process. Jeff Schoonover will reach out to Richard Brown and ask if he would like to be the third person on the committee. He will update the group at the next meeting.	Record
		Important: CGA indicated that the SMSBC should not rank the designer (preferred to weak RFS). Instead they should just provide feedback.	Record
		Interviews might not (corrected in 04/22/2019 meeting) take place if there is a large gap between firms who are qualified to not qualified, but if interviews do take place they usually last 45 minutes per interview.	Record
		At this time the dates are as follows, but could possibly be pushed up to early June: • June 18 th – Review and rank proposals • July 9 th – Interviews if needed.	
8.04	06/24/19	Dan Tavares stated that CGA has investigated whether they can receive pdfs of the model school plans. The MSBA confirmed that they cannot share plans at this time (prior to completing the feasibility study to determine if new construction is the preferred option and the SMSBC decides to explore the model school program).	Ongoing
	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
	03/18/19	CGA will investigate recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA

No.	Date	Issues	Action
10.01		Schedule	
	06/24/19	Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve.	

		Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	
10.02	06/24/19	Budget Daniel Tavares noted that the overall budget has not changed; however, the environmental/site fee (separate from the A/E fee on the project budget break down) will be rolled into the architect's fee since they will have these consultants on their design team.	
10.03	06/24/19	Approval of the Meeting Minutes 1. Victor Machado entertained a motioned to approve SMSBC Meeting Minutes No. 009. Pauline Camara moved the motion forward. Robert Lima seconded the motion. The SMSBC unanimously voted to approve the minutes.	Record/ Close
10.04	06/24/19	Chris Godet motioned to adjourn the meeting. Michael Botelho seconded the motion. All approved to end the meeting at 6:45pm via a roll call vote.	Record/ Close

1. CGA Project Management - OPM Progress Report Dated 06.24.2019





MEETING NOTICE

Time:
Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, July 15, 2019 at 6:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, July 10, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Result of the MSBA Designer Panel
- Award Designer Contract II.
- **OPM** Report III.
- IV. Review and Approve Designer Fee Proposal
- V. Ai3 Presentation
- Approval of June 24, 2019 Minutes VI.
- Dates for Upcoming Meetings VII.
- Other Items VIII.

MSBA: Massachusetts School Building Authority

MEETING NO. 011

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:10 pm – 7:45 pm
Date:	07/15/2019
Next Meeting:	09/16/2019
Upcoming Meetings:	T.B.D.

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	schoonoverj@sbregional.org
Victor Machado (via Conf. Call)	SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho (Absent)	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Edward Callahan	Vice Principal @ SMS	508-324-3140	Edward.Callahan@somersetschools.org
Chris Godet	School Committee Member	508-646-2800	<u>Chr1513@msn.com</u>
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros (Absent)	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset	508-672-1272	Rlma27351@yahoo.com
(Absent)	Water Dept., Retired	774-713-0480	
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Holly McNamara (Non-Voting) (Absent)	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Steve Moniz (Non-Voting)	Board of Selectmen, Member	508-646-2800	smoniz@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

OPM ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo (Absent)	Project Manager	774.244.1101	adigiammo@compassgrouparch.com
Shannon Khoury (Absent)	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney (Absent)	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

Vo.	Date	Issues	Action
3.01	07/15/19	Mr. Schoonover asked what the reimbursement rate is. Mr. Tavares stated 56.89%. Mr. Godet asked when the Town will receive reimbursement. Mr. Tavares stated that the initial reimbursement should be sent after the Committee approved the contract today.	Record
	06/24/19	No change/Not discussed.	Record
	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	04/22/19- 07/15/19	No change/Not discussed.	Record
	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades $5-8$ or grades $6-8$. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
7.03	07/15/19	No discussion.	Record
	06/24/19	Nick Raffa will be joining the committee as the advisory and finance committee member. On April 26 th Lindsey Albernaz sent an updated organization chart to the MSBA for review and approval. On May 23 rd the MSBA reviewed and approved the organization chart which included Nick Raffa's information.	Record
		Victor Machado entertained a motion to formally remove L. Albernaz from the SMSBC. Michael Botelho moved the motion forward. R. Lima seconded the motion. The SMSBC unanimously approved the motion.	Record

		With L. Albernaz being removed from the SMSBC a member from the district with MCPPO certification is required to be part of the committee. After discussion, it was determined that Richard Brown be the member with the MCPPO certification. Chris Godet motioned to have R. Brown be the SMSBC member with MCPPO Certificate. Pauline Camara seconded the motion. The motion was unanimously approved by the committee. The organization chart will be updated and resubmitted to the MSBA for review and approval.	Record
	04/22/19	Chris Godet let the committee know that he will be resigning from advisory and finance committee.	Record
	03/18/19	Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1st. Robert Lima seconded the motion. The SMSBC unanimously voted to approve.	Record
	01/23/19	Make-up of the Committee:	
		 School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC. 	
7.04	07/15/19	Results of the MSBA Designer Selection Panel: JS gave the results of the MSBA Designer Panel. Ai3 was unanimously voted the	Close
		Project Architect.	
			Record
		Project Architect. Award Designer Contract: Motion to accept Ai3 as the design contract by Mr. Machado, 2 nd by Mr. Godet. Vote to approve was	Record Record
	06/24/19	Project Architect. Award Designer Contract: Motion to accept Ai3 as the design contract by Mr. Machado, 2 nd by Mr. Godet. Vote to approve was unanimous. Mr. Scanlon motioned to have the designer begin their work. Mr.	

Towns and the second se	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
	06/24/19	Dan Tavares stated that CGA has investigated whether they can receive pdfs of the model school plans. The MSBA confirmed that they cannot share plans at this time (prior to completing the feasibility study to determine if new construction is the preferred option and the SMSBC decides to explore the model school program).	Ongoing
8.04	07/15/19	Dan Tavares suggested that the Committee take time to visit other schools with similar program.	Ongoing
	03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
8.01	04/22/19	Ongoing.	Record
	01/23/19	Lindsey Albernaz noted that the next MSBA meeting will be held on March 4 th , 2019.	Record
	03/18/19	CGA provided a brief update to the SMSBC regarding the MSBA OPM Panel Review Conference Call Meeting with the MSBA held on March 4 th . The MSBA updated CGA on regulations including the required RFS procedures for designer selection.	Record
	04/22/19	CGA provided a brief update to the SMSBC regarding MSBA Model School Program, Designer RFS and the Designer Selection Process. CGA also provided a look-ahead project schedule.	Record
	Annual management of the control of	Schoonover and Victor Machado volunteered to sit in on the negotiations. Refer to new business regarding schedule and budget.	The state of the s
		Chris Godet asked who will be sitting at the table to negotiate with the architect. Dan Tavares noted that the standard MSBA contract will be used will not be changed very much, if at all. The meeting will be to ensure that all the scope of services will be provided in the fee. Jeff	Record
		Dan Tavares let the Committee know that the MSBA sent out a letter this afternoon that they received from Studio G stating that they will respectfully not interview. (They noted that this would be the third interview in six months and noted that they would keep submitting for future projects.) D. Tavares noted that he did reach out to the MSBA regarding what will be required next and did get feedback that the MSBA will reach out to him and let him know what the next step will be which may require the SMSBC panel members to attend another meeting to officially vote Ai3 as the selected designer to begin negotiations with.	Record

		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
	03/18/19	CGA will investigate recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA
10.01		Schedule	
	07/15/19	Mr. Tavares reviewed the 'Look Ahead' schedule (see OPM Progress Report). He stated, we are entering Module 3: Feasibility Study consisting of preliminary design program and preferred schematic report.	Record
	06/24/19	Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve.	Record
		Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	Record
10.02		Budget	
	07/15/19	OPM Report: Mr. Tavares gave a brief overview of the approval of the designer proposal. Contract negotiations have started since then. The contract is set by the MSBA for basic services, the proposed fee is \$600,000, which leaves \$50,000.00 for contingency.	Close
	06/24/19	Daniel Tavares noted that the overall budget has not changed; however, the environmental/site fee (separate from the A/E fee on the project budget break down) will be rolled into the architect's fee since they will have these consultants on their design team.	Record

No.	Date	Issues	Action
11.1	07/15/19	Ai3 Introductions and Update Mr. Troy Randell was introduced. He thanked the committee for the opportunity and reviewed the MSBA project service scopes consisting of assessment testing, education design process and program design. The education narrative (vision) will also be developed in the next 3 to 4 months. Two or three options will be developed) preferred schematic design. One of the options will be decided by the building committee, followed by a final schematic design. The final design will require a vote by the town.	Record
		Ai3 presentation by Mr. Randell. (See slide show presentation.) Discussion followed.	Record

11.2	07/15/19	Future Meetings	
		Mr. Tavares asked if another night might be better than Monday's. Discussion followed.	Record
***************************************		Next Building Committee Meeting possible date is Monday, August 12, 2019 at 6:00 followed by Monday, September 16, 2019 at 6:00pm.	Ongoing
		Looking for a 'working group' to meet once a week (Superintendent, Principal, Facilities, Building Committee Chair and could have town representative). Mr. Tavares prefers morning meeting.	Ongoing
		Mr. Tavares, Mr. Randell, Mr. Schoonover, Dr. Camara will discuss building tour dates tomorrow morning.	Ongoing
11.3	07/15/19	Approval of the June 24, 2019 meeting minutes were tabled until the next meeting.	Ongoing
11.4	07/15/19	Mr. Machado motioned to adjourn the meeting. Mr. Godet seconded the motion. Meeting adjoined at 7:41 pm.	Record/ Close

- 1. CGA Project Management OPM Progress Report Dated 07.15.2019
- 2. Ai3 Presentation



MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Somerset School Committee - Somerset Middle School MSBA Building Name of Board or Committee:

Committee

Monday, September 16, 2019 at 4:30 pm Date & Time of Meeting:

School Committee Room at North Elementary **Location of Meeting:**

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, September 10, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to:

(circle cancelled/postponed)

AMENDED 9-13-19 11:08 am

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

Workgroup 4:30 pm

- I. Preliminary Design Schedule Review
- Assessment, Testing & Investigation Activities T1.
- Educational Program Narrative, Programming & Visioning Process III.
- Review of Elementary Schools IV.
- Other Items V.

Full Committee 6:00 pm

- Somerset Middle School Building Committee Membership Updates VI.
- Tour of Barrington Middle School VII.
- **OPM** Report VIII.
- Architect Report IX.
 - a. Preliminary Design Schedule Update
 - b. Existing Middle School Assessment, Testing and Investigations Update
 - c. Elementary Schools Enrollment Review
 - d. Existing Middle School Building Evaluation Update
- Approval of July 15, 2019 Minutes X.
- XI. Dates for Upcoming Meetings
- Other Items XII.

MSBA: Massachusetts School Building Authority

MEETING NO. __012

Next Meeting: Upcoming Mtgs:	10/07/2019 11/04/2019; 11/25/2019; 12/16/2019 (TBD: Joint Meeting Vote)
Date:	09/16/2019
Time:	6:00 pm
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Project Location:	1141 Brayton Avenue, Somerset, MA
Project:	Somerset Middle School Building

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	<u>schoonoverj@sbregional.org</u>
Victor Machado	School Committee Member/ SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho (Absent)	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Ronald Tarro (Absent)	Dir. of Business and Fin. for Somerset Public Schools	508-324-3100	<u>Tarror@sbregional.org</u>
Chris Godet (Absent)	School Committee Member	508-646-2800	<u>Chr1513@msn.com</u>
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte (Absent)	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Nicole Mello	Content Coordinator for Science & Tech. at SMS	508-324-3140	Nicole.mello@somersetschools.org
Holly McNamara (Non-Voting) (Absent)	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

CGA PROJECT MANAGEMENT, LLC (OPM) ATTENDEES

Name	Title	Telephone	E-Mail	
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com	
Andrew DiGiammo (Absent)	Project Manager	774.244.1101	adigiammo@compassgrouparch.com	
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com	
Marybeth Carney	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com	

No.	Date	Issues	Action
3.01	09/16/19	Mr. Scanlon asked if there were any updates regarding the reimbursement rate. Mr. Tavares noted that the reimbursement rate has not changed. Town is reimbursed after payment is issued.	Record
	07/15/19	Mr. Schoonover asked what the reimbursement rate is. Mr. Tavares stated 56.89%. Mr. Godet asked when the Town will receive reimbursement. Mr. Tavares stated that the initial reimbursement should be sent after the Committee approved the contract today.	Record
	06/24/19	No change/Not discussed.	Record
	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	04/22/19- 07/15/19	No change/Not discussed.	Record
	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades $5-8$ or grades $6-8$. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
7.03	09/18/19	Victor Machado introduced Nicole Mello, Content Coordinator for Science and Technology at the Somerset Middle School, to the Committee and noted to the Committee that the Somerset School Department has hired Mr. Ronald Tarro to the position of Director of Business and Finance for Somerset Public Schools formally occupied by Mrs. Lindsey Albernaz. Victor Machado noted that Edward Callahan will no longer be part of the committee. Victor Machado motioned to have Nicole Mello and Ronald Tarro be voting members of the committee and acknowledge Edward Callahan will no longer be part of the committee moving forward. Robert Lima seconded. The committee unanimously voted to approve.	Record/ Close

07/15/19	No discussion.	Record
06/24/19	Nick Raffa will be joining the committee as the advisory and finance committee member. On April 26 th Lindsey Albernaz sent an updated organization chart to the MSBA for review and approval. On May 23 rd the MSBA reviewed and approved the organization chart which included Nick Raffa's information.	Record
	Victor Machado entertained a motion to formally remove L. Albernaz from the SMSBC. Michael Botelho moved the motion forward. R. Lima seconded the motion. The SMSBC unanimously approved the motion.	Record
	With L. Albernaz being removed from the SMSBC a member from the district with MCPPO certification is required to be part of the committee. After discussion, it was determined that Richard Brown be the member with the MCPPO certification. Chris Godet motioned to have R. Brown be the SMSBC member with MCPPO Certificate. Pauline Camara seconded the motion. The motion was unanimously approved by the committee. The organization chart will be updated and resubmitted to the MSBA for review and approval.	Record
04/22/19	Chris Godet let the committee know that he will be resigning from advisory and finance committee.	Record
03/18/19	Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1st. Robert Lima seconded the motion. The SMSBC unanimously voted to approve.	Record
01/23/19	Make-up of the Committee:	
	School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee Member, will not be running for School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC.	
04/22/19	Ongoing.	Record
03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
	04/22/19 03/18/19 01/23/19	Nick Raffa will be joining the committee as the advisory and finance committee member. On April 26th Lindsey Albernaz sent an updated organization chart to the MSBA for review and approval. On May 23th the MSBA reviewed and approved the organization chart which included Nick Raffa's information. Victor Machado entertained a motion to formally remove L. Albernaz from the SMSBC. Michael Botelho moved the motion forward. R. Lima seconded the motion. The SMSBC unanimously approved the motion. With L. Albernaz being removed from the SMSBC a member from the district with MCPPO certification is required to be part of the committee. After discussion, it was determined that Richard Brown be the member with the MCPPO certification. Chris Godet motioned to have R. Brown be the SMSBC member with MCPPO Certificate. Pauline Camara seconded the motion. The motion was unanimously approved by the committee. The organization chart will be updated and resubmitted to the MSBA for review and approval. O4/22/19 Chris Godet let the committee know that he will be resigning from advisory and finance committee. Lindsey Albernaz will need to step down as the SMSBC Chairwoman. She has taken another position in another district and will no longer be on the Committee. Victor Machado expressed interest in being the Future Chairman. Lindsey Albernaz motioned to change Chairperson as of June 1st. Robert Lima seconded the motion. The SMSBC unanimously voted to approve. Make-up of the Committee: • School Board Committee Member Victor Machado noted that Michael Botelho, who is currently a School Board Committee in the future election; however, should stay on if he would like to. Lindsey Albernaz indicated that a minimum of one School Board Committee Member is required to be on the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC. Michael indicated that he had no issue with staying on the Committee and would like to stay on as part of the SMSBC. O4/22/19 Ongoing. C

8.04	09/16/19	CGA has scheduled a walk-thru of the recently constructed Barrington Middle School (261 Middle Highway, Barrington, RI) for Thursday, September 19, 2019 at 4:00pm. Mr. Tavares noted that the tour should take about an hour. Twenty-five (25) faculty have expressed interest in attending the tour. Mr. Machado noted that SMS Building Committee Members should e-mail him or Mr. Tavares if they wish to attend.	Ongoing
	07/15/19	Dan Tavares suggested that the Committee take time to visit other schools with similar program.	Ongoing
	06/24/19	Dan Tavares stated that CGA has investigated whether they can receive pdfs of the model school plans. The MSBA confirmed that they cannot share plans at this time (prior to completing the feasibility study to determine if new construction is the preferred option and the SMSBC decides to explore the model school program).	Ongoing
	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
**************************************	03/18/19	CGA will investigate recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA
10.01		Schedule	
100 m m m m m m m m m m m m m m m m m m	09/16/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1. No discussion regarding special town vote.	Record
	07/15/19	Mr. Tavares reviewed the 'Look Ahead' schedule (see OPM Progress Report). He stated, we are entering Module 3: Feasibility Study consisting of preliminary design program and preferred schematic report.	Record
entrement activities of entremental electricity of entrements of entreme	06/24/19	Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve.	Record
		Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	Record
The state of the s			

		Ai3 Introductions and Update	
	09/16/19	Mr. Troy Randell presented an update regarding critical upcoming dates which include Preliminary Design Program (PDP) – December 20, 2019, Preferred Schematic Report (PSR) – April 24, 2020, and Schematic Design (SD) – October 19, 2020. Mr. Randell noted that data has been collected by consultants and that feedback will be provided including, but not limited to, reports. Information collected, including reports, shall be provided to the Committee for their information and records prior to their next meeting.	Ongoing
		Mr. Randell noted that the site and civil engineers will be at the next meeting to present their findings to and answer and questions from the Committee.	Ongoing
		Educational Vision Sessions will be held on September 27 th , October 18 th and November 5 th .	Ongoing
		Ai3 will work with SMS staff to put together a program/space study.	Ongoing
		Mr. Tavares reviewed the capacities of the North, South and Chase Elementary Schools (K-5) and noted the student per classroom ratios for each school. Mr. Tavares also noted to the Committee the advantages and disadvantages (pros/cons) of having 5 th grade students together with 6 th , 7 th and 8 th grade students.	Record/ Close
		Ai3 presented a brief summary of their existing conditions assessment of the building which included, but was not limited to, condition of existing exterior masonry walls, condition of single pane windows and severe accessibility barriers.	Record/ Close
	The second of th	Mr. Medeiros asked Ai3 to provide handouts of their presentation and any future presentations to the Committee at or before the meeting. Ai3 noted that moving forward they will provide handouts.	Record/ Close
	07/15/19	Mr. Troy Randell was introduced. He thanked the committee for the opportunity and reviewed the MSBA project service scopes consisting of assessment testing, education design process and program design. The education narrative (vision) will also be developed in the next 3 to 4 months. Two or three options will be developed) preferred schematic design. One of the options will be decided by the building committee, followed by a final schematic design. The final design will require a vote by the town.	Record
		Ai3 presentation by Mr. Randell. (See slide show presentation.) Discussion followed.	Record
11.2		Future Meetings	a, da anta da Arta de Sacreto circo e sa, se tem ^a camb tira tanta <u>a</u> con ^a lesson de
	07/15/19	Mr. Tavares asked if another night might be better than Monday's. Discussion followed.	Record
		Next Building Committee Meeting possible date is Monday, August 12, 2019 at 6:00 followed by Monday, September 16, 2019 at 6:00pm.	Ongoing

		Looking for a 'working group' to meet once a week (Superintendent, Principal, Facilities, Building Committee Chair and could have town representative). Mr. Tavares prefers morning meeting.	Ongoing
		Mr. Tavares, Mr. Randell, Mr. Schoonover, Dr. Camara will discuss building tour dates tomorrow morning.	Ongoing
11.3	07/15/19	Approval of the June 24, 2019 meeting minutes were tabled until the next meeting.	Record

N 1		1	Action
No.	Date	Issues	ACUON
12.1	09/16/19	OPM Update Mr. Tavares provided the committee with an update which included noting that the designer contact is completed and both the MSBA and the town have copies.	Record/ Close
		Working group meetings which took place on July 7 th , August 6 th and 13 th , September 3 rd , 10 th and 16th and are ongoing. Mr. Scanlon asked if Committee Members could be notified of upcoming Working Group Sessions in case they would like to attend the session. Mr. Machado noted that committee members are welcome to attend any working group if they would like. Generally, the Sessions take place every Tuesday at the SMS between 8:15 am and 10:00 am. If a Committee Member would like to know they should contact either Mr. Schoonover or Mr. Machado via e-mail.	Record/ Close
		Educational program walkthrough occurred on July 17 th and a presentation to the SMS faculty and staff took place on August 27 th .	Record/ Close
		Mr. Tavares noted and listed the Anticipated Project Schedules (APS) for Module 2 (Forming The Project Team), Module 3 (Feasibility Study), Module 4 (Schematic Design) and Module 5 (Funding The Project). Mr. Tavares highlighted the MSBA Board of Directors Meeting / Approval dates. These will take place at the Board's location. CGA will keep the Committee posted on updates to the APS since the dates provided are subject to change.	Ongoing
		Mr. Tavares reviewed the Project Budget and Invoice Report. Mr. Machado asked who will approve the invoices to which Mr. Tavares was not sure of the town's process. Mr. Machado will review and let the OPM and Committee know.	Ongoing
12.2	09/16/19	There will be a kick-off meeting with the MSBA on September 24 th at 1pm when they will tour the Existing Somerset Middle School.	Ongoing
12.3	09/16.19	The first of two town forums will be held on Wednesday, September 25 th . Tours of the school, lead by students, will begin at 6:00. Forum will begin at 6:30 in the SMS auditorium.	Ongoing
12.4	09/16/19	Mr. Scanlon asked if Committee Members should have CORI checks completed since Committee Members may be in the schools when students are in the schools. Principal Camara will email the CORI Check Form to all Committee Members.	Ongoing

12.5	09/16/19	Mr. Machado thanked CGA and Ai3 and motioned to adjourn the	Record/
		meeting. Mr. Schoonover noted so moved and Mr. Lima seconded the motion. Committee unanimously voted to adjourn the meeting.	Close
		the motion. Committee unanimously voice to adjourn the meeting.	

- 1. CGA Project Management OPM Progress Report Dated 09.16.2019
- 2. Ai3 Presentation



MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Name of Board or Committee: Somerset School Committee - Somerset Middle School MSBA Building

Committee

Date & Time of Meeting: Monday, October 7, 2019 at 6:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, October 3, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to:

(circle cancelled/postponed)

REVISED 10-4-19 8:00 am

Clerk/Board Member cancelling/postponing meeting

AGENDA / LIST OF TOPICS

- I. Design Schedule Review
- II. Assessment, Testing and Investigation Activities: Status
- Existing Middle School Site Analysis III.
- IV. Educational Visioning Session #1 Review
- V. Educational Space Summary: Preliminary Documented Review
- VI. **OPM** Report
- VII. Approval of July 15, 2019 and September 16, 2019 Minutes
- Other Items VIII.

MSBA: Massachusetts School Building Authority

MEETING NO. __013

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:00 pm
Date:	10/07/2019
Next Meeting:	11/04/2019
Upcoming Mtgs:	11/25/2019; 12/16/2019 (TBD: Joint Meeting Vote)

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	schoonoverj@sbregional.org
Victor Machado	School Committee Member/ SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Ronald Tarro	Dir. of Business and Fin. for Somerset Public Schools	508-324-3100	<u>Tarror@sbregional.org</u>
Chris Godet	School Committee Member	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers (Absent)	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima (Absent)	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon (Absent)	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Nicole Mello	Content Coordinator for Science & Tech. at SMS	508-324-3140	Nicole.mello@somersetschools.org
Holly McNamara (Non-Voting)	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

CGA PROJECT MANAGEMENT, LLC (OPM) ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo	Project Manager	774.244.1101	adigiammo@compassgrouparch.com
(Absent)			
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

No.	Date	Issues	Action
3.01	10/07/19	No Change/Not Discussed.	Record
	09/16/19	Mr. Scanlon asked if there were any updates regarding the reimbursement rate. Mr. Tavares noted that the reimbursement rate has not changed. Town is reimbursed after payment is issued.	Record
	07/15/19	Mr. Schoonover asked what the reimbursement rate is. Mr. Tavares stated 56.89%. Mr. Godet asked when the Town will receive reimbursement. Mr. Tavares stated that the initial reimbursement should be sent after the Committee approved the contract today.	Record
	06/24/19	No change/Not discussed.	Record
	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	10/07/19	Chris Godet asked if the pros and cons of a 5-8 vs having a 6-8 middle school population has been discussed so that a decision can be made as to which direction the town should move forward with. Victor Machado pointed out that the pros and cons have been detailed in Ai3's presentation in earlier meeting and at the town forum which is available on the committee's web site. The town will need to make the decision as to which population the middle school will move forward with.	Ongoing
		Steven Medeiros noted that at the forum Jeff Schoonover had let the people present know that there was a Facilities Assessment completed for the elementary schools which was given to the Somerset School Committee earlier this year. Jeff Schoonover will distribute a copy of the assessment to the committee.	Ongoing
	04/22/19- 07/15/19	No change/Not discussed.	Record
	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades 5 – 8 or grades 6 – 8. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record

nativa aanihangaa _e a ga aanaaani		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
8.01	10/07/19	Steven Medeiros asked Dan Tavares to provide an update regarding Incentive Points. Dan Tavares noted that these are different categories that the if eligible, the town could receive additional funding. There are only three that Mr. Tavares is aware of which is Maintenance Evaluation, Sustainability and Addition/Renovation Projects. Caps do exist that the MSBA will look at to evaluate money distribution from community to community. This will be reviewed and determined at a later date.	Record/ Close
	04/22/19	Ongoing.	Record
	03/18/19	CGA discussed difference between eligible and ineligible reimbursement. Kevin Scanlon asked which spaces are not reimbursable. CGA indicated that some examples are auditoriums, temporary classrooms, moving expenses and legal fees to name a few. The handout provided by CGA noted that the MSBA, in its sole discretion, will review if a district is eligible for incentive points. Also, statute dictates that no district shall be eligible for more than 18 Incentive Points in total, and that no one category of Incentive Points can be more that 6 points.	Record
8.04	10/07/19	Mr. Tavares noted that the Barrington Middle School Site visit went well.	Record
		Ai3 is looking to schedule walk-thru of Quincy Middle School and Beverly Middle School.	Ongoing
		Jeff Schoonover is looking at a touring the Sharon Middle School which is a addition/renovation project.	Ongoing
	09/16/19	CGA has scheduled a walk-thru of the recently constructed Barrington Middle School (261 Middle Highway, Barrington, RI) for Thursday, September 19, 2019 at 4:00pm. Mr. Tavares noted that the tour should take about an hour. Twenty-five (25) faculty have expressed interest in attending the tour. Mr. Machado noted that SMS Building Committee Members should e-mail him or Mr. Tavares if they wish to attend.	Ongoing
	07/15/19	Dan Tavares suggested that the Committee take time to visit other schools with similar program.	Ongoing
	06/24/19	Dan Tavares stated that CGA has investigated whether they can receive pdfs of the model school plans. The MSBA confirmed that they cannot share plans at this time (prior to completing the feasibility study to determine if new construction is the preferred option and the SMSBC decides to explore the model school program).	Ongoing
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***************************************	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
	03/18/19	CGA will investigate recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA
10.01		Schedule	
	09/16/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1. No discussion regarding special town vote.	Record
	07/15/19	Mr. Tavares reviewed the 'Look Ahead' schedule (see OPM Progress Report). He stated, we are entering Module 3: Feasibility Study consisting of preliminary design program and preferred schematic report.	Record
	06/24/19	Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve.	Record
		Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	Record
11.1		Ai3 Introductions and Update	
	10/07/19	Mr. Troy Randell stated that the first visioning session took place on September 27 th . Approximately 70 people attended. Discussion at the meeting included education priority goals such as integrated technology, auditorium (very important), separate student areas, visible connections to the outdoors, virtual reality spaces and gardens. Also discussed at the meeting is identifying 21 st century schools and learning goals.	Record/ Close
	(A)	The second session will take place on October 18 th . The goal is to carry discussion into the second session/build on the first session and link the goals in a graphic form (towards space and scale).	Ongoing
		Ai3 is beginning to formulate "Proposed Space Summary" with existing space names, sizes and MSBA standards and guidelines. The goal is to take space names, space sizes and quantity of spaces and formulate a project program. There will be a meeting tomorrow (10/8) and Thursday (10/10) to refine this data. The goal is to bring big picture information to the next meeting.	Ongoing
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	10/07/19	Mr. Tavares noted that the MSBA kick off meeting took place on September 24 th . See line item below (12.2).	Ongoing
12.1	1	OPM Update	
1.3	07/15/19	Approval of the June 24, 2019 meeting minutes were tabled until the next meeting.	Record
	***************************************	Mr. Tavares, Mr. Randell, Mr. Schoonover, Dr. Camara will discuss building tour dates tomorrow morning.	Ongoing
		Looking for a 'working group' to meet once a week (Superintendent, Principal, Facilities, Building Committee Chair and could have town representative). Mr. Tavares prefers morning meeting.	Ongoing
	16,7,7,11	Next Building Committee Meeting possible date is Monday, August 12, 2019 at 6:00 followed by Monday, September 16, 2019 at 6:00pm.	Ongoing
	07/15/19	Mr. Tavares asked if another night might be better than Monday's. Discussion followed.	Record
1.2	and the second s	Future Meetings	
	***************************************	Ai3 presentation by Mr. Randell. (See slide show presentation.) Discussion followed.	Record
		of assessment testing, education design process and program design. The education narrative (vision) will also be developed in the next 3 to 4 months. Two or three options will be developed) preferred schematic design. One of the options will be decided by the building committee, followed by a final schematic design. The final design will require a vote by the town.	The state of the s
	07/15/19	Mr. Troy Randell was introduced. He thanked the committee for the opportunity and reviewed the MSBA project service scopes consisting	Ongoing
		Ai3 will work with SMS staff to put together a program/space study.	Ongoing
		Educational Vision Sessions will be held on September 27 th , October 18 th and November 5 th .	Ongoing
		Mr. Randell noted that the site and civil engineers will be at the next meeting to present their findings to and answer and questions from the Committee.	Ongoing
		20, 2019, Preferred Schematic Report (PSR) – April 24, 2020, and Schematic Design (SD) – October 19, 2020. Mr. Randell noted that data has been collected by consultants and that feedback will be provided including, but not limited to, reports. Information collected, including reports, shall be provided to the Committee for their information and records prior to their next meeting.	
	09/16/19	Mr. Troy Randell presented an update regarding critical upcoming dates which include Preliminary Design Program (PDP) – December 20, 2019, Professor Schematic Report (PSP) – April 24, 2020, and	Ongoing

	09/16/19	Mr. Tavares noted and listed the Anticipated Project Schedules (APS) for Module 2 (Forming The Project Team), Module 3 (Feasibility Study), Module 4 (Schematic Design) and Module 5 (Funding The Project). Mr. Tavares highlighted the MSBA Board of Directors Meeting / Approval dates. These will take place at the Board's location. CGA will keep the Committee posted on updates to the APS since the dates provided are subject to change.	Ongoing
		Mr. Tavares reviewed the Project Budget and Invoice Report. Mr. Machado asked who will approve the invoices to which Mr. Tavares was not sure of the town's process. Mr. Machado will review and let the OPM and Committee know.	Ongoing
12.2	10/07/19	Mr. Tavares noted that there was a good discussion with the MSBA regarding the consideration of 5 th grade inclusion. 5 th grade would be a non-refundable cost. Committal to the 5 th grade is not required to be part of PDP submission; however, this will be important later in the process.	Record/ Close
	09/16/19	There will be a kick-off meeting with the MSBA on September 24 th at 1pm when they will tour the Existing Somerset Middle School.	Ongoing
12.3	10/07/19	Troy Randell noted to the committee that the turnout at the first forum was very good. There was a heavy consideration regarding cost; however, there is no project to include a cost currently.	Record
	09/16/19	The first of two town forums will be held on Wednesday, September $25^{\rm th}$. Tours of the school, led by students, will begin at 6:00. Forum will begin at 6:30 in the SMS auditorium.	Ongoing
12.4	09/16/19	Mr. Scanlon asked if Committee Members should have CORI checks completed since Committee Members may be in the schools when students are in the schools. Principal Camara will e-mail the CORI Check Form to all Committee Members.	Ongoing

II NEV	V BUSINESS 17	TEMS	
No.	Date	Issues	Action
13.1		Site Analysis - Civil Engineer	
	10/07/19	Presenter – Vertex Civil Eng. Andrew Chagnon, PE – Vice President	Record
	**************************************	ESA – Phase I complete and closed out. The site had an underground tank and was closed out appropriately. There are documents which reflect that this occurred in 1997.	Record/ Close
		Preliminary Traffic Safety Analysis – Vertex is looking at existing conditions at this time (design work will be done later on in the schedule which will include queuing distances). Vertex is reviewing entry onto the site and adjacent streets (3 locations noted on the presentation). Safety analysis is due in the middle of this month.	Ongoing
		There is a master plan that has been worked on for 18 months. VHB is doing the masterplan and that's the one that the town is going forward with.	Record/ Close

attem;	art lag specied i shifted d'am Ma cell serence come ma lacem,	Holly McNamara noted that the new hotel on route 6 did their own traffic study. That it may be worth having Vertex obtain and review.	Ongoing
		Andrew Chagnon noted that Vertex did the existing conditions site survey which is due at the end of the month.	Ongoing
		Andrew Chagnon noted that the Geotechnical Engineer completed four (4) borings at the existing site. (Locations were shown on the presentation.) Mr. Chagnon also noted that Vertex has historical data from when the original building was constructed. He noted that there were no surprises and that shallow foundation will most likely be appropriate for the site; however, they will continue to evaluate the data.	Ongoing
		Wetlands Delineation – Andrew Chagnon noted that there was a stream at the back of the site at one point, but it no longer exists. There is a large wetland west of the existing middle school building and a small one to the south which is regulated by the town.	Record/ Close
	en marken de de commercia de la commercia de l	There are areas on the site that are designated by the town as open space but are not designated as open space by the state.	Record/ Close
13.2		Site Analysis - Landscape Architect	
	10/17/19	Presenter - Traverse Landscape Architects, Arthur J. Eddy, ASLA, LEED AP, Principal	Record
		Traverse is analyzing the site for potential buildable areas to understand opportunities and constraints at the site. As part of this analysis Traverse is looking at building orientation, existing recreational fields to look at replicating outdoor uses and the tiered portions of the site to take advantage of the topography for tiered landscape for outdoor education. Site education opportunities noted include, but are not limited to, forestry, outdoor spaces, community spaces and outreach paths.	Ongoing
		Traverse is looking at vehicular and pedestrian circulation patterns. Their goal is to enhance pedestrian routes for walking, biking, etc. Review is ongoing.	Ongoing
13.3	10/07/19	Michel Botelho asked if the community used many of the spaces at the school. Dr. Camara noted that there are many community groups that use the middle school. The gymnasium is used seven (7) days a week.	Record/ Close
13.4	10/07/19	Nicole Mello had a question regarding the number of students identified. Mr. Randell noted that the number of students identified by MSBA is a contract between the MSBA and the Town of Somerset. It is a hard number that cannot be changed.	Record/ Close
13.5	10/07/19	Richard Brown will remain the MCPPO certified board member. Ronald Tarro is taking classes to become MCPPO certified. It is the committee's understanding that the needs to be a 3 year wait period. Victor Machado will reach out to the MSBA about whether or not there needs to be a 3 year wait period and will update the group at the next meeting.	Ongoing

13.6	10/07/19	Mr. Machado motioned to approve the meeting minutes dated July 15, 2019. Dr. Camara noted so moved and Mr. Schoonover seconded the motion. Committee unanimously voted accept the meeting minutes. Michael Botelho, Nicole Mello and Ron Torro abstained from the vote.	Record/ Close
		Mr. Machado motioned to approve the meeting minutes dated September 16, 2019. Mr. Schoonover noted so moved and Dr. Camara seconded the motion. Committee unanimously voted accept the meeting minutes. Michael Botelho, Chris Godet and Ron Torro abstained from the vote.	Record/ Close
13.7	10/07/19	Mr. Machado motioned to adjourn the meeting. Mr. Godet noted so moved and Mr. Schoonover seconded the motion. Committee unanimously voted to adjourn the meeting.	Record/ Close

- 1. CGA Project Management OPM Progress Report Dated 10.07.2019
- 2. Ai3, Traverse and Vertex Presentation



MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Somerset School Committee - Somerset Middle School MSBA Building Name of Board or Committee:

Committee

Date & Time of Meeting: Monday, November 4, 2019 at 6:00 pm

Location of Meeting: School Committee Room in North Elementary School

580 Whetstone Hill Road, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, October 28, 2019 Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

GENDA / LIST OF TOPICS

- I. Design Schedule Review
- II. Assessment, Testing and Investigation Activities: Update
- III. Educational Visioning Session #2: Review
- Educational Programming Update IV.
- Review of Preliminary Options V.
- **OPM** Report VI.
- VII. Approval of October 7, 2019 Minutes
- VIII. Other Items

MSBA: Massachusetts School Building Authority

MEETING NO. __014

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:00 pm
Date:	11/04/2019
Next Meeting:	11/25/2019
Upcoming Mtgs:	12/16/2019 (TBD: Joint Meeting Vote)

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
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Victor Machado	School Committee Member/ SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
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Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
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Steven Medeiros	Registered Architect	508-496-5027	<u>smedeiros@civitects.com</u>
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Nicole Mello	Content Coordinator for Science & Tech. at SMS	508-324-3140	Nicole.mello@somersetschools.org
Holly McNamara (Non-Voting)	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

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(Absent)			
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

lo.	Date	Issues	Action
.01	10/07/19- 11/04/19	No Change/Not Discussed.	Record
	09/16/19	Mr. Scanlon asked if there were any updates regarding the reimbursement rate. Mr. Tavares noted that the reimbursement rate has not changed. Town is reimbursed after payment is issued.	Record
	07/15/19	Mr. Schoonover asked what the reimbursement rate is. Mr. Tavares stated 56.89%. Mr. Godet asked when the Town will receive reimbursement. Mr. Tavares stated that the initial reimbursement should be sent after the Committee approved the contract today.	Record
	06/24/19	No change/Not discussed.	Record
	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	11/04/19	There will be a School Committee Meeting on November 12 th . Selectmen, Ai3 and CGA have been invited for an update. Nothing has been shared with the Selectmen and School Committee as of this meeting. The School Committee will be asked to form a committee to discuss Grades 5 thru 8 verses Grades 6 thru 8 at the Somerset Middle School.	Ongoing
	10/07/19	Chris Godet asked if the pros and cons of a 5-8 vs having a 6-8 middle school population has been discussed so that a decision can be made as to which direction the town should move forward with. Victor Machado pointed out that the pros and cons have been detailed in Ai3's presentation in earlier meeting and at the town forum which is available on the committee's web site. The town will need to make the decision as to which population the middle school will move forward with.	Ongoing
		Steven Medeiros noted that at the forum Jeff Schoonover had let the people present know that there was a Facilities Assessment completed for the elementary schools which was given to the Somerset School Committee earlier this year. Jeff Schoonover will distribute a copy of the assessment to the committee.	Ongoing
	04/22/19- 07/15/19	No change/Not discussed.	Record

	03/18/19	Victor Machado noted that the Somerset School Committee may be looking to re-district prior to any future work at the SMS. Ongoing.	Record
	11/19/18	Victor Machado asked who will make the decision whether the future building project will be grades 5 – 8 or grades 6 – 8. He also asked if the School Committee should be involved due to the future project's effects on academics and the overall district. The SMSBC will review future study and make recommendations to the School Committee.	Record
		It was noted that a facility assessment, which is evaluating all three elementary schools, is due in February 2019. It will indicate the condition of the three schools as well as make recommendations. Findings in the assessment may help dictate the direction of the future middle school. A pros and cons assessment should be made after the facility assessment and the SMS study are completed.	Record
8.04	11/04/19	Tours of the Beverly Middle School and Quincy South West Middle Schools (both designed by Ai3) occurred on October 15 th .	Record
	An and a state of the control of the	Jeff Schoonover is in the process of scheduling a tour of the Town of Sharon Middle School which was renovated in 2012.	Ongoing
	10/07/19	Mr. Tavares noted that the Barrington Middle School Site visit went well.	Record
	***************************************	Ai3 is looking to schedule walk-thru of Quincy Middle School and Beverly Middle School.	Ongoing
		Jeff Schoonover is looking at a touring the Sharon Middle School which is a addition/renovation project.	Ongoing
	09/16/19	CGA has scheduled a walk-thru of the recently constructed Barrington Middle School (261 Middle Highway, Barrington, RI) for Thursday, September 19, 2019 at 4:00pm. Mr. Tavares noted that the tour should take about an hour. Twenty-five (25) faculty have expressed interest in attending the tour. Mr. Machado noted that SMS Building Committee Members should e-mail him or Mr. Tavares if they wish to attend.	Ongoing
	07/15/19	Dan Tavares suggested that the Committee take time to visit other schools with similar program.	Ongoing
	06/24/19	Dan Tavares stated that CGA has investigated whether they can receive pdfs of the model school plans. The MSBA confirmed that they cannot share plans at this time (prior to completing the feasibility study to determine if new construction is the preferred option and the SMSBC decides to explore the model school program).	Ongoing
	04/22/19	Dan Tavares stated that given the timeline the committee can only visit schools after the selection of an architect. Jeff Schoonover to send to the committee what CGA sent as recent schools to look at.	Record
		Model School Update: Daniel Tavares stated that 2 of 3 are still viable. Kevin Scanlon asked if it is possible to get pdfs of the plans for the model schools. CGA to look into model schools.	CGA
	03/18/19	CGA will investigate recently constructed schools for the SMSBC to visit prior to the release of the RFS.	CGA

10.01	7	Schedule	**************************************
	11/04/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1.	Record
	09/16/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1. No discussion regarding special town vote.	Record
	07/15/19	Mr. Tavares reviewed the 'Look Ahead' schedule (see OPM Progress Report). He stated, we are entering Module 3: Feasibility Study consisting of preliminary design program and preferred schematic report.	Record
	06/24/19	Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve.	Record
		Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	Record
11.1		Ai3 Introductions and Update	
	11/04/19	Mr. Randell noted that the second session did take place on October 18th. Over 65 staff and faculty participated which were broken up into discussion groups of eight teams of five (5) to six (6) individuals. Main goal of this session is to identify eight (8) to ten (10) priorities and considerations based on fifty (50) design patterns. Establish four (4) to six (6) guiding principles.	Record/ Close
		The next visioning session will take place tomorrow (November 5 th) at the SBRHS from 12:20 PM to 2:00 PM.	Ongoing
		PDP submission, due December 20, 2019, to include the following: • Education Program • Initial Education Survey • Evaluation of existing conditions at the middle school • Evaluation of existing elementary schools • Evaluation of alternate options	Ongoing
		Mr. Randell noted the following updates regarding critical upcoming dates which include Preferred Schematic Report (PSR) – May 6, 2020, and Schematic Design (SD) – September 9, 2020. Ai3 and CGA will update the Committee if these dates change.	Record/ Close
	manufacture and manufacture an	Mr. Scanlon asked Ai3 to provide handouts of their presentation and any future presentations to the Committee at or before the meeting. Ai3 noted that moving forward they will provide handouts.	Record/ Close

	Mr. Scanlon asked how the design team will balance teachers current wish list and future teaching styles. How does the design team make the design adoptable for future teaching styles? Dr. Camara responded that much of the proposed spaces will be flexible so that there is opportunity to adapt to future teaching. Mr. Randell noted that some key design aspects to help with flexibility include, but are not limited to, the following: 1. Connection of spaces will be important to flexibility. 2. Natural light in spaces. 3. Less built-ins will create greater flexibility. 4. Wireless technology.	Record/ Close
10/0'	The second session will take place on October 18 th . The goal is to carry discussion into the second session/build on the first session and link the goals in a graphic form (towards space and scale).	Ongoing
	Ai3 is beginning to formulate "Proposed Space Summary" with existing space names, sizes and MSBA standards and guidelines. The goal is to take space names, space sizes and quantity of spaces and formulate a project program. There will be a meeting tomorrow (10/8) and Thursday (10/10) to refine this data. The goal is to bring big picture information to the next meeting.	Ongoing
	Mr. Troy Randell presented an update regarding critical upcoming dates which include Preliminary Design Program (PDP) – December 20, 2019, Preferred Schematic Report (PSR) – April 24, 2020, and Schematic Design (SD) – October 19, 2020. Mr. Randell noted that data has been collected by consultants and that feedback will be provided including, but not limited to, reports. Information collected, including reports, shall be provided to the Committee for their information and records prior to their next meeting.	Ongoing
09/10	Mr. Randell noted that the site and civil engineers will be at the next meeting to present their findings to and answer and questions from the Committee.	Ongoing
	Educational Vision Sessions will be held on September 27 th , October 18 th and November 5 th .	Ongoing
	Ai3 will work with SMS staff to put together a program/space study.	Ongoing
	Mr. Troy Randell was introduced. He thanked the committee for the opportunity and reviewed the MSBA project service scopes consisting of assessment testing, education design process and program design. The education narrative (vision) will also be developed in the next 3 to 4 months. Two or three options will be developed) preferred schematic design. One of the options will be decided by the building committee, followed by a final schematic design. The final design will require a vote by the town.	Ongoing
07/15	/19 Ai3 presentation by Mr. Randell. (See slide show presentation.) Discussion followed.	Record

12.1		OPM Update	
	11/14/19	Mr. Tavares provided an update on Ai3's progress. He also provided an update on Working Group and Security and Technology Meetings including dates when the meetings were held.	Ongoing
		Mr. Tavares reviewed the Project Budget and Invoice Report. Amount has been sent to the MSBA for reimbursement.	Record
	10/07/19	Mr. Tavares noted that the MSBA kick off meeting took place on September 24 th . See line item below (12.2).	Ongoing
	09/16/19	Mr. Tavares noted and listed the Anticipated Project Schedules (APS) for Module 2 (Forming The Project Team), Module 3 (Feasibility Study), Module 4 (Schematic Design) and Module 5 (Funding The Project). Mr. Tavares highlighted the MSBA Board of Directors Meeting / Approval dates. These will take place at the Board's location. CGA will keep the Committee posted on updates to the APS since the dates provided are subject to change.	Ongoing
		Mr. Tavares reviewed the Project Budget and Invoice Report. Mr. Machado asked who will approve the invoices to which Mr. Tavares was not sure of the town's process. Mr. Machado will review and let the OPM and Committee know.	Ongoing
12.2	11/14/19	As part of his OPM update Mr. Tavares noted to the Committee that MSBA reconfirmed their limited partition of a 5-8 Somerset Middle School via an e-mail dated October 24 th. He noted that no further action has been taken since the October 24 th e-mail.	Record/ Close
	10/07/19	Mr. Tavares noted that there was a good discussion with the MSBA regarding the consideration of 5 th grade inclusion. 5 th grade would be a non-refundable cost. Committal to the 5 th grade is not required to be part of PDP submission; however, this will be important later in the process.	Record
	09/16/19	There will be a kick-off meeting with the MSBA on September 24 th at 1pm when they will tour the Existing Somerset Middle School.	Ongoing
12.3	11/14/19	The second of two forums will be held on Wednesday, November 13 th at 6 pm at the Somerset Middle School.	Ongoing
	10/07/19	Troy Randell noted to the committee that the turnout at the first forum was very good. There as a heavy consideration regarding cost; however, there is no project to include a cost currently.	Record
	09/16/19	The first of two town forums will be held on Wednesday, September 25^{th} . Tours of the school, led by students, will begin at 6:00. Forum will begin at 6:30 in the SMS auditorium.	Ongoing
12.4	09/16/19	Mr. Scanlon asked if Committee Members should have CORI checks completed since Committee Members may be in the schools when students are in the schools. Principal Camara will e-mail the CORI Check Form to all Committee Members.	Ongoing

13.1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Site Analysis - Civil Engineer	
	10/07/19	Presenter – Vertex Civil Eng. Andrew Chagnon, PE – Vice President	Record
		Preliminary Traffic Safety Analysis – Vertex is looking at existing conditions at this time (design work will be done later on in the schedule which will include queuing distances). Vertex is reviewing entry onto the site and adjacent streets (3 locations noted on the presentation). Safety analysis is due in the middle of this month.	Ongoing
	***************************************	Holly McNamara noted that the new hotel on route 6 did their own traffic study. That it may be worth having Vertex obtain and review.	Ongoing
	***************************************	Andrew Chagnon noted that Vertex did the existing conditions site survey which is due at the end of the month.	Ongoing
		Andrew Chagnon noted that the Geotechnical Engineer completed four (4) borings at the existing site. (Locations were shown on the presentation.) Mr. Chagnon also noted that Vertex has historical data from when the original building was constructed. He noted that there were no surprises and that shallow foundation will most likely be appropriate for the site; however, they will continue to evaluate the data.	Ongoing
13.2		Site Analysis – Landscape Architect	
	11/04/19	Not discussed.	Ongoing
	10/17/19	Presenter – Traverse Landscape Architects, Arthur J. Eddy, ASLA, LEED AP, Principal	Record
		Traverse is analyzing the site for potential buildable areas to understand opportunities and constraints at the site. As part of this analysis Traverse is looking at building orientation, existing recreational fields to look at replicating outdoor uses and the tiered portions of the site to take advantage of the topography for tiered landscape for outdoor education. Site education opportunities noted include, but are not limited to, forestry, outdoor spaces, community spaces and outreach paths.	Ongoing
	and the state of t	Traverse is looking at vehicular and pedestrian circulation patterns. Their goal is to enhance pedestrian routes for walking, biking, etc. Review is ongoing.	Ongoing
13.5	10/07/19	Richard Brown will remain the MCPPO certified board member. Ronald Tarro is taking classes to become MCPPO certified. It is the committee's understanding that the needs to be a 3 year wait period. Victor Machado will reach out to the MSBA about whether or not there needs to be a 3 year wait period and will update the group at the next meeting.	ongoing

No.	Date	Issues	Action
4.1		Educational Program Summary	
	11/04/19	Ai3 presented space adjacency diagrams which show size (bubble diagram not exact sizes – large bubble larger spaces and small bubble smaller spaces) and spatial relationship. Spaces include: • Core Academic Spaces • Special Education Spaces 'Neighborhoods' are formed. All neighborhoods are similar and were be broken out as follows: • 6th to 8th Grade Level Organization • 6th Grade Lower Level School • 7th to 8th Grade Upper Level School • 5th to 8th Grade Level Organization • 5th to 8th Grade Level Organization • 7th to 8th Grade Upper Level School • Art and Music Connections • Vocational, Technology Computer Literacy, Coding Robotics and Manufacturing • Guidance – Much feedback included one central and entrance and egress out of each room. • Medical – Nurse near guidance and main offices.	Record
		Mr. Botelho asked Ai3 how different are the Somerset Middle School bubble diagrams from those of other schools? Mr. Randell responded that the diagrams are not very different. He also noted that new auditorium square footage will not be reimbursed and that there will be some areas that will be more prominent in Somerset's program that may not be as prominent in another community (i.e. an auditorium).	Record
		Mr. Randell noted that if a district identifies a need for a space then it is the district's responsibility to provide back-up of why the space and quantity are needed. One example that was noted was that there is a large space in the Somerset Berkley Regional High School that may be used by the community, but does not belong to the Town of Somerset since it is a regional school and belongs to both Somerset and Berkley. There may be a need for more community space for the Town of Somerset.	Ongoing
14.2	11/04/19	Preliminary Building Options Option 1 – Base Repair – Repairs to the existing building. 1. Mr. Randell noted that MSBA requires that this option is required to be carried out throughout the entire study. 2. Only code required repairs would be part of this option. 3. There will be no education upgrades, no site upgrades, no new walls, no technology upgrades and no MSBA reimbursement. Town would bear the cost of the work.	Record

 Option 2 - Grade 6 thru 8 - Addition to / Renovation of the existing building. This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. The work at the SMS would include 124,000 gross square foot of existing building renovations and 25,000 gross square feet of new construction. Temporary modular swing space would be required. Mr. Tavares noted that modular spaces are not reimbursable by the MSBA. Option 3 - Grade 6 thru 8 - Addition to / Renovation of the existing 	Record
 building. (Mr. Randell noted that this option is not advantageous.) This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. The work at the SMS would include 124,000 gross square feet of new building construction and 13,000 gross square feet of renovations (auditorium and lecture hall). Mr. Randell noted that this option is very complex. Due to the complexity and phasing the duration of construction could be as long as three (3) years. 	
 Option 4 - Grade 6 thru 8 - New Construction This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. Mr. Randell noted that there is buildable area towards Brayton Avenue and that this option is the most sustainable and most efficient option. It also resolves site issues and expands site amenities. Mr. Randell noted that this option has the least impact to the town and the community. 	Record
 Option 5 - Grade 5 thru 8 - Addition to / Renovation of the existing building. 1. Phase One (1) would includes building a two (2) story addition to move occupants around for renovation work at other sections of the building. 2. This option will require 82,000 gross square feet of new construction and 87,000 gross square feet of renovations to the existing building. 3. The building will be occupied during the work. 	Record
 Option 6 - Grade 5 thru 8 - Addition to / Renovation of the existing building. (Mr. Randell noted that this option is not advantageous.) 1. This option will require 156,000 gross square feet of new construction and 13,000 square feet of renovation work to the existing building. 2. Temporary modular swing space would be required. Mr. Tavares noted that modular spaces are not reimbursable by the MSBA. 	Record

		Option 7 - Grade 5 thru 8 - New Construction (Similar to Grade 6 thru 8 new construction option). 1. Mr. Randell noted that there is buildable area towards Brayton Avenue and that this option is the most sustainable and most efficient option. It also resolves site issues and expands site amenities. 2. Mr. Randell noted that this option has the least impact to the town and the community.	Record
		Mr. Raffa asked if the addition / renovation options and new construction options will have the same gross square feet. Mr. Randell stated no, the addition / renovation options will have larger square footages because of inefficiencies built in.	Record/ Close
		Mr. Randell was asked about the cost of addition / renovations vs. cost of new construction. He noted that the cost of new construction is slightly higher, but then there is also the cost of phasing and swing space that needs to be considered which will add cost.	Record/ Close
		Mr. Scanlon asked if there were other considerations for option no. 2. Mr. Randell noted that Ai3 will look at different design options / variations for option no. 2.	Record/ Close
14.3	11/04/19	Mr. Machado motioned to approve the meeting minutes dated October 7, 2019. Dr. Camara noted so moved and Mr. Schoonover seconded the motion. Committee unanimously voted accept the meeting minutes. Kathleen Myers and Robert Lima abstained from the vote.	Record/ Close
14.4	11/04/19	Mr. Machado motioned to adjourn the meeting. Mr. Botelho noted so moved and Dr. Camara seconded the motion. Committee unanimously voted to adjourn the meeting.	Record/ Close

ATTACHMENTS:

- 1. CGA Project Management OPM Progress Report Dated 11.04.2019
- 2. Ai3 Presentation

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.





TOWN OF SOMERSET

MEETING NOTICE

Received & Posted	Time:
	Town Clerk

(PLEASE PRINT OR TYPE LEGIBLY)

Somerset School Committee - Somerset Middle School MSBA Building Name of Board or Committee:

Committee

Monday, November 25, 2019 at 6:00 pm Date & Time of Meeting:

Distance Learning Center, Somerset Berkley Regional High School **Location of Meeting:**

625 County Street, Somerset, MA

(physical address including room # or name if applicable)

Robin Vaccaro, Recording Secretary, November 21, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to: (circle cancelled/postponed)

Clerk/Board Member cancelling/postponing meeting

GENDA / LIST OF TOPICS

- Design Schedule Review I.
- II. Assessment, Testing and Investigation Activities: Update
- Educational Visioning Session #2: Review III.
- IV. **Educational Programming Update**
- **Review of Preliminary Options** V.
- VI. **OPM** Report
- Approval of November 4, 2019 Minutes VII.
- Date of Next Meeting VIII.
 - IX. Other Items

MSBA: Massachusetts School Building Authority

OPM: Owner's Project Manager

SOMERSET MIDDLE SCHOOL BUILDING COMMITTEE MEETING MINUTES

MEETING NO. _015

Project:	Somerset Middle School Building
Project Location:	1141 Brayton Avenue, Somerset, MA
Meeting Location:	Somerset North Elementary School, 580 Whetstone Hill Road, Somerset, MA
Time:	6:00 pm
Date:	11/25/2019
Next Meeting:	12/16/2019: Joint Meeting Vote
Upcoming Mtgs:	TBD

SMSBC ATTENDEES

Name	Title	Telephone	E-Mail
Jeff Schoonover	Superintendent of Schools/ SMSBC Vice Chairman	508-324-3100 (215)	schoonoverj@sbregional.org
Victor Machado	School Committee Member/ SMSBC Chairman	774-488-4349	Victor.machado@somersetschools.org
Michael Botelho	Community Member	508-951-2753	michael.botelho@somersetschools.org
Pauline Camara	Principal @ SMS	508-324-3140	Paulina.camara@somersetschools.org
Ronald Tarro	Dir. of Business and Fin. for Somerset Public Schools	508-324-3100	<u>Tarror@sbregional.org</u>
Chris Godet	School Committee Member	508-646-2800	Chr1513@msn.com
Carlos Campos	Supervisor Bldgs & Grounds	508-965-3541	<u>camposc@sbregional.org</u>
Kathleen Byers	Teacher at SMS	508-324-3140	Kathleen.byers@somersetschools.org
Cassey Monte	Teacher at SMS	508-324-3140	Cassey.monte@somersetschools.org
Steven Medeiros	Registered Architect	508-496-5027	smedeiros@civitects.com
Robert Lima	Superintendent of Somerset Water Dept., Retired	508-672-1272 774-713-0480	Rlma27351@yahoo.com
Kevin Scanlon	Licensed Mass. Construction Supervisor	401-447-6446	Krscanlon819@yahoo.com
Nick Raffa	Somerset Advisory and Finance Committee	508-646-2800	<u>littlepaisan@aol.com</u>
Nicole Mello Absent	Content Coordinator for Science & Tech. at SMS	508-324-3140	Nicole.mello@somersetschools.org
Holly McNamara (Non-Voting) – Absent	Chair of the Somerset Board of Selectmen	508-646-2800	hmcnamara@town.somerset.ma.us
Richard Brown (Non-voting) - Absent	Town Administrator	508-646-2800	rbrown@town.somerset.ma.us

CGA PROJECT MANAGEMENT, LLC (OPM) ATTENDEES

Name	Title	Telephone	E-Mail
Daniel Tavares	Project Director	617.835.8528	dtavares@compassgrouparch.com
Andrew DiGiammo	Project Manager	774.244.1101	adigiammo@compassgrouparch.com
(Absent)			
Shannon Khoury	Assistant Project Manager	508.989.3630	skhoury@compassgrouparch.com
Marybeth Carney	Assistant Project Manager	508.284.2792	mcarney@compassgrouparch.com

Committee Guests: Michael McDonald, School Committee Member and Elizabeth Haskell, Director of Curriculum and Assessment, Somerset Public Schools & Somerset Berkley Regional School District

No.	Date	Issues	Action
3.01	11/25/19	 Ai3 reviewed ineligible and eligible reimbursement costs. Ineligible costs will include: Hard and soft costs for Fifth (5 th) Grade which will include approximately 30,000 Gross Square Feet of any project that includes a 5th Grade section. Hard and soft costs for an auditorium. Site costs exceeding eight percent (8%) of the estimated building construction. 	Record
		Ai3 anticipates the following additional MSBA reimbursement: 1. 3.5% on eligible costs. 2. 0% to 5% on Renovation and Re-use	Record
		Ai3 noted that the adjusted reimbursement rate is approximately thirty-seven percent (37%).	Record
	10/07/19- 11/04/19	No Change/Not Discussed.	Record
	09/16/19	Mr. Scanlon asked if there were any updates regarding the reimbursement rate. Mr. Tavares noted that the reimbursement rate has not changed. Town is reimbursed after payment is issued.	Record
	07/15/19	Mr. Schoonover asked what the reimbursement rate is. Mr. Tavares stated 56.89%. Mr. Godet asked when the Town will receive reimbursement. Mr. Tavares stated that the initial reimbursement should be sent after the Committee approved the contract today.	Record
	06/24/19	No change/Not discussed.	Record
	04/22/19	D. Tavares noted that the reimbursement rate is the locked in rate right now, but there is a potential adjustment when the option is selected in the future.	Record
	03/18/19	56.89% (corrected in 04/22/2019 meeting) reimbursement rate is last year's rate. CGA indicated that the MSBA reimbursement rate is constantly changing and will be locked in during the conclusion of the Certified Study.	Record
	09/17/18	Discussion regarding ensuring the Board stays within the \$800,000.00 allocated funds with the estimated 57% reimbursement rate for the Feasibility Study process.	Record
5.02	11/25/19	Ai3 noted that the cost of a 5-8 SMS project will be far less than the cost of any 6-8 SMS option which would require additional work at the Chase Street and South Elementary Schools to add needed space. Mr. Scanlon noted that additional costs for the Chase Street and South Elementary Schools (broken-down in Ai3's presentation) may confuse the public and should be greatly simplified. He also felt that some of the questions on the Project Evaluation Criteria / Matrix were skewed towards new construction or a 5-8 option. Mr. Machado also expressed concern regarding additional information (estimates) regarding work required at the Elementary Schools.	Record/ Ongoing

	Ai3 will simplify the elementary school work and remove questions that are skewed in one direction or another.	
	Mr. Schoonover was asked if the Somerset School Committee has put together a committee to review the 5 th grade option. He noted that the Somerset School Committee asked him to put together a Committee to review the pros and cons of having Grade 5 at the future middle school.	Ongoing
	CGA noted that grades 5-8 and 6-8 options needs to be looked at on an education basis and not construction basis and suggested to the committee that at least one add/reno project should be looked at by Ai3.	Record
11/04/19	There will be a School Committee Meeting on November 12 th . Selectmen, Ai3 and CGA have been invited for an update. Nothing has been shared with the Selectmen and School Committee as of this meeting. The School Committee will be asked to form a committee to discuss Grades 5 thru 8 verses Grades 6 thru 8 at the Somerset Middle School.	Ongoing
10/07/19	Chris Godet asked if the pros and cons of a 5-8 vs having a 6-8 middle school population has been discussed so that a decision can be made as to which direction the town should move forward with. Victor Machado pointed out that the pros and cons have been detailed in Ai3's presentation in earlier meeting and at the town forum which is available on the committee's web site. The town will need to make the decision as to which population the middle school will move forward with.	Ongoing
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10. 01		Schedule	
production to the second section.	11/25/19	Not Discussed.	Ongoing
en a desta de la dela dela della del	11/04/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1.	Record
	09/16/19	Mr. Tavares provided an updated schedule as part of the OPM report. Refer to line item no. 12.1. No discussion regarding special town vote.	Record

	06/24/19	Mr. Tavares reviewed the 'Look Ahead' schedule (see OPM Progress Report). He stated, we are entering Module 3: Feasibility Study consisting of preliminary design program and preferred schematic report. Chris Godet asked if schedule will change due to MSBA panel vote and Studio G's declining to be interviewed. Dan Tavares stated that no not due to MSBA panel decision to or not to interview; however, D. Tavares noted that when Ai3 is on board their outlined schedule may improve. Jeff Schoonover asked if the town vote can be moved up to special town meeting in December, 2020 rather than May, 2021. D. Tavares noted that this could be the target date in the schedule for the designer to meet so that they can be ready to provide information to voters.	Record
11.1	11/25/19	Ai3 Introductions and Update The third visioning session took place on November 5 th at the SBRHS. Develop bubble diagrams to show what the groups are looking for in the future project. Some elements include: 1. Center sunken space. 2. Large wall with small stage for presentations. 3. TV Studio and Media Center.	Record/ Close
		Guiding design principles needed to be narrowed down to not more than five (5). They were narrowed down to the following: 1. Education Innovation. 2. Belonging and Ownership. 3. Safety and Security. 4. Indoor and Outdoor School and Community Connection. 5. Sustainability.	Record/ Close
	11/04/19	The next visioning session will take place tomorrow (November 5 th) at the SBRHS from 12:20 PM to 2:00 PM.	Ongoing
A CALL THE REAL PROPERTY OF THE PROPERTY OF TH		PDP submission, due December 20, 2019, to include the following: • Education Program • Initial Education Survey • Evaluation of existing conditions at the middle school • Evaluation of existing elementary schools • Evaluation of alternate options	Ongoing
The second secon	10/07/19	The second session will take place on October 18 th . The goal is to carry discussion into the second session/build on the first session and link the goals in a graphic form (towards space and scale).	Ongoing
		Ai3 is beginning to formulate "Proposed Space Summary" with existing space names, sizes and MSBA standards and guidelines. The goal is to take space names, space sizes and quantity of spaces and formulate a project program. There will be a meeting tomorrow (10/8) and Thursday (10/10) to refine this data. The goal is to bring big picture information to the next meeting.	Ongoing

		Mr. Troy Randell presented an update regarding critical upcoming dates which include Preliminary Design Program (PDP) – December 20, 2019, Preferred Schematic Report (PSR) – April 24, 2020, and Schematic Design (SD) – October 19, 2020. Mr. Randell noted that data has been collected by consultants and that feedback will be provided including, but not limited to, reports. Information collected, including reports, shall be provided to the Committee for their information and records prior to their next meeting.	Ongoing
	09/16/19	Mr. Randell noted that the site and civil engineers will be at the next meeting to present their findings to and answer and questions from the Committee.	Ongoing
		Educational Vision Sessions will be held on September 27 th , October 18 th and November 5 th .	Ongoing
and the second s	Q1 q2 q3 a san a san a d san a san	Ai3 will work with SMS staff to put together a program/space study.	Ongoing
		Mr. Troy Randell was introduced. He thanked the committee for the opportunity and reviewed the MSBA project service scopes consisting of assessment testing, education design process and program design. The education narrative (vision) will also be developed in the next 3 to 4 months. Two or three options will be developed) preferred schematic design. One of the options will be decided by the building committee, followed by a final schematic design. The final design will require a vote by the town.	Ongoing
The state of the s	07/15/19	Ai3 presentation by Mr. Randell. (See slide show presentation.) Discussion followed.	Record
12.1	200	OPM Update	
	11/25/19	An update was not provided; however, CGA did provide feedback/contributed to the discussion.	Record
ne un parte attent anna d'Argentença (1881)	11/14/19	Mr. Tavares provided an update on Ai3's progress. He also provided an update on Working Group and Security and Technology Meetings including dates when the meetings were held.	Ongoing
est describe the second of the	errent en martin en martin de des	Mr. Tavares reviewed the Project Budget and Invoice Report. Amount has been sent to the MSBA for reimbursement.	Record
COLUMN TO THE PROPERTY OF THE	10/07/19	Mr. Tavares noted that the MSBA kick off meeting took place on September 24 th . See line item below (12.2).	Ongoing
	09/16/19	Mr. Tavares noted and listed the Anticipated Project Schedules (APS) for Module 2 (Forming The Project Team), Module 3 (Feasibility Study), Module 4 (Schematic Design) and Module 5 (Funding The Project). Mr. Tavares highlighted the MSBA Board of Directors Meeting / Approval dates. These will take place at the Board's location. CGA will keep the Committee posted on updates to the APS since the dates provided are subject to change.	Ongoing
Principal department of the company		Mr. Tavares reviewed the Project Budget and Invoice Report. Mr. Machado asked who will approve the invoices to which Mr. Tavares was not sure of the town's process. Mr. Machado will review and let the OPM and Committee know.	Ongoing

12.3	11/25/19	The second forum took place on Wednesday, November 13 th .	Close
	11/14/19	The second of two forums will be held on Wednesday, November 13 th at 6 pm at the Somerset Middle School.	Ongoing
	10/07/19	Troy Randell noted to the committee that the turnout at the first forum was very good. There as a heavy consideration regarding cost; however, there is no project to include a cost currently.	Record
	09/16/19	The first of two town forums will be held on Wednesday, September 25^{th} . Tours of the school, led by students, will begin at 6:00. Forum will begin at 6:30 in the SMS auditorium.	Ongoing
12.4	09/16/19	Mr. Scanlon asked if Committee Members should have CORI checks completed since Committee Members may be in the schools when students are in the schools. Principal Camara will e-mail the CORI Check Form to all Committee Members.	Ongoing
13.1	anna ^a lana an ^a lana an	Site Analysis - Civil Engineer	
	11/04/19- 11/25/19	Not Discussed.	Ongoing
	10/07/19	Presenter – Vertex Civil Eng. Andrew Chagnon, PE – Vice President	Record
		Preliminary Traffic Safety Analysis – Vertex is looking at existing conditions at this time (design work will be done later on in the schedule which will include queuing distances). Vertex is reviewing entry onto the site and adjacent streets (3 locations noted on the presentation). Safety analysis is due in the middle of this month.	Ongoing
	Total and the same of the same	Holly McNamara noted that the new hotel on route 6 did their own traffic study. That it may be worth having Vertex obtain and review.	Ongoing
	Andrew management of the contract of the	Andrew Chagnon noted that Vertex did the existing conditions site survey which is due at the end of the month.	Ongoing
		Andrew Chagnon noted that the Geotechnical Engineer completed four [4] borings at the existing site. (Locations were shown on the presentation.) Mr. Chagnon also noted that Vertex has historical data from when the original building was constructed. He noted that there were no surprises and that shallow foundation will most likely be appropriate for the site; however, they will continue to evaluate the data.	Ongoing
13.2	**************************************	Site Analysis – Landscape Architect	
	11/04/19- 11/25/19	Not discussed.	Ongoing
	10/17/19	Presenter – Traverse Landscape Architects, Arthur J. Eddy, ASLA, LEED AP, Principal	Record

	AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	Traverse is analyzing the site for potential buildable areas to understand opportunities and constraints at the site. As part of this analysis Traverse is looking at building orientation, existing recreational fields to look at replicating outdoor uses and the tiered portions of the site to take advantage of the topography for tiered landscape for outdoor education. Site education opportunities noted include, but are not limited to, forestry, outdoor spaces, community spaces and outreach paths.	Ongoing
		Traverse is looking at vehicular and pedestrian circulation patterns. Their goal is to enhance pedestrian routes for walking, biking, etc. Review is ongoing.	Ongoing
13.5	10/07/19	Richard Brown will remain the MCPPO certified board member. Ronald Tarro is taking classes to become MCPPO certified. It is the committee's understanding that the needs to be a 3 year wait period. Victor Machado will reach out to the MSBA about whether or not there needs to be a 3 year wait period and will update the group at the next meeting.	ongoing
14.1		Educational Program Summary	
	11/25/19	Some program items were discussed. Refer to line 14.2.	Ongoing
	11/04/19	Ai3 presented space adjacency diagrams which show size (bubble diagram not exact sizes – large bubble larger spaces and small bubble smaller spaces) and spatial relationship. Spaces include: • Core Academic Spaces • Special Education Spaces 'Neighborhoods' are formed. All neighborhoods are similar and were be broken out as follows: • 6th to 8th Grade Level Organization • 6th Grade Lower Level School • 7th to 8th Grade Upper Level School • 5th to 8th Grade Level Organization • 5th to 8th Grade Lower Level School • 7th to 8th Grade Upper Level School • Art and Music Connections • Vocational, Technology Computer Literacy, Coding Robotics and Manufacturing • Guidance – Much feedback included one central and entrance and egress out of each room. • Medical – Nurse near guidance and main offices. Mr. Botelho asked Ai3 how different are the Somerset Middle School bubble diagrams from those of other schools? Mr. Randell responded that the diagrams are not very different. He also noted that new auditorium square footage will not be reimbursed and that there will be some areas that will be more prominent in Somerset's program that may not be as prominent in another community (i.e. an auditorium).	Record

14.2		Mr. Randell noted that if a district identifies a need for a space then it is the district's responsibility to provide back-up of why the space and quantity are needed. One example that was noted was that there is a large space in the Somerset Berkley Regional High School that may be used by the community, but does not belong to the Town of Somerset since it is a regional school and belongs to both Somerset and Berkley. There may be a need for more community space for the Town of Somerset.	Ongoing
14.2	11/25/19	Preliminary Building Options Ai3 reviewed Project Cost Projections with the Committee explaining difference between Hard Costs (Construction Costs) and Soft Costs (Interiors and Furniture/Equipment Technology/Design and Engineering Management).	Record/ Close
		Ai3 also noted that MSBA has been tracking construction costs in their program since 2009. Mr. Randell stated that construction funding limits do go up slightly each year; however, the MSBA is not keeping up with the increase in cost of construction. At this time their funding is limited to \$333.00 per Gross Square Feet. Ai3 and CGA are anticipating MSBA construction funding limit increasing soon either later on this year or early next year based on what the MSBA has done in the past. Ai3 noted that the MSBA make changes per fiscal year not calendar year.	Record/ Close
		CGA noted that on Monday, December 16 th Ai3 will provide a brief overview to the Somerset School Committee, Somerset Middle School Building Committee and Somerset Board of Selectmen. The three groups will all be voting on two (2) to three (3) options in which they would like Ai3 to continue developing.	Record
		Teachers on the committee were asked for their feedback regarding the different options. Their main concern is the disruption that would be caused by renovation work in some of the options that may be a distraction while school is in session and would suggest that if the Committee does vote to proceed with an add/reno project than it should be as least disruptive as possible. They felt that new construction options (both 5-8 and 6-8) – Options 4 and 7 - and 6-8 renovation option – Option 2, which would be least intrusive, should be looked at. Mr. Scanlon asked CGA how the SMS Building Committee should inform other committees of the options they recommend. Mr. Tavares stated that the other committees have been informed and that the SMS Building Committee should be the first to meet at the group meeting including approving the November 25 th meeting minutes. The Committee unanimously voted on moving forward with Options 2, 4 and 7 and will let the other Committees know of their vote at the joint meeting on Monday, December 16 th which will be held at the Somerset Middle School Library. Ai3 re-reviewed preliminary options and included updates. Updates	Record
		are included below.	

			T
	11/04/19	Option 1 – Base Repair – Repairs to the existing building. 1. Mr. Randell noted that MSBA requires that this option is required to be carried out throughout the entire study. 2. Only code required repairs would be part of this option. 3. There will be no education upgrades, no site upgrades, no new walls, no technology upgrades and no MSBA reimbursement. Town would bear the cost of the work.	Record
	TATOTA PARAMETER AND ADDRESS A	11/25/19 Update – Estimated to cost \$42,000.00 to \$47,000.00. Duration is not known at this time due to undefined scope of work. 1. Mr. Randell stated that the MSBA does not typically participate in repair projects and it is uncertain at this time as to how much participation there will be by the MSBA.	Record/ Close
		 Option 2 – Grade 6 thru 8 - Addition to / Renovation of the existing building. This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. The work at the SMS would include 124,000 gross square foot of existing building renovations and 25,000 gross square feet of new construction. Temporary modular swing space would be required. Mr. Tavares noted that modular spaces are not reimbursable by the MSBA. 	Record
		11/25/19 Update – Estimated to cost \$88,000,000.00 to \$93,000,000.00. Duration will be approximately forty-two (42) months (3.5 years).	Record
	Annual value and the state of t	 Option 3 – Grade 6 thru 8 - Addition to / Renovation of the existing building. (Mr. Randell noted that this option is not advantageous.) 1. This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. 2. The work at the SMS would include 124,000 gross square feet of new building construction and 13,000 gross square feet of renovations (auditorium and lecture hall). 3. Mr. Randell noted that this option is very complex. Due to the complexity and phasing the duration of construction could be as long as three (3) years. 	Record
20 m m m m m m m m m m m m m m m m m m m		11/25/19 Update – Estimated to cost \$82,000,000.00 to \$87,000,000.00. Duration will be approximately forty-eight (48) months (4 years).	Record/ Close
		 Option 4 – Grade 6 thru 8 - New Construction This option will require future 6,500 square foot additions to both the Chase Street Elementary School and the South Elementary School due to the lack of space. Mr. Randell noted that there is buildable area towards Brayton Avenue and that this option is the most sustainable and most efficient option. It also resolves site issues and expands site amenities. Mr. Randell noted that this option has the least impact to the town and the community. 	Record

11/25/19 Update – Estimated to cost \$80,000,000.00 to \$85,000,000.00. Duration will be approximately thirty-four (34) months (2.8 years).	Record
 Option 5 - Grade 5 thru 8 - Addition to / Renovation of the existing building. 1. Phase One (1) would includes building a two (2) story addition to move occupants around for renovation work at other sections of the building. 2. This option will require 82,000 gross square feet of new construction and 87,000 gross square feet of renovations to the existing building. 3. The building will be occupied during the work. 	Record
11/25/19 Update – Estimated to cost \$101,000,000.00 to \$106,000,000.00. Duration will be approximately forty-eight (48) months (4 years).	Record/ Close
 Option 6 – Grade 5 thru 8 – Addition to / Renovation of the existing building. (Mr. Randell noted that this option is not advantageous.) 1. This option will require 156,000 gross square feet of new construction and 13,000 square feet of renovation work to the existing building. 2. Temporary modular swing space would be required. Mr. Tavares noted that modular spaces are not reimbursable by the MSBA. 	Record
11/25/19 Update - Estimated to cost \$98,000,000.00 to \$103,000,000.00. Duration will be approximately fifty-two (52) months (4 years and 4 months).	Record/ Close
 Option 7 – Grade 5 thru 8 – New Construction (Similar to Grade 6 thru 8 new construction option). 1. Mr. Randell noted that there is buildable area towards Brayton Avenue and that this option is the most sustainable and most efficient option. It also resolves site issues and expands site amenities. 2. Mr. Randell noted that this option has the least impact to the town and the community. 	Record
11/25/19 Update – Estimated to cost \$95,000,000.00 to \$100,000,000.00. Duration will be approximately thirty-six (36) months (3 years).	Record

No.	Date	Issues	Action
15.1		CM @ Risk vs. Design/Bid/Build Procurement Approach	
	11/25/19	Mr. Scanlon asked why Construction Management at Risk (CM @ Risk) under MGL 149A procurement approach is an exclusion. Ai3 explained the difference between CM @ Risk under MGL 149A and Design/Bid/Build procurement approach under MGL 149 to the Committee. Mr. Randell noted that Durfee High School (under construction in Fall River) used the CM @ Risk procurement approach due to the complexity of the project. CGA noted that with CM @ Risk there is a premium for additional management by the GC. CGA noted that the pros and cons of CM @ Risk procurement will be discussed with the SMS Building Committee in future meetings to see if they would like to move the project in this direction. The Committee will need to review and vote on whether they would like to move forward in this direction or move forward with Design/Bid/Build (MGL 149) approach.	Ongoing
15.2	11/25/19	Mr. Godet asked who owns the existing solar panels. Mr. Schoonover noted that the District owns the solar panels. It was asked if the solar panels can be re-used. Mr. Randell stated that the panels can be reused in any future project.	Record/ Close
15.3	11/25/19	Mr. Machado motioned to approve the meeting minutes dated November 4, 2019. Mr Scanlon noted so moved and Mr. Gabot seconded the motion. Committee unanimously voted accept the meeting minutes. Cassey Monte abstained from the vote.	Record/ Close
15.4	11/25/19	Mr. Machado motioned to adjourn the meeting. Mr. Scanlon noted so moved and Mr. Lima seconded the motion. Committee unanimously voted to adjourn the meeting.	Record/ Close

ATTACHMENTS:

1. Ai3 Presentation

The proceeding represents the issues discussed and decided upon during the meeting. Please notify Steven Medeiros if any of the above are incorrect or unclear. These minutes shall be accepted as accurate unless corrections or additions are received with one week of the date of issue.



TOWN OF SOMERSET

MEETING NOTICE

Received & Posted	Time:
	Town Clerk

Name of Board or Committee: JOINT MEETING: Somerset School Committee, Somerset Middle

School Building Committee and Somerset Board of Selectmen

Date & Time of Meeting: Monday, December 16, 2019 at 6:00 pm

Location of Meeting: Somerset Middle School

Auditorium

1141 Brayton Avenue Somerset, MA 02726

Robin Vaccaro, Recording Secretary, December 11, 2019

Clerk/Board Member posting notice & date

Cancelled or postponed to:	
Clerk/Board Member cance	lling/postponing meeting
	AGENDA / LIST OF TOPICS
Call meeting to order at	due notice having been posted.

Pursuant to the Open Meeting Law, any person may make an audio or video recording of this public meeting or may transmit the meeting through any medium. Attendees are therefore advised that such recordings or transmissions may be made whether perceived or unperceived by those present.

School Committee: Administration:

Mr. Andrew Crook, Chair
Mr. Christopher Godet, Vice Chair
Mr. Victor Machado, Jr.
Mrs. Melissa Terra
Mr. Michael McDonald

Superintendent of Schools, Mr. Jeffrey Schoonover
Director of Business & Finance, Mr. Ronald Tarro
Director of Curriculum, Ms. Elizabeth Haskell
Director of Special Education, Ms. Megan Ashton
Director of Technology, Mr. Stephen Levesque

Director of Buildings & Grounds, Mr. Carlos Campos

Somerset Selectmen:

Mr. David Berube, Chair Ms. Holly McNamara

Mr. Steven Moniz

Middle School Building Committee:

Mr. Victor Machado, Jr. Chair

Ms. Elizabeth Haskell

Mr. Jeffrey Schoonover, Vice Chair

Mr. Richard Brown, Town Administrator

Ms. Holly McNamara Mr. Steven Moniz Dr. Pauline Camara

Mr. Ronald Tarro

Mr. Carlos Campos

Ms. Cassey Monte

Ms. Kathleen Byers

Ms. Nicole Mello



Local Actions & Approvals

Community Forums

wo Community Forums were held on **September 25, 2019** and **November 13, 2019** to discuss the Somerset
Middle School Project, the MSBA Process, the existing
conditions of the current middle school, the analysis of the
three existing elementary schools, the options considered, and
the overall educational vision. The handouts identifying the
discussion topics for both Community Forums are included in
this section.

Somerset Middle School Community Forum #1

September 25, 2019



architects ©







- Welcome & Introductions
- MSBA Grant Process Overview
- Project Timeline: Upcoming Milestones & Dates
- Evaluation of Existing Elementary SchoolEnrollments
- Evaluation of Existing Middle School Conditions
- Next Steps
- Community Feedback, Questions, and Answers
- Ways to Stay Connected



















http://www.somersetschools.org/District-Info/ Somerset-Middle-School-Building-Project/index.html

Somerset Middle School Community Forum #2 November 13, 2019

SOMERSET MIDDLE SCHOOL









- MSBA Grant Process Overview
- Project Timeline: Upcoming Milestones & Dates
- Educational Visioning Workshops
- Programming Summary
- Assessment, Testing, and Investigation Activities
- Existing Somerset Middle School Site Analysis and Site Educational Opportunities
- Town-wide Economic Master Plan Middle School Project Integration
- Preliminary Evaluation of Alternatives
- Next Steps
- Community Feedback, Questions, and Answers
- Ways to Stay Connected















http://www.somersetschools.org/District-Info/ Somerset-Middle-School-Building-Project/index.html

Appendix A

ATTACHMENT A - ORIGINAL STATEMENT OF INTEREST SUBMMITTAL - MARCH 9, 2017

Name of School

Somerset Middle School

Massachusetts School Building Authority

School District Somerset

District Contact Lindsey M Albernaz TEL: (508) 324-3100

Name of School Somerset Middle School

Submission Date 3/27/2017

SOI CERTIFICATION

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- After the district completes and submits this SOI electronically, the district must sign the required certifications and submit one signed original hard copy of the SOI to the MSBA, with all of the required documentation described under the "Vote" tab, on or before the deadline.
- The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- Prior to the submission of the hard copy of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation and certification signatures in a format acceptable to the MSBA. If Priority 1 is selected, your Statement of Interest will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system.

Massachusetts School Building Authority

Name of School Somerset Middle School

Chief Executive Officer *	School Committee Chair	Superintendent of Schools
Richard Brown	Arastou Mahjoory	Jeffrey A. Schoonover
Town Manager COB	/AZ	If a Schoon
(signature)	(signature)	(signature)
Date 3/refex (Date \$23/17	Date 3-28-17

Massachusetts School Building Authority

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^{*} Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice. Please do not leave any signature lines blank.

Somerset Middle School

Massachusetts School Building Authority

School District Somerset

District Contact Lindsey M Albernaz TEL: (508) 324-3100

Name of School Somerset Middle School

Submission Date 3/27/2017

Note

We have submitted the Closed Schools form for Wilbur Elementary in addition to this Statement of Interest for Somerset Middle School.

The following Priorities have been included in the Statement of Interest:

- 1.
 Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
- 2. Elimination of existing severe overcrowding.
- 3. The Prevention of the loss of accreditation.
- 4. Prevention of severe overcrowding expected to result from increased enrollments.
- 5. Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
- 6. Short term enrollment growth.
- 7.
 Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
- 8. Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

SOI Vote Requirement

I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

Potential Project Scope:

Repair Project

Windows/ Doors HVAC/ Boiler

Is this SOI the District Priority SOI?

YES

School name of the District Priority SOI:

2017 Somerset Middle School

Is this part of a larger facilities plan?

NO

Massachusetts School Building Authority

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Somerset Middle School

If "YES", please provide the following:

Facilities Plan Date:

Planning Firm:

Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 13 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 20 students per teacher

Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District?

Does the District have related report(s)/document(s) that detail its facilities, student configurations at each NO facility, and District operational budget information, both current and proposed?

If "NO", please note that:

If, based on the SOI review process, a facility rises to the level of need and urgency and is invited into the Eligibility Period, the District will need to provide to the MSBA a detailed Educational Plan for not only that facility, but all facilities in the District in order to move forward in the MSBA's school building construction process.

Is there overcrowding at the school facility?

NO

If "YES", please describe in detail, including specific examples of the overcrowding.

Has the district had any recent teacher layoffs or reductions?

NO

If "YES", how many teaching positions were affected? 0

At which schools in the district?

Please describe the types of teacher positions that were eliminated (e.g., art, math, science, physical education, etc.).

Has the district had any recent staff layoffs or reductions?

NO

If "YES", how many staff positions were affected? 0

At which schools in the district?

Please describe the types of staff positions that were eliminated (e.g., guidance, administrative, maintenance, etc.).

Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions, including the impact on district class sizes and curriculum.

Does Not Apply

Please provide a detailed description of your most recent budget approval process including a description of any budget reductions and the impact of those reductions on the district's school facilities, class sizes, and educational program.

The FY18 budget process was finalized for Somerset Public Schools on March 2, 2017. We are now awaiting a vote at the Annual Town Meeting on May 15, 2017. Our overall FY18 operating budget is \$19,211,871 which is an increase of approximately \$357,000 or a 1.9% increase over the FY17 voted budget. The focused areas creating the increases are contractual salaries, special education tuition's and transportation as well as technology purchases. There was no reductions to the budget as a result of the improvements needed at the Somerset Middle School.

Massachusetts School Building Authority

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Somerset Middle School

General Description

BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).

Somerset Middle School was originally constructed with final completion in 1965. The original size of the building was 95,000 square feet and with the addition of the 6th grade wing of approximately 32,000 square feet added 1969, the total square footage is approximately 127,000 square feet. The building currently has a design population to hold 721 students in grades six through eight. In 1997, the underground storage oil tanks were removed. There was a brick repair project in 1997. In 1999, one of the original four boilers was replaced with a AirCo Benchmark boiler to increase efficiency of the existing HVAC system. In 2004, the entire roof of the building was replaced with a PVC roof. The condition of that roof is currently adequate and in good shape. There have been no major renovations to the building since 1969 with the exception of the new roof.

TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.

127000

SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (maximum of 5000 characters).

The Somerset Middle School is located on 26.2 acres of property and does not share the property with any other facilities or departments in the Town of Somerset. There are no known conditions that would impact a potential project at this site.

ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)

1141 Brayton Avenue, Somerset MA 02726

BUILDING ENVELOPE: Please provide a detailed description of the building envelope, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters).

The Somerset Middle School consists of a brick veneer, steel construction roof, PVC roof membrane and single pane windows throughout the entire building. There are specific areas of the building that have original 9"x9" asbestos tile flooring and the bleachers and gymnasium wood floor are also original to the building. Currently the windows are not energy efficient and provide for much draft and heat loss throughout the building resulting in higher than necessary utility expenditures. The gymnasium floor, because it is original to the building, has started to buckle and become uneven in certain areas even after annual maintenance attempts. In specific classrooms and hallways areas, the original asbestos 9"x9" tiles have become worn and lifted causing asbestos concern for the health of the building. The girls and boys locker room is in need of renovation as both the lockers, flooring, showers, fixtures and bathrooms are original to the 1965 building.

Has there been a Major Repair or Replacement of the EXTERIOR WALLS? NO Year of Last Major Repair or Replacement:(YYYY) 1965

Description of Last Major Repair or Replacement:

N/A

Roof Section A

Massachusetts School Building Authority

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Somerset Middle School

Is the District seeking replacement of the Roof Section? NO

Area of Section (square feet) 98000

Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe)

PVC

Age of Section (number of years since the Roof was installed or replaced) 12

Description of repairs, if applicable, in the last three years. Include year of repair:

N/A

Roof Section B

Is the District seeking replacement of the Roof Section? NO

Area of Section (square feet) 39000

Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe)

PVC

Age of Section (number of years since the Roof was installed or replaced) 47

Description of repairs, if applicable, in the last three years. Include year of repair:

N/A

Window Section A

Is the District seeking replacement of the Windows Section? YES

Windows in Section (count) 134

Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))

Single Pane sliding windows (4' x 6' wide) throughout the entire building.

Age of Section (number of years since the Windows were installed or replaced) 51

Description of repairs, if applicable, in the last three years. Include year of repair:

There have been no repairs, other than routine cleaning, to the original windows installed in 1965.

Window Section B

Is the District seeking replacement of the Windows Section? YES

Windows in Section (count) 32

Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))

Single pane sliding windows are continual throughout the building, originally constructed in 1965.

Age of Section (number of years since the Windows were installed or replaced) 47

Description of repairs, if applicable, in the last three years. Include year of repair:

No repairs have been completed for these windows originally installed in 1969.

MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems and any known problems or existing conditions (maximum of 5000 characters).

The Somerset Middle School currently houses 11 air handlers for the heating of the building. The school has 39 exhaust fans which are all original to the 1965 building. The air handlers have started to deteriorate over the past ten years causing air quality concerns. The air conditioner unit in the main office of the building has only one to two years remaining as being functional. The current electrical system is original to the building but does provide some concern for safety in the 1969 section of the building. Many extension cords are used to run power between classrooms and floor plugs in the 6th grade area have a history of sparking. The conduit pipes running under the boiler room floor are rotting away which causes shortages in electricity and power failures throughout the building.

Boiler Section 1

Is the District seeking replacement of the Boiler? YES

Is there more than one boiler room in the School? NO

What percentage of the School is heated by the Boiler? 100

Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)

Gas only. The boilers were converted in 1997 when the storage oil tanks were removed from the building.

Massachusetts School Building Authority

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Somerset Middle School

Age of Boiler (number of years since the Boiler was installed or replaced) 51 Description of repairs, if applicable, in the last three years. Include year of repair:

There have been no repairs to the three original boilers in the past three years other than annual maintenance testing.

Boiler Section 2

Is the District seeking replacement of the Boiler? YES

Is there more than one boiler room in the School? NO

What percentage of the School is heated by the Boiler? 100

Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)

Gas boiler

Age of Boiler (number of years since the Boiler was installed or replaced) 17

Description of repairs, if applicable, in the last three years. Include year of repair:

The Somerset Middle School purchased a AirCo Benchmark boiler to supplement the three original boilers. Currently the Benchmark is the lead boiler of the building, however the original boilers are utilized as backup when necessary in the colder months. The Benchmark has needed maintenance of parts and has a rotted exhaust pipe.

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES

Year of Last Major Repair or Replacement: (YYYY) 1999

Description of Last Major Repair or Replacement:

AirCo Benchmark boiler was purchased.

Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM? YES

Year of Last Major Repair or Replacement: (YYYY) 1965

Description of Last Major Repair or Replacement:

The Somerset Middle School has recently completed ab=n installation of a 350,000 kWh annual production solar panel system, funded by a State of Massachusetts Department of Energy Resources grant. No other major repairs or replacements have been performed on the electrical and distribution system.

BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters).

The floors consist of 9"x9" VCT tile in the 1965 sections of the building and 12"x12" VCT tile in the 1969 section. The walls are plastered with brick walls in the hallways. The ceilings are 2'x4' tiles and the majority of the lighting consists of 4' fluorescent bulbs.

PROGRAMS and OPERATIONS: Please provide a detailed description of the current programs offered and grades served, and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).

Somerset Middle School currently educates students in grade 6 through grade 8. Educational programming includes English Language Arts, Social Studies, Mathematics, Science, Fine Arts, Foreign Language and Technology. The seasonal temperature changes and the buildings ability to regulate these classroom temperatures does have an effect on student learning. The causes of the temperature regulation include inefficient windows and older ventilation systems related to the air handlers and exhaust system. The temperature fluctuations does have an effect on student and teacher attendance due to low air quality throughout the building during parts of the school year. The air quality effects the ability to breathe clearly and focus on instruction. There are no limitations on program components for the Somerset Middle School due to these deficiencies, however, a quality ventilation system and upgraded boilers would allow for better air circulation throughout the 52 year old building.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core Educational Spaces within the facility, a description of the number and sizes (in square feet) of classrooms, a description of science

Massachusetts School Building Authority

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Somerset Middle School

rooms/labs including ages and most recent updates, a description of the cafeteria, gym and/or auditorium and a description of the media center/library (maximum of 5000 characters).

The Core Educational Spaces (classrooms) within the building are original to the building and have not been updated. There are 45 classrooms, including science rooms/lab through the buildings. The majority of classrooms are 30'x30' classrooms with capacity to fit between 25 and 30 students with desks. The cafeteria is an open space with approximately seating capacity of 300 students. The cafeteria consists of 12"x12" VCT tiles and has one wall of sliding windows that opens up to a shared courtyard with the library area. The gymnasium is the size of two full sized basketball courts with original bleacher systems installed on both sides of the courts. The auditorium has the capacity to seat 900 members, with the original hardwood stage and original audience chairs. The library has the capacity to fit 100 students between the computer lab and the collaborative work spaces. There is one wall of sliding windows that shows the courtyard shared with the cafeteria.

CAPACITY and UTILIZATION: Please provide a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters).

The Somerset Middle School does not currently have an overcrowding issue at the moment, however much of the space is fully utilized during the school day. There are adequate classrooms for instruction as well as non-standard classroom areas. The building does have three computer labs that are fully utilized, a woodworking shop for our Industrial Arts courses and a lecture hall room that is currently not be utilized due to lighting and soundproofing issues.

MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including any override or debt exclusion votes that were necessary (maximum of 5000 characters).

The Somerset Middle School does not have a formal maintenance plan. The maintenance of the boilers, electrical and plumbing system is contracted out with various vendors. These vendors perform annual maintenance and are called in as needed throughout the school year. Somerset Public Schools employs three full time maintenance workers to provide day to day maintenance on our three Elementary Schools and one Middle School within the Somerset Public School District. These staff members work predominately with cosmetic maintenance repairs as well as HVAC maintenance. There is currently an updated capital improvement plan, which includes various repairs, refurbishments and replacements of equipment in our four individual schools. Other than the roof replacement in 2004, there have been no other major renovations to the building. There has not been a override or debt exclusion vote in the Town of Somerset for the Somerset Public School Department.

Somerset Middle School

Priority 5

Question 1: Please provide a detailed description of the issues surrounding the school facility systems (e.g., roof, windows, boilers, HVAC system, and/or electrical service and distribution system) that you are indicating require repair or replacement. Please describe all deficiencies to all systems in sufficient detail to explain the problem.

The Somerset Middle School was originally built in 1965 with an expansion for the 6th grade wing in 1969. The majority of the building structure is original to the building and is in need of upgrades and modernization. The single pane windows are extremely energy inefficient, stained with various color and some do not function properly such as locking, opening and closing. The four boilers, with the exception of the AirCo Benchmark, are original to the building and do not function efficiently. One boiler is completely off line and has not been in use since 1999.

Massachusetts School Building Authority

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Name of School Somerset Middle School

Priority 5

Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.

Other than day to day maintenance and cleaning of the windows, this does not correct the problem of energy inefficiency or provide clear visibility throughout the building. There has not been much appetite in the past to put taxpayer dollars into the Somerset Middle School and now that the building is over fifty years old, it is a commitment to the School Department's Administration and other community members to correct the problem before they become major issues beyond repair and significantly alter the teaching and learning process of our Middle School students.

Massachusetts School Building Authority

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Somerset Middle School

Priority 5

Ouestion 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.

Because of the boiler inefficiency, temperatures in the classroom can sometimes range from high 70 degrees to low 60 degrees depending external weather conditions. The boilers cannot always support regulating the temperatures during the colder months of the year. In the warmer months, there is not adequate ventilation due to the age of the exhaust system which provide for poor air quality. The windows, because they are single pane, allow for the loss of heat during the colder months. Faculty and staff and sometimes forced to adjust their classroom setup to accommodate the loss of heat during the colder months and ventilation issues during the warmer months. This has a direct effect on classroom instruction as air quality and temperature regulation do not provide an environment where learning is the priority. To have successful teaching and learning, students must be able to focus on what they are learning and because comfort level may be less than adequate, the learning process can be altered and less successful fr our students.

Massachusetts School Building Authority

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Somerset Middle School

Priority 5

Question 4: Please describe how addressing the school facility systems you identified in Question 1 above will extend the useful life of the facility that is the subject of this SOI and how it will improve your district's educational program.

The Somerset Middle School is structurally sound, however, because of the age of the building and limited renovations and repairs performed since the original construction, the building is in need of modernization. The windows are original to the building and create temperature control issues within the classroom. Because some of them are either inefficient, broken or stained does not promote a great environment for learning. Replacements of windows would extend the useful life of the building because it would prevent moisture from building in the classroom and other instructional areas. Proper ventilation and temperature control could also extend the useful life of the building because air quality will become improved. The goal is to extend the life of the Somerset Middle School so that it can continue to be utilized for future students. The Town of Somerset recently regionalized with the Town of Berkley in 2011 to build a new regional high school. The old high school was not repaired or renovated as needed by the community over the years and was in such disrepair that the most viable option was to build a new high school. The Town of Somerset, while regionalized with the Town of Berkley for the high school only, still does have a responsibility to maintain the Somerset Middle School and the three elementary buildings. The Somerset Middle School is a functional building, but without necessary renovations and refurbishments, the useful life of the building will be limited.

Please also provide the following:

Have the systems identified above been examined by an engineer or other trained building professional?:

NO

If "YES", please provide the name of the individual and his/her professional affiliation (maximum of 250 characters):

The date of the inspection:

A summary of the findings (maximum of 5000 characters):



TELEPHONE (508) 646-2800

BOARD OF SELECTMEN

TOWN OF SOMERSET MASSACHUSETTS

02726

TOWN OFFICE BUILDING - WOOD AND COUNTY STREETS

Resolution Authorizing the Superintendent of Schools to Submit to MA School Building Authority the Statement of Interest, Dated March 23, 2017, for the Somerset Middle School

RESOLVED: Having convened in an open meeting on Wednesday, March 15, 2017, prior to the closing date, the Board of Selectmen of Somerset, in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated March 23, 2017 for the Somerset Middle School located at 1141 Brayton Avenue, Somerset MA 02726 which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future: replacement of external windows, external doors and boiler systems at the Middle School to increase energy conservation and decrease energy related costs in the Somerset Middle School; and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority.

SOMERSET BOARD OF SELECTMEN

David Berube, Chairman

Steven Moniz

Holly McNamara

True Copy Attest:

Poloros Borgo Town Clark

SOMERSET SCHOOL COMMITTEE MEETING OPEN SESSION MINUTES - March 23, 2017

School Committee Room, North Elementary School

Mr. Mahjoory called the meeting to order at 6:30 p.m.

Chairman Mahjoory stated, "Let the record show that this meeting is being electronically recorded and if anyone in the audience also wishes to electronically record this meeting, you should notify the Committee at this time."

Members Present:

Mr. Arastou Mahjoory, Chair Mr. Michael Botelho, Vice Chair Mrs. Lori Rothwell Mr. Victor Machado, Jr. Mrs. Melissa Terra

Emma Guillotte sang God Bless America.

she was not present at the meeting.

Pledge of Allegiance

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Also Present:

Mr. Jeffrey Schoonover, Superintendent Mrs. Lindsey Albernaz, Business Manager Mrs. Elizabeth Haskell, Director of Curriculum Mrs. Robin Vaccaro, Recording Secretary

Mr. Mahjoory entertained a motion to accept the Open Session minutes of March 2, 2017. Mr. Machado moved the motion. Mr. Botelho seconded. The Committee voted 4-0-1 in favor of the motion. Mrs. Terra abstained as

Communication: Somerset Middle School student, Emma Guillotte, explained why she became a *Stomp Out Bullying* ambassador. She said she has been spreading her anti-bullying message at the middle school and would like to expand to the elementary schools. She showed the Committee the bracelets and posters she uses to promote kindness. The Committee commended Emma for her efforts. Mr. Mahjoory said he would make a donation to her cause. Mr. Machado said that he would like to see one of her presentations and noted that elementary students would benefit more from hearing about anti-bullying from another student rather than an adult.

Ms. Haskell updated the Committee on the professional development offerings in March during the professional development early release day as well as a workshop that she and some staff members attended yesterday on social/emotional learning. The Committee said they appreciate the updates and these help with explaining to parents why there are so many professional development days. Mr. Botelho asked how many professional development days other districts have each year. Mrs. Terra suggested that additional days be added next year and she said that if a set schedule, such as second Friday of the month, was done it would be easier for parents to plan. Mr. Machado said he would prefer to see more at the beginning of the school year rather than at the end of the year. Mr. Schoonover said that the leadership team has been working on developing ideas for professional development over the next several years. He also said that a survey was sent to teachers last week and the teachers identified the same key areas as administration. Mr. Schoonover said that some of the professional development days would be less formal and be more of collaboration time amongst teachers.

Mr. Schoonover said he attended his last meeting of the Superintendent Induction Program today and he thanked the Committee for their support in allowing him to attend because it has been very helpful and rewarding. He said the Wellness Committee met yesterday and was well-represented by teachers and parents of all levels. He said they reviewed the local Wellness Policy and discussed topics for future meetings. They have decided to break into two groups: one focusing on social/emotional learning and the other on physical education and nutrition.

Mr. Schoonover said that the high school Anti-Bullying Coalition has visited all the elementary schools. He said they put on skits and talk to students about what it means to be kind in a very effective way.

Public Input: Somerset Teachers Association Vice President, LuAnn Pratas, asked on behalf of the STA that the bargaining process begin. Mr. Kucikas commented on how eloquent Emma was. He also said that he was shocked that Mr. Mahjoory would not be on the Committee after the election in May. He said this is one of the best groups of Committee members he has seen and they have done a lot for the district. He also commented that it was sad that more people do not attend the meetings to see what goes on.

Budget/Financial Matters: Mr. Machado said this was the eleventh time he had faced the Advisory and Finance Committee to discuss the preliminary budget and this was the first time he had seen them leave satisfied with the information administration put together. He also said the administration did an excellent job of being open and transparent and in bringing the increase amount down.

Mr. Mahjoory entertained a motion to approve the final net budget for fiscal year 2017-2018 for the Somerset Public Schools of \$19,211,871. Mr. Machado moved the motion. Mr. Botelho seconded. The Committee voted 5-0 in favor of the motion.

Mrs. Albernaz said that she and Director of Buildings and Grounds, Carlos Campos, had met with the Selectmen last Wednesday and they reviewed the Massachusetts School Building Authority Statement of Interest (SOI) request for repairs at Somerset Middle School. She said the SOI must be submitted by April 7 and then the statements are vetted and site visits for potential projects are done and schools are notified of approval sometime in December or January. Mrs. Albernaz said a site visit was done in October but the school wasn't selected but they did see the condition of the building. Mrs. Terra asked if any projects had ever been approved for the district. Mr. Campos said they partially supported a roof project in 2004.

Mr. Mahjoory entertained a motion that be it resolved having convened in an open meeting on Thursday, March 23, 2017, prior to the closing date, the School Committee of Somerset, in accordance with its charter, by-laws and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated March 23, 2017 for the Somerset Middle School located at 1141 Brayton Avenue, Somerset, MA 02726 which describes and explains the following deficiencies and the priority category(s) for which an application may be submitted to the Massachusetts School Building Authority in the future: replacement of external windows, external doors and boiler systems at the Middle School to increase energy conservation and decrease energy related costs in the Somerset Middle School; and hereby further specifically acknowledges that by submitting this Statement of Interest Form, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the City/Town/Regional School District to filing an application for funding with the Massachusetts School Building Authority. Mr. Machado moved the motion. Mrs. Rothwell seconded. The Committee voted 5-0 in favor of the motion.

Consent Agenda: Mr. Mahjoory entertained a motion to accept a donation of 5 Epipens and 3 Epipens Jr. from Mylan Pharmaceuticals as part of the Epipens4schools program. Mr. Machado moved the motion. Mrs. Terra seconded. The Committee voted 5-0 in favor of the motion.

New Business: Mr. Schoonover shared his goals for the 2017 calendar year with the Committee. The four goals are District Climate, STEAM and 21st Century Skills, Family Engagement and Communication and Technology Planning. Mr. Mahjoory said that he thought goals should remain the same during a 3-5 year timeframe to get things to where they need to be. Mr. Schoonover said that this year he will be building on what is already in place. He said that a scope and sequence needs to be developed for science and math. He also said that the technology program at the middle school will be modernized to include some robotics components as well as some coding and computer science. Mr. Schoonover said that strategic development and implementation will always be a goal. He said that he wants to be more visible in schools and communicate more with staff and families. Mr. Machado said he would like to see elementary grades be available online and he would like teachers to be encouraged to have office hours. Mrs. Terra suggested a video newsletter to families. Mr. Schoonover said that once the district has the technology plan infrastructure piece it will allow us to have a better vision for the financial component, be better for developing projections and there will be fewer surprises during the budget process.

Mr. Schoonover said that he would like to defer the overview of the Star Reading data because he needed more time to compile the data. Mrs. Terra said she would also like to see the data compared to MCAS or PARCC to see where we measure up. Mr. Schoonover said the measurements are taken at the end of each quarter at the middle school and at the end of fall, winter and spring at the elementary levels in order to track growth and compare from year to year.

Mr. Mahjoory noted that the Committee needed to appoint the Superintendent annually to the READS Collaborative Board of Directors.

Mr. Mahjoory entertained a motion pursuant to Chapter 40, Section 4E, as amended by Chapter 43 of the Acts of 2012, members of the Board of Directors at READS Collaborative are to be appointed annually. Jeffrey

Schoonover, Superintendent of Schools, is appointed to serve as the Somerset Public School District's representative on the Board of Directors of READS Collaborative, in accordance with Massachusetts General Laws Chapter 40, Section 4E as amended by Chapter 43 of the Acts of 2012 for the 2017/2018 school year. Mr. Botelho moved the motion. Mrs. Rothwell seconded. The Committee voted 5-0 in favor of the motion.

Unfinished Business: Mr. Botelho and Mrs. Rothwell explained that the 504 Eligibility Guidelines and Procedures Policy was revised to ensure that all staff is adhering to 504 plans and that procedures are in place for how information is distributed. They further explained that the Bullying Prevention and Intervention Policy was updated to include current methods of reporting. The technology director has set up a dedicated anonymous phone line for bullying reporting. Mr. Schoonover said there will also be a Google form for reporting. The policy had had a second reading by the regional school committee last week and they had asked that besides the specific program for professional development that 'or another approved training program' be added and that it is noted that curriculum can be changed based on the needs of the district. The changes were noted in red on the draft version presented tonight for a second reading, Mrs. Terra said she liked the outline of disciplinary action and asked if the policy had been reviewed by the school councils. Mr. Schoonover said the draft was emailed to all families in the district for their input.

Mr. Mahjoory entertained a motion to accept the 504 Eligibility Guidelines and Procedures Policy as presented. Mr. Botelho moved the motion. Mrs. Rothwell seconded. The Committee voted 5-0 in favor of the motion.

Mr. Mahjoory entertained a motion to accept the Bullying Prevention and Intervention Policy as presented with the changes in red print on pages 3 and 5. Mrs. Terra moved the motion. Mr. Botelho seconded. The Committee voted 5-0 in favor of the motion.

Informational Items: The Committee congratulated the Somerset Middle School Renaissance students for the month of February: Evan Affonso, Savannah Cantelmo, Elijah Desa, Amber Dias, Keidrah Finch and Dominic Mauretti.

Other Matters: Mr. Machado said that although he doesn't believe in one board making public statements regarding another board it was disheartening and unacceptable to charge user fees. Mrs. Terra said that she has been vocally against user fees every year that it has been discussed. Mrs. Rothwell said that it inspiring to see students come and advocate for the sports programs at last week's preliminary budget hearing. She said the regional committee would be meeting again Monday night to discuss the budget and the final vote will be taken on March 30. Mr. Mahjoory asked Mr. Botelho and Mrs. Rothwell to let the regional committee know that himself, Mr. Machado and Mrs. Terra were against the user fees.

Mr. Machado said the Regional Planning Board had met Monday and decided to put out a Request for Proposals to consider hiring a consultant.

Mr. Mahjoory entertained a motion to enter into Executive Session pursuant to Massachusetts General Laws, Chapter 30A, Section 21(a)(3) to discuss strategy with respect to collective bargaining if an open meeting may have a detrimental effect on the bargaining position of the public body and the chair so declares. The Committee would not be returning to Open Session. Mr. Machado moved the motion. Mrs. Rothwell seconded. On a roll call vote the Committee voted 5-0 in favor of the motion. Mr. Machado, aye; Mr. Botelho, aye; Mrs. Rothwell, aye; Mrs. Terra, aye and Mr. Mahjoory, aye

Open Session adjourned at 7:58 pm.

Respectfully submitted, **Robin Vaccaro**Recording Secretary

Documents List:

Bullying Prevention and Intervention Policy 504 Eligibility and Procedures Policy MSBA SOI for SMS READS Collaborative Notice Draft Superintendent Goals for 2017 SMS Renaissance Students for February March Professional Development



Name of School

Somerset Middle School

CERTIFICATIONS

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

Chief Executive Officer *	School Committee Chair	Superintendent of Schools
Richard Brown	Arastou Mahjoory	Jeffrey A. Schoonover
Town Manager	M	JAS More
(signature)	(signature)	(signature)
Date 3/ve/a	Date 3/27/07	Date 3-28-17

^{*} Local Chief Executive Officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice. Please do not leave any signature lines blank.

Massachusetts School Building Authority

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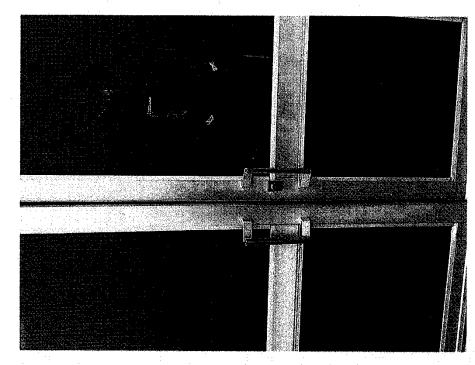
Statement of Interest

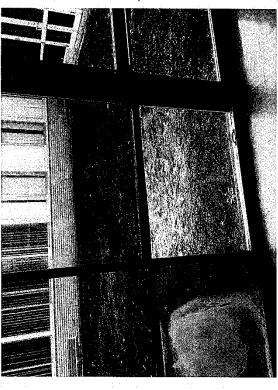
Fiscal Year 2020

Middle School window replacement:

- Extremely energy inefficient and original to building.

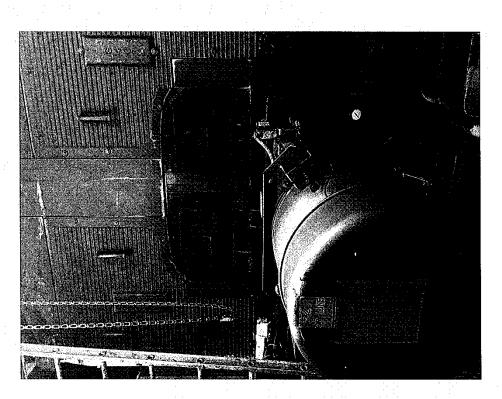
 Estimate \$275,000 **Currently single paned windows and sliders**







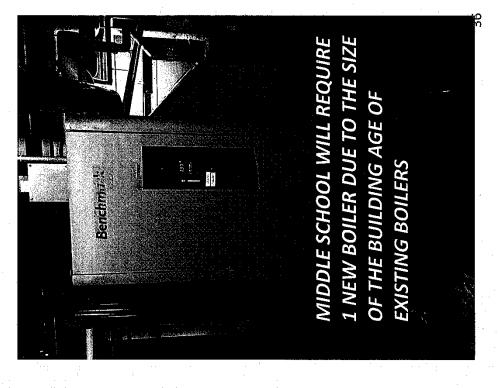
Fiscal Year 2020



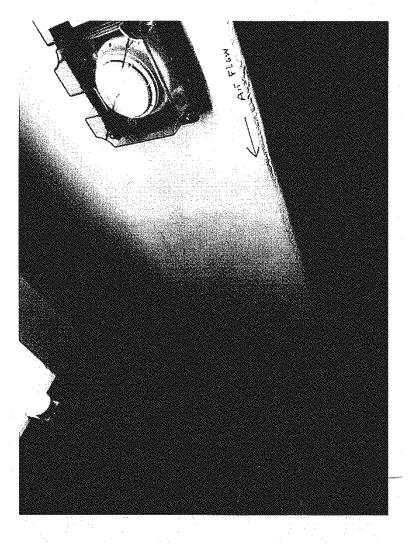
Estimate - \$130,000

Boiler Replacement Necessity
- 3 Original Boilers still exist with only 2 functioning.

- 1 additional newer Boiler installed in 1999.



Fiscal Year 2020



Air Hander

Exhaust Fan System

Air Handler and Exhaust System - Middle School currently has 11 air handlers Estimate - \$500,000

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Appendix B

MSBA Board Actions

Invitation to Conduct a Feasibility Study a.



Deborah B. Goldberg

James A. MacDonald

John K. McCarthy

Chairman, State Treasurer

Chief Executive Officer

Executive Director / Deputy CEO

December 19, 2018

Mr. Richard M. Brown, Somerset Town Administrator Somerset Town Hall 140 Wood Street Somerset, MA 02726

Re: Town of Somerset, Somerset Middle School

Dear Mr. Brown:

Enclosed for your records, please find an original, fully-executed Feasibility Study Agreement and Exhibits A-C for the Somerset Middle School project in the Town of Somerset (the "District").

Also, attached for your convenience, please find instructions for entering project budgets in the Massachusetts School Building Authority (the "MSBA") ProPay System, the ProPay System Access Form, and the Feasibility Study Agreement Budget Revision Request Form. Please note the MSBA will not process reimbursement requests until the District has entered the budget and the budget has been accepted by the MSBA.

Please feel free to contact me if you have any questions.

Regards,

Allison Jones

Project Coordinator

Cc: Legislative Delegation

Holly McNamara, Chair, Somerset Board of Selectmen

Melissa Terra, Chair, Somerset School Committee

Jeffrey Schoonover, Superintendent, Somerset Public Schools

Lindsey M. Albernaz, Director of Business and Finance, Somerset Public Schools

File: 10.2 Letters (Region 6)

District: Town of Somerset

Project Name: Somerset Middle School

MASSACHUSETTS SCHOOL BUILDING AUTHORITY FEASIBILITY STUDY AGREEMENT

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This Feasibility Study Agreement, dated the 1944 day of December (the "Agreement") is between the Massachusetts School Building Authority (the "Authority"), a public instrumentality of the Commonwealth of Massachusetts established by Chapter 70B of the Massachusetts General Laws and Chapters 208 & 210 of the Acts of 2004 of the Commonwealth, in each case as amended from time to time, and the Town of Somerset (the "District").

WHEREAS, the District submitted a Statement of Interest to the Authority for the Somerset Middle School (hereinafter "School"), and the District prioritized this Statement of Interest as its priority to receive any potential funding from the Authority;

WHEREAS, on December 13, 2017, the Board of Directors of the Authority voted to invite the District to the MSBA's Eligibility Period with a commencement date of May 1, 2018, and the District has completed all applicable preliminary requirements to the satisfaction of the MSBA;

WHEREAS, on October 31, 2018, the Board of Directors of the Authority shall have voted to authorize the Parties to enter into this Agreement upon the terms and conditions stated herein.

WHEREAS, the Feasibility Study is one step in the multi-step process of the Authority's grant program for school building construction and renovation projects, and the invitation to collaborate on conducting and/or reviewing a Feasibility Study is not approval of a project or any funding by the Authority, except as expressly provided in this Agreement;

WHEREAS, the Authority's grant program for school building renovation and construction projects is a non-entitlement, discretionary program based on need, as determined by the Authority;

WHEREAS, the District has submitted a signed Initial Compliance Certification, as described in 963 CMR 2.02, 2.03 & 2.10(2), in the form prescribed by the Authority, and it has been accepted by the Authority;

WHEREAS, the District has formed a School Building Committee to monitor the Feasibility Study and advise the District during the study;

EAS, the Authority may reimburse the District for a portion of eligible, approved red in connection with the Feasibility Study undertaken by the District for the certain terms and conditions, hereinafter provided, and subject to the G.L. c. 70B, 963 CMR 2.00 et seq. and all applicable policies and uthority.

reement v.07.26.18

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District: Town of Somerset

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NOW THEREFORE, in consideration of the promises and the agreements, provisions and covenants contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Authority and the District (together, the "Parties") agree as follows:

SECTION 1 DEFINITIONS

1.1 Capitalized terms not specifically defined in this Definitions section shall have the meanings ascribed to them in either M.G.L. c. 70B or 963 CMR 2.00 et seq.

"Budget" shall mean a complete and full enumeration of all costs, including both hard costs and soft costs, so-called, that the District reasonably estimates, to the best of its knowledge and belief, will be incurred in connection with the planning, development, and the completion of the Feasibility Study, which Budget shall be approved by the Authority and attached hereto as **Exhibit A**, as it may be updated from time to time.

"Design Contract" shall mean the standard design contract developed and prescribed by the Authority, as it may be amended by the Authority from time to time that shall be executed by the District and the Designer for design services related to the Proposed Project.

"Designer" shall mean the individual, corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity engaged in the practice of architecture, landscape architecture, or engineering that meets the requirements of M.G.L. c. 7C, § 44 and has been procured and contracted by the District to conduct a Feasibility Study, in accordance with the provisions of Sections 2.1(a)(i) and 2.1(a)(ii) of this Agreement.

"Excusable Delay" shall mean a delay of the Feasibility Study that either (a) is solely because of a natural event, such as flood, storms, or lightning, that is not preventable by any human agency, or (b) is reasonably determined by the Authority to be excusable, provided that the failure of the District to have exclusive ownership, control and use of site will not extend the "Term of the Agreement" established in Section 2.2.

"Feasibility Study" shall mean a study as described in 963 CMR 2.10(8) and in any applicable policies and guidelines of the Authority and, in relation to a Major Reconstruction Project or Repair Project, as described in M.G.L. c. 70B, 963 CMR 2.00 et seq. and any applicable policies and guidelines of the Authority, shall also include an engineering study, in a format prescribed by or otherwise acceptable to the Authority, to investigate potential options and solutions, including cost estimates, for the deficiencies and issues identified in the Statement of Interest or as otherwise determined by the Authority.

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"Owner's Project Manager" shall mean the individual corporation, partnership, sole proprietorship, joint stock company, joint venture, or other entity under contract with, designated, or assigned by the District and approved by the Authority, to fully and completely manage and coordinate administration of the Project to completion. The Owner's Project Manager must meet the qualifications set forth in M.G.L. c. 149, § 44A ½, 963 CMR 2.00 et seq., and all applicable policies and guidelines of the Authority.

"Scope" shall mean the scope of the Feasibility Study as described in 963 CMR 2.10(8) and any applicable policies and guidelines of the Authority or as otherwise determined in writing by the Authority and as more fully described in **Exhibit B** attached hereto, as it may be updated from time to time as mutually agreed upon by the District and the Authority.

"Schedule" shall mean the schedule for the Feasibility Study, which schedule shall be updated from time to time and approved by the Authority.

"School" shall mean the Somerset Middle School located in the District.

"Statement of Interest" shall mean the Statement of Interest, as defined in 963 CMR 2.09 and all applicable policies and guidelines of the Authority, submitted to the Authority by the District for the School.

SECTION 2 FEASIBILITY STUDY

Subject to the terms and conditions of this Agreement, and in reliance on the representations, warranties and covenants contained herein, the Parties hereby agree as follows:

2.1 Feasibility Study.

o (a.) The Parties hereby agree that the District shall undertake a Feasibility Study to investigate potential options and solutions, including cost estimates, to the School's deficiencies and issues as identified in the Statement of Interest or as otherwise determined by the Authority and in accordance with the Scope, Budget, and Schedule approved by the Authority, provided that the Authority has the unconditional unilateral right to alter that approved Scope, Budget, and/or Schedule for the Authority's convenience and the Authority will not be liable to the District for any loss and/or damage that arises, in whole or in part, out of any such alteration. The adequacy, sufficiency and/or acceptability of a Feasibility Study or a Prior Study, as defined in Section 2.1(c) of this Agreement, for the purposes of the Authority's grant program shall be determined by the Authority within its sole discretion. Any determination by the Authority that a Feasibility Study or Prior Study is adequate, sufficient or acceptable

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for the Authority's purposes shall not be construed as a certification or approval by the Authority of the studies, plans, drawings, designs, cost estimates, specifications or any other information or materials contained therein and no MSBA requirement that the District study a particular Option shall constitute an MSBA approval of that Option, in whole or in part. The District, its officials, employees and agents are and shall remain responsible for the Feasibility Study and/or Prior Study and the building designs, site plans, drawings, cost estimates, specifications and other materials and information relative thereto that the District submits to the Authority. The Authority's review of the Feasibility Study and/or Prior Study and any studies, plans, drawings, designs, cost estimates, specifications or any other information or materials contained therein or related thereto is solely for the purpose of determining whether they meet the provisions of this Agreement and the Authority's regulations, standards, policies, guidelines and other requirements and whether the District will be eligible for potential funding from the Authority for the Proposed Project. Approval of a Proposed Project shall only be determined by a vote of the Authority's Board in accordance with 963 CMR 2.00 et seq. and the applicable policies and guidelines of the Authority.

(i.)

The District shall procure a Designer to conduct the Feasibility Study pursuant to the provisions of M.G.L. c. 7C, § 44 through 58, 963 CMR 2.10(8), 963 CMR 2.12, and any other applicable laws and regulations; provided, however, that if the estimated construction cost of the Proposed Project is determined to be more than five million dollars (\$5,000,000), then the District shall select the Feasibility Study Designer using the Authority's Designer Selection Panel in accordance with 963 CMR 2.00 et seq. and all applicable policies and guidelines of the Authority. The District shall not use a Designer who was procured by the District prior to July 1, 2007, to conduct the Feasibility Study, unless the Designer is acceptable to the Authority. It is further provided that, if said Designer who was procured by the District prior to July 1, 2007, is unacceptable to the Authority, the District shall conduct a new procurement for a Feasibility Study Designer pursuant to the applicable provisions of M.G.L. c. 7C, § 44 through 58, 963 CMR 2.10(8), 963 CMR 2.12, and any rules, regulations, policies and guidelines of the Authority.

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(ii.) The District shall use the Authority's Design
Contract to contract with the Designer for the
Feasibility Study. The District shall monitor the
performance of the Designer and shall require the
Designer to fully comply with all provisions of the
Design Contract, including, but not limited to, all
provisions affecting the interests of the Authority.

If, at any time, the construction cost of the Proposed (iii.) Project is estimated to be more than one million five hundred thousand dollars (\$1,500,000), or if the construction cost of the Proposed Project is estimated to be equal to or less than one million five hundred thousand dollars (\$1,500,000) and the Authority so requires, at any time, as a condition to qualify for funding by the Authority, the District shall procure and maintain under contract, or otherwise assign, an Owner's Project Manager, pursuant to M.G.L. c. 149, § 44A ½, 963 CMR 2.00, et seq. and any applicable policies and guidelines of the Authority. The selection of an Owner's Project Manager shall be subject to the review and approval of the Authority as required by M.G.L. 70B, 963 CMR 2.00, et seq., and any applicable policies and guidelines of the Authority. Any costs associated with an Owner's Project Manager who is not approved by the Authority shall not be eligible for reimbursement.

Where applicable, the District shall use the Authority's model request for services and standard contract to procure and contract with any Owner's Project Manager for the Proposed Project, including the Feasibility Study stage of the Proposed Project. The District shall monitor the performance of the Owner's Project Manager and shall require the Owner's Project Manager to fully comply with all provisions of the contract between the District and the Owner's Project Manager including, but not limited to, all provisions affecting the interests of the Authority.

(b.) Subject to the satisfaction of or compliance with, as reasonably determined by the Authority, : all of the terms and conditions of this Agreement, the applicable provisions of M.G.L. c. 70B, Chapters 208 and 210 of the Acts of 2004, and 963 CMR 2.00 *et seq.* and any other rule,

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regulation, policy or guideline of the Authority, and further subject to the Authority's approval of the Scope, Budget and Schedule and the District's approval, authorization and appropriation for the Feasibility Study using forms prescribed by or otherwise acceptable to the Authority, the Authority hereby agrees to pay to the District an amount that shall under no circumstances exceed the lesser of (i) 56.89% of the eligible, approved costs of the Feasibility Study, as determined by the Authority, or (ii) \$455,120.00. The Parties hereby acknowledge and agree that \$455,120.00 is the maximum amount of funding that the District may receive from the Authority for the Feasibility Study, and that the final amount of eligible Feasibility Study costs approved by the Authority may equal an amount less than \$455,120.00, as determined by an audit or audits conducted by the Authority. Any costs and expenditures that are determined by the Authority to be either in excess of the \$455,120.00 or ineligible for payment by the Authority shall be the sole responsibility of the District. The reimbursement rate set forth above, and as more fully described in the Reimbursement Rate Summary, attached hereto as Exhibit "C", is the rate at which the District may be reimbursed for the eligible, approved costs of the Feasibility Study.

In the event that the Authority reasonably determines that the Feasibility Study is not in accordance or compliance with the Scope, Schedule, Budget, all of the terms and conditions of this Agreement, the provisions of M.G.L. c. 70B, Chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 et seq. and any other rule, regulation, policy or guideline of the Authority, or is delayed (other than an Excusable Delay) or is not duly authorized, approved and funded by the District in accordance with applicable law and as required by the Authority, then the Authority may temporarily and/or permanently withhold payments to the District for any eligible, approved costs of the Feasibility Study, provided that the Authority shall not unreasonably withhold any such payments and further provided that the Authority shall give written notice to the District of any such withholding. Notwithstanding the foregoing, failure by the Authority to provide such written notice timely shall not create or result in any entitlement to payment for the District. In the event that the Authority either temporarily or permanently withholds payment for the Feasibility Study, the District hereby agrees and acknowledges that the Authority shall have no liability for any such withholding of payment or any loss that may occur as a result of any such withholding of payment.

The District shall not be eligible to receive any funding for the Authority's share of the eligible, approved Feasibility Study costs, or any portion thereof, unless and until the Authority has approved the Scope, Budget, and Schedule. The Authority shall reimburse the District only for costs incurred by the District in connection with the Feasibility Study that are timely submitted to the Authority, eligible for reimbursement pursuant to

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Authority policies, procedures, and guidelines, and audited and approved by the Authority.

Notwithstanding any provision of this Agreement, a District will not be (c) eligible for reimbursement for costs that arise out of any study of the deficiencies and issues identified in the Statement of Interest to the extent that those costs were incurred by the District prior to the date of the Execution of this Agreement.

2.2 Term of Agreement.

No Project Scope and Budget Agreement for a Proposed Project, which arises out of the provisions of this Agreement will be approved by the Authority's Board until on or after July 1, 2020. Subject to that limitation, the Agreement will terminate upon (1) the approval of a Project Scope and Budget Agreement for a Proposed Project by the Authority's Board and the (2) execution of a Project Scope and Budget Agreement by the Authority and the District for that Proposed Project or (2) Nine Hundred and Thirteen (913) Days after the date upon which the Authority's Board votes to invite the District into Feasibility Study, whichever occurs sooner.

SECTION 3 **COVENANTS**

The District covenants and agrees that as long as this Agreement is in effect, the District shall and shall cause its employees, officers, agents, and representatives to perform and comply with all covenants of this Agreement.

- 3.1 The District hereby agrees that it shall make available for inspection by, and submit to, the Authority any and all information and documentation related to the Feasibility Study, including, but not limited to budget information, progress reports, and draft copies that may be requested by the Authority, promptly and in no event later than the deadline stated in any such request.
- 3.2 The District hereby agrees that it shall work with the Authority in developing the Scope, Budget and Schedule for the Feasibility Study and it acknowledges and agrees that the Authority's funding for the Feasibility Study is subject to the Authority's approval of the Scope, Budget and Schedule.
- 3.3 The District hereby acknowledges and agrees that the Authority shall not provide any amounts in excess of the amount determined under Section 2.1(b) of this Agreement.
- 3.4 The District hereby acknowledges and agrees that the Authority may, in its sole discretion, determine that certain costs incurred by the District in connection with the Feasibility Study are not eligible for reimbursement by the Authority, pursuant to any applicable provisions of M.G.L. c. 70B, 963 CMR 2.00 et seq., including, but not limited to, sections 2.10 & 2.16(5), and any other policies and guidelines of the Authority.

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- 3.5 The District shall comply with all provisions of this Agreement; the provisions of all other agreements between the Authority and the District that relate to the Feasibility Study; the provisions of M.G.L. c. 70B, 963 CMR 2.00 *et seq.*, and all policies and guidelines of the Authority; and all provisions of law applicable to the Feasibility Study, this Agreement, and any other agreements and documents related to the Feasibility Study, and shall take all action necessary to fulfill its obligations under this Agreement.
- 3.6 The District hereby acknowledges and agrees that the Authority shall not be required or obligated to make any payment for any eligible Feasibility Study costs while an Event of Default, as defined in section 8 of this Agreement, shall have occurred.
- 3.7 The District shall, and shall cause any Owner's Project Manager and Designer and their employees, subconsultants and agents to, keep adequate records of the Feasibility Study and make all Feasibility Study records and the Feasibility Study site(s) available to the Authority or representatives of the Authority for review during the course of the Feasibility Study.
- 3.8 The District hereby acknowledges and agrees that the duties of any Owner's Project Manager hired by and/or assigned to the Proposed Project by the District shall include, but not be limited to, fully and completely managing and coordinating on behalf of the District the administration of the Feasibility Study to completion. Any Owner's Project Manager hired by and/or assigned to the Proposed Project by the District shall be responsible for overseeing, tracking, and managing the Budget and Schedule. In the event that an Owner's Project Manager is not required for the Proposed Project, the District shall have the aforesaid duties and responsibilities in addition to any others imposed by M.G.L. c. 70B, 963 CMR, et seq., the policies and guidelines of the Authority, and any other applicable provisions of law.
- 3.9 The District hereby agrees that the Authority shall have free access to, and open communication with, any Owner's Project Manager hired by and/or assigned to the Proposed Project by the District and that the Authority shall have full and complete access to all information and documentation relating to the Proposed Project to the same extent that the District has such access. The District agrees that it shall require any such Owner's Project Manager to fully cooperate with the Authority in all matters related to the Proposed Project; to promptly communicate, transmit, and/or make available for inspection and copying any and all information and documentation requested by the Authority; to fully, accurately and promptly complete all forms and writings requested by the Authority; and to give complete, accurate, and prompt responses to any and all questions, inquiries and requests for information posed by the Authority. The District agrees that it shall not in any way, directly or indirectly, limit, obstruct, censor, hinder or otherwise interfere with the free flow of communication and information between the Owner's Project Manager and the Authority in all matters related to the Proposed Project and as provided herein; that it shall not suffer the same to occur by the act or omission of any other person or entity; and that it shall not retaliate against the Owner's Project Manager for communicating information to the Authority as provided herein. The

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District agrees to execute, deliver and/or communicate to the Owner's Project Manager any and all authorizations, approvals, waivers, agreements, directives, and actions that are necessary to fulfill its obligations under this paragraph. The District further agrees that the Authority shall bear no liability whatsoever arising out of the Authority's knowledge or receipt of information communicated to the Authority by the Owner's Project Manager and that the District shall remain responsible for the management and completion of the Proposed Project.

- 3.10 The District hereby acknowledges and agrees that the duties of the Designer shall include, but not be limited to, those described in this Agreement, including, but not limited to, the Scope attached hereto as Exhibit B; 963 CMR 2.10(8); any applicable rules, regulations, policies and guidelines of the Authority; and any standard scope of services and the Design Contract prescribed by the Authority.
- 3.11 The District hereby acknowledges and agrees that neither the District nor any of its employees, officials, agents, consultants or contractors shall submit any false or intentionally misleading information or documentation to the Authority in connection with this Feasibility Study Agreement or the Feasibility Study, and further acknowledges and agrees that the submission of any such information or documentation may cause the Authority to suspend, revoke or terminate any and all payments otherwise due to the District and/or recover any previous payments made to the District, and the District may be ineligible for any funding from the Authority. The District hereby further agrees that it shall have a continuing obligation to update and notify the Authority in writing when it knows or has any reason to know that any information or documentation submitted to the Authority contains false, misleading or incorrect information.
- 3.12 The District hereby acknowledges and agrees that the Authority shall bear no responsibility or liability of any sort for the results of any Feasibility Study, environmental assessment, geotechnical site testing, any necessary site remediation, clean-up, or other site remediation services.
- 3.13 The District hereby acknowledges and agrees that it shall provide a final Feasibility Study report to the Authority, which shall be in a format that is prescribed by or otherwise acceptable to the Authority.
- 3.14 The District hereby acknowledges and agrees that the Authority's grant program is a non-entitlement, discretionary program based on need, and the Feasibility Study may not result in a school construction, renovation or repair project that is eligible for funding by the Authority.
- 3.15 The District shall not combine, consolidate, or conjoin in any way the procurement, pre-qualification or selection of an Owner's Project Manager or Designer for the Proposed Project with the procurement, pre-qualification or selection of an Owner's Project Manager or Designer for any other construction, repair or renovation project without the express prior written approval of a duly authorized representative of the Authority. Any costs incurred by the District that relate to, or arise out of, the use of

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a combined, consolidated or conjoined procurement, pre-qualification or selection process as proscribed above, including, but not limited to, the preparation of bid documents, requests for services, and requests for qualifications, without the express prior written approval of a duly authorized representative of the Authority shall not be eligible for reimbursement.

SECTION 4 PAYMENTS AND AUDIT

- 4.1 Subject to the terms and conditions of the Agreement, the Authority shall reimburse the District for eligible, approved costs incurred in connection with the Feasibility Study in accordance with the following:
 - Using the Authority's Pro-Pay system, the District shall submit (a) requests for reimbursement on a monthly basis to the Authority in a format prescribed by the Authority. Each monthly request for reimbursement shall be approved locally by a duly authorized representative of the District, shall be in a form acceptable to the Authority, shall include reasonable detail, including, but not limited to (1) the amount of funding requested, (2) the nature of the materials or property or services received, (3) the total value of the work performed and materials furnished by the Owner's Project Manager, if any, the Designer, and each consultant, subconsultant or vendor to date, and (4) the value of the work completed during the Feasibility Study. The District agrees that each request for reimbursement shall be accompanied by the invoices for each of the amounts requisitioned and any other supporting documentation and information substantiating the District's request for reimbursement, as the Authority may request, in a form satisfactory to the Authority.
 - (b) Each request for reimbursement shall include a written certification signed by a duly authorized representative of the District stating that: (1) such request for reimbursement is solely for Feasibility Study costs, (2) the obligations itemized in the request for reimbursement have not been the basis for a prior request for reimbursement submitted by the District that has been paid or rejected by the Authority, (3) the reimbursement requested is due for work actually and properly performed or materials or property actually supplied prior to the date of the requisition, (4) the reimbursement requested is for costs that already have been duly paid by the District, and (5) such reimbursement requested is within the Budget approved by the Authority.
 - (c) The Authority shall review all requests for reimbursement properly submitted pursuant to this Agreement as soon as reasonably possible. The Authority shall not consider requests for reimbursement that are not, as reasonably determined by the Authority, (1) timely and properly submitted, (2) in accordance with the most recent Budget approved by the

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Authority, and (3) for eligible Feasibility Study costs incurred by the District. The District understands and agrees that no reimbursement shall be made by the Authority unless the District has complied with all of the terms and conditions of this Agreement, the applicable provisions of M.G.L. c. 70B, chapters 208 and 210 of the Acts of 2004, 963 CMR 2.00 et seq., and all policies and guidelines of the Authority.

- After receipt from the District of a timely and properly submitted request for reimbursement pursuant to this Agreement, the Authority shall make payment to the District of the Authority's share of approved, eligible Feasibility Study costs, subject to the terms and conditions of this Agreement. The District hereby agrees and acknowledges that the amount of approved, eligible Feasibility Study costs reimbursed by the Authority may be subject to change, pending audit, including but not limited to an audit pursuant to Section 4.2 of this Agreement and the final close-out audit pursuant to Section 4.3 of this Agreement.
- 4.2 The Authority may review and perform a preliminary audit on each request for reimbursement submitted pursuant to this Agreement to ensure that only eligible costs of the Feasibility Study are approved and paid by the Authority. Any such preliminary audits shall be conducted in accordance with 963 CMR 2.16 and other policies and guidelines of the Authority. In the event that the Authority determines that an item contained in a request for reimbursement submitted by the District pursuant to this Agreement is not eligible for reimbursement by the Authority, the Authority shall adjust a subsequent reimbursement to the District to account for the ineligible costs. The District hereby acknowledges and agrees that each audit conducted pursuant to this Section 4.2 is preliminary, and the Authority may further adjust and alter the results of a preliminary audit after it conducts subsequent audits or a final close-out audit of the Feasibility Study.
- 4.3 The District hereby acknowledges and agrees that a final, close-out audit of the Feasibility Study by the Authority shall include an audit of all requests for reimbursement submitted and all reimbursements made by the Authority. The final, close-out audit shall be conducted in accordance with 963 CMR 2.16 and any other applicable regulations. policies and guidelines of the Authority. The District shall make all documents and materials requested by the Authority or its representatives available in a timely manner. The District further acknowledges and agrees that the final, close-out audit of the Feasibility Study may not occur until such time as the Authority conducts its final, closeout audit of the project that may result from the Feasibility Study, should the District be approved for any such project. Any adjustments applicable as a result of the final, closeout audit may be made in the final amount of the Total Facilities Grant, as determined by the Authority.

SECTION 5 REPRESENTATIONS AND WARRANTIES

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The District hereby warrants and represents that each of the following statements is true, correct and complete:

- 5.1 The District is validly organized and existing under and by virtue of the laws of the Commonwealth, has full power and authority to own its properties and carry on its business as now conducted, and has full power and authority to execute, deliver and perform its obligations under this Agreement and all other documents related to the Feasibility Study.
- 5.2 The District is duly authorized to execute and deliver this Agreement and has taken all necessary steps to authorize the execution and delivery of this Agreement, to undertake the Feasibility Study and to perform and consummate all transactions contemplated by this Agreement.
- 5.3 The undersigned has the full legal authority to execute this Agreement on behalf of the District and to bind the District to its provisions.
- 5.4 This Agreement does not and will not, to any material extent, conflict with, or result in violation of any applicable provisions of law, including, but not limited to, any statute, charter, by-law, ordinance, rule or regulation, or any judgment, order, rule or regulation of any court or other agency of government.
- 5.5 The District has all requisite legal power and authority to own and operate the School that is the subject of the Feasibility Study and to undertake and oversee the Feasibility Study or, in the case of a school facility that is leased by the District, the District has all of the requisite legal power and authority to control and operate the School that is the subject of the Feasibility Study and to undertake and oversee the Feasibility Study pursuant to a lease which assures that the District has exclusive jurisdiction and control of the School and the land upon which it is situated for the anticipated useful life of the Proposed Project.
- 5.6 No information furnished by or on behalf of the District to the Authority in this Agreement, the Budget, the Initial Compliance Certification, or any other document, certificate or written statement furnished to the Authority in connection with the Feasibility Study contains any untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements contained in this Agreement or therein not misleading in light of the circumstances in which the same were made.
- 5.7 The District has duly obtained all necessary votes, resolutions, authorizations, appropriations and local approvals, in accordance with formats prescribed by or otherwise acceptable to the Authority, and has taken all actions necessary or required by law to enable it to enter into this Agreement and to fund and perform its obligations hereunder, in accordance with the Authority's guidelines, regulations, policies and standards. This Agreement constitutes a valid and binding obligation of the District, enforceable in accordance with its terms, except as such enforceability may be limited by

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bankruptcy, insolvency, moratorium, reorganization or other laws heretofore or hereafter enacted and general equity principles.

- 5.8 No litigation before or by any court, public board or body is pending or threatened against the District or the Authority seeking to restrain or enjoin the execution and delivery of this Agreement or the Feasibility Study, or contesting or affecting the validity of this Agreement or the power of the District to pay its share of the Feasibility Study.
- 5.9 The District has implemented policies and procedures to prevent and eliminate fraud, waste and abuse of public funds in connection with the Feasibility Study and any future construction or renovation projects that may be forthcoming as a result of the Feasibility Study.
- 5.10 The District has submitted all audit materials requested by the Authority in connection with any project for which the District has received or anticipates receiving funding from the Authority.
- 5.11 All meetings of all public bodies in the District that relate in any way to the Proposed Project, including, but not limited to, the meetings of the District's school building committee, have been conducted, and shall be conducted, in compliance with the provisions of G.L. c. 30A, $\S\S$ 18 25, 940 CMR 29.00 *et seq.*, the so-called Open Meeting Law, and all other applicable law.

SECTION 6 INSURANCE

- 6.1 The District shall obtain and maintain all insurance required by law and insurance of such types and limits and upon such terms and conditions as may be required by, or as may be acceptable to, the Authority.
- 6.2 The District shall require by contractual obligation, and shall also ensure by the exercise of due diligence, that any Designer hired by the District in connection with the Feasibility Study obtain and maintain, at a minimum, insurance of such types and limits and upon such terms and conditions as may be required by law and as may be prescribed by the Authority in the Design Contract between the Designer and the District.
- 6.3 Except where the Owner's Project Manager is an existing employee of the District, the District shall require by contractual obligation, and shall also ensure by the exercise of due diligence, that any Owner's Project Manager hired by the District obtain and maintain, at a minimum, insurance of such types and limits and upon such terms and conditions as may be required by law and as may be prescribed by the Authority in its standard contract for Owner's Project Manager services which is incorporated by reference herein.

SECTION 7

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COMPLIANCE WITH CONTRACT DOCUMENTS, PROJECT PERMITS AND OTHER APPLICABLE LAW

7.1 The District shall take all reasonable actions designed to ensure that the Feasibility Study complies with all applicable contract documents, building codes, laws, rules and regulations and to ensure that all necessary project permits have been obtained. Notwithstanding any right of approval or review held or exercised by the Authority in connection with this Agreement or the Feasibility Study, the District shall be responsible for the successful performance and completion of the Feasibility Study in accordance with this Agreement, the Design Contract, design documents and project permits, if any, and for the economical and efficient operation and administration of the Feasibility Study.

SECTION 8 DEFAULTS AND REMEDIES

- 8.1 The occurrence of any of the following events shall constitute, and is herein defined to be, an Event of Default under this Agreement:
 - (a) If the District shall fail to perform and observe any covenant, agreement or condition on its part provided in this Agreement and such failure shall continue for a period of thirty (30) days after written notice thereof shall be given to the District by the Authority; provided if such failure cannot be remedied within such thirty (30) day period, it shall not constitute an Event of Default hereunder if corrective action satisfactory to the Authority, as determined by the Authority in writing, is instituted by the District within such period and diligently pursued until the failure is remedied. Any forbearance or failure of the Authority in giving such written notice shall not amount to any waiver of the Authority's rights under this Agreement as to the same or subsequent breaches and shall not preclude the Authority from pursuing any of its rights or remedies provided under this Agreement or as otherwise provided by law.
 - (b) If any representation or warranty made by the District in this Agreement or in any other agreement entered into by the District with the Authority shall prove to have been incorrect or to be misleading in any material respect.
- 8.2 If any Event of Default hereunder shall occur and be continuing, the Authority may proceed to protect its rights under this Agreement, and may: (a) terminate this Agreement, (b) permanently withhold or temporarily suspend payment of any eligible, approved costs to the District, (c) recover any payments of eligible, approved costs previously made to the District, and/or (d) exercise any other right or remedy upon such default as may be granted to the Authority under this Agreement or under any other applicable provision of law.
- 8.3 No remedy conferred upon or reserved to the Authority is intended to be exclusive and every such remedy shall be cumulative and shall be in addition to every

District: Town of Somerset

Project Name: Somerset Middle School

other remedy given under this Agreement or now or hereafter existing at law or in equity. No delay or omission to exercise any right, remedy or power accruing upon any Event of Default shall impair any such right, remedy or power or shall be construed to be a waiver thereof, but any such right, remedy or power may be exercised from time to time and as often as the Authority may deem expedient.

SECTION 9 OTHER TERMS

- 9.1 Governing Law. This Agreement shall be governed by, construed, and enforced in accordance with, the laws of the Commonwealth of Massachusetts.
- Venue. Any civil action brought against the Authority by the District, or any person or entity claiming by, through or under it, that arises out of the provisions of this Agreement, shall only be brought in the Superior Court for Suffolk County, Massachusetts. The District, for itself and for any person or entity claiming by, through or under it, hereby waives any defenses that it may have as to the venue to which it has agreed herein, including, but not limited to, any claim that this venue is improper or that the forum is inconvenient. The District for itself and for any person or entity claiming by, through or under it, hereby waives all rights, if any, to a jury trial in any such civil action that may arise out of the provisions of this Agreement.
- 9.3 Indemnification of the Authority by the District. To the fullest extent permitted by law, the District shall indemnify and hold harmless the Authority and its officers, agents and employees from and against any and all claims, actions, damages, liabilities, injuries, costs, fees, expenses, or losses, including, without limitation, reasonable attorney's fees and costs of investigation and litigation, whatsoever which may be incurred by, or for which liability may be asserted against, the Authority or any of its officers, agents or employees arising out of any activities undertaken by, for, or on behalf of the District in the execution or implementation of this Agreement or with respect to the Feasibility Study, including, but not limited to, the performance of any contract or obligation directly or indirectly related to the Feasibility Study. Such obligation shall not be construed to negate or abridge any other obligation of indemnification running to the Authority which would otherwise exist.
- 9.4 Members, Employees Not Liable. No member or employee of the Authority shall be charged or held personally or contractually liable by or to the District under any term or provision of this Agreement or because of any breach thereof or because of its execution or attempted execution.
- 9.5 Assignability. The District shall not assign any interest, in whole or in part, in this Agreement and shall not transfer any interest in the same, whether by assignment or novation, without the prior written approval of the Authority.
- 9.6 Payment Not A Waiver.

District: Town of Somerset

Project Name: Somerset Middle School

The Authority's payment(s) to the District under this Agreement or its review, approval or acceptance of any actions by the District under this Agreement shall not operate as a waiver of any rights under this Agreement and the District shall remain liable to the Authority for all damages incurred by the Authority as a result of the District's failure to perform in accordance with the terms and conditions of this Agreement.

The rights and remedies of the Authority provided for under this Agreement are in addition to any other rights or remedies provided by law. The Authority may assert a right to recover damages by any appropriate means, including, but not limited to, set-off, suit, withholding, recoupment, or counterclaim either during or after performance of this Agreement.

9.7 <u>Notices</u>. Any notices required or permitted to be given by either of the Parties hereunder shall be given in writing and shall be delivered to the addressee (a) in-hand (b) by certified mail, postage prepaid, return receipt requested; (c) by facsimile; or (d) by a commercial overnight courier that guarantees next day delivery and provides a receipt, and such notices shall be addressed as follows:

If to the Authority:

Massachusetts School Building Authority 40 Broad Street, Suite 500 Boston, MA 02109 Attention: Director of Capital Planning

Facsimile: (617) 720-8460

If to the District:

Town of Somerset 580 Whetstone Hill Road Somerset, MA 02726

Attention: Director of Business and Finance

Facsimile: 508-324-3104

or to such other address or addressee as the District and the Authority may from time to time specify in writing. Any notice shall be effective only upon receipt, which for any notice given by facsimile shall mean notice that has been received by the party to whom it is sent as evidenced by a confirmation slip that bears the time and date of receipt.

- 9.8 <u>Severability</u>. If any provisions of this Agreement shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such provision shall not affect any of the remaining provisions of this Agreement, and this Agreement shall be construed and enforced as if such invalid or unenforceable provision had not been contained herein.
- 9.9 <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, any of which shall be regarded for all purposes as an original and all of which constitute but

District: Town of Somerset

Project Name: Somerset Middle School

one and the same instrument. Each party agrees that it will execute any and all documents or other instruments, and take such other actions as may be necessary to give effect to the terms of this Agreement.

- No Waiver. No waiver by either party of any term or conditions of this Agreement shall be deemed or construed as a waiver of any other terms or conditions, nor shall a waiver of any breach be deemed to constitute a waiver of any subsequent breach, whether of the same or of a different section, subsection, paragraph, clause, phrase, or other provision of this Agreement.
- Integration. This Agreement merges and supersedes all prior negotiations, representations, and agreements between the Parties hereto relating to the Feasibility Study and constitutes the entire agreement between the Parties hereto with respect to the Feasibility Study and the Authority's funding of a portion of the eligible, approved costs of the Feasibility Study.
- Amendments. This Feasibility Study Agreement may be amended only through a written amendment signed by duly authorized representatives of the District and the Authority.

IN WITNESS WHEREOF, the Parties have executed this Agreement on this 1944 day of 1944, 2018.

MASSACHUSETTS SCHOOL BUILDING AUTHORITY By, ohn K. McCarthy Éxecutive Director

TOWN OF SOMERSET

Ву,

Richard M. Brown

NAME (type or print)

Town Administrator

TITLE (type or print)

Feasibility Study Agreement v.07.26.18

17

EXHIBIT A

FEASIBILITY STUDY BUDGET

Town of Somerset Somerset Middle School

The total Budget for the Feasibility Study conducted pursuant to this Agreement, which is attached hereto and incorporated by reference herein, shall be no more than \$800,000 based upon the following estimates:

Owner's Project Manager: \$150,000 Designer: \$475,000 \$135,000 Environmental and Site Testing: Other: \$40,000

EXHIBIT B

SCOPE OF THE FEASIBILITY STUDY

Town of Somerset Somerset Middle School

The Scope of the Feasibility Study conducted under this Agreement, which is attached hereto and incorporated by reference herein, shall consist of the development of a Feasibility Study/Schematic Design for the evaluation of a renovation of the existing school, a renovation of and addition to the existing school and/or new construction for the Somerset Middle School (the "Proposed Project") in the Town of Somerset (the "District"). Pursuant to the Massachusetts School Building Authority's (the "MSBA") regulations, 963 CMR 2.06, the space allowance for the Proposed Project shall meet all applicable MSBA regulations and guidelines.

The Feasibility Study shall contain all information required by 963 CMR 2.10(8) and any other applicable rules, regulations, policies, guidelines and directives of the MSBA including, but not limited to, a final design program, educational space summary, budget statement for preferred educational objectives, and a proposed total project budget. The Feasibility Study for this Proposed Project may examine an option to relocate the District-wide grade 5 enrollment to the Somerset Middle School, which for purposes of the design, shall be based on no more than 770 students in grades 5-8. Exclusive of the relocation proposal, and using information from the base enrollment projection, a design enrollment shall be based on no more than 590 students in grades 6-8 for the Somerset Middle School. The District will prepare and submit to the MSBA the educational space summary for both options for review and acceptance. Upon acceptance of the educational space summaries, the District will commence with the evaluation of alternatives. The Schematic Design that is developed pursuant to this Agreement shall be based upon the final design enrollment, which shall be subject to the written approval of the MSBA. The Schematic Design shall include, but not be limited to, the information required by the MSBA's Feasibility Study Guidelines, including, but not limited to, a site development plan, environmental assessment, geotechnical assessment, geotechnical analysis, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, NE-CHPS scorecard or LEED for Schools checklist, outline specifications, cost estimates, project schedule and proposed total project budget.

In conducting the Feasibility Study and developing the Schematic Design, the District shall, in a sufficient and timely manner as determined by the MSBA, initiate such notification procedures, undertake such review processes, and obtain such determinations and approvals as may be required by 963 CMR 2.03(2)(h) & (i), including, but not limited to, such procedures, reviews, determinations, and approvals as may be required by the Massachusetts Historical Commission (the "MHC") and/or the Massachusetts Environmental Policy Act. At its earliest opportunity, the District shall seek a written determination from the MHC as to whether the MHC intends to undertake a review of the Proposed Project.

The District shall be responsible for conducting such geotechnical evaluations, site investigations, soils explorations and environmental assessments as are reasonable and necessary to determine whether any significant environmental, geotechnical or other physical conditions exist that may have an impact upon eventual construction on the proposed site. The MSBA may

require the District to fully fund certain environmental or geotechnical site testing beyond initial investigatory costs. The MSBA shall bear no responsibility or liability of any sort for the results of any geotechnical evaluations or site testing, soils explorations, environmental assessments, nor for any site remediation, clean-up, or other site remediation services.

The development of the Schematic Design shall be subject to continuing review by the MSBA in accordance with the provisions of this Agreement, the MSBA's Feasibility Study guidelines and any other applicable rule, regulation, policy, guideline or directive of the MSBA. The District shall be responsible for submitting to the MSBA all documentation that is required to complete the Feasibility Study and Schematic Design and to support the preparation of a Project Scope and Budget Agreement.

Exhibit C

Calendar Year 2018

Somerset

Somerset Middle School - 201702730305

MSBA Reimbursement Rate Calculation			
Base Points	31.00		
Income Factor	8.21		
Property Wealth Factor	17.68		
Poverty Factor*	-		
Subtotal: Reimbursement Rate Before Incentives	56.89		
Incentive Points Maintenance (0-2)	-		
CM @ Risk (0-1) Only projects invited to Capital Pipeline prior to 1/2/17	-		
Newly Formed Regional District (0-6)	-		
Major Reconstruction or Reno/Reuse (0-5)	-		
Overlay Zoning 40R & 40S (0-1)	-		
Overlay Zoning 100 units or 50% of units for 1, 2 or 3 family structures (0-0.5)	-		
Energy Efficiency - "Green Schools" (0 or 2)	-		
Model Schools (5) Only projects invited to Capital Pipeline prior to 1/2/16	-		
Total Incentive Points	-		
MSBA Reimbursement Rate	56.89		

^{*}Poverty factor is calculated based on Chapter 110 of the Acts of 2017. Future reimbursement rates for feasibility or project scope and budget will be based on the calendar year reimbursement rate in effect at that time, which may be higher or lower than this rate.

Appendix B

MSBA Board Actions

Certificate of Legal Counsel for a Feasibility Study Agreement b.

October 29, 2018

Mark R. Reich mreich@k-plaw.com

Certification of Legal Counsel for the Town of Somerset

We, KP Law, P.C., duly appointed legal counsel for the Town of Somerset, hereby certify that:

- The Town of Somerset is validly organized and existing under and by virtue of the 1. laws of the Commonwealth, has full power and authority to own its properties and carry on its business as now conducted, and has full power and authority to execute, deliver and perform its obligations under the Feasibility Study Agreement, and any amendments thereto, between the Town of Somerset and the Massachusetts School Building Authority for the Proposed Project at Somerset Middle School (the "Feasibility Study Agreement") and all other related documents.
- The Town of Somerset has duly obtained all necessary votes, resolutions, authorizations, appropriations and local approvals, in accordance with the formats prescribed by the Authority, and has taken all actions necessary or required by law to authorize the execution and delivery of the Feasibility Study Agreement, and any amendments thereto, and to fund and perform the obligations of the Town of Somerset under the Feasibility Study Agreement, and any amendments thereto.
- The Feasibility Study Agreement, and any amendments thereto, constitute a valid and binding obligation of the Town of Somerset, enforceable in accordance with its terms, except as such enforceability may be limited by bankruptcy, insolvency, moratorium, reorganization or other laws heretofore or hereafter enacted and general equity principles.
- The following elected or appointed governmental officer(s) and/or governmental body has the full legal authority under the laws of the Commonwealth of Massachusetts and all applicable local charters, ordinances and by-laws to execute and deliver the Feasibility Study Agreement, and any amendments thereto, on behalf of the Town of Somerset and to bind the Town of Somerset to its terms and conditions:

Board of Selectmen Somerset Town Hall 140 Wood Street Somerset, MA 02726

The following elected or appointed governmental officer(s) and/or governmental 5. body has the full legal authority under the laws of the Commonwealth of Massachusetts and all applicable local charters, ordinances and by-laws to make final, binding decisions on behalf of the October 29, 2018 Page 2

Town of Somerset with respect to the Proposed Project described in the Feasibility Study Agreement, and any amendments thereto.

Board of Selectmen Somerset Town Hall 140 Wood Street Somerset, MA 02726

I hereby further certify that, to the best of my knowledge and belief, the above-listed certifications are true, complete and accurate.

IN WITNESS WHEREOF, signed this 29rd day of October 2018.

KP Law, P.C. Town Counsel

650399/SOMS/0001

Appendix B

MSBA Board Actions

Owners Project Manager Approval Letter c.



Deborah B. Goldberg Chairman, State Treasurer James A. MacDonald Chief Executive Officer John K. McCarthy
Executive Director / Deputy CEO

March 5, 2019

Mr. Richard M. Brown, Somerset Town Administrator Somerset Town Hall 140 Wood Street Somerset, MA 02726

Re: Town of Somerset, Somerset Middle School, Owner's Project Manager Approval Letter

Dear Mr. Brown:

Pursuant to the provisions of G.L. c. 149, s. 44A ½ and 963 CMR 2.11, the Town of Somerset ("Town") is required to procure the services of an Owner's Project Manager (the "OPM") for the Somerset Middle School project using a qualifications based selection process. As required by 963 CMR 2.11 (3), the Town has certified in writing to the Massachusetts School Building Authority (the "MSBA") that it has used a qualifications based selection process that complies with Massachusetts law. Pursuant to 963 CMR 2.11 (2) and G.L. c. 70B, s. 2, the Town has requested in writing that the MSBA approve its selection of CGA Project Management, LLC as the OPM for the Somerset Middle School project.

The MSBA has reviewed the information submitted by the Town in support of its selection of CGA Project Management, LLC. Based upon the information provided by the Town, the MSBA hereby approves its selection of CGA Project Management, LLC for the Somerset Middle School project and to the key personnel and consultants identified by CGA Project Management, LLC in the proposal that was submitted to the Town and reviewed by the MSBA, and as presented to the MSBA's Owner's Project Manager Review Panel on March 4, 2019. The MSBA's approval is specific to CGA Project Management, LLC and to the key personnel identified by CGA Project Management, LLC in the proposal that was submitted and reviewed by the MSBA. Pursuant to the provisions of 963 CMR 2.11 (4) and the applicable requirements of any agreements between the MSBA and the Town, any change in the OPM or its key personnel, as described in the attached organizational chart, must be approved in writing by the Town and the MSBA. The MSBA's approval is also based upon the Town's representation that the Eligible Applicant for the Town has designated Lindsey Albernaz, Director of Business and Finance, Somerset Public Schools as the individual who shall have the authority to act on behalf of the Owner, under its contract with the OPM, and who shall be responsible for day-to-day communication between the Owner and the OPM. Any change in this designation must be approved in writing by the MSBA.

Page 2 March 5, 2019 Somerset Owner's Project Manager Approval Letter

Please note the MSBA's approval of the Town's selection is subject to the provisions of 963 CMR 2.11 which, among other things, allows the MSBA to rescind its approval and/or to direct the removal of the OPM under certain circumstances. The MSBA retains the right to rescind its approval of the Town's selection of CGA Project Management, LLC and to deny and/or recoup reimbursement for expenditures or costs related to the OPM services if CGA Project Management, LLC does not perform its services to the satisfaction of the MSBA. The MSBA's approval is further subject to the execution of a contract between the Town and CGA Project Management, LLC in a format that is satisfactory to the MSBA, utilizing any standard contracts, forms, and provisions that the MSBA may require, including the completed MSBA System Access Request form which is described below. Please forward a hard copy and an electronic copy of the fully executed contract between the Town and CGA Project Management, LLC to Katie DeCristofaro, Capital Program Manager, at the MSBA by March 22, 2019.

It will be the Town's responsibility to monitor the performance of CGA Project Management, LLC to ensure that they perform their obligations in a satisfactory manner, and to enforce the provisions of its contract with CGA Project Management, LLC. Among obligations of the OPM that are detailed within the MSBA's standard contract is the requirement for the OPM to submit monthly reports to the MSBA. The OPM shall submit to the Town no later than the twelfth day of each calendar month. The OPM shall begin submitting monthly progress reports on the first reporting date following the month in which the OPM receives an approval letter from the Town. The Town shall verify that the OPM submits its monthly reports on time and in the form and manner determined by the MSBA. OPM Reports shall be submitted to the MSBA by the OPM using the MSBA's online OPM Report System. In order to activate and use this system, the Town must complete and submit the attached MSBA System Access Request form. The completed form must be delivered to Katie DeCristofaro, Capital Program Manager, at the MSBA by March 22, 2019.

The Town must comply with all provisions of law and all conditions imposed by any agreements executed between the MSBA and the Town, including, but not limited to, a Feasibility Study Agreement, a Project Scope and Budget Agreement, and a Project Funding Agreement, related to the provision of services by an OPM. The MSBA maintains its right to withhold reimbursement of costs and expenditures associated with OPM services if the Town fails to comply with the applicable terms and conditions of its agreements with the MSBA or any administrative directives issued by the MSBA, now in effect or hereafter promulgated. The MSBA's decision to approve the Town's selection of an OPM, to approve changes in the OPM, or its key personnel, or decline to exercise any of its rights in relation to the selection or performance of the OPM, shall not be construed as a waiver of the MSBA's right to review, audit, and disallow costs incurred by the Town in relation to OPM services, to withhold reimbursement, or to take any other actions available to the MSBA under the law or under its agreements with the Town.

The MSBA shall bear no liability of any kind whatsoever for any claims directly or indirectly occurring out of the MSBA's approval of the Town's selection of the OPM, the MSBA's approval or non-approval of changes in the OPM or its key personnel, the MSBA's decision to rescind its approval or to direct the removal of an OPM, or any other alleged acts or omissions

Page 3 March 5, 2019

Somerset Owner's Project Manager Approval Letter

on the part of the MSBA related to the selection, performance, acts or omissions of the Owner's Project Manager.

If you have any questions, please do not hesitate to contact me or Allison Jones (Allison.Jones@MassSchoolBuildings.org) at 617-720-4466.

Sincerely,

Mary Pichetti

Director of Capital Planning

Attachments: CGA Project Management Project Team Organizational Chart OPM System Access Request Form - OPM Report System User

Cc: Legislative Delegation

> Holly McNamara, Chair, Somerset Board of Selectmen Melissa Terra, Chair, Somerset School Committee

Jeffrey Schoonover, Superintendent, Somerset Public Schools

Lindsey M. Albernaz, Director of Business and Finance, Somerset Public Schools

Daniel Tavares, Owner's Project Manager, CGA Project Management, LLC

File: 10.2 Letters (Region 6)

Appendix B

MSBA Board Actions

Designer Selection Approval Letter c.



Deborah B. Goldberg *Chairman, State Treasurer*

James A. MacDonald Chief Executive Officer **John K. McCarthy** *Executive Director / Deputy CEO*

July 9, 2019

Richard M. Brown, Town Administrator Somerset Town Hall 140 Wood Street, Room 23 Somerset, MA 02726

RE: Designer Selection Somerset Middle School MSBA ID: 201702730305

Dear Mr. Brown:

On Tuesday, July 9, 2019, the Massachusetts School Building Authority Designer Selection Panel ("DSP") interviewed the finalists for the above-referenced project. The following individuals represented the Town of Somerset on the DSP:

- Steve Moniz, Selectman, Somerset Board of Selectmen
- Jeffrey Schoonover, Superintendent, Somerset Public Schools
- Steven Medeiros, Somerset Building Committee Member

In accordance with the provisions of Massachusetts General Laws, Chapter 7C, Sections 44 through 58, and the MSBA Designer Selection Procedures, the DSP voted unanimously to rank the finalists, in order of qualifications, as follows for the subject project:

- 1. Ai3 Architects LLC
- 2. Studio G. Architects, Inc.
- 3. Dore & Whittier Architects, Inc.

The DSP determined that Ai3 Architects LLC possesses the requisite skills and experience for this project, particularly in light of their extensive experience in the design and construction of schools in Massachusetts.

The Town of Somerset should now take the appropriate local steps necessary to award the contract for designer services to the first-ranked firm and authorize fee and contract negotiations. Please know that the Town of Somerset must use the MSBA's standard contract for designer services, a copy of which can be downloaded from our website, MassSchoolBuildings.org.

Designer Selection Panel Interview Results Letter Somerset Middle School, Somerset, MA July 9, 2019 Page 2 of 2

Before beginning the contract and fee negotiations, however, and in order to remain eligible for the reimbursement of a portion of the designer services fee, please have your Owner's Project Manager contact the MSBA Project Manager for this project, Chris Alles, to discuss the MSBA's guidelines. Upon completion of contract and fee negotiations with the first-ranked firm, please forward a copy of the fully executed contract to Kathryn DeCristofaro, Capital Program Manager, at the MSBA.

Sincerely,

Karl Brown, AIA Design Director

Legislative Delegation cc:

from Brown.

Holly McNamara, Chair, Somerset Board of Selectmen Steve Moniz, Selectman, Somerset Board of Selectmen Andrew Crook, Chair, Somerset School Committee Victor Machado, Jr., Somerset School Committee Member Jeffrey Schoonover, Superintendent, Somerset Public Schools Steven Medeiros, Somerset Building Committee Member Troy L Randall, Ai3 Architects LLC

Gail Sullivan, Studio G. Architects, Inc.

Donald Walter, Dore & Whittier Architects, Inc.

Daniel Tavares, Owner's Project Manager, CGA Project Management

Chris Alles, MSBA Project Manager File 4.3 Feasibility Study Architect (R6)

Appendix C

Local Actions & Approvals

Town Vote for a Feasibility Study a.



Town of Somerset

Massachusetts

TOWN CLERK

TOWN CLERK

I, Dolores Berge, Town Clerk, hereby certify that the following action was taken on Article 24 at the Annual Town Meeting heid on May 21, 2018, at the Somerset Berkiey Regional High School:

Article 24: To see if the Town will vote to raise, appropriate, and/or transfer from available funds a sum of money for the purpose of performing a feasibility study to assess the existing capital needs of the Somerset Middle School, located at 1141 Brayton Avenue, Somerset, MA, for which feasibility study, under the direction of the Somerset Middle School Building Committee, the Town may be eligible for a grant from the Massachusetts School Building Authority.

The Advisory & Finance Committee by a majority does not recommend approval of this article. (Vote 5-3)

A motion was made by School Committeeman Michael Botelho and seconded by Victor Machado that the Town vote to appropriate the amount of Eight Hundred Thousand dollars (\$800,000) for the purpose of paying costs of a feasibility study for the Somerset Middle School, located at 1141 Brayton Avenue, Somerset MA, including the payment of all costs incidental or related thereto, and for which the Town may be eligible for a grant from the Massachusetts School Building Authority ("MSBA"), sald amount to be expended under the direction of the School Building Committee and that said sum be transferred from Stabilization. The Town acknowledges that the MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any costs the Town incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the Town, and that the amount of funding authorized pursuant to this vote shall be reduced by any grant amount set forth in the Feasibility Study Agreement that may be executed between the Town and the MSBA. Discussion followed by Mr. Botelho, Armand Cabral, Lioyd Mendes, Christopher Godet, Kathleen Gunning, David Wilder.

A motion was made to amend the motion by Victor Machado and seconded from the floor to read"that said sum be transferred as follows: \$500,000.00 from Undesignated Surplus and \$300,000.00 be transferred from Stabilization".... Discussion followed by Christopher Godet, Holly McNamara, Victor Machado. The Moderator called for the vote reminding the body that this amendment only needs to pass by a majority vote of those voting. Following a voice vote, the Moderator declared she was in doubt and asked the body for a standing vote.

Vote: Yes - 54, No - 106 Motion to amend failed by majority vote.

The Moderator opened the floor to further discussion on the original motion. Discussion followed by Lorl Belche, Michael Botelho, Christina Wordell, Selectman Hoily McNamara, Supt. Jeffrey Schoonover, Jessica Machado, Lori Rothwell, Brian Michaud, Richard Peirce, Selectman Steven Moniz, Paul Cardin and Selectman David Berube. A motion was made to move the question. The Moderator will allow last 2 voters in line to speak then close discussion. Further discussion followed by Tony Kucikas and Christopher Godet. Another motion to move the question was made by Selectman Moniz and seconded from the floor. Motion carried by a unanimous vote. The Moderator reminds the body that this motion requires a 2/3 vote as the funding source is the Stabilization Account. A standing counted vote is called.

Vote: Yes - 147 No- 27 Motion carried by greater than a 2/3 vote.

A frue copy attest;

Dolores Berge/CMMC

Town Clerk

Appendix D

Design Enrollment Certification Letter

he Design Enrollment Certification Letter issued by the MSBA Director of Capital Planning to the Town Administrator and executed by the Chief Executive Officer, School Committee Representative, and Superintendent of Schools is included in this section of the Appendix for record. The agreed-upon design enrollment for a grade 6 through grade 8 project is **590 students**, and for a grade 5 through grade 8 project is **770 students**.



Chairman, State Treasurer

James A. MacDonald Chief Executive Officer

Executive Director / Deputy CEO

September 21, 2018

Mr. Richard M. Brown, Somerset Town Administrator Somerset Town Hall 140 Wood Street Somerset, MA 02726

Re: Town of Somerset, Somerset Middle School

Dear Mr. Brown:

1 would like to thank your team for meeting with Massachusetts School Building Authority (the "MSBA") staff on September 10, 2018 to review enrollment projections and methodologies for the Somerset Middle School project (the "Proposed Project") in the Town of Somerset (the "District"). As discussed, the next critical step is for the MSBA and the District to agree on a study enrollment for the Somerset Middle School.

The Somerset Middle School presently serves the District's entire grade 6-8 enrollment. The MSBA understands that the District would like its feasibility study to also examine relocation of the District's entire grade 5 enrollment to the Somerset Middle School to relieve enrollment pressures at the District's three elementary schools. Accordingly, this analysis will be particularly focused on the enrollment projections for those grades.

The table below illustrates the District's K-8 enrollment during the most recent ten-year period, including enrollment for the current school year (2018-2019) as reported by the District. The total grade 6-8 enrollment in Somerset as reported by the District for the 2018-2019 school year is 616 students which reflects a decrease of 17 students (-2.7%) from the grade 6-8 enrollment reported in 2014-2015 which was the maximum grade 6-8 enrollment reported in the preceding ten years. Additionally, the 2018-2019 grade 6-8 enrollment reflects an increase of approximately seven students (1.2%) from the average grade 6-8 enrollment reported during the preceding ten-year period.

Year	11.0	68	Tela.
2009	1,111	607	1,718
2010	1,133	584	1,717
2011	1,172	589	1,761
2012	1,155	596	1,751
2013	1,147	614	1,761
2014 ,	1,126	633	1,759
2015	1,108	627	1,735
2016	1,117	616	1,733
2017	1,112	606	1,718
2018	1,100	616	1,716

40 Broad Street, Suite 500 • Boston, MA 02109 • Tel: 617-720-4466 • www.MassSchoolBuildings.org

Page 2 September 21, 2018 Town of Somerset Enrollment Letter

The MSBA understands that the District is proposing a design enrollment to accommodate approximately 626 students in grades 6-8 at the Somerset Middle School. As previously noted, the enrollment in grades 6-8 as reported by the District for the 2018-2019 school year at the Somerset Middle School was 616 students.

With respect to future enrollments, the MSBA's base enrollment forecast indicates that the District's grade 6-8 enrollment will fluctuate somewhat through the 2028-2029 school year. The results of the base enrollment forecast are as follows:

- The average grade 6-8 enrollment forecast for the projected period through the 2028-2029 school year is 580 students.
- The average grade 5-8 enrollment forecast for the projected period through the 2028-2029 school year is 760 students.

As a result of a sensitivity analysis performed by the MSBA on this base enrollment projection and further discussion with the District, the following adjustment has been made to the base enrollment projection:

- Out-of-District Enrollment
 - o In order to adjust for fluctuations to the out-of-district enrollment patterns of the District's residents over time, the MSBA has made an additional adjustment to the base enrollment projection.
 - o In order to make this adjustment, the MSBA adjusted the grade to grade survival ratios for grades 5-8 by a total of 3.3% throughout a four year period in the projection.
 - o This adjustment added the following totals to the projected averages for the District's proposed grade configurations as compared to the base enrollment projection:
 - For grades 6-8 the adjustment added approximately 10 students.
 - For grades 5-8 the adjustment added approximately 10 students.

As a result of the analysis on the base enrollment forecast, the historical enrollment trends of the District, and the adjustment described above the MSBA recommends, for planning and study purposes only, study enrollments for the Proposed Project as follows:

Grades 6-8: 590 students Grades 5-8: 770 students

The number of invitations that the MSBA can issue each year is limited by the annual cap provided through the dedicated penny of the sales tax. Over the last several years, the MSBA has left behind approximately 85% of the applicants that submitted a Statement of Interest to the MSBA. As part of the enrollment process, the MSBA is agreeing with the District's request to consider one additional study enrollment option to evaluate the potential options for improving conditions at the elementary schools in Somerset in addition to the Statement of Interest

Page 3 September 21, 2018 Town of Somerset Enrollment Letter

associated with the Somerset Middle School. The MSBA would not object to the District studying and developing a potential project that relocates the District's entire grade 5 enrollment to the Somerset Middle School. However, if the District were to select this option as its preferred solution, additional costs would be deemed ineligible for reimbursement and the MSBA would not be able to participate fully. The MSBA will participate in the Feasibility Study /Schematic Design costs associated with studying options presented in this enrollment letter up to the limits of its funding caps associated with designer and OPM fees. Although participating in the study costs, the MSBA would limit its estimated maximum grant to the 590 students in grades 6-8, thus funding the Statement of Interest school proposed in the District's preferred solution through construction and completion but would not participate in the construction and completion costs associated with the added enrollment, in this case grade 5.

If the grade 5-8 configuration is determined to be the Preferred Solution, the District will be required to establish in the Preferred Schematic Report the proposed future use or disposition of any existing spaces vacated or otherwise reprogrammed by this potential project and that the Preferred Solution has been approved by the necessary District officials. Further, the MSBA will require a written plan from the District describing the process for determining local support for potential grade reconfiguration. Upon approval of the District's Preferred Solution, the MSBA will forward a design enrollment certification that is specific to the grade configuration associated with the approved Preferred Solution.

The MSBA believes that this study enrollment recommendation will position the District to efficiently meet space capacity needs throughout future enrollment variations. Please sign and return the attached certification within 21 calendar days to confirm agreement on this study enrollment. If the District feels that this study enrollment does not meet the needs of the District, please respond to this letter via e-mail to Allison Jones and propose three meeting/conference call times for which the District can be available to discuss enrollment.

If you have any questions regarding this matter, please do not hesitate to contact me or Allison Jones (Allison.Jones@massschoolbuildings.org) at 617-720-4466.

Sincerely,

Mary/Pichetti

Director of Capital Planning

Cc: Legislative Delegation

Holly McNamara, Chair, Somerset Board of Selectmen Melissa Terra, Chair, Somerset School Committee

Jeffrey Schoonover, Superintendent, Somerset Public Schools

Lindsey M. Albernaz, Director of Business and Finance, Somerset Public Schools

File: 10.2 Letters (Region 6)

MASSACHUSETTS SCHOOL BUILDING AUTHORITY TOWN OF SOMERSET SOMERSET MIDDLE SCHOOL STUDY ENROLLMENT CERTIFICATION

As a result of a collaborative analysis with the Massachusetts School Building Authority (the "MSBA") of enrollment projections and space capacity needs for the Somerset Middle School (the "Proposed Project"), the Town of Somerset hereby acknowledges and agrees that the design of alternatives, which may be evaluated as a part of the feasibility study for the Somerset Middle School, shall be based in accordance with the following:

 Enrollment for Grades 6-8. District-ande	Enrollwent for (Grades 5-8) District wide	
590 students	770 students	

The Town of Somerset further acknowledges and agrees that, pursuant to 963 CMR 2.00 et seq., the MSBA shall determine the square feet per student space allowance and total square footage according to the enrollments noted above. The Town of Somerset acknowledges and agrees that it has no right or entitlement to any particular design enrollment, square feet per student space allowance, or total square footage and that it has no right or entitlement to a design enrollment any greater than any of the enrollments noted above, and further acknowledges and agrees that it shall not bring any claim or action, legal or equitable, against the MSBA, or any of its officers or employees, for the purpose of obtaining an increase in the design enrollment for the Proposed Project that it has acknowledged and agreed to herein. The Town of Somerset further acknowledges and agrees that, among other things, the design enrollment, square feet per student space allowance, and total square footage of the Proposed Project shall be subject to the approval of the MSBA's Board and that the final approval of a Proposed Project shall be within the sole discretion of the MSBA's Board.

The undersigned, for themselves and the Town of Somerset, hereby certify that they have read and understand the contents of this study enrollment certification and that each of the above statements is true, complete and accurate. The undersigned hereby certify that they have been duly authorized by the appropriate governmental body to execute this Certification on behalf of the Town of Somerset and to bind the Town of Somerset to its terms.

Chief Executive Officer

7/21/2018

Date

Duly Authorized Representative of School Committee

SEPT 24, 2018

Date

Date

Appendix E

Maintenance & Capital Planning Document

Somersel: MCF Report DRAFT

Massachusetts School Building Authority

DRAFT Maintenance and Capital Planning Record

The Maintenance and Capital Planning Record is one of the pre-requisite documents required during the application process that the Massachusetts School Building Authority (MSBA) has established for the new grant program for school construction and renovation projects. This report was generated by the MSBA's online Maintenance and Capital Planning System. It contains information entered by representatives selected by the school district regarding district maintenance and capital planning budgets and practices.

For more information on the terms used in this report, the new grant progrem, or the Massachusetts School Building Authority, please see the MSBA website et http://www.massschoolbuildings.org. Informetion about the Maintenance and Capitel Planning System can be found in the User Guide located in the Policies and Guidelines section.

This Maintenance and Capital Planning Report (MCP Report) contains the following sections:

- Staffing
- Maintenance Planning
- · Fecilities Condition Index
- Environment
- · Maintenance Budget

- Capital Program
- Capital Budget
- Attachments
- Submission

Attachments are described by their file name and the date that they were uploaded and have not been reproduced within this report. Enter the Maintenance and Capital Planning System to print each attachment uploaded by the district in its entirety.

Andrew State of Street, or other Persons and	District:	Somerset
	Submission Date:	
-	Project(s) for which this maintenance and capital planning information was submitted:	Somerset Middle School - 201702730305
	Comments:	

Disclaimer: A Maintenance and Capital Pleaning Record is NOT an application for funding. Submission of the Maintenance and Capital Record in no way countils the MSBA to accept an application, approve an application, provide a grant, or any other type of funding, or places any other obligation or requirement on the MSBA.

Massachusotts School Building Authority | Page 1 of 11

Semerach MCP Report DRAFT

Maintenance Planning

1.	Is there a written Maintenance Plan for the district that details minimum custodial and maintenance standards and which governs day to day operations?	Yes
	Attachment: Maintenance Plan	CUSTODIAL procedures manual.pdf, Date Uploaded: 9/17/2018
THE RESERVE OF THE RE	Does the Maintenance Plan include standards and benchmarks for maintenance?	No
2.	Is there a preventative or predictive maintenance plan for the district's facilities?	No
.,	Attachment: Preventative or Predictive Maintenance Plan	
3.	Does the district have a work order system?	Yes
artina d'alleration	Please describe the work order system and how it addresses planned and unplanned maintenance.	Currently the District is utilizing a paper work order system. We plan to start utilizing the new developed electronic work order system by October 1st.
	Attachment; Work Order	Maintenance Request Form.pdf, Date Uploaded: 9/17/2018

Massachusetts School Building Authority | Page 5 of 11

Somerset: MCP Report DRAFT

Environment

1.	Does the district routinely monitor air quality and air changes in its	No ·
	facilities?	
2.	Does the district implement practices in the EPA's Tools for Schools program?	No
	If "No," does the district have a reason that it doesn't use the Tools for Schools?	The District was not awere there was this resource available through the EPA,
3.	Does the district have a protocol to eliminate toxic chemicals end use 'green' products for cleaning and repairs?	Yes
	If "Yes," please describe:	All custodial cleaning products used in school buildings are 'green' and non toxic.
4.	Best practices for building operators typically include regular inspecting, testing, balancing, and cleaning of HVAC components in order to make them operate more efficiently and improve air quality. Does the district have a protocol for doing this?	Yes
	If "Yes," please describe:	We have a full time equivalent licensed HVAC employee that works both for the Somerset Public Schools and Somerset Berkley Regional High School. He checks to make sure air handlers and AC units are running efficiently in all buildings. He changes the filters and AC units and air handlers, changes belts, oils/greases the air handlers and AC units.
5.	Does the district monitor energy consumption and spending?	Yes
	If "Yes," please describe.	Monthly recording of utilization for gas and electric are performed to ensure usage is in line with projected usage. Typically there are variances if we experience a very cold winter or an unseasonable fluctuation in outside temperatures.
6.	Does the district implement energy conservation measures and/or has the district made improvements to its facilities that result in energy savings?	Yes
	If "Yes," please describe:	In 2015, the Somerset Public Schools purchased and installed solar panels for the Somerset Middle School and North Elementary School. The solar panels have helped substantially with our electric usage, saving us approximately 40% of our electrical usage at these two buildings. We also locked into a contract to sell our SREC's (solar renewable energy certificates) on the market, of which the Town of Somerset collects approximately \$28k per quarter because of these SREC sales. In 2016, the District replaced all light bulbs from regular 34W flourescent to 16W LED bulbs. This resulted in savings in our electrical costs. We also replaced all external light bulbs to LED in 2016. In 2016. In 2015, the District installed boiler controls to self regulate boiler operations and program electronically. We tie In the school schedules to this program to ensure systems are not running full time during school vacation periods.

Massachuseits School Building Authority | Page 5 of 11

FY	4100 Cust Svcs	4120 Bidg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bidg Scrty	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Total
2017	668,741	187,950	356,255	37,792	293,055	2,176	92,400	0	0	60,991	1,699,360
2016	682,927	181,186	257,668	36,844	233,753	2,072	63,872	0	0	60,402	1,518,724
2015	660,130	278,265	224,461	22,161	178,951	2,171	99,132	0	0	45,320	1,510,591
	If there is a very greater between years in the expended as provide detail the difference Projected But	een consect district's tota mounts plea ills on the re e.	cutive al ase		1		· Owner Spanish (Spanish	To SM the most a desirable of	o 1100 - 1200 MA 100 4	e de la companya de l	
FY	4100 Cust Svcs	4120 Bidg Heat	4130 Utility Svcs	4210 Grnd Maint	4220 Bldg Maint	4225 Bldg Scrty	4230 Equip Maint	4300 Extra Maint	4400 Netw Tele	4450 Tech Maint	Totał
2021	720,568	197,676	239,812	30,172	273,373	31,000	82,191	0	66,300	0	1,641,092
2020	706,439	193,800	235,110	29,580	268,013	30,000	80,580	0	65,000	0	1,608,522
2019	692,587	190,000	230,500	29,000	262,758	92,830	79,000	0	92,296	0	1,668,971
	What does the appropriate of the routing district's fact sound prevent maintenance provide both and a percerdistrict budg	ate amount operations e should be te maintena dities and to ntative and e program? an absolute ntage of the	of and to allow nce of the achieve a predictive Please e value	include supplies	all items rela	ated to cu nnual mair	stodial and ntenance c	maintena osts, utiliti	ince salar es for gas	ies, secur s, electric a	ice costs. These c ty items, custodia and water, and oth
-	Please provi comments o and forecast MSBA under the district's	n your budg that would stand varia	jet history help the nces or	the exce	ption of FY	18, where	the School	Committe	e voted to	allow us t	nout the past five y o spend approxim Iding security.
	The DESE h with your Tol Expenditures completed fi	tal District s for the mo	st recent lease	Total Di	strict Expend	ditures for	2017: \$16,	441,540			

Massachusetts School Building Authority | Page 7 of 11

Capital Budget

Capital Budget History

The following is a list of all tax overrides, capital exclusions, and debt exclusions sought by the district and any of its associated municipalities and schools as provided by the Massachusetts Department of Revenue.

Vote Date	Municipality	Category	Description	Amount	Yes Votes	No Votes	Win / Loss
12/19/201	Somerset	Debt Exclusion	towns share of bond issued by Somerset- Berkley Reg.Sch. District for purpose of paying cosls of designing,constructing etc. for a new high school including all costs related hereto		1364	697	Win

 1.	Please provide any comments, corrections, or additions to the information listed above.	There have not been any other overrides in the Town of Somerset since the HS vote in 2011.
2.	Please describe any capital projects that were deferred due to funding constraints.	Not applicable

Capital Improvement Plan and Budget

- Please upload a document or documents that list, by year and by item, your anticipated district, municipal, and school capital spending for the next five years. Your attachment(s) can be in any format, but must include the following information:
 - Fiscal year of expected implementation for each item
 - Whether each item is for the entire district, an individual municipality(and which), or a school (and which)
 - · Description of scope or need for work
 - Estimated Cost
 - Funding mechanism(override or debt exclusion, if known)
 - Term of debt (if known)

	Attachment(s)	FY16 CAPITAL IMPROVEMENT PLAN - 1st part.pdf, Date Uploaded: 9/17/2018 FY16 CAPITAL IMPROVEMENT PLAN - 2nd part.pdf, Date Uploaded: 9/17/2018 FY16 CAPITAL IMPROVEMENT PLAN - 3rd part.pdf, Date Uploaded: 9/17/2018
2.	Please provide any Information the district has about the availability of non-public funds for school facility purposes.	The only other alternative funds that the District utilizes for maintenance is the Facility Rental Funds. When an outside organization wants to utilize our facilities, we collect a rental fee. These fees or approximately \$8k-\$10k per year are used to perform one time maintenance or equipment purchases.
3.	Please provide information from the Treasurer, Finance Committee, and/or Capital Planning Committee regarding the current outstanding debt and future bonding capacity inside the debt limit for the municipality/municipalities.	Based on the Town's equalized valuation of \$2,108,404,600 effective January 1, 2016, its Normal General Debt Limit is \$105,420,230. The Direct Debt Summary as of 6/30/17 is \$12,031,344 of which \$4,894,601 is within the Debt Limit and \$6,000,244 is outside the general debt limit, with another \$1,136,500 being short term debt obligations.

Massachusetis School Building Authority | Page 9 of 11

Somersot: MCP Report DRAFT

Submission

This	section will remain blank until a record is submitted. When submitting, the district representatives are required to affirm the following:					
Г	The district has reviewed all of the information entered in the MCP system and the documents attached and affirms that the answers are responsive to the questions and accurately and completely represent the maintenance procedures, budgeting history, capital planning process, expenditure history, and planned budget of the district.					
г	The district acknowledges that by submitting this form electronically it is providing the MSBA with the final, definitive version of the district's maintenance and capital planning information as of this date, and that this information will be used to determine the district's eligibility for reimbursement and potential incentive points.					
	Submission comments or notes;					
	Submission date:					

Massachusetts School Building Authority | Page 11 of 11



Phase I Traffic Impact Analysis

PARE PROJECT NO. 19118.02 REPORT

TRAFFIC IMPACT ANALYSIS FOR SOMERSET MIDDLE SCHOOL SOMERSET, MASSACHUSETTS

SUBMITTED TO: THE VERTEX COMPANIES 400 LIBBEY PARKWAY WEYMOUTH, MA 02189

SUBMITTED BY: PARE CORPORATION 10 LINCOLN ROAD, SUITE 210 FOXBORO, MA 02035

DECEMBER 2019



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APPENDICES

Appendix A	Traffic Counts
Appendix B	Crash Data
Appendix C	Speed Studies
Appendix D	Census Data
Appendix E	Trip Generation & Distribution
Appendix F	Traffic Capacity Analysis



INTRODUCTION

The following represents the traffic study completed for the reconstruction of the Somerset Middle School located at 1141 Brayton Avenue in Somerset, Massachusetts. There are currently two options for reconstruction, either a renovation and addition to the current facility or demolition of the existing facility and construction of a new building.

The existing middle school enrolls approximately 653 students between sixth and eighth grade. The hours of operation are from 8:00 a.m. to 2:40 p.m. and are expected to be maintained in the future. The school currently has one driveway on Brayton Avenue. The property is approximately 57.6 acres in size and the existing building is approximately 150,000 square feet.

The reconstructed Somerset Middle School will be designed to accommodate up to an 18% increase in enrollment due to the anticipated addition of fifth grade to the school at some point in the future. The faculty and staff will increase up to 26% to serve the future student population.

The study area consists of Bark Street/Brayton Avenue from Jaffrey Street in Swansea, Massachusetts to Read Street in Somerset, Massachusetts. A field review of the study area was conducted, which included geometric measurements and field observations recorded at the study intersections and roadways in the vicinity of the project site. The information obtained was used in the analysis of the study area intersections.

Presented within this study are existing conditions in the vicinity of the project site, a safety analysis of the study area, an analysis of the traffic based on existing, future 2026 no-build and future 2026 build conditions, and proposed mitigation measures and/or recommendations, as necessary. A locus map of the study area is provided in Figure 1 and the proposed site layouts are shown in Figures 2 and 3.

DATA COLLECTION

Manual turning movement counts (MTMCs) were completed on Wednesday, September 4, 2019 from 7:00 a.m. to 9:00 a.m. and from 2:00 p.m. to 6:00 p.m. by Transportation Data Corporation (TDC) at the following intersections:

- Bark Street at Jaffrey Street (Swansea, Massachusetts)
- Brayton Avenue at the Somerset Middle School Driveway
- Brayton Avenue at Read Street

Pedestrian and bicyclists counts were captured during all MTMCs. Peak hour volumes were determined at each intersection for the morning, afternoon school and afternoon commuter peak periods.

An automatic traffic recorder count (ATR) was also captured for a 48-hour period from Tuesday, September 10, 2019 to Wednesday, September 11, 2019 by TDC at the following location:

Brayton Avenue south of the Somerset Middle School Driveway



Crash data for the roadway network in the vicinity of the project site was extracted from the MassDOT crash portal. This data encompasses the most recent three-year period available, from October 2016 through September 2019.

The Town of Somerset Planning Department was contacted to determine if there are currently any developments proposed within the Town whose trip generation information should be included in this study. The Town indicated that there are approved development projects, projects in the planning phase and roadway projects outside the vicinity of this project; however, there are no known projects in the vicinity of the study area that are expected to have an impact on the traffic volumes associated with the study area intersections.





= Study Intersection

Date: December 2019



PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
10 LINCOLN ROAD, SUITE 210
FOXBORO, MA 02035
508-543-1755

Figure 1 Locus Map Somerset Middle School Somerset, MA

Project No. 19118.02

EXISTING CONDITIONS

The study area for the Somerset Middle School is defined as the significant roadways and intersections in the vicinity of the site that may be impacted by the proposed reconstruction. Following are descriptions of the roadways and intersections included in the study area along with key observations for the school.

Study Area

Study Area Roadway:

 Bark Street/Brayton Avenue from Jaffrey Street in Swansea, Massachusetts to Read Street

Study Area Intersections:

- 1. Bark Street at Jaffrey Street in Swansea, Massachusetts
- 2. Brayton Avenue at the Somerset Middle School Driveway
- 3. Brayton Avenue at Read Street

Bark Street/Brayton Avenue

Bark Street/Brayton Avenue runs in the north/south direction and is classified as a minor arterial. Land use along Bark Street/Brayton Avenue is mostly residential.

Bark Street extends north from the Swansea town line towards Jaffrey Street. The roadway consists of one 12-foot travel lane and a 6-foot striped shoulder in each direction. On-street parking is permitted along both sides of the roadway. There is a 5-foot sidewalk along the west side of the roadway but there are no crosswalks present within the study area.

Brayton Avenue has an approximate 36-foot curb-to-curb width consisting of an 18-foot travel way in each direction with no marked shoulders. On-street parking is permitted on both sides of the roadway. There is a sidewalk along the west side of the roadway which is 4 feet wide from Read Street to the school driveway and 5 feet wide from the school driveway to the Swansea Town line. There is a 6-foot wide sidewalk along the east side of the roadway from Read Street to the Swansea Town Line where it terminates. There are crosswalks across Brayton Avenue at the school pathway and at the Saint John of God Church and across 1st Street at its intersection with Brayton



Photo 1: Brayton Avenue at the Somerset Middle School Driveway

Avenue. ADA Accessible ramps do not exist at the crosswalks. Approaching the school in the northbound and southbound directions, Brayton Avenue has a school zone speed limit of 20 miles per hour in effect when flashing and "SCHOOL" pavement markings are located in the center of the roadway approximately 40 feet from the flashing school zone signs. There is no other speed limit posted on Brayton Avenue within the study area; therefore a de facto speed limit of 30 miles per hour is assumed for the study area.



<u>Jaffrey Street at Bark Street</u>

At the northern end of the study limit, Bark Street runs north/south while Jaffrey Street approaches from the west forming a three-legged, unsignalized intersection. Jaffrey Street is under stop control while Bark Street is uncontrolled. Due to the intersection's location just north of the Somerset Middle School, a portion of the trips associated with the school travel through this intersection in Swansea, Massachusetts. Bark Street has a curb-to-curb width of 36 feet consisting of one 12-foot travel lane and a 6-foot striped shoulder in each direction. On-street parking is permitted on both sides of the roadway. Jaffrey Street has a 20-foot unstriped paved width with no sidewalks.

Brayton Avenue at the Somerset Middle School Driveway



Photo 2: Looking east towards Brayton Avenue from the school

The intersection of Brayton Avenue and the Somerset Middle School Driveway forms a three-legged, unsignalized intersection. Brayton Avenue runs north/south and has free movements. The school driveway approaches from the west and is under stop control though the approach lacks appropriate signing and striping. At the intersection, Brayton Avenue is 18 feet wide in each direction which accommodates through travel and on-street parking. The school driveway is 26 feet wide with no striping and accommodates one travel lane per direction. Serving as the school's only driveway, it accommodates bus/parent drop-off and pick-up activity and provides access to the staff parking lots. There is a 4-foot sidewalk separated by a 6-foot grass strip along the south side of the school driveway. There are no ADA accessible curb ramps present at the beginning or end of the school sidewalk.

Brayton Avenue at Read Street

The intersection of Brayton Avenue at Read Street forms a four-legged signalized intersection with Brayton Avenue running north/south and Read Street running east/west. The north leg of Brayton Avenue is 18 feet wide in each direction which accommodates through travel and onstreet parking. The south leg of Brayton Avenue is 16 feet wide in each direction which accommodates through travel lane and on-street parking. Brayton Avenue has sidewalks present on both sides. The west and east legs of Read Street accommodate a 12-foot wide travel lane and 6-foot striped shoulder in each direction. There is a sidewalk on the north side of Read Street. The traffic signal operates in three (3) phases: the first phase is for the Brayton Avenue northbound and southbound movements; the second phase is an exclusive pedestrian phase; and the third phase is for the Read Street eastbound and westbound movements.



Photo 3: Eastbound Approach on Read Street



Existing Site Observations

As part of the field review process, traffic observations were conducted during the morning arrival and afternoon dismissal periods associated with the school. The morning drop-off and afternoon pick-up observations were conducted on Monday, October 7, 2019.

Safety Measures

The study area contains several passive safety measures including "SCHOOL" pavement markings on both the northbound and southbound side of the school's driveway paired with flashing school zone sign assemblies indicating a speed limit of 20 miles per hour and a series of both regulatory and non-regulatory signs as seen in the images below.



Photo 4: Slow School Zone Ahead sign



Photo 5: Stop sign in square loop



Photo 6: Stop for Pedestrians in Crosswalk sign

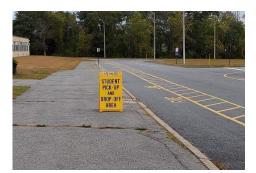


Photo 7: One of Two Student Pick-Up and Drop-off Area sign



Photo 8: One of Two End School Zone Sign



Photo 9: School Crossing Sign





Photo 10: Caution Blind Person in Area Sign



Photo 11: One of Two School Zone Speed Limit Flasher Sign



Photo 12: No Parking Before 8:00 AM with a Handicapped Parking Sign on both sides of the post



Photo 13: One of Two School Pavement Marking with Arrow

Site Layout and Internal Circulation

- The school currently has one driveway located on Brayton Avenue, which is used by staff, student drop-off/pick up, deliveries and bus/van access.
- There are two on-site parking lots intended for staff, visitors and deliveries. One lot is located north of the school and the other is located south of the school. Additionally, there are four parallel parking spaces in front of the school, two designated for handicap parking and two for general use. A striped fire lane exists at the front of the school opposite the parallel parking spaces, leaving a single-lane drive aisle in between. There is a square loop beyond the front of the school that provides access to the southern parking lot.
- There are very few walkers and bikers coming to/from the school and those that do use the pathways to Brayton Avenue, Read Street and Hot and Cold Lane.
- For arrival and dismissal, 17 buses and nine (9) vans enter the school property. During the morning drop off, the buses/vans access the northern parking lot and during the afternoon pick-up buses/vans are split between the northern parking lot and the striped fire lane at the front of the school.



- The designated student drop-off/pick-up area is in the striped fire lane at the front of the school during both arrival and dismissal. There is a staggered release between the bused students and those being picked up. After dropping off/picking up a student, vehicles loop around the square and exit back to Brayton Avenue.
- Students enter and exit the existing building via two main locations and a third as needed, which include:
 - o the front (easterly side) of the school, facing Brayton Avenue;
 - o the north side of the school facing the northern parking lot; and
 - the south side of the school that is for handicapped access from the southern parking lot.

Morning Arrival Period

- Upon arrival to the site at 7:10 a.m., school staff were observed entering the building and parents were beginning to arrive and queue in the fire lane.
- Between 7:10 a.m. and 7:30 a.m., 11 vehicles arrived and waited in the fire lane. The school is opened for students to enter at 7:30 a.m.
- By 7:25 a.m., the flashing speed zone signs approaching the school's driveway were active.
- The school's buses and vans began arriving around 7:30 a.m. and staff aided in helping students from the vehicles.
- Between 7:40 a.m. and 7:55 a.m., a steady stream of students were dropped-off.
- Not all drop-off vehicles pulled to the back of the vehicle in front of them, extending the
 overall queue length. Some vehicles drove around the queue after dropping off their child,
 causing conflict with the vehicles traveling past the queue to access the southern parking
 lot as well as the vehicles traveling back towards the exit after traversing the loop.
- Vehicles dropping students off left adequate space at the internal intersection for the buses/vans to exit the northern parking lot.
- There were no more than eight (8) vehicles observed in the drop-off lane at any given time, but the overall queue extended along the northern side of the school driveway (accommodating 10 vehicles) and onto Brayton Avenue. The longest queues observed included three (3) vehicles traveling southbound and six (6) vehicles traveling northbound on Brayton Avenue.
- Several vehicles were observed disregarding the "Stop" sign at the end of the square loop.



Photo 14: Morning Drop off

• A bike rack, capable of holding six (6) bikes, is located near the school's main entrance. Two (2) of the spaces were occupied.



- School begins at 8:00 a.m. and most school related traffic had cleared by then. However, late students continued to be dropped off until 8:10 a.m.
- There were no queues observed at the Jaffrey Street and Bark Street intersection. Queues
 of up to six (6) vehicles were observed on each approach to the Brayton Avenue and Read
 Street intersection. However, all queues were cleared within one signal cycle.
- Conversations with school staff indicated that rain and winter conditions further complicate traffic because less students walk/bike or are bused resulting in increased drop-offs.

Afternoon Dismissal Period

- Upon arrival to the site at 2:20 p.m., four (4) vehicles were waiting in the aisle of the south school parking lot, two (2) vehicles were parked in parallel parking spaces and 10 vehicles were waiting on the north side of the driveway. Two (2) school vans and two (2) game school buses were waiting in front of the school and two (2) school buses were waiting in the north parking lot.
- At 2:30 p.m., six (6) school buses and three
 (3) school vans arrived and parked in the front of the school, and 10 buses and four



Photo 15: Afternoon Pick up

- (4) school vans arrived and parked in the northern parking lot.
- At 2:40 p.m., students being bused were released from the front and northern entrances of the school under the supervision of school staff and bus/van drivers.



Photo 16: Afternoon Pick up/Buses Leaving the site

- By 2:40 p.m., a 10-vehicle queue extended along Brayton Avenue southbound approaching
 the school driveway. Vehicles waiting along Brayton Avenue southbound impede sight
 lines for vehicles exiting the driveway.
- At 2:45 p.m., the remaining students were dismissed.
- Once the vehicles on Brayton Avenue yielded to allow a bus to exit, several buses would
 proceed out of the driveway. There were no crossing guards present to indicate that traffic
 should continue to wait while all buses were cleared from the site.
- Four (4) vehicles were parked on the west side of Brayton Avenue in the vicinity of the school's pathway.



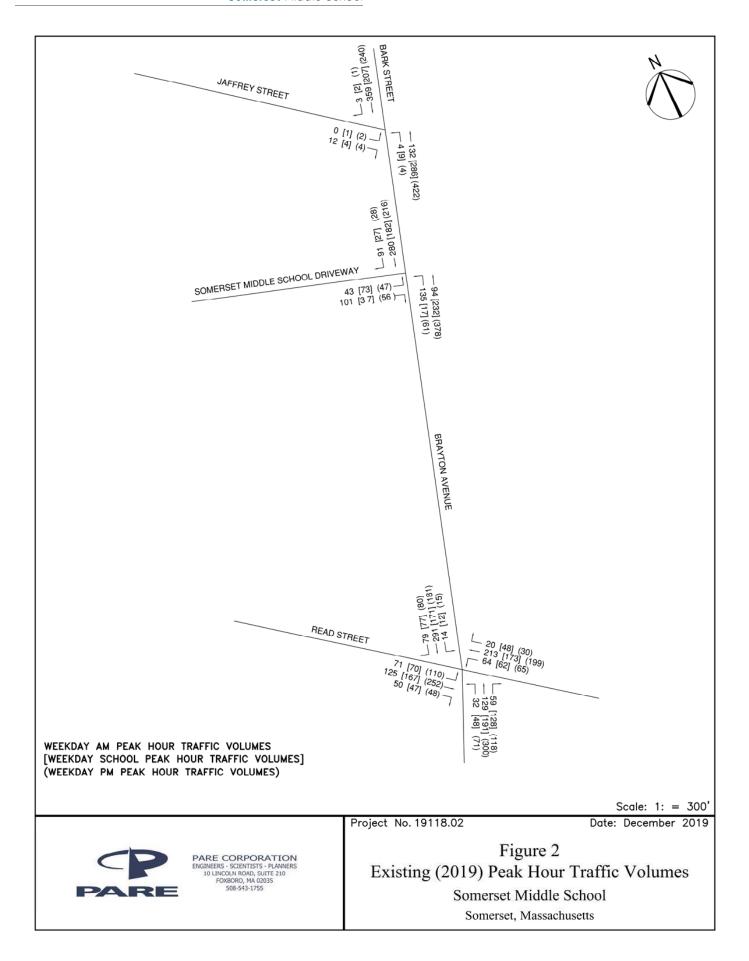
- During afternoon observations, the vehicle queues at the intersection of Brayton Avenue and Read Street cleared within one signal cycle.
- Conversations with school staff indicated:
 - The times that the school zone flashers operate are changed manually. Due to this, they are frequently flashing at the wrong times during day light savings for approximately a week and unnecessarily during vacation weeks and summer break; and
 - O There are two (2) late buses that leave between 3:45 p.m. and 4:00 p.m. to accommodate students staying for after-school activities.

EXISTING TRAFFIC VOLUMES

Existing traffic volume data was collected through turning movement counts (TMCs) at each of the study intersections. TMC's were performed during the weekday morning (7:00 a.m. to 9:00 a.m.) and the weekday afternoon (2:00 p.m. to 6:00 p.m.) peak periods by Transportation Data Corporation (TDC). These time periods were selected as they represent the peak traffic time periods for both the school and the adjacent roadway network. The weekday TMCs were performed on Wednesday, September 4, 2019, while school was in normal session. Pedestrian and bicycle counts were captured during all TMCs. Additionally, an automatic traffic recorder count (ATR) was captured for a 48-hour period from Tuesday, September 10, 2019 to Wednesday, September 11, 2019 by TDC along Brayton Avenue south of the Somerset Middle School driveway. From the data collected, Brayton Avenue has an approximate average daily traffic volume (ADT) of 11,000 vehicles.

Traffic data for the month of September was reviewed to determine if a seasonal adjustment to the traffic data was required. The MassDOT traffic volume data was reviewed from continuous count station 6105, located on I-195 north of U.S. Route 6. The count station data indicated that average daily traffic (ADT) volumes for the month of September were generally the highest of any month while school is in session. Based on this information, and to provide a conservative analysis, the existing traffic volumes were not adjusted for seasonal fluctuation. The existing (2019) traffic volumes are shown in Figure 4. Copies of all count data are provided in Appendix A.





SAFETY ANALYSIS

Crash Data

Crash data for the study area was extracted from the MassDOT crash portal for the most recent threeyear period of October 2016 through September 2019. Crash data was reviewed to determine the presence of safety concerns within the study area. According to the data reviewed, there were 20 total incidents that occurred within the study area. A breakdown of the incidents by type and number of injuries can be seen below in Table 1. A summary table of all crash data reviewed is provided in Appendix B.

Table 1: Crash Summary for Study Area

Roadway	Non- Fatal Injuries	Fatal Injuries	Angle	Object	Rear- End	Sideswipe, Opposite Direction	Head-On
Read St & Brayton Ave	6	0	4	0	8	0	1
Brayton Ave.	1	0	2	2	2	1	0

A total of 13 crashes occurred at the signalized intersection of Brayton Avenue and Read Street. Of these crashes eight (8) were rear end collisions, four (4) were angle collisions, and one (1) was a head-on collision. Three (3) of these crashes resulted in non-fatal injuries with a total of six (6) injured persons and none of the incidents resulted in a fatality. Most of these crashes were rear end collisions as drivers stopped or slowed at the intersection. The four (4) angled collisions were the result of drivers attempting a left turn at the intersection.

A total of seven (7) crashes occurred along Brayton Avenue not at the study area intersection. Of these crashes two (2) were rear end collisions, two (2) were angle collisions, one (1) was a sideswipe collision and two (2) were a collision with an object. One (1) of these crashes resulted in a non-fatal injury and none of the incidents resulted in a fatality.

The data received shows higher occurrences of angle and rear-end incidents. These are generally low severity incidents and are the most common types of incidents expected for this scenario. There were no trends or severity of incidents that would require or lend themselves to mitigation.

Sight Distance

Sight distance is a measure of visibility available at a point of conflict, such as a driveway or an intersection. This is assessed by determining the travel speeds of vehicles on the roadway to ensure that vehicles exiting have adequate time to pull safely out of the location without causing an incident. Sight distance was reviewed for the existing school driveway. The proposed design will have one or two driveways on Brayton Avenue and the final driveway configuration will be determined at a future date.

Vehicle speeds along Brayton Avenue were captured on Tuesday, September 10, 2019 and Wednesday, September 11, 2019. A summary of the speed data results is shown in Table 2. A complete copy of the data can be found in Appendix C.



Table 2: Speed Data Results for Brayton Avenue

	De Facto Speed	Average Speed	True Median (50 th Percentile)	85 th Percentile	10 MPH Pace	% over Posted
Northbound	30	32	32	38	31-40	64%
Southbound	30	32	32	38	31-40	65%

It is typical engineering practice to assign the 85th percentile speed as the design speed of a roadway. Therefore, a design speed of a 40 miles per hour was selected for Brayton Avenue. According to the American Association of State Highway and Transportation Officials (AASHTO) publication *A Policy on the Geometric Design of Highways and Streets, Sixth Edition 2011*, the minimum safe stopping sight distance for a 40-mph design speed is 305 feet. The minimum safe intersection sight distance is 445 feet. A summary of the sight distance available for the existing driveway can be seen in Table 3.

Table 3: Sight Distance Summary for Somerset Middle School

		Required SSD (ft)	Measured SSD (ft)	Required ISD (ft)	Measured ISD (ft)
Existing	To the East	305	>500	445	>500
Driveway	To the West	305	>500	445	>500

SSD – Stopping Sight Distance; ISD – Intersection Sight Distance

The sight distance to the north and south of the existing school driveway meets both stopping and intersection sight distance requirements and to maintain the sight distance, it is suggested that future plantings and fencing be placed so as not to interfere with sight lines.

Due to the straight and relatively flat geometry of the roadway, there will likely be adequate sight distance from future driveway locations. However, this should be reviewed as the site design advances.

FUTURE CONDITIONS

The Future (2026) No-Build traffic volume scenario includes all existing traffic volumes and the traffic volumes associated with expected background growth. To provide a conservative analysis, the background growth in traffic volumes consists of a general background traffic growth rate consistent with recent population growth in the area surrounding the study area and any additional traffic projected from additional developments near the study area. This method allows for the inclusion of a general growth rate to account for any unforeseen increases in traffic volumes and accounts for specific known developments expected to impact the transportation system adjacent to the Project.

General Background Traffic Growth

To account for background growth along the roadways within the vicinity of the project site, the existing traffic volumes were projected over a seven-year horizon from 2019 to 2026. Recent United States Census data for the Town of Somerset was reviewed to determine the appropriate growth rate. The census data showed an increase in population from 2000 to 2010 for the Town of Somerset.



The background growth assessment results are summarized in Table 4 below and a copy of the available census data is provided in Appendix D

Table 4: Population Growth Summary

Data Source	2000 Population	2010 Population	Annual Growth Rate
US Census Data	17,973	18,165	0.10%

Based on this information, a conservative annual growth rate of 0.5% was applied to determine the general background traffic volumes for the seven-year projection.

Outside Development

The Town of Somerset Planning Department was contacted to determine if there were any other proposed developments in the area that may have an impact on future travel patterns or increase traffic volumes in the area. The Planning Department indicated that there is a hotel project approximately one mile away, the Brayton Point Commerce Center project approximately two miles away that is currently in the planning stage and the Wilbur Elementary School Project (10 units) approximately 1.75 miles away. These projects are not expected to have significant traffic impact on intersections studied for this project due to their proximity and anticipated access.

BUILD CONDITIONS

The future 2026 build condition represents the future 2026 no-build condition plus potential traffic associated with the proposed reconstruction.

With the design for the school's reconstruction still in the conceptual stages, it is uncertain whether a single driveway will remain, or if the site will be able to accommodate two driveways. Both scenarios have been analyzed for this study. The initial assessment assumes conservatively that a single driveway will be maintained. The alternative assessment considers the construction of a second driveway.

Based on previous experience designing and assessing various school sites, it is ideal for uses to be separated to the extent possible, with, at a minimum, separate loops for buses and parents. It is also optimal to allow parent queues to extend on-site to the greatest extent possible. For these reasons, the analysis of the two-driveway alternative assumes a bus loop at the front of the school and a parent loop around the back of the school. To accommodate right-side drop-offs by both vehicle types, the buses are assumed to enter the northern driveway and exit the southern driveway, while the parents will do the reverse. Teachers are assumed to enter both driveways based on proximity to their origin and destination. During the p.m. commuter peak, after school hours, it was assumed that either driveway could be utilized by all users.

Trip Generation

The Somerset Middle School is expected to maintain similar enrollment over the immediate upcoming years. It is, however, being designed to accommodate the addition of fifth grade, which will create an approximate 18% increase in students at this facility.

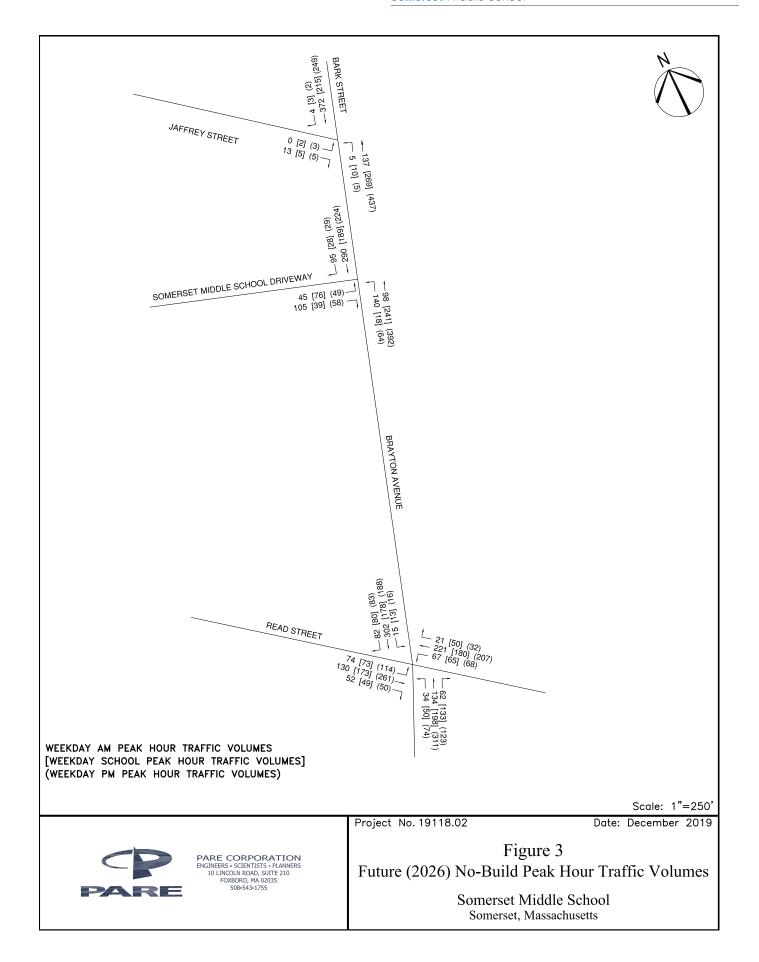


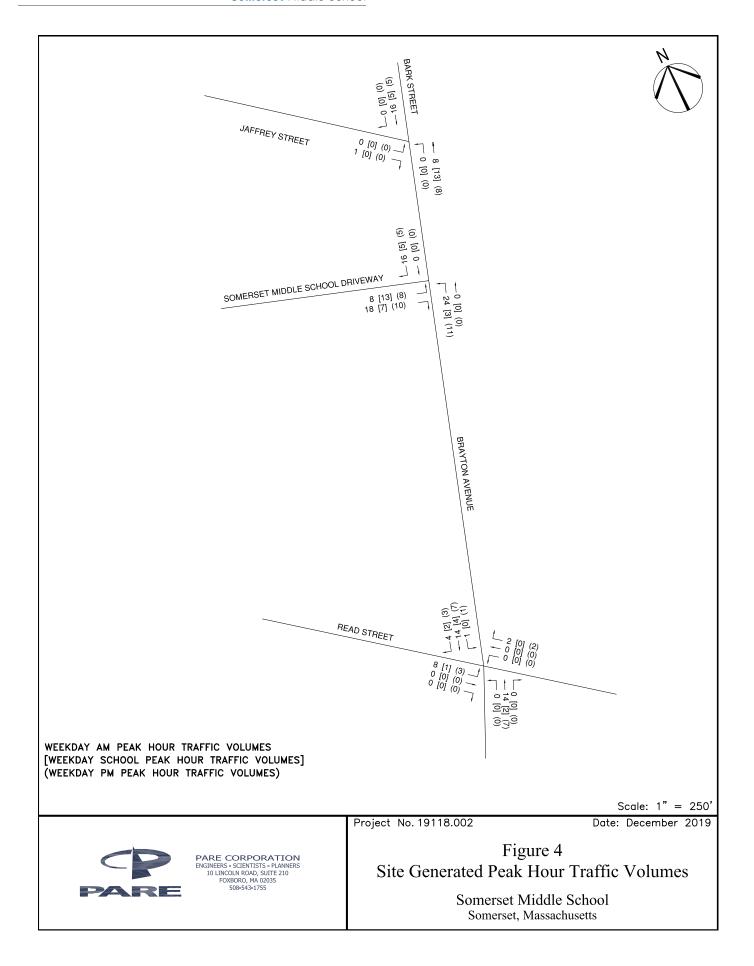
The proposed middle school with no eligible student drivers is expected to have the same mode split, i.e. bused students, walkers and drop-off/pick-up, as exists today; therefore, a linear projection was completed to compute the future volumes of vehicles and pedestrians. It was also assumed that staff trips during the peak hours would increase proportionally to the inflation in enrollment.

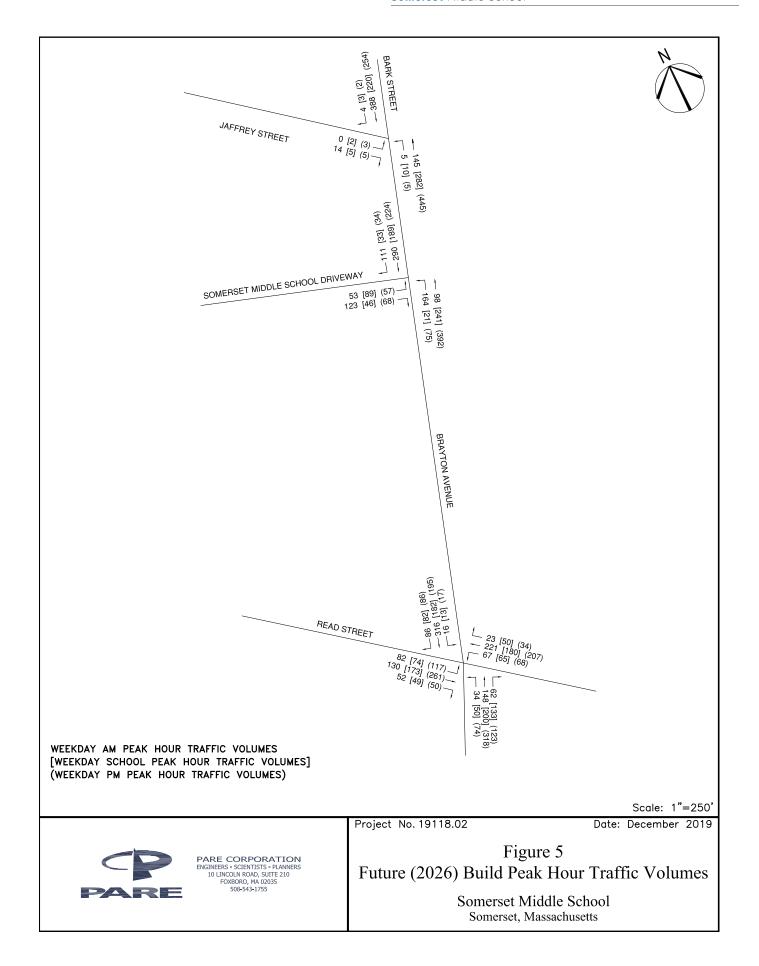
Trip Distribution

Trip distribution was completed by adding the additional traffic projected for the school into the surrounding roadway network based on the existing traffic volume distribution. The future (2026) nobuild volumes are shown in Figure 5, site-generated volumes are shown in Figure 6 and the future (2026) build volumes are shown in Figure 7. Complete trip generation and distribution calculations are provided in Appendix E.









CAPACITY ANALYSIS

Capacity analysis was completed for the study intersections for existing, future 2026 no-build, and the future 2026 build conditions. Capacity analysis characterizes intersections based on their level of service (LOS). LOS is a quality measure describing operational conditions within a traffic stream, generally in terms of service measures such as speed, travel times, traffic interruptions, etc. Six (6) LOS, from A to F, are defined for each type of facility, with A representing the best operating conditions and F representing the worst operating conditions. The LOS criteria for signalized and unsignalized intersections are provided in Table 5 below. The complete capacity analyses can be found in Appendix F. Tables 6 through 8 provide the capacity analysis results for all study intersections for the AM, PM school and PM commuter peak hours for the existing, nobuild and build scenarios with one site driveway.

Table 5: LOS Criteria for Signalized and Unsignalized Intersections

	Signalized Intersection	Unsignalized Intersection
LOS	Delay Time (sec/veh)	Delay Time (sec/veh)
A	≤ 10	0-10
В	> 10-20	> 10-15
С	> 20-35	> 15-25
D	> 35-55	> 25-35
Е	> 55-80	> 35-50
F	> 80	> 50

Table 6: AM Peak Hour LOS Table

Intersection	Movement		Existing	g (2019)		e (2026) Build	Future (2026) Build										
Tittersection	WIOV	ement	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²									
Jaffrey	NB	L	A (8.4)	0	A (8.5)	0	A (8.6)	0									
Street at	SB	R	N/C	-	N/C	-	N/C	-									
Bark Street	EB LR		B (11.5)	<1	B (11.7)	<1	B (11.9)	<1									
School	NB	L	A (9.3)	<1	A (0.7)	<1	A (9.7)	<1									
Driveway at	SB	T	N/C	-	N/C	-	N/C	-									
Brayton Avenue	EB	L R	E (36.6)	6.6) 6 E(7	F (53.2)	4									
	NB	LTR	A (7.4)	80	80	80	80	80	80	80	80	80	A (7.8)	A (7.8)	88	A (8.1)	95
Read Street	SB LTR		B (10.7)	148	B (11.4)	161	B (12.0)	172									
at Brayton	EB LTR		B (18.4)	112	B (18.7)	118	C (20.1)	123									
Avenue	WB LTR		C (21.0)	139	C (21.3)	145	C (21.4)	146									
	Inters	section	B (14.1)	-	B (14.6)	-	B (15.1)	-									

^{1.} Delay shown in seconds per vehicle, N/C – No Conflict; 2. Queue Length shown in vehicles for unsignalized intersections and in feet for signalized intersections.



^{# 95&}lt;sup>th</sup> percentile volume exceeds capacity; queue may be longer.

Table 7: PM School Peak Hour LOS Table

Intersection	Move	ement	Existing	(2019)		e (2026) Build	Future (20	026) Build											
intersection	WIOV	ement	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²											
Jaffrey	NB	L	A (7.7)	0	A (7.7)	0	A (7.8)	0											
Street at	SB R		N/C	-	N/C	-	N/C	=											
Bark Street	EB LR		B (10.2)	<1	B (10.6)	<1	B (10.6)	<1											
School	NB	L	A (7.8)	<1	A (7.8)	<1	A (7.8)	<1											
Driveway at	SB	T	N/C	-	N/C	-	N/C	-											
Brayton Avenue	EB	LR	C (18.6)	3	C (20.1)	4	C (20.1)	5											
•	NB	LTR	B (11.0)	117	B (11.0)	170	B (11.1)	172											
Read Street	SB	LTR	B (10.6)	133	133	133	133	133	133	133	133	133	133	133 B (10.6	B (10.6)	B (10.6)	102	B (10.7)	104
at Brayton	EB LTR		C (23.0)	137	B (19.8)	140	B (20.0)	141											
Avenue ³	WB LTR		B (17.9)	102	C (22.8)	130	C (22.8)	130											
	Inters	ection	B (14.1)	-	B (15.7)	=	B (15.8)	-											

^{1.} Delay shown in seconds per vehicle, N/C – No Conflict; 2. Queue Length shown in vehicles for unsignalized intersections and in feet for signalized intersections.

Table 8: PM Commuter Peak Hour LOS Table

Intersection	Mov	ement	Existing	(2019)		e (2026) Build	Future (20	26) Build
Titter section	WIOV	ement	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²
Jaffrey	NB L SB R		A (7.8)	0	A (7.8)	0	A (7.9)	0
Street at	SB	R	N/C	-	N/C	-	N/C	-
Bark Street	EB LR		B (11.9)	<1	B (12.5)	<1	B (12.6)	<1
School	NB	L	A (8.0)	<1	A (8.0)	<1	A (8.1)	<1
Driveway at	SB	T	N/C	-	N/C	-	N/C	-
Brayton Avenue	EB	L R	C (24.3)	4	C (27.5)	5	E (39.1)	7
	NB	LTR	B (15.7)	236	B (17.5)	#265	B (18.1)	#295
Read Street	SB	LTR	B (10.8)	111	B (11.4)	116	B (11.8)	122
at Brayton	EB LTR		C (28.5)	#225	C (29.7) #272		C (30.2)	#277
Avenue ³	WB LTR		B (17.8)	140	B (17.9)	147	B (17.8)	148
	Inters	ection	B (18.6)	-	B (15.7)	=	C (20.0)	-

^{1.} Delay shown in seconds per vehicle, N/C – No Conflict; 2. Queue Length shown in vehicles for unsignalized intersections and in feet for signalized intersections.

The analysis shows little change between the no-build and future scenarios. Generally, the study intersections will operate at acceptable levels of service, at LOS C or better, with the exception of the school's driveway, which is expected to operate at LOS F during the morning drop-off period and at LOS E during the evening commuter peak.



^{# 95&}lt;sup>th</sup> percentile volume exceeds capacity; queue may be longer.

^{# 95}th percentile volume exceeds capacity; queue may be longer.

ALTERNATIVE

To alleviate delays and queue lengths and improve existing operation issues, an alternative scenario was assessed with two school driveways and circulation improvements as defined previously. The capacity analysis results of the alternative scenario can be seen in Table 9.

Table 9: Alternative Build Peak Hour LOS Table

Intersection	Move	ement	Future (2 School I			(2026) PM I Pick up	Future (2026) PM Commuter Peak		
Titter section	MOVE	ement	LOS Queue (Delay¹) Length²		LOS (Delay¹)	Queue Length ²	LOS (Delay¹)	Queue Length ²	
North School	NB	L	A (8.5)	<1	A (7.8)	0	A (0.0)	0	
Driveway at	SB	T	N/C	-	N/C	-	N/C	-	
Brayton	EB LR		C (16.8)	2	C (15.5)	3	C (15.9)	<1	
Avenue									
South School	NB	L	A (9.3)	<1	A (8.0)	0	A (7.9)	<1	
Driveway at	SB	LT	N/C	-	N/C	-	N/C	-	
Brayton Avenue	EB LR		C (19.1) <1		B (13.8)	<1	B (10.1)	<1	

^{1.} Delay shown in seconds per vehicle, N/C – No Conflict; 2. Queue Length shown in vehicles

The addition of a second school driveway would result in a decrease in delay and queue lengths, allowing all peak hours to operate at acceptable levels of service, at LOS C or better.

CONCLUSIONS

The crash data reviewed and summarized from October 2016 through September 2019 for the study area revealed a low frequency of incidents within the study area and the incidents were generally of low severity, with the exception of the signalized intersection of Brayton Avenue at Read Street. This intersection had approximately four (4) incidents per year; however, the severity of incidents remained low with incidents being primarily rear-end or angle collisions. There were no trends or concerns of incidents near the school site that would lend themselves to mitigation. It is not expected that the additional traffic generated by the expansion of the Somerset Middle School will have an impact on the safety of the roadways or create a safety concern.

The sight distance review indicated that the existing school driveway has adequate stopping and intersection sight distance in both directions. Given the relatively straight and level geometry of Brayton Avenue, it is expected that relocated driveways along the school's frontage would also have adequate sight distance. However, as noted previously, sight distance should be reassessed as the site design advances to confirm adequate sight lines from the final driveway locations.

The analysis shows little change between the no-build and build conditions. The intersections studied operate at acceptable levels of service except for the school's existing driveway. The school's driveway experiences considerable delay and queue lengths and will worsen under the build condition. To improve level of service and alleviate existing operational issues, the addition



^{# 95&}lt;sup>th</sup> percentile volume exceeds capacity; queue may be longer.

of a second driveway was reviewed in conjunction with circulation improvements. With two driveways, the site would operate at acceptable levels of service during all times of the day. Further, the circulation improvements, as defined previously, would significantly improve site operations.

In summary, the reconstruction of the Somerset Middle School site, expanded to accommodate fifth grade students, is expected to have minimal impact on the traffic and safety operations within the study area. However, to improve operations accessing and within the site, the following improvements are recommended:

- The addition of a second school driveway;
- The separation of parent and bus drop-off/pick-up areas;
- Uniform circulation procedures during drop-off and pick-up periods;
- Extension of the available on-site parent queue length;
- Maintenance of a continuous two-way drive aisle with additional pull-out areas; and
- Construction of ADA compliant ramps on Brayton Avenue at the school's walkways.



Appendix A

Traffic Counts



Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225A Site Code : 05225

Start Date : 9/4/2019

Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	Bray	ton Avenue		Bray	ton Avenue		Somerset Mi	ddle School D	rive	
	F ₁	rom North		Fre	om South		Fre	om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	1	70	0	16	8	0	0	0	0	95
07:15 AM	17	88	0	25	30	0	0	0	1	161
07:30 AM	45	85	0	20	63	0	51	19	0	283
07:45 AM	28	37	0	33	34	0	50	24	0	206
Total	91	280	0	94	135	0	101	43	1	745
08:00 AM	1 1	54	0	29	1	0	4	2	0	91
08:15 AM	2	58	0	39	1	0	2	0	ĭ	103
08:30 AM	0	64	0	34	1	1	0	2	0	102
08:45 AM	0	58	0	29	1	0	0	0	0	88
Total	3	234	0	131	4	1	6	4	1	384
Grand Total	94	514	0	225	139	1	107	47	2	1129
Apprch %	15.5	84.5	0	61.6	38.1	0.3	68.6	30.1	1.3	
Total %	8.3	45.5	0	19.9	12.3	0.1	9.5	4.2	0.2	
Cars & Peds	81	510	0	216	133	1	101	38	2	1082
% Cars & Peds	86.2	99.2	0	96	95.7	100	94.4	80.9	100	95.8
Trucks & Buses	9	4	0	8	6	0	6	9	0	42
% Trucks & Buses	9.6	0.8	0	3.6	4.3	0	5.6	19.1	0	3.7
Bikes by Direction	4	0	0	1	0	0	0	0	0	5
% Bikes by Direction	4.3	0	0	0.4	0	0	0	0	0	0.4

		Brayton	Avenue		Brayton Avenue				Somerset Middle School Drive				
		From	North		From South				From West				
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	45 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	07:00 AM	[
07:00 AM	1	70	0	71	16	8	0	24	0	0	0	0	95
07:15 AM	17	88	0	105	25	30	0	55	0	0	1	1	161
07:30 AM	45	85	0	130	20	63	0	83	51	19	0	70	283
07:45 AM	28	37	0	65	33	34	0	67	50	24	0	74	206
Total Volume	91	280	0	371	94	135	0	229	101	43	1	145	745
% App. Total	24.5	75.5	0		41	59	0		69.7	29.7	0.7		
PHF	.506	.795	.000	.713	.712	.536	.000	.690	.495	.448	.250	.490	.658
Cars & Peds	78	277	0	355	93	129	0	222	95	34	1	130	707
% Cars & Peds	85.7	98.9	0	95.7	98.9	95.6	0	96.9	94.1	79.1	100	89.7	94.9
Trucks & Buses	9	3	0	12	1	6	0	7	6	9	0	15	34
% Trucks & Buses	9.9	1.1	0	3.2	1.1	4.4	0	3.1	5.9	20.9	0	10.3	4.6
Bikes by Direction	4	0	0	4	0	0	0	0	0	0	0	0	4
% Bikes by Direction	4.4	0	0	1.1	0	0	0	0	0	0	0	0	0.5

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225A Site Code : 05225

Start Date : 9/4/2019

				Groups Printe	ed- Cars & Ped	ls				
	B	rayton Avenue		В	Brayton Avenue	e	Somerset Middle School Drive			
		From North		From South						
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	1	70	0	16	8	0	0	0	0	95
07:15 AM	15	86	0	24	30	0	0	0	1	156
07:30 AM	36	84	0	20	58	0	49	14	0	261
07:45 AM	26	37	0	33	33	0	46	20	0	195
Total	78	277	0	93	129	0	95	34	1	707
08:00 AM	1	54	0	27	1	0	4	2	0	89
08:15 AM	2	58	0	36	1	0	2	0	1	100
08:30 AM	0	64	0	33	1	1	0	2	0	101
08:45 AM	0	57	0	27	1	0	0	0	0	85
Total	3	233	0	123	4	1	6	4	1	375
Grand Total	81	510	0	216	133	1	101	38	2	1082
Apprch %	13.7	86.3	0	61.7	38	0.3	71.6	27	1.4	
Total %	7.5	47.1	0	20	12.3	0.1	9.3	3.5	0.2	

		Brayton				Brayton			Some	rset Middl		Drive	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	07:00 AM	[
07:00 AM	1	70	0	71	16	8	0	24	0	0	0	0	95
07:15 AM	15	86	0	101	24	30	0	54	0	0	1	1	156
07:30 AM	36	84	0	120	20	58	0	78	49	14	0	63	261
07:45 AM	26	37	0	63	33	33	0	66	46	20	0	66	195
Total Volume	78	277	0	355	93	129	0	222	95	34	1	130	707
% App. Total	22	78	0		41.9	58.1	0		73.1	26.2	0.8		
PHF	.542	.805	.000	.740	.705	.556	.000	.712	.485	.425	.250	.492	.677

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N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225A Site Code : 05225

Start Date : 9/4/2019

Page No : 1

Groups Printed- Trucks & Buses

	Bra	yton Avenue		Bray	ton Avenue		Somerset Mi	ddle School D	Prive	
	F	rom North		Fr	om South		Fr	om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	2	0	1	0	0	0	0	0	3
07:30 AM	7	1	0	0	5	0	2	5	0	20
07:45 AM	2	0	0	0	1	0	4	4	0	11
Total	9	3	0	1	6	0	6	9	0	34
08:00 AM	0	0	0	2	0	0	0	0	0	2
08:15 AM	0	0	0	2	0	0	0	0	0	2
08:30 AM	0	0	0	1	0	0	0	0	0	1
08:45 AM	0	1	0	2	0	0	0	0	0	3_
Total	0	1	0	7	0	0	0	0	0	8
Grand Total	9	4	0	8	6	0	6	9	0	42
Apprch %	69.2	30.8	0	57.1	42.9	0	40	60	0	
Total %	21.4	9.5	0	19	14.3	0	14.3	21.4	0	

		Brayton	Avenue		Brayton Avenue From South				Some	rset Middl	e School D	Prive	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at 0	07:15 AM]									
07:15 AM	0	2	0	2	1	0	0	1	0	0	0	0	3
07:30 AM	7	1	0	8	0	5	0	5	2	5	0	7	20
07:45 AM	2	0	0	2	0	1	0	1	4	4	0	8	11
08:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	2
Total Volume	9	3	0	12	3	6	0	9	6	9	0	15	36
% App. Total	75	25	0		33.3	66.7	0		40	60	0		
PHF	.321	.375	.000	.375	.375	.300	.000	.450	.375	.450	.000	.469	.450

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N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225A Site Code : 05225

Start Date : 9/4/2019

Page No : 1

_				Gre	oups Printed- E	Bikes by Direc	tion				
		Bra	yton Avenue		Bra	ayton Avenue		Somerset I	Middle School	Drive	
		F	rom North]	From South]	From West		
	Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
	07:00 AM	0	0	0	0	0	0	0	0	0	0
	07:15 AM	2	0	0	0	0	0	0	0	0	2
	07:30 AM	2	0	0	0	0	0	0	0	0	2
	07:45 AM	0	0	0	0	0	0	0	0	0	0_
	Total	4	0	0	0	0	0	0	0	0	4
	08:00 AM	0	0	0	0	0	0	0	0	0	0
	08:15 AM	0	0	0	1	0	0	0	0	0	1
	08:30 AM	0	0	0	0	0	0	0	0	0	0
	08:45 AM	0	0	0	0	0	0	0	0	0	0_
	Total	0	0	0	1	0	0	0	0	0	1
	Grand Total	4	0	0	1	0	0	0	0	0	5
	Apprch %	100	0	0	100	0	0	0	0	0	
	Total %	80	0	0	20	0	0	0	0	0	

		Brayton A	Avenue			Brayton	Avenue		Som	erset Midd	le School	Drive	
		From N	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:45	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at 0	7:00 AM	[
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	2	0	0	2	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	4	0	0	4	0	0	0	0	0	0	0	0	4
% App. Total	100	0	0		0	0	0		0	0	0		
PHF	.500	.000	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.500

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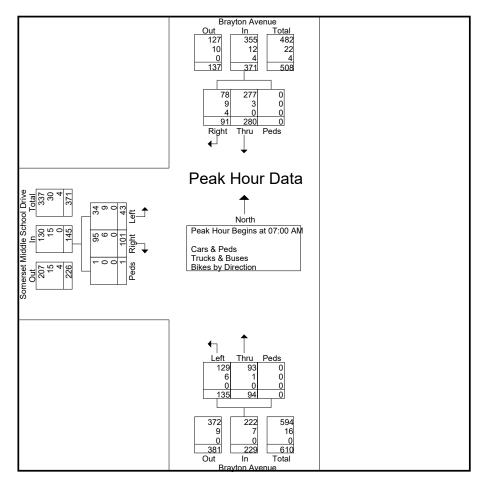
N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225A Site Code: 05225

Site Code : 05225 Start Date : 9/4/2019

		Brayton				Brayton			Some	rset Middl		Drive	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	rom 07:00 A	AM to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at (07:00 AM										
07:00 AM	1	70	0	71	16	8	0	24	0	0	0	0	95
07:15 AM	17	88	0	105	25	30	0	55	0	0	1	1	161
07:30 AM	45	85	0	130	20	63	0	83	51	19	0	70	283
07:45 AM	28	37	0	65	33	34	0	67	50	24	0	74	206
Total Volume	91	280	0	371	94	135	0	229	101	43	1	145	745
Mapp. Total	24.5	75.5	0		41	59	0		69.7	29.7	0.7		
PHF	.506	.795	.000	.713	.712	.536	.000	.690	.495	.448	.250	.490	.658
Cars & Peds	78	277	0	355	93	129	0	222	95	34	1	130	707
% Cars & Peds	85.7	98.9	0	95.7	98.9	95.6	0	96.9	94.1	79.1	100	89.7	94.9
Trucks & Buses	9	3	0	12	1	6	0	7	6	9	0	15	34
% Trucks & Buses	9.9	1.1	0	3.2	1.1	4.4	0	3.1	5.9	20.9	0	10.3	4.6
Bikes by Direction	4	0	0	4	0	0	0	0	0	0	0	0	4
% Bikes by Direction	4.4	0	0	1.1	0	0	0	0	0	0	0	0	0.5



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N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225AA

Site Code : 05225 Start Date : 9/4/2019

Groups Printed- Car	s & Peds - Trucks & Buses - Bikes by Dir	ection
on Avenue	Brayton Avenue	Somer

	Bra	yton Avenue	Time Cur	Bra	yton Avenue			iddle School D	Drive	
	F	From North		F	rom South			rom West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	3	48	0	49	7	0	3	0	0	110
02:15 PM	3	44	0	60	10	0	0	2	0	119
02:30 PM	15	44	0	51	7	0	2	4	0	123
02:45 PM	9	46	0	60	6	0	49	28	0	198
Total	30	182	0	220	30	0	54	34	0	550
03:00 PM	2	48	0	56	1	0	14	2	0	123
03:15 PM	1	44	0	65	3	0	8	3	0	124
03:30 PM	1	59	0	79	3	0	5	1	0	148
03:45 PM	1	48	0	85	2	0	8	0	0	144_
Total	5	199	0	285	9	0	35	6	0	539
04:00 PM	7	54	0	78	20	0	7	0	0	166
04:15 PM	13	59	0	103	26	0	8	1	0	210
04:30 PM	6	53	0	94	11	0	28	40	0	232
04:45 PM	6	52	0	94	14	0	5	0	0	171
Total	32	218	0	369	71	0	48	41	0	779
05:00 PM	3	52	0	87	10	0	15	6	0	173
05:15 PM	9	57	0	80	11	0	2	1	0	160
05:30 PM	4	50	0	76	4	0	3	0	0	137
05:45 PM	1	44	0	78	7	0	3	0	0	133
Total	17	203	0	321	32	0	23	7	0	603
Grand Total	84	802	0	1195	142	0	160	88	0	2471
Apprch %	9.5	90.5	0	89.4	10.6	0	64.5	35.5	0	
Total %	3.4	32.5	0	48.4	5.7	0	6.5	3.6	0	
Cars & Peds	73	794	0	1179	135	0	152	77	0	2410
% Cars & Peds	86.9	99	0	98.7	95.1	0	95	87.5	0	97.5
Trucks & Buses	11	7	0	12	7	0	7	11	0	55
% Trucks & Buses	13.1	0.9	0	1	4.9	0	4.4	12.5	0	2.2
Bikes by Direction	0	1	0	4	0	0	1	0	0	6
% Bikes by Direction	0	0.1	0	0.3	0	0	0.6	0	0	0.2

		Brayton .	Avenue		Brayton Avenue Somerset Middle School Drive						Drive		
		From 1	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	rom 02:00 I	PM to 03:4:	5 PM - Pe	ak 1 of 1									
Peak Hour for Entire	Intersection	Begins at (02:45 PM										
02:45 PM	9	46	0	55	60	6	0	66	49	28	0	77	198
03:00 PM	2	48	0	50	56	1	0	57	14	2	0	16	123
03:15 PM	1	44	0	45	65	3	0	68	8	3	0	11	124
03:30 PM	1	59	0	60	79	3	0	82	5	1	0	6	148
Total Volume	13	197	0	210	260	13	0	273	76	34	0	110	593
% App. Total	6.2	93.8	0		95.2	4.8	0		69.1	30.9	0		
PHF	.361	.835	.000	.875	.823	.542	.000	.832	.388	.304	.000	.357	.749
Cars & Peds	11	193	0	204	254	11	0	265	69	23	0	92	561
% Cars & Peds	84.6	98.0	0	97.1	97.7	84.6	0	97.1	90.8	67.6	0	83.6	94.6
Trucks & Buses	2	4	0	6	5	2	0	7	7	11	0	18	31
% Trucks & Buses	15.4	2.0	0	2.9	1.9	15.4	0	2.6	9.2	32.4	0	16.4	5.2
Bikes by Direction	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0.2

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File Name: 05225AA

Start Date : 9/4/2019

Site Code : 05225

Page No : 2

N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA

Client: Pare/A. Archer

		Brayton	Avenue			Brayton A	Avenue		Some	rset Middl	e School l	Drive	
		From	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 04:00 I	PM to 05:4	5 PM - Pe	ak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	04:15 PM										
04:15 PM	13	59	0	72	103	26	0	129	8	1	0	9	210
04:30 PM	6	53	0	59	94	11	0	105	28	40	0	68	232
04:45 PM	6	52	0	58	94	14	0	108	5	0	0	5	171
05:00 PM	3	52	0	55	87	10	0	97	15	6	0	21	173
Total Volume	28	216	0	244	378	61	0	439	56	47	0	103	786
% App. Total	11.5	88.5	0		86.1	13.9	0		54.4	45.6	0		
PHF	.538	.915	.000	.847	.917	.587	.000	.851	.500	.294	.000	.379	.847
Cars & Peds	28	216	0	244	372	61	0	433	55	47	0	102	779
% Cars & Peds	100	100	0	100	98.4	100	0	98.6	98.2	100	0	99.0	99.1
Trucks & Buses	0	0	0	0	3	0	0	3	0	0	0	0	3
% Trucks & Buses	0	0	0	0	0.8	0	0	0.7	0	0	0	0	0.4
Bikes by Direction	0	0	0	0	3	0	0	3	1	0	0	1	4
% Bikes by Direction	0	0	0	0	0.8	0	0	0.7	1.8	0	0	1.0	0.5

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N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225AA

Site Code : 05225 Start Date : 9/4/2019

			Gr	oups Printed- (Cars & Peds					
	Bray	ton Avenue		Bray	on Avenue		Somerset Mi	ddle School D	rive	
	Fre	om North		Fre	om South		Fre	om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	3	45	0	49	7	0	3	0	0	107
02:15 PM	3	44	0	60	10	0	0	2	0	119
02:30 PM	6	44	0	51	2	0	2	4	0	109
02:45 PM	8	46	0	57	6	0	44	17	0	178
Total	20	179	0	217	25	0	49	23	0	513
03:00 PM	1	45	0	54	1	0	14	2	0	117
03:15 PM	1	44	0	64	2	0	7	3	0	121
03:30 PM	1	58	0	79	2	0	4	1	0	145
03:45 PM	1	48	0	83	2	0	8	0	0	142
Total	4	195	0	280	7	0	33	6	0	525
04:00 PM	7	54	0	78	20	0	7	0	0	166
04:15 PM	13	59	0	99	26	0	7	1	0	205
04:30 PM	6	53	0	92	11	0	28	40	0	230
04:45 PM	6	52	0	94	14	0	5	0	0	171
Total	32	218	0	363	71	0	47	41	0	772
05:00 PM	3	52	0	87	10	0	15	6	0	173
05:15 PM	9	57	0	80	11	0	2	1	0	160
05:30 PM	4	50	0	75	4	0	3	0	0	136
05:45 PM	1	43	0	77	7	0	3	0	0	131
Total	17	202	0	319	32	0	23	7	0	600
Grand Total	73	794	0	1179	135	0	152	77	0	2410
Apprch %	8.4	91.6	0	89.7	10.3	0	66.4	33.6	0	
Total %	3	32.9	0	48.9	5.6	0	6.3	3.2	0	

		Brayton	Avenue			Brayton	Avenue		Some	rset Middle	e School l	Drive	
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 02:00 I	PM to 03:4	5 PM - Pea	ak l of l									
Peak Hour for Entire	Intersection	Begins at	02:45 PM										
02:45 PM	8	46	0	54	57	6	0	63	44	17	0	61	178
03:00 PM	1	45	0	46	54	1	0	55	14	2	0	16	117
03:15 PM	1	44	0	45	64	2	0	66	7	3	0	10	121
03:30 PM	1	58	0	59	79	2	0	81	4	1	0	5	145
Total Volume	11	193	0	204	254	11	0	265	69	23	0	92	561
% App. Total	5.4	94.6	0		95.8	4.2	0		75	25	0		
PHF	.344	.832	.000	.864	.804	.458	.000	.818	.392	.338	.000	.377	.788
D 1 II	04.00 10		D) (D 1	1 61									
Peak Hour Analysis F				C I Of I									
Peak Hour for Entire I	1	_		72	00	26	0	125	7		0	ا ه	205
04:15 PM	13	59	0	72	99	26	0	125	20	1	0	8	205
04:30 PM	6	53	0	59	92	11	0	103	28	40	0	68	230
04:45 PM	6	52	0	58	94	14	0	108	5	0	0	5	171
05:00 PM	3	52	0	55	87	10	0	97	15	6	0	21	173
Total Volume	28	216	0	244	372	61	0	433	55	47	0	102	779
% App. Total	11.5	88.5	0		85.9	14.1	0		53.9	46.1	0		
PHF	.538	.915	.000	.847	.939	.587	.000	.866	.491	.294	.000	.375	.847

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N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA

Client: Pare/A. Archer

File Name: 05225AA

Site Code : 05225 Start Date : 9/4/2019

Grou	ps	Printea-	Trucks	œ	Buses
	_				

			yton Avenue			ton Avenue		Somerset Mi	rive		
L			rom North			om South			om West		1
L	Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
	02:00 PM	0	3	0	0	0	0	0	0	0	3
	02:15 PM	0	0	0	0	0	0	0	0	0	0
	02:30 PM	9	0	0	0	5	0	0	0	0	14
	02:45 PM	1	0	0	2	0	0	5	11	0	19
	Total	10	3	0	2	5	0	5	11	0	36
	03:00 PM	1	2	0	2	0	ا م	0	0	0	6
	03:00 PM 03:15 PM	1	3	0	1	1	0	1	0	0	2
	03:13 PM 03:30 PM	0	0	0	1	1	0	1	0		3
		0	1	-	0	1	- 1	1	0	0	3
_	03:45 PM	0	0	0		0	0	0	0	0	<u>Z</u> _
	Total	1	4	0	5	2	0	2	0	0	14
	04:00 PM	0	0	0	0	0	0	0	0	0	0
	04:15 PM	0	0	0	2	0	0	0	0	0	2
	04:30 PM	0	0	-	2	0		0	0	-	2
		0	0	0	1	0	0	0	0	0	1
_	04:45 PM	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	3	0	0	0	0	0	3
	05:00 PM	0	0	0	0	0	0	0	0	0	0
	05:15 PM	ő	0	0	0	0	0	Ô	Ô	0	Ô
	05:30 PM	0	0	0	1	0	0	Ô	0	0	1
	05:45 PM	0	0	0	1	0	0	0	0	0	1
-	Total	0	0	0	2	0	0	0	0	0	2
	Total	U	U	U	2	U	0	U	U	0	2
	Grand Total	11	7	0	12	7	0	7	11	0	55
	Apprch %	61.1	38.9	0	63.2	36.8	0	38.9	61.1	0	
	Total %	20	12.7	0	21.8	12.7	0	12.7	20	0	

		Brayton .	Avenue			Brayton .	Avenue		Some	rset Middle	e School	Drive	
		From 1	North			From S				From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Tota
eak Hour Analysis F	From 02:00 P	M to 03:45	5 PM - Pe	eak 1 of 1									
eak Hour for Entire	Intersection	Begins at (2:30 PM										
02:30 PM	9	0	0	9	0	5	0	5	0	0	0	0	14
02:45 PM	1	0	0	1	2	0	0	2	5	11	0	16	19
03:00 PM	1	3	0	4	2	0	0	2	0	0	0	0	(
03:15 PM	0	0	0	0	1	1	0	2	1	0	0	1	3
Total Volume	11	3	0	14	5	6	0	11	6	11	0	17	42
% App. Total	78.6	21.4	0		45.5	54.5	0		35.3	64.7	0		
PHF	.306	.250	.000	.389	.625	.300	.000	.550	.300	.250	.000	.266	.553
eak Hour Analysis F				k l of l									
eak Hour for Entire I	ntersection E	Begins at 04	1:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	(
Total Volume	0	0	0	0	3	0	0	3	0	0	0	0	3
% App. Total	0	0	0		100	0	0		0	0	0		
DHE	000	000	000	000	275	000	000	275	000	000	000	000	275

Mario Perone, mperonel@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer

05:45 PM

Grand Total

Apprch %

Total %

Total

16.7

File Name: 05225AA

Site Code : 05225 Start Date : 9/4/2019

Page No : 1

				JII	orkes by Direction	oups i illiteu- E	Ul			
	Drive	Middle School	Somerset N		ayton Avenue	Bra		ayton Avenue	Bra	
		From West]		From South	I		From North	F	
Int. Total	Peds	Left	Right	Peds	Left	Thru	Peds	Thru	Right	Start Time
0	0	0	0	0	0	0	0	0	0	02:00 PM
0	0	0	0	0	0	0	0	0	0	02:15 PM
0	0	0	0	0	0	0	0	0	0	02:30 PM
11	0	0	0	0	0	1	0	0	0	02:45 PM
1	0	0	0	0	0	1	0	0	0	Total
0	0	0	0	0	0	0	0	0	0	03:00 PM
0	0	0	0	0	0	0	0	0	0	03:15 PM
0	0	0	0	0	0	0	0	0	0	03:30 PM
0	0	0	0	0	0	0	0	0	0	03:45 PM
0	0	0	0	0	0	0	0	0	0	Total
0	0	0	0	0	0	0	0	0	0	04:00 PM
3	0	0	1	0	0	2	0	0	0	04:15 PM
1	0	0	0	0	0	1	0	0	0	04:30 PM
0	0	0	0	0	0	0	0	0	0	04:45 PM
4	0	0	1	0	0	3	0	0	0	Total
	0		1						1	
0	0	0	0	0	0	0	0	0	0	05:00 PM
0	0	0	0	0	0	0	0	0	0	05:15 PM
0	0	0	0	0	0	0	0	0	0	05:30 PM
4		^							l ^	05.45.73.6

66.7

16.7

Groups Printed- Bikes by Direction

		Brayton A	Avenue			Brayton A	Avenue		Some	set Middle	School I	Orive	
		From 1	North			From S	South			From '	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	rom 02:00 P	M to 03:45	PM - Peal	k 1 of 1									
Peak Hour for Entire	Intersection	Begins at 0	2:00 PM										
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	1
% App. Total	0	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.250
Peak Hour Analysis Fi				1 of 1									
Peak Hour for Entire I	ntersection E	segins at 04	:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	2	0	0	2	1	0	0	1	3
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	0	0	3	1	0	0	1	4
% App. Total	0	0	0		100	0	0		100	0	0		
PHF	000	000	000	000	375	000	000	375	250	000	000	250	333

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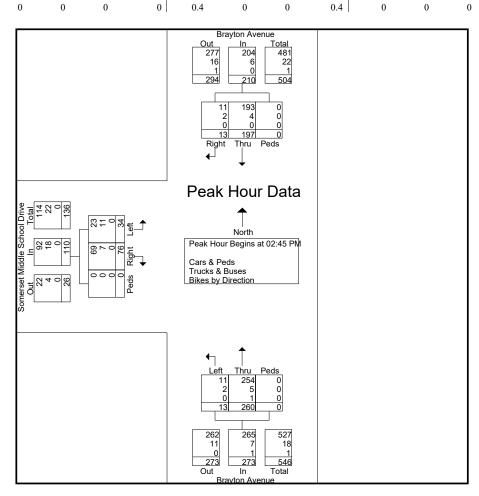
N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225AA

Site Code : 05225 Start Date : 9/4/2019

		Brayton				-	Avenue		Some	Drive			
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 02:00 I	PM to 03:4	5 PM - Pe	ak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	02:45 PM										
02:45 PM	9	46	0	55	60	6	0	66	49	28	0	77	198
03:00 PM	2	48	0	50	56	1	0	57	14	2	0	16	123
03:15 PM	1	44	0	45	65	3	0	68	8	3	0	11	124
03:30 PM	1	59	0	60	79	3	0	82	5	1	0	6	148
Total Volume	13	197	0	210	260	13	0	273	76	34	0	110	593
Martin Markett	6.2	93.8	0		95.2	4.8	0		69.1	30.9	0		
PHF	.361	.835	.000	.875	.823	.542	.000	.832	.388	.304	.000	.357	.749
Cars & Peds	11	193	0	204	254	11	0	265	69	23	0	92	561
% Cars & Peds	84.6	98.0	0	97.1	97.7	84.6	0	97.1	90.8	67.6	0	83.6	94.6
Trucks & Buses	2	4	0	6	5	2	0	7	7	11	0	18	31
% Trucks & Buses	15.4	2.0	0	2.9	1.9	15.4	0	2.6	9.2	32.4	0	16.4	5.2
Bikes by Direction	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0.4	0	0	0.4	0	0	0	0	0.2



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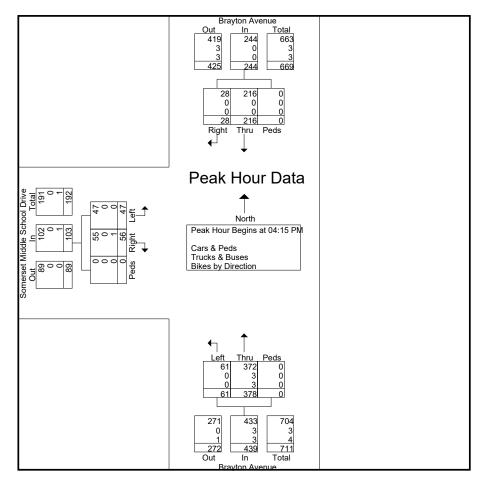
N/S: Brayton Avenue

W: Somerset Middle School Drive

City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225AA Site Code: 05225

Start Date : 9/4/2019

		Brayton A	Avenue			Brayton A	Avenue		Some	Drive			
		From N	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis Fr	rom 04:00 P	M to 05:45	PM - Pe	ak 1 of 1									
Peak Hour for Entire I	ntersection	Begins at 0	4:15 PM										
04:15 PM	13	59	0	72	103	26	0	129	8	1	0	9	210
04:30 PM	6	53	0	59	94	11	0	105	28	40	0	68	232
04:45 PM	6	52	0	58	94	14	0	108	5	0	0	5	171
05:00 PM	3	52	0	55	87	10	0	97	15	6	0	21	173
Total Volume	28	216	0	244	378	61	0	439	56	47	0	103	786
% App. Total	11.5	88.5	0		86.1	13.9	0		54.4	45.6	0		
PHF	.538	.915	.000	.847	.917	.587	.000	.851	.500	.294	.000	.379	.847
Cars & Peds	28	216	0	244	372	61	0	433	55	47	0	102	779
% Cars & Peds	100	100	0	100	98.4	100	0	98.6	98.2	100	0	99.0	99.1
Trucks & Buses	0	0	0	0	3	0	0	3	0	0	0	0	3
% Trucks & Buses	0	0	0	0	0.8	0	0	0.7	0	0	0	0	0.4
Bikes by Direction	0	0	0	0	3	0	0	3	1	0	0	1	4
% Bikes by Direction	0	0	0	0	0.8	0	0	0.7	1.8	0	0	1.0	0.5



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N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Client: Pare/A. Archer

Start Date : 9/4/2019 Page No : 1

File Name: 05225B

Site Code : 05225

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

	т			Oit	oups riiii			TTUCKS)11					
	1	Brayton A				Read S				Brayton A							
		From N				From I				From S				From V			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	9	59	3	1	0	59	18	0	21	19	10	0	10	46	6	0	261
07:15 AM	12	76	0	0	2	64	15	0	15	31	8	0	11	28	17	1	280
07:30 AM	29	96	3	0	10	48	17	2	7	40	7	0	16	19	33	0	327
07:45 AM	29	60	8	0	8	42	14	0	16	39	7	0	13	32	15	0	283
Total	79	291	14	1	20	213	64	2	59	129	32	0	50	125	71	1	1151
08:00 AM	9	50	0	0	0	34	17	1	15	23	12	0	14	15	8	0	198
08:15 AM	11	53	1	0	3	56	12	0	11	25	7	0	19	37	14	0	249
08:30 AM	13	46	1	0	3	40	17	0	16	24	12	0	19	26	8	0	225
08:45 AM	9	54	2	0	1	39	16	0	13	24	5	0	21	29	6	0	219
Total	42	203	4	0	7	169	62	1	55	96	36	0	73	107	36	0	891
Grand Total	121	494	18	1	27	382	126	3	114	225	68	0	123	232	107	1	2042
Apprch %	19.1	77.9	2.8	0.2	5	71	23.4	0.6	28	55.3	16.7	0	26.6	50.1	23.1	0.2	
Total %	5.9	24.2	0.9	0	1.3	18.7	6.2	0.1	5.6	11	3.3	0	6	11.4	5.2	0	
Cars & Peds	119	489	18	1	25	375	126	3	107	217	67	0	121	224	103	1	1996
% Cars & Peds	98.3	99	100	100	92.6	98.2	100	100	93.9	96.4	98.5	0	98.4	96.6	96.3	100	97.7
Trucks & Buses	2	5	0	0	2	7	0	0	7	7	1	0	2	7	4	0	44
% Trucks & Buses	1.7	1	0	0	7.4	1.8	0	0	6.1	3.1	1.5	0	1.6	3	3.7	0	2.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0.4	0	0	0.1

		Bray	yton Av	enue		Read Street						Brayton Avenue					Read Street				
		Fı	rom No	rth			F	rom Ea	st			Fı	rom Soi	ıth		From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07	:00 AM	I to 08:4	45 AM -	Peak 1	of 1														
Peak Hour for	Entire !	Intersec	tion Be	gins at	07:00 Al	M															
07:00 AM	72	0	59	18	0	77	21	19	10	0	50	10	46	6	0	62	261				
07:15 AM	12	76	0	0	88	2	64	15	0	81	15	31	8	0	54	11	28	17	1	57	280
07:30 AM	29	96	3	0	128	10	48	17	2	77	7	40	7	0	54	16	19	33	0	68	327
07:45 AM	29	60	8	0	97	8	42	14	0	64	16	39	7	0	62	13	32	15	0	60	283
Total Volume	79	291	14	1	385	20	213	64	2	299	59	129	32	0	220	50	125	71	1	247	1151
% App. Total	20.5	75.6	3.6	0.3		6.7	71.2	21.4	0.7		26.8	58.6	14.5	0		20.2	50.6	28.7	0.4		
PHF	.681	.758	.438	.250	.752	.500	.832	.889	.250	.923	.702	.806	.800	.000	.887	.781	.679	.538	.250	.908	.880
Cars & Peds	77	288	14	1	380	19	208	64	2	293	54	127	32	0	213	49	119	69	1	238	1124
% Cars & Peds																					
Trucks & Buses	2	3	0	0	5	1	5	0	0	6	5	2	0	0	7	1	5	2	0	8	26
% Trucks & Buses	2.5	1.0	0	0	1.3	5.0	2.3	0	0	2.0	8.5	1.6	0	0	3.2	2.0	4.0	2.8	0	3.2	2.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.4	0.1

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N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Client: Pare/A. Archer

File Name: 05225B Site Code : 05225

Start Date : 9/4/2019

Page No : 1

Groups Printed- Cars & Peds

							noups r	micu- C	ars & rec	15							
]	Brayton A	venue			Read S	treet			Brayton A	Avenue			Read S	treet		
		From N	Vorth			From	East			From S	outh			From V	Vest		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	9	59	3	1	0	57	18	0	18	19	10	0	9	43	6	0	252
07:15 AM	12	74	0	0	2	62	15	0	15	31	8	0	11	26	17	1	274
07:30 AM	29	95	3	0	9	48	17	2	6	39	7	0	16	19	31	0	321
07:45 AM	27	60	8	0	8	41	14	0	15	38	7	0	13	31	15	0	277
Total	77	288	14	1	19	208	64	2	54	127	32	0	49	119	69	1	1124
08:00 AM	9	49	0	0	0	34	17	1	13	22	12	0	14	15	7	0	193
08:15 AM	11	53	1	0	2	55	12	0	11	22	7	0	19	36	14	0	243
08:30 AM	13	46	1	0	3	39	17	0	16	23	11	0	18	25	8	0	220
08:45 AM	9	53	2	0	1	39	16	0	13	23	5	0	21	29	5	0	216
Total	42	201	4	0	6	167	62	1	53	90	35	0	72	105	34	0	872
Grand Total	119	489	18	1	25	375	126	3	107	217	67	0	121	224	103	1	1996
Apprch %	19	78	2.9	0.2	4.7	70.9	23.8	0.6	27.4	55.5	17.1	0	26.9	49.9	22.9	0.2	
Total %	6	24.5	0.9	0.1	1.3	18.8	6.3	0.2	5.4	10.9	3.4	0	6.1	11.2	5.2	0.1	

		Bra	yton Av	enue			R	ead Str	eet			Bra	yton Av	enue			R	ead Str	eet]
		F	rom No	rth			F	rom Ea	ıst			F	rom So	ıth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07	:00 AM	I to 08:	45 AM -	Peak 1	of 1														
Peak Hour for	Entire !	Intersec	tion Be	gins at	07:00 AN	M															
07:00 AM	9	59	3	1	72	0	57	18	0	75	18	19	10	0	47	9	43	6	0	58	252
07:15 AM	12	74	0	0	86	2	62	15	0	79	15	31	8	0	54	11	26	17	1	55	274
07:30 AM	29	95	3	0	127	9	48	17	2	76	6	39	7	0	52	16	19	31	0	66	321
07:45 AM	27	60	8	0	95	8	41	14	0	63	15	38	7	0	60	13	31	15	0	59	277
Total Volume	77	288	14	1	380	19	208	64	2	293	54	127	32	0	213	49	119	69	1	238	1124
% App. Total	20.3	75.8	3.7	0.3		6.5	71	21.8	0.7		25.4	59.6	15	0		20.6	50	29	0.4		
PHF	.664	.758	.438	.250	.748	.528	.839	.889	.250	.927	.750	.814	.800	.000	.888	.766	.692	.556	.250	.902	.875

Transportation Data Corporation

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N/S: Brayton Avenue E/W: Read Street

City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225B Site Code : 05225

Start Date : 9/4/2019

Page No : 1

						Gro	oups Prin	ted- Tru	cks & Bus	ses							
	H	Brayton A	venue			Read St	treet		H	Brayton A	venue			Read S	treet		
		From N	orth			From 1	East			From S	outh			From V	Vest		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	2	0	0	3	0	0	0	1	2	0	0	8
07:15 AM	0	2	0	0	0	2	0	0	0	0	0	0	0	2	0	0	6
07:30 AM	0	1	0	0	1	0	0	0	1	1	0	0	0	0	2	0	6
07:45 AM	2	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	6
Total	2	3	0	0	1	5	0	0	5	2	0	0	1	5	2	0	26
08:00 AM	0	1	0	0	0	0	0	0	2	1	0	0	0	0	1	0	5
08:15 AM	0	0	0	0	1	1	0	0	0	2	0	0	0	1	0	0	5
08:30 AM	0	0	0	0	0	1	0	0	0	1	1	0	1	1	0	0	5
08:45 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3_
Total	0	2	0	0	1	2	0	0	2	5	1	0	1	2	2	0	18
Grand Total	2	5	0	0	2	7	0	0	7	7	1	0	2	7	4	0	44
Apprch %	28.6	71.4	0	0	22.2	77.8	0	0	46.7	46.7	6.7	0	15.4	53.8	30.8	0	
Total %	4.5	11.4	0	0	4.5	15.9	0	0	15.9	15.9	2.3	0	4.5	15.9	9.1	0	

		Bray	ton Av	enue			R	ead Stre	eet			Bray	yton Av	enue			R	ead Str	eet		
		Fı	om No	rth			F	rom Ea	st			Fı	om So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07	:00 AM	I to 08:4	45 AM -	Peak 1	of 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	07:00 Al	M															
07:00 AM	0	0	0	0	0	0	2	0	0	2	3	0	0	0	3	1	2	0	0	3	8
07:15 AM	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	6
07:30 AM	0	1	0	0	1	1	0	0	0	1	1	1	0	0	2	0	0	2	0	2	6
07:45 AM	2	0	0	0	2	0	1	0	0	1	1	1	0	0	2	0	1	0	0	1_	6
Total Volume	2	3	0	0	5	1	5	0	0	6	5	2	0	0	7	1	5	2	0	8	26
% App. Total	40	60	0	0		16.7	83.3	0	0		71.4	28.6	0	0		12.5	62.5	25	0		
PHF	.250	.375	.000	.000	.625	.250	.625	.000	.000	.750	.417	.500	.000	.000	.583	.250	.625	.250	.000	.667	.813

File Name: 05225B

Start Date : 9/4/2019

Site Code : 05225

Transportation Data Corporation

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Client: Pare/A. Archer Page No : 1

Groups Printed- Bikes by Direction

									o o j Dire								
	I	3rayton A	venue			Read S	treet			Brayton 1	Avenue			Read S			
		From N	Vorth			From	East			From S	South			From	West		
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
 Total	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Grand Total	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
Apprch %	0	0	0	0	0	0	0	0	0	100	0	0	0	100	0	0	
Total %	0	0	0	0	0	0	0	0	0	50	0	0	0	50	0	0	

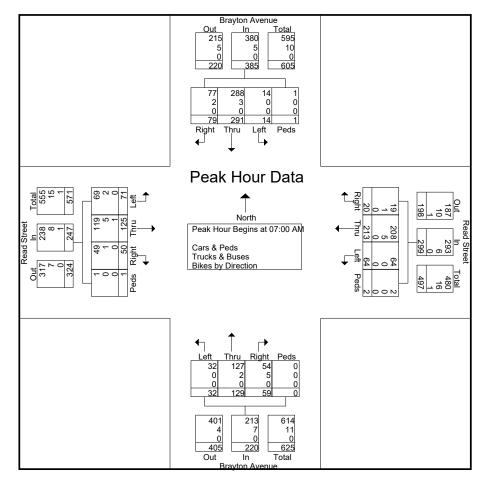
		Bray	yton Av	enue			R	ead Str	eet			Bray	yton Av	enue			R	ead Str	eet]
		F1	rom No	rth			F	rom Ea	ıst			Fı	om So	ıth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07	:00 AM	I to 08:	45 AM -	Peak 1	of 1				-										
Peak Hour for	Entire 1	Intersec	tion Be	gins at	07:00 AN	M															
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	100	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.250

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N/S: Brayton Avenue E/W: Read Street

City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225B Site Code: 05225 Start Date: 9/4/2019

		_	ton Av				R	ead Stre	eet			Bray	ton Av	enue				ead Str			l
		Fr	om No	rth			F	rom Ea	st			Fı	rom Soi	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 07:	:00 AM	to 08:4	5 AM -	Peak 1	of 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at (07:00 AN	M															
07:00 AM	9	59	3	1	72	0	59	18	0	77	21	19	10	0	50	10	46	6	0	62	261
07:15 AM	12	76	0	0	88	2	64	15	0	81	15	31	8	0	54	11	28	17	1	57	280
07:30 AM	29	96	3	0	128	10	48	17	2	77	7	40	7	0	54	16	19	33	0	68	327
07:45 AM	29	60	8	0	97	8	42	14	0	64	16	39	7	0	62	13	32	15	0	60	283
Total Volume	79	291	14	1	385	20	213	64	2	299	59	129	32	0	220	50	125	71	1	247	1151
% App. Total	20.5	75.6	3.6	0.3		6.7	71.2	21.4	0.7		26.8	58.6	14.5	0		20.2	50.6	28.7	0.4		
PHF	.681	.758	.438	.250	.752	.500	.832	.889	.250	.923	.702	.806	.800	.000	.887	.781	.679	.538	.250	.908	.880
Cars & Peds	77	288	14	1	380	19	208	64	2	293	54	127	32	0	213	49	119	69	1	238	1124
% Cars & Peds																					
Trucks & Buses	2	3	0	0	5	1	5	0	0	6	5	2	0	0	7	1	5	2	0	8	26
% Trucks & Buses	2.5	1.0	0	0	1.3	5.0	2.3	0	0	2.0	8.5	1.6	0	0	3.2	2.0	4.0	2.8	0	3.2	2.3
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.4	0.1



Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Client: Pare/A. Archer

File Name: 05225BB Site Code: 05225

Site Code : 05225 Start Date : 9/4/2019

				GIC	Jups I IIII			Trucks	& Buses -			711		D			1
		Brayton A				Read S			E	Brayton A				Read S			
		From N				From l				From S				From '			
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Tota
02:00 PM	15	40	0	0	1	70	20	0	30	40	11	0	11	49	20	0	30′
02:15 PM	19	48	1	0	6	82	29	2	25	48	11	0	12	31	22	0	330
02:30 PM	10	32	0	0	4	51	20	0	36	49	8	0	11	52	13	0	28
02:45 PM	33	59	8	1	0	52	26	0	23	48	11	0	13	35	15	0	32
Total	77	179	9	1	11	255	95	2	114	185	41	0	47	167	70	0	125
03:00 PM	20	42	3	1	4	37	14	0	37	49	17	0	8	35	11	0	27
03:15 PM	14	38	1	0	4	32	23	1	32	45	12	0	16	51	23	0	29
03:30 PM	16	41	0	0	4	38	12	0	19	53	16	0	20	53	16	0	28
03:45 PM	12	36	1	0	3	46	15	0	24	56	13	0	14	59	20	0	29
Total	62	157	5	1	15	153	64	1	112	203	58	0	58	198	70	0	115
04:00 PM	15	40	3	0	7	64	11	0	19	69	16	0	19	61	24	0	34
04:15 PM	22	47	1	1	9	39	14	0	20	86	15	0	11	75	28	0	36
04:30 PM	24	54	7	0	9	37	19	1	37	67	16	0	13	58	26	0	36
04:45 PM	14	37	2	0	6	61	15	0	35	76	10	0	14	60	29	0	35
Total	75	178	13	1	31	201	59	1	111	298	57	0	57	254	107	0	144
05:00 PM	20	43	5	0	6	62	17	0	26	71	30	0	10	59	27	0	37
05:15 PM	11	37	3	0	6	53	13	0	21	62	17	0	11	62	19	0	31
05:30 PM	16	41	1	0	4	72	20	0	27	53	9	0	10	54	21	0	32
05:45 PM	9	28	1	0	7	65	12	0	30	59	11	0	15	55	16	0	30
Total	56	149	10	0	23	252	62	0	104	245	67	0	46	230	83	0	132
Grand Total	270	663	37	3	80	861	280	4	441	931	223	0	208	849	330	0	518
Apprch %	27.7	68.1	3.8	0.3	6.5	70.3	22.9	0.3	27.6	58.4	14	0	15	61.2	23.8	0	
Total %	5.2	12.8	0.7	0.1	1.5	16.6	5.4	0.1	8.5	18	4.3	0	4	16.4	6.4	0	
ars & Peds	261	660	35	3	75	852	273	4	441	923	219	0	206	843	320	0	511
Cars & Peds	96.7	99.5	94.6	100	93.8	99	97.5	100	100	99.1	98.2	0	99	99.3	97	0	98
cks & Buses	8	2	2	0	5	9	7	0	0	7	4	0	2	5	8	0	:
rucks & Buses	3	0.3	5.4	0	6.2	11	2.5	0	0	0.8	1.8	0	1	0.6	2.4	0	1
es by Direction	1	1	0	0	0	0	0	0	0	1	0	0	0	1	2	0	
kes by Direction	0.4	0.2	0	0	0	0	0	0	0	0.1	0	0	0	0.1	0.6	0	0

		Bra	yton Av	enue			R	ead Str	eet			Bray	yton Av	enue			R	ead Stre	eet		
		F	rom No	rth			F	rom Ea	ıst			Fı	rom So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 02	:00 PM	to 03:4	5 PM - F	eak 1 o	f 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	02:00 PN	1															
02:00 PM	15	40	0	0	55	1	70	20	0	91	30	40	11	0	81	11	49	20	0	80	307
02:15 PM	19	48	1	0	68	6	82	29	2	119	25	48	11	0	84	12	31	22	0	65	336
02:30 PM	10	32	0	0	42	4	51	20	0	75	36	49	8	0	93	11	52	13	0	76	286
02:45 PM	33	59	8	1	101	0	52	26	0	78	23	48	11	0	82	13	35	15	0	63	324
Total Volume	77	179	9	1	266	11	255	95	2	363	114	185	41	0	340	47	167	70	0	284	1253
% App. Total	28.9	67.3	3.4	0.4		3	70.2	26.2	0.6		33.5	54.4	12.1	0		16.5	58.8	24.6	0		
PHF	.583	.758	.281	.250	.658	.458	.777	.819	.250	.763	.792	.944	.932	.000	.914	.904	.803	.795	.000	.888	.932
Cars & Peds	74	177	7	1	259	11	247	93	2	353	114	182	40	0	336	47	166	65	0	278	1226
% Cars & Peds																					
Trucks & Buses	3	2	2	0	7	0	8	2	0	10	0	3	1	0	4	0	1	5	0	6	27
% Trucks & Buses	3.9	1.1	22.2	0	2.6	0	3.1	2.1	0	2.8	0	1.6	2.4	0	1.2	0	0.6	7.1	0	2.1	2.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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N/S: Brayton Avenue File Name: 05225BB E/W: Read Street Site Code : 05225 City, State: Somerset, MA Start Date : 9/4/2019 Client: Pare/A. Archer Page No : 2

		Bray	ton Av	enue			Re	ead Str	eet			Bray	yton Av	enue			R	ead Str	eet		
		F	om No	rth			F	rom Ea	ıst			Fı	rom So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04	:00 PM	to 05:4	45 PM - F	Peak 1 c	of 1														
Peak Hour for	Entire	Intersec	tion Be	gins at	04:15 PN	Л															
04:15 PM	22	47	1	1	71	9	39	14	0	62	20	86	15	0	121	11	75	28	0	114	368
04:30 PM	24	54	7	0	85	9	37	19	1	66	37	67	16	0	120	13	58	26	0	97	368
04:45 PM	14	37	2	0	53	6	61	15	0	82	35	76	10	0	121	14	60	29	0	103	359
05:00 PM	20	43	5	0	68	6	62	17	0	85	26	71	30	. 0	127	10	59	27	0	96	376
Total Volume	80	181	15	1	277	30	199	65	1	295	118	300	71	0	489	48	252	110	0	410	1471
% App. Total	28.9	65.3	5.4	0.4		10.2	67.5	22	0.3		24.1	61.3	14.5	0		11.7	61.5	26.8	0		
PHF	.833	.838	.536	.250	.815	.833	.802	.855	.250	.868	.797	.872	.592	.000	.963	.857	.840	.948	.000	.899	.978
Cars & Peds	79	180	15	1	275	29	199	65	1	294	118	297	71	0	486	48	251	107	0	406	1461
% Cars & Peds																					
Trucks & Buses	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	1	1	0	2	5
% Trucks & Buses	0	0	0	0	0	3.3	0	0	0	0.3	0	0.7	0	0	0.4	0	0.4	0.9	0	0.5	0.3
Bikes by Direction	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5
9/ Dileas by Direction	1.3	0.6	0	0	0.7	0	0	0	0	0	0	0.3	0	0	0.2	0	0	1.8	0	0.5	0.3

File Name: 05225BB

Transportation Data Corporation

Mario Perone, mperone l@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Site Code : 05225 Start Date : 9/4/2019

Client: Pare/A. Archer Page No : 1

Groups Printed- Cars & Peds

		I	Brayton A				Read St	reet]	Brayton A				Read S			
L			From N				From I	East			From S	South			From '	West		
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
	02:00 PM	14	39	0	0	1	69	20	0	30	40	11	0	11	49	20	0	304
	02:15 PM	19	48	1	0	6	77	28	2	25	47	10	0	12	30	22	0	327
	02:30 PM	10	32	0	0	4	49	20	0	36	48	8	0	11	52	9	0	279
	02:45 PM	31	58	6	1	0	52	25	0	23	47	11	0	13	35	14	0	316
	Total	74	177	7	1	11	247	93	2	114	182	40	0	47	166	65	0	1226
	03:00 PM	18	42	3	1	3	37	13	0	37	49	16	0	8	34	11	0	272
	03:15 PM	13	38	1	0	4	32	20	1	32	44	12	0	16	51	22	0	286
	03:30 PM	14	41	0	0	2	38	12	0	19	53	14	0	18	53	16	0	280
	03:45 PM	12	36	1	0	3	46	14	0	24	55	13	0	14	58	19	0	295
	Total	57	157	5	1	12	153	59	1	112	201	55	0	56	196	68	0	1133
									•				•					
	04:00 PM	15	40	3	0	7	63	11	0	19	69	16	0	19	61	24	0	347
	04:15 PM	21	47	1	1	9	39	14	0	20	83	15	0	11	75	26	0	362
	04:30 PM	24	53	7	0	8	37	19	1	37	67	16	0	13	57	26	0	365
	04:45 PM	14	37	2	0	6	61	15	0	35	76	10	0	14	60	28	0	358
	Total	74	177	13	1	30	200	59	1	111	295	57	0	57	253	104	0	1432
	05:00 PM	20	43	5	0	6	62	17	0	26	71	30	0	10	59	27	0	376
	05:15 PM	11	37	3	0	6	53	13	0	21	62	17	0	11	62	19	0	315
	05:30 PM	16	41	1	0	3	72	20	0	27	53	9	0	10	52	21	0	325
	05:45 PM	9	28	1	0	7	65	12	0	30	59	11	0	15	55	16	0	308
	Total	56	149	10	0	22	252	62	0	104	245	67	0	46	228	83	0	1324
	Grand Total	261	660	35	3	75	852	273	4	441	923	219	0	206	843	320	0	5115
	Apprch %	27.2	68.8	3.6	0.3	6.2	70.8	22.7	0.3	27.9	58.3	13.8	0	15	61.6	23.4	0	
	Total %	5.1	12.9	0.7	0.1	1.5	16.7	5.3	0.1	8.6	18	4.3	0	4	16.5	6.3	0	

		Bra	yton Av	70n110			D	ead Str	oot			Bras	yton Av	zonijo			D	ead Stre	oot		1
			rom No					rom Ea					rom So					rom We			
Ct (Tr	D. L.					D: L					D: L					D' L					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	_						f 1														
Peak Hour for	Entire :	Intersec	tion Be	gins at	02:00 PN	Л															
02:00 PM	14	39	0	0	53	1	69	20	0	90	30	40	11	0	81	11	49	20	0	80	304
02:15 PM	19	48	1	0	68	6	77	28	2	113	25	47	10	0	82	12	30	22	0	64	327
02:30 PM	10	32	0	0	42	4	49	20	0	73	36	48	8	0	92	11	52	9	0	72	279
02:45 PM	31	58	6	1	96	0	52	25	0	77	23	47	11	0	81	13	35	14	0	62	316
Total Volume	74	177	7	1	259	11	247	93	2	353	114	182	40	0	336	47	166	65	0	278	1226
% App. Total	28.6	68.3	2.7	0.4		3.1	70	26.3	0.6		33.9	54.2	11.9	0		16.9	59.7	23.4	0		
PHF	.597	.763	.292	.250	.674	.458	.802	.830	.250	.781	.792	.948	.909	.000	.913	.904	.798	.739	.000	.869	.937
	•																				•
Peak Hour An	alvsis F	rom 04	:00 PM	to 05:4	15 PM - F	eak 1 o	f 1														
Peak Hour for	Entire	Intersec	tion Be	gins at	04:15 PN	Л															
04:15 PM	21	47	1	1	70	9	39	14	0	62	20	83	15	0	118	11	75	26	0	112	362
04:30 PM	24	53	7	0	84	8	37	19	1	65	37	67	16	0	120	13	57	26	0	96	365
04:45 PM	14	37	2	0	53	6	61	15	0	82	35	76	10	0	121	14	60	28	0	102	358
05:00 PM	20	43	5	0	68	6	62	17	0	85	26	71	30	0	127	10	59	27	0	96	376
Total Volume	79	180	15	1	275	29	199	65	1	294	118	297	71	0	486	48	251	107	0	406	1461
% App. Total	28.7	65.5	5.5	0.4		9.9	67.7	22.1	0.3		24.3	61.1	14.6	0		11.8	61.8	26.4	0		
PHF	.823	.849	.536	.250	.818	.806	.802	.855	.250	.865	.797	.895	.592	.000	.957	.857	.837	.955	.000	.906	.971

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N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA Client: Pare/A. Archer File Name: 05225BB Site Code: 05225 Start Data: 0/4/2019

Start Date : 9/4/2019 Page No : 1

Groups Printed- Trucks & Buses

Brayton Avenue	at. Total
Start Time Right Thru Left Peds Right Thru Left Peds Right Thru Left Peds Right Thru Left Peds Int	at. Total
	it. Total 3
	3
	0
02:15 PM 0 0 0 0 0 0 5 1 0 0 1 1 0 0 1 0 0 0	,
02:30 PM 0 0 0 0 0 0 2 0 0 0 1 0 0 0 4 0	7
02:45 PM 2 1 2 0 0 0 1 0 0 1 0 0 0 0 1 0	8_
Total 3 2 2 0 0 8 2 0 0 3 1 0 0 1 5 0	27
03:00 PM 2 0 0 0 1 0 1 0 0 0 1 0 0 1 0 0 0 1	6
03:15 PM 1 0 0 0 0 0 0 3 0 0 1 0 0 0 1 0 0	6
03:30 PM 2 0 0 0 2 0 0 0 0 0 2 0 2 0 0 0	8
03:45 PM 0 0 0 0 0 0 0 1 0 0 1 0 0 1 1 0 0 0 1 1 0	4
Total 5 0 0 0 3 0 5 0 0 2 3 0 2 2 2 0	24
04:00 PM 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	1
04:15 PM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2
04:30 PM 0 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0	2
04:45 PM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1
Total 0 0 0 0 1 1 0 0 0 2 0 0 0 1 1 0	6
05:00 PM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
05:15 PM 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0
05:30 PM 0 0 0 0 1 0 0 0 0 0 0 0 0 1 0 0	2
05:45 PM	0
Total 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0	2
Grand Total 8 2 2 0 5 9 7 0 0 7 4 0 2 5 8 0	59
Appreh 6 66.7 16.7 16.7 0 23.8 42.9 33.3 0 0 63.6 36.4 0 13.3 33.3 53.3 0	
Total % 13.6 3.4 3.4 0 8.5 15.3 11.9 0 0 11.9 6.8 0 3.4 8.5 13.6 0	

								1.0										1.0			1
			yton Av					ead Str					yton Av					ead Stre			
			rom No					rom Ea	ıst				om So	_				rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 02	:00 PM	to 03:4	15 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	ntersec	tion Be	gins at	02:15 PN	1															
02:15 PM	0	0	0	0	0	0	5	1	0	6	0	1	1	0	2	0	1	0	0	1	9
02:30 PM	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	4	0	4	7
02:45 PM	2	1	2	0	5	0	0	1	0	1	0	1	0	0	1	0	0	1	0	1	8
03:00 PM	2	0	0	0	2	1	0	1	0	2	0	0	1	0	1	0	1	0	0	1	6
Total Volume	4	1	2	0	7	1	7	3	0	11	0	3	2	0	5	0	2	5	0	7	30
% App. Total	57.1	14.3	28.6	0		9.1	63.6	27.3	0		0	60	40	0		0	28.6	71.4	0		
PHF	.500	.250	.250	.000	.350	.250	.350	.750	.000	.458	.000	.750	.500	.000	.625	.000	.500	.313	.000	.438	.833
	•																				
Peak Hour An	alysis F	rom 04	:00 PM	to 05:4	15 PM - F	eak 1 o	f 1														
Peak Hour for	Entire 1	ntersec	tion Be	gins at	04:00 PN	1															
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	1	1	0	0	2	0	2	0	0	2	0	1	1	0	2	6
% App. Total	0	0	0	0		50	50	0	0	_	0	100	0	0	_	0	50	50	0	_	
PHF	000	000	000	000	000	250	250	000	000	500	000	250	000	000	250	000	250	250	000	500	750

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N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA Client: Pare/A. Archer

File Name: 05225BB Site Code : 05225 Start Date : 9/4/2019

Group	s Printed-	Bikes b	y Direction

		I	Brayton A				Read Str				Brayton A				Read St			
L			From N				From E				From S				From V			
	Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Int. Total
	02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:15 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	4
	04:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
	Total	1	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0	5
	05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0_
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	Grand Total	1	1	0	0	0	0	0	0	0	1	0	0	0	1	2	0	6
	Apprch %	50	50	0	0	0	0	0	0	0	100	0	0	0	33.3	66.7	0	
	Total %	16.7	16.7	0	0	0	0	0	0	0	16.7	0	0	0	16.7	33.3	0	

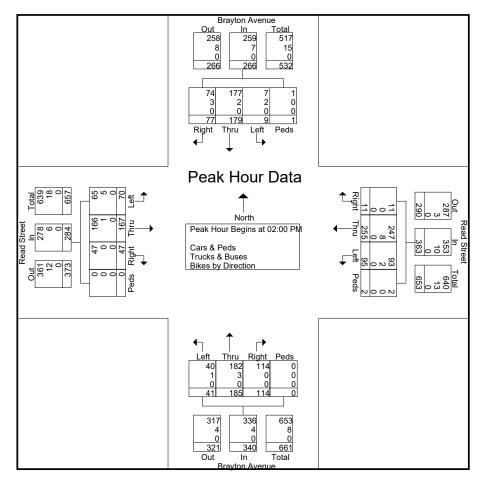
		Bray	yton Av	zenile			R	ead Stre	et .			Bray	ton Av	zenne			R	ead Stre	et .		
			rom No					rom Ea					om So					rom We			
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An								Leit	1 cus	дрр. госаг	reigne	Tinu	Leit	reas	дрр. голаг	rugin	Tina	Leit	1 cus	дрр. голаг	Int. Potar
Peak Hour for																					
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Peak Hour An	_						f 1														
Peak Hour for	Entire 1	ntersec	tion Be	gins at	04:00 PN	1															
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	4
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5
% App. Total	50	50	0	0		0	0	0	0		0	100	0	0		0	0	100	0		
PHF	.250	.250	.000	.000	.500	.000	.000	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.250	.000	.250	.313

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N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

City, State: Somerset, MA Client: Pare/A. Archer File Name : 05225BB Site Code : 05225 Start Date : 9/4/2019

		Bray	ton Av	enue			R	ead Stre	eet			Bray	yton Av	enue			R	ead Stre	eet		
		Fr	om No	rth			F	rom Ea	ıst			Fı	rom So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 02	:00 PM	to 03:4	5 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	02:00 PN	1															
02:00 PM	15	40	0	0	55	1	70	20	0	91	30	40	11	0	81	11	49	20	0	80	307
02:15 PM	19	48	1	0	68	6	82	29	2	119	25	48	11	0	84	12	31	22	0	65	336
02:30 PM	10	32	0	0	42	4	51	20	0	75	36	49	8	0	93	11	52	13	0	76	286
02:45 PM	33	59	8	1	101	0	52	26	0	78	23	48	11	0	82	13	35	15	0	63	324
Total Volume	77	179	9	1	266	11	255	95	2	363	114	185	41	0	340	47	167	70	0	284	1253
% App. Total	28.9	67.3	3.4	0.4		3	70.2	26.2	0.6		33.5	54.4	12.1	0		16.5	58.8	24.6	0		
PHF	.583	.758	.281	.250	.658	.458	.777	.819	.250	.763	.792	.944	.932	.000	.914	.904	.803	.795	.000	.888	.932
Cars & Peds	74	177	7	1	259	11	247	93	2	353	114	182	40	0	336	47	166	65	0	278	1226
% Cars & Peds																					
Trucks & Buses	3	2	2	0	7	0	8	2	0	10	0	3	1	0	4	0	1	5	0	6	27
% Trucks & Buses	3.9	1.1	22.2	0	2.6	0	3.1	2.1	0	2.8	0	1.6	2.4	0	1.2	0	0.6	7.1	0	2.1	2.2
Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Bikes by Direction	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



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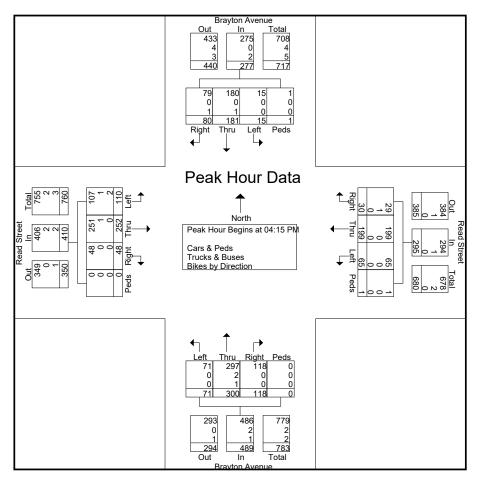
N/S: Brayton Avenue E/W: Read Street City, State: Somerset, MA

Client: Pare/A. Archer

Site Code : 05225 Start Date : 9/4/2019

File Name: 05225BB

		-	ton Av				Re	ead Str	eet			Bray	ton Av	enue			Re	ead Stre	eet]
		Fr	om No	rth			F	rom Ea	ast			Fı	om So	uth			F	rom W	est		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour An	alysis F	rom 04	:00 PM	to 05:4	45 PM - P	eak 1 o	f 1														
Peak Hour for	Entire 1	Intersec	tion Be	gins at	04:15 PN	1															
04:15 PM	22	47	1	1	71	9	39	14	0	62	20	86	15	0	121	11	75	28	0	114	368
04:30 PM	24	54	7	0	85	9	37	19	1	66	37	67	16	0	120	13	58	26	0	97	368
04:45 PM	14	37	2	0	53	6	61	15	0	82	35	76	10	0	121	14	60	29	0	103	359
05:00 PM	20	43	5	0	68	6	62	17	0	85	26	71	30	0	127	10	59	27	0	96	376
Total Volume	80	181	15	1	277	30	199	65	1	295	118	300	71	0	489	48	252	110	0	410	1471
% App. Total	28.9	65.3	5.4	0.4		10.2	67.5	22	0.3		24.1	61.3	14.5	0		11.7	61.5	26.8	0		
PHF	.833	.838	.536	.250	.815	.833	.802	.855	.250	.868	.797	.872	.592	.000	.963	.857	.840	.948	.000	.899	.978
Cars & Peds	79	180	15	1	275	29	199	65	1	294	118	297	71	0	486	48	251	107	0	406	1461
% Cars & Peds																					
Trucks & Buses	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	1	1	0	2	5
% Trucks & Buses	0	0	0	0	0	3.3	0	0	0	0.3	0	0.7	0	0	0.4	0	0.4	0.9	0	0.5	0.3
Bikes by Direction	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	5
% Bikes by Direction	1.3	0.6	0	0	0.7	0	0	0	0	0	0	0.3	0	0	0.2	0	0	1.8	0	0.5	0.3



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N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer

File Name: 05225C Site Code : 05225

Start Date : 9/4/2019

Page No : 1

Groups Printed- Cars & Peds - Trucks & Buses - Bikes by Direction

		Bark Street			Bark Street		J	Jaffrey Street		
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	1	70	0	13	3	0	2	0	0	89
07:15 AM	2	103	0	24	1	0	3	0	1	134
07:30 AM	0	125	0	38	0	0	3	0	0	166
07:45 AM	0	61	0	57	0	0	4	0	0	122_
Total	3	359	0	132	4	0	12	0	1	511
00.00.134		50	0.1	2.1						0.6
08:00 AM	1	53	0	31	0	0	1	0	0	86
08:15 AM	0	60	0	41	0	0	1	0	1	103
08:30 AM	0	64	0	38	0	0	3	0	0	105
08:45 AM	0	55	0	30	0	0	0	0	0	85
Total	1	232	0	140	0	0	5	0	1	379
	1 .						1		_ 1	
Grand Total	4	591	0	272	4	0	17	0	2	890
Apprch %	0.7	99.3	0	98.6	1.4	0	89.5	0	10.5	
Total %	0.4	66.4	0	30.6	0.4	0	1.9	0	0.2	
Cars & Peds	3	573	0	254	3	0	17	0	2	852
Cars & Peds	75	97	0	93.4	75	0	100	0	100	95.7
Trucks & Buses	1	14	0	17	1	0	0	0	0	33
% Trucks & Buses	25	2.4	0	6.2	25	0	0	0	0	3.7
Bikes by Direction	0	4	0	1	0	0	0	0	0	5
% Bikes by Direction	0	0.7	0	0.4	0	0	0	0	0	0.6

		Bark S	Street			Bark	Street			Jaffrey	Street		
		From	North			From	South			From			
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis I	From 07:00 A	M to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at (07:00 AM	1									
07:00 AM	1	70	0	71	13	3	0	16	2	0	0	2	89
07:15 AM	2	103	0	105	24	1	0	25	3	0	1	4	134
07:30 AM	0	125	0	125	38	0	0	38	3	0	0	3	166
07:45 AM	0	61	0	61	57	0	0	57	4	0	0	4	122
Total Volume	3	359	0	362	132	4	0	136	12	0	1	13	511
% App. Total	0.8	99.2	0		97.1	2.9	0		92.3	0	7.7		
PHF	.375	.718	.000	.724	.579	.333	.000	.596	.750	.000	.250	.813	.770
Cars & Peds	3	343	0	346	123	3	0	126	12	0	1	13	485
% Cars & Peds	100	95.5	0	95.6	93.2	75.0	0	92.6	100	0	100	100	94.9
Trucks & Buses	0	12	0	12	9	1	0	10	0	0	0	0	22
% Trucks & Buses	0	3.3	0	3.3	6.8	25.0	0	7.4	0	0	0	0	4.3
Bikes by Direction	0	4	0	4	0	0	0	0	0	0	0	0	4
% Bikes by Direction	0	1.1	0	1.1	0	0	0	0	0	0	0	0	0.8

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N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer

File Name: 05225C Site Code : 05225

Start Date : 9/4/2019

Page No : 1

Groups Printed- Cars & Peds

		Bark Street		_	Bark Street			Jaffrey Street		
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	1	70	0	13	3	0	2	0	0	89
07:15 AM	2	97	0	24	0	0	3	0	1	127
07:30 AM	0	117	0	33	0	0	3	0	0	153
07:45 AM	0	59	0	53	0	0	4	0	0	116
Total	3	343	0	123	3	0	12	0	1	485
08:00 AM	0	52	0	29	0	0	1	0	0	82
08:15 AM	0	60	0	38	0	0	1	0	1	100
08:30 AM	0	64	0	36	0	0	3	0	0	103
08:45 AM	0	54	0	28	0	0	0	0	0	82
Total	0	230	0	131	0	0	5	0	1	367
Grand Total	3	573	0	254	3	0	17	0	2	852
Apprch %	0.5	99.5	0	98.8	1.2	0	89.5	0	10.5	
Total %	0.4	67.3	0	29.8	0.4	0	2	0	0.2	

		Bark S	Street			Bark S	Street			Jaffrey	Street		
		From	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at 0	07:00 AM	I									
07:00 AM	1	70	0	71	13	3	0	16	2	0	0	2	89
07:15 AM	2	97	0	99	24	0	0	24	3	0	1	4	127
07:30 AM	0	117	0	117	33	0	0	33	3	0	0	3	153
07:45 AM	0	59	0	59	53	0	0	53	4	0	0	4	116
Total Volume	3	343	0	346	123	3	0	126	12	0	1	13	485
% App. Total	0.9	99.1	0		97.6	2.4	0		92.3	0	7.7		
PHF	.375	.733	.000	.739	.580	.250	.000	.594	.750	.000	.250	.813	.792

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N/S: Bark Street File Name: 05225C W: Jaffrey Street Site Code : 05225 Start Date : 9/4/2019 City, State: Swansea, MA

Client: Pare/A. Archer Page No : 1

Groups Printed- Trucks & Buses

		Bark Street			Bark Street			Jaffrey Street		
		From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	2	0	0	1	0	0	0	0	3
07:30 AM	0	8	0	5	0	0	0	0	0	13
07:45 AM	0	2	0	4	0	0	0	0	0	6
Total	0	12	0	9	1	0	0	0	0	22
08:00 AM	1	1	0	2	0	0	0	0	0	4
08:15 AM	0	0	0	2	0	0	0	0	0	2
08:30 AM	0	0	0	2	0	0	0	0	0	2
08:45 AM	0	1	0	2	0	0	0	0	0	3_
Total	1	2	0	8	0	0	0	0	0	11
Grand Total	1	14	0	17	1	0	0	0	0	33
Apprch %	6.7	93.3	0	94.4	5.6	0	0	0	0	
Total %		42.4	0	51.5	3	0	0	0	0	

		Bark S	Street			Bark S	Street			Jaffrey	Street		
		From 1	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	5 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at ()7:15 AM										
07:15 AM	0	2	0	2	0	1	0	1	0	0	0	0	3
07:30 AM	0	8	0	8	5	0	0	5	0	0	0	0	13
07:45 AM	0	2	0	2	4	0	0	4	0	0	0	0	6
08:00 AM	1	1	0	2	2	0	0	2	0	0	0	0	4
Total Volume	1	13	0	14	11	1	0	12	0	0	0	0	26
% App. Total	7.1	92.9	0		91.7	8.3	0		0	0	0		
PHF	.250	.406	.000	.438	.550	.250	.000	.600	.000	.000	.000	.000	.500

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Bark Street W: Jaffrey Street City, State: Swansea, MA

Client: Pare/A. Archer

File Name: 05225C Site Code : 05225

Start Date : 9/4/2019

			Grou	aps Printed- Bik	es by Direction	on				
	F	Bark Street		Ba	rk Street		Jaffi	rey Street		
	F	rom North		Fre	om South		Fre	om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	4	0	0	0	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0_
Total	0	4	0	0	0	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	1	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0_
Total	0	0	0	1	0	0	0	0	0	1
Grand Total	0	4	0	1	0	0	0	0	0	5
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	80	0	20	0	0	0	0	0	

		Bark S	Street			Bark S	Street			Jaffrey	Street		
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	M to 08:4	5 AM - Pe	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at (07:00 AM										
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	4	0	4	0	0	0	0	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	0	4	0	0	0	0	0	0	0	0	4
% App. Total	0	100	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250

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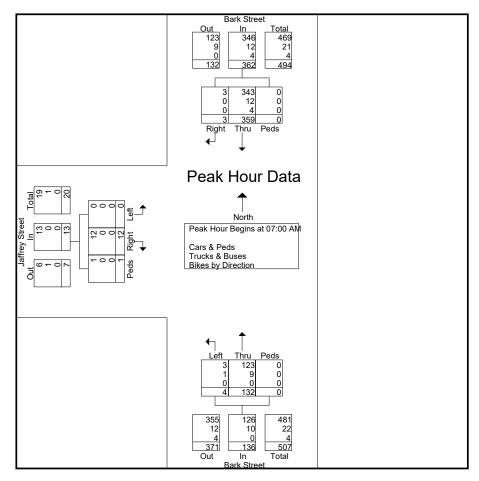
N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer

File Name: 05225C Site Code : 05225

Start Date : 9/4/2019

		Bark				Bark	Street			Jaffrey			
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 07:00 A	AM to 08:4	15 AM - P	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	07:00 AM	[
07:00 AM	1	70	0	71	13	3	0	16	2	0	0	2	89
07:15 AM	2	103	0	105	24	1	0	25	3	0	1	4	134
07:30 AM	0	125	0	125	38	0	0	38	3	0	0	3	166
07:45 AM	0	61	0	61	57	0	0	57	4	0	0	4	122
Total Volume	3	359	0	362	132	4	0	136	12	0	1	13	511
% App. Total	0.8	99.2	0		97.1	2.9	0		92.3	0	7.7		
PHF	.375	.718	.000	.724	.579	.333	.000	.596	.750	.000	.250	.813	.770
Cars & Peds	3	343	0	346	123	3	0	126	12	0	1	13	485
% Cars & Peds	100	95.5	0	95.6	93.2	75.0	0	92.6	100	0	100	100	94.9
Trucks & Buses	0	12	0	12	9	1	0	10	0	0	0	0	22
% Trucks & Buses	0	3.3	0	3.3	6.8	25.0	0	7.4	0	0	0	0	4.3
Bikes by Direction	0	4	0	4	0	0	0	0	0	0	0	0	4
% Bikes by Direction	0	1.1	0	1.1	0	0	0	0	0	0	0	0	0.8



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N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer

% Trucks & Buses

% Bikes by Direction

Bikes by Direction

0

0

0.1

File Name: 05225CC Site Code : 05225

Start Date : 9/4/2019

Page No : 1

		Groups F	rinted- Cars &	& Peds - Truck	s & Buses - B	ikes by Direct	tion			
	В	ark Street		Ba	ark Street		Jaff	rey Street		
	F	rom North		Fr	om South		Fre	om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	0	50	0	47	1	0	1	1	0	100
02:15 PM	1	45	0	60	2	0	1	0	0	109
02:30 PM	1	57	0	51	5	0	2	1	0	117
02:45 PM	1	55	0	83	5	0	0	0	0	144
Total	3	207	0	241	13	0	4	2	0	470
03:00 PM	0	49	0	57	2	0	2	0	0	110
03:15 PM	0	46	0	68	1	0	0	0	0	115
03:30 PM	0	59	0	78	1	0	0	0	0	138
03:45 PM	0	50	0	82	2	0	0	1	0	135
Total	0	204	0	285	6	0	2	1	0	498
04:00 PM	1	60	0	73	4	0	0	2	0	140
04:15 PM	1	68	0	104	0	0	3	1	0	177
04:30 PM	0	59	0	135	1	0	1	0	0	196
04:45 PM	0	58	0	92	2	0	0	1	0	153
Total	2	245	0	404	7	0	4	4	0	666
05:00 PM	0	55	0	91	1	0	0	0	0	147
05:15 PM	0	64	0	81	0	0	1	0	0	146
05:30 PM	0	54	0	74	1	0	1	0	0	130
05:45 PM	0	46	0	79	0	0	0	0	0	125
Total	0	219	0	325	2	0	2	0	0	548
Grand Total	5	875	0	1255	28	0	12	7	0	2182
Apprch %	0.6	99.4	0	97.8	2.2	0	63.2	36.8	0	
Total %	0.2	40.1	0	57.5	1.3	0	0.5	0.3	0	
Cars & Peds	5	856	0	1231	25	0	12	7	0	2136
% Cars & Peds	100	97.8	0	98.1	89.3	0	100	100	0	97.9
Trucks & Buses	0	18	0	20	3	0	0	0	0	41

		Bark	Street			Bark S	treet			Jaffrey	Street		
		From	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	rom 02:00 I	PM to 03:4	5 PM - Pe	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	02:45 PM										
02:45 PM	1	55	0	56	83	5	0	88	0	0	0	0	144
03:00 PM	0	49	0	49	57	2	0	59	2	0	0	2	110
03:15 PM	0	46	0	46	68	1	0	69	0	0	0	0	115
03:30 PM	0	59	0	59	78	1	0	79	0	0	0	0	138
Total Volume	1	209	0	210	286	9	0	295	2	0	0	2	507
% App. Total	0.5	99.5	0		96.9	3.1	0		100	0	0		
PHF	.250	.886	.000	.890	.861	.450	.000	.838	.250	.000	.000	.250	.880
Cars & Peds	1	204	0	205	272	6	0	278	2	0	0	2	485
% Cars & Peds	100	97.6	0	97.6	95.1	66.7	0	94.2	100	0	0	100	95.7
Trucks & Buses	0	5	0	5	13	3	0	16	0	0	0	0	21
% Trucks & Buses	0	2.4	0	2.4	4.5	33.3	0	5.4	0	0	0	0	4.1
Bikes by Direction	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0.2

4 0.3

0

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Bark Street File Name: 05225CC W: Jaffrey Street Site Code : 05225

City, State: Swansea, MA Start Date : 9/4/2019 Client: Pare/A. Archer

			Street				Street			-	Street		
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 04:00 I	PM to 05:4	15 PM - Pe	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	04:15 PM										
04:15 PM	1	68	0	69	104	0	0	104	3	1	0	4	177
04:30 PM	0	59	0	59	135	1	0	136	1	0	0	1	196
04:45 PM	0	58	0	58	92	2	0	94	0	1	0	1	153
05:00 PM	0	55	0	55	91	1	0	92	0	0	0	0	147
Total Volume	1	240	0	241	422	4	0	426	4	2	0	6	673
% App. Total	0.4	99.6	0		99.1	0.9	0		66.7	33.3	0		
PHF	.250	.882	.000	.873	.781	.500	.000	.783	.333	.500	.000	.375	.858
Cars & Peds	1	240	0	241	416	4	0	420	4	2	0	6	667
% Cars & Peds	100	100	0	100	98.6	100	0	98.6	100	100	0	100	99.1
Trucks & Buses	0	0	0	0	3	0	0	3	0	0	0	0	3
% Trucks & Buses	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0.4
Bikes by Direction	0	0	0	0	3	0	0	3	0	0	0	0	3
% Bikes by Direction	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0.4

Mario Perone, mperone l@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Bark Street W: Jaffrey Street City, State: Swansea, MA

Client: Pare/A. Archer

File Name: 05225CC Site Code : 05225

Start Date : 9/4/2019

	Ba	rk Street		Ba	rk Street		Jaff	rey Street		
	Fre	om North		Fro	m South			om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	0	47	0	47	1	0	1	1	0	97
02:15 PM	1	45	0	60	2	0	1	0	0	109
02:30 PM	1	47	0	51	5	0	2	1	0	107
02:45 PM	1	55	0	72	2	0	0	0	0	130
Total	3	194	0	230	10	0	4	2	0	443
03:00 PM	0	45	0	56	2	0	2	0	0	105
03:15 PM	0	46	0	66	1	0	0	0	0	113
03:30 PM	0	58	0	78	1	0	0	0	0	137
03:45 PM	0	50	0	80	2	0	0	11	0	133
Total	0	199	0	280	6	0	2	1	0	488
04:00 PM	1	60	0	73	4	0	0	2	0	140
04:15 PM	1	68	0	100	0	0	3	1	0	173
04:30 PM	0	59	0	133	1	0	1	0	0	194
04:45 PM	0	58	0	92	2	0	0	1 .	0	153
Total	2	245	0	398	7	0	4	4	0	660
05:00 PM	0	55	0	91	1	0	0	0	0	147
05:15 PM	0	64	0	81	0	0	1	0	0	146
05:30 PM	0	54	0	73	1	0	1	0	0	129
05:45 PM	0	45	0	78	0	0	0	0	0	123
Total	0	218	0	323	2	0	2	0	0	545
Grand Total	5	856	0	1231	25	0	12	7	0	2136
Apprch %	0.6	99.4	0	98	2	0	63.2	36.8	0	
Total %	0.2	40.1	0	57.6	1.2	0	0.6	0.3	0	

		Bark S	Street			Bark S	Street			Jaffrey	Street		
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Tota
eak Hour Analysis F	rom 02:00 F	M to 03:4	5 PM - Pe	ak 1 of 1									
eak Hour for Entire	Intersection	Begins at	03:00 PM										
03:00 PM	0	45	0	45	56	2	0	58	2	0	0	2	105
03:15 PM	0	46	0	46	66	1	0	67	0	0	0	0	113
03:30 PM	0	58	0	58	78	1	0	79	0	0	0	0	137
03:45 PM	0	50	0	50	80	2	0	82	0	1	0	1	133
Total Volume	0	199	0	199	280	6	0	286	2	1	0	3	488
% App. Total	0	100	0		97.9	2.1	0		66.7	33.3	0		
PHF	.000	.858	.000	.858	.875	.750	.000	.872	.250	.250	.000	.375	.891
eak Hour Analysis Fi	04.00 DI	A to 05.45	DM Dool	l- 1 of 1									
eak Hour Analysis Fl				K 1 01 1									
04:15 PM	1 1	68	0	69	100	0	0	100	3	1	0	4	173
04:30 PM	0	59	0	59	133	1	0	134	1	0	0	1	173 194
04:45 PM	0	58	0	58	92	2	0	94	0	1	0	1	153
05:00 PM	0	55	0	55	91	1	0	92	0	0	0	0	147
Total Volume	1	240	0	241	416	4	0	420	4	2	0		667
rotai volume	1			241		4	U	420	4	2	U	6	00
% App. Total	0.4	99.6	0		99				66.7	33.3			

Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer

File Name: 05225CC Site Code : 05225

Start Date : 9/4/2019

Page No : 1

			Gro	ups Printed- Tr						
		ark Street			rk Street			rey Street		
		om North			m South			om West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	0	3	0	0	0	0	0	0	0	3
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	10	0	0	0	0	0	0	0	10
02:45 PM	0	0	0	10	3	0	0	0	0	13
Total	0	13	0	10	3	0	0	0	0	26
03:00 PM	0	4	0	1	0	0	0	0	0	5
03:15 PM	0	0	0	2	0	0	0	0	0	2
03:30 PM	0	1	0	0	0	0	0	0	0	1
03:45 PM	0	0	0	2	0	0	0	0	0	2
Total	0	5	0	5	0	0	0	0	0	10
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	2	0	0	0	0	0	2
04:30 PM	0	0	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0_
Total	0	0	0	3	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	1	0	0	0	0	0	1_
Total	0	0	0	2	0	0	0	0	0	2
Grand Total	0	18	0	20	3	0	0	0	0	41
Apprch %	0	100	0	87	13	0	0	0	0	
Total %	0	43.9	0	48.8	7.3	0	0	0	0	

		Bark S	Stroot			Bark S	Stroot			Jaffrey	Stroot		
										From			
		From				From							
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 02:00 P	M to 03:4	5 PM - Pe	eak 1 of 1									
Peak Hour for Entire	Intersection 1	Begins at (02:30 PM										
02:30 PM	0	10	0	10	0	0	0	0	0	0	0	0	10
02:45 PM	0	0	0	0	10	3	0	13	0	0	0	0	13
03:00 PM	0	4	0	4	1	0	0	1	0	0	0	0	5
03:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
Total Volume	0	14	0	14	13	3	0	16	0	0	0	0	30
% App. Total	0	100	0		81.2	18.8	0		0	0	0		
PHF	.000	.350	.000	.350	.325	.250	.000	.308	.000	.000	.000	.000	.577
Peak Hour Analysis F	rom 04:00 PN	M to 05:45	PM - Pea	k 1 of 1									
Peak Hour for Entire I	ntersection B	Begins at 04	1:00 PM										
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	0	0	3	0	0	0	0	3
% App. Total	0	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.375	.000	.000	.375	.000	.000	.000	.000	.375

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N/S: Bark Street W: Jaffrey Street City, State: Swansea, MA

Client: Pare/A. Archer

File Name: 05225CC Site Code : 05225

Start Date : 9/4/2019

			Gr	oups Printed-	Bikes by Direc	tion				
	l	Bark Street		•	Bark Street		J	laffrey Street		
	1	From North			From South			From West		
Start Time	Right	Thru	Peds	Thru	Left	Peds	Right	Left	Peds	Int. Total
02:00 PM	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	1	0	0	0	0	0	1_
Total	0	0	0	1	0	0	0	0	0	1
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	2	0	0	0	0	0	2
04:30 PM	0	0	0	1	0	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	3	0	0	0	0	0	3
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	0	0	0	0	0	0	1
Total	0	1	0	0	0	0	0	0	0	1
Grand Total	0	1	0	4	0	0	0	0	0	5
Apprch %	0	100	0	100	0	0	0	0	0	
Total %	0	20	0	80	0	0	0	0	0	

		Bark S	Street			Bark S	Street			Jaffrey	Street		
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis I	From 02:00 F	M to 03:4	5 PM - Pe	eak 1 of 1									
Peak Hour for Entire	Intersection	Begins at	02:00 PM										
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
Total Volume	0	0	0	0	1	0	0	1	0	0	0	0	1
% App. Total	0	0	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.000	.000	.250	.000	.000	.000	.000	.250
	04.00 77		D) (D										
Peak Hour Analysis F				k l of l									
Peak Hour for Entire l	Intersection E	Begins at 04	4:00 PM					1				1	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	2	0	0	2	0	0	0	0	2
04:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	3	0	0	3	0	0	0	0	3
% App. Total	0	0	0		100	0	0		0	0	0		
PHE	000	000	000	000	375	000	000	375	000	000	000	000	375

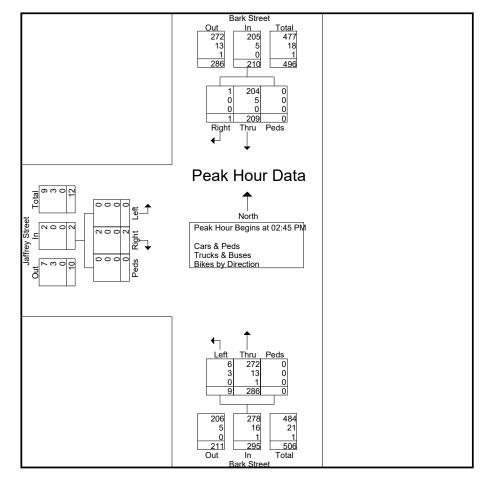
Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

N/S: Bark Street W: Jaffrey Street

City, State: Swansea, MA Client: Pare/A. Archer File Name: 05225CC Site Code: 05225

Start Date : 9/4/2019

		Bark S				Bark S				Jaffrey			
		From	North			From	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	From 02:00 P	M to 03:4	5 PM - Pe	ak 1 of 1									
Peak Hour for Entire	Intersection 1	Begins at (02:45 PM										
02:45 PM	1	55	0	56	83	5	0	88	0	0	0	0	144
03:00 PM	0	49	0	49	57	2	0	59	2	0	0	2	110
03:15 PM	0	46	0	46	68	1	0	69	0	0	0	0	115
03:30 PM	0	59	0	59	78	1	0	79	0	0	0	0	138
Total Volume	1	209	0	210	286	9	0	295	2	0	0	2	507
Martin Markett	0.5	99.5	0		96.9	3.1	0		100	0	0		
PHF	.250	.886	.000	.890	.861	.450	.000	.838	.250	.000	.000	.250	.880
Cars & Peds	1	204	0	205	272	6	0	278	2	0	0	2	485
% Cars & Peds	100	97.6	0	97.6	95.1	66.7	0	94.2	100	0	0	100	95.7
Trucks & Buses	0	5	0	5	13	3	0	16	0	0	0	0	21
% Trucks & Buses	0	2.4	0	2.4	4.5	33.3	0	5.4	0	0	0	0	4.1
Bikes by Direction	0	0	0	0	1	0	0	1	0	0	0	0	1
% Bikes by Direction	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0.2



Mario Perone, mperone1@verizon.net tel (781) 587-0086 cell (781) 439-4999

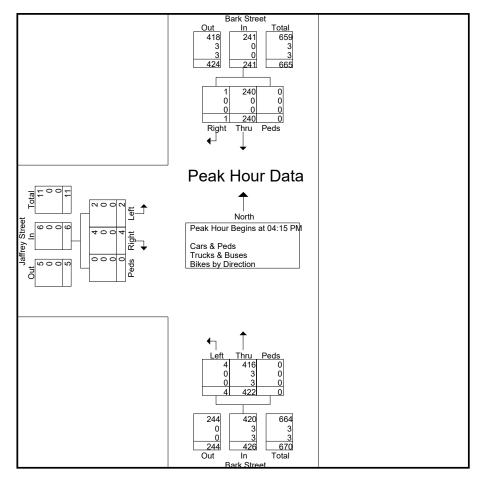
N/S: Bark Street W: Jaffrey Street City, State: Swansea, MA

Client: Pare/A. Archer

Site Code : 05225 Start Date : 9/4/2019

File Name: 05225CC

		Bark S	Street			Bark S	treet			Jaffrey	Street		
		From	North			From S	South			From	West		
Start Time	Right	Thru	Peds	App. Total	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Int. Total
Peak Hour Analysis F	rom 04:00 P	M to 05:4	5 PM - Pe	ak 1 of 1									
Peak Hour for Entire	Intersection	Begins at (04:15 PM										
04:15 PM	1	68	0	69	104	0	0	104	3	1	0	4	177
04:30 PM	0	59	0	59	135	1	0	136	1	0	0	1	196
04:45 PM	0	58	0	58	92	2	0	94	0	1	0	1	153
05:00 PM	0	55	0	55	91	1	0	92	0	0	0	0	147
Total Volume	1	240	0	241	422	4	0	426	4	2	0	6	673
% App. Total	0.4	99.6	0		99.1	0.9	0		66.7	33.3	0		
PHF	.250	.882	.000	.873	.781	.500	.000	.783	.333	.500	.000	.375	.858
Cars & Peds	1	240	0	241	416	4	0	420	4	2	0	6	667
% Cars & Peds	100	100	0	100	98.6	100	0	98.6	100	100	0	100	99.1
Trucks & Buses	0	0	0	0	3	0	0	3	0	0	0	0	3
% Trucks & Buses	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0.4
Bikes by Direction	0	0	0	0	3	0	0	3	0	0	0	0	3
% Bikes by Direction	0	0	0	0	0.7	0	0	0.7	0	0	0	0	0.4



Transportation Data Corporation Mario Perone, mperonel@verizon.net

Page 1

tel (781) 587-0086 cell (781) 439-4999 Brayton Avenue south of Somerset Middle School Driveway

City, State: Somerset, MA Client: Pare/A. Archer

05225BVOLUME Site Code: 05225

Start 9	9/10/2019	NB		SB	С	ombined	9/11	/2	NB		SB	Со	mbined
Time	Tue A.		И. A.M							. A.M			P.M.
12:00	6		1	47	7	96		4	52	0	34	4	86
12:15	4		1	38	5	85		6	49	1	44	7	93
12:30	4		3	48	7	98		2	48	0	49	2	97
12:45	5		4	56	9	95		3	57	1	32	4	89
01:00	3		2	36	5	81		2	46	1	49	3	95
01:15	1		2	51	3	99		3	54	0	55	3	109
01:30	3	-	2	57	5	95		2	39	1	43	3	82
01:45	2		0	49	2	110		0	37	1	41	1	78
02:00	1		1	49	2	100		2	49	0	54	2	103
02:00	0		1	42	1	108		1	75	1	40	2	115
02:30	1		1	54	2	151		0	90	4	50	4	140
02:45	2		0	87	2	169		2	55	0	91	2	146
03:00	0		1	49	1	132		3	103	4	59	7	162
03:00	3		0	49	3	128		0	87	2	60	2	147
03:30	2		2	74	4	180		0	84	2	70	2	154
03:45	2		4	99	6	188		2	98	3	53	5	151
04:00	0		8	60	8	147		2	76	6	68	8	144
04:15	2		6	79	8	177		1	129	8	81	9	210
04:30	1		13	111	14	207		1	101	12	80	13	181
04:45	2		11	52	13	141		3	90	10	65	13	155
05:00	3		13	66	16	157		5	89	8	69	13	158
05:15	6		19	57	25	149		11	119	16	61	27	180
05:30	8		22	53	30	137		5	90	23	48	28	138
05:45	7		26	68	33	150		7	61	34	44	41	105
06:00	14		43	64	57	147		13	83	38	45	51	128
06:15	17		45	44	62	127		15	76	34	40	49	116
06:30	13	80	70	54	83	134		17	53	65	50	82	103
06:45	28		64	49	92	104		29	70	68	35	97	105
07:00	37		76	40	113	103		42	46	82	31	124	77
07:15	53	42	69	27	122	69		55	42	67	32	122	74
07:30	93	44	129	31	222	75		80	66	119	25	199	91
07:45	61	57	102	30	163	87		76	40	107	20	183	60
08:00	40	44	67	21	107	65		44	42	63	25	107	67
08:15	37	40	63	24	100	64		41	34	65	19	106	53
08:30	45	30	72	20	117	50		39	39	65	22	104	61
08:45	33	19	67	13	100	32		39	27	56	20	95	47
09:00	25		67	20	92	44		40	27	69	11	109	38
09:15	34	21	45	15	79	36		32	24	52	8	84	32
09:30	34		38	8	72	35		35	21	51	7	86	28
09:45	39		38	14	77	28		31	13	40	8	71	21
10:00	45		44	4	89	19		35	17	47	12	82	29
10:15	31	8	53	13	84	21		46	5	27	8	73	13
10:30	45		55	8	100	18		39	13	52	7	91	20
10:45	47		36	6	83	12		48	8	43	6	91	14
11:00	51		42	3	93	5		50	6	37	5	87	11
11:15	40		49	4	89	15		47	8	42	3	89	11
11:30	47		43	1	90	8		52	6	49	2	101	8
11:45	55		54	3	109	5		53	4	39	3	92	7
Total	1032		1574	1947	2606	4483		1065	2548	1515	1784	2580	4332
Day Total		3568		1947 3521		089			613		299		
% Total	14.6%		22.2%	27.5%	,	009		15.4%	36.9%	21.9%	25.8%	08	912
Peak	- 07:15		07:00	03:45	07:00	03:45	-	07:15	04:15	07:00	04:15	07:00	04:15
Vol.	- 247		376	349	620	719	-	255	409	375	295	628	704
P.H.F.	0.664	0.896	0.729	0.786	0.698	0.868		0.797	0.793	0.788	0.910	0.789	0.838
ADT	ADT 5,902	AAE	OT 5,902										

Page 1

Mario Perone, mperonel@verizon.net tel (781) 587-0086 cell (781) 439-4999

05225BVOLUME Site Code: 05225

Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA Client: Pare/A. Archer

Start	9/10/2019		ΝB		Totals		SB		Totals		ed Totals
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoo
12:00		6	49			1	47				
12:15		4	47			1	38				
12:30		4	50			3	48				
12:45		5	39	19	185	4	56	9	189	28	37
01:00		3	45			2	36				
01:15		1	48			2	51				
01:30		3	38			2	57				
01:45		2	61	9	192	0	49	6	193	15	38
02:00		1	51	-		1	49				
02:15		0	66			1	42				
02:30		1	97			1	54				
02:45		2	82	4	296	0	87	3	232	7	52
03:00		0	83	7	200	1	49	J	202	•	0.
03:15		3	79			0	49				
03:30		2	106			2	74				
03:45		2	89	7	357	4	99	7	271	14	6:
		0	89	7	357	8		/	211	14	0
04:00		2					60				
04:15			98			6	79				
04:30		1	96	_	070	13	111		000	4.0	•
04:45		2	89	5	370	11	52	38	302	43	6
05:00		3	91			13	66				
05:15		6	92			19	57				
05:30		8	84			22	53				
05:45		7	82	24	349	26	68	80	244	104	5
06:00		14	83			43	64				
06:15		17	83			45	44				
06:30		13	80			70	54				
06:45		28	55	72	301	64	49	222	211	294	5
07:00		37	63			76	40				
07:15		53	42			69	27				
07:30		93	44		İ	129	31		İ		
07:45		61	57	244	206	102	30	376	128	620	3
08:00		40	44		200	67	21	0.0	.20	020	•
08:15		37	40			63	24				
08:30		45	30			72	20				
08:45		33	19	155	133	67	13	269	78	424	2
09:00		25	24	100	100	67	20	209	, 0	74	
09:00		34	21			45	15				
09:13		34	27			38	8				
09:30		39	14	132	86	38	14	188	57	320	1
				132	00			100	37	320	11
10:00		45	15			44	4				
10:15		31	8			53	13				
10:30		45	10	400	00	55	8	400	0.1	0.50	
10:45		47	6	168	39	36	6	188	31	356	
11:00		51	2			42	3				
11:15		40	11			49	4				
11:30		47	7			43	1				
11:45		55	2	193	22	54	3	188	11	381	
Total		1032	2536			1574	1947			2606	44
Combined		25	68			35	21			70	80
Total		33	000			33	Z 1			70	υ υ
ercentag	0.00/										
e	0.0%										

Page 2

Mario Perone, mperonel@verizon.net tel (781) 587-0086 cell (781) 439-4999

05225BVOLUME Site Code: 05225

Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA Client: Pare/A. Archer

Start	9/11/2019	N	В	Hour	Totals	S	В	Hour	Totals	Combine	ed Totals
Time	Wed	Morning	Afternoon		Afternoon		Afternoon		Afternoon		Afternoon
12:00		4	52	-		Ō	34	-		-	
12:15		6	49			1	44				
12:30		2	48			0	49				
12:45		3	57	15	206	1	32	2	159	17	365
01:00		2	46			1	49				
01:15		3	54			0	55				
01:30		2	39			1	43				
01:45		0	37	7	176	1	41	3	188	10	364
02:00		2	49			0	54				
02:15		2 1	75			0 1	40				
02:30			90			4	50				
02:45		0 2	55	5	269	0	91	5	235	10	504
03:00		3	103	-		4	59				
03:15		0	87			2	60				
03:30		0	84			2	70				
03:45		0 2	98	5	372	3	53	11	242	16	614
04:00		2	76	J	012	6	68		272	10	014
04:15		1	129			8	81				
04:13		1	101			12	80				
04:45		2	90	7	396	10	65	36	294	43	690
		3 5	89	1	390			30	294	43	090
05:00		11	119			8 16	69 61				
05:15		- 11				10					
05:30		5 7	90	00	250	23 34	48	0.4	000	400	504
05:45			61	28	359	34	44	81	222	109	581
06:00		13	83			38 34	45				
06:15		15	76			34	40				
06:30		17	53			65	50				
06:45		29	70	74	282	68	35	205	170	279	452
07:00		42 55	46			82	31				
07:15		55	42			67	32				
07:30		80	66			119	25				
07:45		76	40	253	194	107	20	375	108	628	302
08:00		44	42			63	25				
08:15		41	34			65	19				
08:30		39	39			65	22				
08:45		39	27	163	142	56	20	249	86	412	228
09:00		40	27			69	11				
09:15		32	24			52	8				
09:30		35	21			51	7				
09:45		31	13	138	85	40	8	212	34	350	119
10:00		35	17			47	12				
10:15		46	5			27	8				
10:30		39	13			52	7				
10:45		48	8	168	43	43	6	169	33	337	76
11:00		50	6			37	5				
11:15		47	8			42	3				
11:30		52	6			49	2				
11:45		53	4	202	24	39	3	167	13	369	37
Total		1065	2548		_ +	1515	1784	101	.5	2580	4332
Combined											
Total		361	13			32	99			69	12
Percentag											
e	0.0%										
Total		2097	5084			3089	3731			5186	8815
Percent		29.2%	70.8%			45.3%	54.7%			37.0%	63.0%
, Stociit		20.270	. 0.070			70.070	O-1.1 /0			37.070	30.070
ADT	A	ADT 5,902	AA	ADT 5,902							

Appendix B

Crash Data



Somerset Middle School Somerset, MA October 2016 ~ September 2019 Pare Project No. 19118.02 October 2019



Crash Ref					Travel	No of			Weather	Road		
No	Crash No	Crash Date	On Street	Intersecting Street	Directions	Vehicles	Injuries	Fatalities	Condition	Condition	Lighting	Crash Type
1	4640485	12/21/2018	Brayton Avenue	Fourth Street	NB	1	0	0	Rain	Wet	Daylight	Object (UP)
2	4309159	01/04/2017	Brayton Avenue	Read Street	NB	2	0	0	Clear	Dry	Dark lighted	Rear-end
3	4489760	01/24/2018	Brayton Avenue	Read Street	NB/WB	2	3	0	Clear	Dry	Daylight	Angle
4	4502650	02/17/2018	Brayton Avenue	Read Street	SB	2	0	0	Clear	Dry	Dark lighted	Rear-end
5	4520665	03/22/2018	Brayton Avenue	Read Street	SB/EB	2	0	0	Cloudy/Rain	Wet	Daylight	Angle
6	4523944	04/03/2018	Brayton Avenue	Read Street	SB	2	0	0	Clear	Dry	Daylight	Rear-end
7	4554970	06/17/2018	Brayton Avenue	Read Street	SB	3	0	0	Clear/Other	Dry	Dark lighted	Rear-end
8	4271584	10/27/2016	Read Street	Brayton Avenue	EB	3	0	0	Rain/Other	Wet	Dusk	Rear-end
9	4532314	04/22/2018	Read Street	Brayton Avenue	NB/WB	2	2	0	Clear	Dry	Daylight	Angle
10	4585325	08/17/2018	Read Street	Brayton Avenue	EB/NB	2	0	0	Clear	Dry	Daylight	Angle
11	4669494	02/23/2019	Read Street	Brayton Avenue	EB	2	0	0	Clear	Dry	Dark lighted	Rear-end
12	4707505	06/01/2019	Read Street	Brayton Avenue	WB	3	1	0	Clear	Dry	Dark lighted	Head-on
13	4721264	07/03/2019	Read Street	Brayton Avenue	WB	3	0	0	Clear	Dry	Daylight	Rear-end
14	4748989	09/09/2019	Read Street	Brayton Avenue	WB	2	0	0	Clear		Daylight	Rear-end
15	4407621	08/12/2017	Brayton Avenue		NB/SB	2	0	0	Clear	Dry	Daylight	Sideswipe opposite
16	4439671	10/03/2017	Brayton Avenue		NB	3	1	0	Clear	Dry	Daylight	Rear-end
17	4457781	11/17/2017	Brayton Avenue		WB	2	0	0	Clear	Dry	Dark lighted	Angle
18	4457784	11/18/2017	Brayton Avenue		EB/SB	2	0	0	Rain	Wet	Dark lighted	Angle
19	4648859	01/04/2019	Brayton Avenue		NB	1	0	0	Clear	Dry	Dark lighted	Object (deer)
20	4750404	09/13/2019	Brayton Avenue		SB	2	0	0	Clear		Daylight	Rear-end

Module 3 - Preliminary Design Program 559

Appendix C

Speed Studies



Transportation Data Corporation
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05225Bspeed Site Code: 05225

Page 1

Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA
Client: Pare/A Archer

Northbound Start	1	16	21	26	31	36	41	46	51	56	61	66	71		85th	95th
Time	15	20	21 25	30	35	40	45	50	55	60	65	70	7 i 75	Total	Percent	Percent
09/10/19	0	0	25		6	40 6	45	0	0	0	00	0	0	10tai	38	40
09/10/19	0	0	0	0	2	6	1	0	0	0	0	0	0	9	39	40
01:00	0	0	0	0	2	1	1	0	0	0	0	0	0	4	42	42
02:00	0	0	0	2		2	1	1	0	0	0	0	0	7	44	48
03.00		-	0	0	1	3	1	0	0	0	0	0		5	44	43
05:00	0	0	0	1	11	10	2	0	-	0		0	0	24	39	43
		0	0					~	0		0		0			
06:00 07:00	0	41	55	8 59	30 38	22 23	10 3	0	0	0	0	0	0	72 244	39 33	43 38
	25		34	4 6	38			0		-	0	-			36	39
08:00	5	3		46 16	38 48	25 45	3	1	0 2	0	0	0	0	155	39	39 42
09:00	2	5	4				9	1	2	0	0	0	0	132		
10:00	3	2	4	22	62	63	14	0	1	0	0	0	0	168	39	42
11:00	6	2	4	25	74	66	15	1	0	0	0	0	0	193	39	42
12 PM	3	4	1	17	72	72	14	2	0	0	0	0	0	185	39	42
13:00	2	4	4	19	76	68	15	4	0	0	0	0	0	192	39	43
14:00	9	18	85	80	53	43	8	0	0	0	0	0	0	296	35	39
15:00	11	26	124	148	41	7	0	0	0	0	0	0	0	357	29	33
16:00	11	8	38	113	149	46	5	0	0	0	0	0	0	370	34	38
17:00	6	3	14	45	150	114	15	1	0	0	1	0	0	349	38	39
18:00	5	3	9	55	140	72	13	4	0	0	0	0	0	301	38	40
19:00	0	2	7	30	89	68	9	1	0	0	0	0	0	206	38	39
20:00	1	0	1	14	60	41	12	4	0	0	0	0	0	133	39	43
21:00	0	0	1	5	46	28	5	1	0	0	0	0	0	86	38	41
22:00	0	1	2	4	12	17	3	0	0	0	0	0	0	39	39	41
23:00	0	0	0	1	3	15	3	0	0	0	0	0	0	22	39	43
Total	89	123	387	714	1204	863	163	21	3	0	1	0	0	3568		
Percent	2.5%	3.4%	10.8%	20.0%	33.7%	24.2%	4.6%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	07:00	07:00	11:00	11:00	11:00	03:00	09:00					07:00		
Vol.	25	41	55	59	74	66	15	1	2					244		
PM Peak	15:00	15:00	15:00	15:00	17:00	17:00	13:00	13:00			17:00			16:00		
Vol.	11	26	124	148	150	114	15	4			1			370		

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05225Bspeed

Site Code: 05225

Transportation Data Corporation
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Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA

Client: Pare/A Archer

	20 2	21 26 25 30	31	36										
Time 15	20 2		JI		41	46	51	56	61	66	71		85th	95th
			35	40	45	50	55	60	65	70	7 T	Total	Percent	Percent
		0 0	6	6	2	1	0	0	0	0	0	15	41	46
01:00 0	1	0 1	2	2	1	0	0	0	0	0	0	7	39	43
02:00 0	0	0 0	2	3	0	0	0	0	0	0	0	5	38	39
03:00 0	1	0 0	0	2	1	1	0	0	0	0	0	5	46	48
04:00 0	0	0 1	0	3	1	1	1	0	0	0	0	7	49	53
05:00 0	0	1 1	10	12	3	1	0	0	0	0	0	28	39	44
06:00 1	2	0 11	32	24	4	0	0	0	0	0	0	74	38	40
		68 47	44	19	4	0	0	0	0	0	0	253	33	37
		46 46	34	17	6	Ö	0	0	0	0	0	163	34	39
09:00 5	2	7 18	49	48	8	1	0	0	0	0	0	138	38	41
10:00 1	1	5 24	70	49	15	3	0	0	0	0	0	168	39	43
11:00 4	2	6 26	81	66	16	1	0	0	0	0	0	202	38	42
12 PM 4	2	6 20	81	75	14	3	1	0	0	0	0	206	39	42
13:00 1	2	0 14	65	73	17	4	0	0	0	0	0	176	39	43
14:00 10	25 5	57 63	72	38	3	0	0	0	1	0	0	269	35	38
15:00 10	41 12	124 121	61	15	0	0	0	0	0	0	0	372	31	34
16:00 14	10 5	53 108	138	63	9	1	0	0	0	0	0	396	36	39
17:00 10	5 1	10 64	158	97	15	0	0	0	0	0	0	359	37	39
18:00 6	3	4 39	121	91	17	1	0	0	0	0	0	282	38	41
19:00 1	2	1 15	91	61	19	4	0	0	0	0	0	194	39	43
20:00 3	1	0 11	73	42	11	1	0	0	0	0	0	142	38	42
21:00 1	1	1 10	29	31	8	4	0	0	0	0	0	85	39	44
22:00 0	0	0 5	14	15	4	4	0	0	1	0	0	43	43	48
23:00 0	0	0 2	7	11	4	0	0	0	0	0	0	24	40	43
		389 647	1240	863	182	31	2	0	2	0	0	3613		
	7% 10.8		34.3%	23.9%	5.0%	0.9%	0.1%	0.0%	0.1%	0.0%	0.0%			
AM Peak 07:00 07:			11:00	11:00	11:00	10:00	04:00					07:00		
		68 47	81	66	16	3	1					253		
PM Peak 16:00 15:			17:00	17:00	19:00	13:00	12:00		14:00			16:00		
Vol. 14	41 12	124 121	158	97	19	4	1		1			396		
Grand 175 2	94 77	776 1361	2444	1726	345	52	5	0	3	0	0	7181	,	
	1% 10.8	.8% 19.0%	34.0%	24.0%	4.8%	0.7%	0.1%	0.0%	0.0%	0.0%	0.0%			

15th Percentile: 23 MPH 32 MPH

50th Percentile: 38 MPH 85th Percentile: 95th Percentile: 40 MPH

10 MPH Pace Speed: 31-40 MPH Stats

> Number of Vehicles > 30 MPH: 4575 Percent of Vehicles > 30 MPH : Mean Speed(Average) : 63.7% 32 MPH

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05225Bspeed Site Code: 05225

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Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA Client: Pare/A. Archer

Southbound	ce/A. Arc	ner														
Start	1	16	21	26	31	36	41	46	51	56	61	66	71		85th	95th
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	Total	Percent	Percent
09/10/19	0	0	1	1	2	3	2	0	0	0	0	0	0	9	41	43
01:00	0	0	0	0	1	4	0	1	0	0	0	0	0	6	45	48
02:00	0	0	0	0	1	2	0	0	0	0	0	0	0	3	38	39
03:00	0	0	0	0	2	2	2	1	0	0	0	0	0	7	44	48
04:00	0	0	0	2	9	15	9	2	1	0	0	0	0	38	43	47
05:00	0	0	1	3	23	31	16	5	1	0	0	0	0	80	43	46
06:00	1	1	6	9	50	115	33	7	0	0	0	0	0	222	41	44
07:00	7	22	63	112	95	63	13	0	1	0	0	0	0	376	36	39
08:00	5	12	69	80	63	24	16	0	0	0	0	0	0	269	34	40
09:00	2	1	1	16	71	65	22	9	1	0	0	0	0	188	40	45
10:00	0	0	5	16	82	66	16	3	0	0	0	0	0	188	39	43
11:00	2	2	8	17	64	75	18	2	0	0	0	0	0	188	39	42
12 PM	3	1	6	14	61	73	25	6	0	0	0	0	0	189	40	44
13:00	4	4	4	19	60	72	29	1	0	0	0	0	0	193	40	43
14:00	23	14	43	59	57	22	13	1	0	0	0	0	0	232	35	40
15:00	14	38	95	80	37	5	2	0	0	0	0	0	0	271	30	34
16:00	42	29	54	73	69	27	7	0	0	0	0	1	0	302	34	38
17:00	6	6	25	42	79	68	17	1	0	0	0	0	0	244	38	41
18:00	8	2	10	49	89	44	9	0	0	0	0	0	0	211	37	39
19:00	5	0	0	19	47	42	12	3	0	0	0	0	0	128	39	43
20:00	0	0	3	6	29	27	11	2	0	0	0	0	0	78	40	44
21:00	0	0	0	2	17	30	6	2	0	0	0	0	0	57	39	44
22:00	1	3	0	1	6	14	4	1	1	0	0	0	0	31	41	47
23:00	0	0	0	1	3	3	2	2	0	0	0	0	0	11	45	48
Total	123	135	394	621	1017	892	284	49	5	0	0	1	0	3521		
Percent	3.5%	3.8%	11.2%	17.6%	28.9%	25.3%	8.1%	1.4%	0.1%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	08:00	07:00	07:00	06:00	06:00	09:00	04:00					07:00		
Vol.	7	22	69	112	95	115	33	9	1					376		
PM Peak	16:00	15:00	15:00	15:00	18:00	12:00	13:00	12:00	22:00			16:00		16:00		
Vol.	42	38	95	80	89	73	29	6	1			1		302		

Ai3 Architects, LLC Module 3 - Preliminary Design Program

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Brayton Avenue south of Somerset Middle School Driveway City, State: Somerset, MA

Client: Pare/A. Archer

Southbound	e/A. Arc	ner														
Start	1	16	21	26	31	36	41	46	51	56	61	66	71		85th	95th
Time	15	20	25	30	35	40	45	50	55	60	65	70	75	Total	Percent	Percent
09/11/19	0	1	0	0	0	1	0	0	0	0	0	0	0	2	38	39
01:00	0	0	0	0	2	0	1	0	0	0	0	0	0	3	42	44
02:00	0	0	0	0	1	2	2	0	0	0	0	0	0	5	43	44
03:00	0	0	0	1	1	7	1	1	0	0	0	0	0	11	41	47
04:00	0	0	0	1	7	15	9	4	0	0	0	0	0	36	44	47
05:00	1	0	0	1	27	36	11	4	1	0	0	0	0	81	41	46
06:00	0	0	6	11	56	98	31	2	1	0	0	0	0	205	40	43
07:00	22	27	63	90	107	51	14	1	0	0	0	0	0	375	35	39
08:00	1	3	66	100	42	28	6	3	0	0	0	0	0	249	34	39
09:00	1	1	1	46	73	60	27	2	1	0	0	0	0	212	39	43
10:00	2	0	4	28	54	56	22	3	0	0	0	0	0	169	39	43
11:00	0	0	10	14	76	42	20	4	1	0	0	0	0	167	39	44
12 PM	1	0	6	18	44	71	18	1	0	0	0	0	0	159	39	43
13:00	4	1	5	14	57	85	18	3	1	0	0	0	0	188	39	43
14:00	13	22	49	57	49	38	5	2	0	0	0	0	0	235	36	39
15:00	13	20	70	77	45	12	4	1	0	0	0	0	0	242	32	37
16:00	33	22	46	52	74	47	18	2	0	0	0	0	0	294	37	41
17:00	3	0	8	41	83	68	18	1	0	0	0	0	0	222	38	42
18:00	2	1	8	21	56	63	17	2	0	0	0	0	0	170	39	43
19:00	4	4	1	7	40	39	13	0	0	0	0	0	0	108	39	42
20:00	1	1	0	9	33	29	11	2	0	0	0	0	0	86	40	43
21:00	0	0	1	1	15	15	2	0	0	0	0	0	0	34	38	40
22:00	0	0	0	2	8	19	4	0	0	0	0	0	0	33	39	42
23:00	0	0	0	1	3	5	4	0	0	0	0	0	0	13	42	44
Total	101	103	344	592	953	887	276	38	5	0	0	0	0	3299		
Percent	3.1%	3.1%	10.4%	17.9%	28.9%	26.9%	8.4%	1.2%	0.2%	0.0%	0.0%	0.0%	0.0%			
AM Peak	07:00	07:00	08:00	08:00	07:00	06:00	06:00	04:00	05:00					07:00		
Vol.	22	27	66	100	107	98	31	4	1					375		
PM Peak	16:00	14:00	15:00	15:00	17:00	13:00	12:00	13:00	13:00					16:00		
Vol.	33	22	70	77	83	85	18	3	1					294		
Grand Total	224	238	738	1213	1970	1779	560	87	10	0	0	1	0	6820		
Percent	3.3%	3.5%	10.8%	17.8%	28.9%	26.1%	8.2%	1.3%	0.1%	0.0%	0.0%	0.0%	0.0%			

23 MPH 15th Percentile :

32 MPH 38 MPH 50th Percentile: 85th Percentile: 95th Percentile: 42 MPH

10 MPH Pace Speed : 31-40 MPH Stats

> 4407 64.6% Number of Vehicles > 30 MPH: Percent of Vehicles > 30 MPH :
> Mean Speed(Average) : 32 MPH

05225Bspeed

Site Code: 05225

Appendix D

Census Data



Somerset, Massachusetts Population: Census 2010 and 2000 Interactive Map, Demographics, Statistics, Quick Facts

Compare population statistics about Somerset, MA by race, age, gender, Latino/Hispanic origin etc. CensusViewer delivers detailed demographics and population statistics from the 2010 Census, 2000 Census, American Community Survey (ACS), registered voter files, commercial data sources and more.

Experience breakthrough technology for census data discovery, population analysis and visualization over Bing Maps. Visually "fly over" a state, viewing in great detail the census blocks, census tracts, cities, counties and various political districts in your selection or "zoom down" to the street level to get demographic statistics and information about the population in an individual census block or census tract.



Click on any map link to see our blazing-fast data visualization over Bing Maps in action. Read more about the unprecedented demographic insight and analytical power of CensusViewer interactive maps.

CensusViewer maps, data and statistics pages for all states, counties and cities.

Somerset, Massachusetts - Overview	2010	Census	2000	Census	2000-201	0 Change
	Counts	Percentages	Counts	<u>Percentages</u>	Change	Percentages
Total Population	18,165	100.00%	17,973	100.00%	192	1.07%
Population by Race						
American Indian and Alaska native alone	20	0.11%	22	0.12%	-2	-9.09%
Asian alone	148	0.81%	95	0.53%	53	55.79%
Black or African American alone	68	0.37%	30	0.17%	38	126.67%
Native Hawaiian and Other Pacific native alone	1	0.01%	4	0.02%	-3	-75.00%
Some other race alone	54	0.30%	28	0.16%	26	92.86%
Two or more races	174	0.96%	142	0.79%	32	22.54%
White alone	17,700	97.44%	17,652	98.21%	48	0.27%
Population by Hispanic or Latino Origin (of any race)						
Persons Not of Hispanic or Latino Origin	17,974	98.95%	17,883	99.50%	91	0.51%
Persons of Hispanic or Latino Origin	191	1.05%	90	0.50%	101	112.22%
Population by Gender						
Female	9,544	52.54%	9,455	52.61%	89	0.94%
Male	8,621	47.46%	8,518	47.39%	103	1.21%
Population by Age						
Persons 0 to 4 years	798	4.39%	781	4.35%	17	2.18%
Persons 5 to 17 years	2,706	14.90%	2,901	16.14%	-195	-6.72%
Persons 18 to 64 years	10,764	59.26%	10,497	58.40%	267	2.54%
Persons 65 years and over	3.897	21.45%	3,794	21.11%	103	2.71%



Appendix E

Trip Generation & Distribution



Somerset Middle School Somerset, MA Future 2026 No-Build Traffic Volumes Pare Project No. 19118.02 October 2019

2019-2026 NO-BUILD TRAFFIC VOLUMES Future No-Build Growth Factor = 0.5%

AM Peak Hour 7:00 - 8:00 AM School Peak Hour 2:45 - 3:45 PM

PM Peak Hour 4:15 - 5:15 PM

Jeffrey Street & Bark Street

	2019 Existing	2026 No-Build
EB - LT	0	0
EB - RT	12	14
NB - LT	4	5
NB - T	132	147
SB - T	359	399
SB - RT	3	4

Jeffrey Street & Bark Street

comey encor a Bank encor		
	2019 Existing	2026 No-Build
EB - LT	0	0
EB - RT	2	3
NB - LT	9	10
NB - T	286	297
SB - T	209	217
SB - RT	1	2

Jeffrey Street & Bark Street

	2019 Existing	2026 No-Build
EB - LT	2	3
EB - RT	4	5
NB - LT	4	5
NB - T	422	437
SB - T	240	249
SB - RT	1	2

Somerset Middle School Driveway & **Brayton Avenue**

Brayton Avenue		
	2019 Existing	2026 No-Build
EB - LT	43	45
EB - RT	101	105
NB - LT	135	140
NB - T	94	98
SB - T	280	290
SB - RT	91	95

Somerset Middle School Driveway & **Brayton Avenue**

Diaytoli Avellue		
	2019 Existing	2026 No-Build
EB - LT	34	36
EB - RT	76	79
NB - LT	13	14
NB - T	260	270
SB - T	197	204
SB - RT	13	14

Somerset Middle School Driveway & **Brayton Avenue**

	2019 Existing	2026 No-Build
EB - LT	47	49
EB - RT	56	58
NB - LT	61	64
NB - T	378	392
SB - T	216	224
SB - RT	28	29

Read Street & Brayton Avenue

Read Street & Brayton Avenue		
	2019 Existing	2026 No-Build
EB - LT	71	74
EB - T	125	130
EB - RT	50	52
SB - LT	14	15
SB - T	291	302
SB - RT	79	82
WB - LT	64	67
WB - T	213	221
WB - RT	20	21
NB - LT	32	34
NB - T	129	134
NB - RT	59	62

Read Street & Brayton Avenue			
	2019 Existing	2026 No-Build	
EB - LT	70	73	
EB - T	167	173	
EB - RT	47	49	
SB - LT	9	10	
SB - T	179	186	
SB - RT	77	80	
WB - LT	95	99	
WB - T	255	265	
WB - RT	11	12	
NB - LT	41	43	
NB - T	185	192	
NB - RT	114	119	

Read Street & Brayton Avenue

	2019 Existing	2026 No-Build
EB - LT	110	114
EB - T	252	261
EB - RT	48	50
SB - LT	15	16
SB - T	181	188
SB - RT	80	83
WB - LT	65	68
WB - T	199	207
WB - RT	30	32
NB - LT	71	74
NB - T	300	311
NB - RT	118	123
	_	-

Computation by: CB Checked by: AA

Somerset Middle School Somerset, MA Future 2026 Build Traffic Volumes Pare Project No. 19118.02 October 2019



2019-2026 BUILD TRAFFIC VOLUMES

AM Peak Hour 7:00 - 8:00 AM School Peak Hour 2:30 - 3:30 PM PM Peak Hour 4:15 - 5:15 PM

Jeffrey Street & Bark Street

	Site Generated	2026 Build
EB - LT	0	0
EB - RT	1	14
NB - LT	0	5
NB - T	8	145
SB - T	16	388
SB - RT	0	4

Jeffrey Street & Bark Street

	Site Generated	2026 Build
EB - LT	0	2
EB - RT	0	5
NB - LT	0	10
NB - T	13	282
SB - T	5	220
SB - RT	0	3

Jeffrev Street & Bark Street

Jei	irey Street & Bari	Correct
	Site Generated	2026 Build
EB - LT	0	3
EB - RT	0	5
NB - LT	0	5
NB - T	8	445
SB - T	5	254
SB - RT	0	2

Somerset Middle School Driveway &

	Brayton Avenu	ie
	Site Generated	2026 Build
EB - LT	8	53
EB - RT	18	123
NB - LT	24	164
NB - T	0	98
SB - T	0	290
SB - RT	16	111

Somerset Middle School Driveway & Brayton Avenue

	Site Generated	2026 Build
EB - LT	13	89
EB - RT	7	46
NB - LT	3	21
NB - T	0	241
SB - T	0	189
SB - RT	5	33
00 111		

Somerset Middle School Driveway & Brayton Avenue

	Site Generated	2026 Build
EB - LT	8	57
EB - RT	10	68
NB - LT	11	75
NB - T	0	392
SB - T	0	224
SB - RT	5	34

Read Street & Brayton Avenue

	Site Generated	2026 Build
EB - LT	8	82
EB - T	0	130
EB - RT	0	52
SB - LT	1	16
SB - T	14	316
SB - RT	4	86
WB - LT	0	67
WB - T	0	221
WB - RT	2	23
NB - LT	0	34
NB - T	14	148
NB - RT	0	62

Read Street & Brayton Avenue

Read	Street & Brayton	Avenue
	Site Generated	2026 Build
EB - LT	1	74
EB - T	0	173
EB - RT	0	49
SB - LT	0	13
SB - T	4	182
SB - RT	2	82
WB - LT	0	65
WB - T	0	180
WB - RT	0	50
NB - LT	0	50
NB - T	2	200
NB - RT	0	133

Read Street & Brayton Avenue

	Site Generated	2026 Build
EB - LT	3	117
EB - T	0	261
EB - RT	0	50
SB - LT	1	17
SB - T	7	195
SB - RT	3	86
WB - LT	0	68
WB - T	0	207
WB - RT	2	34
NB - LT	0	74
NB - T	7	318
NB - RT	0	123

Appendix F

Traffic Capacity Analysis



Somerset Middle School AM Peak Existing

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	1>	
Traffic Vol, veh/h	0	12	4	132	359	3
Future Vol, veh/h	0	12	4	132	359	3
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	_	-	_	-
Veh in Median Storage	•	_	_	0	0	_
Grade. %	s, # 0 0	_	-	0	0	-
Peak Hour Factor	81	81	60	60	72	72
	2			2		
Heavy Vehicles, %		2	2		400	2
Mvmt Flow	0	15	7	220	499	4
Major/Minor I	Minor2		Major1	N	Major2	
Conflicting Flow All	736	503	504	0	-	0
Stage 1	502	-	-	-	-	-
Stage 2	234	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	_	-	-	-	-
Follow-up Hdwy		3.318	2.218	-	-	
Pot Cap-1 Maneuver	386	569	1061	-	_	-
Stage 1	608	-	-	_	_	_
Stage 2	805	_	_	_	_	_
Platoon blocked, %	003	_		-	-	_
	200	ECO	1060			
Mov Cap-1 Maneuver	382	568	1060	-	-	-
Mov Cap-2 Maneuver	382	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	11.5		0.2		0	
HCM LOS	В		0.2		U	
I IOWI LOG	D					
Minor Long/Major Mare	.+	NBL	NDT	EDI 51	CDT	CDD
Minor Lane/Major Mvm	IL			EBLn1	SBT	SBR
Capacity (veh/h)		1060	-	568	-	-
HCM Lane V/C Ratio		0.006		0.026	-	-
HCM Control Delay (s)		8.4	0	11.5	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-

Synchro 10 Report Page 1 11/05/2019 DF

5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	11					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		EDK	INDL			SDK
Lane Configurations	12	101	125	વ	290	04
Traffic Vol, veh/h	43 43	101	135	94 94	280 280	91
Future Vol, veh/h		101	135			91
Conflicting Peds, #/hr	0	•	1	0	0	•
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	69	69	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	206	196	136	394	128
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	987	460	523	0	- viajoiz	0
Stage 1	459	400	J2J -	U	_	U
Stage 2	528	_		-	-	
Critical Hdwy	6.42	6.22	4.12	-	-	-
	5.42	0.22	4.12	-	-	-
Critical Hdwy Stg 1				-		
Critical Hdwy Stg 2	5.42	2 240	-	•	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	274	601	1043	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	592	-	-	-	-	-
Platoon blocked, %			1.5.15	-	-	-
Mov Cap-1 Maneuver	218	600	1042	-	-	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Annroach	EB		NB		SB	
Approach	36.6		5.5		0	
HCM Control Delay, s			5.5		U	
HCM LOS	E					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1042	_	394	_	
HCM Lane V/C Ratio		0.188		0.746	_	_
HCM Control Delay (s)		9.3	0	36.6	_	_
HCM Lane LOS		9.5 A	A	50.0 E	_	
	·		- -	6		
HCM 95th %tile Q(veh	1	0.7				

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

Somerset Middle School AM Peak Existing

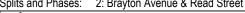
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			44			4			4	
Traffic Volume (vph)	71	125	50	64	213	20	32	129	59	14	291	79
Future Volume (vph)	71	125	50	64	213	20	32	129	59	14	291	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			1.00	
Frt		0.972			0.991			0.964			0.972	
Flt Protected		0.986			0.989			0.993			0.998	
Satd. Flow (prot)	0	1777	0	0	1823	0	0	1772	0	0	1798	0
FIt Permitted		0.817			0.890			0.907			0.987	
Satd. Flow (perm)	0	1472	0	0	1640	0	0	1618	0	0	1778	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27			8			39			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1		1			3	1		2	2		2
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	78	137	55	70	232	22	36	145	66	19	388	105
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	270	0	0	324	0	0	247	0	0	512	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0	, ,		0	Ŭ		0	Ŭ		0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

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Somerset Middle School AM Peak Existing

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		14.6			14.6			26.2			26.2	
Actuated g/C Ratio		0.30			0.30			0.54			0.54	
v/c Ratio		0.59			0.65			0.28			0.53	
Control Delay		18.4			21.0			7.4			10.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.4			21.0			7.4			10.7	
LOS		В			С			Α			В	
Approach Delay		18.4			21.0			7.4			10.7	
Approach LOS		В			С			Α			В	
Queue Length 50th (ft)		57			76			27			76	
Queue Length 95th (ft)		112			139			80			148	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		801			883			885			966	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.34			0.37			0.28			0.53	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 48	.9											
Natural Cycle: 45												
Control Type: Actuated-Un	coordinated	d										
Maximum v/c Ratio: 0.65												
Intersection Signal Delay: 1	14.1			lr	ntersection	LOS: B						
Intersection Capacity Utiliz	ation 51.9%)		10	CU Level	of Service	e A					
Analysis Period (min) 15												
Splits and Phases: 2: Br	ayton Aven	ua & Dago	l Street									
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HCM 2010 TWSC 3: Jaffrey Street & Bark Street

11/05/2019 School Peak Existing

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	LDIN	HUL	4	\$	ODIT
Traffic Vol, veh/h	1	4	9	259	207	2
Future Vol, veh/h	1	4	9	259	207	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-		-	_	-
Veh in Median Storage		_	_	0	0	_
Grade, %	0		_	0	0	_
Peak Hour Factor	25	25	84	84	89	89
	25	25	2	2	2	2
Heavy Vehicles, %	4	16	11	308	233	2
Mvmt Flow	4	16	TI	308	233	2
Major/Minor I	Minor2	1	Major1	N	/lajor2	
Conflicting Flow All	565	236	236	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	330	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	_	_
Critical Hdwy Stg 2	5.42	-	_	_	_	_
Follow-up Hdwy		3.318	2.218	_	_	
Pot Cap-1 Maneuver	486	803	1331	_	_	_
Stage 1	804	-	-	_	_	_
Stage 2	728					
Platoon blocked, %	120	_			_	-
Mov Cap-1 Maneuver	480	801	1330	-	-	
Mov Cap-1 Maneuver		001	1330	-	-	-
	480		-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	727	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	10.2		0.3		0	
HCM LOS	В		0.0			
1.0141 2.00	J					
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1330	-	707	-	-
HCM Lane V/C Ratio		0.008	-	0.028	-	-
HCM Control Delay (s)		7.7	0	10.2	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-
.,						

HCM 2010 TWSC 5: Brayton Avenue & Somerset Middle School Driveway

11/05/2019

School Peak Existing

Intersection						
Int Delay, s/veh	6.9					
•		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	72	27	47	4	100	07
Traffic Vol, veh/h	73	37	17	232	182	27
Future Vol, veh/h	73	37	17	232	182	27
Conflicting Peds, #/hr	0	1	_ 1	0	0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	36	36	83	83	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	203	103	20	280	207	31
Major/Minor	Minor		Major1	N	Major	
	Minor2		Major1		Major2	^
Conflicting Flow All	544	225	239	0	-	0
Stage 1	224	-	-	-	-	-
Stage 2	320	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	500	814	1328	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	490	812	1327	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	798	_	_	-	-	-
Stage 2	735	_	_	_	_	_
Olago Z	, 00					
Approach	EB		NB		SB	
HCM Control Delay, s	18.6		0.5		0	
HCM LOS	С					
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1327	-	565	-	
HCM Lane V/C Ratio		0.015		0.541	_	_
HCM Control Delay (s)		7.8	0	18.6	_	_
HCM Lane LOS		Α.	A	C	_	_
HCM 95th %tile Q(veh	١	0	-	3.2		
HOW SOUL WILL WING)	U	•	3.2	-	-

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

11/05/2019 School Peak Existing

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	70	167	47	12	171	77	62	173	48	48	191	128
Future Volume (vph)	70	167	47	12	171	77	62	173	48	48	191	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			0.99			1.00			0.99	
Frt		0.978			0.960			0.977			0.953	
Flt Protected		0.988			0.998			0.989			0.993	
Satd. Flow (prot)	0	1800	0	0	1772	0	0	1793	0	0	1749	0
FIt Permitted		0.810			0.977			0.831			0.923	
Satd. Flow (perm)	0	1475	0	0	1734	0	0	1506	0	0	1626	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			44			22			57	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1					3			2	2		1
Peak Hour Factor	0.89	0.89	0.89	0.76	0.76	0.76	0.91	0.91	0.91	0.66	0.66	0.66
Adj. Flow (vph)	79	188	53	16	225	101	68	190	53	73	289	194
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	320	0	0	342	0	0	311	0	0	556	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0	J -		0	J -		0			0	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel					• · · · · ·							
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94		0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel		OI · EX			OI · EX			OI LX			OI LX	
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	1 01111	4		1 01111	8		1 01111	2		1 01111	6	
Permitted Phases	4	7		8	J		2			6	U	
Detector Phase	4	4		8	8		2	2		6	6	
Dotector i nase	7	7		U	U					U	U	

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11/05/2019 School Peak Existing

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		14.5			14.5			26.3			26.3	
Actuated g/C Ratio		0.30			0.30			0.54			0.54	
v/c Ratio		0.71			0.63			0.38			0.62	
Control Delay		23.0			17.9			9.1			12.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		23.0			17.9			9.1			12.4	
LOS		С			В			Α			В	
Approach Delay		23.0			17.9			9.1			12.4	
Approach LOS		С			В			Α			В	
Queue Length 50th (ft)		73			70			40			82	
Queue Length 95th (ft)		137			102			117			133	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		802			951			819			899	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.40			0.36			0.38			0.62	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 48.	9											
Natural Cycle: 50												
Control Type: Actuated-Und	coordinated	<u> </u>										
Maximum v/c Ratio: 0.71												
Intersection Signal Delay: 1	5.2			Ir	ntersection	n LOS: B						
Intersection Capacity Utiliza	ation 65.2%			10	CU Level	of Service	e C					
Analysis Period (min) 15												
Splits and Phases: 2: Bra	auton Auga	uo & Doco	l Ctroot									
Spins and Fridses. 2. Bra	ayton Aveni	ue a Reac	Jueet		-							



Somerset Middle School PM Peak Existing

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	4	
Traffic Vol, veh/h	2	4	4	422	240	1
Future Vol, veh/h	2	4	4	422	240	1
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- Olop	None	-	None	-	None
Storage Length	0	INUITE	-	-	-	-
Veh in Median Storage		-	-	0	0	-
	0				0	
Grade, %		-	- 70	0		- 07
Peak Hour Factor	38	38	78	78	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	11	5	541	276	1
Major/Minor I	Minor2	ı	Major1	N	Major2	
Conflicting Flow All	829	278	278	0		0
Stage 1	278	-	-	-	-	-
Stage 2	551			_	-	
Critical Hdwy	6.42	6.22	4.12	_		_
Critical Hdwy Stg 1	5.42	0.22	4.12	-	-	-
	5.42		-	-		
Critical Hdwy Stg 2				_	_	
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	340	761	1285	-	-	-
Stage 1	769	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	337	760	1284	-	-	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	576			_	_	
Olago 2	0,0					
Approach	EB		NB		SB	
HCM Control Delay, s	11.9		0.1		0	
HCM LOS	В					
Minor Lang/Major Mym	.+	NBL	NDT	EDI 51	SBT	SBR
Minor Lane/Major Mvm	ıt .			EBLn1		
Capacity (veh/h)		1284	-	536	-	-
HCM Lane V/C Ratio		0.004		0.029	-	-
HCM Control Delay (s)		7.8	0	11.9	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-

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5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	6.7					
		EDD	NDI	NDT	CDT	CDD
Movement Configurations	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	47	EC	64	4 1	216	20
Traffic Vol, veh/h	47	56	61	378	216	28
Future Vol, veh/h	47 0	56	61	378	216	28
Conflicting Peds, #/hr		0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	124	147	72	445	254	33
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	860	271	287	0	- viajoiz	0
Stage 1	271	-	201	U		-
Stage 2	589	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
	5.42		4.12	-		
Critical Hdwy Stg 1		-		-	-	-
Critical Hdwy Stg 2	5.42	2 240	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	326	768	1275	-	-	-
Stage 1	775	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	302	768	1275	-	-	-
Mov Cap-2 Maneuver	302	-	-	-	-	-
Stage 1	717	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Approach	EB		NB		SB	
			1.1		0	
HCM Control Delay, s	24.3		1.1		U	
HCM LOS	С					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1275		451	-	-
HCM Lane V/C Ratio		0.056		0.601	-	-
HCM Control Delay (s)		8	0	24.3		_
HCM Lane LOS		A	A	24.3 C	_	-
HCM 95th %tile Q(veh	\	0.2	- A	3.9	-	-
HOW JOHN WHIE WIVEN)	0.2	-	3.9	_	-

Somerset Middle School PM Peak Existing

	۶	→	•	•	+	•	•	†	~	/	↓	-✓
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	110	252	48	65	199	30	71	300	118	15	181	80
Future Volume (vph)	110	252	48	65	199	30	71	300	118	15	181	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.984			0.986			0.967			0.961	
Flt Protected		0.987			0.989			0.993			0.997	
Satd. Flow (prot)	0	1809	0	0	1812	0	0	1779	0	0	1774	0
Flt Permitted		0.809			0.834			0.908			0.967	J
Satd. Flow (perm)	0	1483	0	0	1528	0	0	1627	0	0	1720	0
Right Turn on Red		1100	Yes		1020	Yes		1021	Yes		1120	Yes
Satd. Flow (RTOR)		14	100		12	100		34	100		43	. 00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1	11.0			17.0	2		11.0	1	1	00.0	1
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.96	0.96	0.96	0.81	0.81	0.81
Adj. Flow (vph)	122	280	53	75	229	34	74	313	123	19	223	99
Shared Lane Traffic (%)	122	200	33	7.5	223	J -1	/4	313	125	19	223	33
Lane Group Flow (vph)	0	455	0	0	338	0	0	510	0	0	341	0
Turn Type	Perm	NA	U	Perm	NA	U	Perm	NA	U	Perm	NA	U
Protected Phases	I CIIII	4		I CIIII	8		I CIIII	2		I CIIII	6	
Permitted Phases	4			8	U		2			6	- U	
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase										<u> </u>		
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	0.0		1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag		7.0			7.0			٦.0			7.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	U	19.9		U	19.9		U	26.3		U	26.3	
Actuated g/C Ratio		0.37			0.37			0.48			0.48	
v/c Ratio		0.82			0.60			0.40			0.40	
Control Delay		28.5			17.8			15.7			10.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		28.5			17.8			15.7			10.8	
LOS		26.5 C			17.6 B			15.7 B			10.8 B	
LUS		U			D			D			D	

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Lanes, Volumes, Timings

Somerset Middle School PM Peak Existing

2: Brayton Avenue & Read Street

	•	-	•	•	•	•	1	Ť	~	-	¥	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		28.5			17.8			15.7			10.8	
Approach LOS		С			В			В			В	
Queue Length 50th (ft)		123			81			107			57	
Queue Length 95th (ft)		#225			140			236			111	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		725			745			805			854	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.63			0.45			0.63			0.40	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 54.3

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.82

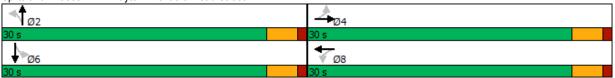
Intersection Signal Delay: 18.6 Intersection Capacity Utilization 84.2% Intersection LOS: B
ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Brayton Avenue & Read Street



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Somerset Middle School AM Peak No-Build

Int Delay, s/veh Movement Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Intersection						
Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Phatoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Int Delay, s/veh	0.3					
Lane Configurations Traffic Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Phatoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h Future Vol, veh/h Future Vol, veh/h Conflicting Peds, #/hr Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Mir Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Phatoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		¥	LOIK	HUL	4	1 30	אופט
Future Vol, veh/h Conflicting Peds, #/hr Sign Control S RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Min Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	13	5	137	372	4
Conflicting Peds, #/hr Sign Control Sign Control Sign Control Sign Control Sign Control Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mymt Flow Major/Minor Minor Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mymt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	13	5	137	372	4
Sign Control RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	1	1	0	0	1
RT Channelized Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Mir Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		Stop	Stop	Free	Free	Free	Free
Storage Length Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Mir Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	None	-	None	-	None
Veh in Median Storage, # Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Min Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	-	_	-	_	-
Grade, % Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		-	_	_	0	0	_
Peak Hour Factor Heavy Vehicles, % Mvmt Flow Major/Minor Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	-	-	0	0	-
Heavy Vehicles, % Mymt Flow Major/Minor Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mymt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		81	81	60	60	72	72
Major/Minor Mir Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy 3 Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		2	2	2	2	2	2
Major/Minor Minor Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		0	16	8	228	517	6
Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	IVIVMT FIOW	U	16	ğ	228	517	Ь
Conflicting Flow All Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Delay, s HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)							
Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Major/Minor	Minor2	1	Major1	N	/lajor2	
Stage 1 Stage 2 Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Conflicting Flow All	765	522	524	0	-	0
Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Stage 2 Follow-up Hdwy Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		521	-	-	-	-	-
Critical Hdwy Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Stage 2 Follow-up Hdwy Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	•	244	_		_	-	_
Critical Hdwy Stg 1 Critical Hdwy Stg 2 Follow-up Hdwy Stage 1 Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		6.42	6.22	4.12	-	-	_
Critical Hdwy Stg 2 Follow-up Hdwy 3. Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		5.42	-	-	_		_
Follow-up Hdwy 3. Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		5.42	_	_	_	_	-
Pot Cap-1 Maneuver Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)			3.318	2 218	_	_	_
Stage 1 Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		371	555	1043	_	_	_
Stage 2 Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		596	-	-	_	_	_
Platoon blocked, % Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		797				_	_
Mov Cap-1 Maneuver Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		191	-	_	-	_	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		367	554	1042	-	-	_
Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		367	334	1042		_	-
Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)			_		-	-	
Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		590	-	-	-	-	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Stage 2	796	-	-	-	-	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)							
HCM Control Delay, s HCM LOS Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	Approach	EB		NB		SB	
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)		11.7		0.3		0	
Minor Lane/Major Mvmt Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	·	В		0.0			
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	110111 200						
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)							
HCM Lane V/C Ratio HCM Control Delay (s)		nt	NBL	NBT	EBLn1	SBT	SBR
HCM Control Delay (s)			1042	-	554	-	-
			0.008	-	0.029	-	-
20 Logo LMOL	HCM Control Delay (s)		8.5	0	11.7	-	-
	HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh)	HCM 95th %tile Q(veh)	0	-	0.1	-	-

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HCM 2010 TWSC

Somerset Middle School AM Peak No-Build

5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	13.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		EDK	INDL			SDK
Lane Configurations	₩	405	440	4	♣	٥٢
Traffic Vol, veh/h	45	105	140	98	290	95
Future Vol, veh/h	45	105	140	98	290	95
Conflicting Peds, #/hr	0	1	_ 1	_ 0	_ 0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e,# 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	69	69	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	92	214	203	142	408	134
	Minor2		Major1	N	/lajor2	
Conflicting Flow All	1024	477	543	0	-	0
Stage 1	476	-	-	-	-	-
Stage 2	548	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	_	-
Follow-up Hdwy		3.318	2.218	-		-
Pot Cap-1 Maneuver	261	588	1026	_	-	_
Stage 1	625	-	- 323	_	_	_
Stage 2	579	_	_	_	_	_
Platoon blocked, %	313	_	-	-	_	
	204	E07	1005	-	-	
Mov Cap-1 Maneuver		587	1025	-	-	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	45.3		5.5		0	
	45.5 E		5.5		U	
HCM LOS						
Minor Lane/Major Mvn	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1025	_	376		
HCM Lane V/C Ratio		0.198		0.814	_	_
HCM Control Delay (s)	9.4	0	45.3	_	_
HCM Lane LOS		3. 4	A	45.5 E	_	_
HCM 95th %tile Q(veh	.)	0.7	- -	7.2		_
How som while Q(ver)	0.7	-	1.2	-	-

Somerset Middle School AM Peak No-Build

Lane Group EBL EBT EBR WBL WBT WBR NBL NBT NBR SBL SBT Lane Configurations ♣ <	SBR 82 82
Traffic Volume (vph) 74 130 52 67 221 21 34 134 62 15 302	
	82
Future Volume (vph) 74 130 52 67 221 21 34 134 62 15 302	
Ideal Flow (vphpl) 1900 1900 1900 1900 1900 1900 1900 190	1900
Lane Util. Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Ped Bike Factor 1.00 1.00 0.99 1.00	
Frt 0.973 0.991 0.964 0.972	
Flt Protected 0.986 0.989 0.993 0.998	
Satd. Flow (prot) 0 1779 0 0 1823 0 0 1772 0 0 1798	0
Flt Permitted 0.810 0.885 0.902 0.986	
Satd. Flow (perm) 0 1461 0 0 1631 0 0 1609 0 0 1777	0
Right Turn on Red Yes Yes Yes	Yes
Satd. Flow (RTOR) 27 8 39 27	
Link Speed (mph) 30 30 30	
Link Distance (ft) 484 761 505 1333	
Travel Time (s) 11.0 17.3 11.5 30.3	
Confl. Peds. (#/hr) 1 1 3 1 2 2	2
Peak Hour Factor 0.91 0.91 0.91 0.92 0.92 0.92 0.89 0.89 0.75 0.75	0.75
Adj. Flow (vph) 81 143 57 73 240 23 38 151 70 20 403	109
Shared Lane Traffic (%)	
Lane Group Flow (vph) 0 281 0 0 336 0 0 259 0 0 532	0
Enter Blocked Intersection No No No No No No No No No No	No
Lane Alignment Left Left Right Left Right Left Left Right Left Left	Right
Median Width(ft) 0 0 0	
Link Offset(ft) 0 0 0	
Crosswalk Width(ft) 16 16 16	
Two way Left Turn Lane	
Headway Factor 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Turning Speed (mph) 15 9 15 9 15	9
Number of Detectors 1 2 1 2 1 2	
Detector Template Left Thru Left Thru Left Thru Left Thru	
Leading Detector (ft) 20 100 20 100 20 100 20 100	
Trailing Detector (ft) 0 0 0 0 0 0 0	
Detector 1 Position(ft) 0 0 0 0 0 0 0	
Detector 1 Size(ft) 20 6 20 6 20 6	
Detector 1 Type CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex CI+Ex	
Detector 1 Channel	
Detector 1 Extend (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Detector 1 Queue (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Detector 1 Delay (s) 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	
Detector 2 Position(ft) 94 94 94	
Detector 2 Size(ft) 6 6 6	
Detector 2 Type CI+Ex CI+Ex CI+Ex CI+Ex	
Detector 2 Channel	
Detector 2 Extend (s) 0.0 0.0 0.0	
Turn Type Perm NA Perm NA Perm NA Perm NA	
Protected Phases 4 8 2 6	
Permitted Phases 4 8 2 6	
Detector Phase 4 4 8 8 2 2 6 6	

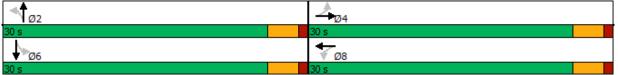
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Somerset Middle School AM Peak No-Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		15.1			15.1			26.2			26.2	
Actuated g/C Ratio		0.31			0.31			0.53			0.53	
v/c Ratio		0.61			0.67			0.30			0.56	
Control Delay		18.7			21.3			7.8			11.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		18.7			21.3			7.8			11.4	
LOS		В			С			Α			В	
Approach Delay		18.7			21.3			7.8			11.4	
Approach LOS		В			С			Α			В	
Queue Length 50th (ft)		60			80			30			83	
Queue Length 95th (ft)		118			145			88			161	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		789			870			873			956	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.36			0.39			0.30			0.56	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 49.4	4											
Natural Cycle: 45												
Control Type: Actuated-Und	coordinated											
Maximum v/c Ratio: 0.67												
Intersection Signal Delay: 1	4.6			Ir	ntersection	LOS: B						
Intersection Capacity Utiliza	ation 53.8%			IC	CU Level o	of Service	Α					
Analysis Period (min) 15												
Splits and Phases: 2: Bra	uton Avon	10 8 Dogs	1 Stroot									





Somerset Middle School School Peak No-Build

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		LDK	INDL			אמט
Lane Configurations	À	_	4	4	}	^
Traffic Vol, veh/h	2	5	1	269	215	3
Future Vol, veh/h	2	5	1	269	215	3
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	84	84	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	8	20	1	320	242	3
IVIVIIIL I IUW	U	20	- 1	320	242	J
Major/Minor I	Minor2		Major1	N	Major2	
Conflicting Flow All	567	246	246	0	-	0
Stage 1	245			-	_	_
Stage 2	322	-	_	_		-
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	0.22	7.12	-		-
	5.42		-	-	-	-
Critical Hdwy Stg 2				-		
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	485	793	1320	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	484	791	1319	-	-	-
Mov Cap-2 Maneuver	484	_	_	-	-	_
Stage 1	794	_	_	_	_	_
Stage 2	734	_	_	_		
οιαίς Ζ	7 04	_		_		_
Approach	EB		NB		SB	
HCM Control Delay, s	10.6		0		0	
HCM LOS	В		•			
110111 200						
Minor Lane/Major Mvm	ıt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1319	-	670	_	-
HCM Lane V/C Ratio		0.001	-	0.042	-	_
HCM Control Delay (s)		7.7	0	10.6	-	-
HCM Lane LOS		Α	A	В	_	_
. IOIVI LUITO LOO		\neg	$\overline{}$			
HCM 95th %tile Q(veh)	١	0	_	0.1		

5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	7.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W	LDIX	NDL	4	1≯	ODIN
Traffic Vol, veh/h	76	39	18	241	189	28
Future Vol, veh/h	76	39	18	241	189	28
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	_	-	_	-
Veh in Median Storage		_	_	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	36	36	83	83	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	211	108	22	290	215	32
IVIVIIIL I IOW	211	100	22	230	213	32
	Minor2		Major1	N	Major2	
Conflicting Flow All	566	233	248	0	-	0
Stage 1	232	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	_	_	-	-	-
Follow-up Hdwy		3.318	2.218	-	-	-
Pot Cap-1 Maneuver	486	806	1318	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	475	804	1317	-	-	_
Mov Cap-2 Maneuver	475	-	-	_	_	
Stage 1	790	_	_	_	_	_
Stage 2	724	_				-
Olaye Z	147					
Approach	EB		NB		SB	
HCM Control Delay, s	20.1		0.5		0	
HCM LOS	С					
Minor Long (Marion Ed		NDI	NDT	EDL 4	CDT	CDD
Minor Lane/Major Mvm	ıt	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		1317	-	552	-	-
HCM Lane V/C Ratio		0.016		0.579	-	-
HCM Control Delay (s)		7.8	0	20.1	-	-
HCM Lane LOS		Α	Α	С	-	-
HCM 95th %tile Q(veh))	0.1	-	3.7	-	-

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Somerset Middle School School Peak No-Build

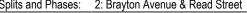
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	73	173	49	65	180	50	50	198	133	13	178	80
Future Volume (vph)	73	173	49	65	180	50	50	198	133	13	178	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.978			0.977			0.953			0.960	
Flt Protected		0.988			0.989			0.993			0.998	
Satd. Flow (prot)	0	1793	0	0	1792	0	0	1748	0	0	1772	0
Flt Permitted		0.818			0.858			0.915			0.975	
Satd. Flow (perm)	0	1485	0	0	1555	0	0	1611	0	0	1731	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			22			57			44	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1		1			3	1		2	2		2
Peak Hour Factor	0.89	0.89	0.89	0.76	0.76	0.76	0.91	0.91	0.91	0.66	0.66	0.66
Adj. Flow (vph)	82	194	55	86	237	66	55	218	146	20	270	121
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	331	0	0	389	0	0	419	0	0	411	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0	Ĭ		0	, i		0	Ŭ		0	J
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Detector Phase	4	4		8	8		2	2		6	6	

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Somerset Middle School School Peak No-Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	•	17.1		U	17.1		•	26.3		•	26.3	
Actuated g/C Ratio		0.33			0.33			0.51			0.51	
v/c Ratio		0.65			0.73			0.49			0.45	
Control Delay		19.8			22.8			11.0			10.6	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		19.8			22.8			11.0			10.6	
LOS		В			C			В			В	
Approach Delay		19.8			22.8			11.0			10.6	
Approach LOS		В			C			В			В	
Queue Length 50th (ft)		77			94			61			61	
Queue Length 95th (ft)		140			130			170			102	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)		707			001			720			1200	
Base Capacity (vph)		768			804			850			905	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.43			0.48			0.49			0.45	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 51.5												
Natural Cycle: 45												
Control Type: Actuated-Unco	ordinated											
Maximum v/c Ratio: 0.73												
Intersection Signal Delay: 15	.7			Ir	ntersection	LOS: B						
Intersection Capacity Utilizati				10	CU Level o	of Service	e C					
Analysis Period (min) 15												
Splits and Phases: 2: Bray	rton Avenu	ue & Read	Street									





Somerset Middle School PM Peak No Build

Intersection						
Int Delay, s/veh	0.4					
•		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	À	_	-	4	^	0
Traffic Vol, veh/h	3	5	5	437	249	2
Future Vol, veh/h	3	5	5	437	249	2
Conflicting Peds, #/hr	0	0	0	_ 0	_ 0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	78	78	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	13	6	560	286	2
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	860	288	289	0	-	0
Stage 1	288	200	209	U		U
	572	-	-	-	-	-
Stage 2	6.42			-	-	-
Critical Hdwy		6.22	4.12	•	-	•
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	326	751	1273	-	-	-
Stage 1	761	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	323	750	1272	-	-	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	564	-	-	-	-	-
, in the second						
					0.0	
Annroach	ED		ND			
Approach	EB		NB		SB	
HCM Control Delay, s	12.5		NB 0.1		0	
HCM Control Delay, s	12.5					
HCM Control Delay, s HCM LOS	12.5 B	NBI	0.1	EBLn1	0	SBR
HCM Control Delay, s HCM LOS Minor Lane/Major Mvm	12.5 B	NBL 1272	0.1 NBT I	EBLn1		SBR
HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h)	12.5 B	1272	0.1 NBT I	501	0 SBT	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	12.5 B nt	1272 0.005	0.1 NBT I	501 0.042	O SBT -	-
HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	12.5 B nt	1272 0.005 7.8	0.1 NBT I	501 0.042 12.5	0 SBT - -	- - -
HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	12.5 B	1272 0.005	0.1 NBT I	501 0.042	O SBT -	-

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5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	7.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W	LDI	HUL	4	\$	ODIN
Traffic Vol, veh/h	49	58	64	392	224	29
Future Vol, veh/h	49	58	64	392	224	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-		-		-
Veh in Median Storage		_	_	0	0	_
Grade, %	, # 0 0	_	_	0	0	_
Peak Hour Factor	38	38		85	85	85
	2	2	85 2	2	2	2
Heavy Vehicles, %	129	153	75	461	264	34
Mvmt Flow	129	153	75	461	204	34
Major/Minor I	Minor2	1	Major1	N	Major2	
Conflicting Flow All	892	281	298	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	_	_	_
Critical Hdwy Stg 2	5.42	-	-	-	_	-
Follow-up Hdwy		3.318	2.218	_	-	-
Pot Cap-1 Maneuver	312	758	1263	_	_	_
Stage 1	767	-	-	_	_	_
Stage 2	542					
Platoon blocked, %	UTZ		_	-	_	
Mov Cap-1 Maneuver	287	758	1263	-	-	_
Mov Cap-1 Maneuver		700	1203	-	-	-
	287		-	-	-	-
Stage 1	706	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	27.5		1.1		0	
HCM LOS	D					
TIOW LOO						
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1263	-	433	-	-
HCM Lane V/C Ratio		0.06	-	0.65	-	-
HCM Control Delay (s)		8	0	27.5	-	-
HCM Lane LOS		Α	Α	D	-	-
HCM 95th %tile Q(veh))	0.2	-	4.5	-	-
.,						

Lanes, Volumes, Timings 2: Read Street & Brayton Avenue

Somerset Middle School PM Peak No Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	114	261	50	68	207	32	74	311	123	16	188	83
Future Volume (vph)	114	261	50	68	207	32	74	311	123	16	188	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.984			0.986			0.967			0.961	
Flt Protected		0.987			0.989			0.993			0.997	
Satd. Flow (prot)	0	1809	0	0	1812	0	0	1779	0	0	1774	0
Flt Permitted		0.801			0.830			0.904			0.965	
Satd. Flow (perm)	0	1468	0	0	1521	0	0	1620	0	0	1717	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			12			34			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1					2			1	1		1
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.96	0.96	0.96	0.81	0.81	0.81
Adj. Flow (vph)	127	290	56	78	238	37	77	324	128	20	232	102
Shared Lane Traffic (%)						<u> </u>		<u></u>	0			
Lane Group Flow (vph)	0	473	0	0	353	0	0	529	0	0	354	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	J
Protected Phases	1 01111	4		1 01111	8		1 01111	2		1 01111	6	
Permitted Phases	4			8			2	_		6		
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase	•						_	_				
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	0.0		1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag		1.0			1.0			1.0			1.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	•	20.9		J	20.9		v	26.2		J	26.2	
Actuated g/C Ratio		0.38			0.38			0.47			0.47	
v/c Ratio		0.84			0.61			0.67			0.42	
Control Delay		29.7			17.9			17.5			11.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		29.7			17.9			17.5			11.4	
LOS		29.7 C			17.9 B			17.5 B			11. 4 B	
		U			D			D			D	

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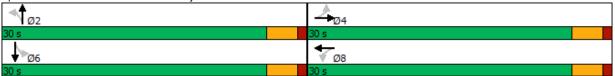
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Lanes, Volumes, Timings 2: Read Street & Brayton Avenue

Somerset Middle School PM Peak No Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		29.7			17.9			17.5			11.4	
Approach LOS		С			В			В			В	
Queue Length 50th (ft)		131			86			127			67	
Queue Length 95th (ft)		#272			147			#265			116	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		704			728			787			838	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.67			0.48			0.67			0.42	
Intersection Summary												
Area Type: (Other											
Cycle Length: 60												
Actuated Cycle Length: 55.2												
Natural Cycle: 45												
Control Type: Actuated-Unco	oordinated											
Maximum v/c Ratio: 0.84												
Intersection Signal Delay: 19).7			ln	tersectior	ı LOS: B						
Intersection Capacity Utilizat	ion 87.0%			IC	U Level o	of Service	E					
Analysis Period (min) 15												
# 95th percentile volume e			eue may	be longer	·.							
Queue shown is maximur	n after two	cycles.										

Splits and Phases: 2: Read Street & Brayton Avenue



Somerset Middle School AM Peak Build

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	\$	
Traffic Vol, veh/h	0	14	5	145	388	4
Future Vol. veh/h	0	14	5	145	388	4
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	_	None	_	None	_	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	_	_	0	0	_
Peak Hour Factor	81	81	60	60	72	72
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	17	8	242	539	6
WWITCHIOW	U	11	U	272	000	U
	Minor2		Major1		Major2	
Conflicting Flow All	801	544	546	0	-	0
Stage 1	543	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	354	539	1023	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	785	-	_	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	538	1022	-	_	_
Mov Cap-2 Maneuver	350	-	-	-	_	-
Stage 1	576	_	_	_	_	_
Stage 2	784	_	_	_	_	_
Olugo Z	704					
Approach	EB		NB		SB	
HCM Control Delay, s	11.9		0.3		0	
HCM LOS	В					
Minor Lane/Major Mvm	ı t	NBL	NRT	EBLn1	SBT	SBR
Capacity (veh/h)	ı	1022	-	538	- 301	JDK -
HCM Lane V/C Ratio		0.008		0.032		
				11.9	-	-
HCM Control Delay (s)		8.6	0		-	-
HCM Lane LOS		A	Α	В	-	-
HCM 95th %tile Q(veh))	0	-	0.1	-	-

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Intersection						
Int Delay, s/veh	8.7					
•		EDD	NDI	NDT	CDT	CDD
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	**	40	404	4	\$	444
Traffic Vol, veh/h	53	12	164	98	290	111
Future Vol, veh/h	53	12	164	98	290	111
Conflicting Peds, #/hr	0	1	_ 1	_ 0	0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	49	49	69	69	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	24	238	142	408	156
NA = : = = /NA:= =	\d: C		M-!. 4		4-1- 0	
	Minor2		Major1		Major2	
Conflicting Flow All	1105	488	565	0	-	0
Stage 1	487	-	-	-	-	-
Stage 2	618	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318	2.218	-	-	-
Pot Cap-1 Maneuver	233	580	1007	-	-	-
Stage 1	618	-	-	_	_	
Stage 2	538	_	_	_	_	_
Platoon blocked, %	000				_	-
Mov Cap-1 Maneuver	173	579	1006	-		
				-	-	
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	537	-	-	-	-	-
Approach	EB		NB		SB	
HCM Control Delay, s	53.2		6.1		0	
HCM LOS	55.2 F		0.1		U	
TIOW LOS	Г					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1006	-	199	-	-
HCM Lane V/C Ratio		0.236	-	0.667	-	-
HCM Control Delay (s)		9.7	0	53.2	-	_
HCM Lane LOS		A	A	F	_	
HCM 95th %tile Q(veh)	0.9	-	4	_	_
. I Sivi oda i 70tilo Q(Veli		0.0		7		

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

Somerset Middle School AM Peak Build

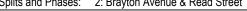
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			44			4			4	
Traffic Volume (vph)	82	130	52	67	221	23	34	148	62	16	316	86
Future Volume (vph)	82	130	52	67	221	23	34	148	62	16	316	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			1.00	
Frt		0.973			0.990			0.966			0.972	
Flt Protected		0.985			0.989			0.993			0.998	
Satd. Flow (prot)	0	1778	0	0	1820	0	0	1776	0	0	1798	0
Flt Permitted		0.785			0.883			0.903			0.985	
Satd. Flow (perm)	0	1416	0	0	1625	0	0	1615	0	0	1775	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			8			36			28	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1		1			3	1		2	2		2
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.89	0.89	0.89	0.75	0.75	0.75
Adj. Flow (vph)	90	143	57	73	240	25	38	166	70	21	421	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	290	0	0	338	0	0	274	0	0	557	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0	Ŭ		0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4		. 3	8			2			6	
Permitted Phases	4			8			2	_		6		
Detector Phase	4	4		8	8		2	2		6	6	
20000111000	7	7		<u> </u>	U					J	v	

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Somerset Middle School AM Peak Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag		1.0			1.0						1.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	<u> </u>	15.2			15.2		•	26.2		<u> </u>	26.2	
Actuated g/C Ratio		0.31			0.31			0.53			0.53	
v/c Ratio		0.64			0.67			0.31			0.58	
Control Delay		20.1			21.4			8.1			12.0	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.1			21.4			8.1			12.0	
LOS		20.1 C			C C			Α			12.0 B	
Approach Delay		20.1			21.4			8.1			12.0	
Approach LOS		C			C			A			12.0 B	
Queue Length 50th (ft)		63			81			33			89	
Queue Length 95th (ft)		123			146			95			172	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)		707			001			720			1200	
Base Capacity (vph)		763			865			873			954	
Starvation Cap Reductn		0			000			0/3			0	
Spillback Cap Reductin		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.38			0.39			0.31			0.58	
Intersection Summary		0.00			0.00			0.01			0.00	
Area Type:	Other											
Cycle Length: 60	- u											
Actuated Cycle Length: 49.	5											
Natural Cycle: 50												
Control Type: Actuated-Und	coordinated											
Maximum v/c Ratio: 0.67	Joordinated											
Intersection Signal Delay: 1	5.1			Ir	ntersection	I OS: B						
Intersection Capacity Utiliza					CU Level		R					
Analysis Period (min) 15	ation 55.0 /0			10	JO FEAR!	JI OCI VICE	, u					
,		0.5										
Splits and Phases: 2: Bra	ayton Aveni	ue & Read	Street									





Somerset Middle School School Peak Build

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		EDK	NDL			SDK
Lane Configurations	À	E	10	4	}	2
Traffic Vol, veh/h	2	5	10	282	220	3
Future Vol, veh/h	2	5	10	282	220	3
Conflicting Peds, #/hr	0	1	_ 1	_ 0	_ 0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-		-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage,		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	25	25	84	84	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	20	12	336	247	3
Major/Minor N	/linor2		Major1	N	Major2	
Conflicting Flow All	610	251	251	0	viajui 2 -	0
	250	201	201	U	-	-
Stage 1				-		
Stage 2	360	-	- 4.40	-	-	-
Critical Hdwy	6.42	6.22		-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
		3.318		-	-	-
Pot Cap-1 Maneuver	458	788	1314	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	452	786	1313	-	-	-
Mov Cap-2 Maneuver	452	-	-	-	-	-
Stage 1	782	-	_	-	-	_
Stage 2	705	_	_	_	_	_
ctage 2	100					
Approach	EB		NB		SB	
HCM Control Delay, s	10.8		0.3		0	
HCM LOS	В					
		NBL	NDT	EBLn1	SBT	SBR
Minor Long/Major Mym	+			EDLIII	ODI	SDR
Minor Lane/Major Mvm	t					
Capacity (veh/h)	t	1313	-	649	-	-
Capacity (veh/h) HCM Lane V/C Ratio	t	1313 0.009	-	649 0.043	-	-
Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	t	1313 0.009 7.8	- - 0	649 0.043 10.8	-	-
Capacity (veh/h) HCM Lane V/C Ratio		1313 0.009	-	649 0.043		

Synchro 10 Report Page 1 10/11/2019 DF

5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	10.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
		LDK	NDL			SDR
Lane Configurations	** **	40	04	4	190	22
Traffic Vol, veh/h	89	46	21	241	189	33
Future Vol, veh/h	89	46	21	241	189	33
Conflicting Peds, #/hr	0	1	_ 1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	e, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	36	36	83	83	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	247	128	25	290	215	38
WIVIII(I IOW	271	120	20	200	210	00
Major/Minor	Minor2	ı	Major1	١	/lajor2	
Conflicting Flow All	575	236	254	0	-	0
Stage 1	235	-	-	-	-	-
Stage 2	340	_	_	_	_	_
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	0.22	7.12	_	_	_
Critical Hdwy Stg 2	5.42	_		-	_	
			2.218	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	480	803	1311	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	468	801	1310	-	-	-
Mov Cap-2 Maneuver	468	-	-	-	-	-
Stage 1	785	_	_	_	_	_
Stage 2	720	_	_	_	_	_
Olago Z	120					
Approach	EB		NB		SB	
HCM Control Delay, s	24.9		0.6		0	
HCM LOS	С					
Minor Lane/Major Mvn	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1310	-	545	-	-
HCM Lane V/C Ratio		0.019	-	0.688	-	-
HCM Control Delay (s)	7.8	0	24.9	-	-
HCM Lane LOS		A	A	C	_	_
HCM 95th %tile Q(veh	1	0.1	-	5.3	_	_
HOW JOHN JOHN WINE WINE	1	0.1		0.0		_

10/11/2019 Synchro 10 Report Page 2 DF

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

Somerset Middle School School Peak Build

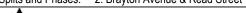
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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	74	173	49	65	180	50	50	200	133	13	182	82
Future Volume (vph)	74	173	49	65	180	50	50	200	133	13	182	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.978			0.977			0.953			0.960	
Flt Protected		0.988			0.989			0.994			0.998	
Satd. Flow (prot)	0	1793	0	0	1792	0	0	1750	0	0	1772	0
Flt Permitted		0.816			0.858	-	-	0.914			0.976	
Satd. Flow (perm)	0	1481	0	0	1555	0	0	1609	0	0	1733	0
Right Turn on Red	•		Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			22			56			44	. 00
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1	11.0	1		17.0	3	1	11.0	2	2	00.0	2
Peak Hour Factor	0.89	0.89	0.89	0.76	0.76	0.76	0.91	0.91	0.91	0.66	0.66	0.66
Adj. Flow (vph)	83	194	55	86	237	66	55	220	146	20	276	124
Shared Lane Traffic (%)	00	154	33	00	201	00	33	220	170	20	210	127
Lane Group Flow (vph)	0	332	0	0	389	0	0	421	0	0	420	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	LOIL	0	rtigiit	LGIL	0	rtigrit	LUIT	0	rtigrit	LUIT	0	rtigrit
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane		10			10			10			10	
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	1.00	9	15	1.00	9	1.00	1.00	9	15	1.00	9
Number of Detectors	13	2	J	1	2	J	1	2	J	13	2	J
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex		CI+Ex	CI+Ex	
Detector 1 Channel	OITLX	OITLX		OITLX	OITLX		OI+LX	OITLX		CITLX	OITLX	
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)	0.0	94		0.0	94		0.0	94		0.0	94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		CI+Ex			CI+Ex			CI+Ex			CI+Ex	
Detector 2 Type Detector 2 Channel		CITEX			CITEX			CITEX			CITEX	
		0.0			0.0			0.0			0.0	
Detector 2 Extend (s) Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases	reiiii	NA 4		reiiil	NA 8		Fellili	NA 2		reiiii	NA 6	
Permitted Phases	1	4		8	0		2			6	O	
Detector Phase	4	4		8	8		2	2		6	6	
Detector Phase	4	4		ŏ	ŏ					Ö	6	

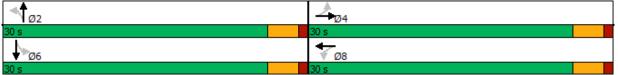
10/11/2019 DF

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

Somerset Middle School School Peak Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	<u> </u>	17.1		•	17.1			26.3		•	26.3	
Actuated g/C Ratio		0.33			0.33			0.51			0.51	
v/c Ratio		0.66			0.73			0.50			0.46	
Control Delay		20.0			22.8			11.1			10.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		20.0			22.8			11.1			10.7	
LOS		В			C			В			В	
Approach Delay		20.0			22.8			11.1			10.7	
Approach LOS		В			C			В			В	
Queue Length 50th (ft)		77			94			61			62	
Queue Length 95th (ft)		141			130			172			104	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)		101			001			120			1200	
Base Capacity (vph)		766			804			848			906	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.43			0.48			0.50			0.46	
Intersection Summary												
Area Type:	Other											
Cycle Length: 60												
Actuated Cycle Length: 51.	5											
Natural Cycle: 45												
Control Type: Actuated-Und	coordinated											
Maximum v/c Ratio: 0.73												
Intersection Signal Delay: 1	5.8			Ir	ntersection	LOS: B						
Intersection Capacity Utiliza					CU Level		e C					
Analysis Period (min) 15												
Splits and Phases: 2: Bra	ayton Aveni	ia & Page	1 Street									
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Somerset Middle School PM Peak Build

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	\$	- J-11
Traffic Vol, veh/h	3	5	5	445	254	2
Future Vol, veh/h	3	5	5	445	254	2
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-		-	_	-
Veh in Median Storage		-	-	0	0	_
Grade, %	0	_	_	0	0	_
Peak Hour Factor	38	38	78	78	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	13	6	571	292	2
WWW.CT IOW	U	10	U	011	LUL	_
	Minor2		Major1		Major2	<u> </u>
Conflicting Flow All	877	294	295	0	-	0
Stage 1	294	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	319	745	1266	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	558	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	316	744	1265	-	-	-
Mov Cap-2 Maneuver	316	-	-	-	-	-
Stage 1	750	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Annanah	ED		ND		O.D.	
Approach	EB		NB		SB	
HCM Control Delay, s	12.6		0.1		0	
HCM LOS	В					
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1265	-	493		-
HCM Lane V/C Ratio		0.005		0.043	-	
HCM Control Delay (s)		7.9	0	12.6		
HCM Lane LOS		Α.5	A	12.0 B	_	_
HCM 95th %tile Q(veh))	0	-	0.1	_	
TOM OUT JULIO Q(VOI)				J. 1		

Somerset Middle School 10/17/2019 PM Peak Build DF

5: Brayton Avenue & Somerset Middle School Driveway

Intersection						
Int Delay, s/veh	11.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	7/	LDI/	NDL	4 1	3B1 }	ODIN
		60	75	392		34
Traffic Vol, veh/h	57	68	75		224	
Future Vol, veh/h	57	68	75	392	224	34
Conflicting Peds, #/hr	0	0	0	0	0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	38	38	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	150	179	88	461	264	40
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	921	284	304	0	- viajoiz	0
Stage 1	284	204	JU 4	-		-
	637	-	-	-	_	-
Stage 2				-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	300	755	1257	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	527	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	272	755	1257	-	-	-
Mov Cap-2 Maneuver	272	-	-	_	_	_
Stage 1	692	_	_	_	_	_
Stage 2	527	_	_	_	-	-
Olaye Z	JZI					
Approach	EB		NB		SB	
HCM Control Delay, s	39.1		1.3		0	
HCM LOS	Е					
Minor Long/Maigr M.	.4	NDI	NDT	CDI n4	CDT	CDD
Minor Lane/Major Mvn	IL	NBL		EBLn1	SBT	SBR
Capacity (veh/h)		1257	-	417	-	-
HCM Lane V/C Ratio		0.07		0.789	-	-
HCM Control Delay (s)		8.1	0	39.1	-	-
HCM Lane LOS		Α	Α	Е	-	-
HCM 95th %tile Q(veh)	0.2	-	6.9	-	-

Somerset Middle School 10/17/2019 PM Peak Build DF

Lanes, Volumes, Timings 2: Brayton Avenue & Read Street

Somerset Middle School PM Peak Build

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4			4			4			4	
Traffic Volume (vph)	117	261	50	68	207	34	74	318	123	17	195	86
Future Volume (vph)	117	261	50	68	207	34	74	318	123	17	195	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00			1.00			0.99			0.99	
Frt		0.984			0.985			0.968			0.961	
Flt Protected		0.987			0.989			0.993			0.997	
Satd. Flow (prot)	0	1809	0	0	1810	0	0	1781	0	0	1774	0
Flt Permitted		0.796			0.831			0.902			0.964	
Satd. Flow (perm)	0	1459	0	0	1521	0	0	1618	0	0	1715	0
Right Turn on Red	•		Yes	-		Yes	-		Yes	-		Yes
Satd. Flow (RTOR)		14			13			33			43	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		484			761			505			1333	
Travel Time (s)		11.0			17.3			11.5			30.3	
Confl. Peds. (#/hr)	1	11.0			11.0	2		11.0	1	1	00.0	1
Peak Hour Factor	0.90	0.90	0.90	0.87	0.87	0.87	0.96	0.96	0.96	0.81	0.81	0.81
Adj. Flow (vph)	130	290	56	78	238	39	77	331	128	21	241	106
Shared Lane Traffic (%)	100	230	00	70	200	0.5	- ''	001	120	<u> </u>	271	100
Lane Group Flow (vph)	0	476	0	0	355	0	0	536	0	0	368	0
Turn Type	Perm	NA	U	Perm	NA	U	Perm	NA	U	Perm	NA	U
Protected Phases	i Giiii	4		i Giiii	8		i Giiii	2		i Giiii	6	
Permitted Phases	4			8	U		2			6	U	
Detector Phase	4	4		8	8		2	2		6	6	
Switch Phase				U	U					- U	U	
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	22.5	22.5		22.5	22.5		22.5	22.5		22.5	22.5	
Total Split (s)	30.0	30.0		30.0	30.0		30.0	30.0		30.0	30.0	
Total Split (%)	50.0%	50.0%		50.0%	50.0%		50.0%	50.0%		50.0%	50.0%	
Maximum Green (s)	26.0	26.0		26.0	26.0		26.0	26.0		26.0	26.0	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	1.0	0.0		1.0	0.0		1.0	0.0		1.0	0.0	
Total Lost Time (s)		4.0			4.0			4.0			4.0	
Lead/Lag		4.0			4.0			4.0			4.0	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effet Green (s)	U	21.2		U	21.2		U	26.2		U	26.2	
Actuated g/C Ratio		0.38			0.38			0.47			0.47	
v/c Ratio		0.84			0.60			0.47			0.47	
Control Delay		30.2			17.8			18.1			11.8	
Queue Delay		0.0			0.0			0.0			0.0	
_		30.2			17.8			18.1				
Total Delay LOS		30.2 C			17.6 B			16.1 B			11.8 B	
LU3		U			D			D			D	

Somerset Middle School 10/17/2019 PM Peak Build DF

Lanes, Volumes, Timings

Somerset Middle School PM Peak Build

2: Brayton Avenue & Read Street

	•	→	•	•	•	•	1	Ť		-	¥	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		30.2			17.8			18.1			11.8	
Approach LOS		С			В			В			В	
Queue Length 50th (ft)		132			86			133			72	
Queue Length 95th (ft)		#277			148			#295			122	
Internal Link Dist (ft)		404			681			425			1253	
Turn Bay Length (ft)												
Base Capacity (vph)		697			726			782			833	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.68			0.49			0.69			0.44	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 55.5

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.84

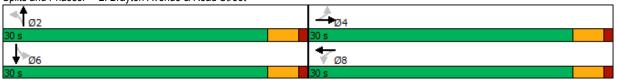
Intersection Signal Delay: 20.0 Intersection Capacity Utilization 88.6% Intersection LOS: C ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 2: Brayton Avenue & Read Street



HCM 2010 TWSC 5: Brayton Avenue & School Driveway north

Somerset Middle School AM Peak Build 2 School Driveways

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W		,,DL	4	1≯	ODIN
Traffic Vol, veh/h	60	107	12	116	351	19
Future Vol, veh/h	60	107	12	116	351	19
Conflicting Peds, #/hr	0	107	12	0	0	19
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	Stop	None	Free -	None	Free -	None
						None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	69	69	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	116	17	168	494	27
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	711	510	522	0	-	0
Stage 1	509	_	-	_	_	_
Stage 2	202		_	_	_	_
Critical Hdwy	6.42	6.22	4.12	_	_	_
Critical Hdwy Stg 1	5.42	0.22	4.12		_	
Critical Hdwy Stg 2	5.42	_	-	_		_
Follow-up Hdwy		3.318		_		-
					-	-
Pot Cap-1 Maneuver	400	563	1044		-	_
Stage 1	604	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	562	1043	-	-	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	831	-	-	-	-	-
J.						
Annroach	EB		NB		SB	
Approach						
HCM Control Delay, s	16.8		8.0		0	
HCM LOS	С					
Minor Lane/Major Mvn	nt	NBL	NBTI	EBLn1	SBT	SBR
Capacity (veh/h)		1043	-	486	-	-
HCM Lane V/C Ratio		0.017		0.374	-	<u> </u>
		8.5	0	16.8		
HCM Control Delay (s)						
HCM Lane LOS	\	Α	Α	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.7	-	-

Synchro 10 Report Page 1 11/05/2019 DF

Intersection						
Int Delay, s/veh	2.4					
		EDD	ND	NDT	ODT	000
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥	4.5	4.45	<u>्</u>	4	•
Traffic Vol, veh/h	19	12	113	109	334	64
Future Vol, veh/h	19	12	113	109	334	64
Conflicting Peds, #/hr	0	1	_ 1	_ 0	_ 0	_ 1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage		-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	69	69	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	13	164	158	470	90
N 4 - : - : /N 4:	N 41: C		M-!. 4		4-1-0	
	Minor2		Major1		Major2	
Conflicting Flow All	1002	517	561	0	-	0
Stage 1	516	-	-	-	-	-
Stage 2	486	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	269	558	1010	-	-	-
Stage 1	599	-	-	-	-	-
Stage 2	618	_	_	_	_	_
Platoon blocked, %	3.0			_	_	_
Mov Cap-1 Maneuver					_	_
	221	557	1000		-	-
	221	557	1009	-	-	-
Mov Cap-2 Maneuver	221	-	1009	-	- - -	-
Mov Cap-2 Maneuver Stage 1	221 492	-		-	-	-
Mov Cap-2 Maneuver	221	-		- - -	-	-
Mov Cap-2 Maneuver Stage 1	221 492	-		- - -	-	-
Mov Cap-2 Maneuver Stage 1 Stage 2	221 492	-		-	- - - -	-
Mov Cap-2 Maneuver Stage 1 Stage 2	221 492 617 EB	-	- - - NB	-	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s	221 492 617 EB 19.1	-	- - -	-	- - - -	-
Mov Cap-2 Maneuver Stage 1 Stage 2	221 492 617 EB	-	- - - NB	-	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS	221 492 617 EB 19.1 C	-	NB 4.7	-	- - - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s	221 492 617 EB 19.1 C	-	NB 4.7	- - - -	- - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS	221 492 617 EB 19.1 C	-	NB 4.7	-	- - - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm	221 492 617 EB 19.1 C		- - - NB 4.7	- - EBLn1	- - - - - SB	-
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	221 492 617 EB 19.1 C	NBL 1009 0.162	- - - NB 4.7	EBLn1 288 0.117	- - - - - SB 0	- - - - - - - - - - - -
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio HCM Control Delay (s)	221 492 617 EB 19.1 C	NBL 1009 0.162 9.3	NB 4.7	EBLn1 288 0.117 19.1	- - - - SB 0	SBR
Mov Cap-2 Maneuver Stage 1 Stage 2 Approach HCM Control Delay, s HCM LOS Minor Lane/Major Mvm Capacity (veh/h) HCM Lane V/C Ratio	221 492 617 EB 19.1 C	NBL 1009 0.162	NB 4.7	EBLn1 288 0.117	- - - - SB 0	

 11/05/2019
 Synchro 10 Report

 DF
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HCM 2010 TWSC 5: Brayton Avenue & School Driveway North

Somerset Middle School School Peak Build 2 driveways

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			4	\$	UJ 11
Traffic Vol, veh/h	32	83	11	261	209	20
Future Vol, veh/h	32	83	11	261	209	20
Conflicting Peds, #/hr		1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	- -		-		-	
Storage Length	0	-	_	-	_	-
Veh in Median Storage	•	_	_	0	0	_
Grade, %	0	_	_	0	0	-
,	36	36		83	88	88
Peak Hour Factor			83			
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	231	13	314	238	23
Major/Minor	Minor2		Major1	N	Major2	ı
Conflicting Flow All	591	252	262	0		0
Stage 1	251	-	-	-	_	-
Stage 2	340	_	_	_	_	_
Critical Hdwy	6.42	6.22	4.12	_	_	
Critical Hdwy Stg 1	5.42	0.22	4.12		_	-
	5.42	_	_	-		-
Critical Hdwy Stg 2			0.040	-		-
Follow-up Hdwy		3.318		-	-	-
Pot Cap-1 Maneuver	470	787	1302	-	-	-
Stage 1	791	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver		786	1301	-	-	-
Mov Cap-2 Maneuver		-	-	-	-	-
Stage 1	781	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Annraaah	ΓD		NB		SB	
Approach	EB					
HCM Control Delay, s			0.3		0	
HCM LOS	С					
Minor Lane/Major Mvr	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1301	_	658		
HCM Lane V/C Ratio		0.01		0.485	_	_
HCM Control Delay (s	1	7.8	0	15.5	_	_
HCM Lane LOS	,	7.0 A	A	13.3 C	_	-
HCM 95th %tile Q(veh	.)	0	-	2.7		-
HOW 95th Wille Q(ver	1)	U	_	2.1	-	-

Synchro 10 Report Page 1 10/11/2019 DF

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	¥			4	\$	
Traffic Vol, veh/h	20	11	12	252	272	20
Future Vol, veh/h	20	11	12	252	272	20
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-		-		-
Veh in Median Storage		_	-	0	0	_
Grade, %	0	_		0	0	_
Peak Hour Factor	36	36	83	83	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	56	31	14	304	309	23
MINITE FIOW	50) I	14	304	309	23
Major/Minor	Minor2		Major1	N	Major2	
Conflicting Flow All	654	323	333	0	-	0
Stage 1	322	-	-	_	-	-
Stage 2	332	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	_	-
Critical Hdwy Stg 1	5.42	-	-	-		-
Critical Hdwy Stg 2	5.42	_	-	-	-	-
Follow-up Hdwy		3.318	2.218	-		-
Pot Cap-1 Maneuver	431	718	1226	_	_	_
Stage 1	735	-	-	_		_
Stage 2	727	_	_	_	_	_
Platoon blocked, %	121			_	_	_
Mov Cap-1 Maneuver	424	717	1225			
Mov Cap-2 Maneuver	424	- 111	1220	_	_	
Stage 1	724	_	-			-
	724	-	-	-	-	-
Stage 2	120		-		-	
Approach	EB		NB		SB	
HCM Control Delay, s	13.8		0.4		0	
HCM LOS	В					
110111 200						
Minor Lane/Major Mvr	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1225	-	496	-	-
HCM Lane V/C Ratio		0.012	-	0.174	-	-
HCM Control Delay (s)	8	0	13.8	-	-
HCM Lane LOS		Α	Α	В	-	-
HCM 95th %tile Q(veh	1)	0	-	0.6	-	-
•						

 10/11/2019
 Synchro 10 Report

 DF
 Page 1

HCM 2010 TWSC 5: Brayton Avenue & School Driveway North

Somerset Middle School PM Peak Build 2 School Driveways

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W	LDIX	NDL	4	<u>361</u>	אופט
Traffic Vol, veh/h	'T' 49	0	0	392	224	29
Future Vol, veh/h	49	0	0	392	224	29
Conflicting Peds, #/hr	0	0	_ 0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	53	0	0	461	264	34
	00	U		101	207	UT
	Minor2		Major1	N	Major2	
Conflicting Flow All	742	281	298	0	-	0
Stage 1	281	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	_	-	-
Critical Hdwy Stg 1	5.42	-	- 1.12	_	_	_
Critical Hdwy Stg 2	5.42	_	_			
Follow-up Hdwy		3.318		-	_	-
	383	758	1263	_		
Pot Cap-1 Maneuver		100	1203		-	-
Stage 1	767	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	383	758	1263	-	-	-
Mov Cap-2 Maneuver	383	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	635	-	-	_	-	-
g 						
Approach	EB		NB		SB	
HCM Control Delay, s	15.9		0		0	
HCM LOS	С					
		MDI	MDT	·	007	000
Minor Lane/Major Mvm	nt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)		1263	-	383	-	-
HCM Lane V/C Ratio		-	-	0.139	-	-
HCM Control Delay (s)		0	-	15.9	-	-
HCM Lane LOS		A	_	С	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-
				3.0		

Somerset Middle School 10/17/2019 PM Peak Build 2 School Driveways DF

HCM 2010 TWSC 5: Brayton Avenue & School Driveway South

Somerset Middle School PM Peak Build 2 School Driveways

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	7/	LDI\	NDL	4	- 100 ↑	ODIN
Troffic Val. yeb/b		EO	C1			٥
Traffic Vol, veh/h	0	58	64	392	224	0
Future Vol, veh/h	0	58	64	392	224	0
Conflicting Peds, #/hr	0	0	0	_ 0	_ 0	_ 0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage	, # 0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mymt Flow	0	63	75	461	264	0
WWW. LICAN	U	00	10	701	207	U
	Minor2		Major1	N	Major2	
Conflicting Flow All	875	264	264	0	-	0
Stage 1	264	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	_	_	
Critical Hdwy Stg 1	5.42	- 0.22	7.12	_	_	_
Critical Hdwy Stg 1	5.42			-		_
		3.318		-	-	-
Follow-up Hdwy				-	-	-
Pot Cap-1 Maneuver	320	775	1300	-	-	-
Stage 1	780	-	-	-	-	-
Stage 2	542	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	295	775	1300	-	-	-
Mov Cap-2 Maneuver	295	_	-	_	-	_
Stage 1	719	_	_	_	_	
Stage 2	542	_	_		_	_
Glaye Z	J4Z	_		_		_
Approach	EB		NB		SB	
HCM Control Delay, s	10.1		1.1		0	
HCM LOS	В					
1 JOINI LOO	U					
Minor Lane/Major Mvm	nt	NBL	NBT I	EBLn1	SBT	SBR
Capacity (veh/h)		1300	-	775	-	-
HCM Lane V/C Ratio		0.058		0.081	_	
HCM Control Delay (s)		7.9	0	10.1	_	
HCM Lane LOS		Α	A	В	_	_
HCM 95th %tile Q(veh)	١	0.2	- A	0.3		
How som while Q(ven)		U.Z	-	0.5	-	

Somerset Middle School 10/17/2019 PM Peak Build 2 School Driveways DF



Geotechnical Evaluation

PREPARED FOR: The Vertex Companies, Inc.

PRELIMINARY GEOTECHNICAL DESIGN BASIS **REPORT**

PROPOSED SOMERSET MIDDLE SCHOOL BUILDING 1141 BRAYTON AVENUE SOMERSET, MASSACHUSETTS

PREPARED BY:

PARE CORPORATION 10 LINCOLN ROAD, SUITE 210 FOXBORO, MASSACHUSETTS 02035

PARE PROJECT NUMBER 19118.00

SUBMITTED SEPTEMBER 2019



PRELIMINARY GEOTECHNICAL DESIGN BASIS REPORT

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9/24/2019

Vertex-Somerset Geotech Rpt_ 9-24-19 Final



1.0 BACKGROUND/SITE LOCATION

This preliminary Geotechnical Design Basis Report presents the results of the Phase I geotechnical subsurface investigations and evaluations undertaken by Pare Corporation (Pare) at the site of the proposed new Somerset Middle School building adjacent to the existing school located off Brayton Avenue, Somerset, Massachusetts. The new building is anticipated to consist of multi-story structures with no below grade spaces. The design is subject to change pending results of the investigation as written herein. The project site is depicted on Figure 1-1: Locus Plan and Figure 1-2: Aerial Plan. This report has been prepared in accordance with our proposal and is subject to the geotechnical limitations presented in Appendix C.

1.1 Purpose and Scope

The large size of the site, current unknown location of the proposed construction, and known complexity of the subsurface conditions on the proposed site requires the completion of additional explorations which are beyond the scope identified herein. All parties also acknowledge and understand that the services performed to date are preliminary in nature and that additional explorations will be performed during the post-schematic design phase once the building footprint, proposed school layout, and proposed grading information is more clearly defined.

The purpose of this schematic study is to identify the existing subsurface conditions; evaluate potential implications the observed conditions may have upon the proposed building; assist in design; and provide preliminary geotechnical parameters and recommendations for use during the design of the foundations, building, and other site improvements associated with the proposed project. The scope of this evaluation included the following:

- Filing a Locate Request Form with Dig Safe.
- Reviewing available subsurface information.
- Advancing four (4) borings within or adjacent to the footprint of the proposed building.
 Two (2) borings were advanced into bedrock and the other two (2) borings were advanced until refusal on weathered bedrock.
- Installing an observation well.
- Sampling and performing Standard Penetration Testing (SPT).
- Performing mechanical grain size analysis on specific representative soil samples.
- Preparing a preliminary geotechnical report summarizing the exploration findings, data evaluations, geotechnical design recommendations, and construction recommendations.

The scope of this evaluation did not include an evaluation of the site for the presence of contamination or other environmental concerns, as those tasks are outside of Pare's proposed scope of services.

1.2 Surface Conditions

As shown on Figure 1-3: Subsurface Exploration Plan, the site is located west of Brayton Avenue, and east of the existing Somerset Middle School and parking lots. North of the site lies a wooded area with power lines running east to west, and to the south of the site lies the South Elementary School and a sports field. The site is currently covered by grassed areas, asphalt paving and concrete sidewalks. The grade in the area of the current Middle School is relatively flat. The area between

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the current Middle School and Brayton Avenue slopes down irregularly at approximately 2H:1V towards Brayton Avenue. The existing site grades range from approximately El.148ft near Boring B19-5 to El.127ft¹ near Brayton Avenue. A sewer field is located on the proposed site north of boring B19-1 (see Figure 1-3). Somerset Middle School also has archived records of the original construction blueprints showing the extent and location of the sewer field.

1.3 USGS Surficial/Bedrock Geology

The United States Geological Survey (USGS) surficial geology map of the Fall River Quadrangle, Massachusetts indicates that the site is underlain by glacial till deposits. This layering consists of "Boulders, gravel, sand, silt, and clay; unconsolidated; poorly sorted and unstratified."²

The bedrock below the surficial deposits is mapped as the Rhode Island Formation. In the area investigated, this deposit is subclassified as "Sandstone, graywacke, shale, and conglomerate; minor beds of meta-anthracite and fossil plants."³

1.4 Proposed Grading

Pare has not been provided with specifics as to the proposed building grades.

The property appears to be located within the FEMA⁴ Flood Hazard Zone "X" with an area determined to be outside the 0.2% annual chance flood plain.



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Elevations are based on HEC-RAS LIDAR data.

² USGS Surficial Geologic Map of Fall River Quadrangle, Massachusetts, 2011.

³ USGS Bedrock Geology Map of Massachusetts.

⁴ FEMA Flood Insurance Rate Map Number 44009C0102J, Effective date September 8, 2017.

2.0 SUBSURFACE EXPLORATIONS

The Phase I subsurface investigation program was performed by New England Boring Contractors, Inc of Brockton, Massachusetts and observed by Pare personnel between August 6th, 2019 to August 7th, 2019. During this study, four (4) borings were advanced. The borings were performed using a CME 75 drill rig utilizing 4-inch casing with wash and drive techniques, as noted on the boring logs, with 5-foot-long NX-size rock cores being recovered from two (2) of the borings. A 20-foot deep observation well was installed in boring B19-1. Boring logs are included in Appendix A, and exploration locations are shown on Figure 1-3: Subsurface Exploration Location Plan.

Pare's field personnel observed the drilling conditions, visually identified the SPT soil samples during the advancement of the explorations and took groundwater measurements on the same day exploration was completed at a boring location. Groundwater readings during exploration are anticipated to be higher than typical values due to drilling techniques.

2.1 Previous exploration programs

Boring data presented on a plan dated March 24, 1964 prepared by Warren H. Ashley A.I.A within or adjacent to the proposed site was made available by the client. The information presented indicated that 17 borings were drilled, 16 of which ranged between 8 to 12 feet in depth. Generally, the strata encountered were 1 to 3 feet of topsoil underlain by fine to medium SAND with fine to coarse gravel fragments. The SAND layer was underlain by a coarser layer defined as being "Rock Fragments". The seventeenth boring was drilled to 26.5 feet. Between the depths of 8 feet and 26.5 feet, it was generally classified as rock fragments. The rock fragments and blow counts suggest a weathered rock layer may have been encountered within this depth interval.

2.2 Current exploration program

The subsurface investigation program, consisted of four (4) test borings (B19-1, B19-2, B19-3 and B19-5), was performed by New England Boring of Brockton, Massachusetts and observed by Pare personnel from August 6th, 2019 to August 7th, 2019. B19-4 was not performed. The bottom of the borings was determined to be as follows: 27.8 feet in B19-1, 9.2 feet in B19-2, 13.6 feet in B19-3, and 15.3 feet in B19-5

Split spoon samples were obtained in general accordance with ASTM D-1586 using an automatic hammer. The SPT provides an indication of the characteristics, relative density, and consistency of the deposits. The test consists of driving a 1-3/8 inch inside diameter standard split spoon sampler 24 inches with a 140-pound automatic hammer dropping from a height of 30 inches. The SPT value used in subsequent analysis is the number of blows (N) required to drive the sampler from 6 to 18 inches of penetration.

During the explorations, subsurface soils were visually classified utilizing the Burmister Classification System. This system describes soil composition based on the percentage of soil particle size present by weight in the sample with the major soil particle size listed first followed by other soil components described as "trace" indicating 0-10% by weight, "little" indicating 10-20% by weight, "some" indicating 20-35% by weight, or "and" indicating 35-50% by weight.

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Rock coring was performed within borings B19-1 and B19-5. The rock coring was completed with an NX-sized double-barrel coring. The rock coring was completed in general conformance with ASTM D-2113. Pare personnel were on-site to observe coring, collect the samples, calculate core recovery, determine Rock Quality Designation (RQD), and describe the recovered rock. The amount of core recovery is the ratio of recovered rock over the length of the core run. RQD is the ratio of the length of recovered rock pieces greater than 4 inches (unbroken) and length of the core run.

2.3 Field Measurement and Methodology

The locations of the borings were georeferenced in the field using a handheld GPS unit with sub-foot horizontal accuracy. Data from the GPS unit was later corrected using Trimble software and the representative boring location are shown on Figure 1-3: Subsurface Exploration Location Plan.

2.4 Locations

Four (4) borings were performed in the general area of the proposed building. The borings (B19-1, B19-2, B19-3 and B19-5) were advanced to various depths at the locations shown in Figure 1-3. Of the performed borings: B19-1 was located in the approximate center of site, B19-2 was approximately located in the southeast area of the site, B19-3 was approximately located in the west area of the site, and B19-5 was approximately located in the southwest area of the site. B19-4 was not performed.



Module 3 - Preliminary Design Program

3.0 SUBSURFACE CONDITIONS

The material within the subsurface profile in the area of the proposed building generally consist of TOPSOIL overlying GLACIAL DEPOSITS, overlying TILL, overlying WEATHERED SANDSTONE.

3.1 Soil Strata

The various soil strata reported on the boring logs are described below. It should be noted that the depths to, and thickness of the various soil and rock strata will vary between and away from the exploration locations. Similarly, the nature of the various deposits will also vary between and away from the exploration locations.

For additional information and detail regarding the various strata, please refer to the boring logs in Appendix A and Table 3-1: Subsurface Exploration Summary.

3.1.1 Stratum 1 – TOPSOIL

TOPSOIL was encountered at all the explorations locations. TOPSOIL was identified in the upper portion of the 2-foot split spoon samples between the depth of 0 and 2 feet. It is assumed to be approximately 6 inches thick. TOPSOIL was generally described as brown to gray, fine SAND, with "trace" to "and" amounts of medium sand, "little" to "some" silt, "trace" to "little" coarse sand, "trace" fine to coarse gravel, and "trace" organics.

SPTs performed in Stratum 1 generally indicate a density of loose to medium dense.

3.1.2 Stratum 2 – GLACIAL DEPOSITS

GLACIAL DEPOSITS were encountered within the footprint of the proposed building and site improvement areas and are generally described as brown to gray, fine SAND with "trace" to "and" amounts of medium sand, "little" to "and" amounts of SILT, "trace" to "some" of fine to coarse gravel, and "trace" to "some" amounts of coarse sand.

SPTs performed in Stratum 2 generally indicate a density of medium dense to very dense.

GLACIAL DEPOSITS were encountered within all borings with a thickness ranging from 3.5 feet to 7.5 feet.

3.1.3 Stratum 3 – TILL

TILL was encountered underlying the GLACIAL DEPOSITS stratum at the site and is generally described as poorly sorted gray, fine to coarse GRAVEL, with "and" amounts of medium sand, "little" to "and" amounts of fine sand, "trace" to "and" amounts of coarse sand, and "trace" to "some" silt.

SPTs performed in this stratum indicate a density of dense to very dense.

The TILL was encountered in all borings with the thickness ranging from 2.0 feet to 7.0 feet.

3.1.4 Stratum 4 – WEATHERED SANDSTONE

WEATHERED SANDSTONE was encountered in all four (4) borings and is generally described as completely weathered sandstone recovered as gray, fine to coarse gravel or medium to coarse sand with "trace" to "little" amounts of fine sand, and "trace" to "some" amounts of silt.

SPTs performed in Stratum 4 generally indicate a density of dense to very dense.

3.1.5 Stratum 5 – SANDSTONE BEDROCK

SANDSTONE BEDROCK was encountered within B19-1 and B19-5, as determined by rock coring. Refusal in borings B19-2 and B19-3 was likely due to bedrock being encountered.

Based upon a visual inspection of the rock core sample obtained from B19-1 and B19-5, bedrock consists of weak to moderately strong, gray, fine grained SANDSTONE, laminated, highly weathered to slightly weathered. The rock core samples were characterized as "poor" using the Rock Quality Designation (RQD) value. A summary of rock core depth, length, and RQD is presented in Table 3-2.

TABLE 3-2: ROCK CORE SUMMARY							
Soil Boring No.	Approximate Depth (ft)	Length (ft)	Recovery (%)	RQD (%)			
B19-1 C1	23.2-27.8	4.5	76.3	0			
B19-5 C1	10.3-15.3	5.0	98.3	0			



Module 3 - Preliminary Design Program

Somerset Middle School New Building

Subsurface Conditions

Table 3-1: Subsurface Exploration Summary									
			Approximate Depth (Elevation) to Top of Stratum (ft)						
Boring ID	General Location	Approx. Ground Surface Elevation (ft) ⁵	Stratum 1 TOPSOIL	Stratum 2 GLACIAL DEPOSITS	Stratum 3 TILL	Stratum 4 WEATHERED SANDSTONE	Stratum 5 SANDSTONE BEDROCK	Depth of Exploration	Groundwater 6
B19-1	Center region of site	134.4	0.0 (134.4)	0.5 (133.9)	8.0 (126.4)	13.0 (121.4)	23.2 (111.2)	27.8 (106.6)	11.8 (122.6)
B19-2	Southwest region of site	128.3	0.0 (128.3)	0.5 (127.8)	4.0 (124.3)	7.0 (121.3)	N/E	9.2 (119.1)	2.6 (125.7)
B19-3	West region of site	146.6	0.0 (146.6)	0.5 (146.1)	4.0 (142.6)	13.0 (133.6)	N/E	13.6 (133.0)	2.3 (143.6)
B19-5	Southeast region of site	148.3	0.0 (148.3)	0.5 (147.8)	6.0 (142.3)	8.0 (140.3)	10.2 (138.1)	15.3 (133.0)	5.0 (143.3)

N/E: Not Encountered

3.2 Groundwater

Based on observations during the subsurface investigation program, groundwater varied by a significantly big range from approximately 2.0 feet (Elevation 146.3 feet) to 11.8 feet (Elevation 122.6 feet) below the existing ground surface. The measured groundwater reading was 11.8 feet below the existing ground surface in the observation well. It is important to note that as part of the boring activities, water was introduced to each borehole and may not have dissipated at the time that the initial or subsequent measurements were taken.

It should be noted that groundwater levels are known to fluctuate due to local and regional factors including, but not limited to, precipitation events, seasonal changes, and periods of wet or dry weather.

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⁵ Elevations are based LIDAR data from Hec-Ras software.

⁶ Groundwater observed in borings B19-2, B19-3, and B19-5 were observed during drilling and may have a lower groundwater than observed.

4.0 LABORATORY TESTING

The laboratory testing program included mechanical grain size analyses performed upon samples from the strata encountered during the investigation. The results of the laboratory testing are summarized below. The data sheets are included in Appendix B.

4.1 Grain Size Analysis

Three grain size analyses were performed on materials recovered during the subsurface investigation with descriptions and results presented as follows:

	Table 4-1: Results of Grain Size Analyses								
Test	Boring	Sample	Depth	Representative % % So		% Sand	% Fines		
No.	No.	No.	(Ft.)	Soil Strata	Gravel	70 Sanu 70 Fines			
1	B19-3	S-3	4-6	GLACIAL DEPOSITS	20.3	43.2	36.4		
2	B19-2	S-2	2-4	GLACIAL DEPOSITS	22.9	61.9	15.2		
3	B19-1	S-5	8-10	TILL	46.3	50.1	3.6		



Module 3 - Preliminary Design Program

5.0 IMPLICATIONS OF SUBSURFACE CONDITIONS

5.1 General

Based on the subsurface investigation program and observations made during the explorations, the following are the geotechnical issues identified that could potentially impact the development of the site as proposed:

- The TOPSOIL observed across the surface of the site, is not a suitable bearing stratum for footings or suitable for reuse as backfill material in the building or roadway areas and is recommended to be removed and replaced with suitable material as stated herein or be stock piled and reused as landscaping material.
- Asphalt, concrete, topsoil, and fill material observed across the surface of the site should be removed in their entirety as these materials are not suitable bearing material for footings or suitable for reuse as backfill materials.
- The GLACIAL DEPOSITS and TILL strata encountered in the borings contain "little" to "and" amounts of silt. While reuse of this material is permissible, this material, when saturated from groundwater or rainfall events, will be easily disturbed by construction equipment making traversing the site and compaction of this material difficult. Moisture conditioning may be required to keep the soil near the optimum water content.
- WEATHERED SANDSTONE was encountered within all borings during the subsurface exploration at this site. Excavations of WEATHERED SANDSTONE may be necessary for construction of foundations. Voids resulting from the removal of WEATHERED SANDSTONE will need to be properly backfilled and compacted in layers with suitable fill material.
- For each of the strata described above it should be note that the thickness and extents are likely to vary across the site.
- Onsite materials do not appear suitable for reuse in their current state, nor will all required material gradations or quantities be present on-site. Imported materials, screening of onsite materials, and/or blending of on-site material with imported material is anticipated for this project.
- Groundwater was encountered at depths ranging from 2.0 to 11.8 feet below the existing site grade in the borings. Based upon these observations, groundwater could impact the foundation excavations. Dewatering and control of watering during excavation will likely be necessary during the preparation of the subgrade for foundations and utilities.



5.2 Seismic Design and Liquefaction Evaluations

5.2.1 Site Criteria

In accordance with the 2015 International Building Code and ASCE 7-10, and based on the boring information, the soil profile of the project site is characterized as Site Class Profile C, "Very Dense Soil and Soft Rock" $\bar{N} > 50^7$).

In accordance with the Massachusetts 780 CMR 9th Edition Table 1604.11 and using the 2015 International Building Code, the maximum considered earthquake spectral response acceleration at short periods, S_S, and at 1-second periods, S₁, are 0.178g and 0.060g, respectively, for Somerset, Massachusetts.

Correcting the accelerations for the observed site profile based upon the SPT N-Values, the following parameters are recommended in the use of determining the seismic design category for the structure:

- Adjusted maximum considered earthquake spectral response acceleration parameters
 - \circ S_{MS} = 0.183 for site class "C"
 - o $S_{M1} = 0.102$ for site class "C"
- For calculating the design spectral response accelerations utilize:
 - o S_{DS} = 0.122 for site class "C"
 - o S_{D1}=0.068 for site class "C"
- Peak Ground Acceleration:
 - \circ PGA_M = 0.091 g for site class "C"
- Seismic Design Category
 - o For site class "C" Category "B"

5.2.2 Liquefaction Evaluation

Liquefaction is the tendency for a soil type, particularly fine sands, to lose a significant amount of strength and behave similar to a liquid in the event of an earthquake, or sufficient vibrations. Liquefaction analyses generally relate SPT-N values, corrected for overburden, and measured groundwater levels to the liquefaction potential of the materials in question.

The liquefaction analyses completed during preparation of this report takes into account the soil and groundwater conditions encountered during the subsurface exploration program. It should be noted that fluctuations in groundwater levels can have a significant effect in the liquefaction potential of soils. If the groundwater is observed to change during the construction process or future explorations, Pare should be contacted as it may be necessary to re-analyze the soil for liquefaction potential.

Based upon the observed relative densities, groundwater elevation, and material composition in accordance with the Massachusetts 780 CMR 9th edition Figure 1806.4c, it appears that the in-situ soils are NOT susceptible to liquefaction at this time.

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⁷ " \overline{N} " denotes the average Standard Penetration Test N-value for the first 100 feet of soil and rock.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Foundations and Slabs

6.1.1 Site Preparation

The areas of the proposed structures will need to be stripped, grubbed of asphalt, fill, vegetation, and topsoil. The material to be removed from the site may contain solid wastes and should be disposed of in a manner that is consistent with local and state regulations. Organic matter encountered should be removed from the building footprint as defined by a 1 horizontal to 1 vertical slope extending downward and outward from two feet outside the edges of the footings. Care shall be taken so as not to combine or mix organic material with the granular material to be reused as fill in other portions of the site.

Existing utilities on the site, including gas, electric, drainage, and drainage fields, and structures encountered during the progression of the work should be removed to the full extent and the resulting excavations backfilled with properly compacted "Granular Fill". Alternately pipes and structures can be filled with concrete. Care should be taken during the procedure to ensure complete filling of the pipes and/or structures.

Boulders encountered during the site preparation should be removed from the building area. Boulders located within the building area should be removed to a depth of at least 12 inches below the foundation elevation. Voids that result from boulder removal should be backfilled with compacted "Granular Fill".

In areas to be cut, the cut should extend to 12 inches below the bottom of the building slab and be backfilled with a 12-inch layer of compacted "Sand Gravel Fill". The interior and exterior footings should also be over excavated by 12 inches below founding level and replaced with 12 inches of compacted "Sand Gravel Fill". Should the exposed subgrade conform to the gradation for "Sand Gravel Fill" over-excavation is not required as the area can be proof-rolled with 10 passes of a vibratory drum roller.

Should the subgrade become disturbed during excavation and/or construction, the disturbed material should be over excavated and replaced with one foot of "Sand Gravel Fill" or 6 inches of "Crushed Stone" and a layer of filter fabric to stabilize the subgrade.

Prior to foundation preparation, the building site should be proof rolled to identify loose or soft pockets that may be present. Please see section 6.12 for reference to proof rolling.

6.1.2 Shallow Foundations

A shallow foundation system composed of column (e.g., square) and wall (e.g., continuous) footings bearing on suitable bearing material (minimum 12-inch thick layer of compacted "Sand Gravel Fill"; 6-inches of crushed stone (in wet areas) wrapped in a layer of geotextile filter fabric placed on compacted structural "Granular Fill"; improved on-site GLACIAL DEPOSITS and TILL. Proof compacted GLACIAL DEPOSITS (Stratum 2) and TILL (Stratum 3) appear suitable for effectively transferring building loads to the ground. *A maximum net allowable soil bearing*

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pressure⁸ of 4,000 pounds per square foot for exterior footings and interior footings is recommended in the design of footings bearing on these materials at the recommended frost depth.

The above noted allowable bearing pressures were developed assuming a factor of safety of 3.0 against bearing capacity failure and with the following footing geometry:

Continuous exterior wall footings: A width of no less than 2 nor greater than 8 feet with a minimum embedment depth of 48 inches.

Interior square footings: A 2x2, 4x4, 6x6, or 8x8 foot square footing with a minimum embedment depth of 24 inches.

Exterior square footings: A 2x2, 4x4, 6x6, or 8x8 foot square footing with a minimum embedment depth of 48 inches.

A maximum total settlement of 1 inch and a maximum differential settlement of ½ inch between foundation elements was also assumed. Interior footings were also assumed to be at least 4 feet wide. In the event that lower settlement tolerances are required, Pare should be contacted to revise the bearing pressure, subgrade preparation, and/or foundation recommendations.

Footings should be proportioned to apply no more than the net allowable bearing pressure. For footings less than 2-feet wide or greater than 8-feet wide, the net allowable bearing pressure should be reassessed and in no case should a continuous footing be less than 24-inches wide or should a column footing be less than 24-inches wide.

A modulus of vertical subgrade reaction (K_v) of 150 pounds per cubic inch is recommended for design of slab on grade placed over 12 inches of compacted "Sand Gravel Fill". The structural engineer will need to design the floor slab for anticipated live and dead loads in accordance with applicable building codes. Should the building, mechanical, electrical, or other equipment require independent foundations, additional foundations and/or modifications to the floor slab may be required depending upon the actual load requirements.

6.2 **Ground Modifications**

The design of the ground modification program should be coordinated with the structural engineer in discussion with the geotechnical engineer and the site/civil engineer. Given our current understanding of the project, the material, depth to groundwater, and area to be improved Pare recommends a combination of Excavation and Replacement with Proof Compaction. The ground improvement program should be designed to provide a uniform bearing stratum meeting the bearing capacity presented in Section 6.1, in addition to reducing the risk of excessive total and differential settlements developing.

The following summarizes the ground improvement approach to provide suitable bearing for footings/foundations.

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⁸ Net allowable bearing pressure is the pressure in excess of the existing overburden pressure that can be safely carried at the footing depth, D.

- 1. Unsuitable in-situ soils: TOPSOIL (Stratum 1), deposits containing organic matter or roots greater than ¼ inch diameter, and fill deposits that may be present shall be over excavated to the top of the soil determined to be an acceptable bearing stratum, and the exposed subgrade proof compacted within the influence zone of the proposed foundation and slabs-on-grade. Subgrades should be proof compacted with a minimum 4-6 passes of a vibratory roller with a static weight of 10,000 pounds and a dynamic weight of 20,000 pounds. Caution should be used when compacting the subgrade, if wet, to avoid weaving and disturbance from vibrations. Any unsuitable, disturbed, or weaving areas should be removed.
- 2. The excavation shall then be backfilled with approved material, compacted in lifts, to the bearing elevation of the proposed foundation or slabs-on-grade. Site elevations shall be raised as required using approved material and compacted in lifts with a maximum loose lift thickness of 12 inches.
- 3. It may be possible to reuse on-site GLACIAL DEPOSITS and TILL material as "Sand Gravel Fill" after grain size analyses confirm suitability. *Blending with other aggregates to reach acceptable standards is anticipated. Importing of materials is anticipated.*
- 4. All fill shall be compacted under the observation of the geotechnical engineer to the recommended relative compaction as described in Table 6.4. Each lift of placed material shall be field density tested in accordance with project specifications.

This approach, which is the recommended approach in areas of the proposed Building and Influence Zones, will address the potential for excessive differential settlement. The reuse of the GLACIAL DEPOSITS and TILL as backfill may be permissible with the completion of confirmatory grain size analyses, and environmental contamination testing. In the case of organic material being encountered, the reuse of any organic material encountered as fill material within the influence zone of the proposed building area should not be permitted.

6.3 Settlement

Settlement of the proposed structures should be limited to 1-inch total settlement and 0.5-inch differential settlement. Differential settlement of foundation system with footings founded upon both natural soils and bedrock, may govern the bearing capacity and the reduced values should be used for design. Based upon the density and types of the observed soils, and recommended bearing capacities as identified in the section above, settlements in excess of the limits identified are not anticipated.

6.4 Lateral Earth Pressures and Retaining Wall Design

For the design of retaining walls with level backfill, recommended lateral earth pressure coefficients are indicated in Table 6-1. A moist unit weight of 125 pounds per cubic foot (pcf) and a minimum internal friction angle (ϕ) of 33° for imported free draining "Granular Fill" is recommended. A moist unit weight of 130 pounds per cubic foot (pcf) and a minimum internal friction angle (ϕ) of 35° for imported free draining "Sand Gravel Fill" is recommended. The lateral earth pressure coefficient should be increased where the ground surface slopes up behind the wall. The retaining walls should be designed to withstand surcharge loading which may be present over the life of the structure. Surcharge loading would include traffic loads, as well as loads from storage, fill or construction equipment which may be placed adjacent to the wall. The influence zone behind the wall can be defined by a one horizontal to one vertical line extending upward from the outside edge of the wall footing.

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The magnitude of lateral earth pressure against retaining walls is dependent upon the type of backfill, method of fill placement, drainage provisions, and the amount of yielding the wall is permitted to undergo after the placement of the backfill. Pare recommends that all retaining walls be backfilled with a free draining "Granular Fill", as defined herein.

The lateral earth pressure distribution against retaining walls should be computed using the appropriate coefficient of lateral earth pressure, K. Recommended values of K are presented in the table below. Friction factors are also presented for use in checking resistance to unbalanced forces on walls.

TABLE 6-1: RECOMMENDED EARTH PRESSURE AND FRICTION COEFFICIENTS							
Material	At-Rest Coefficient (K ₀)	Active Coefficient (K _a)	Passive Coefficient (Kp)				
Compacted Granular Fill	0.45	0.29	3.39				
Compacted Sand Gravel Fill	0.43	0.27	3.69				
FRICTION COEFFICIENTS							
Concrete Poured on Imported Sand Gravel Fill / Rock $\tan \delta = 0.45$							
Precast Concrete on Imported Sand Gravel Fill / Rock $\tan \delta = 0.30$							

In order to attain either the active or passive condition, displacement of the wall is necessary. To attain the active condition in a sand material, the horizontal movement required ranges from 0.001H to 0.004H depending on the density of the material. The horizontal movement required to attain the passive condition in a sand material ranges from 0.02H to 0.06H, where H is the wall height. For basement walls or other retaining walls with no allowable movement, the At-Rest Coefficient shall be used in calculating wall loads. Passive resistance should be ignored for soil depths of less than 5 feet or rock depths less than 2 feet.

Traffic loads and other anticipated loadings that could occur behind the walls should be considered. In addition, the effect of adjacent footings on lateral walls should be accounted for during design.

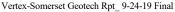
6.5 Frost Depth Recommendations

In conformance with the International Building Code (2015), and the 9th Edition of the Massachusetts State Building Code, exterior footings founded over soils should be placed at a minimum depth of 48-inches below the finished grade in order to provide for frost protection. Preparation for slabs should consider the frost heave susceptibility of subgrade soils.

6.6 Drainage

Groundwater was encountered at the site at depths ranging from 2.0 to 11.8 feet below the existing ground surface. Also note that as part of the boring activities, water was introduced to the noted borings and may not have dissipated at the time that the measurement was taken. Considering that the building design is unknown at this time and the observed groundwater at the time of the

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exploration, pending final floor elevations, a sub-drain or perimeter drain system should be considered for the proposed building inclusive of elevator pits, auditoriums, theaters as well as mechanical and classroom spaces.

Note that shallow foundations should be prepared in the dry. Roof drainage and surface water runoff should be directed away from the structures. As water levels are anticipated to fluctuate with the seasons and precipitation events, positive drainage is also recommended in order to carry water away from the building foundation.

Underground Utilities 6.7

Underground pipes and utilities should be placed on bedding in accordance with the manufacturer's specifications and recommendations to prevent damage to the utility from oversized particle during compaction. "Granular Fill" should be placed in lifts on the sides and above the utilities. The lift thickness should be sized appropriately for the compaction equipment used: vibratory plate compactor, 6-inch lift; vibratory drum roller, 12-inch lift.

Currently under the proposed site is a sewer field caution should be taken upon excavating this area. Please see Figure 1-3: Subsurface Exploration Plan for the approximate location.

6.8 Flexible and Rigid Pavement Recommendations

All asphalt, topsoil, subsoil, in-situ fill, and organic material should be stripped prior to filling. Subsoils and fills deemed suitable for improvements may be improved in the presence of a geotechnical engineer. The subgrade should be proof rolled with a minimum of 4-6 passes of a vibratory roller with a static weight of 10,000 pounds and a dynamic weight of 20,000 pounds. Caution should be used when compacting the subgrade, if wet, to avoid weaving and disturbance from vibrations.

Table 6-2 presents recommended pavement layer thickness based upon standard AASHTO design procedures for both "Standard Duty" and "Heavy Duty" pavement. "Standard Duty" pavement is applicable for up to 50,000 Equivalent Single 18-kip Axle Loads (ESAL's) while "Heavy Duty" pavement is applicable up to 350,000 EAL's. The recommended base and subbase courses for both "Standard Duty" and "Heavy Duty" areas are as listed below:

TABLE 6-2: RECOMMENDED STANDARD AND HEAVY DUTY FLEXIBLE PAVEMENT LAYER THICKNESS					
Pavement Section STD. DUTY HEAVY DUTY					
Finish Course	1-1/2 inches	1-1/2-inches			
Binder Course	1-1/2 inches	2-inches			
Base Course	6-inches	8-1/2-inches			
Subbase Course	8-inches	12-inches			

Should the actual loading conditions be greater than those assumed, the pavement sections will need to be re-analyzed for the actual conditions. This may result in a thicker pavement section being required.

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In areas where concrete and asphalt paving meet, it would be advantageous to provide a strip of free draining soil below the concrete and bituminous interface. The free draining strip should consist of a 24-inch layer of "Sand Gravel Fill" extending a minimum of 3 feet laterally below the concrete apron. This should control minor frost heaving that may occur if water enters the subgrade through this joint.

6.9 Construction Materials

Fill materials should be friable soil, free from trash, ice, snow, frozen soils, tree stumps, roots, and other organic matter and deleterious materials. Pare recommends the following soil gradations for imported fill, conforming to the Massachusetts Department of Transportation 1988 English Standard Specifications for Highways and Bridges including up to the supplemental specification from July 1, 2015 (State Standards).

- Gravel Borrow utilized as "Sand Gravel Fill" below structures and under pavement should conform to M1.03.0, Type B of the State Standards.
- All other Gravel Borrow material utilized as "Granular Fill" below structures and for material
 utilized in regrading areas, trench backfill, backfill against below-grade walls as "Granular
 Fill" should conform to M1.03.0 Type A of the State Standards.
- Crushed Stone Bedding Material should be imported material conforming to Item M2.01.4 of the State Standards.
- A maximum of 10% of recycled asphalt pavement (RAP) may be included in the pavement mixture or as specified within the State Standard Specifications.



Table 6-3: The Soil Gradations within are based upon the Massachusetts State Specifications and are shown for clarity.

	TABLE 6-3: SOIL GRADATIONS (Percent Passing the Designated Sieve Sizes)							
Sieve Size	Sand Gravel Fill	Granular Fill	1-1/2 inch Crushed Stone	3/4 inch Crushed Stone	Coarse Sand			
3-inch*	100	60-100	-	-	-			
2-inch	-	-	100					
1-1/2-inch	-	-	95-100	-	-			
1-inch	-	-	35-70	100	-			
³/₄-inch	70-100	-	0-25	90-100	-			
½-inch	50-85	50-85	-	10-50	100			
³ / ₈ -inch	-	45-80	-	0-20	85-100			
No. 4	40-75	40-75	-	0-5	20-50			
No. 8	-	-	-	-	0-15			
No. 10	30-60	-	-	-	-			
No. 40	10-35	0-45	-	-	-			
No. 100	5-20**	-	-	-	-			
No. 200	0-8	0-10	<1	<1	-			

^{*} The maximum recommended stone size is three inches where placed as base course below slabs and pavement; elsewhere, maximum stone size shall be 2/3 of the loose lift thickness.

6.10 Reuse of On-Site Soils

The reuse of on-site TOPSOIL is anticipated as loam borrow after blending with imported loams, or screening to produce the grain size within the project specifications.

From a geotechnical perspective, asphalt material stripped from the site and crushed to a maximum ³/₄-inch size and blended with clean sand and gravel may be reused as "Granular Fill" material below the pavement subbase. The material should be placed in lifts with a maximum thickness of 12-inches and be compacted to required densities by vibratory equipment. State regulatory requirements should be investigated, however, to determine if the material is environmentally acceptable for use on the site.

Based on the visual classifications and limited gradation analyses, partial reuse of the onsite GLACIAL DEPOSITS (Stratum 2) and TILL (Stratum 3) as backfill is anticipated as "Granular Fill". Reuse as "Granular Fill" and/or "Sand Gravel Fill" will require modification (e.g. blending and/or screening) to meet specified gradations. However, care should be taken to separate material not conforming to the requirements of fill material from reusable material.

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^{**} The amount passing the No. 100 sieve should be between 40 and 70 percent of that amount passing the number 40 sieve.

^{***}Straight line interpretation shall be used between the sieve sizes.

It should be noted that not all required soil gradations will be available on-site. Imported materials, screening of on-site materials, or blending/amending imported material with on-site material is anticipated for this project.

All materials not reused onsite must be disposed of in accordance with local, state and federal requirements.

6.11 Soils Prone to Disturbance

Silty or fine sandy soils, like those found on-site, are prone to disturbance when saturated from groundwater or rainfall events, are easily disturbed by construction equipment traversing the site, are difficult to compact, and are prone to frost heave during freeze-thaw cycles. If the construction is performed during the late fall, winter, or spring months, wet conditions and freeze thaw cycles should be expected to prevail. Soils that become saturated or allowed to freeze will require, thawing and/or draining, re-compaction, and retesting prior to placing additional fill material or structural components. Delays caused by wet/freezing soil conditions may be a factor that affects the construction schedule. Should the subgrade become disturbed, the disturbed material should be over-excavated and replaced with compacted "Granular Fill" as recommended in Section 6.8.

Soils with a silt content of greater than about 8% have the potential to heave when subjected to freezing conditions. The risk of heaving increases with increasing silt content, although soils with a silt content of less than about 15% silt are considered within the construction industry to be an acceptable risk. High silt content soils are not recommended for use in frost zones below structures, sidewalks, pavements, or within the influence zone of foundation walls due to their susceptibility to frost heave. Prior to reusing these materials, <u>confirmatory sieve analyses for each type of onsite material proposed for reuse</u> should be completed by the Contractor and submitted to the Engineer for approval.

6.12 Compaction

The approved subgrade to accept backfill, footings, slabs, and foundations, should be excavated with a flat bottom bucket to limit the amount of subgrade disturbance.

Lift thicknesses of placed material should be limited based on the capacity of compaction equipment and the means of compaction. Where compaction by hand tools is completed, lifts should not exceed 6 inches in thickness (loose lift thickness). Lifts compacted with mechanical equipment shall not exceed 12 inches thick (loose lift thickness) but will vary based on the size of the equipment used. Compaction of this material should be performed with adequately sized equipment to yield the recommended amount of relative compaction. In all cases, compaction shall be field verified in accordance with ASTM D1556 (sand cone test), ASTM D6938 (Density testing by Nuclear Methods), or other method approved by the Engineer.



The fill materials should be compacted to the recommended relative densities as outlined as follows:

TABLE 6-4: RECOMMENDED MINIMUM COMPACTION REQUIREMENTS					
Location	Percent of Maximum Dry Density ¹				
Backfill below footings, within the building area and below slabs ²	95				
Backfill for foundation walls	95				
Backfill within pavement base and sub base layers	95				
Backfill below pavement subbase layers	95				
Around and above utilities within the building area	95				
Around and above utilities in paved areas	92				
Backfill behind retaining walls	95 ³				
Backfill within landscaped areas	85				

¹ Maximum dry density as determined by the Modified Proctor test (ASTM D 1557)

A schematic drawing presenting influence zones beneath and near interior and exterior footings, recommended base and sub-base materials, and recommended fill materials for varying areas of the site development is included as Figure 6-1.

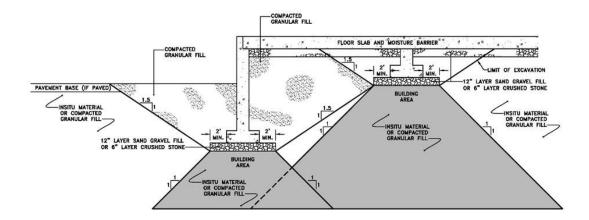


Figure 6-1: Typical Profile Below Footings

² Building area is described as an area extending downward and outward from the outside edge of the footing at a 1H:1V slope.

³ During compaction of fill placed behind retaining walls, care shall be taken so as to maintain uniform elevation along both sides within the embedded areas, and to not overstress the wall by applying excessive compactive energy at the top of the wall.

7.0 CONSTRUCTION CONSIDERATIONS

This section presents construction considerations and recommendations including excavation, backfilling, utility installation, dewatering, lateral earth support, protection of adjacent structures, and construction monitoring.

7.1 Excavation

7.1.1 Site preparation

After rough grades have been established, but before placement of compacted "Granular Fill", exposed surfaces should be visually inspected and probed. Frozen, wet, or loose soils and other undesirable materials should be removed. The exposed subgrade should be further tested by proof rolling with a minimum 10,000-pound static weight roller to identify loose or soft pockets that may be present.

The area of the proposed structures will need to be stripped of asphalt and fill, and grubbed of all vegetation and topsoil. Construction debris from demolished structures and roadways should be removed and properly disposed of in accordance with current regulations. Should the material contain solid wastes, such material should be segregated and disposed of in a manner consistent with local and state regulations.

Existing utilities on the site, including gas, electric, drainage, sewer pipes, and structures encountered during the progression of the work should be removed to the full extent and the resulting excavations backfilled with compacted "Granular Fill". Alternately the pipes and structures can be filled with grout through tremie grouting procedures. Care should be taken during the procedure to ensure complete filling and venting of the pipes and/or structures.

Should the subgrade become disturbed during excavation and/or construction, all disturbed material should be over-excavated to firm or native soil and replaced with a minimum of one foot of compacted "Granular Fill" or 6-inches of "Crushed Stone" wrapped in a Geotextile Fabric.

7.1.2 Parking and Paved Roadway Surfaces:

All topsoil, organic soil, existing asphalt paving, and fill should be stripped prior to filling. The subgrade should be proof rolled with a minimum 4-6 passes of a vibratory roller with a static weight of 10,000 pounds and a dynamic weight of 20,000 pounds. Soft areas should be removed and replaced with "Granular Fill". Caution should be used when compacting the subgrade, if wet, to avoid weaving and disturbance from vibrations.

7.2 Backfilling

7.2.1 Granular Fill

Pare recommends that footings, foundation walls, bases and subbase course for bituminous pavement, and areas requiring fill below the floor slab be backfilled to within 12 inches of the footings and slabs with compacted "Granular Fill". Compacted "Granular Fill" should be free

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draining friable soil free from trash, ice, snow, tree stumps, roots, other organic matter, and deleterious materials.

In general, compaction should be accomplished by placing fill in 8 to 12 inch loose horizontal lifts and mechanically compacting each lift to the specified dry density. Thinner lifts may be required in certain instances depending on the type of mechanical compaction equipment utilized Recommended minimum compaction requirements are described in Section 6.11.

7.2.2 Sand Gravel Fill

"Sand Gravel Fill" should be placed a minimum of 12 inches below footings, slabs and as pavement base course layers. This material should be placed in 6 to 12 inch loose horizontal lifts and mechanically compacted to the specified dry density. In areas where wet conditions are encountered, "Crushed Stone" wrapped in a layer of geotextile filter fabric could be used under footings instead of the "Sand Gravel Fill". The "Crushed Stone" should be proof compacted with 1 pass in each direction with a vibratory compactor.

7.2.3 Crushed Stone

If "Crushed Stone" is used for a subbase course (concrete pavement only) or base course, placement and compaction requirements are similar to those for "Granular Fill", 95% of the maximum dry density. This material should conform to Item M2.01.4 of the State Standards.

7.2.4 Excavation Backfill

When backfilling against excavated slopes or trench walls the Contractor shall take care to bench the lift into the excavated slope wall. Compaction equipment should be operated in such a manner to achieve adequate bonding and compaction of the placed lift and existing excavation wall.

7.3 Utility Installation

Excavations for installation of underground utilities should be made to comply with all OSHA, federal, state, and local regulations. At a minimum, excavations should be wide enough to accommodate the utility to be installed with clearance on each side of the utility to provide space for operating compaction equipment for backfilling of the utility in lifts without damaging the utility. The base of the excavation and bedding layer should be formed to properly support all components of the utility, including pipe bells, and manholes to prevent damage during installation. During backfilling operations, care should be taken to provide properly compacted fill along the length of the utility being installed. All fill material (cobbles and boulders within the native deposits) larger than 3 inches should be removed from the fill within 12 inches of the utility to prevent damage to the utility during compaction.

7.4 Dewatering

Temporary dewatering may be required to control groundwater and/or water resulting from rain, surface runoff, which may be encountered within the excavations. During the exploration groundwater was observed as low at 11.8 feet in the observation well and as high as 2 to3 feet in

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borings B19-2 and B19-5. As mentioned, due to drilling methods, the recorded groundwater readings are anticipated to be higher than natural groundwater levels. The contractor should provide for proper drainage of surface water away from excavation. All excavation should be conducted in the dry.

It should be noted that groundwater levels may fluctuate over time due to variations in rainfall, the rock profile in the work area, and other factors different from those prevailing at the time the explorations were performed.

7.5 Lateral Earth Support

Excavation support is solely the Contractor's responsibility. Several excavations are expected within the footprint of the proposed structure for installation of footings, utilities, and below-grade walls. Temporary support systems may be required at some locations to retain the surrounding soil and maintain a near-vertical excavation face where it will be necessary to protect the adjacent building walls, pavement, or underground utilities. Groundwater was observed at the site, therefore this should be considered in the design of excavation support systems. Design of cantilever and braced support systems is beyond the scope of this report and should be performed for the Contractor through the services of a professional engineer licensed in the state of Massachusetts. Excavation support for all excavations shall follow OSHA and other applicable State and Local standards.

In areas where an open cut is possible without a temporary support system, the final side slopes should conform to Local, State, and Federal safety requirements.

7.6 Protection of Adjacent Structures

Pare recommends that prior to the start of construction, a video and/or photo pre-construction survey is performed at buildings which are located near the work area which may be affected. This should also include adjacent utilities that may be affected by the construction. This survey would record "before construction conditions" of existing structures and utilities that are expected to remain through construction. A post-construction survey should also be performed to compare conditions before and after construction. These surveys are invaluable in resolving potential project claim disputes.

Pare recommends that crack gauges be installed to monitor movement of existing cracks and on cracks that develop in new or existing concrete foundation walls.

7.7 Construction Monitoring

The site preparation, excavation and backfill, compaction, and foundation installations should be observed by our geotechnical field engineer(s) under the direction of one of our registered professional engineers experienced in geotechnical engineering. While onsite, our engineer(s) will provide verification of bearing layers, and assistance in general interpretation of the geotechnical requirements during construction and could provide field density testing if requested. This would provide an accurate record of construction, alert the designer to changed conditions, and make useful data available for future construction. We have found that having an experienced engineer present during earthwork operation provides for a higher quality construction and enables efficiencies that help to maintain schedules.

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Ai3 Architects, LLC

Somerset Middle School New Building

Construction Considerations

Foundation excavations should be observed to confirm that all loose, soft, and undesirable material (i.e. organic matter, pavement, and other deleterious materials) is removed and that the foundations will bear on a satisfactory material. Excavation subgrade observations should include hand auger borings or hand probing.

As mentioned, compaction criteria for the various imported materials should be developed and included in the specifications. Field density testing should be performed using a nuclear density gauge to confirm that adequate compaction is being achieved. During construction, representative samples of all materials to be used as backfill should also be tested for conformance with the specified material properties. As required by the International Building Code (IBC 2015) Geotechnical Special Inspections should be completed during the construction process.

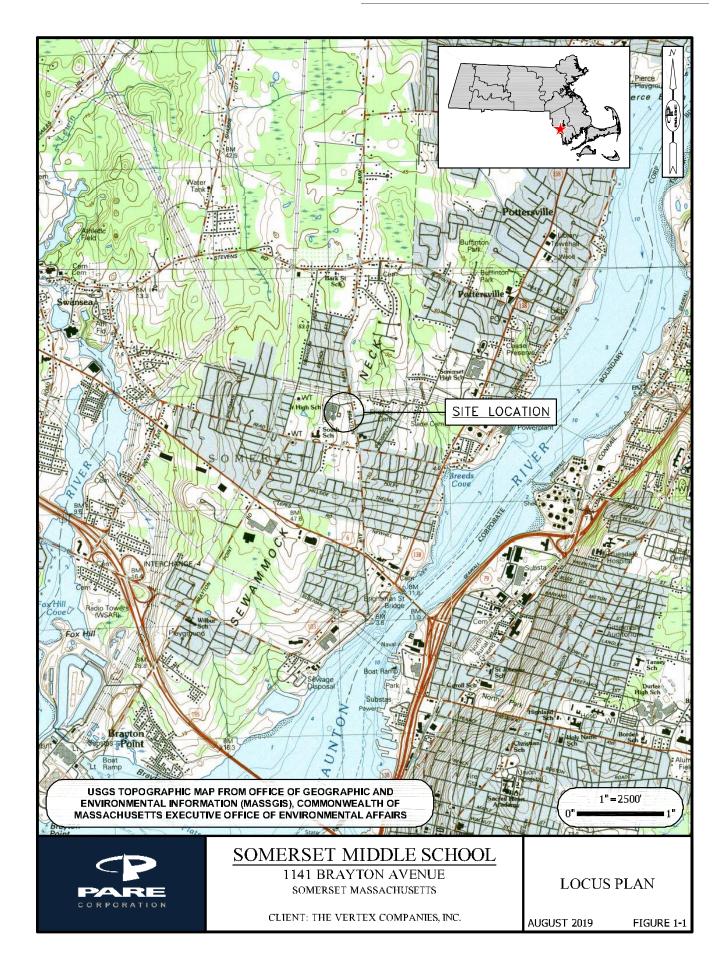


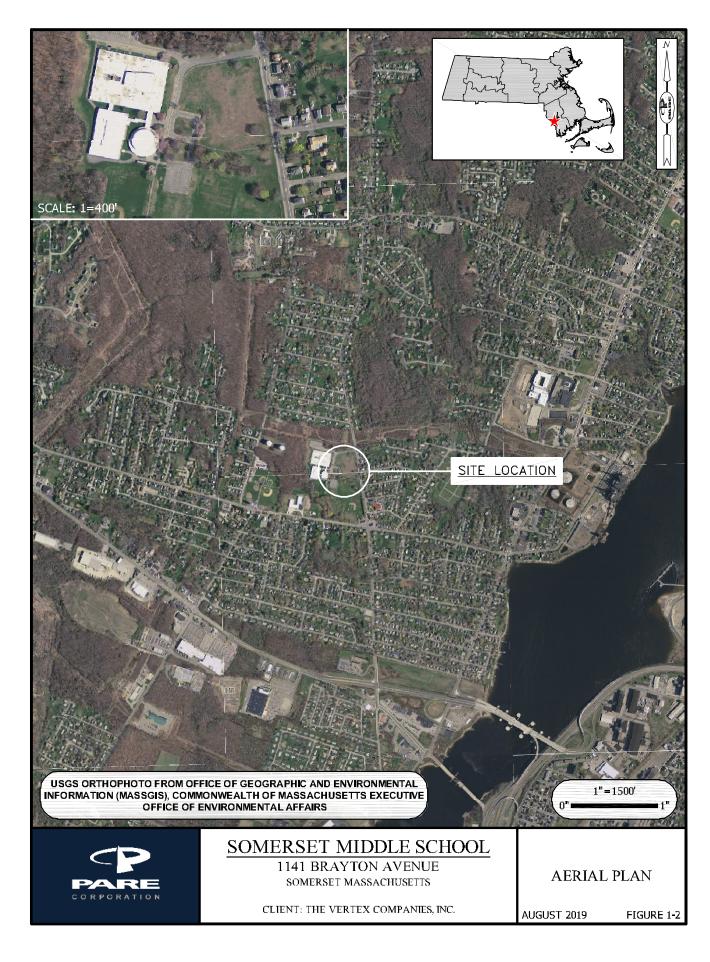
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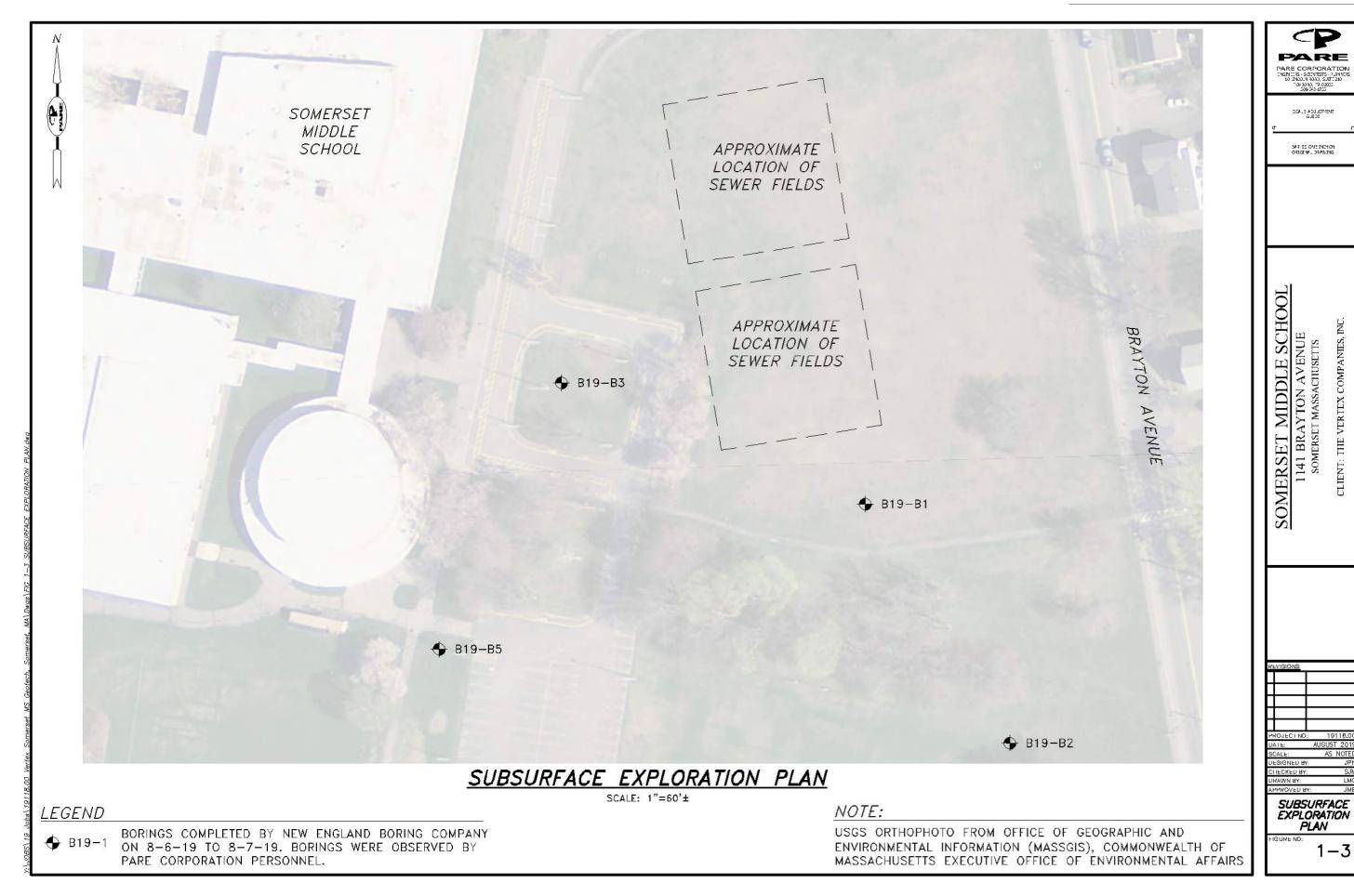
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FIGURES







APPENDIX A **Boring Logs**

Pare Corporation **BORING NUMBER B19-1** 10 Lincoln Road, Suite 210 PAGE 1 OF 1 Foxboro, MA 02035 PARE T: 508-543-1755 PORATION F: 508-543-1881 CLIENT The Vertex Companies, Inc. PROJECT NAME Somerset Middle School PROJECT NUMBER 19118.00 PROJECT LOCATION Somerset, MA COMPLETED 8/7/19 **DATE STARTED** 8/6/19 **GROUND ELEVATION** 134.4 ft NAVD88 HOLE SIZE 3 7/8 in. **DRILLING CONTRACTOR** New England Boring Contractors, Inc. **GROUND WATER LEVELS:** AT TIME OF DRILLING 5.60 ft / Elev 128.80 ft DRILLING METHOD CME 75 - wash and drive/NX-coring ▼ AT END OF DRILLING __11.80 ft / Elev 122.60 ft CHECKED BY RKM BORING LOCATION SEE EXPLORATION LOCATION PLAN SAMPLE TYPE NUMBER RECOVERY/PEN (in) CASING (bl/ft) E BLOW COUNTS/6" GRAPHIC LOG DEPTH (ft) MIN/FT STRATUM DEPTH (SAMPLE DESCRIPTION **DESCRIPTION** MA\BORING LOGS\19118.00 BORING LOGS.GPJ 1A: Moist, medium dense, brown, fine SAND, some silt, trace 6" TOPSOIL 31 S-1 5-7-9-12 14 / 24 0 - 2 organic, trace medium to coarse sand, trace fine to coarse 49 (16)1B: Moist, medium dense, gray, fine SAND, some fine to 44 S-2 14 / 24 2 - 4 8-6-10-21 coarse gravel, little silt, little medium to coarse sand. 90 (16)Moist, medium dense, brown, fine SAND, little silt, little fine to coarse gravel, trace medium to coarse sand. 5/5 S-3 12 / 24 17-23-19-24 Wet, dense, dark brown to gray, fine to medium SAND, little silt, **GLACIAL DEPOSITS** 70 (42)trace coarse sand, trace fine to coarse gravel. 93 Wet, very dense, dark brown to gray, fine to medium SAND, S-4 20 / 24 6 - 8 25-32-35-34 little silt, trace fine to coarse gravel, trace coarse sand. 130 (67)Wet, very dense, gray, fine to coarse GRAVEL and medium to SOMERSET S-5 17 / 24 8 - 10 29-34-58-97 coarse SAND, little fine sand, trace silt. GLACIAL TILL 55 (92)10 66 90 GEOTECH, 80 Completely weathered SANDSTONE recovered as wet, very 30 S-6 18 / 24 13 - 15 32-47-58-97 VERTEX SOMERSET MS dense, gray, fine to coarse GRAVEL, some silt, little fine sand, 44 (105)trace medium to coarse sand 15 70 10 WEATHERED 213 SANDSTONE S-7 3/3 18.2 120/3" Completely weathered SANDSTONE recovered as wet, very 18.5 dense, gray, fine to medium SAND, some silt, trace fine to JOBS\19118.00 67 20 coarse gravel, trace coarse sand 90 87 155 OG - GINT STD US LAB.GDT - 8/21/19 12:51 - Y:\JOBS\19 \, Weak to moderately strong, gray, fine SANDSTONE, laminated (1-5 mm±), highly weathered to slightly weathered. 10.5 SANDSTONE BEDROCK 25 7 42 / 55 23.2 8.5 9.5 Bottom of borehole at 27.8 feet. GRANULAR SOILS
OWS/FT DENSITY REMARKS: COHESIVE SOILS
BLOWS/FT DENSITY BURMISTER CLASSIFICATION BLOWS/F 1.0'-8' - auto hammer was used to drive casing 2.8-13' - 140 lb. safety hammer was used to drive casing.
3.13'+ - 300 lb. safety hammer was used to drive casing.
4.A monitoring well was installed to 20, with the screened length at 20 to 15 feet. The well was backfilled with 19.3 feet of sand, 6 feet bentonite seal, and 2 feet of cement. <2 2 - 4 0 - 4 V. LOOSE V. SOFT TRACE 0 -10% LOOSE M. DENSE SOFT 4 - 10 LITTLE 10 - 20% 10 - 30 4 - 8 M. STIFF SOME 20 - 35% 30 - 50 DENSE 8 - 15 STIFF V. STIFF AND 35 - 50% >50 V DENSE HARD PERCENT BY WEIGHT NOTES: 1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON

THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

BORING NUMBER B19-2 Pare Corporation 10 Lincoln Road, Suite 210 PAGE 1 OF 1 Foxboro, MA 02035 PARET: 508-543-1755 RPORATION F: 508-543-1881 CLIENT The Vertex Companies, Inc. PROJECT NAME Somerset Middle School PROJECT LOCATION Somerset, MA PROJECT NUMBER 19118.00 COMPLETED 8/7/19 GROUND ELEVATION 128.3 ft NAVD88 **DATE STARTED** 8/6/19 HOLE SIZE 3 7/8 in. **DRILLING CONTRACTOR** New England Boring Contractors, Inc. **GROUND WATER LEVELS:** DRILLING METHOD CME 75 - wash and drive ¥ AT TIME OF DRILLING 2.60 ft / Elev 125.70 ft AT END OF DRILLING ---LOGGED BY JPN CHECKED BY RKM BORING LOCATION SEE EXPLORATION LOCATION PLAN RECOVERY/PEN (in) SAMPLE TYPE NUMBER CASING (bl/ft) BLOW COUNTS/6" F) GRAPHIC LOG DEPTH (ft) MIN/FT STRATUM DEPTH (SAMPLE DESCRIPTION **DESCRIPTION** Moist, loose, brown, fine SAND, little silt, little medium to 6" TOPSOIL 6 S-1 18 / 24 0 - 2 coarse sand, trace fine to coarse gravel, trace organic. 30 (7)Moist, dense, brown to gray, fine SAND, some medium to 72 **GLACIAL DEPOSITS** S-2 20 / 24 2 - 4 6-17-20-23 coarse sand, some fine to coarse gravel, little silt. 132 (37)Wet, dense, gray, fine to coarse SAND, little silt, little fine to coarse gravel. 80 S-3 18 / 24 4 - 6 22-24-26-24 **GLACIAL TILL** 98 (50)6/6 6-65 114 S-4 Wet, very dense, gray, fine to coarse SAND, little silt, little fine 108 to coarse gravel. 100/1 S-5 WEATHERED 150 Completely weathered SANDSTONE recovered as very dense, SANDSTONE fine to coarse GRAVEL, little medium to coarse sand, little silt, S-6 3/3 9 - 9.2 100/3" 10 Completely weathered SANDSTONE recovered as wet, gray, very dense, fine to coarse GRAVEL, little silt, trace fine to coarse sand. Bottom of borehole at 9.2 feet. 15 20 COHESIVE SOILS BLOWS/FT DENISIT GRANULAR SOILS
BLOWS/FT DENSITY REMARKS: 1.Mottling observed at 2-4 feet. 2.Gray sandstone fragments were observed in the drilling wash at 6.0-7.0 feet and 7.2-9.0 feet. .Casing refusal at 8'±. 0 - 4 V. LOOSE <2 V. SOFT TRACE 0 -10% SOFT LOOSE M. DENSE 4 -10 10 - 20% 20 - 35% LITTLE 10 - 30 30 - 50 4 - 8 M. STIFF SOME DENSE 8 - 15 STIFF V. STIFF AND 35 - 50% V. DENSE >50 HARD PERCENT BY WEIGHT NOTES: 1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

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GINT STD US LAB.GDT - 8/21/19 12:51 - Y:\UOBS\19 JOBS\19118.00 \VERTEX SOMERSET MS

BORING LOG-

Pare Corporation **BORING NUMBER B19-3** 10 Lincoln Road, Suite 210 PAGE 1 OF 1 Foxboro, MA 02035 PARE T: 508-543-1755 F: 508-543-1881 CLIENT The Vertex Companies, Inc. PROJECT NAME Somerset Middle School PROJECT NUMBER 19118.00 PROJECT LOCATION Somerset, MA COMPLETED 8/7/19 **DATE STARTED** 8/7/19 GROUND ELEVATION 146.6 ft NAVD88 HOLE SIZE 3 7/8 in. **DRILLING CONTRACTOR** New England Boring Contractors, Inc. **GROUND WATER LEVELS:** DRILLING METHOD CME 75 - wash and drive AT TIME OF DRILLING ---AT END OF DRILLING ---LOGGED BY JPN **CHECKED BY** RKM BORING LOCATION SEE EXPLORATION LOCATION PLAN SAMPLE TYPE NUMBER RECOVERY/PEN (in) CASING (bl/ft) E BLOW COUNTS/6" GRAPHIC LOG DEPTH (ft) MIN/FT STRATUM DEPTH (SAMPLE DESCRIPTION **DESCRIPTION** , MA\BORING LOGS\19118.00 BORING LOGS.GPJ Moist, medium dense, brown to gray, fine to medium SAND, 6" TOPSOIL 65 S-1 2-6-10-15 (16) 17 / 24 0 - 2 some silt, trace medium to coarse sand, trace fine to coarse 70 gravel, trace organics. Moist, medium dense, gray to brown, fine to medium SAND, some fine to coarse gravel, little silt, little coarse sand, trace 40 S-2 18 / 24 2 - 4 14-15-12-8 27 (27)**GLACIAL DEPOSITS** organics. 66 Wet, medium dense, gray to brown SILT and fine to SAND, 16 / 24 S-3 8-7-8-12 some fine to coarse gravel. 103 (15)Wet, dense, gray to brown, fine to medium SAND, some silt, Х S-4 10 / 24 6 - 8 14-18-30-48 some fine to coarse gravel, trace coarse sand. Х (48)S-5 8 - 8.6 57-65/1" Wet, very dense, gray, fine to coarse GRAVEL, some silt, little. 40 SOMERSET, fine to coarse sand. 68 GLACIAL TILL 10 Wet, very dense, gray, medium to coarse SAND, some silt, little S-6 16 / 24 10 - 12 23-51-75-25 fine sand, little fine to coarse gravel. BORING LOG - GINT STD US LAB.GDT - 8/21/19 12:51 - Y:\UOBS\19 JOBS\19118.00 \VERTEX SOMERSET MS GEOTECH, (126)WEATHERED S-7 90-90/1" Completely weathered SANDSTONE recovered as wet, very SANDSTONE 136 dense, gray, fine to medium SAND and SILT, trace fine grave trace coarse sand 15 Bottom of borehole at 13.6 feet. 20 25 COHESIVE SOILS BLOWS/FT DEVICE GRANULAR SOILS OWS/FT DENSITY REMARKS: 1.0-4'4" - casing advanced with auto hammer. 2.4'+ - 4" casing advanced with 300 lb. safety. 3. Mottling observed in S-3 sample. 4. Between 8.6' and 10.0' and 12.0' and 13.0', the rollerbit advanced slowly. The wash was observed BLOWS/F <2 2 - 4 0 - 4 V. LOOSE V. SOFT TRACE LITTLE 0 -10% LOOSE M. DENSE SOFT 4 - 10 10 - 20% 10 - 30 4 - 8 M. STIFF to be gray sanstone fragments 20 - 35% SOME 30 - 50 DENSE 8 - 15 STIFF V. STIFF AND 35 - 50% V DENSE >50 HARD PERCENT BY WEIGHT NOTES: 1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON

THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

BORING NUMBER B19-5 Pare Corporation 10 Lincoln Road, Suite 210 PAGE 1 OF 1 Foxboro, MA 02035 PARET: 508-543-1755 RPORATION F: 508-543-1881 CLIENT The Vertex Companies, Inc. PROJECT NAME Somerset Middle School PROJECT NUMBER 19118.00 PROJECT LOCATION Somerset, MA COMPLETED 8/7/19 **GROUND ELEVATION** 148.3 ft NAVD88 **DATE STARTED** 8/7/19 HOLE SIZE 3 7/8 in. **DRILLING CONTRACTOR** New England Boring Contractors, Inc. **GROUND WATER LEVELS:** DRILLING METHOD CME 75 - wash and drive/NX-coring ¥ AT TIME OF DRILLING 2.00 ft / Elev 146.30 ft AT END OF DRILLING ---LOGGED BY JPN CHECKED BY RKM BORING LOCATION SEE EXPLORATION LOCATION PLAN RECOVERY/PEN (in) SAMPLE TYPE NUMBER CASING (bl/ft) BLOW COUNTS/6" F) GRAPHIC LOG DEPTH (ft) MIN/FT STRATUM DEPTH (SAMPLE DESCRIPTION **DESCRIPTION** -OGS/19118.00 BORING LOGS.GPJ 1A: 6" Dry, medium dense, brown, fine to medium SAND, little 6" TOPSOIL S-1 15 / 24 0 - 2 2-4-7-10 silt, trace organics. 42 (11) 1B: 14" Dry, medium dense, gray, fine SAND, little silt, fine to coarse gravel, trace coarse sand. 89 S-2 20 / 24 2 - 4 11-15-18-23 Dry, dense, gray, fine SAND, little fine to coarse gravel, little 133 (33)**GLACIAL DEPOSITS** silt, trace medium to coarse sand. 1 Wet, very dense, gray, fine to medium SAND, little silt, trace S-3 11 / 24 4 - 6 25-56-65-39 fine gravel. 78 (121)MA\BORING L Wet, very dense, gray, fine to coarse GRAVEL, little fine to 58 S-4 15 / 24 6 - 8 34-30-23-23 coarse sand. little silt. **GLACIAL TILL** 130 (53)Completely weathered SANDSTONE recovered as wet, gray, 190 SOMERSET S-5 17 / 24 8 - 10 20-19-24-WEATHERED dense, medium to coarse SAND, some fine to coarse gravel. 201 127 SANDSTONE 10 (43)Moderately strong, gray, fine SANDSTONE, laminated (1-5 13 mm±), slightly weathered. GEOTECH. 13 RQD = 0% SANDSTONE 59 / 60 10.3 BEDROCK 15.3 8 GINT STD US LAB.GDT - 8/21/19 12:51 - Y:\UOBS\19 JOBS\19118.00 \VERTEX SOMERSET MS 15 Bottom of borehole at 15.3 feet. 20 COHESIVE SOILS GRANULAR SOILS
BLOWS/FT DENSITY REMARKS: 1.Casing advanced using 300lb safety hammer 2.Casing refusal at 10.3'. V. LOOSE 0 - 4 <2 V. SOFT TRACE 0 -10% SOFT LOOSE M. DENSE 4 -10 LITTLE 10 - 20% 10 - 30 30 - 50 4 - 8 M. STIFF 20 - 35% SOME 8 - 15 STIFF BORING LOG-V. STIFF AND 35 - 50% V. DENSE >50 HARD PERCENT BY WEIGHT NOTES: 1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON

THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

APPENDIX B **Laboratory Testing Data**



SIEVE ANALYSIS

SOIL SAMPLE

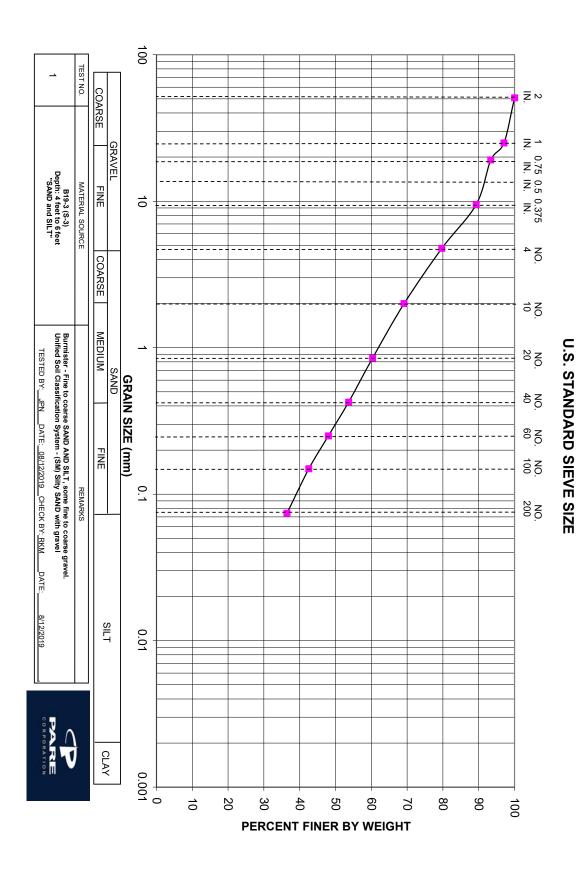
WATER CONTENT

Location:	Somerset Middle	School, MA	Container No.		File No.	19118.00
Boring No.:	B19-3	_	Wt. Container (g)	189.5	Test No.	1
Depth:	4.0 ft-6.0 ft	Wt. Con	tainer, Wet Soil (g)	882.3	Date	8/12/2019
Sample No.	S-3	Wt. Coi	ntainer, Dry Soil (g) _	780.7	Tested By:	JPN
		_	Wt. Water (g)	101.6	Checked By	RKM
Specific			Wt. Dry Soil (g)	591.2	_	
Gravity, Gs:		_	Water Content (%)	17.19%	Dry Sieve	
		Wt. Con, So	oil Before Wash (g)	780.7		
		Wt. Con, V	Vashed Dry Soil (g)_	598.8	_Wash Sieve	
		Wt. V	Vashed Dry Soil (g)	409.3	Combined	X

TOTAL SAMPLE

U.S. Standard Sieve No.	Sieve Opening (mm)	Sieve Wt. (g)	Sieve + Soil Wt. (g)	Accumulative Wt. of Soil Retained (g)	Accumulative Percent Retained	Total Sample Percent Finer By Wt.
2"	50.8	545.2	545.2	0.0	0.0	100.0
1"	25	553.1	561.1	8.0	2.9	97.1
0.75"	19.1	531.8	563.0	39.2	6.6	93.4
0.375"	9.5	536.6	560.6	63.2	10.7	89.3
4	4.76	498.1	555.0	120.1	20.3	79.7
10	2	481.0	543.2	182.3	30.8	69.2
20	0.85	433.5	485.5	234.3	39.6	60.4
40	0.425	377.7	417.3	273.9	46.3	53.7
60	0.250	348.5	381.9	307.3	52.0	48.0
100	0.149	330.8	363.1	339.6	57.5	42.5
200	0.074	340.5	376.6	375.7	63.6	36.4
Pan		370.7	404.2	409.2	100.0	0.0
Split Sample	Wt (Washed)			181.9	_	_
Total Sample	e Weight			591.1		

Loss Check: 0.017%





SIEVE ANALYSIS

SOIL SAMPLE

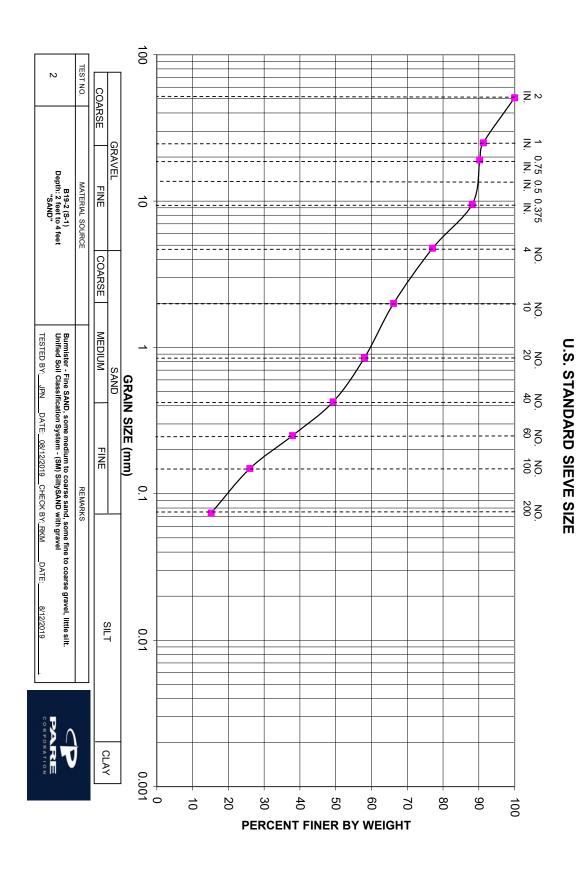
WATER CONTENT

Location:	Somerset Middle	School, MA	Container No.		File No.	19118.00	
Boring No.:	B19-2		Wt. Container (g)	185	Test No.	2	
Depth:	2.0 ft-4.0 ft	Wt. Con	tainer, Wet Soil (g)	539.5	Date	8/12/2019	
Sample No.	S-1	Wt. Cor	ntainer, Dry Soil (g)	515.7	Tested By:	JPN	
		•	Wt. Water (g)	23.8	Checked By	RKM	
Specific			Wt. Dry Soil (g)	330.7	_		
Gravity, Gs:		-	Water Content (%)	7.20%	_Dry Sieve	X	
	Wt. Con, Soil Before Wash (g)						
		Vashed Dry Soil (g) _		_Wash Sieve			
		Wt. W	Vashed Dry Soil (g)		Combined		

TOTAL SAMPLE

U.S. Standard Sieve No.	Sieve Opening (mm)	Sieve Wt. (g)	Sieve + Soil Wt. (g)	Accumulative Wt. of Soil Retained (g)	Accumulative Percent Retained	Total Sample Percent Finer By Wt.
2"	50.8	546.2	546.2	0.0	0.0	100.0
1"	25	553.6	577.3	23.7	8.7	91.3
0.75"	19.1	532.2	540.6	32.1	9.7	90.3
0.375"	9.5	537.1	544.0	39.0	11.8	88.2
4	4.76	498.8	535.3	75.5	22.9	77.1
10	2	481.2	517.1	111.4	33.8	66.2
20	0.85	433.6	460.4	138.2	42.0	58.0
40	0.425	378.1	407.0	167.1	50.7	49.3
60	0.250	348.9	386.3	204.5	62.1	37.9
100	0.149	331.2	370.4	243.7	74.0	26.0
200	0.074	340.8	376.4	279.3	84.8	15.2
Pan		370.7	420.8	329.4	100.0	0.0
Split Sample	: Wt (Washed)			0.0		
Total Sample	e Weight			329.4		

Loss Check: 0.393%





SIEVE ANALYSIS

SOIL SAMPLE

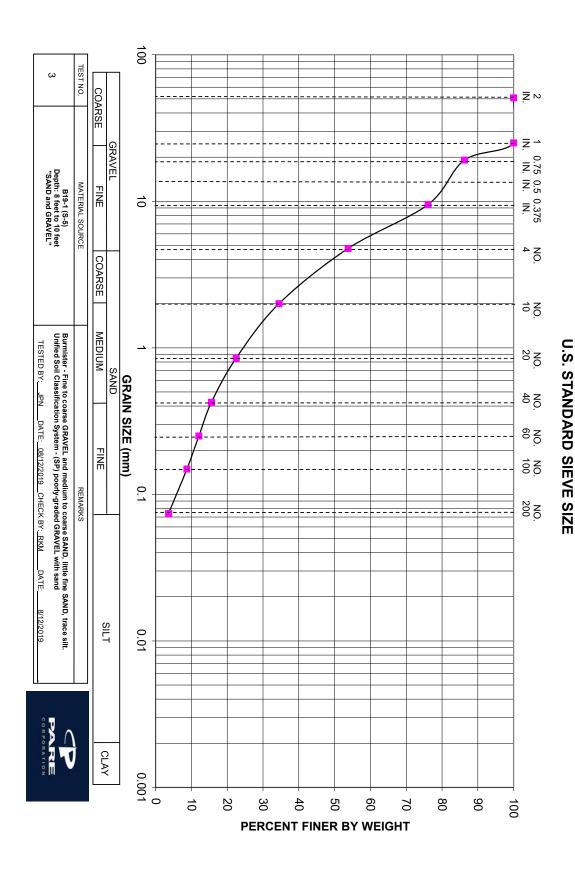
WATER CONTENT

Location:	Somerset Middle	School, MA	Container No.		File No.	19118.00
Boring No.:	B19-1		Wt. Container (g)	185	Test No.	3
Depth:	8.0 ft-10.0 ft	Wt. Con	tainer, Wet Soil (g)	539.5	Date	8/12/2019
Sample No.:	S-5	Wt. Co	ntainer, Dry Soil (g) _	515.7	Tested By:	JPN
		•	Wt. Water (g)	23.8	Checked By	RKM
Specific			Wt. Dry Soil (g)	330.7	_	_
Gravity, Gs:			Water Content (%)	7.20%	Dry Sieve	X
		Wt. Con, So	oil Before Wash (g)			
Wt. Con, Washed Dry Soil (g)_					_Wash Sieve	
		Wt. V	Vashed Dry Soil (g)_		Combined	

TOTAL SAMPLE

TOTAL DAI	11 LL					
U.S.	0:		0:		Accumulative	
Standard	Sieve Opening		Sieve + Soil		Percent	Percent Finer
Sieve No.	(mm)	Sieve Wt. (g)	Wt. (g)	Retained (g)	Retained	By Wt.
2"	50.8	546.2	546.2	0.0	0.0	100.0
1"	25	553.5	553.5	0.0	0.0	100.0
0.75"	19.1	532.1	576.4	44.3	13.7	86.3
0.375"	9.5	537.3	570.1	77.1	23.9	76.1
4	4.76	498.8	571.0	149.3	46.3	53.7
10	2	481.5	543.8	211.6	65.6	34.4
20	0.85	433.7	472.3	250.2	77.5	22.5
40	0.425	378.3	400.6	272.5	84.4	15.6
60	0.250	349.1	360.4	283.8	87.9	12.1
100	0.149	331.0	341.8	294.6	91.3	8.7
200	0.074	340.6	357.2	311.2	96.4	3.6
Pan		370.7	382.3	322.8	100.0	0.0
Split Sample	e Wt (Washed)			0.0		
Total Sampl	e Weight			322.8		

Loss Check: 2.389%



APPENDIX C **Geotechnical Limitations**



GEOTECHNICAL LIMITATIONS

Explorations

- 1. The analyses and recommendations submitted in this report are based in part upon the data obtained from subsurface explorations. The nature and extent of variations between these explorations may not become evident until construction. If variations then appear evident, Pare Corporation (PARE) should be asked to re-evaluate the recommendations of this report.
- 2. The generalized soil profile described in the text is intended to convey trends in the subsurface conditions. The boundaries between strata are approximate and idealized and have been developed by interpretations of widely spaced explorations and samples; actual soil transitions are probably more erratic. For specific information, refer to the boring logs.
- 3. Water level readings have been made in the drill holes at the times and under the conditions stated on the boring logs. These data have been reviewed and interpretations have been made in the text of this report. However, fluctuations in the level of groundwater may occur due to variations in rainfall, temperature, and other factors occurring since the time the measurements were made.

Review

4. In the event that any changes in the nature or location of the proposed building are planned, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions of this report are verified in writing by PARE. PARE should also be provided with the opportunity for a general review of the final design and specifications in order that the earthwork and foundation recommendations may be properly interpreted and implemented in the design and specifications.

Construction

5. PARE should be retained to provide soil engineering services during construction of the excavation and foundation phases of work in order to observe compliance with the design concepts, specifications, and recommendations and to allow design changes in the event that subsurface conditions differ from those indicated prior to the start of construction.

Use of Report

- 6. This report has been prepared for the exclusive use of The Vertex Companies INC. for specific application to the proposed construction located at 1141 Brayton Avenue Somerset, Massachusetts in accordance with generally accepted engineering practices. No other warranty, expressed or implied, is made.
- 7. This engineering report has been prepared for this project by PARE. This report is for design purposes only and is not necessarily sufficient to prepare an accurate bid. Contractors wishing a copy of this report may secure it with the understanding that its scope is limited to design considerations only.

APPENDIX D **General Investigation Notes**

GENERAL INVESTIGATION NOTES



GENERAL

- 1. All depths are given in feet measured from the ground surface unless otherwise noted. Depth of angled borings is measured along the axis of the boring.
- The identification and description of soils is based on visual inspection of the retrieved samples using the Burmister Classification System. Descriptions of boring logs apply only at the specific boring locations and at the time the borings were made. They are not warranted to be representative of subsurface conditions at other locations or times.
- Water levels are observed at the end of boring (E.O.B.) or/and on a long-term basis through the use of strategically placed observation wells. The indicated levels may not reflect the actual groundwater levels. Fluctuations in groundwater levels can occur due to variations in precipitation, season, tidal fluctuation, adjacent construction activity and construction dewatering systems, and other

SOIL DESCRIPTION

- 1. The Standard Penetration (SPT) test is performed in general accordance with ASTM D-1586. The standard penetration resistance (N) is defined as the number of blows required to drive a 2-inch O.D., 1 3/8-inch I.D. split-spoon sampler by 12 inches by dropping a 140-lb hammer through a vertical distance of 30 inches. The sampler is normally driven 3 (for 18-inch long sampler) or 4 (for 24-inch long sampler) successive 6-inch increments. The first 6-inch is considered to be a seating drive, therefore the sum of the second and third increments are used in determining the N value.
- Consistency/Condition

Coarse-Grained Soils Very loose	Relative Density (%) 0-15	<u>N (</u>	olows per foot) 0-4	
Loose	15-35		4-10	
Medium dense	35-65		10-30	
Dense	65-85		30-50	
Very dense	85-100		>50	
	Unconfined Compressive			
Fine-Grained Soils	Strength, qu (tsf)	<u>N (</u> 1	olows per foot)	Field Identification
Very Soft	< 0.25		0-2	Exudes between fingers when squeezed in hand
Soft	0.25-0.50		2-4	Molded by light finger pressure
Medium	0.50-1.00		4-8	Molded by strong finger pressure
Stiff	1.00-2.00		8-15	Indented by thumb
Very Stiff	2.00-4.00		15-30	Indented by thumbnail
Hard	>4.00		>30	Difficult to indent by thumbnail
Grain Size		Descripti	ve Adjective	
Boulders – >12 in.		Trace	0-109	%
Cobbles -3 in. -12 in.		Little	10-209	%
Gravel – Coarse, ¾ in 3 in.		Some	20-35%	√o
– Fine, 0.19 in. (#4) t	o ¾ in.	And	35-50%	√o
Sand – Coarse, 0.079 in. (#10	0) to 0.19 in. (#4)	Percent by	Weight	
– Medium, 0.017 in. (#	(40) to 0.079 in. (#10)			
– Fine, 0.0029 in. (#20	0) to 0.017 in. (#40)			
Silt – 0.0002 in. to 0.0029 in.	(#200)			
Clay - <0.0002 in.				

ROCK DESCRIPTION

- 1. Core recovery is the total length of rock core recovered from a core run divided by the length of the run, expressed as a percentage.
- Rock Quality Designation (RQD) is the total length of hard, sound pieces of rock core greater than 4-inches from a core run divided by the length of the run, expressed as a percentage.

RQD (%)	<u>Description</u>	Approximate Equivalent Fracture Spacing (fee			
0-25	Very Poor	Very close	(<0.2)		
25-50	Poor	Close	(0.2-1)		
50-75	Fair	Moderately wide	(1-3)		
75-90	Good	Wide	(3-10)		
90-100	Excellent	Very wide	(>10)		

"Weathering" refers to the degree of alteration observed in the rock core, which is produced by chemical and/or mechanical processes.

Grade	Symbol	Recognition
Fresh	F	No visible sign of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	WS	Slight discoloration inwards from open fractures, otherwise similar to F.
Moderately Weathered	WM	Discoloration throughout. Weaker minerals such as feldspar decomposed. Strength somewhat

Appendix H VERTEX®

Phase I ESA Report





Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts 02726

PHASE I ENVIRONMENTAL SITE ASSESSMENT

SEPTEMBER 10, 2019

PREPARED FOR:

Ai3 Architects, LLC 526 Boston Post Road Wayland, Massachusetts 01778 Attn: Troy L. Randall

PREPARED BY:

The Vertex Companies, Inc. 400 Libbey Industrial Parkway Weymouth, MA 02189 PHONE 781.952.6000

VERTEX PROJECT NO: 58759.01



September 10, 2019

Ai3 Architects, LLC 526 Boston Post Road Wayland, Massachusetts 01778 Attn: Troy L. Randall

RE: Phase I Environmental Site Assessment

Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts VERTEX Project No. 58759.01

Dear Mr. Randall:

The Vertex Companies, Inc. (VERTEX) is pleased to submit this Phase I Environmental Site Assessment (ESA) report for the above referenced property (the site). The purpose of this assessment was to identify Recognized Environmental Conditions (RECs) in connection with the site. A REC is defined as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." It does not include *de minimis* conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

Our work was conducted in general conformance with proposal P.0463.19, executed by Mr. Troy Randall on August 7, 2019, and in accordance with the general provisions of the E 1527-13 American Society for Testing and Materials (ASTM) document entitled "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" for commercial real estate, as well as the U.S. Environmental Protection Agency's (USEPA) All Appropriate Inquires (AAI) Final Rule of November 1, 2005, as amended December 30, 2013. To the best of our knowledge, this Phase I ESA report is true and accurate.

THE VERTEX COMPANIES, INC. 400 LIBBEY PARKWAY WEYMOUTH, MA 02189

781.952.6000 | VERTEXENG.COM

We declare that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in 40 C.F.R. Part 312.10. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

Please do not hesitate to contact us at your convenience should you have any questions or comments regarding this report or our recommendations. It has been a pleasure working with you on this project.

Sincerely,

The Vertex Companies, Inc.

Micollette Lynch

Nicollette Lynch Scientist II

Genevieve Reynolds

Technical Director - Due Diligence



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PHASE I ENVIRONMENTAL SITE ASSESSMENT

Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts **VERTEX Project No. 58759.01**

1.0 **SUMMARY**

On August 7, 2019, The Vertex Companies, Inc. (VERTEX) was contracted by Mr. Troy Randall, Partner with Ai3 Architects, LLC, to conduct a Phase I Environmental Site Assessment (ESA) of the Somerset Middle School, located at 1141 Brayton Avenue in Somerset, Massachusetts (the site). According to the Town of Somerset Assessor's Office, the site is addressed as 1141 Brayton Avenue and consists of approximately 25.21 acres of land identified as Map-Block-Lot: 005.B-0000-0344.0. The site is improved with a one-story school building with a partial basement area constructed from 1964 to 1965 and expanded in 1969. The site building is currently occupied by the Somerset Middle School. According to the Town of Somerset Assessor's Office, the site currently is owned by the Town of Somerset. The purpose of this assessment was to identify Recognized Environmental Conditions (RECs), including Controlled RECs (CRECs) and Historical RECs (HRECs), in connection with the site.

ASTM Findings

 Based on review of readily available historical information, the site historically consisted of undeveloped and/or agricultural land with Brayton Avenue located abutting the east of the site, and Read Street abutting the south of the site. A residence was present along Read Street on the southern portion of the site from at least 1938 through 1960. The residence was demolished prior to the construction of the current school building from 1964 to 1965. An addition was made to the school in 1969. No environmental concerns were identified with respect to current or historical use of the site.



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- According to information obtained from the Town of Somerset Fire Department, the site historically maintained two 6,200-gallon fuel oil underground storage tanks (USTs). The permits note different types of fuel oil, including #6, "less than #5", and "less than #4". The USTs were removed in July 1997 as part of a Town-wide project. During removal activities, headspace sampling of soil in the area of the USTs resulted in concentrations greater than 100 parts per million (ppm). Release Tracking Number (RTN) 4-0013199 was assigned to the release case. Approximately 32.84 tons of soil were removed from the tank excavation and disposed of at an approved facility. Confirmatory soil sampling did not identify concentrations of Total Petroleum Hydrocarbons (TPH) above Method 1 soil standards. A Class A-1 Response Action Outcome (RAO) Statement was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on September 15, 1997. The RAO indicates the USTs stored #2 fuel oil. Based on the reported closure, the release identified during the removal of the former on-site USTs is considered a HREC.
- The site is located in an area of residential and commercial properties. Read Street has bordered the south of the site since at least 1888. St. John of God Parish has been developed to the east of the site since 1928. Brayton Avenue has bordered the east of the site since at least 1938. Residential properties have been developed to the east of the site, across Brayton Avenue, since at least 1938. Power lines have been developed to the north of the site since at least 1938. Baseball fields have been located to the westsouthwest of the site since the early 1940s. South Elementary School was developed to the southwest of the site in 1951. A water tower was developed to the west of the site during the mid-1960s. The water tower was demolished in 2012, and two new water towers were constructed. No environmental concerns were identified with respect to current or historical use of adjoining properties.
- VERTEX conducted a regulatory review that included a search of state and federal regulatory databases to identify environmental concerns for the site and surrounding properties. Several facilities were identified within the ASTM search distances of the site.



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Based on distance, apparent gradient relationship, regulatory status, and/or other facilityspecific characteristics, no RECs to the site were identified with respect to these facilities.

Conclusions

VERTEX has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, of the Somerset Middle School, located at 1141 Brayton Avenue, Somerset, Massachusetts. Exceptions to, or deletions from, this practice are described in Section 8.0 of this report. This assessment has revealed evidence of the following HREC in connection with the site.

Based on the reported closure, the release identified during the removal of the former on-site USTs is considered a HREC.



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2.0 SITE AND VICINITY CHARACTERISTICS

2.1 **Site Description**

The site is located at 1141 Brayton Avenue in Somerset, Massachusetts (the site). According to the Town of Somerset Assessor's Office, the site is addressed as 1141 Brayton Avenue and consists of approximately 25.21 acres of land identified as Map-Block-Lot: 005.B-0000-0344.0. The site location is shown on Figure 1 - Site Locus Map.

2.2 **Site Improvements**

The site is improved with a one-story elementary school building constructed from 1964 to 1965 and expanded in 1969. The site building is constructed with brick façade exterior walls on a combination concrete basement and slab foundation with a flat roof. Solar panels are located on the roof of the site building. According to the site contact, Mr. Carlos Campos, the boiler room and main electrical room are the only basement areas, located beneath the kitchen area.

The site building is currently occupied by the Somerset Middle School. The site building consists of classrooms, an art room, offices, a library, a gymnasium, a cafeteria, an auditorium, a kitchen area, storage areas, restrooms, and back-of-house areas. Interior finishes include tile, carpet, wood, drywall, brick, concrete masonry unit (CMU), and acoustical ceiling tiles.

Exterior areas on-site consist of asphalt-paved parking areas and driveways, asphalt and concrete-paved walkways, athletic fields, and landscaped areas.

For a layout of the site, please refer to Figure 2 - Site Plan. Photographic documentation of the site and surrounding areas is presented in Appendix A.



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2.3 Tenant Operations

The site currently operates as the Somerset Middle School. Chemicals are limited to typical small quantity storage of maintenance and cleaning supplies, which were observed to be well stored, with no signs of staining or a release. Significant quantities of petroleum products and hazardous material usage or storage were not observed on-site. A grease trap is located within the kitchen area, which is serviced annually by site maintenance personnel. The site also generates small quantities of biohazardous waste associated with the nurse's office. Biohazardous waste is collected in designated receptacles, which are serviced on a routine basis. The current on-site operations are not considered to be an environmental concern.

2.4 Current Uses of Adjoining Properties

The site was observed to be located in a residential and commercial area of Somerset, Massachusetts. Adjoining properties were observed (from the site or from public access areas) for signs of RECs and their potential to pose an environmental concern to the site. The uses and features of adjoining properties are described in the following table. The locations of these properties relative to the site are depicted on Figure 2 – Site Plan.

NEARBY/ADJOINING PROPERTY SUMMARY			
DIRECTION	PROPERTY USE	CONCERNS	
North	Power lines, beyond which are residences	None.	
East	Brayton Avenue, beyond which are residences and St. John of God Parish	None.	
South	Correia & Sons Market and Read Street, beyond which are residences	None.	
Southwest	South Elementary School, South Complex (baseball fields), and a water tower	None.	
West	Undeveloped wooded land and water towers	None.	



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2.5 Physical Setting Source(s)

Physical setting sources specified in Section 12.0 of this report were reviewed to provide information about the geology and hydrogeology of the site.

2.5.1 Topography

A review of the 2012 USGS Topographic Quadrangle Map of Fall River, Massachusetts indicates that the surface elevation of the site is approximately 120 to 150 feet above mean sea level. The site appears to be located on a small-size hill; as such, the topography of the site slopes to the east and the topography of adjoining properties slopes in various directions. The topography of the surrounding area appears to generally slope to the east towards Taunton River or west towards Lee River.

2.5.2 Surface Water

No naturally-occurring surface water bodies were observed on or adjoining the site. However, according to the National Wetlands Inventory, a stream runs along the northern and western site boundaries. The Taunton River is located approximately 0.5 miles east-southeast of the site, and Lee River is located approximately 1 mile west of the site. Based on the Federal Emergency Management Agency (FEMA) Insurance Rate Map (FIRM) 25005C0331G, the site is not located in a 100- or 500-year floodplain.

2.5.3 Geologic Conditions

According to the United States Department of Agriculture (USDA) Web Soil Survey, soils at the site consist primarily of Udorthents, which are described as moderately well and well drained soils, with moderately coarse textures, and moderate infiltration rates. A small-size area of soil on the northern portion of the site consists of Pittstown silt loams, which are described as



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moderately well drained with slow infiltration rates. A small-size area of soil on the northwestern corner of the site consists of Paxton fine sandy loams, which are described as well drained with slow infiltration rates. Bedrock outcrops were not observed during the site reconnaissance.

2.5.4 Groundwater

Based on surface topography and nearby surface waters, groundwater flow direction is estimated to be to the east-southeast towards the Taunton River, and groundwater is anticipated to be encountered within 10 feet below ground surface (bgs). Actual local groundwater flow direction can be influenced by factors such as local surface topography, underground structures, seasonal fluctuations, soil and bedrock geology, and production wells, none of which were considered during this study.



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3.0 **USER-PROVIDED INFORMATION**

VERTEX requested the following information about the site from the Client (User):

- An evaluation of the presence of environmental cleanup liens for the site;
- Activity and use limitations (AULs) such as engineering controls (e.g., slurry walls, caps) and land use restrictions or institutional controls (e.g., deed restrictions, covenants) that may be in place for the site;
- Specialized knowledge that includes personal knowledge or experience related to the site or nearby properties based on professional experience or knowledge of the site;
- Fair market value (FMV) to evaluate whether the purchase price of any parcel was significantly below FMV;
- Obvious indicators that involve past or present spills, stains, releases, cleanups on or near the site;
- Common knowledge about use of specific chemicals, possible contamination, or past use of the site and surrounding area; and
- Reason for performing the ESA.

The Client stated that the work was being conducted in support of future renovation activities. No other responsive information regarding the site was provided by the User.



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4.0 **INTERVIEWS**

VERTEX conducted interviews regarding site history and the current on-site operations with the following individuals:

INTERVIEWS				
NAME/COMPANY TITLE/POSITION INFORMATION PROVIDED				
Mr. Carlos Campos Director of Buildin Somerset Public Schools and Grounds		Provided access to the site and information regarding site operations.		
Municipal Officials	Various	Provided municipal information.		

Information obtained from these interviews is discussed in relevant sections of this report. Please refer to Section 6.3 for a summary of information obtained from municipal inquiries.



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5.0 HISTORICAL RECORDS REVIEW

Past land uses for the site and adjoining properties were assessed to identify historical practices or conditions that may have impacted the site. This was accomplished by reviewing historical information from several sources including but not limited to interviews with a site representative, review of available ownership records, and review of historical information obtained from regulatory sources, aerial photographs, city directories, and historical maps.

5.1 **Historical Site Use Summary**

Based on review of readily available historical information, the site historically consisted of undeveloped and/or agricultural land with Brayton Avenue located abutting the east of the site, and Read Street abutting the south of the site. A residence was present along Read Street on the southern portion of the site from at least 1938 through 1960. The residence was demolished prior to the construction of the current school building from 1964 to 1965. An addition was made to the school in 1969. No environmental concerns were identified with respect to current or historical use of the site.

5.2 **Historical Adjoining Properties Use Summary**

The site is located in an area of residential properties, a school, undeveloped land, and athletic fields. Read Street has bordered the south of the site since at least 1888. St. John of God Parish has been developed to the east of the site since 1928. Brayton Avenue has bordered the east of the site since at least 1938. Residential properties have been developed to the east of the site, across Brayton Avenue, since at least 1938. Power lines have been developed to the north of the site since at least 1938. Baseball fields have been located to the west-southwest of the site since the early 1940s. South Elementary School was developed to the southwest of the site in 1951. A water tower was developed to the west of the site during the mid-1960s. The water tower was



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demolished in 2012, and two new water towers were constructed. No environmental concerns were identified with respect to current or historical use of adjoining properties.

5.3 **Previous Environmental Reports**

VERTEX was not provided with previous environmental reports for review.

5.4 **Prior Ownership**

Due to the lack of available sales information from the Town of Somerset Assessor's Office, VERTEX was unable to obtain specific site ownership information from the Bristol County Registry of Deeds, Fall River District. However, historical information obtained from the Town of Somerset Assessor's Office indicates that the site has been owned by the Town of Somerset since at least 1965. No environmental liens or AULs were noted through review of available information from the Bristol County Registry of Deeds. Prior owners of the site were not available to be interviewed.

5.5 **City Directories**

VERTEX reviewed historical city directory information for the site and adjoining properties. Due to the densely developed residential nature of the surrounding area, only commercial, institutional, and industrial properties are listed in the table below. Copies of the city directories are included in Appendix C. A summary of listings is presented below.

	CITY DIRECTORY REVIEW			
YEAR	YEAR SUMMARY (ON-SITE) SUMMARY (OFF-SITE)		CONCERNS	
1985	No #: Somerset Middle School	Read Street	None	
	Cafeteria, Middle School South,	466: Lee's House of Beauty		
	Mass Health & Guidance	476: Jack's Family Variety		
		500: Correia & Sons		
	656: Somerset Clinic			
700: South School				
		821: Somerset United		



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	CITY DIRECTORY REVIEW			
YEAR	SUMMARY (ON-SITE)	SUMMARY (OFF-SITE)	CONCERNS	
		Brayton Ave		
		1036: St. John of God Church		
1989	1141: BICO Collaborative, Henkeles	Read Street	None	
	& McCoy	466: The Haircuttery		
		500: Correia & Sons		
	No #: Somerset Middle School	656: Somerset Clinic		
	Cafeteria, Middle School South,	700: South School		
	Mass Health & Guidance	821: Somerset United Methodist		
		Brayton Ave		
		980: Basement Waterproofing		
		996: St. John of God		
		1036: St. John of God Church		
		1262: Shuster Corp.		
1992	1141: Somerset School District	Read Street	None	
		466: The Haircuttery, Statewide Construction Co.		
		500: Correia & Sons Market		
		700: Somerset School District		
		841: Somerset United Methodist Church		
1995	Not Listed	Read Street	None	
		466: The Haircuttery, Statewide Construction Co.		
		500: Correia & Sons Market		
		700: Somerset School District		
		841: Somerset United Methodist Church		
		Brayton Ave		
		1204: Hair Today		
2000	1141: Somerset Junior High School,	Read Street	None	
	South Coast Educational	466: Hair It Is		
	Collaborative	476: Ideal Party		
		500: Correia & Sons Market Inc.		
		579: D&D Burner Service		
		700: Somerset School District		
2005	4444 6	841: Somerset United Methodist Church	+	
2005	1141: Somerset Junior High School,	Read Street	None	
	South Coast Educational Collaborative	466: Indulgence		
	Collaborative	467: Furniture Place Inc.		
		472: Restore Therapy 476: Healthy Way, IDR Inc.		
		500: Correia & Sons Market Inc., Margi Corp.		
		700: Somerset School District		
		841: Somerset United Methodist Church		
		Brayton Ave	1	
		996: St. John of God Church	1	
		1204: Hair Today	1	
2010	1141: Somerset School District,	Read Street	None	
	South Coast Educational	466: Indulgence	1	
	Collaborative	476: Healthy Way		



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	CITY DIRECTORY REVIEW			
YEAR	SUMMARY (ON-SITE)	SUMMARY (OFF-SITE)	CONCERNS	
		500: Correia & Sons Market Inc.		
		700: Somerset School District		
		841: Somerset United Methodist Church		
		Brayton Ave		
		996: St. John of God Church		
		1204: Hair Today		
2014	1141: Somerset School District,	Read Street	None	
	South Coast Educational	467: Stop & Pick Inc., L&M Real Estate Group Inc.		
	Collaborative	476: Healthy Way		
		500: Correia & Sons Market Inc.		
		700: Somerset School District		
		841: Somerset United Methodist Church		
		Brayton Ave		
		985: M&D Correia Realty LLC		
		996: St. John of God Church		
		1204: Hair Today		

The review of city directories did not identify RECs in connection with the site.

5.6 **Aerial Photography**

VERTEX reviewed aerial photographs including the site and adjoining properties. Copies of the aerial photographs are included in Appendix D. A summary of information obtained from the review is provided in the table below.

	AERIAL PHOTOGRAPHY REVIEW			
YEAR	YEAR SUMMARY (ON-SITE) SUMMARY (OFF-SITE)			
1938 1941	The site is depicted as undeveloped/agricultur al land. A residence is developed on the southwestern corner of the site.	Roadways border the south and east of the site, beyond which are residences. A church is also noted to the east of the site. Power lines are developed to the north of the site, beyond which are residences. The area to the west of the site is undeveloped. A commercial property is developed to the southeast of the site.	None	
1952 1960	Relatively unchanged.	A school has been developed to the southwest of the site. Other off-site properties remain generally similar to the previous aerial photograph.	None	
1966	A portion of the current site building has been developed.	A water tower has been developed to the west of the site. Other off-site properties remain generally similar to the previous aerial photograph.	None	



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	AERIAL PHOTOGRAPHY REVIEW			
YEAR	YEAR SUMMARY (ON-SITE) SUMMARY (OFF-SITE)			
1970	An addition has been made to the school building.	Surrounding properties appear similar to the previous aerial photograph.	None	
1977 1980 1986 1991 1995 2006 2008 2012 2016	The site is consistent with its current features.	Surrounding properties are consistent with their current features. The water tower to the west of the site was demolished in 2012 and two new water towers were constructed.	None	

The review of historical aerial photographs did not identify RECs in connection with the site.

5.7 **Topographic Maps**

VERTEX reviewed historical topographic maps including the site and surrounding areas. Copies of the topographic maps are included in Appendix E. A summary of information obtained from the review is provided in the table below.

	TOPOGRAPHIC MAP REVIEW			
YEAR	SUMMARY (ON-SITE)	SUMMARY (OFF-SITE)	CONCERNS	
1888 1893	The site is depicted as undeveloped land.	Surrounding properties are depicted as undeveloped land. A roadway is depicted adjacent to the south of the site.	None	
1944 1949	A small structure is developed on the southwestern corner of the site. Remaining site areas are undeveloped.	Power lines are developed to the north of the site, beyond which are residences. A roadway borders the east of the site, beyond which are residences and a church. A roadway borders the south of the site, beyond which are residences. A school and water tower are developed to the far southwest of the site.	None	
1967	A portion of the current school is developed on the northern portion of the site. The southern portion of the site remains undeveloped.	South School has been developed to the southwest of the site. Two water towers are noted to the west and southwest of the site. Read Street borders the south of the site, beyond which are multiple structures. Two structures are noted to the adjacent southeast of the site. Brayton Ave borders the east of the site, beyond which is shaded red indicating dense development. A church is also noted to the east of the site. Power lines abut the north of the site.	None	
1979 1985	An addition has been made to the site building, bringing the building to the current configuration.	Surrounding properties appear similar to the previous topographic map.	None	
2012	No specific features are depicted on the topographic	No specific features depicted on the topographic map other than the roadways surrounding the site.	None	



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	TOPOGRAPHIC MAP REVIEW			
YEAR	YEAR SUMMARY (ON-SITE) SUMMARY (OFF-SITE) CONCERNS			
	map other than the roadways			
	surrounding the site.			

The review of historical topographic maps did not identify RECs in connection with the site.

5.8 **Sanborn Fire Insurance Maps**

VERTEX reviewed historical Sanborn Fire Insurance Maps including the site and surrounding areas. Copies of the Sanborn Fire Insurance Maps are included in Appendix F. A summary of information obtained from the review is provided in the table below.

	SANBORN MAP REVIEW			
YEAR	YEAR SUMMARY (ON-SITE) SUMMARY (OFF-SITE)			
1959	The site is not depicted on the map.	South School and a library are developed to the southwest of the site. The school was constructed in 1951. Other surrounding properties are not depicted on the map.	None	

The review of historical Sanborn Fire Insurance Maps did not identify RECs in connection with the site.



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6.0 REGULATORY RECORDS REVIEW

VERTEX obtained a regulatory database report as specified in Section 12.0. Review of databases and files from federal, state, and local environmental regulatory agencies was used to identify use, generation, storage, treatment, or disposal of hazardous materials and chemicals, or release incidents of such materials that might have impacted the site. The databases discussed in the following sections address ASTM requirements. Additional federal and state databases may have also been reviewed, and if so, are listed in the table below. A copy of the database report is included in Appendix G.

VERTEX's review of these listings assessed the potential for soil, groundwater, and/or soil vapor impacts to the site from on-site listings or listings at surrounding facilities, taking into account such factors as the assumed groundwater depth and flow direction, regulatory status, distance from the site, and other information reported by the regulatory database(s) and/or other sources of information.

A summary of the database information is provided in the following table.

REGULATORY DATABASE SUMMARY				
DATABASE	ASTM RADIUS	TARGET PROPERTY	SURROUNDING FACILITIES	
National Priorities List (NPL)/Proposed NPL/De-listed NPL	1 Mile	-	-	
Superfund Enterprise Management System Archive (SEMS) Sites	½ Mile	-	-	
SEMS Archive	½ Mile	-	-	
Resource Conservation and Recovery Act (RCRA) Corrective Action Report (CORRACTS)	1 Mile	-	-	
RCRA Treatment, Storage, and Disposal Facilities (RCRA-TSDF)	½ Mile	-	-	
RCRA Hazardous Waste Generators	¼ Mile	-	-	
RCRA Former Hazardous Waste Generators/No Longer Regulated Sites (RCRA NonGen/NLR)	¼ Mile	-	1	
Facility Index System (FINDS)	Target Property	1		



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REGULATORY DATABASE SUMMARY				
DATABASE	ASTM RADIUS	TARGET PROPERTY	SURROUNDING FACILITIES	
Emergency Response Notification System (ERNS)	Target Property	-		
Enforcement and Compliance History Online (ECHO)	Target Property	1		
Federal Institutional Controls/Engineering Controls	½ Mile	-	-	
State Hazardous Waste Sites (SHWS)	1 Mile	-	26	
Solid Waste Facilities/Landfills (SWF/LF)	½ Mile	-	-	
Solid Waste Recycling Facility (SWRCY)	½ Mile	-	-	
Voluntary Cleanup Program (VCP)	½ Mile	-	-	
Leaking Underground Storage Tank (LUST)	½ Mile	1	5	
Leaking Aboveground Storage Tank (LAST)	½ Mile	-	1	
Underground Storage Tank (UST)	¼ Mile	-	-	
Aboveground Storage Tank (AST)	¼ Mile	-	-	
Spills	Target Property	-		
Release	Target Property	1		
State Institutional Controls	½ Mile	-	1	
HW Gen	¼ Mile	-	-	
Brownfield Sites	½ Mile	-	-	
US Brownfield Sites	½ Mile	-	-	
Drycleaners	¼ Mile	-	-	
Asbestos	Target Property	1		
US AIRS	Target Property	1		
EDR Historical Auto Stations	1/8 Mile	-	-	
EDR Historical Cleaners	1/8 Mile	-	-	
EDR Manufactured Gas Plants (MGP)	1 Mile	-	-	



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In addition to the listed databases, EDR maintains proprietary databases of historical auto stations, dry cleaners, and manufactured gas plants. These databases are based on aggregation of historical resource data and are not produced by local, state or federal agencies. As such, VERTEX reviews these databases as a part of the historical resource review and includes information from these listings where appropriate.

The database report includes an orphan summary. This summary identifies facilities that are listed on one of the above-referenced databases or lists but do not include complete or accurate geographic data. Consequently, EDR was unable to map the facilities in relation to the site. VERTEX reviewed the orphan summary prior to inspecting the site and surrounding properties. Orphan properties located within ASTM search distances of the site (if any) were incorporated into VERTEX's review.

6.1 **On-Site Listings**

The site is listed on the United States Aerometric Information Retrieval System (US AIRS) database as a minor source with Programmatic ID AIR MA0000002512000729. Compliance inspections were completed in 1987, 1990, 1993, 2002, and 2011. No violations were reported for the site. The site is also listed on the Facility Index System (FINDS) and Enforcement and Compliance History Online (ECHO) databases in association with air emissions.

The site is listed on the Asbestos database for asbestos abatement events in 2004, 2007, 2010, 2011, 2013, and 2015. Areas of abatement have included the boiler room, a men/women restroom, and a hallway.

The site is listed on the Leaking Underground Storage Tank (LUST) and RELEASE databases for contamination discovered during the removal of two former on-site 6,200-gallon fuel oil USTs in July 1997. During removal activities, headspace sampling of soil in the area of the USTs resulted in concentrations greater than 100 parts per million (ppm). Release Tracking Number (RTN) 4-



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0013199 was assigned to the release case. Approximately 32.84 tons of soil were removed from the tank excavation and disposed of at an approved facility. Confirmatory soil sampling did not identify concentrations of Total Petroleum Hydrocarbons (TPH) above Method 1 soil standards. A Class A-1 Response Action Outcome (RAO) Statement was submitted to the Massachusetts Department of Environmental Protection (MassDEP) on September 15, 1997. Based on the reported closure, the release identified during the removal of the former on-site USTs is considered a HREC.

6.2 **Off-Site Listings**

A review of state and federal regulatory records revealed several facilities within ASTM-specified search radii of the site. Of these facilities, one was located within 500 feet of the site and is discussed in the table below. The remaining database listings are not considered an environmental concern to the site based on distance, regulatory status, and/or apparent groundwater gradient and are not further discussed.

OFF-SITE STATE AND FEDERAL LISTINGS				
FACILITY	DISTANCE/ DIRECTION/ GRADIENT	REGULATORY STATUS	CONCERNS	
South School 700 Read Street	Adjacent southwest/ crossgradient	LUST: Listed with RTN 4-0013198 for contamination discovered during the removal of a 5,000-gallon #2 fuel oil UST in July 1997. During removal activities, headspace sampling of soil in the area of the UST resulted in concentrations greater than 100 ppm. Approximately 8.21 tons of soil were removed from the tank excavation and disposed of at an approved facility. Confirmatory soil sampling did not identify concentrations of TPH above Method 1 soil standards. A Class A-1 RAO Statement was submitted to the MassDEP on September 15, 1997. Based on the reported closure, the off-site release facility is not considered a concern in connection with the site.	None	

VERTEX notes that EDR mapped a release facility, identified at 1250 Brayton Road, listed on the SHWS and RELEASE databases, approximately 75 feet from the site. However, after review of regulatory documents for the release case on the MassDEP Online File Server, the release is



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located at 1250 Brayton Point Road, over 4,000 feet southwest of the site. As such, concerns were not identified.

6.3 **Additional Environmental Record Sources**

VERTEX contacted local agencies to request information relevant to the site and vicinity. A summary of the agencies contacted and the information obtained is included in the following table.

LOCAL RESEARCH SUMMARY					
OFFICE	INFORMATION OBTAINED	CONCERNS			
Town of Somerset	VERTEX obtained the assessor card and detailed property	None			
Assessor's Office	information for the subject site.				
Somerset Town Clerk's Office	No records pertaining to the site were on-file.	None			
Town of Somerset Water Department	The site is connected to the municipal water and sewer systems. Initial connection dates were not provided.	None			
Town of Somerset Building Department	VERTEX reviewed various permits for the site, including alteration/renovation permits, plumbing permits, electrical permits, and a permit to install solar panels of the roof of the site building in 2015. No records of environmental concern were identified.	None			
Town of Somerset Health Department	No records pertaining to the site were on-file, except for food establishment permits.	None			
Town of Somerset Fire Department	Annual inspections for the school were on-file dating back to the 1960s. Records of two 6,200-gallon fuel oil USTs installed in 1965 were reviewed. Please refer to Section 6.1 for further discussion of the former on-site USTs.	See Section 6.1			
Town of Somerset Conservation Commission	No records pertaining to the site were on-file.	None			
Bristol County Registry of Deeds – Fall River District	Due to the lack of available sales information from the Town of Somerset Assessor's Office, prior ownership records were unable to be located. See Section 5.4.	None			



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7.0 SITE RECONNAISSANCE

A site visit was conducted by VERTEX representative Nicollette Lynch, Scientist II, on August 6, 2019 between 10:00 a.m. and 12:00 p.m. Mr. Carlos Campos, Director of Buildings and Grounds with Somerset Public Schools, escorted VERTEX during the site visit and answered questions regarding site operations.

During the site visit, the weather was partly cloudy with a temperature of approximately 45° Fahrenheit. The site visit consisted of a walk-through of the site and visual reconnaissance of neighboring properties from curbside. Photographic documentation of the site visit is included in Appendix A.

7.1 **Access Restrictions**

VERTEX visually and physically observed accessible areas of the site. The interior and exterior of the site building were observed. The building roof was not accessed during the site inspection. Based on the current site use as a middle school, this access limitation is not considered to be significant. No additional limitations imposed by physical obstructions or other limiting conditions were observed.

7.2 **Site Observations**

Observations of site conditions were made during the site reconnaissance and are summarized in the table below. Issues of concern are discussed in greater detail following the table.

SITE OBSERVATIONS				
DESCRIPTION	REPORTED/ OBSERVED ON-SITE Y/N	COMMENTS		
Hazardous	Υ	The site currently utilizes small quantities of janitorial cleaning chemicals		
Substances and		and maintenance supplies. These materials were observed to be well		



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		SITE OBSERVATIONS
DESCRIPTION	REPORTED/ OBSERVED ON-SITE Y/N	COMMENTS
Petroleum		stored and are reportedly utilized in accordance with their labeling. No
UST(s)	N	RECs were noted. VERTEX did not observe fill pipes, vent pipes or other evidence of current UST(s). VERTEX did not observe operations and/or equipment that are typically associated with significant fuel or chemical storage that typically utilizes USTs. Please refer to Section 6.1 for information pertaining to previous USTs located on-site.
AST(s)	N	VERTEX did not observe evidence of AST(s). VERTEX did not observe operations and/or equipment that are typically associated with significant fuel or chemical storage that typically utilizes ASTs.
Strong, Pungent, or Noxious Odors	N	Not identified during the site visit.
Pools of Liquid	N	Not identified during the site visit.
Drums	N	Not identified during the site visit.
Unidentified Substance Containers	N	Not identified during the site visit.
Polychlorinated Biphenyls (PCB)- containing Equipment	N	A pad-mounted transformer was noted adjacent to the northwestern corner of the site building. No labeling regarding PCB content was observed. The transformer is reportedly owned and operated by National Grid. No staining was observed in the vicinity of the transformer; as such, no environmental concerns were identified.
Utilities (Electricity/ Natural Gas)	Υ	Electricity – supplied by National Grid Natural gas – supplied by Liberty Utilities
Hydraulic Equipment	N	Not identified during the site visit.
Water Supply	Υ	Water is supplied to the site by the Town of Somerset. An initial connection date was not available.
Wells	N	On-site water extraction or groundwater monitoring wells were not identified or reported.
Wastewater	Y	Wastewater discharges from the site are limited to domestic and commercial discharges with no indicated process/industrial type discharges. Sewer service is provided to the site by the Town of Somerset. An initial connection date was not available.
Septic	N	Not identified or reported during the site visit.
Storm Water	Y	Storm water at the site discharges to storm water catch basins located throughout the site property, which reportedly discharge to the municipal storm water system. No staining or evidence of a release was observed in the vicinity of the storm water catch basins. No environmental concerns were noted.
Flood Plain	N	According to FEMA, the site is not located in a 100- or 500-year floodplain.
Pits, Ponds, Lagoons	N	Not identified during the site visit.



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SITE OBSERVATIONS				
DESCRIPTION	REPORTED/ OBSERVED ON-SITE Y/N	COMMENTS		
Stained Soil, Stained Pavement, Corrosion to Pavement	N	Not identified during the site visit.		
Stressed Vegetation	N	Not identified during the site visit.		
Solid Waste	Y	Solid waste and recycling are stored in dumpsters located to the north of the site building, which are serviced on a routine basis by a contractor. The dumpsters are situated on asphalt pavement. No staining or evidence of a release was observed in the vicinity of the dumpsters. No environmental concerns were identified.		
Hazardous Waste Management	Y	The site generates small quantities of biohazardous waste associated with the nurse's office. Biohazardous waste is collected in designated receptacles, which are serviced on a routine basis.		
Heating/Cooling	Y	The site building is primarily heated by natural gas-fired boilers and cooled by portable electric window air conditioner units, if necessary. However, select areas associated with the site building are heated and/or cooled by electrically-controlled and natural gas-fired HVAC equipment. The site contacts had no knowledge regarding historical heating systems associated with the site building.		
Drains, Sumps, Oil/Water Separators/Sand Traps	Y	Floor drains, which reportedly discharge to the municipal sewer system, were observed throughout the site building. The kitchen area is equipped with an unknown capacity above grade		
		grease trap, which is serviced annually by maintenance personnel. The site also maintains three sump pumps in the boiler room, and one sump pump in the main electrical room. No staining or evidence of a release was observed in the vicinity of the on-site floor drains, grease trap, or sump pumps. As such, no RECs were identified.		
Vapor Intrusion	N	As part of this assessment, VERTEX assessed the potential for impacts to the site from potential on- and off-site sources of vapor intrusion. The potential for impacts from off-site properties included a review of current off-site operations (see Section 2.4), a review of historical operations (see Section 5.2), and a review of regulatory database records (see Section 6.2). Potential sources of on- and off-site vapor intrusion were not identified.		



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8.0 **DATA GAPS**

Significant data gaps that would affect VERTEX's ability to identify RECs at the site were not encountered during this assessment. Deviations or deletions from the scope of work defined by ASTM E 1527-13 were not intentionally made.

Our conclusions regarding the potential environmental impact of nearby, off-site facilities on the site are based on readily available information from the environmental databases and the assumed groundwater flow direction as inferred from the topography of the site and surrounding area. A detailed file review of each facility was beyond the scope of work. However, VERTEX reviewed regulatory files for the site and adjacent South Elementary School from the MassDEP. Please refer to Sections 6.1 and 6.2 for further discussion.



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9.0 **CONCLUSIONS AND RECOMMENDATIONS**

VERTEX has performed a Phase I ESA in conformance with the scope and limitations of ASTM E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, of the Somerset Middle School, located at 1141 Brayton Avenue, Somerset, Massachusetts. Exceptions to, or deletions from, this practice are described in Section 8.0 of this report. This assessment has revealed evidence of the following HREC in connection with the site.

Based on the reported closure, the release identified during the removal of the former on-site USTs is considered a HREC.



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10.0 SCOPE AND LIMITATIONS

10.1 Purpose

The primary purpose of this assessment is to identify, to the extent feasible pursuant to the processes prescribed in ASTM E 1527-13, RECs in connection with the site. As defined in ASTM E 1527-13, a REC is "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." It does not include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. A "historical REC" is defined in ASTM E 1527-13 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)." ASTM E 1527-13 defines the term "controlled REC" as "a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls)."

In conducting this assessment, VERTEX followed ASTM E 1527-13, as well as the U.S. Environmental Protections Agency's All Appropriate Inquires (AAI) Final Rule of November 1, 2005 as amended December 30, 2013. There were no exceptions to or deletions from this



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practice, as described in Section 8.0 of the report. ASTM defines good commercial and customary practice for conducting an ESA of a parcel of commercial real estate with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601) and petroleum products. This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. The practice constitutes "all appropriate inquiries into the previous ownership and uses of the facility in accordance with generally accepted good commercial and customary standards and practices" as defined at 42 U.S.C. 9601(35)(B).

As part of ASTM E 1527-13, Phase I ESAs must be conducted by or under the supervision of a qualified Environmental Professional. The AAI Final Rule defines an Environmental Professional as someone who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors of the rule. We declare that to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 40 C.F.R. 312.10. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the site. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 C.F.R. Part 312.

10.2 **Detailed Scope-of-Services**

As part of this Phase I ESA, and in accordance with the provisions of ASTM E 1527-13, VERTEX performed a visual reconnaissance of the site, noted use of adjoining properties, and conducted historical and regulatory records research. The following provides a more detailed description of the scope of services:



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- Visual assessment of the site building(s), if present, and grounds to identify potential for onsite petroleum or hazardous material release(s).
- Visual assessment and categorization of the use of abutting and adjoining properties as potential off-site sources of petroleum or hazardous material contamination to the site.
- Review of readily available state and federal regulatory records related to on-site activities and to potential off-site activities to identify sources of petroleum or hazardous material contamination to the site.
- Review of readily available historical information to assess for potential on-site and off-site sources of petroleum or hazardous material contamination to the site.
- Review of readily available local records related to historical site ownership, usage, and development. This includes obtaining information from local environmental authorities to identify complaints, violations, citations, inspections, environmental liens, AULs, or institutional and engineering controls related to the site.
- Review of readily available documents and other resources for the site and site vicinity to evaluate current and historical development and renovation activities.
- Visual assessment for suspect Polychlorinated Biphenyl (PCB) containing equipment, e.g., transformers, elevators. Please note, this scope of work does not include an evaluation for or testing of suspect PCBs in building materials such as caulking, mastic/adhesives, oil-based paints, coatings and sealants. Currently, there are no regulatory requirements to test in-place building materials for the presence of PCBs. Although testing is not required for in place materials, owners are required to know the content of the waste streams that they generate and potentially sign waste profiles prior to disposal facility acceptance. Therefore, if renovation or demolition activities are to be conducted at the site that will result in the



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generation of demolition debris, a contractor or waste disposal facility may request certification of knowledge of the waste stream or testing to determine if the material(s) contain PCBs for proper handling and disposal purposes.

Preparation of a Phase I ESA report.

10.3 Significant Assumptions

Information obtained from the Client, the Client's representative, site representatives, individuals interviewed, and prior environmental reports is considered to be accurate unless VERTEX's reasonable inquiries clearly revealed otherwise.

Conditions observed were considered to be representative of areas that were not observed unless otherwise indicated.

The primary direction of groundwater flow is assumed to follow topography, unless otherwise indicated by measurement of the potentiometric surface or other quantifiable data.

VERTEX reviewed reasonably ascertainable public records with respect to past operations and ownership of the site in an attempt to determine past site usage. VERTEX is not a professional title insurance firm and makes no guarantee, express or implied, that the listing reviewed represented a comprehensive delineation of past site ownership or tenancy for legal purposes. The accuracy and completeness of information maintained in public records by public agencies or other entities is assumed to be sufficient for the purposes of this Phase I ESA, and independent verification of its validity is beyond the scope of this investigation.



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10.4 **Limitations and Exceptions**

Our professional services have been performed, our findings obtained, and our recommendations prepared in accordance with customary principles and practices in the fields of environmental science and engineering. The findings within this ESA utilized information that was practically reviewable per ASTM Practice E 1527-13, meaning that only relevant data relating to the subject site has been incorporated into the findings, disregarding extraordinary analysis of irrelevant data. The investigation conducted for this ESA was limited to data that were reasonably ascertainable, meaning that the information was publicly available, obtainable within the cost and time constraints under the scope of services for this project, and practically available. VERTEX is not responsible for the independent conclusions, opinions, or recommendations made by others based on the records review, site inspection, field exploration, and laboratory test data presented in this report.

It should be noted that all surficial environmental assessments are inherently limited in the sense that conclusions are drawn and recommendations developed from information obtained from limited research and site evaluation. Subsurface conditions were not field-investigated as part of this study and may differ from the conditions implied by the surficial observations. Additionally, the passage of time may result in a change in the environmental characteristics at this site and surrounding properties. VERTEX does not warrant against future operations or conditions, or against operations or conditions present of a type or at a location not investigated. VERTEX does not assume responsibility for other environmental issues that may be associated with the subject site.

This study is not intended to assess or otherwise determine if soil contamination, waste emplacement, or groundwater contamination exists. These data are accessible only by sampling of subsurface material and groundwater through the completion of soil borings and the installation of monitoring wells and the chemical analyses of soil and groundwater samples. The scope of work, determined by the client, did not include these activities.



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In view of the rapidly changing status of environmental laws, regulations and guidelines, VERTEX cannot be responsible for changes in laws, regulations, or guidelines that occur after the study has been completed and that may affect the subject site.

It must be noted that no investigation can absolutely rule out the existence of hazardous materials at a given site. This assessment has been based upon prior site history and observable conditions. Existing hazardous materials and contaminants can escape detection using these methods.

There were no significant data gaps or accessibility limitations that would affect VERTEX's ability to identify RECs at the sites, as discussed in Section 8.0.

While VERTEX may comment on environmental compliance matters that fall under the scope of this assessment, this study does not constitute a regulatory compliance audit, and does not document compliance with applicable state, federal, or local regulations.

10.5 Special Terms and Conditions

No special Terms and Conditions were agreed upon between the User and the Environmental Professional.

10.6 **User Reliance**

This report is for the exclusive use of Ai3 Architects, LLC. No other party shall have the right to rely on any service provided by VERTEX without prior written consent. Use of this report by any other party shall be at such party's sole risk.



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11.0 REFERENCES

Agencies Contacted/Records Reviewed:

Town of Somerset Assessor's Office

Town of Somerset Town Clerk's Office

Town of Somerset Water Department

Town of Somerset Building Department

Town of Somerset Health Department

Town of Somerset Fire Department

Town of Somerset Conservation Commission

Bristol County Registry of Deeds – Fall River District

Other Documents Reviewed:

EDR Database Report, August 5, 2019.

Aerial photographs obtained from EDR, dated 1938, 1941, 1952, 1960, 1966, 1970, 1977, 1980, 1986, 1991, 1995, 2006, 2008, 2012, and 2016.

City directories obtained from EDR, dated 1985, 1989, 1992, 1995, 2000, 2005, 2010, and 2014.

Topographic maps obtained from EDR, dated 1888, 1893, 1944, 1949, 1967, 1979, 1985, and 2012.

Sanborn Fire Insurance Maps obtained from EDR, dated 1959.

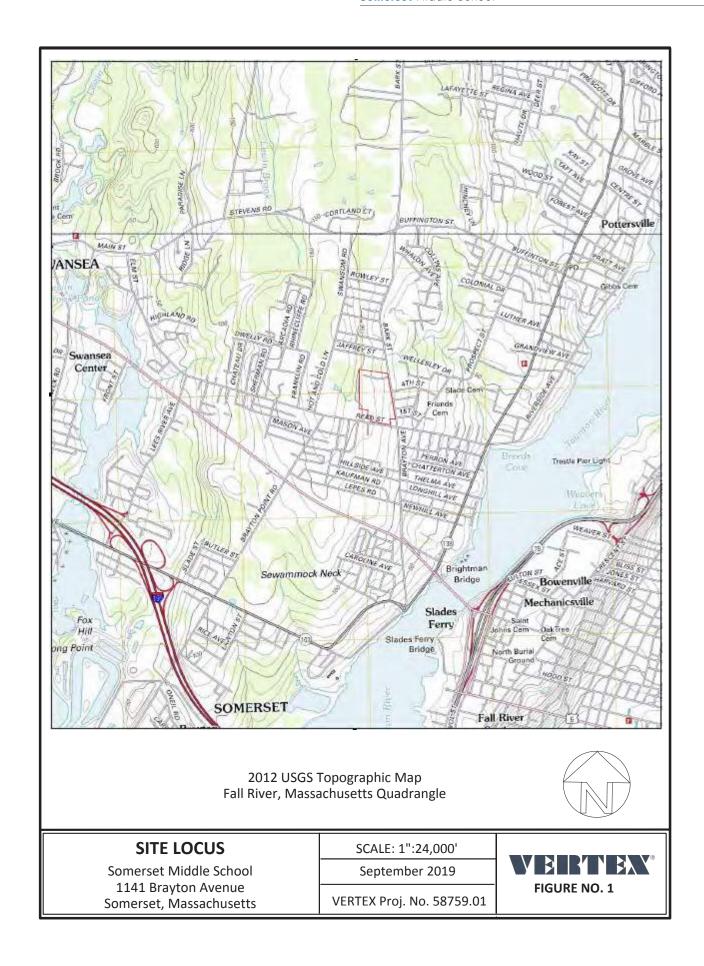
Interviews:

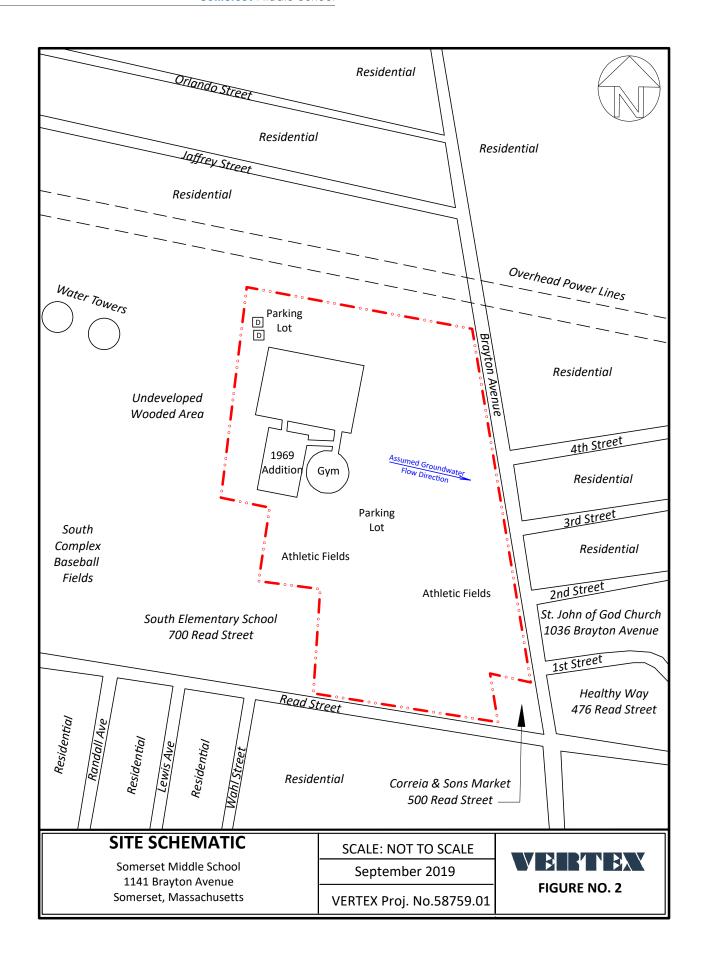
Mr. Carlos Campos, Director of Buildings and Grounds

Various Municipal Staff



FIGURES





APPENDIX A: PHOTOGRAPHIC DOCUMENTATION

Photographic Documentation Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts VERTEX Proj. No. 58759.01



Photo #1: View of the site from the east along Brayton Ave.



Photo #2: Eastern exterior.



Photo #3: Southeastern portion of the site building, the school gymnasium.



Photo #4: Connection between the 1965 and 1969 portions of the site building.



Photo #5: Western exterior of the 1969 addition.



Photo #6: Western exterior of the 1965 portion of the site building.



Photographs taken by Nicollette Lynch on August 6, 2019.

Photographic Documentation Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts VERTEX Proj. No. 58759.01



Photo #7: Northern exterior.



Photo #8: Dumpsters located to the northwest of the site building.



Photo #9: Transformer along the northern exterior of the site building.



Photo #10: Description



Photo #11: Athletic fields to the south of the site building and paved parking lot.



Photo #12: Athletic fields on the southern portion of the site.



Photographs taken by Nicollette Lynch on August 6, 2019.

Photographic Documentation Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts VERTEX Proj. No. 58759.01



Photo #13: Main entryway.



Photo #14: Gym.



Photo #15: Southern hallway connecting the 1969 addition to the original portion of the site building.



Photo #16: Classroom.



Photo #17: Library.



Photo #18: Auditorium.



Photographs taken by Nicollette Lynch on August 6, 2019.

Photographic Documentation Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts VERTEX Proj. No. 58759.01



Photo #19: Cafeteria.



Photo #20: Grease trap.



Photo #21: Cafeteria.



Photo #22: Hallway.



Photo #23: Water towers to the west of the site.



Photo #24: South Complex baseball fields to the southwest of the site.



Photographs taken by Nicollette Lynch on August 6, 2019.

Photographic Documentation Somerset Middle School 1141 Brayton Avenue Somerset, Massachusetts **VERTEX Proj. No. 58759.01**



Photo #25: South Elementary School to the southwest of the



Photo #26: Correia & Sons Market to the south of the site.



Photo #27: Healthy Way to the southeast of the site, across Brayton Avenue.



Photo #28: St. John of God Church to the east of the site, across Brayton Avenue.



Photo #29: Residences to the east of the site across Brayton Avenue.

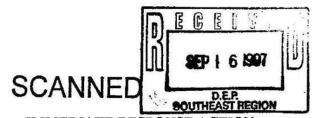


Photo #30: Power lines to the north of the site.



Photographs taken by Nicollette Lynch on August 6, 2019.

APPENDIX B: RELEVANT DOCUMENTS



IMMEDIATE RESPONSE ACTION COMPLETION REPORT AND RAO SUPPORT DOCUMENTATION **RELEASE TRACKING NO. 4-0013199** SOUTH MIDDLE JUNIOR HIGH SCHOOL

SOMERSET PUBLIC SCHOOLS 580 WHETSTONE HILL ROAD SOMERSET, MASSACHUSETTS 02726

SEPTEMBER 15, 1997

PREPARED BY:

RESOURCE CONTROL ASSOCIATES, INC. **474 BROADWAY** PAWTUCKET, RHODE ISLAND 02860-1377

IMMEDIATE RESPONSE ACTION COMPLETION REPORT AND RAO SUPPORT DOCUMENTATION RELEASE TRACKING NO. 4-0013199 SOUTH MIDDLE JUNIOR HIGH SCHOOL

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Release Notification Form (BWSC-103)	
Immediate Response Action (IRA) Transmittal Form (BWSC-105)	
Response Action Outcome Form (RAO) Statement Transmittal Form (B'	WSC-104)

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LIST C	F FIGU	RES
	Figure 1	Site Planning and Monitoring Locations

Figure 1 Site Planning and Monitoring Locations

APPENDICES

Appendix A: Laboratory Certificates of Analysis

Appendix B: Bills of Lading

Appendix C: Additional Limitations

"f:\doc\#\t\somira1.wpd"



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-103

Release Tracking Number

A. RELEASE OR THREAT OF RELEA	SE LOCATION:			
Street: 1141 Brayton Avenu		Location Aid:	South M	iddle Junior HS
City/Town: Somerset			2726-000	
B. THIS FORM IS BEING USED TO:				SEP 1 6 1997
Submit a Release Notification (com				
Submit a Retraction of a Previously form). You MUST attach the supporting	Reported Notification of a Rele documentation required by 310 CMR 4	ose or Threat 0.0335.	of Release (comp	southeast region
C. INFORMATION DESCRIBING THE				
Date and time you obtained knowledge of the				
The date you obtained knowledge is alway				Table 10 to
IF KNOWN, record date and time release or T	OR occurred. Date: 07/18/97	Time:	12:00	Specify: AM 🚺 PM
Check here if you previously provided an	Oral Notification to DEP (2 Hour and 7	2 Hour Repor	ting Conditions o	nly).
Provide date and time of Oral Notification	n. Date: <u>07/18/97</u>	Time	12:00	Specify: AM 🚺 P
Check all Notification Thresholds that apply to	the Release or Threat of Release:	(for more inf	ormation see 310	CMR 40.0310 - 40.0315)
2 HOUR REPORTING CONDITIONS	72 HOUR REPORTING CONDITIO	NS 120	DAY REPORTIN	IG CONDITIONS
Sudden Release	Subsurface Non-Aqueous Phas	se 🗌		ardous Material(s) to Soil or
Threat of Sudden Release	Liquid (NAPL) Equal to or Grea 1/2 Inch	ter than	Concentration(s	ceeding Reportable)
Oil Sheen on Surface Water	Underground Storage Tank (US	(TS	Release of Oil to	Soil Exceeding Reportable
Poses Imminent Hazard	Release		Yards) and Affecting More than 2 Cubic
Could Pose Imminent Hazard	Threat of UST Release			Groundwater Exceeding Reportable
Release Detected in Private Well	Release to Groundwater near Water Supply		Concentration(s	***
Release to Storm Drain	Release to Groundwater near School or Residence		Subsurface Nor Equal to or Great Inch	n-Aqueous Phase Liquid (NAPL) ater than 1/8 Inch and Less than 1/2
Sanitary Sewer Release (Imminent Hazard Only)	Control of Medianice			
List below the Oils or Hazardous Materials that If necessary, attach a list of additional Oil and	at exceed their Reportable Concentration	n or Reportat	le Quantity by the	e greatest amount.
Name and Quantities of Oils (O) and Hazardo	O HM CAS#	Amount or	Units	Reportable Concentrations Exceeded, if Applicable
O or HM Released	(check one) (if known)	Concentration		(RCS-1, RCS-2, RCGW-1, RCGW
No. 2 fuel oil	☑ □	109_pp	m	headspace
	🗆 🗅			
D. ADDITIONAL INVOLVED PARTIE	is:			
Check here if attaching names and addisubmitting this Release Notification (req	resses of owners of properties affected	by the Releas	se or Threat of Re	elease, other than an owner who is
Check here if attaching Licensed Site P		optional).		
• Interest the English that the Control of the Cont	e in names and addresses on the b	-wcab-		

Revised 3/1/95

Supersedes Form BWSC-003



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-103

Release Tracking Number

4 - 13199
If assigned by DEP

RELEASE NOTIFICATION & NOTIFICATION RETRACTION

FORM Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

Name of Organization: Somerset Public	Schools	
Name of Contact: Edmond Goulart		Title: Business Manager
Street: 580 Whetstone Hill Road		
City/Town: Somerset		State: MA ZIP Code: 02726-0000
		FAX: (optional)
F. RELATIONSHIP OF PERSON REQUIRED TO	NOTIFY TO RE	LEASE OR THREAT OF RELEASE: (check one)
RP or PRP Specify: W Owner O Operator	○ Generator ○	Transporter Other RP or PRP:
Fiduciary, Secured Lender or Municipality with Exemp	pt Status (as defined	by M.G.L. c. 21E, s. 2)
Agency or Public Utility on a Right of Way (as defined	d by M.G.L. c. 21E, s	. 5(j))
Any Person Otherwise Required to Notify Specify F	Relationship:	
G. CERTIFICATION OF PERSON REQUIRED TO	O NOTIFY:	,
of those individuals immediately responsible for obtaining the knowledge and belief, true, accurate and complete, and (iii) this submittal. If the person or entity on whose behalf this spossible fines and imprisonment, for willfully submitting fall (signature) For: Somerset Public Schools (print name of person or entity recorded in Section E) Enter address of the person providing certification, if different street:	he information, the m) that I am fully autho submittal is made am se, inaccurate, or ince	Title: Business Manager Date: 9/10/97
Telephone:	Ext.;	FAX: (optional)
YOU MUST COMPLETE ALL RELEVANT INCOMPLETE. IF YOU SUBMIT A	SECTIONS OF T	THIS FORM OR DEP MAY RETURN THE DOCUMENT AS FORM, YOU MAY BE PENALIZED FOR MISSING DEADLINE.

Revised 3/1/95

Supercedes Form BWSC-003 Do Not Alter This Form Page 2 of 2

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Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-104

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Release Tracking Number

40400

Pursuant to 310 CMR 40.0180 (Subpart B), 40.0580 (Subpart	E) & 40.1056 (Subpart J)
A. SITE OR DOWNGRADIENT PROPERTY LOCATION:	
Site Name: (optional) Somerset Public Schools	
Street: 1141 Brayton Avenue Loc	
City/Town: Somerset ZIP	Code: 02726-000 B G E V E
Check here if this Site location is Tier Classified. If a Tier I Permit has been issued,	state the Permit Number:
Related Release Tracking Numbers that this Form Addresses:	A SEP 1 P Par
If submitting an RAO Statement, you must document the location of the Site or the Statement. If submitting an RAO Statement for a PORTION of a Disposal Site, yo portion subject to this submittal and, to the extent defined, the entire Disposal Site you must provide a site plan of the property subject to the submitta	u must document the location and boundaries for Goth the e. If submitting a Downgradient Property Status Submittal.
B. THIS FORM IS BEING USED TO: (check all that apply)	
Submit a Response Action Outcome (RAO) Statement (complete Sections A, B,	C, D, E, F, H, I, J and L).
Check here if this is a revised RAO Statement. Date of Prior Submittal:	
Check here if any Response Actions remain to be taken to address conditions a Numbers are listed above. This RAO Statement will record only an RAO-Partia	ssociated with any of the Releases whose Release Tracking I Statement for those Release Tracking Numbers.
Specify Affected Release Tracking Numbers:	
Submit an optional Phase I Completion Statement supporting an RAO Statement (complete Sections A, B, H, I, J, and L).	t or Downgradient Property Status Submittal
Submit a Downgradient Property Status Submittal (complete Sections A, B, G, H	, I, J and K).
Check here if this is a revised Downgradient Property Status Submittal. Date	of Prior Submittal:
Submit a Termination of a Downgradient Property Status Submittal (complete S	ections A, B, I, J and L).
Submit a Periodic Review Opinion evaluating the status of a Temporary Solution	on (complete Sections A, B, H, I, J and L).
Specify one: For a Class C RAO For a Waiver Comple	tion Statement indicating a Temporary Solution
Provide Submittal Date of RAO Statement or Waiver Completion Statement:	
You must attach all supporting documentation required for each any Legal Notices and Notices to Public Officials re	use of form indicated, including copies of quired by 310 CMR 40.1400.
C. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)	
Assessment and/or Monitoring Only	Deployment of Absorbant or Contaminent Materials
√ Removal of Contaminated Soils	Temporary Covers or Caps
Re-use, Recycling or Treatment	Bioremediation
On Site Off Site Est. Vol.: cubic yards	Soil Vapor Extraction
Describe:	Structure Venting System
✓ Landfill ✓ Cover ✓ Disposal Est. Vol.:20 cubic yards	Product or NAPL Recovery
Removal of Drums, Tanks or Containers	Groundwater Treatment Systems
Describe:	Air Sparging
Removal of Other Contaminated Media	Temporary Water Supplies
Specify Type and Volume:	Temporary Evacuation or Relocation of Residents
Other Response Actions	Fencing and Sign Posting
Describe:	
SECTION C IS CONTINUED ON THE	NEXT PAGE.

Revised 4/7/95

Supersedes Forms BWSC-004 and 010 (in part) Do Not Alter This Form

Page 1 of 4

DEC-22-97 MON 16:42

RESOURCE CONTROLS

FAX NO. 14017271849

P. 02



Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup BWSC-104

RESPONSE ACTION OUTCOME (RAO) STATEMENT &	3
DOWNGRADIENT PROPERTY STATUS TRANSMITTAL	
Burniage to 310 CMP 40 0180 (Subpart E) 40 0580 (Subpart E) & 40 1056 (Subpart E)	art .I)

Release Tracking Number

DEP	Pursuant to 310 CMR 40.0180 (Sul	opart	B), 40.0580 (Subpart E) &	40.10	056 (Subpart J)	<u>*</u>	13	199
C. DESCRIPTION OF	RESPONSE ACTIONS: (c	onti	nued)			-180	4 - 37 37	
Check here if any Re interested in using the	esponse Action(s) that serve as the be is information to create an Innovative	sis f Tech	or this RAO Statement Involuncingles Clearinghouse.)	ve the	e use of Innovative Technolo	gies. (Di	EP is	
Describe Technolog	ies:			-A00745.3		WA 100 W 100		
D. TRANSPORT OF	REMEDIATION WASTE: (if Ren	redia	tion Waste was sent to an o	ff-cite	facility, answer the followin	g questio	ns)	
enough a monday of the month of the second o	law Waste Systems							= 1
	inville, MA			CU STANCE	D E G	[]	W	5 0
	Waste Transported to Date: 32.8				100	. A 11	000	Щ\
[12:14	ON OUTCOME CLASS:				[22]	22	1331	THI
Specify the Class of Rest	conse Action Outcome that applies to	the S	lite or Disposal Site. Select	ONL		D.E.P.		_
Class A-1 RAO: Sp	pecify one of the following:				500	THEAST R	EGIUN	اا
Q	Contamination has been reduced t	o bad	okground levels. A	Three	at of Release has been elimi	nated.		1
Class A-2 RAO: Yo	ou MUST provide justification that redu	scing	contamination to backgroun	nd lev	reis is infeesible.			
	ou MUST provide both an implemente background levels is infeasible.	d Act	livity and Use Limitation (AU	L) an	d justification that reducing o	contamin	ation	
lf.	applicable, provide the earlier of the A	UL e	expiration date or date the des	sign l	ife of the remedy will end: _			
Class B-1 RAO: Sp	pecify one of the following:							
	Contamination is consistent with b	ackg	round levels Co	ıntam	ination is NOT consistent w	ith backg	round	levels.
Class B-2 RAO: Yo	ou MUST provide an implemented AU	L,						
16	applicable, provide the AUL expiration	date	: <u></u>	,				
Class C RAO:	Check here if you will conduct post	-RA	O Operation, Maintenance a	nd M	onitoring at the Site.			
17.552	Specify One: Passive Ope	ratio	n and Maintenance () N	fonitoring Only			
	Active Opera	tion	and Maintenance (defined a	310	CMR 40.0006)			
F. RESPONSE ACTI	ON OUTCOME INFORMATION	:			A STATE OF THE STA			
If an RAO Complian	ce Fee is required, check here to cert	ify th	at the fee has been submitte	d. Y	ou MUST attach a photocop	y of the p	aymer	nt.
	iting one or more AULs. You must at Statement. Specify the type of AUL(s					nplement	ed AU	L
Notice of Activ	ity and Use Limitation	Grai	nt of Environmental Restricti	on	Number of AULs a	ttached;		
Specify the Risk Characte	erization Method(s) used to achieve th	e RA	O described above and all S	Soil ar	nd Groundwater Categories	applicable	e to the	e Site.
Be sure t	More than one Soil Category and o check off all APPLICABLE category					were me	et.	
Risk Characterization	n Method(s) Used:		Method 1		Method 2	Me	thod 3	,
Soil Category(les) Ap	oplicable:	V	S-1		8-2	☐ s-	3	Oak
Groundwater Catego	ory(ies) Applicable:	V	GW-1	V	GW-2	√ a	N-3 I	Kut
> When submitting any Risk Characterization	Class A-1 RAO or a Class B-1 RA	b wt	ere contamination is con	siste	nt with background levels	, do NOT	spec	ifya
	Class A-2 RAO or a Class B-1 RA in a level of no significant risk. Th							

Revised 4/7/95

Supersedes Forms BWSC-004-and-04.0.(in-part)

Rage 2 of 4

DEC-22-97 MON 16:41

RESOURCE CONTROLS

FAX NO. 14017271849

P. 01



RESOURCE CONTROLS

The proven solution to your environmental needs.



JOB NO.: A4365 DATE: 12/22/97 Beverly Hill - MADEP TO: 508-947-6557 Robert C. Atwood FROM: Resource Controls (401) 728-6860 NO. OF PAGES INCLUDING COVER SHEET: Somerset Schools RTN 4-13198 and 4-13199 PROJECT: Attached please find the revised Section 4 BWSC-104 (page 2) form for sites RTN: 4-13198 and RTN 4-13199. I will forward the original revised pages to you in tonight's mail so that you may replace previously forwarded reports. If you do not receive all of the pages or if you have any problems with the transmission, please call our office at (401)-728-6860 to request assistance.

474 Broadway Pawtucket, RI 02860 401 728-6860 Fax 401 727-1849

18 Lincoln Avenue Scituate, MA 02066 617 545-3908 Fax 617 545-9068 ("F:\U\L\F\FAXCOVER.SHN")





Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-104

RESPONSE ACTION OFFICEMENT &

	RADIENT PROPERTY STATUS TRANSMITTAL FORM	Release I racking Numbe
	10 CMR 40.0180 (Subpart B), 40.0580 (Subpart E) & 40.1056 (Subpart J)	4 - 13199
C. DESCRIPTION OF RESPONSE	ACTIONS: (continued)	No.
	s) that serve as the basis for this RAO Statement involve the use of Innovative Tech create an Innovative Technologies Clearinghouse.)	nnologies. (DEP is
D. TRANSPORT OF REMEDIATIO	N WASTE: (if Remediation Waste was sent to an off-site facility, answer the followed	owing guestions)
	te Systems - Allied Plainville Landfill	
	MA	ORIN BIN
(27).	ed to Date: 32.84 tons	1007
E. RESPONSE ACTION OUTCOM	E CLASS:	SEP 1 6 1997
Specify the Class of Response Action Out	toome that applies to the Site or Disposal Site. Select ONLY one Class:	3 0
Class A-1 RAO: Specify one of the f	following: n has been reduced to background levels. A Threat of Release has been.	D.E. REGION
	n has been reduced to background levels. A Threat of Release has been.	eliminated.
Class A-2 RAO: You MUST provide	justification that reducing contamination to background levels is infeasible.	
Class A-3 RAO: You MUST provide to background level	both an implemented Activity and Use Limitation (AUL) and justification that reduc	
If applicable, provid	de the earlier of the AUL expiration date or date the design life of the remedy will en	d:
Class B-1 RAO: Specify one of the f	following:	
Contamination	n is consistent with background levels Contamination is NOT consiste	nt with background levels.
Class B-2 RAO: You MUST provide	an implemented AUL.	
	be the AUL expiration date :	
Class C RAO: Check here if	you will conduct post-RAO Operation, Maintenance and Monitoring at the Site,	
Specify One:		
	Active Operation and Maintenance (defined at 310 CMR 40,0006)	
F. RESPONSE ACTION OUTCOME		1997
	d, check here to certify that the fee has been submitted. You MUST attach a photo	scome of the navment
related to this RAO Statement. Speci	AULs. You must attach an AUL Transmittal Form (BWSC-113) and a copy of each for the type of AUL(s) below: (required for all Class A-3 RAOs and Class B-2 RAOs.)	on implemented AUL Os)
Notice of Activity and Use Limita	ation Grant of Environmental Restriction Number of AU	s attached:
Specify the Risk Characterization Method(s	s) used to achieve the RAO described above and all Soil and Groundwater Categor	ies applicable to the Site.
More than one	Soil Category and more than one Groundwater Category may apply at a Sil	e.
Risk Characterization Method(s) Used	d: Method 1 Method 2	Method 3
Soil Category(les) Applicable:	□ S-1 □ S-2	☐ s-3
Groundwater Category(ies) Applicable		☐ GW-3
> When submitting any Class A-1 RAO Risk Characterization Method.	or a Class B-1 RAO where contamination is consistent with background lev	rels, do NOT specify a
 When submitting any Class A-2 RAO use an AUL to maintain a level of no s Method 1. 	or a Class B-1 RAO where contamination is NOT consistent with backgrour significant risk. Therefore, you must meet S-1 Soil Standards, if using Risk	nd levels, you cannot Characterization

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Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-104

RESPONSE ACTION OUTCOME (RAO) STATEMENT &

Release Tracking Number

D E P DOWNGRADIENT PROPERTY ST. Pursuant to 310 CMR 40.0180 (Subpart B), 40.058	1 1 1 1 1 1 1 1 1 1
G. DOWNGRADIENT PROPERTY STATUS SUBMITTAL:	***
If a Downgradient Property Status Submittal Compliance Fee is required, attach a photocopy of the payment.	check here to certify that the fee has been submitted. You MUST
Check here if a Release(s) of Oil or Hazardous Material(s), other than that	t which is the subject of this surple
Release Tracking Number(s):	it which is the subject of this submitter. has decurred at this property.
	SEP 6 1997
Check here if the Releases identified above require further Respons Required documentation for a Downgradient Property Status Sub.	mittal includes, but is not limited to copies of polices provided
to owners and operators of both upgradient and downgradient abutt	ting properties and of any known or suspected source properties.
H. LSP OPINION:	
I attest under the pains and penalties of perjury that I have personally examined documents accompanying this submittal. In my professional opinion and judgn 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the pand belief,	ment based upon application of (i) the standard of care in 309 CMR
> if Section B indicates that a Downgradient Property Status Submittal is to submittal (i) has (have) been developed and implemented in accordance with the is (are) appropriate and reasonable to accomplish the purposes of such responsith the identified provisions of all orders, permits, and approvals identified in the	ne applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) nse action(s) as set forth in 310 CMR 40.0183(2)(b), and (iii) complies(y)
> if Section B indicates that either an RAO Statement, Phase I Completion response action(s) that is (are) the subject of this submittal (i) has (have) been of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and (iii) comidentified in this submittal.	developed and implemented in accordance with the applicable provisions e to accomplish the purposes of such response action(s) as set forth in
I am aware that significant penalties may result, including, but not limited to, por false, inaccurate or materially incomplete.	ssible fines and imprisonment, if I submit information which I know to be
Check here if the Response Action(s) on which this opinion is based, if ar issued by DEP or EPA. If the box is checked, you MUST attach a statem	ny, are (were) subject to any order(s), permit(s) and/or approval(s) tent identifying the applicable provisions thereof
LSP Name: Robert C. Atwood LSP#: 148	1 Stamp:
Telephone: 401-728-6860 Ext.:	HOUSER 18
FAX: (optional) 401-727-1849	
Signature: Robert C. atwood	(2705 %)
Signature: Tall C Mayor	— OTE BUTES!
Date: 9/15/9 7	
I. PERSON MAKING SUBMITTAL:	
Name of Organization: Somerset Public Schools	o con assess
Name of Contact: Edmond Goulart	Title: Business Manager
Street 580 Whetstone Hill Road	
City/Town: Somerset	
Telephone: 508-324-3100 Ext.:	
J. RELATIONSHIP TO SITE OF PERSON MAKING SUBMITTAL:	70000
RP or PRP Specify: Owner Operator Generator	
Fiduciary, Secured Lender or Municipality with Exempt Status (as defined	
Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s	s. 5(j))
Any Other Person Submitting This Form Specify Relationship:	
Revised 4/7/95 Supersedes Forms BWSC	2-004 and 010 (in part) Page 3 (

Supersedes Forms BWSC-004 and 010 (in part) Do Not Alter This Form

.....

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Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-104

RESPONSE ACTION OUTCOME (RAO) STATEMENT & DOWNGRADIENT PROPERTY STATUS TRANSMITTAL FORM

Release Tracking Number

Mary Committee C	rsuant to 310 CMR 40.0180 (Subpart B), 40.05	80 (Subpart E) & 40.1056 (Subpart J)	4 - 13199
CERTIFICATION OF P	PERSON SUBMITTING DOWNGRADIE	NT PROPERTY STATUS SUBMITTAL:	
familiar with the information cor of the/those individual(s) immed information and belief, true, acc behalf this submittal is made sa have provided notice in accorda entity(les) legally responsible for	ntained in this submittal, including any and all ordinately responsible for obtaining the information curate and complete; (iii) that, to the best of my atisfy(ies) the criteria in 310 CMR 40.0183(2); ance with 310 CMR 40.0183(5); and (v) that has or this submittal. If the person(s) or entity(ies) or	ocuments accompanying this transmittal form; the material information contained herein is to knowledge, information and belief, lithe person by that lithe person(s) or entity(ies) on whose or fully authorized to make this attestation on be behalf this submittal is made is are aw	(ii) that cased on my inquit the best of my knowledge (s) or entity(les) on whose entity it is submittal is made that of the person is on the that there are somition
penalties, including, but not lim	nited to, possible fines and imprisonment, for wi	fully submitting false, inaccurate, or incomplete	information.
Ву:		Title: SC	D.E.P. OUTHEAST REGION
(signature)			
For:	entity recorded in Section I)	Date:	
Enter address of the person pro	roviding certification, if different from address re	corded in Section I:	
Street:			
City/Town:		State: ZIP Code:	
Telephone:	Ext.:	FAX: (optional)	
sy: (signature) For: Somerset Pub	lic Schools	Title: Business Manage	r
(print name of person or e	entity recorded in Section I) oviding certification, if different from address re	corded in Section I:	
(print name of person or e Enter address of the person pro Street:	entity recorded in Section I) oviding certification, if different from address re	corded in Section I:	
(print name of person or e Enter address of the person pro Street: City/Town:	entity recorded in Section I) oviding certification, if different from address re	corded in Section I:	

Revised 4/7/95

Supersedes Forms BWSC-004 and 010 (in part) Do Not Alter This Form

Page 4 of 4

Massachusetts Department of Environment Bureau of Waste Site Cleanup	onmental Protection BWSC-
IMMEDIATE RESPONSE ACTION (IR.	
DEP TRANSMITTAL FORM Pursuant to 310 CM	
A. RELEASE OR THREAT OF RELEASE LOCATION:	558 O MOS -
Release Name: (optional) Somerset Public Schools	
Street: 1141 Brayton Avenue	Location Aid: South Middle Junior HS
City/Town: Somerset	
Check here if a Tier Classification Submittal has been provided to DEP for this R	Release Tracking Number.
Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.01	
Specify Program: CERCLA	Waste Management RCRA State Program (210 Facilities
Related Release Tracking Numbers That This IRA Addresses:	D.5.P
B. THIS FORM IS BEING USED TO: (check all that apply)	SOUTHEAST REGIO
Submit an IRA Plan (complete Sections A, B, C, D, E, H, I, J and K).	
Check here if this IRA Plan is an update or modification of a previously app	
Submit an Imminent Hazard Evaluation (complete Sections A, B, C, F, H, I, J	and K).
Submit an IRA Status Report (complete Sections A, B, C, E, H, I, J and K).	
Submit a Request to Terminate an Active Remedial System and/or Termina Imminent Hazard (complete Sections A, B, C, D, E, H, I, J and K).	
Submit an IRA Completion Statement (complete Sections A, B, C, D, E, G, H,	
You must attach all supporting documentation required for e any Legal Notices and Notices to Public Officia	
C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRA	NT IRA:
Identify Media and Receptors Affected: (check all that apply) Air Gro	undwater Surface Water Sediments J Soil
Wetiand Storm Drain Paved Surface Private Well	Public Water Supply Zone 2 Residence
School Unknown Other Specify:	
Identify Conditions That Require IRA, Pursuant to 310 CMR 40.0412: (check all that	t apply) 2 Hour Reporting Condition(s)
72 Hour Reporting Condition(s) Substantial Release Migration	Other Condition(s)
Describe: The Department determined that the	is immediate response
action is necessary based on the resul	ts of on-site soil screening
Identify Oils and Hazardous Materials Released: (check all that apply)	ils Chlorinated Solvents Heavy Metals
Others Specify:	
D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply)	
Assessment and/or Monitoring Only	Deployment of Absorbent or Containment Materials
Excavation of Contaminated Soils	Temporary Covers or Caps
Re-use, Recycling or Treatment	Bloremediation
On Site Off Site Est. Vol.: cubic yar	
D	
	Structure Venting System
Store On Site Off Site Est. Vol.: cubic yar	
✓ Landfill ✓ Cover ○ Disposal Est. Vol.: 20 cubic yar	
Removal of Drums, Tanks or Containers	Air Sparging
Describe:	Temporary Water Supplies
SECTION D IS CONTINUED ON T	HE NEXT PAGE.

The state of the s

Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-105

Paleace Tracking Number

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D) 13199
D. DESCRIPTION OF RESPONSE ACTIONS (continued):
Removal of Other Contaminated Media Temporary Evacuation of Residents
Specify Type and Volume: Fencing and Sign Posting
Other Response Actions Describe: Check here if this IRA involves the use of Innovative Technologies (DEP is interested in using this information to aid in-oreating an Innovative Technologies Clearinghouse).
Describe Technologies: SOUTHEAST REGION
E. TRANSPORT OF REMEDIATION WASTE: (if Remediation Waste has been sent to an off-site facility, answer the following questions)
Name of Facility: Laidlaw Waste Systems - Allied Plainville Landfill
Town and State: Plainville, MA
Quantity of Remediation Waste Transported to Date: 32.84 tons
F. IMMINENT HAZARD EVALUATION SUMMARY: (check one of the following)
Based upon an evaluation, an Imminent Hazard exists in connection with this Release or Threat of Release.
Based upon an evaluation, an Imminent Hazard does not exist in connection with this Release or Threat of Release.
Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
Based upon an evaluation, it is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
G. IRA COMPLETION STATEMENT:
Check here if future response actions addressing this Release or Threat of Release will be conducted as part of the Response Actions planned for a Site that has already been Tier Classified under a different Release Tracking Number, or a Site that is identified on the Transition List as described in 310 CMR 40.0600 (i. e., a Transition Site, which includes Sites with approved Waivers). These additional response actions must occur according to the deadlines applicable to the earlier Release Tracking Number (i. e., Site ID Number).
State Release Tracking Number (i. e., Site ID Number) of Tier Classified Site or Transition Site:
If any Remediation Waste will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement, you must submit either a Release Abatement Measure (RAM) Plan or a Phase IV Remedy Implementation Plan, along with the appropriate transmittal form, as an attachment to the IRA Completion Statement.
H. LSP OPINION:
I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief,
> if Section B of this form indicates that an Immediate Response Action Plan is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;
> if Section B of this form indicates that an Imminent Hazard Evaluation is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation complies(y) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;
> if Section B of this form indicates that an Immediate Response Status Report is being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;
> if Section B of this form indicates that an Immediate Response Action Completion Statement or a Request to Terminate an Active Remedial System and/or Terminate a Continuing Response Action(s) Taken to Address an Imminent Hazard is being submitted, the response action(s) that is (are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal
this submittal. SECTION H IS CONTINUED ON THE NEXT PAGE.

Revised 2/24/95

Supersedes Forms BWSC-005, 006, 010 (in part) and 011 Do Not Alter This Form

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Massachusetts Department of Environmental Protection Bureau of Waste Site Cleanup

BWSC-105

IM	MEDIATE RESPON	ISE ACTION (IRA)	Release Tracking Numb
DEP TR	ANSMITTAL FORM	Pursuant to 310	CMR 40.0424 - 40.0427 (Subpar	t D) 4 - 13199
H. LSP Opinion (contin	nued):			m reerw
I am aware that significant pe inaccurate or materially incon	enalties may result, including, b nplete.	out not limited to, possi	ble fines and imprisonment, if I submit	inforfhationSwhish I know to be ta
Check here if the Respondence DEP or EPA. If the box	onse Action(s) on which this op c is checked, you MUST attach	pinion is based, if any, a statement identifyin	are (were) subject to any order(s), pern g the applicable provisions thereof.	ni(s and/or Spio val(s) fissible 7
LSP Name: Robert	C. Atwood	LSP#: 1481_		JUDE MAS D.E.P.
Telephone: 401-728-	-6860	Ext.:		HOF MASON FAST REGIO
FAX: (optional) 4.01-72 Signature: # 4.01 Date: 9/15/91	st C. Hwal	ad		ROBERT C. ATWOOD No. 1481 O SITE PROFES
I. PERSON UNDERTAK	GING IRA:			SITE DROVE
		Schools		
Name of Contact: Edmor	nd Goulart		Title: Business Manag	ger
	cone Hill Road_			
			State: MA ZIP Code:	02726-0000
			FAX: (optional)	
	been a change in the person u		rax. (optional)	
	on a Right of Way (as defined		***	
The state of the s	ertaking IRA Specify Relation	1036 (A W K)		2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	PERSON UNDERTAKIN	1072/11711116074		*
familiar with the information of those individuals immediate knowledge and belief, true, as this submittal. Ithe person opposible lines and imprisonm	contained in this submittal, inclu lely responsible for obtaining the ocurate and complete, and (iii)	uding any and all docur the information, the mate that I am fully authorize ubmittal is made amvis se, inaccurate, or incom	and penalties of perjury (i) that I have penents accompanying this transmittal for perial information contained in this submited to make this attestation on behalf of aware that there are significant penaltic applete information. Title: Business Mana	rm, (ii) that, based on my inquiry ttal is, to the best of my the entity legally responsible for s, including, but not limited to,
(signature)		7	0/./	
For:Somerset Pub	olic Schools entity recorded in Section I)		Date: 9 116 19	7
			ded in Section I:	
(print name of person or	providing certification, if differe	ent from address recon		
(print name of person or Enter address of the person	providing certification, if differe			
(print name of person or Enter address of the person of Street:				*
(print name of person or Enter address of the person of Street: City/Town:			State: ZIP Code:	

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Page 3 of 3

Date of the

AND RAO SUPPORT DOCUMENTATION RELEASE TRACKING NO. 4-0013199 SOUTH MIDDLE JUNIOR HIGH SCHOOL



1.0 OVERVIEW

In accordance with the Massachusetts Contingency Plan (MCP 310 CMR 40.0427), this document has been prepared to provide the Massachusetts Department of Environmental Protection (MADEP) with a completion report on the Immediate Response Action (IRA) implemented at the site and associated support documentation for a Response Action Outcome (RAO). The IRA performed was in response to a release of No. 2 fuel oil. The Site is the South Middle School (Junior High School) at 1141 Brayton Avenue in Somerset, Massachusetts.

A release of No. 2 fuel oil that had previously occurred at the Site was discovered during underground storage tank (UST) removal activities. Headspace sampling of soil in the area of the UST gave results greater than 100 ppm. Approximately 32.84 tons of soil was removed from the tank area, stockpiled, and subsequently removed from the Site for disposal at an approved facility. Following soil removal, confirmatory samples were collected and submitted to a State approved laboratory for analysis. The samples were analyzed for total petroleum hydrocarbons (TPH). The results were below applicable Method 1 soil standards.

As a result of the foregoing activities at the Site, Resource Controls concludes that site conditions have been restored to background conditions; that a condition of No Significant Risk to human health, public welfare, safety, or the environment exists at the Site; IRA activities have been completed; and that a Class A-1 Response Action Outcome has been achieved.

2.0 SITE DESCRIPTIONS

2.1 General Descriptions

The Site is the property located at 1141 Brayton Avenue in Somerset, Massachusetts, also known as the South Middle Junior High School. The property is owned and operated by Somerset Public Schools for an educational facility. See Figure 1 for a site location plan.

3.0 PLAN FOR IMMEDIATE RESPONSE ACTIONS

3.1 Purpose

The purpose of the Immediate Response Action was to assess, and eliminate where practical, site conditions at the underground tank site that may be time critical. Specifically, the goal was to assess the extent of contamination and remove a limited amount of soil from the tank grave, prior to site restoration.

3.2 Scope of IRA Assessment Activities Performed to Date

Resource Controls collected soil samples from 14 locations within the two tank excavation areas during and after tank removal. Of the 14 samples collected, only one indicated a headspace reading greater than 100 ppm, found to be 109 ppm "as benzene". Following notification to MADEP, approximately 32.84 tons of contaminated soil was removed from the tank grave for disposal. Soils in the area of the excavated soils were again screened for headspace. Following detection of trace level headspace results, two confirmatory soil samples were obtained and sent to the laboratory for TPH analysis. The samples contained 10 milligrams per kilogram (mg/kg) and 8.6 mg/kg of TPH, which are considered to be equivalent to background. There was no evidence that the release affected groundwater.

Resource Controls has prepared this IRA Completion Report for submittal to the MADEP. The report documents all procedures followed and results obtained and includes a Site Plan depicting the location of the site and sampling points.

3.3 Remediated Waste Materials

Approximately 32.84 tons of petroleum contaminated soils were removed to Laidlaw's landfill in Plainville, Massachusetts, for reuse as daily cover. A copy of the Bill of Lading is included in Appendix B.

4.0 CONCLUSIONS

As a result of the subject Immediate Response Action conducted, Resource Controls has found that background conditions have been attained and therefore, a condition of No Significant Risk relative to human health, public welfare, safety and the environment exists at the Site. Based on the foregoing, a Class A-1 Response Action Outcome is appropriate for the Site. All contaminated soil has been removed from the Site.

5.0 RECOMMENDATIONS

No further action is necessary regarding the subject Site.

6.0 LIMITATIONS

This report addresses the environmental characteristics of the Subject Property with regard to the release of No. 2 fuel oil at the Subject tank location. It is not intended to guarantee that the Subject Property is or is not free from conditions, materials or substances which could adversely impact the environment or pose a threat to public health and safety. Rather, it is intended to be used as a summary of available information on existing conditions, the conclusions of which are based upon a reasonable and knowledgeable review of evidence found in accordance with normally accepted industry standards, state and federal protocols, and within the scope and budget established with the client. Should further research on the Subject Property be warranted, any additional data obtained must be reviewed by Resource Controls and the conclusions presented herein may be modified accordingly. This report or any part thereof, may not be altered, used, relied upon or reproduced by any party without first obtaining written permission from Resource Controls.

Conclusions stated herein are based on the available information summarized herein and refer only to the specific Subject Property investigated. No warranty is implied or given.

7.0 LSP OPINION AND REPORT AUTHORIZATION

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal, including any and all documents accompanying this submittal. In my professional opinion and judgement based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and (iii) the provisions of 309 CMR 4.03(5), to the best of my knowledge, information and belief, the response action that is the subject of this submittal (i) has been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR. 40.0000, (ii) is appropriate and reasonable to accomplish the purposes of such response action as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40,0000 and (iii) complies with the identified provisions of all orders, permits, and approvals identified in this submittal.

L.S.P. No. 1481

This report has been prepared and reviewed by the undersigned staff in accordance with Resource Controls' standard Quality Control Procedures.

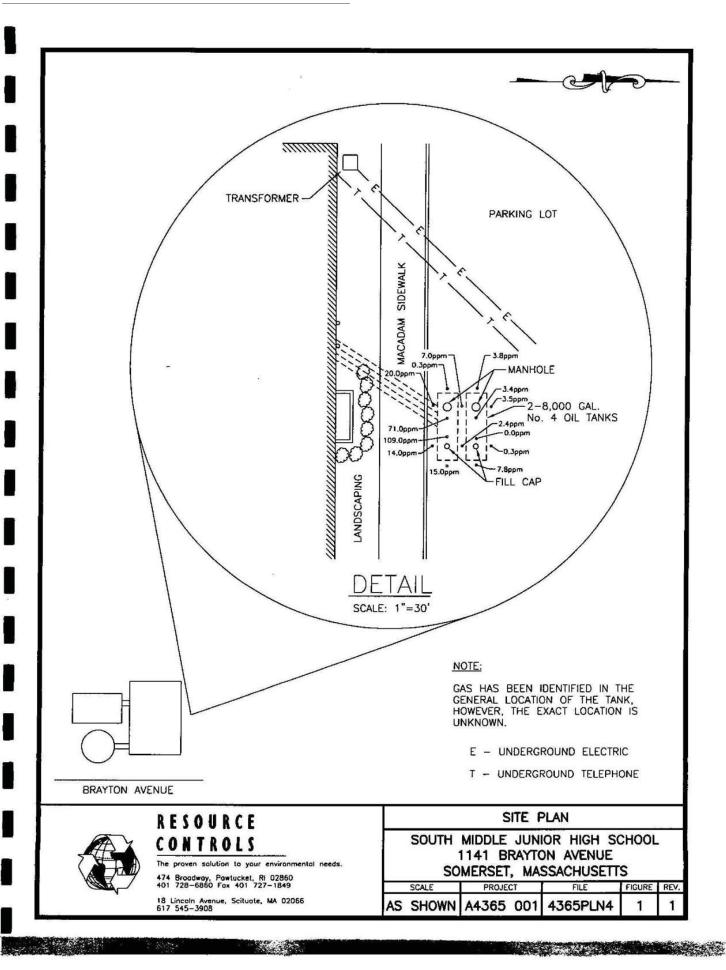
President

Neal B. Personeus

Environmental Engineering Scientist

JOB NO.: A4365 JOB NAME: Somerset Public Schools DATE: Sept. 15, 1997

LIST OF FIGURES





User Questionnaire

This "User Questionnaire" has been provided to meet the requirements of the E1527-13 American Society for Testing and Materials (ASTM) document entitled "Standard Practices for Environmental Site Assessments: Phase I Environmental Site Assessment Process". The "User" must provide information (if available and to the extent feasible) for six of the questions below (in bold/italics) to the environmental professional in order to meet the "all appropriate inquiry" rule. VERTEX has included additional questions to supplement information collected during the performance of the Phase I Environmental Site Assessment. The "User" should provide responses to all of the questions to the extent feasible; however, the "User" is not required to find out information that is not known before returning the questionnaire to VERTEX.

Date: 8-15-19
Site Name: Midsit School Your Name: CARles Campes
Site Location: 1141 Brayfor AVE, Somerset
Your Title: Building Supervisore
Relationship to Site (Owner, Occupant, Purchaser, Other):
Length of Time Associated with Site:
Please review and complete this questionnaire which will assist VERTEX in completing our site assessment. If sufficient space in not provided, please compete your response on a separate sheet of paper and attach it to this questionnaire.
Are there any previous environmental reports that were conducted for the site? (If yes, please provide).
No Ayes Oil TANK Removal
Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state, or local law?
No Yes (If yes, please described)
THE VERTEX COMPANIES, INC. 781.952.6000 VERTEXENG.COM

Module 3 - Preliminary Design Program Ai3 Architects, LLC

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	-
use restric	ware of any Activity and Use Limitations (AULs), such as engineering controls, lan tions or institutional controls that are in place at the site and/or have been filed on a registry under federal, tribal, state, or local law?
	Vos (If vos places describe)
∡ No	Yes (If yes, please describe)
Ne the use	or of this ESA do you have any specialized knowledge or evperience related to th
oroperty on the current of the curre	er of this ESA do you have any specialized knowledge or experience related to the related properties? For example, are you involved in the same line of business of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?
property on the current of the curre	r nearby properties? For example, are you involved in the same line of business of tour or former occupants of the property or an adjoining property so that you would
roperty of he current ave speci	or nearby properties? For example, are you involved in the same line of business of tor former occupants of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?
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roperty on the current of the curren	or nearby properties? For example, are you involved in the same line of business of tor former occupants of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?
property on the current of the curre	or nearby properties? For example, are you involved in the same line of business of tor former occupants of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?
oroperty on the current of the curre	or nearby properties? For example, are you involved in the same line of business of tor former occupants of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?
property of the current	or nearby properties? For example, are you involved in the same line of business of tor former occupants of the property or an adjoining property so that you would alized knowledge of the chemicals and processes used by this type of business?

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User Questionnaire

Page 3 of 4

Does the purchase price being paid for this property reasonably reflect the fair market value
of the property? If you conclude [or believe] that there is a difference [or that it may not
reflect fair market value] have you considered whether the lower purchase price is because
contamination is known or believed to be present at the property?

No	Yes (If yes, please describe)
	·
erty th	ware of commonly known or reasonably ascertainable information about nat would help the environmental professional to identify conditions indicative threatened releases? For example, as user,
Do y	you know [or have any information regarding] the past uses of the property?
	· · · · · · · · · · · · · · · · · · ·
_	
	you know of [or have any information regarding any] specific chemicals that sent or once were present at the property? \[\] No \[\] Yes (If yes, describe)
	you know of [or have information regarding] spills or other chemical releases be [or may have] taken place at the property? \times No \tag Yes (If yes, describe)
-	

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User Questionnaire

Page 4 of 4

	<u>.</u>			
	w of or have any info e property?] X No			rial that has
[Are there ar	y wastewater treatmei be)	t operations con	ducted at the site	e?] 📉 No [
				<u></u>
· ·				
-	SA, based on your kno tors that point to the Yes (If yes, please	resence or likely		
obvious indica	tors that point to the	resence or likely		
obvious indica	tors that point to the	resence or likely		
obvious indica	tors that point to the	resence or likely		

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Wetland Map

National Wetlands Inventory

U.S. Fish and Wildlife Service

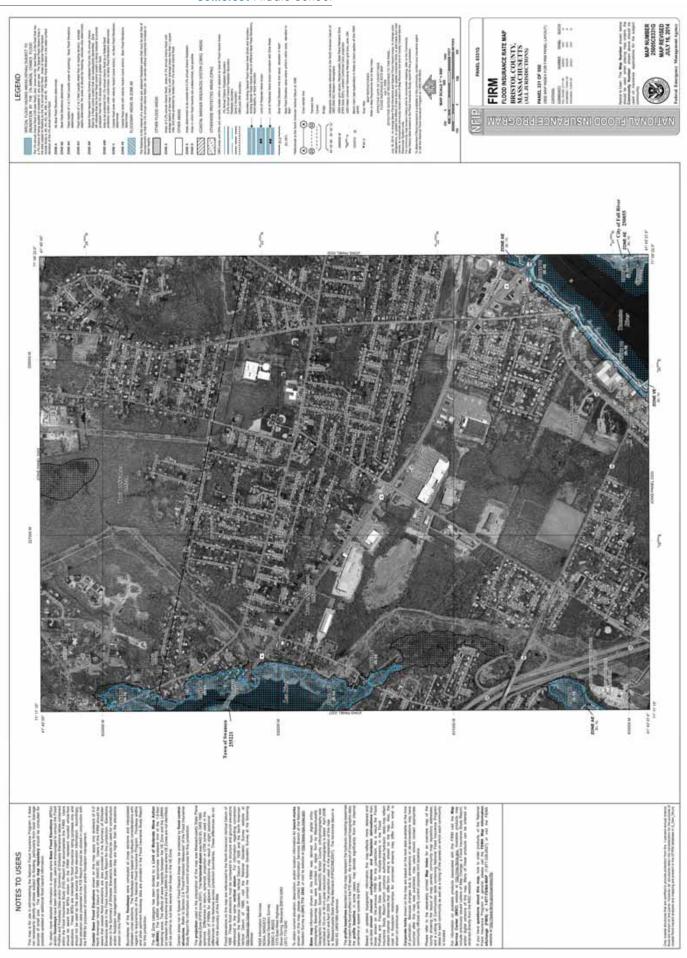
1:9,470 0.15

0.25

0.125 0.075

August 9, 2019

Wetlands



APPENDIX C: CITY DIRECTORIES

Somerset Middle School

1141 Brayton Avenue Somerset, MA 02726

Inquiry Number: 5741137.5

August 07, 2019

The EDR-City Directory Image Report



6 Armstrong Road Shelton, CT 06484 800.352.0050 www.edrnet.com

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SECTION

Executive Summary Findings

City Directory Images

Thank you for your business. Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	Target Street	Cross Street	<u>Source</u>
2014	$\overline{\checkmark}$	$\overline{\checkmark}$	EDR Digital Archive
2010		$\overline{\checkmark}$	EDR Digital Archive
2005		$\overline{\checkmark}$	EDR Digital Archive
2000		$\overline{\checkmark}$	EDR Digital Archive
1995	☑	$\overline{\mathbf{V}}$	EDR Digital Archive
1992	☑		EDR Digital Archive
1989		$\overline{\checkmark}$	Cole Criss-Cross Directory
1985		$\overline{\checkmark}$	Cole Criss-Cross Directory

FINDINGS

TARGET PROPERTY STREET

1141 Brayton Avenue Somerset, MA 02726

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
BRAYTON	AVE	
2014	pg A1	EDR Digital Archive
2010	pg A3	EDR Digital Archive
2005	pg A5	EDR Digital Archive
2000	pg A7	EDR Digital Archive
1995	pg A9	EDR Digital Archive
1992	pg A11	EDR Digital Archive
1989	pg A13	Cole Criss-Cross Directory
1985	pg A15	Cole Criss-Cross Directory

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FINDINGS

CROSS STREETS

<u>Year</u>	<u>CD Image</u>	<u>Source</u>
READ ST		
2014	pg. A2	EDR Digital Archive
2010	pg. A4	EDR Digital Archive
2005	pg. A6	EDR Digital Archive
2000	pg. A8	EDR Digital Archive
1995	pg. A10	EDR Digital Archive
1992	pg. A12	EDR Digital Archive
1989	pg. A14	Cole Criss-Cross Directory
1985	pg. A16	Cole Criss-Cross Directory

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City Directory Images

BRAYTON AVE 2014

701	AIMEE ELIZABETH PERRON PT DPT
702	ABSOLUTE DRAIN INC
755	GAIAS BREOWAN INCORPORATED
800	THWAITE, THOMAS W
806	AUGUSTO, KATHLEEN M
824	ATKINSON, ROBERT T
	MARCEAU, SCOTT R
827	CORREA, JESSE J
836	MACHADO, STACY A
849	CONTI, LISA A
868	OLIVEIRA, DAVID A
886	FISHER, DAVID M
900	GALUSKA, RICHARD M
920	MCINTOSH, STEPHEN P
931	OCCUPANT UNKNOWN,
985	CORREIA, DAVID
	M & D CORREIAS REALTY LLC
996	ST JOHN OF GOD CHURCH
1084	BOTELHO, RICHARD L
1110	SHEPPARD, TRACY L
1138	LEITE, THERESA
1141	SOMERSET SCHOOL DISTRICT
	SOUTH CAST EDCTL COLLABORATIVE
1156	FAULKNER, SHERRY A
	JUSTINSKI, DAVID B
	VIANA, DAWN
1188	FARIA, CHRISTINA M
	FARIA, JUVENAL S
1204	AMARANTES, JOHN A
	HAIR TODAY

Cross Street

Source

EDR Digital Archive

READ ST 2014

290	MUNICIPAL CLEANING SVCS INC
391	GALVAO, JOSEPH A
398	BROUILLARD, WILLIAM R
	GAIL BROUILLARD
410	QUITERIO, JESSICA
419	FERREIRA, EDUARDO M
420	MARTIN, DOUGLAS R
430	FREDRICKS, JESSICA
440	JKB BOOKING
	KENNEY, BRIAN R
441	COSTA, KAREN M
452	DE SOUTO BARBE
	OCCUPANT UNKNOWN,
467	L&M REAL ESTATE GROUP INC
	MUSHTAQ, LAILA
	STOP & PICK INC
472	FONSECA, RICHARD
	JULIUS, TINA
476	HEALTHY WAY
500	CORREIA & SONS MARKET INC
525	BENEVIDES, FRANK S
549	BENEVIDES, CLAUDIA
579	PARENT, DAVID P
599	MICHAEL, ALU D
617	TRENHOLME, PAUL S
649	MASSA, DOMINICK A
669	LANGLAIS, LORRAINE L
693	RODRIGUES, RAUL M
700	SOMERSET SCHOOL DISTRICT
841	SOMERSET UNITED METHODIST CH

702	ABSOLUTE DRAIN INC
755	GAIAS BREOWAN INCORPORATED
800	THWAITE, KEVIN J
806	AUGUSTO, MICHAEL A
824	RACINE, DAVID D
836	SOUSA, LUIS C
868	OLIVEIRA, DAVID A
886	FISHER, DAVID M
900	GALUSKA, RICHARD M
920	MCINTOSH, STEPHEN P
996	LAGOA, RAUL R
	ST JOHN OF GOD CHURCH
1084	BOTELHO, RICHARD T
1110	ALMEIDA, JOSEPH
1138	LEITE, THERESA
1141	SOMERSET SCHOOL DISTRICT
	SOUTH CAST EDCTL COLLABORATIVE
1156	VIANA, DAWN
1188	FARIA, JUVENAL S
	FARIA, SIDNEY J
1204	AMARANTES, JOHN A
	HAIR TODAY

Cross Street

<u>Source</u>

EDR Digital Archive

READ ST 2010

230	DENNINGS ELIZABETH
270	PERRY MARY
329	MAGONI LOUIS & ESTHER
391	GALVAO, JOSEPH A
398	BILLS HOME REPAIRS
	BROUILLARD, WILLIAM R
419	FERREIRA, EDUARDO M
430	GRANDFIELD, EDWARD P
440	KENNEY, BRIAN R
452	DE SOUTO BARBE
466	INDULGENCE
467	MUSHTAQ, MUHAMMAD
472	FONSECA, RICHARD
476	HEALTHY WAY
500	CORREIA & SONS MARKET INC
525	BENEVIDES, FRANK S
549	BENEVIDES, HORTENSE
579	PARENT, DAVID P
669	LANGLAIS, LORRAINE L
693	RODRIGUES, RAUL M
700	SOMERSET SCHOOL DISTRICT
841	SOMERSET UNITED METHODIST CH

		DOME WARREN	
	800	BOVIE, WARREN W	
l	000	THIBODEAU, ROBERT	
l	806	AUGUSTO, MICHAEL A	
l	004	TORRES, JOHN R	
l	824	RACINE, DAVID R ROMANO, NICK	
l	827	CORREA, TOM	
l	836	MACHADO, STACY A	
l	849	CORREA. EVA	
l	868	OLIVEIRA, DAVID A	
l	886	FISHER, DAVID M	
l	889	DIOGO, EMILIANA M	
l	900	GALUSZKA, RICHARD M	
l	931	ALVARNAS, ROGER J	
l	961	ARRUDA, RAYMOND S	
l	985	CORREIA, GUILHERME	
l	996	LAGOA, RAUL M	
l	330	PEREIRA, LUCIANO J	
l		ST JOHN OF GOD CHURCH	
l		STJOHN, O	
l	1084	BOTELHO, RICHARD T	
	1110	BERTHOLD, JOSEPH R	
l	1138	LEITE, RAYMOND	
l	1141	SOMERSET JUNIOR HIGH SCHOOL	
l		SOUTH CAST EDCTL COLLABORATIVE	
l	1156	FAULKNER, RICHARD A	
l		PEREIRA, NORMAN R	
l	1188	FARIA, JUVENAL S	
l	1204	AMARANTES, JOHN A	
l		HAIR TODAY	
I			

Cross Street

<u>Source</u>

EDR Digital Archive

READ ST 2005

329	MAGONI LOUIS & ESTHER
391	GALVAO, JOSEPH A
398	BROUILLARD, WILLIAM R
419	FERREIRA, EDUARDO M
420	MARTIN, DOUGLAS R
430	GRANDFIELD, EDWARD P
440	KENNEY, BRIAN R
441	COSTA, KAREN M
452	CABRAL, TODD M
466	INDULGENCE
467	FURNITURE PLACE INC
	MUHAMMAD, MUSHTAQ D
472	RESTORE THERAPY
476	HEALTHY WAY
	IDR INC
500	CORREIA & SONS MARKET INC
	MARGI CORP
525	BENEVIDES, FRANK S
549	BENEVIDES, FRANK S
579	PARENT, DAVID P
599	MICHAEL, ALU D
617	TRENHOLME, PAUL S
649	MASSA, STEVEN W
669	ZORRA, DORI M
683	CARVALHO, MARY
693	RODRIGUES, RAUL M
700	SOMERSET SCHOOL DISTRICT
821	SOMERSET UNITED METHDST CHURCH

800	FOSTER, JEFF
	IZBICKI, MELISSA
	PERRY, AMANDA
	THOMAS, DANIELL P
806	AUGUSTO, RUTH A
	TORRES, JOHN
824	BORGES, MARK
	WILDING, JOHN
827	CORREA, JESSE
849	CONTI, LISA
	CORREA, EVA
868	OLIVEIRA, DAVID
886	CHEETHAM, DONALD F
900	GALUSKA, RICHARD
920	GALUSKA, JANE
931	ALVARNAS, ROGER
1084	BOTELHO, RICHARD
1138	LEITE, RAYMOND
1141	SOMERSET JUNIOR HIGH SCHOOL
	SOUTH CAST EDCTL COLLABORATIVE
1156	BENOIT, MATTHEW J
	GASS, C
	PEREIRA, NORMAN R
1188	FARIA, JUVENAL

Cross Street

<u>Source</u>

EDR Digital Archive

READ ST 2000

235	E C DUCY INVESTIGATIONS & SEC
391	GALVAO, JOSEPH A
398	BROUILLARD, WILLIAM R
419	FERREIRA, EDWARDO
425	PONTE, ANNA
430	GRANDFIELD, EDWARD P
441	JAROSZ, ALBERT
452	MELLO, KEITH
466	HAIR IT IS
467	ROESER, ROBERT
472	CORREIA, MICHAEL
476	IDEAL PARTY
500	CORREIA & SONS MARKET INC
549	BENEVIDES, FRANK S
579	D&D BURNER SVC
	PARENT, DAVID
599	DALU, EVA I
669	JUSSEAUME, CLAIRE
	LANGLAIS, OSCAR J
693	RODRIGUES, RAUL
700	SOMERSET SCHOOL DISTRICT
841	SOMERSET UNITED METHDST CHURCH

800	ANDRADE, PAULA & JOEL
	COLLINS, PHILLIP A
806	AUGUSTO, R A
	TORRES, JOHN
824	REBELLO, NORBERT
827	CORREA, JESSE
849	CORREA, E
868	OLIVEIRA, DAVID
	OLIVEIRA, E C
886	CHEETHEM, DONALD F
900	GALUSKA, RICHARD
920	GALUSKA, JANE
931	ALVARNAS, ROGER
1084	BOTELHO, R & L
	FURTADO, L
1138	LEITE, RAYMOND
1156	PEREIRA, NORMAN R
1188	FARIA, JUVENAL
1204	HAIR TODAY

Cross Street

<u>Source</u>

EDR Digital Archive

READ ST 1995

391	GALVAO, JOS A
398	ERNST, ALFRED A
419	FERREIRA, EDWARDO
430	GRANDFIELD, EDW P
441	JAROSZ, ALBERT
452	DYL, ERIC
466	HAIRCUTTERY INC
	STATEWIDE CONSTRUCTION CO
467	CIOSEK, FRANK J
476	FANCY FINGERS
500	CORREIA & SONS MARKET
549	BENEVIDES, FRANK S, JR
579	PARENT, DAVID
599	D'ALU, JOS F
649	MASSA, DOMINICK
	MASSA, STEVEN W
669	PETTINE, TED
	ZORRA, D M
693	RODRIGUES, RAUL
700	SOMERSET SCHOOL DISTRICT
841	SOMERSET UNITED METHDST CHURCH

1141	SOMERSET SCHOOL DISTRICT

Cross Street

Source

EDR Digital Archive

READ ST 1992

391	GALVAO, JOS A
398	ERNST, ALFRED A
410	RIGBY, ROBT
419	FERREIRA, EDWARDO
430	GRANDFIELD, EDW P
441	JAROSZ, ALBERT
466	HAIRCUTTERY
	STATEWIDE CONSTRUCTION CO
467	CIOSEK, FRANK J
500	CORREIA & SONS MARKET
549	BENEVIDES, FRANK S, JR
579	PARENT, DAVID
599	D'ALU, JOS F
617	MARQUIS, GEO J
649	MASSA, DOMINICK
	MASSA, STEVEN W
669	NAPERT, J & E
	ZORRA, D M
693	RODRIGUES, RAUL
700	SOMERSET SCHOOL DISTRICT
841	SOMERSET UNITED METHDST CHURCH



Source

Cole Criss-Cross Directory

READ ST 1989



Cole Criss-Cross Directory

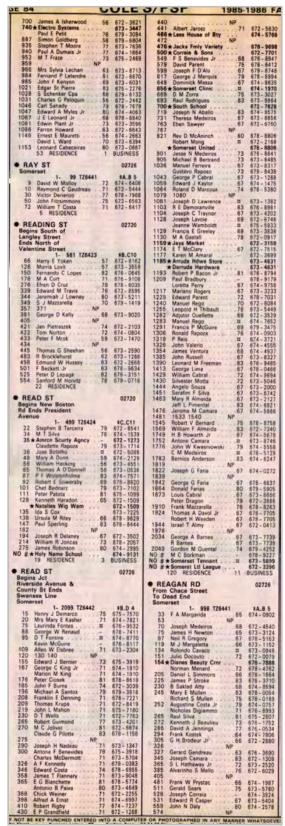
BRAYTON AVE 1985



Source

Cole Criss-Cross Directory

READ ST 1985



APPENDIX D: AERIAL PHOTOGRAPHS

Somerset Middle School

1141 Brayton Avenue Somerset, MA 02726

Inquiry Number: 5741137.8

August 06, 2019

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

EDR Aerial Photo Decade Package

08/06/19

Site Name: Client Name:

Somerset Middle School The Vertex Companies, Inc. 1141 Brayton Avenue 400 Libbey Parkway Somerset, MA 02726 Weymouth, MA 02189-0000 EDR Inquiry # 5741137.8 Contact: Nicollette Lynch



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search	

<u>Year</u>	Scale	<u>Details</u>	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2008	1"=500'	Flight Year: 2008	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1995	1"=500'	Acquisition Date: March 29, 1995	USGS/DOQQ
1991	1"=750'	Flight Date: April 04, 1991	USGS
1986	1"=500'	Flight Date: March 30, 1986	USDA
1980	1"=500'	Flight Date: April 07, 1980	USGS
1977	1"=1000'	Flight Date: April 01, 1977	USGS
1970	1"=500'	Flight Date: October 06, 1970	USDA
1966	1"=500'	Flight Date: February 22, 1966	USGS
1960	1"=500'	Flight Date: May 01, 1960	USGS
1952	1"=500'	Flight Date: October 12, 1952	USDA
1941	1"=500'	Flight Date: October 24, 1941	USGS
1938	1"=500'	Flight Date: December 13, 1938	USGS

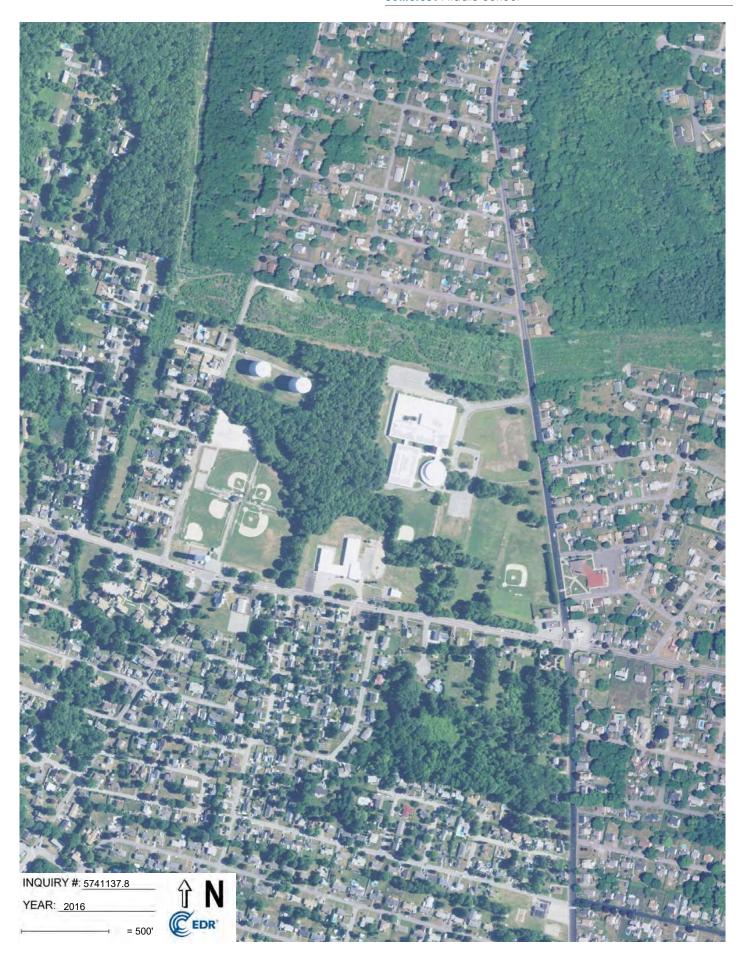
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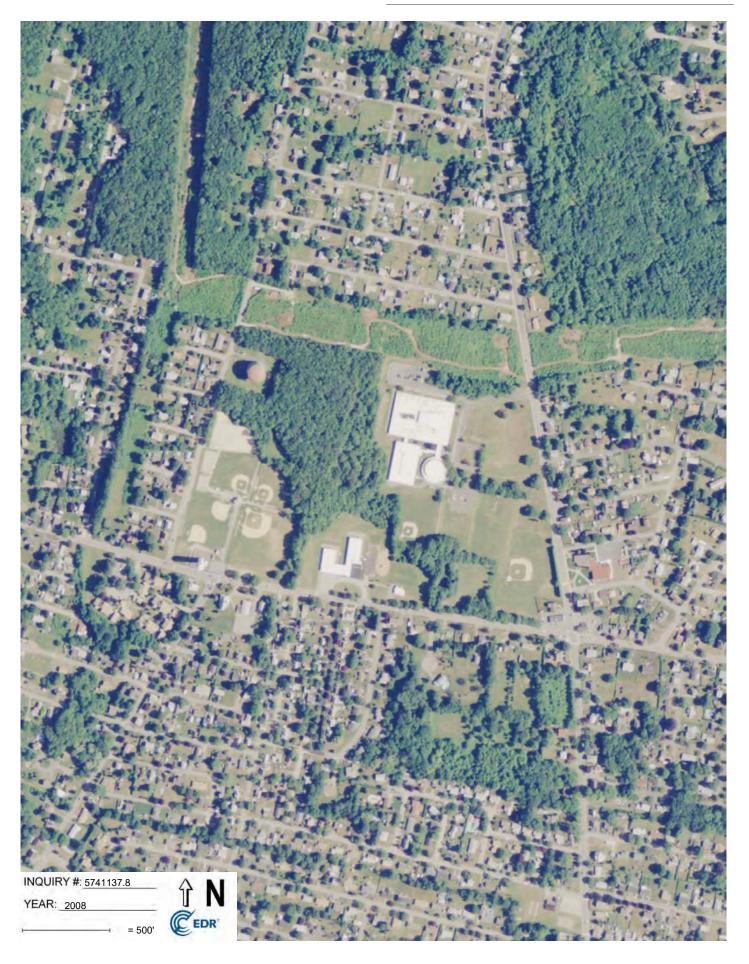
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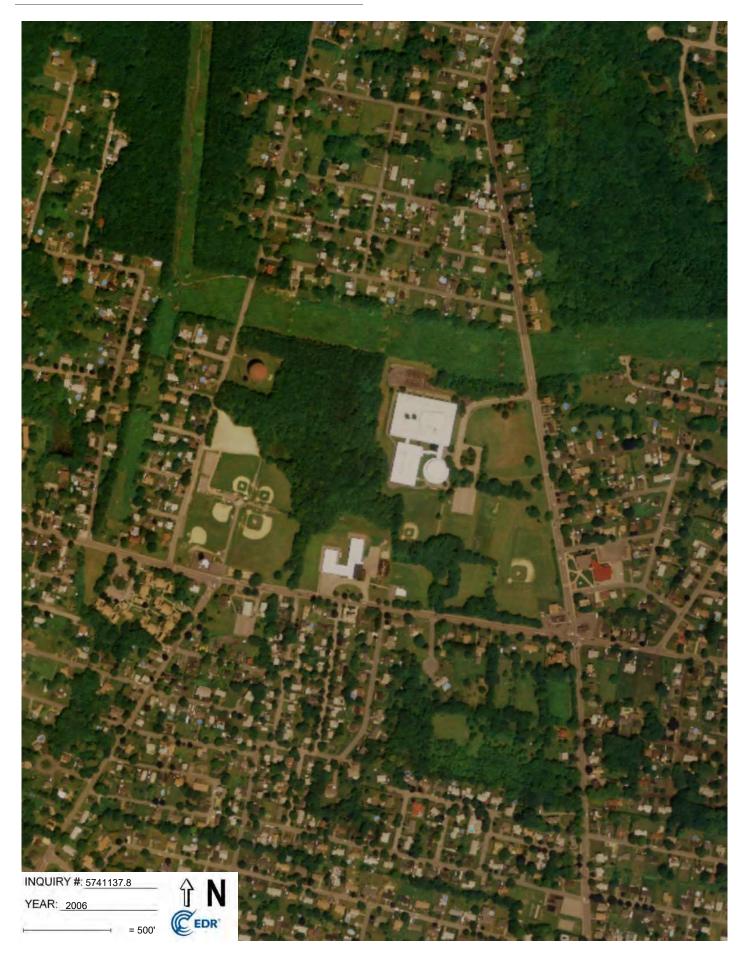
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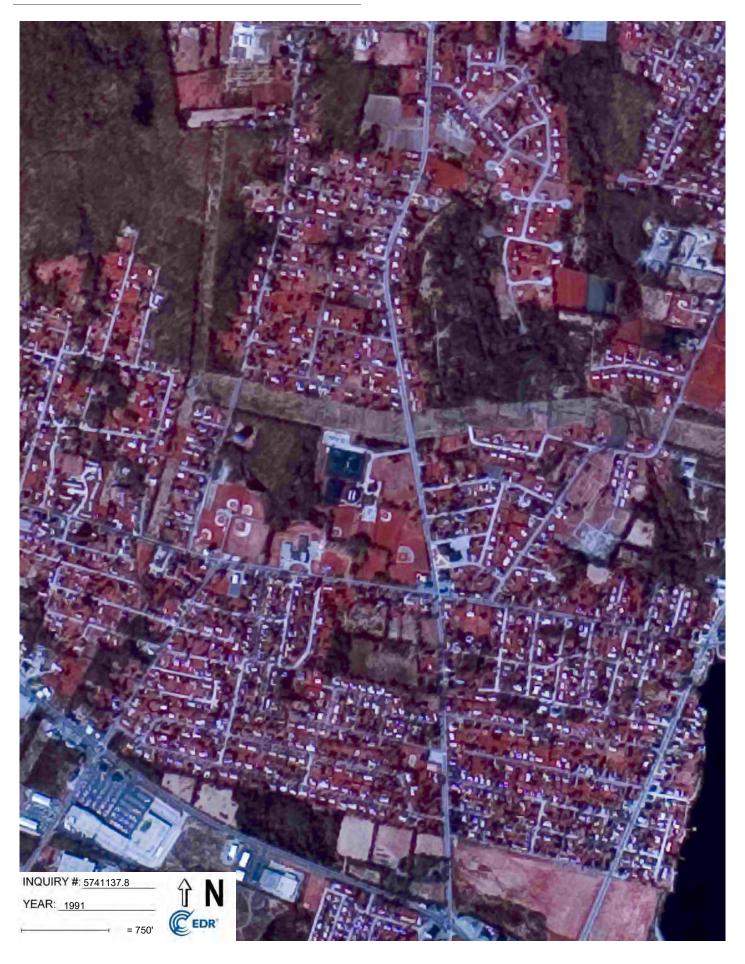






























APPENDIX E: TOPOGRAPHIC MAPS

Somerset Middle School 1141 Brayton Avenue Somerset, MA 02726

Inquiry Number: 5741137.4

August 05, 2019

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

EDR Historical Topo Map Report

08/05/19

Site Name:

Client Name:

Somerset Middle School 1141 Brayton Avenue Somerset, MA 02726 EDR Inquiry # 5741137.4 The Vertex Companies, Inc. 400 Libbey Parkway Weymouth, MA 02189-0000 Contact: Nicollette Lynch



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by The Vertex Companies, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Res	ults:	Coordinates:	
P.O.#	NA	Latitude:	41.738279 41° 44' 18" North
Project:	NA	Longitude:	-71.165099 -71° 9' 54" West
•		UTM Zone:	Zone 19 North
		UTM X Meters:	319953.83
		UTM Y Meters:	4622983.56
		Elevation:	149.14' above sea level
Maps Provid	ded:		
2012	1893		
1985	1888		
1979			
1967			
1949			
1948, 194	9		
1944			
1943, 194	4		

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Fall River 2012 7.5-minute, 24000



Somerset 2012 7.5-minute, 24000

1985 Source Sheets



Somerset 1985 7.5-minute, 25000 Aerial Photo Revised 1980



Fall River 1985 7.5-minute, 25000 Aerial Photo Revised 1980

1979 Source Sheets



Fall River 1979 7.5-minute, 24000 Aerial Photo Revised 1977

1967 Source Sheets



Somerset 1967 7.5-minute, 24000 Aerial Photo Revised 1966



Fall River 1967 7.5-minute, 24000 Aerial Photo Revised 1966

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1949 Source Sheets



Fall River 1949 7.5-minute, 31680

1948, 1949 Source Sheets



Somerset 1948 7.5-minute, 24000

1944 Source Sheets



FALL RIVER 1944 7.5-minute, 25000

1943, 1944 Source Sheets



Somerset 1943 7.5-minute, 31680



Fall River 1944 7.5-minute, 31680

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1893 Source Sheets



Taunton 1893 15-minute, 62500



Fall River 1893 15-minute, 62500

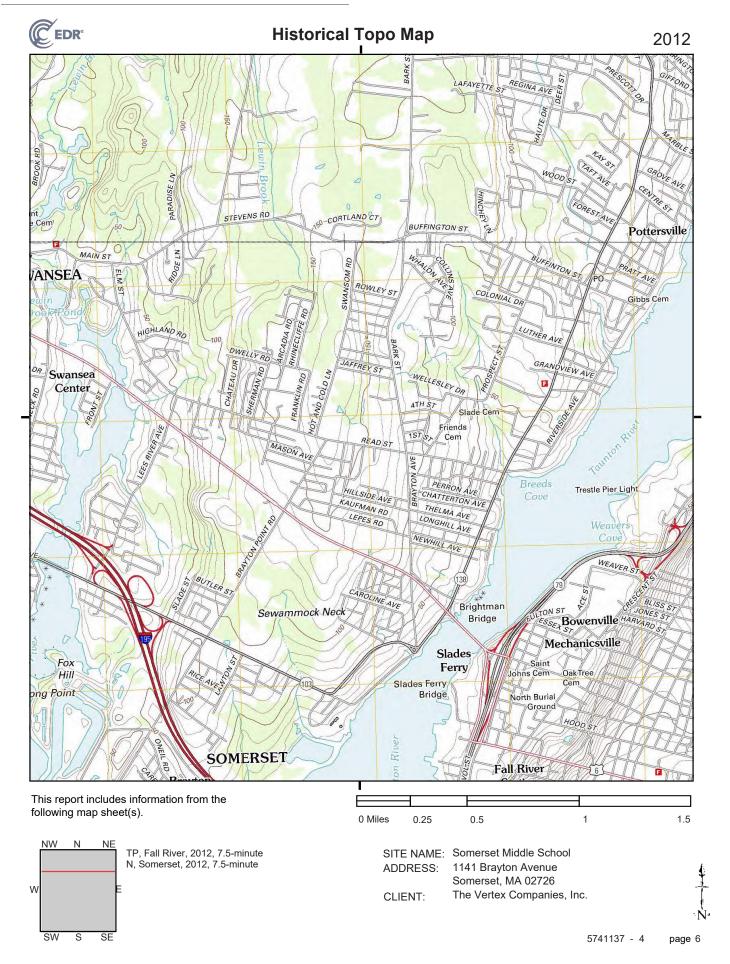
1888 Source Sheets

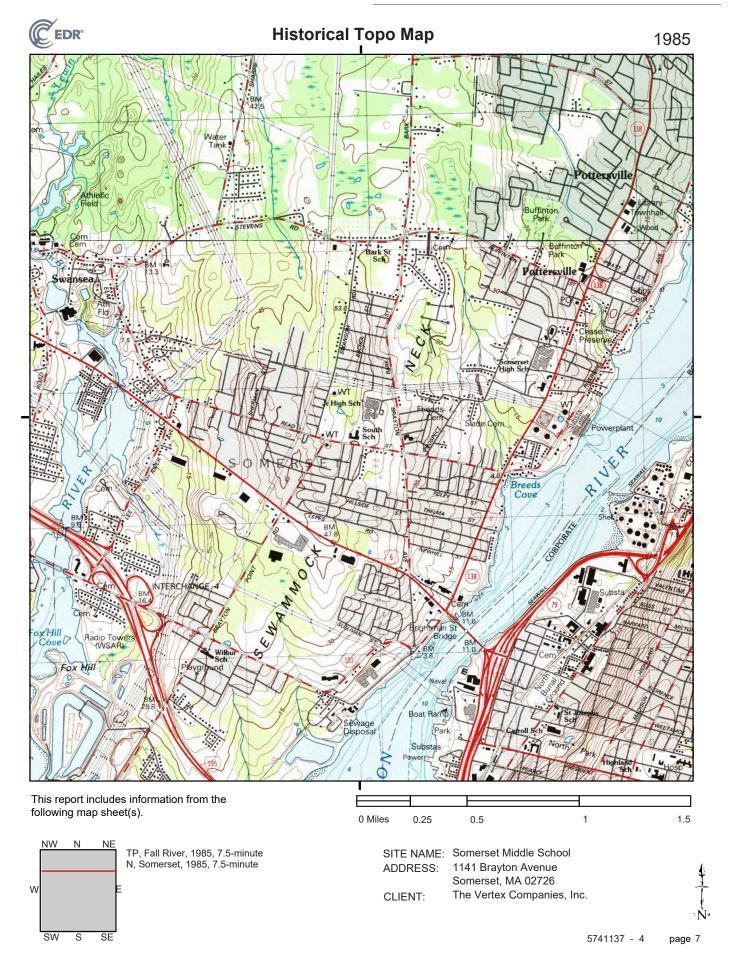


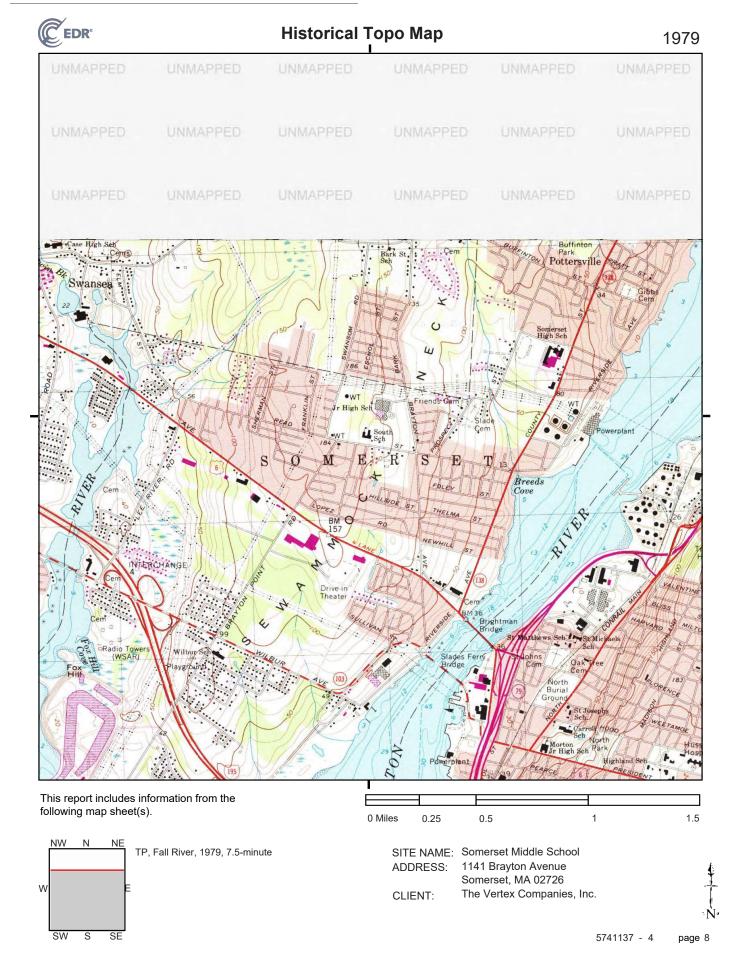
Fall River 1888 15-minute, 62500

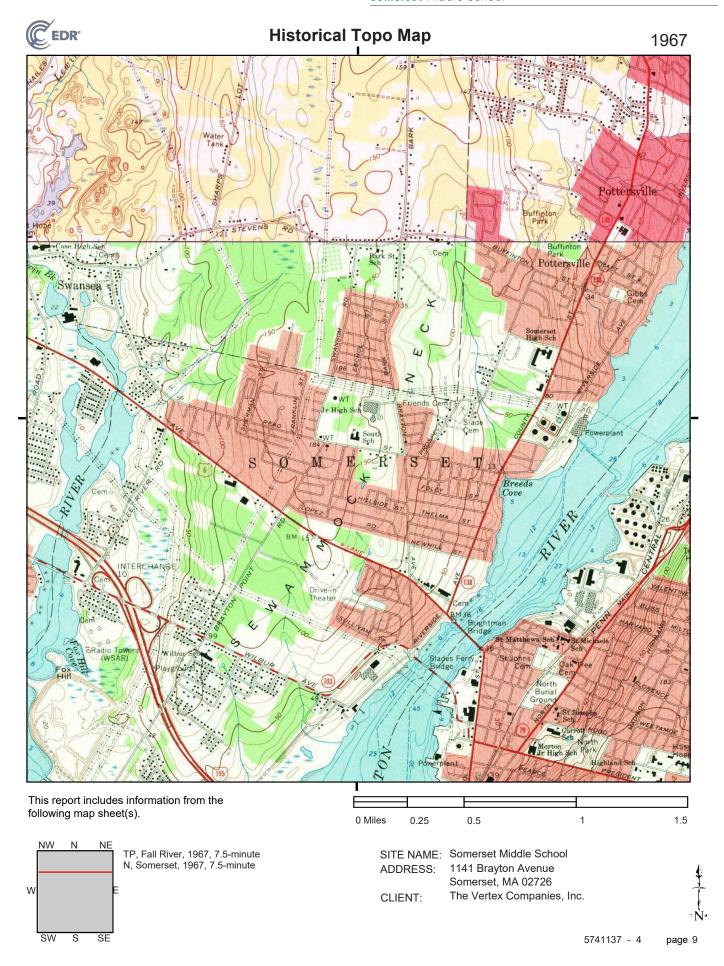


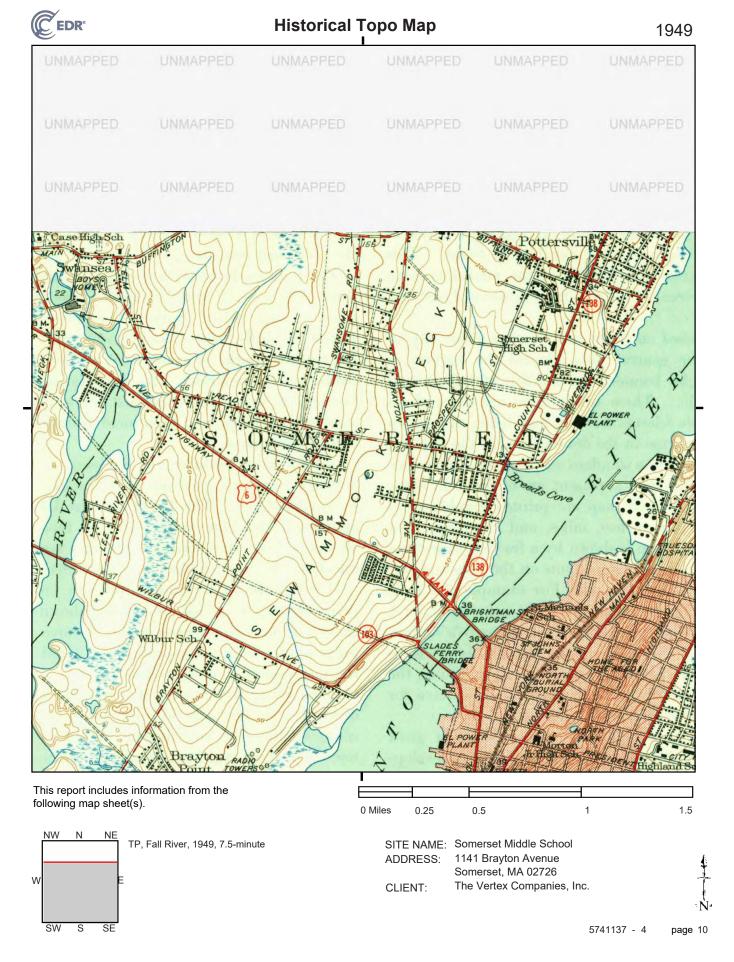
Taunton 1888 15-minute, 62500

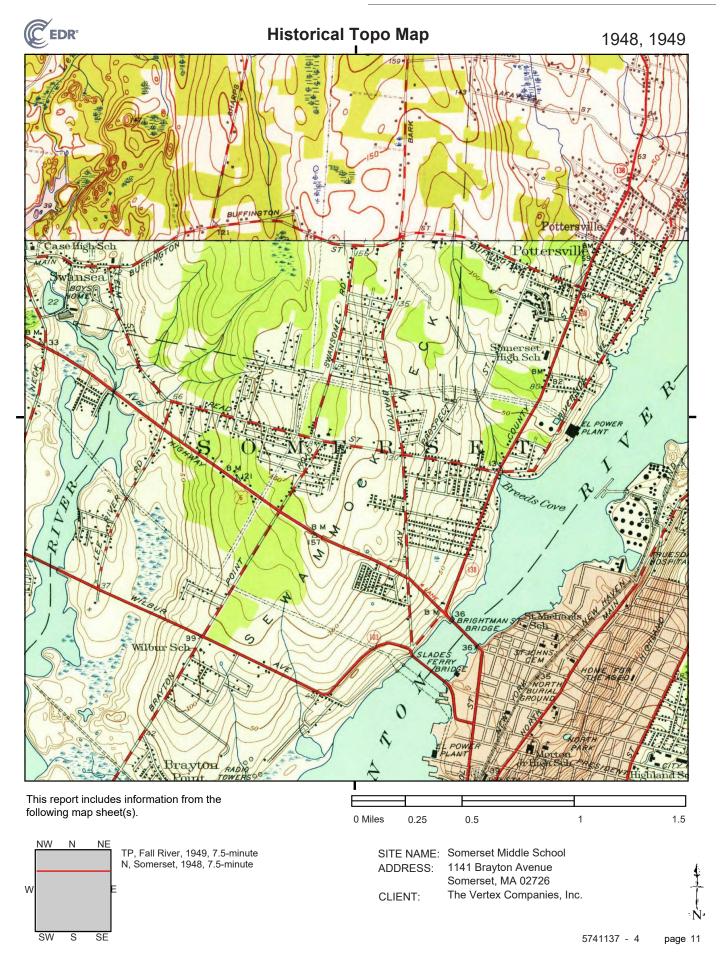


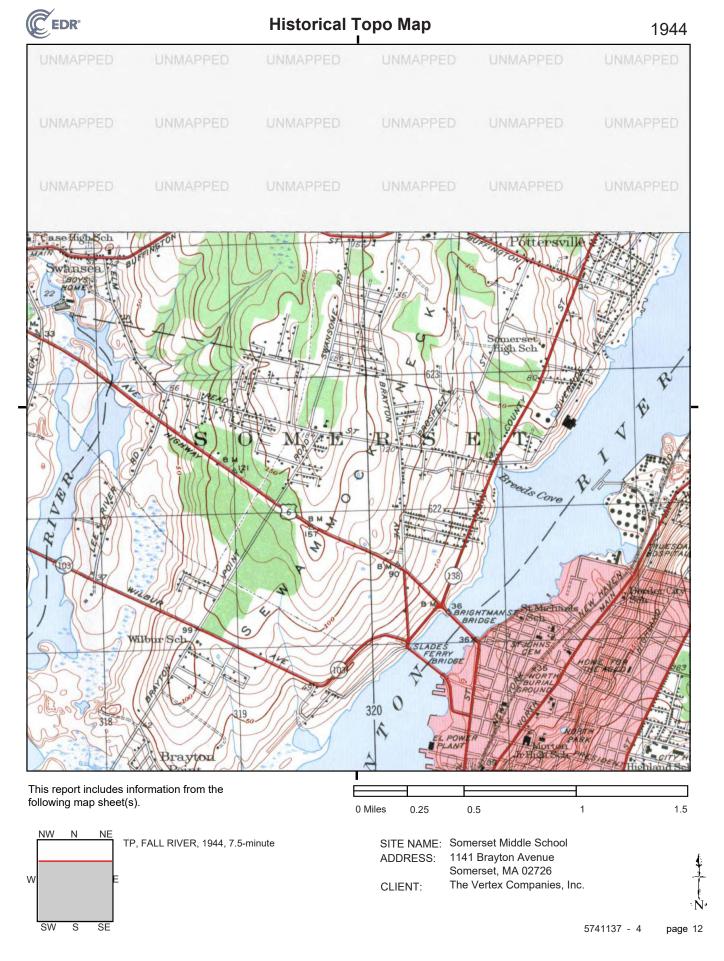


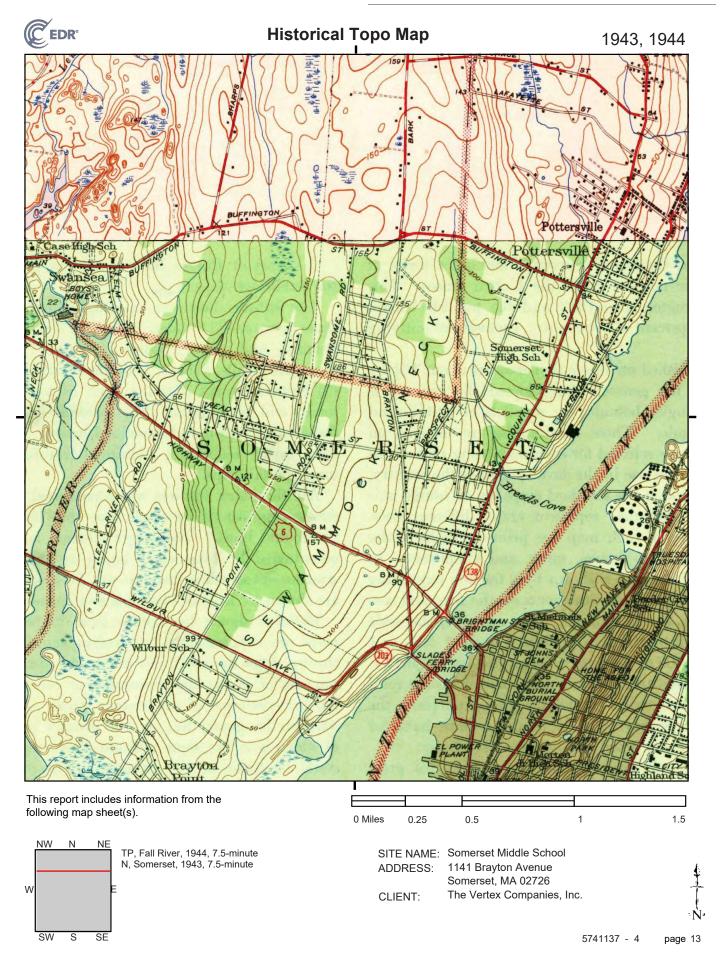


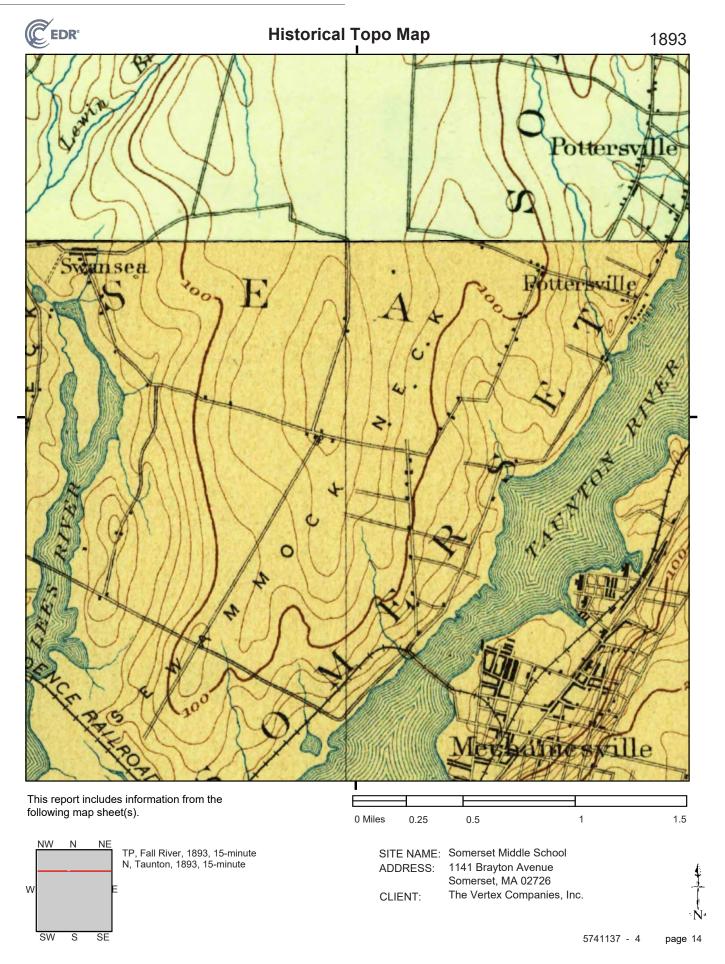


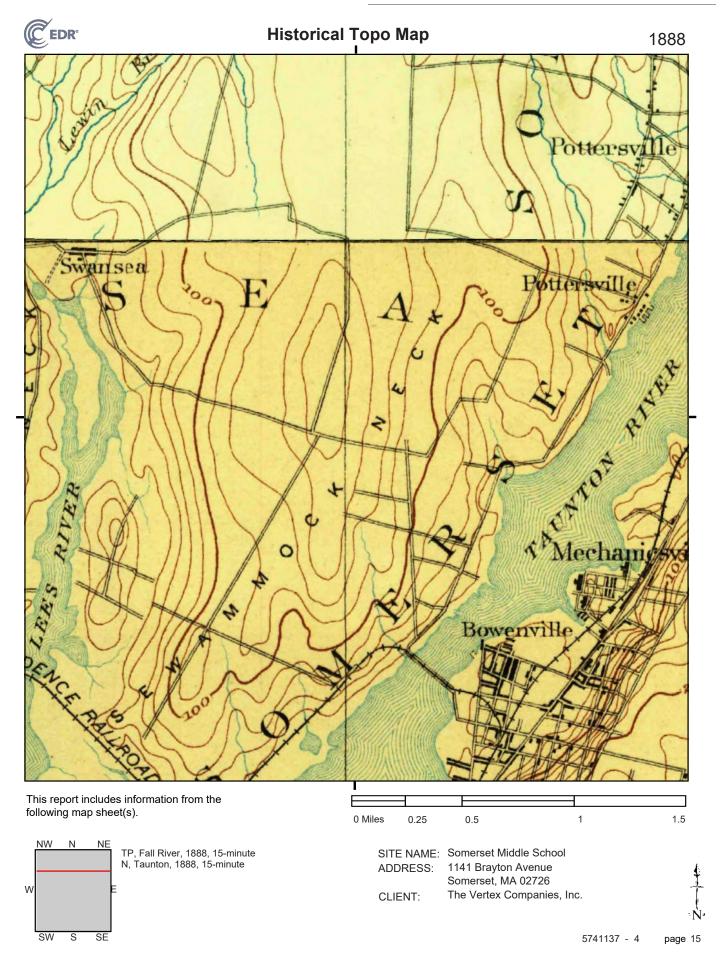












APPENDIX F: SANBORN FIRE INSURANCE MAPS

Somerset Middle School 1141 Brayton Avenue Somerset, MA 02726

Inquiry Number: 5741137.3

August 06, 2019

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

Certified Sanborn® Map Report

08/06/19

Site Name: **Client Name:**

The Vertex Companies, Inc. Somerset Middle School 400 Libbey Parkway 1141 Brayton Avenue Somerset, MA 02726 Weymouth, MA 02189-0000 EDR Inquiry # 5741137.3 Contact: Nicollette Lynch



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by The Vertex Companies, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 16C8-4955-AD4B

PO# NΑ **Project** NA

Maps Provided:

1959



Sanborn® Library search results Certification #: 16C8-4955-AD4B

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

Library of Congress

✓ University Publications of America

▼ EDR Private Collection

The Sanborn Library LLC Since 1866™

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The Vertex Companies, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an FDR Account Executive the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

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5741137 - 3

Sanborn Sheet Key

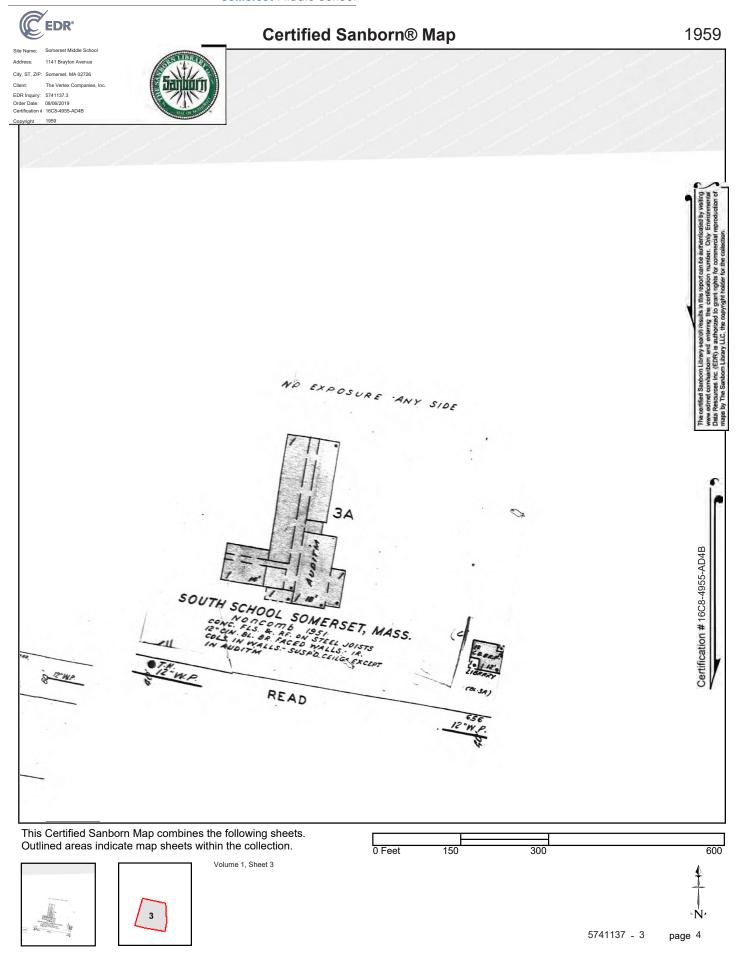
This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.



1959 Source Sheets



Volume 1, Sheet 3 1959



APPENDIX G: REGULATORY DATABASE REPORT

Somerset Middle School 1141 Brayton Avenue Somerset, MA 02726

Inquiry Number: 5741137.2s

August 05, 2019

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor Shelton, CT 06484 Toll Free: 800.352.0050 www.edrnet.com

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GEOCHECK ADDENDUM	
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Please contact EDR at 1-800-352-0050 with any questions or comments.

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TC5741137.2s Page 1

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

1141 BRAYTON AVENUE SOMERSET, MA 02726

COORDINATES

Latitude (North): 41.7382790 - 41° 44' 17.80" Longitude (West): 71.1650990 - 71° 9' 54.35"

Universal Tranverse Mercator: Zone 19 UTM X (Meters): 319948.9 UTM Y (Meters): 4622770.5

Elevation: 149 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 5641997 FALL RIVER, MA

Version Date: 2012

5641999 SOMERSET, MA North Map:

Version Date: 2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140718 Source: USDA

MAPPED SITES SUMMARY

Target Property Address: 1141 BRAYTON AVENUE SOMERSET, MA 02726

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	SOUTH MIDDLE JR HIGH	1141 BRAYTON AVE	MA RGA LUST		TP
A2	SOMERSET JR HIGH	1141 BRAYTON AVENUE	US AIRS, FINDS, ECHO		TP
A3	SOUTH MIDDLE JR HIGH	1141 BRAYTON AVE	MA LUST, MA RELEASE, MA ASBESTOS		TP
4	SOUTH SCHOOL	700 READ ST	MA LUST, MA RELEASE, MA AIRS	Higher	2, 0.000,
5	NO LOCATION AID	1250 BRAYTON RD	MA SHWS, MA RELEASE	Lower	73, 0.014, NE
6	D&D SANDBLASTING	125 GEORGE ST	RCRA NonGen / NLR	Lower	914, 0.173, ESE
7	HAROLD ST	230 READ ST	MA LUST, MA INST CONTROL, MA RELEASE	Lower	1338, 0.253, ESE
8	NO LOCATION AID	1193 READ ST	MA LAST, MA RELEASE	Lower	1339, 0.254, West
9	NO LOCATION AID	1072 GRAND ARMY REPU	MA SHWS, MA RELEASE	Lower	1870, 0.354, SW
B10	FORMER MOBIL	992 GRAND ARMY HWY (MA SHWS, MA LUST, MA RELEASE	Lower	1890, 0.358, SW
B11	CUMBERLAND FARMS V19	992 GRAND ARMY HWY	MA SHWS, MA RELEASE, MA HW GEN	Lower	1890, 0.358, SW
B12	MOBIL STATION, FMR.	992 GRAND ARMY HWY	MA LUST, MA RELEASE	Lower	1890, 0.358, SW
B13	CUMBERLAND FARMS GAS	992 G.A.R HWY	MA SHWS, MA RELEASE	Lower	1925, 0.365, SW
14	RT-6 ROADWAY	1160 GAR HWY	MA SHWS, MA RELEASE	Lower	1982, 0.375, WSW
15	IN FRONT OF HORNER M	IN FRONT OF 1255 GRA	MA SHWS, MA RELEASE	Lower	2301, 0.436, WSW
16	PROPERTY	718 GRAND ARMY REBUL	MA SHWS, MA RELEASE	Higher	2397, 0.454, SSW
C17	BAKERS GULF	3 COUNTY ST	MA SHWS, MA RELEASE	Lower	2500, 0.473, ESE
18	SOMER MOTORS INC	1491 BRAYTON POINT R	MA LUST, MA RELEASE, MA HW GEN, MA TIER 2	Lower	2602, 0.493, SW
C19	VEHICLE ACCIDENT	IN FRONT OF 54 COUNT	MA SHWS, MA RELEASE	Lower	2654, 0.503, ESE
20	PETRO-TECH	266 GRAND ARMY REPUB	MA SHWS, MA SPILLS, MA RELEASE	Lower	2923, 0.554, SSE
21	HOME DEPOT	535 GAR HIGHWAY RTE	MA SHWS, MA RELEASE	Lower	3231, 0.612, South
22	FORMER FRESHWATER RE	1901 RIVERSIDE AVENU	MA SHWS, MA RELEASE	Lower	3625, 0.687, East
23	7-ELEVEN #33227	1693 GRAND ARMY REPU	MA SHWS, MA UST, MA RELEASE, MA HW GEN	Lower	3754, 0.711, West
24	GREECE BIBLE CHURCH	802 RIVERSIDE AVENUE	MA SHWS, MA RELEASE	Lower	3820, 0.723, SSE
D25	GIBBS OIL CO	514 COUNTY ST	MA SHWS, MA RELEASE	Lower	3940, 0.746, ENE
D26	HESS STATION	516 COUNTY ST	MA SHWS, MA RELEASE	Lower	3958, 0.750, ENE
27	FORMER SOMERSET POWE	1606 RIVERSIDE AVE	MA SHWS, MA LAST, MA AST, MA INST CONTROL, MA	Lower	4156, 0.787, East
28	SHAWOMET ST	113 SHAWOMET ST	MA SHWS, MA LUST, MA RELEASE	Lower	4185, 0.793, ENE
29	COMMUNITY CLEANSERS	875 COUNTY STREET	MA SHWS, MA RELEASE	Lower	4666, 0.884, ENE
30	BRIGHTMAN ST BRIDGE	BRIGHTMAN ST	MA SHWS, MA RELEASE	Lower	4906, 0.929, SSE
31	NEW ENGLAND POWER/DB	375 RIVERSIDE AVE	MA SHWS, MA RELEASE	Lower	5216, 0.988, South
32	TAUNTON RIVER	BRIGHTMAN STREET BRG	MA SHWS, MA RELEASE	Lower	5234, 0.991, SSE
E33	SPEEDWAY STORE #2416	35 G.A.R. HWY	MA SHWS, MA LUST, MA RELEASE	Lower	5266, 0.997, West
E34	HESS STATION	35 GRAND ARMY HWY	MA SHWS, MA RELEASE	Lower	5266, 0.997, West
E35	SPEEDWAY #2416	35 GAR HWY	MA SHWS, MA LUST, MA UST, MA RELEASE	Lower	5266, 0.997, West

5741137.2s Page 2

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
SOUTH MIDDLE JR HIGH 1141 BRAYTON AVE SOMERSET, MA	MA RGA LUST Facility ID: 4-0013199	N/A
SOMERSET JR HIGH 1141 BRAYTON AVENUE SOMERSET, MA 02726	US AIRS Database: US AIRS MINOR, Date of Governi EPA plant ID:: 110021925461	N/A ment Version: 10/12/2016
	FINDS Registry ID:: 110021925461	
	ECHO Registry ID: 110021925461	
SOUTH MIDDLE JR HIGH 1141 BRAYTON AVE	MA LUST Release Tracking Number / Current Status: 4	N/A -0013199 / RAO
SOMERSET, MA	MA RELEASE Release Tracking Number / Current Status: 4	-0013199 / RAO
	MA ASBESTOS	

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL______National Priority List
Proposed NPL_____Proposed National Priority List Sites NPL LIENS..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL..... National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY..... Federal Facility Site Information listing

SEMS..... Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS...... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG RCRA - Large Quantity Generators RCRA-SQG RCRA - Small Quantity Generators

RCRA-CESQG...... RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

Land Use Control Information System US ENG CONTROLS..... Engineering Controls Sites List US INST CONTROL..... Sites with Institutional Controls

Federal ERNS list

ERNS..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

MA SWF/LF..... Solid Waste Facility Database/Transfer Stations

State and tribal leaking storage tank lists

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land

State and tribal registered storage tank lists

FEMA UST..... Underground Storage Tank Listing INDIAN UST...... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

MA BROWNFIELDS..... Completed Brownfields Covenants Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI...... Report on the Status of Open Dumps on Indian Lands DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations ODI_____Open Dump Inventory IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register US CDL...... National Clandestine Laboratory Register

Local Land Records

MA LIENS..... Liens Information Listing LIENS 2..... CERCLA Lien Information

Records of Emergency Release Reports

..... Hazardous Materials Information Reporting System MA SPILLS 90...... SPILLS 90 data from FirstSearch MA SPILLS 80..... SPILLS 80 data from FirstSearch

Other Ascertainable Records

FUDS...... Formerly Used Defense Sites DOD...... Department of Defense Sites

SCRD DRYCLEANERS...... State Coalition for Remediation of Drycleaners Listing

US FIN ASSUR_____ Financial Assurance Information

EPA WATCH LIST..... EPA WATCH LIST

2020 COR ACTION........... 2020 Corrective Action Program List TSCA..... Toxic Substances Control Act TRIS______ Toxic Chemical Release Inventory System

SSTS..... Section 7 Tracking Systems ROD..... Records Of Decision RMP..... Risk Management Plans

RAATS...... RCRA Administrative Action Tracking System

PRP...... Potentially Responsible Parties PADS...... PCB Activity Database System

ICIS...... Integrated Compliance Information System

FTTS......FIFŘA/ TSCA Tracking System - FIFŘA (Federal Insecticide, Fungicide, & Rodenticide

Act)/TSCA (Toxic Substances Control Act) Material Licensing Tracking System

COAL ASH DOE..... Steam-Electric Plant Operation Data COAL ASH EPA...... Coal Combustion Residues Surface Impoundments List

PCB TRANSFORMER_____PCB Transformer Registration Database

RADINFO...... Radiation Information Database

HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing

DOT OPS..... Incident and Accident Data

CONSENT...... Superfund (CERCLA) Consent Decrees

INDIAN RESERV..... Indian Reservations

FUSRAP..... Formerly Utilized Sites Remedial Action Program

UMTRA..... Uranium Mill Tailings Sites

LEAD SMELTERS.....Lead Smelter Sites

..... Mines Master Index File

ABANDONED MINES..... Abandoned Mines

DOCKET HWC..... Hazardous Waste Compliance Docket Listing

.....Unexploded Ordnance Sites UXO..

FUELS PROGRAM..... EPA Fuels Program Registered Listing MA DRYCLEANERS_____Regulated Drycleaning Facilities

MA ENF..... Enforcement Action Cases

MA Financial Assurance Financial Assurance Information Listing MA GWDP..... Ground Water Discharge Permits

MA MERCURY..... Mercury Product Recyling Drop-Off Locations Listing

MA NPDES Permit Listing

MA TSD..... TSD Facility

MA UIC...... Underground Injection Control Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	EDR Proprietary Manufactured Gas Plants
	EDR Exclusive Historical Auto Stations
FDR Hist Cleaner	EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

State- and tribal - equivalent CERCLIS

MA SHWS: Contains information on releases of oil and hazardous materials that have been reported to DEP.

A review of the MA SHWS list, as provided by EDR, and dated 02/28/2019 has revealed that there are 26 MA SHWS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
PROPERTY Release Tracking Number: 4-0006030 Compliance Status: Response Action Ou	718 GRAND ARMY REBUL tcome	SSW 1/4 - 1/2 (0.454 mi.)	16	55
Lower Elevation	Address	Direction / Distance	Map ID	Page
NO LOCATION AID Release Tracking Number: 4-0017461 Compliance Status: Response Action Ou	1250 BRAYTON RD	NE 0 - 1/8 (0.014 mi.)	5	23
NO LOCATION AID Release Tracking Number: 4-0017907 Release Tracking Number: 4-0011851 Compliance Status: Response Action Ou	1072 GRAND ARMY REPU	SW 1/4 - 1/2 (0.354 mi.)	9	36
FORMER MOBIL Release Tracking Number: 4-0021091 Compliance Status: Response Action Ou	992 GRAND ARMY HWY (tcome	SW 1/4 - 1/2 (0.358 mi.)	B10	41
CUMBERLAND FARMS V19 Release Tracking Number: 4-0024629 Release Tracking Number: 4-0026045 Compliance Status: Response Action Ou	992 GRAND ARMY HWY	SW 1/4 - 1/2 (0.358 mi.)	B11	46
CUMBERLAND FARMS GAS Release Tracking Number: 4-0027337	992 G.A.R HWY	SW 1/4 - 1/2 (0.365 mi.)	B13	51
RT-6 ROADWAY Release Tracking Number: 4-0026988	1160 GAR HWY	WSW 1/4 - 1/2 (0.375 mi.)	14	52
IN FRONT OF HORNER M Release Tracking Number: 4-0020357 Compliance Status: Response Action Ou	IN FRONT OF 1255 GRA	WSW 1/4 - 1/2 (0.436 mi.)	15	53
BAKERS GULF Release Tracking Number: 4-0012663 Compliance Status: Response Action Ou	3 COUNTY ST	ESE 1/4 - 1/2 (0.473 mi.)	C17	56
VEHICLE ACCIDENT Release Tracking Number: 4-0025254	IN FRONT OF 54 COUNT	ESE 1/2 - 1 (0.503 mi.)	C19	66
PETRO-TECH Release Tracking Number: 4-0018207 Compliance Status: Response Action Ou	266 GRAND ARMY REPUB	SSE 1/2 - 1 (0.554 mi.)	20	68
HOME DEPOT Release Tracking Number: 4-0018798 Compliance Status: Response Action Ou	535 GAR HIGHWAY RTE	S 1/2 - 1 (0.612 mi.)	21	70
FORMER FRESHWATER RE Release Tracking Number: 4-0027291 Compliance Status: Unclassified	1901 RIVERSIDE AVENU	E 1/2 - 1 (0.687 mi.)	22	72
7-ELEVEN #33227 Release Tracking Number: 4-0018048 Compliance Status: Response Action Ou	1693 GRAND ARMY REPU	W 1/2 - 1 (0.711 mi.)	23	73
GREECE BIBLE CHURCH Release Tracking Number: 4-0024413 Compliance Status: Response Action Ou	802 RIVERSIDE AVENUE	SSE 1/2 - 1 (0.723 mi.)	24	76
GIBBS OIL CO	514 COUNTY ST	ENE 1/2 - 1 (0.746 mi.)	D25	77

Release Tracking Number: 4-0016426 Compliance Status: Response Action Out	come			
HESS STATION Release Tracking Number: 4-0016973 Release Tracking Number: 4-0018728 Compliance Status: Response Action Out	516 COUNTY ST	ENE 1/2 - 1 (0.750 mi.)	D26	78
FORMER SOMERSET POWE Release Tracking Number: 4-0001017 Release Tracking Number: 4-0014126 Release Tracking Number: 4-0018175 Release Tracking Number: 4-0016023 Release Tracking Number: 4-0010291 *Additional key fields are available in the Normal Compliance Status: Not a Disposal Site (Compliance Status: Response Action Outcomes)	DEP)	E 1/2 - 1 (0.787 mi.)	27	81
SHAWOMET ST Release Tracking Number: 4-0017443 Compliance Status: Response Action Out	113 SHAWOMET ST	ENE 1/2 - 1 (0.793 mi.)	28	197
COMMUNITY CLEANSERS Release Tracking Number: 4-0027260 Compliance Status: Unclassified	875 COUNTY STREET	ENE 1/2 - 1 (0.884 mi.)	29	200
BRIGHTMAN ST BRIDGE Release Tracking Number: 4-0012673 Compliance Status: Response Action Out	BRIGHTMAN ST	SSE 1/2 - 1 (0.929 mi.)	30	201
NEW ENGLAND POWER/DB Release Tracking Number: 4-0026909	375 RIVERSIDE AVE	S 1/2 - 1 (0.988 mi.)	31	202
TAUNTON RIVER Release Tracking Number: 4-0015656 Compliance Status: Adequately Regulated	BRIGHTMAN STREET BRG	SSE 1/2 - 1 (0.991 mi.)	32	203
SPEEDWAY STORE #2416 Release Tracking Number: 4-0027047 Compliance Status: Response Action Out	35 G.A.R. HWY	W 1/2 - 1 (0.997 mi.)	E33	204
HESS STATION Release Tracking Number: 4-0020351 Compliance Status: Response Action Out	35 GRAND ARMY HWY	W 1/2 - 1 (0.997 mi.)	E34	208
SPEEDWAY #2416 Release Tracking Number: 4-0022576	35 GAR HWY	W 1/2 - 1 (0.997 mi.)	E35	210

State and tribal leaking storage tank lists

MA LAST: The Leaking Aboveground Storage Tanks database

A review of the MA LAST list, as provided by EDR, and dated 02/28/2019 has revealed that there is 1 MA LAST site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page	
NO LOCATION AID	1193 READ ST	W 1/4 - 1/2 (0.254 mi.)	8	31	
Release Tracking Number / Current Statu	ıs: 4-0020152 / RAO				

MA LUST: Sites within the Releases Database that have a UST listed as its source.

A review of the MA LUST list, as provided by EDR, and dated 02/28/2019 has revealed that there are 5 MA LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page 19	
SOUTH SCHOOL Release Tracking Number / Current Status	700 READ ST : 4-0013198 / RAO	0 - 1/8 (0.000 mi.)	4		
Lower Elevation	Address	Direction / Distance	Map ID	Page	
HAROLD ST Release Tracking Number / Current Status	230 READ ST : 4-0010795 / RAO	ESE 1/4 - 1/2 (0.253 mi.)	7	25	
FORMER MOBIL Release Tracking Number / Current Status	992 GRAND ARMY HWY (: 4-0020922 / RAO	SW 1/4 - 1/2 (0.358 mi.)	B10	41	
MOBIL STATION, FMR. Release Tracking Number / Current Status	992 GRAND ARMY HWY : 4-0020951 / RAO	SW 1/4 - 1/2 (0.358 mi.)	B12	49	
SOMER MOTORS INC Release Tracking Number / Current Status	1491 BRAYTON POINT R : 4-0013093 / RAO	SW 1/4 - 1/2 (0.493 mi.)	18	58	

State and tribal institutional control / engineering control registries

MA INST CONTROL: Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

A review of the MA INST CONTROL list, as provided by EDR, and dated 02/28/2019 has revealed that there is 1 MA INST CONTROL site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HAROLD ST	230 READ ST	ESE 1/4 - 1/2 (0.253 mi.)	7	25
Release Tracking Number: 4-0010795				

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

Lower Elevation	Address	Direction / Distance	Мар ІО	Page
D&D SANDBLASTING	125 GEORGE ST	ESE 1/8 - 1/4 (0.173 mi.)	6	24

EPA ID:: MAR000505305

Due to poor or inadequate address information, the following sites were not mapped. Count: 14 records.

Site Name

WATTUPA WATER
PG&E POWER STA
BEHIND DANGELOS
RT 195 WEST AT EXIT 4
POWER PLANT
NO LOCATION AID
@BRAYTON PT POWER
BRAYTON AVE.
RT 195 WEST-EXIT 4 OFF-RAMP
BLDG 19 PARKING LOT
UTILITY POLE
SOMERSET TRANSFER STATION
SOMERSET LANDFILL

BORGE LANDFILL

Database(s)

MA LUST, MA RELEASE, MA ASBESTOS MA SHWS, MA RELEASE

MA SHWS, MA RELEASE MA SHWS, MA RELEASE MA SHWS, MA RELEASE MA SHWS, MA RELEASE

MA SHWS, MA LAST, MA RELEASE

MA SHWS, MA RELEASE MA SHWS, MA RELEASE MA SHWS, MA RELEASE MA SHWS, MA RELEASE MA SHWS, MA RELEASE

MA SWF/LF MA SWF/LF

OVERVIEW MAP - 5741137.2S 1/2 1 Miles Target Property Sites at elevations higher than or equal to the target property Indian Reservations BIA Areas of Critical Environmental Concern Sites at elevations lower than Power transmission lines the target property 100-year flood zone Manufactured Gas Plants 500-year flood zone National Priority List Sites National Wetland Inventory Dept. Defense Sites State Wetlands This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view. CLIENT: SITE NAME: Somerset Middle School The Vertex Companies, Inc. CONTACT: Nicollette Lynch ADDRESS: 1141 Brayton Avenue

August 05, 2019 2:23 pm

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Somerset MA 02726

41.738279 / 71.165099

LAT/LONG:

INQUIRY #: 5741137.2s

DATE:

DETAIL MAP - 5741137.2S Houlton St ROVOREDO, MICHELLE Orlando man SOMERSET MIDDLE SCHOOL Ν Chatterton Kaufman Rd The I ma Ave Lepes 1/16 1/4 Miles 1/8 Target Property Sites at elevations higher than or equal to the target property Indian Reservations BIA Areas of Critical Environmental Concern Sites at elevations lower than Power transmission lines the target property 100-year flood zone Manufactured Gas Plants 500-year flood zone Sensitive Receptors National Wetland Inventory National Priority List Sites State Wetlands Dept. Defense Sites This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

August 05, 2019 2:25 pm

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The Vertex Companies, Inc.

INQUIRY #: 5741137.2s

CONTACT: Nicollette Lynch

CLIENT:

DATE:

ADDRESS:

LAT/LONG:

SITE NAME: Somerset Middle School

1141 Brayton Avenue Somerset MA 02726

41.738279 / 71.165099

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMEN	ITAL RECORDS							
Federal NPL site list								
NPL Proposed NPL NPL LIENS	1.000 1.000 1.000		0 0 0	0 0 0	0 0 0	0 0 0	NR NR NR	0 0 0
Federal Delisted NPL si	ite list							
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY SEMS	0.500 0.500		0 0	0 0	0 0	NR NR	NR NR	0 0
Federal CERCLIS NFRA	NP site list							
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRAC	CTS facilities li	ist						
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-COF	RRACTS TSD f	acilities list						
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generate	ors list							
RCRA-LQG RCRA-SQG RCRA-CESQG	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
Federal institutional co- engineering controls re								
LUCIS US ENG CONTROLS US INST CONTROL	0.500 0.500 0.500		0 0 0	0 0 0	0 0 0	NR NR NR	NR NR NR	0 0 0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equiv	alent CERCLIS	3						
MA SHWS	1.000		1	0	8	17	NR	26
State and tribal landfill solid waste disposal sit								
MA SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking	storage tank l	ists						
MA LAST MA LUST INDIAN LUST	0.500 0.500 0.500	1	0 1 0	0 0 0	1 4 0	NR NR NR	NR NR NR	1 6 0
State and tribal register	red storage tar	nk lists						
FEMA UST	0.250		0	0	NR	NR	NR	0

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	<u>1/2 - 1</u>	<u>> 1</u>	Total Plotted
MA UST MA AST INDIAN UST	0.250 0.250 0.250		0 0 0	0 0 0	NR NR NR	NR NR NR	NR NR NR	0 0 0
State and tribal institution control / engineering control		es						
MA INST CONTROL	0.500		0	0	1	NR	NR	1
State and tribal voluntar	y cleanup site	es						
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfie	elds sites							
MA BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMEN	ITAL RECORD	<u>s</u>						
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / S Waste Disposal Sites	Solid							
INDIAN ODI DEBRIS REGION 9 ODI IHS OPEN DUMPS	0.500 0.500 0.500 0.500		0 0 0	0 0 0 0	0 0 0	NR NR NR NR	NR NR NR NR	0 0 0 0
Local Lists of Hazardous Contaminated Sites	s waste /							
US HIST CDL US CDL	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Local Land Records								
MA LIENS LIENS 2	TP TP		NR NR	NR NR	NR NR	NR NR	NR NR	0 0
Records of Emergency F	Release Repo	rts						
HMIRS MA SPILLS MA RELEASE MA SPILLS 90 MA SPILLS 80	TP TP TP TP TP	1	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	NR NR NR NR NR	0 0 1 0
Other Ascertainable Rec	ords							
RCRA NonGen / NLR FUDS DOD SCRD DRYCLEANERS US FIN ASSUR EPA WATCH LIST 2020 COR ACTION	0.250 1.000 1.000 0.500 TP TP 0.250		0 0 0 0 NR NR 0	1 0 0 0 NR NR 0	NR 0 0 0 NR NR NR	NR 0 0 NR NR NR NR	NR NR NR NR NR NR	1 0 0 0 0 0

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MAP FINDINGS SUMMARY

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Go	vt. Archives							
MA RGA HWS MA RGA LUST	TP TP	1	NR NR	NR NR	NR NR	NR NR	NR NR	0 1
- Totals		7	2	1	14	17	0	41

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Distance EDR ID Number
Elevation Site EDR ID Number

A1 SOUTH MIDDLE JR HIGH SCHOOL MA RGA LUST S115007627
Target 1141 BRAYTON AVE N/A

Target 1141 BRAYTON AVE Property SOMERSET, MA

Site 1 of 3 in cluster A

Actual: RGA LUST: 149 ft.

2012 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2011 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2010 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2009 2008 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2007 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2006 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE SOUTH MIDDLE JR HIGH SCHOOL 2005 1141 BRAYTON AVE 2004 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE 2003 SOUTH MIDDLE JR HIGH SCHOOL 1141 BRAYTON AVE SOUTH MIDDLE JR HIGH SCHOOL 2002 1141 BRAYTON AVE

 A2
 SOMERSET JR HIGH
 US AIRS 1008302052

 Target
 1141 BRAYTON AVENUE
 FINDS N/A

Property SOMERSET, MA 02726 ECHO

Site 2 of 3 in cluster A

Actual: US AIRS MINOR:

149 ft. Envid: 1008302052

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461
D and B Number: Not reported
Primary SIC Code: 8211
NAICS Code: 611110
Default Air Classification Code: MIN
Facility Type of Ownership Code: CTG
Air CMS Category Code: Not reported
HPV Status: Not reported

US AIRS MINOR:

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461 Air Operating Status Code: OPR

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1987-01-12 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461 Air Operating Status Code: OPR

Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1990-01-05 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

SOMERSET JR HIGH (Continued)

Activity Type: Inspection/Evaluation Activity Status: Not reported

Region Code:

AIR MA0000002512000729 Programmatic ID:

Facility Registry ID: 110021925461

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1993-01-19 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code:

AIR MA0000002512000729 Programmatic ID:

Facility Registry ID: 110021925461

Air Operating Status Code: OPR Default Air Classification Code: MIN

State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards Air Program:

Activity Date:

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Inspection/Evaluation Activity Type:

Activity Status: Not reported

Region Code:

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-11-15 00:00:00 Activity Status Date: Not reported

Activity Group: **Compliance Monitoring** Activity Type: Inspection/Evaluation

Activity Status: Not reported

US AIRS MINOR:

Envid: 1008302052

Region Code:

AIR MA0000002512000729 Programmatic ID:

Facility Registry ID: 110021925461 D and B Number: Not reported Primary SIC Code: 8211 NAICS Code: 611110 Default Air Classification Code: MIN Facility Type of Ownership Code: CTG Not reported Air CMS Category Code: HPV Status: Not reported

US AIRS MINOR:

Region Code:

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461

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1008302052

Distance EDR ID Number
Elevation Site EDR ID Number

SOMERSET JR HIGH (Continued) 1008302052

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1987-01-12 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461

Air Operating Status Code: OPR Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1990-01-05 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 0

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461
Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 1993-01-19 00:00:00
Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461

Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2002-02-11 00:00:00
Activity Status Date: Not reported
Activity Group: Compliance Monitoring

Activity Group: Compliance Monitoring
Activity Type: Inspection/Evaluation
Activity Status: Not reported

Region Code: 01

Programmatic ID: AIR MA0000002512000729

Facility Registry ID: 110021925461
Air Operating Status Code: OPR
Default Air Classification Code: MIN

Air Program: State Implementation Plan for National Primary and Secondary Ambient Air Quality Standards

Activity Date: 2011-11-15 00:00:00

Activity Status Date: Not reported

Activity Group: Compliance Monitoring Activity Type: Inspection/Evaluation

Activity Status: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

SOMERSET JR HIGH (Continued)

1008302052

FINDS:

Registry ID: 110021925461

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

AIR EMISSIONS CLASSIFICATION UNKNOWN

MA-EPICS - Massachussetts Environmental Protection Integrated Computer System

AIR MINOR

<u>Click this hyperlink</u> while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1008302052 Registry ID: 110021925461

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110021925461

A3 SOUTH MIDDLE JR HIGH SCHOOL MA LUST S102687526
Target 1141 BRAYTON AVE MA RELEASE N/A
Property SOMERSET, MA MA ASBESTOS

Site 3 of 3 in cluster A

Actual: 149 ft. LUST:

Facility:

Current Status:Not reportedRelease Tracking Number/Current Status:4-0013199 / RAOStatus Date:09/16/1997

 Source Type:
 UST

 Release Town:
 SOMERSET

 Notification Date:
 07/18/1997

 Category:
 72 HR

Category: 72 HR
Associated ID: Not reported
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Oil Or Haz Material:

Location Type: SCHOOL Source: UST

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 100 parts per million

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 7/24/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Release:

Release Tracking Number/Current Status: 4-0013199 / Primary ID: Not reported Official City: SOMERSET Notification: 07/18/1997 Category: 72 HR Status Date: 09/16/1997 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Map ID
Direction
Distance

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 7/24/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RN

Action Status: Reportable Release under MGL 21E

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 100 parts per million

Location Type: SCHOOL Source: UST

ASBESTOS:

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 12/27/2010 Start Date: End Date: 12/31/2010 Not reported Date Entered: Entry Date: 11/30/2010 Quantity Materical Removed SF: 80.00 Quantity Material Removed LF: .00 Project Description: Blr

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

AR Tracking ID: 135063 Super Lic Number: AS61476 AM060526 Monitor Lic Number: AA000007 Lab Lic Number: 2010 Year: Sticker Number: 100117396 Form Type: ANF-001 Fee Status: Exempt Facility Phone: Not reported Sub Town: Not reported Worksite: **BOILER ROOM** Occupied: Contractor: AC000627

Hours: Week days: 8-4 Week end:

Project Type: Rpr

Contract Type:

Abatement Process: Fcontain,Encp
Location: Indoors
Decon Process: 3 STAGE FULL

Disposal Methods: WRAPPED IN 2 LAYERS 6 MIL POLY LABELED AND SEALED

Facility Usage: SCHOOL
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ:

Owner Name: TOWN OF SOMERSET - SCHOOL DEPT

WRITTEN

Owner Address: 580 WHETSTONE HILL ROAD

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: **BANNER ENVIRO** Transporter Address: 16 BACK RIVER WAY

Transporter City: DUXBURY
Transporter State: Not reported

Final Site: 39

Certified Name: D NELSON
Cert Sign Date: 11/30/2010
Certified Company: BANNER
Certified Phone: 7819346873
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 01/21/2011 End Date: 01/21/2011 Not reported Date Entered: Entry Date: 01/20/2011 Quantity Materical Removed SF: 80.00 Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 136942

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

Super Lic Number: AS61476 Monitor Lic Number: AM060526 AA000007 Lab Lic Number: 2011 Year: Sticker Number: 100119751 Form Type: ANF-001 Fee Status: Exempt Facility Phone: Not reported Sub Town: Not reported SAME Worksite: Occupied: -1 AC000627 Contractor: Contract Type: WRITTEN

Hours: Week days: 8-4 Week end:

Project Type: Rpr
Abatement Process: Fcontain
Location: Indoors

Decon Process: 3 STAGAE FULL

Disposal Methods: WRAPPED IN 2 LAYERS 6 MIL POLY LABELED AND SEALED

Facility Usage: SCHOOL
Waiver Given: Not reported
DEP Waiver Number: SE 11-013
DLWD Waiver Number: 11-040 NB

Small Owner Occ: 5

Owner Name: TOWN OF SOMERSET

Owner Address: Not reported Owner City: Not reported

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported BANNER ENVIRO Transporter Name: Transporter Address: 16 BACK RIVER WAY

Transporter City: DUXBURY
Transporter State: Not reported
Final Site: 39

Certified Name: D NELSON
Cert Sign Date: 01/20/2011
Certified Company: BANNER
Certified Phone: 7819346873
Entered_by: Not reported

Notification: Not reported Not reported DEP Region: Notifiers Name: Not reported Start Date: 06/29/2004 End Date: 06/30/2004 Date Entered: Not reported 06/07/2004 Entry Date: Quantity Materical Removed SF: .00 Quantity Material Removed LF: 35.00 Project Description: Other:0 AR Tracking ID: 40571 Super Lic Number: AS040468

Distance EDR ID Number
Elevation Site EDR ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

Monitor Lic Number: AM051114 AA000173 Lab Lic Number: 2004 Year: Sticker Number: 100005650 Form Type: ANF-001 Fee Status: Exempt Facility Phone: 5083243140 Sub Town: Not reported

Worksite: MEN/WOMEN RESTROOM

Occupied: -1
Contractor: AC000412
Contract Type: WRITTEN

Hours: Week days: 8AM-4PM Week end:

Project Type: Renv
Abatement Process: Glv
Location: Indoors

Decon Process: REMOTE DECON UNIT

Disposal Methods: GLOVEBAG - WET ACM AND PLACE IN DOUBLE 6-MIL BAGS. DISPOSE AT EPA

APPROVED LANDFILL.

Facility Usage: SCHOOL
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ:

Owner Name: SOMERSET PUBLIC SCHOOLS
Owner Address: 580 WHETSTONE HILL ROAD

Owner City: SOMERSET

Owner State: MA
On Site Manager Name: NA

On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: 10000 Transporter Name: ERS, INC.

Transporter Address: 98 CAMBRIDGE ST.
Transporter City: MIDDLEBORO
Transporter State: Not reported

Final Site: 39

Certified Name: GARY PELLETIER
Cert Sign Date: 06/07/2004
Certified Company: ERS, INC.
Certified Phone: 5089986229
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 02/19/2007 Fnd Date: 02/23/2007 Date Entered: Not reported 02/06/2007 Entry Date: Quantity Materical Removed SF: .00 Quantity Material Removed LF: 38.00 Project Description: Trwl

AR Tracking ID:

Super Lic Number:

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79128

AS61476

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

AM060526 Monitor Lic Number: AA000007 Lab Lic Number: 2007 Year: Sticker Number: 100051349 ANF-001 Form Type: Fee Status: Exempt Facility Phone: Not reported Sub Town: Not reported Worksite: SAME Occupied: -1 AC000627 Contractor: Contract Type: WRITTEN

Hours: Week days: 8-4 Week end:

Project Type: Rpr Abatement Process: Glv Location: Indoors

Decon Process: SINGLE AND/OR 3 STAGE AS NEEDED

SOMERSET

Disposal Methods: WRAPPED IN 2 LAYER 6 MIL POLY LABELED AND SEALED W/ DUCT TAPE

Facility Usage: SCHOOL
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ: 5

Owner City:

Owner Name: SOMERSET SCHOOL DEPT
Owner Address: 580 WHETSTONE HILL RD

Owner State: MA On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported Not reported EXP Date: Facility Size: Not reported Not reported Transporter Name: Transporter Address: Not reported Transporter City: Not reported

Transporter State: Not reported Final Site: 47

Certified Name: D NELSON
Cert Sign Date: 02/06/2007
Certified Company: BANNER
Certified Phone: 7819346873
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/11/2013 End Date: 07/11/2013 Date Entered: Not reported Entry Date: 07/10/2013 Quantity Materical Removed SF: 00 Quantity Material Removed LF: 14.00 Project Description: Spr AR Tracking ID: 175854 Super Lic Number: AS000630 Monitor Lic Number: AM060297

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

Lab Lic Number: AA000131 Year: 2013 100181115 Sticker Number: Form Type: ANF-001 Fee Status: Exempt Facility Phone: Not reported Sub Town: Not reported Worksite: **THROUGHOUT** Occupied: AC000745 Contractor: Contract Type: WRITTEN

Hours: Week days: 7-3 Week end:

Project Type: Renv
Abatement Process: Glv
Location: Indoors
Decon Process: GLOVE BAG

Disposal Methods: ALL ACM HANDLED WET, DOUBLE BAGGED, LABELED, DISPOSED IN EPA LANDFILL

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: SE-132-16 DLWD Waiver Number: 6895-2013 Small Owner Occ: 5

Owner Name: SOMERSET MIDDLE SCHOOL

Owner Address: Not reported
Owner City: Not reported

Owner State: MA
On Site Manager Name: Not

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: CLEAN AIR ENVIRONMENTAL, INC

Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: 39

Certified Name: KEVIN GOHEEN
Cert Sign Date: 07/10/2013
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/23/2015 End Date: 07/25/2015 Date Entered: Not reported Entry Date: 07/10/2015 Quantity Materical Removed SF: 1832.00 Quantity Material Removed LF: Not reported

Project Description: OTHER VAT MASTIC COVE BASE

 AR Tracking ID:
 217118

 Super Lic Number:
 AS000630

 Monitor Lic Number:
 AM060297

 Lab Lic Number:
 AA000131

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SOUTH MIDDLE JR HIGH SCHOOL (Continued)

S102687526

 Year:
 2015

 Sticker Number:
 100224287

 Form Type:
 ANF-001

 Fee Status:
 EXEMPT

 Facility Phone:
 5083243100

 Sub Town:
 Not reported

 Worksite:
 HALLWAY

 Occupied:
 -1

 Contractor:
 AC000745

 Contract Type:
 WRITTEN

 Hours:
 7-7

 Project Type:
 Renv

 Abatement Process:
 Fcontain

 Location:
 INDOORS

Decon Process: FULL CONTAINMENT

Disposal Methods: ALL ACM HANDLED WET, DOUBLE BAGGED, LABELED, DISPOSED IN EPA LANDFILL

Facility Usage: SCHOOL
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ:

Owner Name: SOMERSET MIDDLE SCHOOL
Owner Address: 1141 BRAYTON AVENUE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: CARLOS CAMPOS
On Site Manager Phone: 5083243100
Ins Comp: LIBERTY MUTUAL
Policy Number: WC231S375413035

EXP Date: 3/29/2016 Facility Size: 137000

Transporter Name: CLEAN AIR ENVIRONMENTAL, INC

Transporter Address: 193 WEBSTER STREET

Transporter City:
Transporter State:
MA
Final Site:
Not reported
Certified Name:
KEVIN GOHEEN
Cert Sign Date:
07/10/2015

Certified Company: CLEAN AIR ENVIRONMENTAL, INC

Certified Phone: 6179702572 Entered_by: KEVINGO

4 SOUTH SCHOOL MA LUST 1001315434
700 READ ST MA RELEASE N/A
< 1/8 SOMERSET, MA 02726 MA AIRS

< 1/8 SOMERSET, MA 02726 0.000 mi.

2 ft.

Relative: LUST: Higher Facility: Actual:

Actual: Current Status: Not reported
155 ft. Release Tracking Number/Current Status: 4-0013198 / RAO

 Status Date:
 09/16/1997

 Source Type:
 UST

 Release Town:
 SOMERSET

 Notification Date:
 07/18/1997

 Category:
 72 HR

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

SOUTH SCHOOL (Continued) 1001315434

Associated ID: Not reported Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil Or Haz Material:

Location Type: SCHOOL Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 100 parts per million

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 7/24/199

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Release:

Release Tracking Number/Current Status: 4-0013198 / RAO

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SOUTH SCHOOL (Continued) 1001315434

 Primary ID:
 Not reported

 Official City:
 SOMERSET

 Notification:
 07/18/1997

 Category:
 72 HR

 Status Date:
 09/16/1997

 Phase:
 Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/18/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 7/24/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/16/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 100 parts per million

Location Type: SCHOOL Source: UST

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

SOUTH SCHOOL (Continued)

1001315434

AIRS:

Address 2: Not reported Facility Status: Not reported Permit Code: Not reported Permit Name: Not reported DEP Region: Not reported Application Tracking Number: Not reported Date Closed: Not reported Applicant Name: Not reported Applicant Address: Not reported Applicant City, St, Zip: Not reported Applicant Telephone: Not reported AQID: 1200731 SOUTH SCHOOL Owner Name: Latitude: 41.770435 -71.139158 Longitude: Primary NAICS:

NAICS Code: 611110

NAICS Desc: Elementary and Secondary Schools

AIRS:

Pollutant: AMMONIA
Actual Emission: 0
Emission Year: 2014

Pollutant: CARBON MONOXIDE

Actual Emission: 0 Emission Year: 2014

Pollutant: HALOGENATED ORGANIC COMPOUND

Actual Emission: 0 Emission Year: 2014

Pollutant: HYDROCARBON

Actual Emission: 0 Emission Year: 2014

Pollutant: NITROGEN OXIDES (NOx)

Actual Emission: 0 Emission Year: 2014

Pollutant: PM10, FILTERABLE

Actual Emission: 0 Emission Year: 2014

Pollutant: PM2.5, FILTERABLE

Actual Emission: 0 Emission Year: 2014

Pollutant: SULFUR DIOXIDE

Actual Emission: 0 Emission Year: 2014

Pollutant: VOLATILE ORGANIC COMPOUNDS (VOC)

Actual Emission: 0 Emission Year: 2014

Map ID MAP FINDINGS

Direction EDR ID Number Distance Elevation Database(s) **EPA ID Number**

NO LOCATION AID MA SHWS S105735818 5 ΝE 1250 BRAYTON RD **MA RELEASE** N/A < 1/8 SOMERSET, MA

01/10/2003

0.014 mi. 73 ft.

Relative: SHWS:

Lower Facility ID: 4-0017461 Actual: Source Type: **TRANSFORM** Release Town: SOMERSET 123 ft. Notification Date: 11/15/2002 Category: TWO HR Associated ID: Not reported **Current Status:** RAO

> Not reported Response Action Outcome: A1 Oil Or Haz Material: Oil

Release:

Status Date:

Phase:

Release Tracking Number/Current Status: 4-0017461 / RAO Primary ID: Not reported Official City: SOMERSET Notification: 11/15/2002 Category: TWO HR Status Date: 01/10/2003 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type:

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO Action Status: **RAO Statement Received**

1/10/2003 Action Date:

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

RNF Action Type:

Action Status: Reportable Release under MGL 21E

Action Date: 1/10/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

Action Date: 11/15/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Release Disposition Action Type:

Action Status: Reportable Release under MGL 21E

Action Date: 11/15/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

NO LOCATION AID (Continued) S105735818

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 11/20/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

TRANSFORMER OIL Chemical:

Quantity: 95 gallons INDUSTRIAL Location Type: **TRANSFORM** Source:

D&D SANDBLASTING RCRA NonGen / NLR 1007570462

ESE 125 GEORGE ST

1/8-1/4 SOMERSET, MA 02727 0.173 mi.

914 ft.

Relative: RCRA NonGen / NLR:

Lower Date form received by agency: 10/10/2002

D&D SANDBLASTING Facility name: Actual: Facility address: 125 GEORGE ST 85 ft. SOMERSET, MA 02727

EPA ID: MAR000505305 Contact:

OWNERNAME OWNERNAME Contact address: 125 GEORGE ST

SOMERSET, MA 02727

Contact country: US

Contact telephone: 999-999-9999 Not reported Contact email: EPA Region: 01 Private Land type: Classification: Non-Generator

Handler: Non-Generators do not presently generate hazardous waste Description:

Owner/Operator Summary:

OWNER NAME Owner/operator name: Owner/operator address: 125 GEORGE ST

SOMERSET, MA 02727

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/01/1900 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: Nο

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MAR000505305

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

D&D SANDBLASTING (Continued) 1007570462

On-site burner exemption: No Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: Nο

Violation Status: No violations found

Evaluation Action Summary:

Evaluation date: 09/30/2002

Evaluation: NOT A SIGNIFICANT NON-COMPLIER

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: EPA

Evaluation date: 08/08/2002

Evaluation: SIGNIFICANT NON-COMPLIER

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

7 HAROLD ST MA LUST \$102088162 ESE 230 READ ST MA INST CONTROL N/A 1/4-1/2 SOMERSET, MA 02726 MA RELEASE

0.253 mi. 1338 ft.

Relative: LUST:
Lower
Facility:
Actual:

Actual: Current Status: Not reported
69 ft. Release Tracking Number/Current Status: 4-0010795 / RAO

 Status Date:
 09/25/1995

 Source Type:
 UST

 Release Town:
 SOMERSET

 Notification Date:
 09/26/1994

 Category:
 72 HR

 Associated ID:
 Not reported

 Phase:
 Not reported

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Oil Or Haz Material:

Location Type: RESIDNTIAL

Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 188 parts per million

Map ID Direction Distance

MAP FINDINGS

Distance Elevation Site EDR ID Number EPA ID Number

HAROLD ST (Continued) S102088162

Chemical: #2 FUEL OIL
Quantity: 277 parts per million

Actions:

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 1/5/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 1/5/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDD1U
Action Date: 10/18/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 11/23/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 11/23/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Compliance and Enforcement Action Action Status: Interim Deadline Letter Issued

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

HAROLD ST (Continued) S102088162

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Amendment Received or Issued

Action Date: 3/15/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published

Action Date: 3/6/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published

Action Date: 9/20/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/25/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more $% \left(1\right) =\left(1\right) \left(

AULs that have been implemented.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 9/25/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/26/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 9/28/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Immediate Response Action Action Status: IRA Assessment Only

Action Date: 9/29/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

HAROLD ST (Continued) S102088162

INST CONTROL:

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: AMEND
Action Date: 03/15/2002

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: LEGNOT
Action Date: 03/06/2002

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: LEGNOT
Action Date: 09/20/1995

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: RECPT
Action Date: 09/25/1995

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: SNAUDI
Action Date: 11/23/2011

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0010795
Action Type: AUL
Action Stat: TSAUD
Action Date: 11/26/2001

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release:

Release Tracking Number/Current Status: 4-0010795 / Primary ID: Not reported
Official City: SOMERSET
Notification: 09/26/1994
Category: 72 HR
Status Date: 09/25/1995

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

HAROLD ST (Continued) S102088162

Phase: Not reported

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 1/5/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 1/5/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

 Action Type:
 RLFA

 Action Status:
 FLDD1U

 Action Date:
 10/18/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 11/23/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 11/23/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Compliance and Enforcement Action Action Status: Interim Deadline Letter Issued

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Map ID Direction Distance Elevation

MAP FINDINGS

Site EDR ID Number EPA ID Number

HAROLD ST (Continued) S102088162

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 11/26/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Amendment Received or Issued

Action Date: 3/15/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published

Action Date: 3/6/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Legal Notice Published

Action Date: 9/20/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/25/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 9/25/1995

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/26/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 9/28/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Immediate Response Action

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

HAROLD ST (Continued) S102088162

Action Status: IRA Assessment Only

Action Date: 9/29/1994

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Chemicals:

SOMERSET, MA

Chemical: #2 FUEL OIL
Quantity: 188 parts per million
Chemical: #2 FUEL OIL
Quantity: 277 parts per million
Location Type: RESIDNTIAL

Source: UST

 8
 NO LOCATION AID
 MA LAST
 \$108348058

 West
 1193 READ ST
 MA RELEASE
 N/A

1/4-1/2 0.254 mi. 1339 ft.

Relative: LAST:

Lower Release Tracking Number/Current Status: 4-0020152 / RAO

Actual: Source Type: AST

 146 ft.
 Release Town:
 SOMERSET

 Notification Date:
 11/07/2006

 Category:
 TWO HR

 Associated ID:
 Not reported

 State Date:
 10/17/2007

Associated ID: Not reported
Status Date: 10/17/2007
Phase: Not reported
Pespense Action Outcome: A2 A parma

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil Or Haz Material: Oil

Chemicals:

Chemical: #2 FUEL OIL
Quantity: Not reported
Location Type: RESIDNTIAL
Source: AST

Actions:

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 1/3/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 10/17/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 10/17/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Map ID Direction Distance Elevation Site

MAP FINDINGS

EDR ID Number Database(s) **EPA ID Number**

NO LOCATION AID (Continued)

S108348058

Action Type: Response Action Outcome - RAO Action Status: Fee Received - FMCRA Use Only

Action Date: 10/18/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: **RLFA** Action Status: **FOLOFF** Action Date: 11/14/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: **RLFA** FLDD1A Action Status: Action Date: 11/16/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

11/16/2006 Action Date:

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

A Notice sent to a Potentially Responsible Party (PRP) Action Type:

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc. Action Date:

11/17/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: Level I - Technical Screen Audit

Action Date: 11/30/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/7/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: **RLFA** Action Status: **FOLOFF** Action Date: 11/9/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

RLFA Action Type: Action Status: **FOLOFF** Action Date: 12/13/2006

A permanent solution has been achieved. Contamination has not been Response Action Outcome:

reduced to background.

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

12/13/2006 Action Date:

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

NO LOCATION AID (Continued) S108348058

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Written Plan Received

Action Date: 12/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received

Action Date: 3/12/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 3/14/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received

Action Date: 7/31/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action

Action Status: Modified Revised or Updated Plan Received

Action Date: 7/31/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Release:

Release Tracking Number/Current Status: 4-0020152 / Primary ID: Not reported
Official City: SOMERSET
Notification: 11/07/2006
Category: TWO HR
Status Date: 10/17/2007
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action

Map ID Direction Distance Elevation

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

NO LOCATION AID (Continued)

S108348058

Action Status: Level I - Technical Screen Audit

Action Date: 1/3/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 10/17/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 10/17/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 10/18/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/14/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1A
Action Date: 11/16/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 11/16/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 11/17/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 11/30/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/7/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

S108348058

NO LOCATION AID (Continued)

reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/9/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

 Action Type:
 RLFA

 Action Status:
 FOLOFF

 Action Date:
 12/13/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 12/13/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action Action Status: Written Plan Received

Action Date: 12/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received

Action Date: 3/12/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 3/14/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Status or Interim Report Received

Action Date: 7/31/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action

Action Status: Modified Revised or Updated Plan Received

Action Date: 7/31/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Database(s) **EPA ID Number**

S108348058 **NO LOCATION AID (Continued)**

Chemicals:

Chemical: #2 FUEL OIL Quantity: Not reported Location Type: RESIDNTIAL Source: AST

NO LOCATION AID MA SHWS S102088623 sw 1072 GRAND ARMY REPUBLIC HWY MA RELEASE N/A

1/4-1/2 SOMERSET, MA 0.354 mi.

1870 ft. Relative: SHWS:

Lower Facility ID: 4-0017907 Source Type: UNKNOWN Actual: Release Town: SOMERSET 131 ft. Notification Date: 07/09/2003 Category: 120 DY Associated ID: Not reported

Current Status: RAO 05/22/2007 Status Date: Phase: PHASE IV A2

Response Action Outcome:

Oil Or Haz Material: Oil and Hazardous Material

Facility ID: 4-0011851 Source Type: UNKNOWN Release Town: SOMERSET Notification Date: 12/18/1995 120 DY Category: Associated ID: Not reported **Current Status:** RAO Status Date: 11/13/1996 Phase: Not reported

Response Action Outcome:

Oil Or Haz Material: Hazardous Material

Release:

Release Tracking Number/Current Status: 4-0011851 / RAO Primary ID: Not reported Official City: SOMERSET Notification: 12/18/1995 Category: 120 DY 11/13/1996 Status Date: Phase: Not reported

A2 - A permanent solution has been achieved. Contamination has not Response Action Outcome:

been reduced to background.

Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: An activity type that is related to an Audit

FOLCD Action Status: Action Date: 10/1/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

NO LOCATION AID (Continued)

S102088623

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 11/13/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 11/8/1996

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/18/1995

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/18/1995

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 12/21/1995

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: An activity type that is related to an Audit

Action Status: NOA
Action Date: 4/7/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: An activity type that is related to an Audit

Action Status: Interim Deadline Letter Issued

Action Date: 7/23/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 7/23/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO

Action Status: Revised Statement or Transmittal Received

Action Date: 9/22/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Distance EDR ID Number
Elevation Site EDR ID Number

NO LOCATION AID (Continued)

S102088623

Chemicals:

Chemical: UNKNOWN CHEMICAL OF TYPE - HAZARDOUS MATERIAL

Quantity: 2900 micrograms per liter

Location Type: COMMERCIAL Source: UNKNOWN

Release Tracking Number/Current Status: 4-0017907 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 07/09/2003
Category: 120 DY
Status Date: 05/22/2007
Phase: PHASE IV

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.
Oil / Haz Material Type: Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 10/13/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 10/6/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 11/18/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 12/16/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 2/22/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

NO LOCATION AID (Continued)

S102088623

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 2/23/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 2/28/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 3/31/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 4/13/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only

Action Date: 4/5/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 4/7/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 5/22/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 6/17/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 6/21/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 6/21/2004

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

NO LOCATION AID (Continued)

S102088623

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Tier Classification
Action Status: Tier 2 Classification

Action Date: 6/21/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 6/25/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Phase 2

Action Status: Completion Statement Received

Action Date: 6/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Phase 3

Action Status: Completion Statement Received

Action Date: 6/29/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Fee Received - FMCRA Use Only

Action Date: 7/14/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 7/29/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 7/9/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/9/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 7/9/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

NO LOCATION AID (Continued) \$102088623

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 8/19/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 9/6/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical: C9 THRU C10 AROMATIC HYDROCARBONS

Quantity: 240 parts per million
Chemical: 2-METHYLNAPHTHALENE

Quantity: 9 parts per million

Chemical: TPH

Quantity:1430 parts per millionChemical:NAPHTHALENEQuantity:4.38 parts per million

Chemical: C11 THRU C22 AROMATIC HYDROCARBONS

Quantity: 340 parts per million Source: UNKNOWN

 B10
 FORMER MOBIL
 MA SHWS
 \$109029278

 SW
 992 GRAND ARMY HWY (RTE 6)
 MA LUST
 N/A

Not reported

1/4-1/2 SOMERSET, MA 02726

0.358 mi.

1890 ft. Site 1 of 4 in cluster B

SHWS: Relative: Lower Facility ID: 4-0021091 Source Type: Not reported Actual: SOMERSET Release Town: 02/20/2008 Notification Date: Category: 120 DY Associated ID: Not reported **Current Status:** RAO Status Date: 08/07/2008

Response Action Outcome: Not reported
Oil Or Haz Material: Oil and Hazardous Material

LUST:

Phase:

Facility:

Current Status:Not reportedRelease Tracking Number/Current Status:4-0020922 / 8AOStatus Date:08/07/2008Source Type:USTRelease Town:SOMERSETNotification Date:11/28/2007

Category: 72 HR
Associated ID: Not reported
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

TC5741137.2s Page 41

MA RELEASE

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER MOBIL (Continued) S109029278

been reduced to background.

Oil Or Haz Material:

Location Type: PRIVPROP Location Type: COMMERCIAL

Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: WASTE OIL
Quantity: 231 parts per million

Actions:

Action Type: BOL
Action Status: SHPFAC
Action Date: 1/20/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 1/24/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure

Action Status: Modified Revised or Updated Plan Received

Action Date: 1/24/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 1/25/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 1/25/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/28/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 11/28/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER MOBIL (Continued)

S109029278

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 12/12/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 12/12/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 2/2/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 8/7/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 9/26/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: BOI

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/28/201

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Release:

Release Tracking Number/Current Status: 4-0020922 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 11/28/2007
Category: 72 HR
Status Date: 08/07/2008
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: BOL
Action Status: SHPFAC
Action Date: 1/20/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

MAP FINDINGS

EDR ID Number

Database(s)

EPA ID Number

FORMER MOBIL (Continued)

S109029278

reduced to background.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 1/24/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure

Action Status: Modified Revised or Updated Plan Received

Action Date: 1/24/2012

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 1/25/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 1/25/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/28/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 11/28/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 12/12/200

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 12/12/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 2/2/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER MOBIL (Continued) S109029278

Action Status: RAO Statement Received

Action Date: 8/7/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 9/26/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/28/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical: WASTE OIL

Quantity: 231 parts per million
Location Type: PRIVPROP
Location Type: COMMERCIAL

Source: UST

Release Tracking Number/Current Status: 4-0021091 / Primary ID: Not reported
Official City: SOMERSET
Notification: 02/20/2008
Category: 120 DY
Status Date: 08/07/2008
Phase: Not reported

Response Action Outcome:

Oil / Haz Material Type: Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/20/2008
Response Action Outcome: Not reported

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 2/20/2008
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 4/30/2008
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 8/7/2008
Response Action Outcome: Not reported

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER MOBIL (Continued)

S109029278

Chemicals:

Chemical: C19 THRU C36 ALIPHATIC HYDROCARBONS

Quantity: 7710 milligrams per kilogram

Chemical: NICKEL

 Quantity:
 25.7 milligrams per kilogram

 Chemical:
 ACENAPHTHYLENE

 Quantity:
 1.05 milligrams per kilogram

Chemical: C11 THRU C22 AROMATIC HYDROCARBONS

Quantity: 2260 milligrams per kilogram

 B11
 CUMBERLAND FARMS V1949
 MA SHWS
 \$113410486

 SW
 992 GRAND ARMY HWY
 MA RELEASE
 N/A

 1/4-1/2
 SOMERSET, MA 02726
 MA HW GEN

4-0024629

0.358 mi.

1890 ft. Site 2 of 4 in cluster B

Relative: SHWS: Lower Facility ID:

Actual: Source Type: VEHICLE
137 ft. Release Town: SOMERSET
Notification Date: 06/25/2013
Category: TWO HP

Category: TWO HR
Associated ID: Not reported
Current Status: RAO
Status Date: 08/24/2013
Phase: Not reported

Response Action Outcome: A1
Oil Or Haz Material: Oil

Facility ID: 4-0026045 Source Type: **VEHICLE** Release Town: SOMERSET Notification Date: 04/06/2016 Category: TWO HR Associated ID: Not reported **Current Status: PSNC** 04/29/2016 Status Date: Phase: Not reported

Response Action Outcome: PN
Oil Or Haz Material: Not reported

Facility ID: 4-0026045 Source Type: HOSE SOMERSET Release Town: Notification Date: 04/06/2016 Category: TWO HR Associated ID: Not reported **Current Status: PSNC** Status Date: 04/29/2016 Phase: Not reported

Response Action Outcome: PN

Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0024629 / RAO Primary ID: Not reported Official City: SOMERSET

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

CUMBERLAND FARMS V1949 (Continued)

S113410486

 Notification:
 06/25/2013

 Category:
 TWO HR

 Status Date:
 08/24/2013

 Phase:
 Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 6/25/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 6/25/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 7/9/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 8/23/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 8/24/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical:GASOLINEQuantity:12 gallonsLocation Type:COMMERCIALSource:VEHICLE

Release Tracking Number/Current Status: 4-0026045 / PSNC

Primary ID: Not reported Official City: SOMERSET Notification: 04/06/2016 Category: TWO HR Status Date: 04/29/2016 Phase: Not reported Response Action Outcome: PN - PN Oil / Haz Material Type: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

CUMBERLAND FARMS V1949 (Continued)

S113410486

Click here to access the MA DEP site for this facility:

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 4/13/2016 Response Action Outcome: PN

Action Type: Response Action Outcome - RAO

Action Status: PSNRCD
Action Date: 4/29/2016
Response Action Outcome: PN

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/29/2016 Response Action Outcome: PN

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 4/6/2016 Response Action Outcome: PN

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 4/6/2016 Response Action Outcome: PN

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 5/16/2016
Response Action Outcome: PN

Chemicals:

Chemical: Not reported
Quantity: Not reported
Location Type: COMMERCIAL
Source: HOSE
Source: VEHICLE

HW GEN:

Name: CUMBERLAND FARMS V1949
Address: 992 GRAND ARMY HWY
City,State,Zip: SOMERSET, MA 02726
EPA ld: MV5086791261

EPA Id: MV508679126
RCRA Generator Status: VSQG
State Generator Status: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

 B12
 MOBIL STATION, FMR.
 MA LUST
 \$108962804

 SW
 992 GRAND ARMY HWY
 MA RELEASE
 N/A

1/4-1/2 SOMERSET, MA

0.358 mi.

1890 ft. Site 3 of 4 in cluster B

Relative: LUST:
Lower
Facility:
Actual:

Actual: Current Status: Not reported
137 ft. Release Tracking Number/Current Status: 4-0020951 / RAO

 Status Date:
 08/07/2008

 Source Type:
 UST

 Release Town:
 SOMERSET

 Notification Date:
 12/11/2007

 Category:
 72 HR

 Associated ID:
 Not reported

 Phase:
 Not reported

Response Action Outcome:

Oil Or Haz Material: Not reported

Location Type: COMMERCIAL

Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: SOIL HEADSPACE Quantity: 260 parts per million

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 12/11/2007 Response Action Outcome: 12/11/2007 Not reported

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/11/2007 Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 12/18/2007
Response Action Outcome: Not reported

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 2/7/2008
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 2/7/2008
Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

S108962804 MOBIL STATION, FMR. (Continued)

Action Date: 8/7/2008 Response Action Outcome: Not reported

Release:

Release Tracking Number/Current Status: 4-0020951 / RAO Primary ID: Not reported SOMERSET Official City: Notification: 12/11/2007 Category: 72 HR Status Date: 08/07/2008 Phase: Not reported Response Action Outcome: Not reported Oil / Haz Material Type:

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action Oral Approval of Plan or Action Action Status:

Action Date: 12/11/2007 Response Action Outcome: Not reported

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/11/2007 Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

A MassDEP piece of correspondence was issued (approvals, NORs, etc. Action Status:

Action Date: 12/18/2007 Response Action Outcome: Not reported

Action Type: **RNFE**

Action Status: Transmittal, Notice, or Notification Received

Action Date: 2/7/2008 Response Action Outcome: Not reported

Action Type: Immediate Response Action Action Status: Completion Statement Received

Action Date: 2/7/2008 Response Action Outcome: Not reported

Action Type: Response Action Outcome - RAO Action Status: **RAO Statement Received**

Action Date: 8/7/2008 Response Action Outcome: Not reported

Chemicals:

SOIL HEADSPACE Chemical: Quantity: 260 parts per million COMMERCIAL Location Type:

Source: UST

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

B13 CUMBERLAND FARMS GAS STATION MA SHWS S123244442
SW 992 G.A.R HWY MA RELEASE N/A

1/4-1/2 SOMERSET. MA

0.365 mi.

1925 ft. Site 4 of 4 in cluster B

Relative: SHWS:

 Lower
 Facility ID:
 4-0027337

 Actual:
 Source Type:
 OVERFILL

 134 ft.
 Release Town:
 SOMERSET

 Notification Date:
 07/16/2018

 Category:
 TWO HR

 Associated ID:
 Not reported

Associated ID: Not reported
Current Status: PSNC
Status Date: 09/05/2018
Phase: Not reported
Response Action Outcome: PN

Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0027337 / PSNC

Primary ID: Not reported Official City: SOMERSET 07/16/2018 Notification: TWO HR Category: 09/05/2018 Status Date: Phase: Not reported Response Action Outcome: PN - PN Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/16/2018 Response Action Outcome: PN

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/5/2018 Response Action Outcome: PN

Action Type: Response Action Outcome - RAO

Action Status: PSNRCD
Action Date: 9/5/2018
Response Action Outcome: PN

Chemicals:

Chemical: Not reported
Quantity: Not reported
Location Type: COMMERCIAL
Source: OVERFILL

EDR ID Number Distance Elevation Database(s) **EPA ID Number**

RT-6 ROADWAY MA SHWS S121394508 14 wsw **1160 GAR HWY** MA RELEASE N/A

Not reported

1/4-1/2 SOMERSET, MA 02726 0.375 mi.

1982 ft.

Relative: SHWS:

Lower Facility ID: 4-0026988 Actual: Source Type: VEHICLE Release Town: SOMERSET 124 ft. Notification Date: 12/08/2017 Category: TWO HR Associated ID: Not reported **Current Status: PSNC** Status Date: 12/22/2017

> Response Action Outcome: PΝ

Oil Or Haz Material: Not reported

Release:

Phase:

Release Tracking Number/Current Status: 4-0026988 / PSNC Primary ID: Not reported Official City: SOMERSET Notification: 12/08/2017 Category: TWO HR Status Date: 12/22/2017 Phase: Not reported Response Action Outcome: PN - PN

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO Level I - Technical Screen Audit Action Status:

Action Date: 10/26/2018 Response Action Outcome: ΡN

A Notice sent to a Potentially Responsible Party (PRP) Action Type:

A MassDEP piece of correspondence was issued (approvals, NORs, etc. Action Status:

12/12/2017 Action Date:

Response Action Outcome: ΡN

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 12/22/2017

Response Action Outcome: PΝ

Response Action Outcome - RAO Action Type:

Action Status: PSNRCD Action Date: 12/22/2017

Response Action Outcome: PΝ

Action Type: **RLFA** Action Status: FLDD1U Action Date: 12/8/2017 Response Action Outcome: PΝ

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

RT-6 ROADWAY (Continued) S121394508

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

12/8/2017 Action Date: Response Action Outcome:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/8/2017 Response Action Outcome: ΡN

Chemicals:

Chemical: Not reported Quantity: Not reported ROADWAY Location Type: Source: **VEHICLE**

15 IN FRONT OF HORNER MILL WORKS wsw IN FRONT OF 1255 GRAND ARMY HWY **MA RELEASE** SOMERSET, MA 1/4-1/2

4-0020357

0.436 mi. 2301 ft.

Relative: SHWS: Lower Facility ID:

Source Type: **FUELTANK** Actual: 107 ft. Release Town: SOMERSET Notification Date: 03/01/2007 Category: TWO HR Associated ID: Not reported **Current Status:** RAO

Status Date: 04/30/2007 Phase: Not reported Response Action Outcome: Oil Or Haz Material: Not reported

4-0020357 Facility ID: **VEHICLE** Source Type: Release Town: SOMERSET 03/01/2007 Notification Date: Category: TWO HR Associated ID: Not reported **Current Status:** RAO 04/30/2007 Status Date: Phase: Not reported

Response Action Outcome: Α1

Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0020357 / RAO Primary ID: Not reported SOMERSET Official City: Notification: 03/01/2007 Category: TWO HR Status Date: 04/30/2007 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

TC5741137.2s Page 53

MA SHWS

S108476934

N/A

Map ID
Direction
Distance

Distance EDR ID Number EDR atabase(s) EPA ID Number EPA ID Number

IN FRONT OF HORNER MILL WORKS (Continued)

S108476934

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 3/1/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 3/1/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 3/9/200

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 4/30/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 4/30/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 5/25/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: DIESEL
Quantity: 20 gallons
Location Type: STATE
Location Type: ROADWAY
Source: FUELTANK
Source: VEHICLE

Map ID MAP FINDINGS

Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

PROPERTY MA SHWS S101856653 16 ssw 718 GRAND ARMY REBULIC HWY **MA RELEASE**

1/4-1/2 SWANSEA, MA 02777

0.454 mi. 2397 ft

Relative: SHWS:

Higher Facility ID: 4-0006030 Actual: Source Type: Not reported Release Town: **SWANSEA** 149 ft. 02/16/1994 Notification Date: Category: NONE Associated ID: Not reported **Current Status:** RAO Status Date: 01/06/1995

> Phase: Not reported Response Action Outcome: A1

> Not reported Oil Or Haz Material:

Release:

Release Tracking Number/Current Status: 4-0006030 / RAO Primary ID: Not reported Official City: **SWANSEA** Notification: 02/16/1994 Category: NONE Status Date: 01/06/1995 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Abatement Measure Action Status: Completion Statement Received

Action Date: 1/6/1995

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO RAO Statement Received Action Status:

Action Date: 1/6/1995

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date:

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Compliance and Enforcement Action Action Status: Interim Deadline Letter Issued

Action Date: 2/16/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

EDR ID Number Distance Elevation Database(s) **EPA ID Number**

PROPERTY (Continued) S101856653

Action Type: Release Disposition Action Status: Valid Transition Site

Action Date: 2/16/1994

A permanent solution has been achieved. Contamination has been reduced Response Action Outcome:

to background or a threat of release has been eliminated.

Action Type: Release Abatement Measure Action Status: Written Plan Received

Action Date: 9/22/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: **TREGS LSPFA** Action Status: Action Date: 9/22/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: UNKNOWN Quantity: Not reported

C17 **BAKERS GULF** S102555568 MA SHWS **ESE 3 COUNTY ST MA RELEASE** N/A SOMERSET, MA

4-0012663

B1

1/4-1/2 0.473 mi.

13 ft.

2500 ft. Site 1 of 2 in cluster C

Relative: SHWS: Lower Facility ID: Source Type: Actual:

Not reported SOMERSET Release Town: Notification Date: 11/22/1996 Category: 120 DY Associated ID: Not reported **Current Status:** RAO 11/28/1997 Status Date: PHASE II Phase: Response Action Outcome:

Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0012663 / RAO Primary ID: Not reported Official City: SOMERSET Notification: 11/22/1996 Category: 120 DY Status Date: 11/28/1997 Phase: PHASE II

Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No

Significant Risk exists.

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Site

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

S102555568

BAKERS GULF (Continued)

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 1/3/1997

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: FLDISS
Action Date: 11/22/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/22/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 11/22/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 11/28/1997

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 11/28/1997

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 12/1/1997

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 3/4/1997

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Chemicals:

Chemical: GASOLINE VAPORS
Quantity: Not reported
Location Type: COMMERCIAL
Location Type: ROADWAY

MA TIER 2

Map ID MAP FINDINGS Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

1000312878 SOMER MOTORS INC 18 MA LUST sw 1491 BRAYTON POINT RD MA RELEASE N/A 1/4-1/2 MA HW GEN

0.493 mi. 2602 ft.

Relative: LUST: Lower Facility: Actual:

SOMERSET, MA 02725

Current Status: Not reported 126 ft. Release Tracking Number/Current Status: 4-0013093 / RAO

10/27/1997 Status Date: UST Source Type: Release Town: SOMERSET Notification Date: 06/13/1997 Category: 72 HR

Associated ID: Not reported Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil Or Haz Material:

Location Type: COMMERCIAL

Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: WASTE OIL Quantity: 100 parts per million

Actions:

Action Type: Response Action Outcome - RAO **RAO Statement Received** Action Status:

Action Date: 10/27/1997

A permanent solution has been achieved. Contamination has not been Response Action Outcome:

reduced to background.

Action Type: Immediate Response Action Action Status: Completion Statement Received

Action Date: 10/27/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: Fee Received - FMCRA Use Only

Action Date: 10/31/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA FLDD1U Action Status: Action Date: 11/3/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

SOMER MOTORS INC (Continued) 1000312878

Action Date: 6/13/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 6/13/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 6/19/199

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 8/11/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Release:

Release Tracking Number/Current Status: 4-0013093 / Primary ID: Not reported
Official City: SOMERSET
Notification: 06/13/1997
Category: 72 HR
Status Date: 10/27/1997
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 10/27/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 10/27/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 10/31/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

SOMER MOTORS INC (Continued)

1000312878

Action Type: **RLFA** FLDD1U Action Status: Action Date: 11/3/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action Action Status: Oral Approval of Plan or Action

Action Date: 6/13/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 6/13/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc. Action Date:

6/19/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

RNF Action Type:

Action Status: Reportable Release under MGL 21E

Action Date: 8/11/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

WASTE OIL Chemical: Quantity: 100 parts per million COMMERCIAL Location Type:

Source: UST

HW GEN:

SOMER MOTORS INC Name: 1491 BRAYTON POINT RD Address: City,State,Zip: SOMERSET, MA 02725 EPA Id: MAR000546242

RCRA Generator Status: VSQG State Generator Status: LQG-MA

SOMERSET CHRYSLER JEEP Name: Address: 1491 BRAYTON POINT RD City, State, Zip: SOMERSET, MA 02725 MAD985267806 EPA Id:

RCRA Generator Status: **VSQG** State Generator Status: LQG-MA

TIER 2:

Name: STATE LINE CHRYSLER JEEP DODGE RAM

Address: 1491 BRAYTON POINT RD. City, State, Zip: SOMERSET, MA 02725

Report Year: 2018

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

SOMER MOTORS INC (Continued)

Mailing Country:

Latlong Method:

1000312878

Facility Id: FATR2018000000041497

Facility Dept: Not reported Latitude: 41.730800 Longitude: -71.174000

Mailing Address: 1491 Brayton Point Rd. Mailing City/State/Zip: 02725

Not reported

Not reported

Notes: Not reported All Chemicals Same As Last Yr: Not reported Date Signed: 2019-03-29 Dike Or Other Safeguard: Not reported Failed Validation: Not reported Date Modified: 03/28/2019 Fees Total: Not reported Num Of Employees: 20 Site Coord Abbreviated?: false Site Map: Not reported State Label Code: Not reported Submitted By: Not reported Validation Report: Not reported Fire District: Not reported Latlong Location Description: Not reported

Record Key: FDTR2018000000034225

Id:Not reportedType:EINDescription:Not reportedLast Modified:Not reported

Record Key: FDTR2018000000034226

Id: Not reported Type: RMP

Description: Not reported Last Modified: Not reported

Record Key: FDTR2018000000034227

Id:Not reportedType:SICDescription:Not reportedLast Modified:Not reported

Record Key: FDTR201800000034228

Id:Not reportedType:State IDDescription:Not reportedLast Modified:Not reported

Record Key: FDTR2018000000034229

Id:Not reportedType:TRIDescription:Not reportedLast Modified:Not reported

Record Key: FDTR2018000000034230

Id: Not reported Type: T2M Facility ID

MAP FINDINGS

EDR ID Number

Database(s) EPA ID Number

SOMER MOTORS INC (Continued)

1000312878

Description: Not reported Last Modified: Not reported

Record Key: FDTR2018000000034231

Id:Not reportedType:NAICSDescription:Not reportedLast Modified:Not reported

Record Key: FDTR2018000000034232

Id: Not reported
Type: DUN & BradStreet
Description: Not reported
Last Modified: Not reported

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384299P41497

Title: Not reported Contact Name: Not reported Contact Email: Not reported

Contact Mail Address: 1491 Brayton Point Rd.

Contact Mail City: Somerset Contact Mail State: MA Contact Mail Zip: 02725 Contact Mail Country: US Contact1 Type: Other Contact2 Type: Not reported Contact3 Type: Not reported Contact4 Type: Not reported Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018155632P41497

Title: Not reported
Contact Name: Batteries
Contact Email: Not reported
Contact Mail Address: 78 County St.
Contact Mail City: East Freetown

Contact Mail State: MA Contact Mail Zip: 02717 Contact Mail Country: Not reported Carrier Contact Contact1 Type: Contact2 Type: Not reported Contact3 Type: Not reported Contact4 Type: Not reported Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384296P41497

Title: Not reported Contact Name: Kardon

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

SOMER MOTORS INC (Continued)

1000312878

Contact Email: ekardon@route24auto.com

Contact Mail Address: 1016 Belmont St.
Contact Mail City: Brockton
Contact Mail State: MA
Contact Mail Zip: 02301
Contact Mail Country: US

Contact1 Type: Owner / Operator
Contact2 Type: Not reported
Contact3 Type: Not reported
Contact4 Type: Not reported
Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384349P41497

Title: Service Manager Contact Name: Bowman

Contact Email: dbowman@route24auto.com

Contact Mail Address: Not reported Contact Mail City: Not reported Contact Mail State: Not reported Contact Mail Zip: Not reported Contact Mail Country: Not reported Not reported

Contact1 Type: Tier II Information Contact

Contact2 Type: Not reported
Contact3 Type: Not reported
Contact4 Type: Not reported
Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384350P41497

Title: Service Manager

Contact Name: Bowman

Contact Email: dbowman@route24auto.com

Contact Mail Address: Not reported
Contact Mail City: Not reported
Contact Mail State: Not reported
Contact Mail Zip: Not reported
Contact Mail Country: Not reported

Contact1 Type: Fac. Emergency Coordinator

Contact2 Type: Not reported
Contact3 Type: Not reported
Contact4 Type: Not reported
Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384351P41497

Title: Service Manager

Contact Name: Bowman

Contact Email: dbowman@route24auto.com

Contact Mail Address: Not reported

MAP FINDINGS

Site EDR ID Number

EPA ID Number

SOMER MOTORS INC (Continued)

1000312878

Contact Mail City: Not reported Contact Mail State: Not reported Contact Mail Zip: Not reported Contact Mail Country: Not reported Contact1 Type: **Emergency Contact** Contact2 Type: Not reported Contact3 Type: Not reported Contact4 Type: Not reported Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384352P41497

Title: General Manager

Contact Name: Viera

Contact Email: al@route24auto.com Contact Mail Address: Not reported Not reported Contact Mail City: Contact Mail State: Not reported Contact Mail Zip: Not reported Contact Mail Country: Not reported Contact1 Type: **Emergency Contact** Contact2 Type: Not reported

Contact3 Type: Not reported
Contact4 Type: Not reported
Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384297P41497
Title: Not reported
Contact Name: Not reported
Contact Email: Not reported
Contact Mail Address: Not reported
Contact Mail City: Not reported

Contact Mail State: Not reported Contact Mail Zip: Not reported Contact Mail Country: Not reported Contact1 Type: Billing Contact2 Type: Not reported Contact3 Type: Not reported Contact4 Type: Not reported Modification Date: 1900-01-01

Contact:

Report Year: 2018

Contact Record Id: CTTR2018384295P41497

Title: Not reported
Contact Name: Not reported
Contact Email: Not reported
Contact Mail Address: Not reported
Contact Mail City: Not reported
Contact Mail State: MA

Map ID
Direction
Distance

EDR ID Number Database(s) EPA ID Number

SOMER MOTORS INC (Continued)

1000312878

Contact Mail Zip: Not reported

Contact Mail Country: US

Contact1 Type: Parent Company
Contact2 Type: Not reported
Contact3 Type: Not reported
Contact4 Type: Not reported
Modification Date: 1900-01-01

Chemicals:

Elevation

Site

Acute: Not reported Ave Amount: Not reported Ave Amount Code: Not reported

Chem Inv Record Id: CVTR2018000000155632

Chem Same As Last Yr: false
Chronic: Not reported
CICAS: Not reported
CI EHS Chemical: false
CI Last Modified: 2019-03-29

Days On Site: 365

Entered Chemical Name:

Fire:

Gas:
Liquid:
Max Amount:
Max Amount Code:
Max Amt Container:
Max Amount:
Max Amount:
Max Amount Code:
Max Amt Container:
Max Amount:
Max Amount Code:
Max Amt Container:
Max

Pressure: Not reported Pure: false Reactive: Not reported Solid: true

State01 Checkbox: Not reported State01 Number: Not reported State01 Text: Not reported State02 Checkbox: Not reported State02 Number: Not reported State02 Text: Not reported Not reported State03 Checkbox: State03 Number: Not reported State03 Text: Not reported State04 Checkbox: Not reported State04 Number: Not reported State04 Text: Not reported State05 Checkbox: Not reported Not reported State05 Text: State06 Checkbox: Not reported State06 Text: Not reported State07 Checkbox: Not reported State07 Text: Not reported State1 Contact Field: Not reported State Label Code: Not reported

Location:

Trade Secret:

Record Key: CLTR201800000S428637 Chem Inv Record Id: CVTR2018000000155632

false

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

SOMER MOTORS INC (Continued)

1000312878

Type Code: Battery

Pressure Code: Ambient pressure Temperature Code: Ambient temperature Location: in cars on property

4200 Amount: Amount Unit: lbs 2019-03-29 Last Modified:

CLTR201800000S428638 Record Key: CVTR2018000000155632 Chem Inv Record Id:

Type Code: Battery

Pressure Code: Ambient pressure Temperature Code: Ambient temperature

Location: In Parts Amount: 1400 Amount Unit: lbs Last Modified: 2019-03-29

Chemical Mixture:

Record Key: CLTR201800000M166319 Chem Inv Rec Id: CVTR2018000000155632

Mx Chem: Lead Mx CAS: 7439921 Percentage: Not reported Wt Vol: weight Mx EHS: false Mx Last Modified: 2019-03-29

Record Key: CLTR201800000M166318 Chem Inv Rec Id: CVTR2018000000155632

Mx Chem: Sulfuric Acid Mx CAS: 7664939 Percentage: Not reported Wt Vol: weight Mx EHS: true Mx Last Modified: 2019-03-29

C19 **VEHICLE ACCIDENT** MA SHWS S117277536 **ESE** IN FRONT OF 54 COUNTY STREET MA RELEASE N/A

1/2-1 SOMERSET, MA

0.503 mi.

Site 2 of 2 in cluster C 2654 ft.

SHWS: Relative: Lower Facility ID:

4-0025254 Source Type: VEHICLE Actual: Release Town: SOMERSET 18 ft. 07/31/2014 Notification Date: Category: TWO HR Associated ID: Not reported **Current Status: PSNC** Status Date: 12/19/2014

> Phase: Not reported Response Action Outcome: PΝ

Oil Or Haz Material: Oil

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

VEHICLE ACCIDENT (Continued)

S117277536

Release:

Release Tracking Number/Current Status: 4-0025254 / PSNC

Primary ID: Not reported Official City: SOMERSET Notification: 07/31/2014 Category: TWO HR Status Date: 12/19/2014 Phase: Not reported Response Action Outcome: PN - PN Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 10/31/2014

Response Action Outcome: PN

Action Type: Compliance and Enforcement Action Action Status: Notice of Non-Compliance Issued

Action Date: 11/19/2014

Response Action Outcome: PN

Action Type: Response Action Outcome - RAO

Action Status: PSNRCD
Action Date: 12/19/2014
Response Action Outcome: PN

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 12/19/2014
Response Action Outcome: PN

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 7/31/2014
Response Action Outcome: PN

Action Type: RLFA
Action Status: FLDD1U
Action Date: 7/31/2014
Response Action Outcome: PN

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 7/31/2014
Response Action Outcome: PN

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/3/2014
Response Action Outcome: PN

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Distance EDR ID Number
Elevation Site EDR ID Number

VEHICLE ACCIDENT (Continued) S117277536

Action Date: 9/9/2014 Response Action Outcome: PN

Chemicals:

Chemical: DIESEL FUEL
Quantity: Not reported
Location Type: ROADWAY
Location Type: COMMERCIAL
Source: VEHICLE

 20
 PETRO-TECH
 MA SHWS
 \$101040313

 SSE
 266 GRAND ARMY REPUBLIC HWY
 MA SPILLS
 N/A

SSE 266 GRAND ARMY REPUBLIC HWY MA SPILLS N/A
1/2-1 SOMERSET, MA MA RELEASE

0.554 mi. 2923 ft.

Relative: SHWS:

 Lower
 Facility ID:
 4-0018207

 Actual:
 Source Type:
 PIPE

 86 ft.
 Release Town:
 SOMERSET

 Notification Date:
 01/05/2004

Response Action Outcome: A1
Oil Or Haz Material: Oil

MA Spills:

Facility ID: 9-9999 S91-0676 Spill ID: Staff Lead: MORAN, M Date Entered: Not reported Last Entered: 19911114 First Response: 19911106 Spill Date: Not reported Spill Time: Not reported Report Time: Report Date: 19911029 10:00AM **PETROLEUM** Case Closed: YES Mat Type: Virgin Waste: VIRGIN Contam Soil: Not reported Env Impact: SOIL Other Impact: Not reported **GASOLINE** Material: Other Material: Not reported Qty Reported: 11-50 Qty Actual: Qty Reported: **CUBIC YDS** Qty Actual: CAS No: Not reported PCB Lev (ppm): Source: U.S.T. Other Source: Not reported Not reported

Source:U.S.T.Other Source:Not reportedIncident:OVERFILLOther Incidnt:Not reportedCleanup Type:SSCContractor:NOT USEDReferral:NOLUST Elig:---

Report Prep: Not reported Category: Not reported

Notifier: ROBERT GRACIE, SOMERSET BH

Notif Tel: Not reported Days/Close: 0

Release:

Release Tracking Number/Current Status: 4-0018207 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 01/05/2004

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

PETRO-TECH (Continued)

S101040313

Category: TWO HR
Status Date: 12/23/2005
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oi

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Compliance and Enforcement Action

Action Status: ACOP Action Date: 1/31/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 1/5/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 1/5/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 1/9/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 12/23/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 12/23/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Compliance and Enforcement Action Action Status: Notice of Non-Compliance Issued

Action Date: 3/2/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated

Action Type: Compliance and Enforcement Action Action Status: Notice of Non-Compliance Issued

Action Date: 5/13/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Distance EDR ID Number
Elevation Site EDR ID Number

PETRO-TECH (Continued) S101040313

Action Type: Compliance and Enforcement Action Action Status: Notice of Non-Compliance Issued

Action Date: 6/13/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Compliance and Enforcement Action Action Status: Notice of Non-Compliance Issued

Action Date: 6/2/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO

Action Status: Fee Not Required - Fee Credited-FMCRA Use Only

Action Date: 7/20/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: DIESEL FUEL
Quantity: 15 gallons
Location Type: COMMERCIAL
Location Type: ROADWAY
Source: PIPE

21 HOME DEPOT MA SHWS \$106775907 South 535 GAR HIGHWAY RTE 6-BRAYTON POINT RD MA RELEASE N/A

1/2-1 SOMERSET, MA

0.612 mi. 3231 ft.

Relative: SHWS:

 Lower
 Facility ID:
 4-0018798

 Actual:
 Source Type:
 TRANSFORM

 137 ft.
 Release Town:
 SOMERSET

 Notification Date:
 11/26/2004

 Notification Date:
 11/26/2004

 Category:
 TWO HR

 Associated ID:
 Not reported

 Current Status:
 RAO

 Status Date:
 01/19/2005

 Phase:
 Not reported

Response Action Outcome: A2
Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0018798 / Primary ID: Not reported
Official City: SOMERSET
Notification: 11/26/2004
Category: TWO HR
Status Date: 01/19/2005
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

HOME DEPOT (Continued) S106775907

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 1/19/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 1/19/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 11/26/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/26/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/26/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 12/1/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 12/15/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical: TRANSFORMER OIL

Quantity:100 gallonsLocation Type:COMMERCIALLocation Type:UTILEASESource:TRANSFORM

Distance EDR ID Number
Elevation Site EDR ID Number

22 FORMER FRESHWATER RESERVOIR TANK MA SHWS S122300470 East 1901 RIVERSIDE AVENUE MA RELEASE N/A

1/2-1 SOMERSET, MA 02726

0.687 mi. 3625 ft.

Relative: SHWS:

Lower Facility ID: 4-0027291 Actual: Source Type: UNKNOWN Release Town: SOMERSET 40 ft. Notification Date: 06/12/2018 Category: 120 DY Associated ID: Not reported **Current Status:** UNCLSS Status Date: 06/12/2018 Phase: Not reported

Response Action Outcome: Not reported Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0027291 / UNCLSS

Primary ID: Not reported
Official City: SOMERSET
Notification: 06/12/2018
Category: 120 DY
Status Date: 06/12/2018
Phase: Not reported

Response Action Outcome: -

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 6/12/2018
Response Action Outcome: Not reported

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 6/12/2018
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 6/28/2018
Response Action Outcome: Not reported

Chemicals:

Chemical: Not reported Quantity: Not reported Source: UNKNOWN

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

23 7-ELEVEN #33227 MA SHWS U003907867 West 1693 GRAND ARMY REPUBLIC HWY MA UST N/A

1/2-1 SOMERSET, MA 02725 MA RELEASE 0.711 mi. MA HW GEN

0.711 mi. 3754 ft.

 Relative:
 SHWS:

 Lower
 Facility ID:
 4-0018048

 Actual:
 Source Type:
 Not reported

 39 ft.
 Release Town:
 SOMERSET

 Notification Date:
 09/22/2003

 Category:
 120 DY

 Category:
 120 DY

 Associated ID:
 Not reported

 Current Status:
 RAO

 Status Date:
 12/19/2003

 Phase:
 Not reported

Response Action Outcome: B1

Oil Or Haz Material: Hazardous Material

UST:

Facility:

Name: 7-ELEVEN #33227

Address: 1693 GRAND ARMY REPUBLIC HWY

City, State, Zip: SOMERSET, MA 02725

 Facility ID:
 22162

 Owner Id:
 7911

 Owner:
 7-ELEVEN INC

1722 ROUTH ST Owner Address: Owner City, St, Zip: DALLAS, TX 75221 Telephone: Not reported Description: Not reported Facility address 2: Not reported PO BOX 711 Owner address 2: Latitude: 41.73778 Longitude: -71.18298 Contact name: Mark Becker Contact address1: 47 Fairways Blvd Contact address2: Not reported . Williamsville Contact city:

Contact state: NY
Contact zip: 14221

Contact email: mark.becker@7-11.com
Update: 2017-05-12 00:00:00

Mark Pooker.

Update by: Mark Becker Fac status: CLOSED

Tank ID:

 Tank Status:
 Tank Removed

 Status Date:
 05/10/2017

 Date Installed:
 11/01/2001

 Capacity:
 15000.00000

 Contents:
 Gasoline

 Tank Usage:
 Motor Vehi

Tank Leak Detection: Continuous Interstitial Monitoring
Pipe Leak Detection: Continuous Interstitial Space Monitoring

Latitude: Not reported Longitude: Not reported

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number

7-ELEVEN #33227 (Continued)

U003907867

Tank construct: Double-walled non-corrodible (including "composite") material (cathodic protection not required)

Pipe construct: Double-walled non-corrodible material (No corrosion protection required)
Ptype: Pressurized piping system with mechanical automatic line leak detection

Number of compartment: Not reported

Pipe install date: 11/01/2001
Pipe leak install date: Not reported

Submersible sump:

Submersible sump install date: 11/01/2001

Turbine sump: Y
Turbine sump sensor: Y
Intermediate sump: N
Intermediate sump sensor: N
Spill bucket installed date: 11/01/2001

Spill bucket sensor: N

Overfill protect install: 11/01/2001

Overfill protect type: Automatic shut-off valve
Automatic line leak detect: 11/01/2001
Tank corrosion type: Not reported
Leak corrosion type: Not reported

Tank ID: 2

 Tank Status:
 Tank Removed

 Status Date:
 05/10/2017

 Date Installed:
 11/01/2001

 Capacity:
 10000.00000

 Contents:
 Gasoline

 Tank Usage:
 Motor Vehi

Tank Leak Detection: Continuous Interstitial Monitoring
Pipe Leak Detection: Continuous Interstitial Space Monitoring

Latitude: Not reported Longitude: Not reported

Tank construct: Double-walled non-corrodible (including "composite") material (cathodic protection not required)

Pipe construct: Double-walled non-corrodible material (No corrosion protection required)
Ptype: Pressurized piping system with mechanical automatic line leak detection

Number of compartment: Not reported Pipe install date: 11/01/2001 Pipe leak install date: 11/01/2001 Submersible sump: Y

Submersible sump install date: 11/01/2001

Turbine sump: Y
Turbine sump sensor: Y
Intermediate sump: N
Intermediate sump sensor: N
Spill bucket installed date: 11/01/2001

Spill bucket sensor: N

Overfill protect install: 11/01/2001

Overfill protect type: Automatic shut-off valve
Automatic line leak detect: 11/01/2001
Tank corrosion type: Not reported
Leak corrosion type: Not reported

Release:

Release Tracking Number/Current Status: 4-0018048 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 09/22/2003

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

7-ELEVEN #33227 (Continued) U003907867

Category: 120 DY
Status Date: 12/19/2003
Phase: Not reported

Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No

Significant Risk exists.
Oil / Haz Material Type: Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 11/17/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Compliance and Enforcement Action Action Status: Interim Deadline Letter Issued

Action Date: 11/17/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Compliance and Enforcement Action

Action Status: RFI
Action Date: 11/17/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 12/19/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 3/12/2004

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/22/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/22/2003

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Chemicals:

Chemical: METHYL TERT-BUTYL ETHER

Quantity: 0.34 parts per million

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

7-ELEVEN #33227 (Continued)

U003907867

HW GEN:

Name: 7 ELEVEN 33227

1693 GRAND ARMY REPUBLIC HWY Address:

City, State, Zip: SOMERSET, MA 02725 EPA Id: MAR000504027

VSQG RCRA Generator Status: State Generator Status: Not reported

24 **GREECE BIBLE CHURCH** MA SHWS S113411834 SSE **802 RIVERSIDE AVENUE** MA RELEASE N/A

1/2-1 0.723 mi. 3820 ft.

SHWS:

SOMERSET, MA

Relative: Lower Facility ID: 4-0024413 Source Type: **TRANSFORM** Actual: Release Town: SOMERSET 31 ft. Notification Date: 02/11/2013 TWO HR Category: Associated ID: Not reported **Current Status:** RAO 04/13/2013 Status Date:

> Phase: Not reported Response Action Outcome: A2 Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0024413 / RAO Primary ID: Not reported SOMERSET Official City: Notification: 02/11/2013 Category: TWO HR Status Date: 04/13/2013 Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type:

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/11/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

A Notice sent to a Potentially Responsible Party (PRP) Action Type:

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/22/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: **RNFE**

Action Status: Transmittal, Notice, or Notification Received

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

GREECE BIBLE CHURCH (Continued) S113411834

Action Date: 4/10/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 4/13/2013

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical:NON PCB MODFQuantity:51 gallonsLocation Type:PRIVPROPSource:TRANSFORM

 D25
 GIBBS OIL CO
 MA SHWS
 \$106513384

 ENE
 514 COUNTY ST
 MA RELEASE
 N/A

0.746 mi. 3940 ft.

1/2-1

Site 1 of 2 in cluster D

SOMERSET, MA

Relative: SHWS:

Lower Facility ID: 4-0016426 Source Type: Not reported Actual: SOMERSET 80 ft. Release Town: Notification Date: 05/02/2001 Category: 120 DY Associated ID: Not reported **Current Status:** RAO Status Date: 09/17/2001 Phase: Not reported

Response Action Outcome: B1
Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0016426 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 05/02/2001
Category: 120 DY
Status Date: 09/17/2001
Phase: Not reported

Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No

Significant Risk exists.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 5/18/2004

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Database(s) **EPA ID Number**

GIBBS OIL CO (Continued) S106513384

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

5/2/2001 Action Date:

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: **RNF**

Action Status: Reportable Release under MGL 21E

Action Date: 5/2/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Response Action Outcome - RAO Action Status: **RAO Statement Received**

Action Date: 9/17/2001

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Chemicals:

Chemical: C5 THRU C8 ALIPHATIC HYDROCARBONS

1200 parts per billion Quantity:

D26 **HESS STATION** MA SHWS S105522085 ENE **516 COUNTY ST** MA RELEASE N/A

4-0016973

1/2-1 SOMERSET, MA 0.750 mi.

3958 ft. Site 2 of 2 in cluster D

Phase:

Relative: SHWS: Lower Facility ID:

Source Type: **VEHICLE** Actual: Release Town: SOMERSET 80 ft. Notification Date: 04/01/2002 Category: TWO HR Associated ID: Not reported **Current Status:** RAO 07/10/2002 Status Date:

Not reported Response Action Outcome: Α1 Oil Or Haz Material: Oil

Facility ID: 4-0018728 Source Type: **TANKER** Release Town: SOMERSET Notification Date: 10/18/2004 Category: TWO HR Associated ID: Not reported **Current Status:** RAO Status Date: 12/17/2004 Phase: Not reported

Response Action Outcome: Α1 Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0016973 / RAO Primary ID: Not reported Official City: SOMERSET

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

HESS STATION (Continued) S105522085

Notification: 04/01/2002
Category: TWO HR
Status Date: 07/10/2002
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 4/1/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/1/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 4/1/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 5/2/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RN

Action Status: Reportable Release under MGL 21E

Action Date: 5/29/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 6/11/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: Written Plan Received

Action Date: 6/7/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 7/10/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

Distance EDR ID Number
Elevation Site EDR ID Number

HESS STATION (Continued) S105522085

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 7/10/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 7/15/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: GASOLINE
Quantity: 10 gallons
Location Type: COMMERCIAL
Location Type: RESIDNTIAL
Location Type: ROADWAY
Source: VEHICLE

Release Tracking Number/Current Status: 4-0018728 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 10/18/2004
Category: TWO HR
Status Date: 12/17/2004
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been required to background or a threat of release her been eliminated.

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 10/18/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 10/19/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/16/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

S105522085

HESS STATION (Continued)

Action Date: 11/23/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/17/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 12/17/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 12/17/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Written Plan Received

Action Date: 12/17/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/23/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical:GASOLINEQuantity:20 gallonsLocation Type:COMMERCIALSource:TANKER

27 FORMER SOMERSET POWER LLC East 1606 RIVERSIDE AVE

1606 RIVERSIDE AVE SOMERSET, MA 02726

1/2-1 SOMERSET, MA 0 0.787 mi. 4156 ft.

Relative:

Lower

Actual:

38 ft.

MA SHWS 1001493262
MA LAST MAR000014308
MA AST
MA INST CONTROL
MA RELEASE

RCRA NonGen / NLR MA ASBESTOS MA HW GEN NJ MANIFEST RI MANIFEST

SHWS:

 Facility ID:
 4-0001017

 Source Type:
 Not reported

 Release Town:
 SOMERSET

 Notification Date:
 01/15/1991

 Category:
 NONE

Map ID Direction Distance

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Associated ID: Not reported Current Status: DEPNDS Status Date: 07/23/1993 Phase: Not reported Response Action Outcome: Not reported Oil Or Haz Material: Not reported

Facility ID: 4-0014126 Source Type: Not reported Release Town: SOMERSET Notification Date: 09/04/1998 Category: 120 DY Associated ID: Not reported **Current Status:** RAO Status Date: 09/07/1999 PHASE II Phase: Response Action Outcome: B2

Oil Or Haz Material: Not reported

4-0018175 Facility ID: Source Type: Not reported Release Town: SOMERSET Notification Date: 12/11/2003 Category: 120 DY Associated ID: Not reported **Current Status:** RAO 09/14/2004 Status Date: Phase: Not reported

Response Action Outcome: A3
Oil Or Haz Material: Oil

4-0016023 Facility ID: Source Type: PIPE SOMERSET Release Town: Notification Date: 02/04/2001 TWO HR Category: Associated ID: Not reported **Current Status:** RAO 04/05/2001 Status Date: Not reported Phase:

Response Action Outcome: A2
Oil Or Haz Material: Oil

Facility ID: 4-0016023 Source Type: UNKNOWN SOMERSET Release Town: Notification Date: 02/04/2001 Category: TWO HR Associated ID: Not reported **Current Status:** RAO Status Date: 04/05/2001 Phase: Not reported

Response Action Outcome: A2
Oil Or Haz Material: Oil

Facility ID: 4-0010291 Source Type: DRUMS

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Release Town:

Notification Date:

O2/22/1994
Category:

TWO HR
Associated ID:

Ourrent Status:

RAO
Status Date:

O4/21/1994
Phase:

SOMERSET

Not reported

O2/22/1994

RAO

O4/21/1994

Not reported

Response Action Outcome: A1
Oil Or Haz Material: Oil

4-0021966 Facility ID: Source Type: PIPE SOMERSET Release Town: Notification Date: 06/08/2009 TWO HR Category: Associated ID: Not reported **Current Status:** RAO 08/03/2009 Status Date: Phase: Not reported Response Action Outcome: Α1 Oil Or Haz Material: Oil

Facility ID: 4-0010120 Source Type: TRANSFORM Release Town: SOMERSET Notification Date: 12/05/1993 TWO HR Category: Associated ID: Not reported Current Status: RAO Status Date: 12/06/1994 Not reported Phase:

Response Action Outcome: A1
Oil Or Haz Material: Oil

Facility ID: 4-0010120 Source Type: **TRUCK** Release Town: SOMERSET Notification Date: 12/05/1993 Category: TWO HR Associated ID: Not reported **Current Status:** RAO 12/06/1994 Status Date: Phase: Not reported Response Action Outcome: Α1

Response Action Outcome: A1
Oil Or Haz Material: Oil

Facility ID: 4-0010052 Source Type: **FLOORDRAIN** Release Town: SOMERSET Notification Date: 10/30/1993 Category: TWO HR Associated ID: Not reported **Current Status:** RAO 10/06/1994 Status Date: Not reported

Response Action Outcome: A1
Oil Or Haz Material: Oil

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

LAST:

Release Tracking Number/Current Status: 4-0023101 / RAO

Source Type: AST
Release Town: SOMERSET
Notification Date: 02/06/2011
Category: TWO HR
Associated ID: Not reported
Status Date: 06/07/2011

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

Not reported

been reduced to background.

Oil Or Haz Material: Oil

Chemicals:

Phase:

Chemical: LUBRICATING OIL
Quantity: 200 gallons
Location Type: INDUSTRIAL
Location Type: WATERBODY

Source: AST

Actions:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/12/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/6/201

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1U
Action Date: 2/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 3/2/201

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Status: Written Plan Received

Action Date: 4/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 6/7/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 6/7/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Release Tracking Number/Current Status: 4-0014128 / RAO

Source Type: AST

 Release Town:
 SOMERSET

 Notification Date:
 09/04/1998

 Category:
 120 DY

 Associated ID:
 Not reported

 Status Date:
 09/07/1999

 Phase:
 PHASE II

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Oil Or Haz Material: Oil

Chemicals:

Chemical: TPH

Quantity: 3880 parts per million

Source: AST

Actions:

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 1/12/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 1/20/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 1/23/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Map ID Direction Distance

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number
Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 10/11/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 10/13/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 10/13/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/29/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 11/11/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Status: DEDNOT Action Date: 4/21/2015

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/27/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 5/11/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 5/18/2017

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 5/25/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 5/26/2017

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 5/27/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 6/12/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRUN

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Date: 9/22/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 9/24/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number/Current Status: 4-0016023 / RAO

Source Type: AST

 Release Town:
 SOMERSET

 Notification Date:
 02/04/2001

 Category:
 TWO HR

 Associated ID:
 Not reported

 Status Date:
 04/05/2001

 Phase:
 Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

been reduced to background.

Oil Or Haz Material: Oil

Chemicals:

 Chemical:
 JET FUEL

 Quantity:
 2000 gallons

 Location Type:
 INDUSTRIAL

 Location Type:
 COMMERCIAL

 Source:
 PIPE

 Source:
 AST

 Source:
 UNKNOWN

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/4/2000

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1U
Action Date: 2/4/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/4/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/6/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 4/14/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 4/5/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 4/5/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

INST CONTROL:

Release Tracking Number: 4-0014126

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Type: AUL
Action Stat: RECPT
Action Date: 09/07/1999

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014126
Action Type: AUL
Action Stat: SNAUDI
Action Date: 05/24/2006

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014126
Action Type: AUL
Action Stat: SNAUDI
Action Date: 05/31/2006

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014126
Action Type: AUL
Action Stat: SNAUDI
Action Date: 10/13/2011

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014126
Action Type: AUL
Action Stat: TSAUD
Action Date: 02/04/2002

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014128
Action Type: AUL
Action Stat: DEDNOT
Action Date: 04/21/2015

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014128
Action Type: AUL
Action Stat: RECPT
Action Date: 09/07/1999

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014128 Action Type: AUL

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Stat: SNAUDI Action Date: 10/13/2011

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0014128
Action Type: AUL
Action Stat: TSAUD
Action Date: 02/04/2002

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Release Tracking Number: 4-0018175
Action Type: AUL
Action Stat: RECPT
Action Date: 09/14/2004

Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not

been reduced to background and an Activity and use Limitation (AUL)

has been implemented.

Release Tracking Number: 4-0018175
Action Type: AUL
Action Stat: SNAUDI
Action Date: 05/16/2006

Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not

been reduced to background and an Activity and use Limitation (AUL)

has been implemented.

Release Tracking Number: 4-0018175
Action Type: AUL
Action Stat: SNAUDI
Action Date: 10/13/2011

Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not

been reduced to background and an Activity and use Limitation (AUL)

has been implemented.

Release Tracking Number: 4-0018175
Action Type: AUL
Action Stat: TSAUD
Action Date: 01/13/2005

Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not

been reduced to background and an Activity and use Limitation (AUL)

has been implemented.

Release:

Release Tracking Number/Current Status: 4-0001017 / DEPNDS

 Primary ID:
 Not reported

 Official City:
 SOMERSET

 Notification:
 01/15/1991

 Category:
 NONE

 Status Date:
 07/23/1993

 Phase:
 Not reported

 Response Action Outcome:

Oil / Haz Material Type: Not reported

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition Action Status: Valid Transition Site 1/15/1991

Action Date: Response Action Outcome: Not reported

Action Type: **TREGS** Action Status: **DEPNDS** Action Date: 7/23/1993 Response Action Outcome: Not reported

Chemicals:

UNKNOWN Chemical: Quantity: Not reported

Release Tracking Number/Current Status: 4-0010052 / RAO Primary ID: Not reported Official City: SOMERSET Notification: 10/30/1993 TWO HR Category: Status Date: 10/06/1994 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Reportable Release under MGL 21E Action Status:

Action Date: 10/30/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/30/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: IRA Assessment Only

Action Date: 10/30/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: Completion Statement Received

Action Date: 10/6/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Status: RAO Statement Received

Action Date: 10/6/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 11/1/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/28/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: Written Plan Received

Action Date: 12/28/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 12/9/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 8/26/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: LUBRICATING OIL Quantity: Not reported

Chemical: UNKNOWN CHEMICAL OF TYPE - OIL

Quantity: Not reported
Location Type: INDUSTRIAL
Source: FLOORDRAIN

Release Tracking Number/Current Status: 4-0010120 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 12/05/1993
Category: TWO HR
Status Date: 12/06/1994
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/5/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 12/6/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 12/6/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FOLFLD
Action Date: 12/9/1993

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 2/8/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action Action Status: Written Plan Received

Action Date: 2/8/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Fee Received - FMCRA Use Only

Action Date: 8/26/1997

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: MINERAL OIL
Quantity: Not reported
Chemical: TRANSFORMER OIL
Quantity: Not reported
Location Type: INDUSTRIAL

Source: TRANSFORM Source: TRUCK

Release Tracking Number/Current Status: 4-0010291 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 02/22/1994

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Category: TWO HR
Status Date: 04/21/1994
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oi

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/22/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/22/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/25/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 4/21/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 4/21/1994

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: #6 FUEL OIL Quantity: Not reported Chemical: #6 FUEL OIL Quantity: 20 gallons Chemical: #2 FUEL OIL Quantity: 20 gallons INDUSTRIAL Location Type: **DRUMS** Source:

Release Tracking Number/Current Status: 4-0014126 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 09/04/1998
Category: 120 DY
Status Date: 09/07/1999

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Phase: PHASE II

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 10/13/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 10/13/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 11/6/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRAN
Action Date: 4/27/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 5/24/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 5/24/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 5/31/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 5/31/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 9/22/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Chemicals:

Chemical: UNKNOWN Quantity: 6 inches

Release Tracking Number/Current Status: 4-0014128 / Primary ID: Not reported Official City: SOMERSET Notification: 09/04/1998 Category: 120 DY Status Date: 09/07/1999 Phase: PHASE II

Response Action Outcome: B2 - Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 1/12/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 1/20/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 1/23/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 10/11/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD
Action Date: 10/13/2011

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 10/13/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/29/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 11/11/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 2/4/2002

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Action Status: DEDNOT Action Date: 4/21/2015

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/27/2006

Response Action Outcome: Remedial actions have not been conducted because a level of No

Map ID Direction Distance

Elevation

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 5/11/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 5/18/2017

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 5/25/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 5/26/2017

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 5/27/2016

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 6/12/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 9/22/2011

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 9/24/2018

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

AULs that have been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 9/4/1998

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Activity and Use Limitation

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more $% \left(1\right) =\left(1\right) \left(

AULs that have been implemented.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 9/7/1999

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists, but that level is contingent upon one or more

AULs that have been implemented.

Chemicals:

Chemical: TPH

Quantity: 3880 parts per million

Source: AST

Release Tracking Number/Current Status: 4-0016023 / RAO
Primary ID: Not reported
Official City: SOMERSET
Notification: 02/04/2001
Category: TWO HR
Status Date: 04/05/2001
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Distance Elevation Site EDR ID Number

Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/4/2000

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1U
Action Date: 2/4/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/4/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/6/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 4/14/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 4/5/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 4/5/2001

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical: JET FUEL
Quantity: 2000 gallons
Location Type: INDUSTRIAL
Location Type: COMMERCIAL
Source: PIPE

 Source:
 PIPE

 Source:
 AST

 Source:
 UNKNOWN

Release Tracking Number/Current Status: 4-0018175 / PROPrimary ID: Not reported Official City: SOMERSET Notification: 12/11/2003 Category: 120 DY Status Date: 04-0018175 / RAO

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Phase: Not reported

Response Action Outcome: A3 - A permanent solution has been achieved. Contamination has not

been reduced to background and an Activity and use Limitation (AUL)

has been implemented.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 1/11/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Activity and Use Limitation
Action Status: Level I - Technical Screen Audit

Action Date: 1/13/2005

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: An activity type that is related to an Audit

Action Status: NAFNVD Action Date: 10/13/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 10/13/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 12/11/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/11/2003

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 4/27/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Type: An activity type that is related to an Audit Action Status: Notice of Non-compliance related to an Audit

Action Date: 5/16/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Activity and Use Limitation
Action Status: Level II - Audit Inspection

Action Date: 5/16/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Compliance and Enforcement Action Action Status: Interim Deadline Letter Issued

Action Date: 6/29/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 6/29/200

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Compliance and Enforcement Action

Action Status: RFI Action Date: 6/29/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: An activity type that is related to an Audit
Action Status: Audit Follow-up Completion Statement Received

Action Date: 7/13/2006

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Activity and Use Limitation

Action Status: Transmittal, Notice, or Notification Received

Action Date: 9/14/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Response Action Outcome - RAO

Action Status: RAO Statement Received

Action Date: 9/14/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: Response Action Outcome - RAO

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Action Status: Fee Received - FMCRA Use Only

Action Date: 9/16/2004

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 9/22/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background and an Activity and use Limitation (AUL) has

been implemented.

Chemicals:

Chemical: C11 THRU C22 AROMATIC HYDROCARBONS

Quantity: 38900 parts per million

Chemical: C9 THRU C18 ALIPHATIC HYDROCARBONS

Quantity: 4480 parts per million

Chemical: C19 THRU C36 ALIPHATIC HYDROCARBONS

Quantity: 39500 parts per million

Release Tracking Number/Current Status: 4-0021966 / Primary ID: Not reported Official City: SOMERSET Notification: 06/08/2009 Category: TWO HR Status Date: 08/03/2009 Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been

reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 6/16/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 6/8/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 6/8/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 8/18/2009

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 8/3/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 8/3/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 8/3/2009

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: #6 FUEL OIL
Quantity: 100 gallons
Location Type: COMMERCIAL

Source: PIPE

Release Tracking Number/Current Status: 4-0023101 / Primary ID: Not reported
Official City: SOMERSET
Notification: 02/06/2011
Category: TWO HR
Status Date: 06/07/2011
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/12/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/6/2011

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: **RLFA** Action Status: FLDD1U Action Date: 2/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date:

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

RNFE Action Type:

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/6/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action Action Status: Written Plan Received

Action Date: 4/6/2011

A permanent solution has been achieved. Contamination has not been Response Action Outcome:

reduced to background.

Action Type: Immediate Response Action Action Status: Completion Statement Received

Action Date: 6/7/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO

Action Status: **RAO Statement Received**

Action Date: 6/7/2011

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

EPA ID:

Contact:

Chemical: LUBRICATING OIL Quantity: 200 gallons INDÚSTRIAL Location Type: Location Type: WATERBODY

Source: **AST**

RCRA NonGen / NLR:

Date form received by agency: 04/11/2013

Facility name: FORMER SOMERSET POWER LLC

Facility address: 1606 RIVERSIDE AVE SOMERSET, MA 02726

MAR000014308 FRANK WEIDNER Contact address:

162 VALLEY BLVD WOOD RIDJE, NJ 07075-0000

Contact country: US

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Contact telephone: 201-416-4009
Contact email: Not reported
EPA Region: 01
Land type: Private
Classification: Non-Generator

Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: ASSET RECOVERY GROUP LLC

Owner/operator address: 162 VALLEY BLVD

WOOD RIDJE, NJ 07075

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Not reported Owner/operator extension: Legal status: Private Owner/Operator Type: Operator Owner/Op start date: 01/31/2012 Owner/Op end date: Not reported

Owner/operator name: ASSET RECOVERY GROUP LLC

Owner/operator address: 162 VALLEY BLVD

WOOD RIDJE, NJ 07075

Owner/operator country: US

Owner/operator telephone: Not reported Owner/operator email: Not reported Owner/operator fax: Not reported Owner/operator extension: Not reported Legal status: Private Owner/Operator Type: Owner Owner/Op start date: 01/31/2012 Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: Mixed waste (haz. and radioactive): No Recycler of hazardous waste: No Transporter of hazardous waste: No Treater, storer or disposer of HW: No Underground injection activity: No On-site burner exemption: Nο Furnace exemption: No Used oil fuel burner: No Used oil processor: No User oil refiner: No Used oil fuel marketer to burner: No Used oil Specification marketer: No Used oil transfer facility: No Used oil transporter: No

Historical Generators:

Date form received by agency: 02/15/2012

Site name: FORMER SOMERSET POWER LLC

Classification: Not a generator, verified

Map ID Direction Distance Elevation

Site

MAP FINDINGS

EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Date form received by agency: 03/30/1999

Site name: FORMER SOMERSET POWER LLC

Classification: Small Quantity Generator

Hazardous Waste Summary:

. Waste code: D001

. Waste name: IGNITABLE WASTE

. Waste code: D002

. Waste name: CORROSIVE WASTE

. Waste code: D003

. Waste name: REACTIVE WASTE

. Waste code: D007 . Waste name: CHROMIUM

Waste code: D008
Waste name: LEAD

Waste code: D009
Waste name: MERCURY

. Waste code: D018
. Waste name: BENZENE

. Waste code: D039

Waste name: TETRACHLOROETHYLENE

. Waste code: MA01 . Waste name: WASTE OIL

Facility Has Received Notices of Violations:

Regulation violated:

Not reported

Area of violation: State Statute or Regulation

Date violation determined: 03/02/2012
Date achieved compliance: 08/30/2012
Violation lead agency: State

Enforcement action: WRITTEN INFORMAL

Enforcement action date:
Enf. disposition status:
Enf. disp. status date:
Enforcement lead agency:
Proposed penalty amount:
Final penalty amount:
Paid penalty amount:

O 8/13/2012

Not reported
Not reported
Not reported
Not reported

Evaluation Action Summary:

Evaluation date: 03/02/2012

Evaluation: NON-FINANCIAL RECORD REVIEW

Area of violation: State Statute or Regulation Date achieved compliance: 08/30/2012

Date achieved compliance: 08/30/2012 Evaluation lead agency: State

Evaluation date: 06/11/2009

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

Area of violation: Not reported Date achieved compliance: Not reported Evaluation lead agency: State

Evaluation date: 03/14/2001

COMPLIANCE EVALUATION INSPECTION ON-SITE Evaluation:

Area of violation: Not reported Not reported Date achieved compliance: Evaluation lead agency: State

ASBESTOS:

Project Type:

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 02/19/2016 03/31/2016 End Date: Not reported Date Entered: Entry Date: 02/05/2016 Quantity Materical Removed SF: 37660.00 Quantity Material Removed LF: 500.00

Project Description: PIPEINSUL OTHER MASTIC COATING

AR Tracking ID: 231633 Super Lic Number: AS071733 Monitor Lic Number: Not reported Lab Lic Number: AA000208 2016 Year: Sticker Number: 100236964 Form Type: ANF-001 Fee Status: HUNDRED Facility Phone: 9789073598 Sub Town: Not reported TANK#2 Worksite: Occupied: 0 AC000639 Contractor: Contract Type: WRITTEN 7-3:30 Hours:

Dem Abatement Process: Glv, Fcontain, oth: EXTERIOIR ABATEMENT

OUTDOORS Location:

Decon Process: THREE STAGE PERSONNEL DECONTAMINATION UNIT WITH SHOWER REMOTE TO THE

WORK AREAS

Disposal Methods: WETTED ACM TO BE PACKAGED IN TWO 6-MIL POLY BURIAL BAG-LINED FIBER

DRUMS, OR WRAPPED IN TWO LAYERS OF 6-MIL POLY, RHEN SEALED AND LABELED

TANK FARM Facility Usage: Waiver Given: Not reported DEP Waiver Number: Not reported **DLWD Waiver Number:** Not reported

Small Owner Occ:

NEW ENGLAND POWER COMPANY Owner Name:

Owner Address: 40 SYLVAN ROAD WALTHAM Owner City: Owner State: MA

ERIN WHORISKEY On Site Manager Name: On Site Manager Phone: 7819073598

Ins Comp: STATE NATIONAL INSURANCE COMPANY

Policy Number: NFA 0824093 EXP Date: 3/29/2016

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Facility Size: 36000

AMERICAN ENVIRONMENTAL Transporter Name:

18 CANAL STREET Transporter Address:

Transporter City: HOLYOKE Transporter State: MA Final Site:

Not reported RANDY REYNOLDS Certified Name: Cert Sign Date: 02/05/2016

AMERICAN ENVIRONMENTAL Certified Company:

Certified Phone: 4133227190

METROREMEDIATOR Entered_by:

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 05/23/2007 Start Date: End Date: 05/29/2007 Date Entered: Not reported Entry Date: 05/09/2007 Quantity Materical Removed SF: 50.00 Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 82772 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2007 100055161 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5082352007 Not reported Sub Town: Worksite: **BOILER HOUSE** Occupied:

AC000120 Contractor: WRITTEN

Contract Type: Week days: 7AM-7PM Week end: Hours:

Project Type: Rpr Abatement Process: Fcontain Indoors Location:

Decon Process: 2 CHAMBER DECON WITH 5 MICRON INLINE FILTER

Disposal Methods: WETDOWN, PACKAGED, LABELLED AND SHIPPED IN DOT APPROVED CONTAINERS

BOILER HOUSE Facility Usage: Waiver Given: Not reported DEP Waiver Number: Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: 5

Owner Name: NRG

Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET

Owner State: MA

JEFFREY ARAUJO On Site Manager Name: On Site Manager Phone: 508-235-2007

ZURICH AMERICAN INSURANCE Ins Comp:

Policy Number: WC5869371-01 EXP Date: 12/31/2007 Facility Size: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Name: FLEET ENVIRONMENTAL SERVICES

Transporter Address: 75 D YORK AVENUE
Transporter City: RANDOLPH
Transporter State: Not reported

Final Site: 47

Certified Name: KATE TIMBERLAKE

Cert Sign Date: 05/09/2007

Certified Company: FLEET ENVIRONMENTAL SVC

Certified Phone: 7818151100 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/30/2014 Fnd Date: 05/10/2014 Date Entered: Not reported Entry Date: 04/29/2014 Quantity Materical Removed SF: 100.00 Quantity Material Removed LF: .00 Project Description: Trns AR Tracking ID: 188540 AS053930 Super Lic Number: Monitor Lic Number: AM000146 Lab Lic Number: AA000208 Year: 2014 100197972 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: Not reported Sub Town: Not reported FLOW CONTROL Worksite:

Occupied: 0
Contractor: AC000831
Contract Type: WRITTEN

Hours: Week days: 7-3:30PM Week end:

Project Type: Dem

Abatement Process: Encl,Fcontain,Encp Location: Not reported

Decon Process: THREE CHAMBER DECON

Disposal Methods: WETTED MATERIALS TO BE DOUBLE BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: SE-14-156 DLWD Waiver Number: 9471-2014

Small Owner Occ: 5

Owner Name: GREAT NORTHERN SITE CORP
Owner Address: 85-87 BOSTON STREET

Owner City: EVERETT, MA

Owner State: MA

On Site Manager Name: ETHAN OWEN
On Site Manager Phone: 413 281-5851
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: RECOERY EXPRESS, INC

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Address: 180 CANAL STREET
Transporter City: BOSTON, MA
Transporter State: Not reported
Final Site: 39
Certified Name: JESSDA
Cert Sign Date: 04/29/2014

Certified Company: ASP ENVIRONMENTAL

Certified Phone: 9789059936 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 06/09/2003 Start Date: End Date: 06/13/2003 Date Entered: Not reported Entry Date: 06/19/2003 Quantity Materical Removed SF: 240.00 Quantity Material Removed LF: 15.00

Project Description: **Boiler Coatings** AR Tracking ID: 26446 Super Lic Number: AS070996 AM061057 Monitor Lic Number: Lab Lic Number: AA000144 Not reported Year: Sticker Number: 200403 ANF-001 Form Type: Fee Status: 60

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: ELEVATION 137

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7 AM - 7 PM
Project Type: Renovation
Abatement Process: Glove Bag
Location: Indoors

Decon Process: ACM REMOVED/GLOVE BAG/HEPA VAC
Disposal Methods: WET 2 PLY POLY BAG WITH DUMPSTER

Facility Usage: ELEC GENERA Waiver Given: -1

DEP Waiver Number: SE-03-094
DLWD Waiver Number: 1B03147BS
Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS
Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported
On Site Manager Phone: Not reported
Ins Comp: TRAVELERS CORP.

Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported
Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037

Distance EDR ID Number
Elevation Site EDR ID Number

(860) 423-6048

Ewilliams

FORMER SOMERSET POWER LLC (Continued)

Certified Phone:

Entered by:

1001493262

Transporter City: CHELSEA Transporter State: MA

Final Site: 7
Certified Name: DANIEL LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 10/15/2003 10/22/2003 End Date: Date Entered: Not reported 10/07/2003 Entry Date: Quantity Materical Removed SF: 156.00 Not reported

Quantify Material Removed LF: Not reported Project Description: TRANSITE WALL BOARD

 AR Tracking ID:
 31828

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 201894

 Form Type:
 ANF-001

Fee Status: F
Facility Phone: (508) 235-2000
Sub Town: Not reported

Worksite: ASH SILO SIDING Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7A-33P

Project Type: TRANSITE SIDING REMOVED
Abatement Process: TRANSITE SIDING REMOVED

Location: Outdoors
Decon Process: HEPA VAC

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: ELECTRIC GE Waiver Given: Not reported **DEP Waiver Number:** Not reported Not reported **DLWD Waiver Number:** Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF INC Transporter Name:

Transporter Address:

Transporter City:

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PO BOX 6037

CHELSEA

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter State: Final Site:

Certified Name: DAN LABASTIE Cert Sign Date: 10/01/2003 Not reported Certified Company: Certified Phone: (860) 423-6048 Entered_by: fuminski

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 04/30/2014 End Date: 05/16/2014 Not reported Date Entered: Entry Date: 04/29/2014 Quantity Materical Removed SF: 00 Quantity Material Removed LF: 11.00 Project Description: Blr AR Tracking ID: 188537 Super Lic Number: AS053930 Monitor Lic Number: AM000146 Lab Lic Number: AA000208 2014 Year: Sticker Number: 100197968 ANF-001 Form Type: Fee Status: Fifty Facility Phone: Not reported Sub Town: Not reported Worksite: BUILDING # 2

Occupied:

Contractor: AC000831 WRITTEN Contract Type:

Hours: Week days: 7-3:30PM Week end:

Project Type: Dem

Abatement Process: Encl,Fcontain,Encp Location: Not reported

THREE CHAMBER DECON Decon Process:

WETTED MATERIALS TO BE DOUBLE BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** SE-14-153 **DLWD Waiver Number:** 9468-2014 5

Small Owner Occ:

Owner Name: GREAT NORTHERN SITE CORP

85-87 BOSTON STREET Owner Address:

EVERETT, MA Owner City:

Owner State: MA

On Site Manager Name: ETHAN OWEN On Site Manager Phone: 413-281-5851 Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

RECOVERY EXPRESS, INC Transporter Name: 180 CANAL STREET Transporter Address: Transporter City: BOSTON, MA Transporter State: Not reported

MAP FINDINGS Map ID Direction

Distance EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Final Site: Certified Name: **JESSDA** 04/29/2014 Cert Sign Date:

Certified Company: ASP ENVIRONMENTAL

Certified Phone: 9789059905 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 04/30/2014 Start Date: End Date: 05/17/2014 Date Entered: Not reported Entry Date: 04/29/2014 Quantity Materical Removed SF: 100.00 Quantity Material Removed LF: .00 Project Description: Insl AR Tracking ID: 188538 Super Lic Number: AS053930 AM000146 Monitor Lic Number: Lab Lic Number: AA000208 2014 Year: 100197969 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: Not reported Sub Town: Not reported Worksite:

OXYGEN STORAGE

Occupied:

Contractor: AC000831 Contract Type: WRITTEN

Week days: 7-3:30PM Week end: Hours:

Project Type: Dem

Encl,Fcontain,Encp **Abatement Process:** Location: Not reported

Decon Process: THREE CHAMBER DECON

WETTED MATERIALS TO BE DOUBLE BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** SE-14-154 DLWD Waiver Number: 9469-2014

Small Owner Occ:

Owner Name: GREAT NORTHERN SITE CORP

Owner Address: 85-87 BOSTON STREET

EVERETT Owner City: Owner State: MA

On Site Manager Name: **ETHAN OWEN** 413 281-5851 On Site Manager Phone: Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

RECOVERY EXPRESS, INC Transporter Name: Transporter Address: 180 CANAL STREET Transporter City: BOSTON, MA

Transporter State: Not reported

Final Site: 39

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Certified Name: **JESSDA** Cert Sign Date: 04/29/2014

Certified Company: ASP ENVIRONMENTAL

Certified Phone: 9799059905

Entered_by: Not reported

Notification: Not reported **DEP Region:** Not reported Notifiers Name: Not reported 04/30/2014 Start Date: End Date: 05/20/2014 Date Entered: Not reported Entry Date: 04/29/2014 Quantity Materical Removed SF: 800.00 Quantity Material Removed LF: .00 Project Description: Trns AR Tracking ID: 188539 Super Lic Number: AS053930 Monitor Lic Number: AM000146 AA000208 Lab Lic Number: 2014 Year: Sticker Number: 100197971 ANF-001 Form Type: Fee Status: Fifty

Facility Phone: Not reported Sub Town: Not reported

SUBSTATION OFFICE Worksite:

Occupied:

Contractor: AC000831 Contract Type: WRITTEN

Hours: Week days: 7-3:30PM Week end:

Project Type: Dem

Abatement Process: Encl, Fcontain, Encp Location:

Not reported

THREE CHAMBER DECON Decon Process:

Disposal Methods: WETTED MATERIALS TO BE DOUBLE BAG

Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** SE-14-155 DLWD Waiver Number: 9470-2014

Small Owner Occ.

Owner Name: **GREAT NORTHERN** Owner Address: 85-87 BOSTON STREET

Owner City: EVERETT, MA

Owner State: MA

ETHAN OWEN On Site Manager Name: On Site Manager Phone: 413 281-5851 Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: RECOVERY EXPRESS, INC Transporter Address: 180 CANAL STREET Transporter City: BOSTON, MA

Transporter State: Not reported Final Site: 39 Certified Name: JESSDA

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Cert Sign Date: 04/29/2014

Certified Company: ASP ENVIRONMENTAL

Certified Phone: 9789059936 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 10/03/2002 End Date: 10/13/2002 Date Entered: Not reported Entry Date: 09/19/2002 Quantity Materical Removed SF: 50.00 Quantity Material Removed LF: 75.00

Project Description: boiler Coatings&thermal solid core pipe insulatio

AR Tracking ID: 15273 Super Lic Number: AS040221 Monitor Lic Number: Not reported Lab Lic Number: AA000144 2002 Year: Sticker Number: 557076 Form Type: ANF-001 Fee Status: 50

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: elevator 137 sootblower stopvalve

Occupied: 0

Contractor: AC000490
Contract Type: Not reported
Hours: m-f 7-330
Project Type: Renovation

Abatement Process: glove Bag\\cleanup\\encapsulation

Location: Indoors

Decon Process: wetwipe,hepavac,isolate
Disposal Methods: 2 Ply Poly Bag with Label

Facility Usage: power generator

Waiver Given:

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NRG somerset ops
Owner Address: 1606 riverside avenue

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported

Ins Comp: amer protection ins co

Policy Number:

EXP Date:
Not reported
Facility Size:
140000 sf 7 fl
Transporter Name:
JOB ROLLOFF INC
Transporter City:
PO BOX 6037
Transporter State:
MA

Final Site: 7

Certified Name: daniel p labastie jr Cert Sign Date: 09/18/2002

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

Not reported

FORMER SOMERSET POWER LLC (Continued)

Certified Company:

1001493262

Certified Phone: (508) 755-1355
Entered_by: Not reported

Notification: Not reported
DEP Region: Not reported
Notifiers Name: Not reported
Start Date: 07/03/2009

Start Date: 07/03/2009 End Date: 07/14/2009 Date Entered: Not reported Entry Date: 07/02/2009 Quantity Materical Removed SF: 40.00 Quantity Material Removed LF: .00 Project Description: Blr,Trns AR Tracking ID: 114646 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2009 100091006 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5082352025 Sub Town: Not reported BOILER HOUSE Worksite:

 Occupied:
 -1

 Contractor:
 AC000701

 Contract Type:
 WRITTEN

Hours: Week days: 7AM330PM Week end: N/A

Project Type: Rpr Abatement Process: Fcontain Location: Indoors

Decon Process: THREE CHAMBER DECONTAMINATION UNIT ADJACENT TO THE WORK AREA.

Disposal Methods: ALL ASBESTOS INSULATION WILL PROPERLY WETTED & DOUBLE BAGGED LABELED.

Facility Usage: POWER PLANT
Waiver Given: Not reported
DEP Waiver Number: SE-09187
DLWD Waiver Number: 1B09196BS

Small Owner Occ: 5
Owner Name: NRG

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET
Owner State: MA
On Site Manager Name: CARLO LODI
On Site Manager Phone: 508-235-2025

Ins Comp: NATIONAL UNION FIRE INSURANCE

 Policy Number:
 WC6506877

 EXP Date:
 2/28/2009

 Facility Size:
 300,000

Transporter Name: SERVICE TRANSPORT GROUP INC.

Transporter Address: 58 PYLES LANE
Transporter City: NEW CASTLE, DE
Transporter State: Not reported

Final Site: 47
Certified Name: JIM SILVIA
Cert Sign Date: 07/02/2009
Certified Company: MORAN

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

5088890674

FORMER SOMERSET POWER LLC (Continued)

Certified Phone:

1001493262

Entered_by:

Not reported

Notification:

DEP Region:

Not reported

Notifiers Name:

Not reported

Start Date:

D5/03/2016

End Date:

O7/29/2016

Not reported

Notifiers Name:

Not reported

Not reported

Not reported

Not reported

Not reported

Not reported

Date Entered: Not reported
Entry Date: 05/04/2016
Quantity Materical Removed SF: 63000.00
Quantity Material Removed LF: Not reported

Project Description: OTHER TANK COATING

AR Tracking ID: 237619 Super Lic Number: AS000022 Monitor Lic Number: Not reported Lab Lic Number: Not reported 2016 Year Sticker Number: 100242271 ANF-001 Form Type: HUNDRED Fee Status: Facility Phone: 7814310016 Sub Town: Not reported Worksite: TANK#2 Occupied: AC000639 Contractor: Contract Type: WRITTEN

Hours: 7AM - 5 PM
Project Type: Dem

Abatement Process: Glv, Clnp, Fcontain, oth: EXTERIOR REGULATED AREA

Location: OUTDOORS

Decon Process: THREE CHAMBER REMOTE DECONTAMINATION UNIT WITH HOT AND COLD WATER

Disposal Methods: DOUBLED 6-MIL POLY BAGS

Facility Usage: TANK FARM Waiver Given: Not reported DEP Waiver Number: SAW-16-133 DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER COMPANY

Owner Address: 40 SYLVAN ROAD
Owner City: WALTHAM
Owner State: MA
On Site Manager Name: ERIN WHORISKEY
On Site Manager Phone: 7819073598

Ins Comp: STATE NATIONAL INSURANCE COMPANY

 Policy Number:
 NFA 0824093

 EXP Date:
 3/29/2017

 Facility Size:
 36000

Transporter Name: RED TECHNOLIGIES, LLC
Transporter Address: 10 NORTHWOOD DRIVE

Transporter City: BLOOMFIELD

Transporter State: CT

Final Site: Not reported
Certified Name: RANDY REYNOLDS

Cert Sign Date: 05/04/2016

Certified Company: AMERICAN ENVIRONMENTAL, INC.

Certified Phone: 4133227190

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Entered_by: METROREMEDIATOR

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/17/2013 04/18/2013 End Date: Date Entered: Not reported 04/16/2013 Entry Date: Quantity Materical Removed SF: 900.00 Quantity Material Removed LF: .00 Project Description: Trns AR Tracking ID: 171891 Super Lic Number: AS900109 Monitor Lic Number: AA000216 Lab Lic Number: AA000118 Year: 2013 Sticker Number: 100175770 Form Type: ANF-001 Fee Status: Fifty Facility Phone: 000000000 Sub Town: Not reported

Sub Town:

Not reported
Worksite:

TRUCK TRAILER
Occupied:

0

Contractor: AC000509
Contract Type: WRITTEN

Hours: Week days: 0730-1700 Week end: N/A

Project Type: Oth:CLEAN-UP

Abatement Process: Encl

Location: Not reported
Decon Process: REMOTE THREE STAGE

Disposal Methods: ACM WILL BE MISTED, REBAGGED, SEALED, LABELED AND MOVED TO TEMP

FACILITY FOR DISPOSAL

Facility Usage: TRUCK BOX TRAILER

Waiver Given: Not reported DEP Waiver Number: SE-13-131 DLWD Waiver Number: 6221-2013

Small Owner Occ: 5

Owner Name: ASSET RECOVERY GROUP
Owner Address: 1000 PAGE AVE, 2ND FLOOR

Owner City: LYNDHURST

Owner State: MA
On Site Manager Name: KEVIN DOWNEY
On Site Manager Phone: 508-431-8990
Ins Comp: CHARTIS
Policy Number: WC5315048
EXP Date: 4/22/2013

Facility Size: 900

Transporter Name: TMC ENVIRONMENTAL Transporter Address: 19 NATIONAL DRIVE

Transporter City: FRANKLIN
Transporter State: Not reported
Final Site: 39

Certified Name: JIM CONNOLLY Cert Sign Date: 04/16/2013

Certified Company: TMC ENVIRONMENTAL

Certified Phone: 5089663737

Distance EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Entered_by: Not reported Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 05/02/2014 12/30/2014 End Date: Date Entered: Not reported 04/23/2014 Entry Date: Quantity Materical Removed SF: 5000.00 Quantity Material Removed LF: 1500.00 Project Description: Insl,Trwl AR Tracking ID: 187802 Super Lic Number: AS033421 Monitor Lic Number: AM000146 Lab Lic Number: AA000208 Year: 2014 Sticker Number: 100197015 Form Type: ANF-001 Fee Status: Fifty

Facility Phone: Not reported Sub Town: Not reported

Worksite: CONVEYOR CAT WALK

Occupied:

AC000831 Contractor: Contract Type: WRITTEN

Hours: Week days: 7-3:30PM Week end:

Project Type: Dem

Abatement Process: Encl,Fcontain,Encp Location: Not reported

Decon Process: THREE CHAMBER DECON

WETTED MATERIALS TO BE DOUBLE BAG Disposal Methods:

Facility Usage: Not reported Not reported Waiver Given: **DEP Waiver Number:** SE-14-133 DLWD Waiver Number: 9351-2014

Small Owner Occ:

GREAT NORTHERN SITE CORP Owner Name: Owner Address: 85-87 BOSTON STREET

EVERETT, MA Owner City: Owner State: MA On Site Manager Name: **ETHAN OWEN**

On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: RECOERY EXPRESS, INC Transporter Address: 180 CANAL STREET. Transporter City: BOSTON, MA Transporter State: Not reported

Final Site: 39 Certified Name: **JESSDA** 04/17/2014 Cert Sign Date:

Certified Company: ASP ENVIRONMENTAL

Certified Phone: 9789059936 Entered by: Not reported

Map ID
Direction
Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

DEP Region: Not reported Notifiers Name: Not reported 03/10/2008 Start Date: End Date: 03/12/2008 Date Entered: Not reported Entry Date: 02/28/2008 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 300.00

THERMAL INSUL Project Description: AR Tracking ID: 95010 Super Lic Number: AS000913 Monitor Lic Number: AM073892 Lab Lic Number: AA000144 Year: Not reported Sticker Number: 304876 ANF-001 Form Type:

Fee Status:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: COAL BUNKER, SOUTHEAST CORNER, ELECVATION 222

Occupied: -1

Contractor: AC000490 Contract Type: Not reported Hours: 7-330 Project Type: Not reported Abatement Process: Not reported Location: Not reported AS REQUIRED Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Not reported Transporter City: Transporter State: Not reported Final Site: 10

Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported

Distance EDR ID Number EDR atabase(s) EPA ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/19/2002 End Date: 04/22/2002 Date Entered: Not reported 04/25/2002 Entry Date: Quantity Materical Removed SF: 300.00 Quantity Material Removed LF: .00

Boiler Coatings Project Description: AR Tracking ID: 14203 Super Lic Number: AS040221 Monitor Lic Number: Not reported AA000144 Lab Lic Number: Year: 2002 554698 Sticker Number: Form Type: ANF-001 Fee Status: 50

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: 237 unit 8 porthouse

Occupied: -1
Contractor: AC000490
Contract Type: Not reported
Hours: 7a-3:30
Project Type: Renovation
Abatement Process: Full Containment
Location: Indoors

Disposal Methods: 2 Ply Poly Bag with Label

3 chamber

Facility Usage: power generator Waiver Given: -1

DEP Waiver Number: se02-083
DLWD Waiver Number: vwa-002568

Decon Process:

DLWD Waiver Number: vwa-002568
Small Owner Occ: 0

Owner Name: nrg-somerset operations
Owner Address: 1606 riverside avenue

Owner City: SOMERSET

Owner State: MA
On Site Manager Name: Not reported
On Site Manager Phone: Not reported
Ins Comp: american protection

Policy Number: 5br0029072
EXP Date: 04/01/03
Facility Size: 120000

Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037
Transporter City: CHELSEA
Transporter State: MA
Final Site: 29

Certified Name: daniel labastie
Cert Sign Date: 04/19/2002
Certified Company: Not reported
Certified Phone: (781) 953-1719
Entered_by: Not reported

Notification: Not reported

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Notifiers Name: Not reported 05/04/2016 Start Date: End Date: 05/31/2016 Date Entered: Not reported 05/03/2016 Entry Date: Quantity Materical Removed SF: 1600.00 Quantity Material Removed LF: Not reported Project Description: OTHER SOIL AR Tracking ID: 237582 Super Lic Number: AS061838 Monitor Lic Number: AM002542 Lab Lic Number: AA000197 2016 Year: Sticker Number: 100242237 Form Type: ANF-001 HUNDRED Fee Status: Facility Phone: 7819073598 Sub Town: Not reported Worksite: TANK#2 Occupied: AC000877 Contractor: Contract Type: WRITTEN 7AM-5PM Hours: Project Type: Dem Abatement Process: Clnp

Location: OUTDOORS

Decon Process: DECONTAMINATION STATION/WASH STATION
Disposal Methods: 2-10 MIL LINERS IN ROLL-OFF CONTAINERS

Facility Usage: FORMER OIL STORAGE TANK

Waiver Given: Not reported DEP Waiver Number: SAW-16-112 DLWD Waiver Number: 1B-1669BS

Small Owner Occ: (

Owner Name: NEW ENGLAND POWER
Owner Address: 40 SYLVAN ROAD

Owner City: WALTHAM

Owner State: MA

 On Site Manager Name:
 ERIN HHORISKEY

 On Site Manager Phone:
 7819073598

 Ins Comp:
 STARR INDEMNITY

 Policy Number:
 10000336719151

 EXP Date:
 9/28/2016

 Facility Size:
 500000

Transporter Name: WL FRENCH EXCAVATING CORP.

Transporter Address: 3 SURVEY CIRCLE Transporter City: NORTH BILLERICA

Transporter State: MA

Final Site: Not reported Certified Name: ED PRICE Cert Sign Date: 05/03/2016

Certified Company: CHARTER CONTRACTING COMPANY LLC

Certified Phone: 6175930997 Entered_by: EPRICE

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Start Date: 03/30/2009
End Date: 03/30/2009
Date Entered: Not reported
Entry Date: 03/19/2009
Quantity Materical Removed SF: Not reported
Quantity Material Removed LF: 6.00

Project Description: Thermal solid core

 AR Tracking ID:
 110585

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 306027

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: GRADE 125 NORTH SIDE NEAR #3 ELEVATOR

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-3:30
Project Type: Repair
Abatement Process: Glove Bag
Location: Indoors
Decon Process: AS REQUIRED

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERST OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported
On Site Manager Phone: Not reported
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: DUMPSTER ON SITE

Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported

Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: acconey

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 03/13/2006

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

End Date: 03/15/2006
Date Entered: Not reported
Entry Date: 02/27/2006
Quantity Materical Removed SF: Not reported
Quantity Material Removed LF: 30.00

Project Description: Thermal solid core

 AR Tracking ID:
 64812

 Super Lic Number:
 AS052056

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 302161

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: STOREROOM, GROUND FLOOR, SOUTHWEST CORNER

Occupied:

Contractor: AC000490 Contract Type: Not reported 7-3:30 Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported AS REQUIRED Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

-1

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp: Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF Transporter Address: PO BOX 6037 Transporter City: **CHELSEA**

Transporter State: MA Final Site: 7

Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: esandler

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 05/18/2009 End Date: 05/19/2009

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Date Entered: Not reported entry Date: 05/08/2009

Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 30.00

Project Description: ThERermal solid core

 AR Tracking ID:
 112406

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 306029

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: GRADE 118 MIDWAY ON MAIN FLR BY ELECTRICIANS DOOR

Occupied: -1

Contractor: AC000490 Contract Type: Not reported 7-330 Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: AS REQUIRED WET 2 PLY POLY BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: Not reported
Owner Name: NRG SOMERSET OPS

Owner Address: 16-6 RIVERSIDE AVE
Owner City: SOMERSET

Owner State: MA
On Site Manager Name: Not reported
On Site Manager Phone: Not reported
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: DUMPSTER ON SITE

Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported

Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/06/2004 End Date: 07/16/2004 Date Entered: Not reported

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Entry Date: 06/24/2004
Quantity Materical Removed SF: 500.00
Quantity Material Removed LF: Not reported
Project Description: THERMAL BLOCK

 AR Tracking ID:
 41308

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 1561630

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: #3 OIL TANK HEAT EXHANGER

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7A-330P
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: AS REQUIRED

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC Transporter Address: PO BOX 6037 Transporter City: **CHELSEA** Transporter State: MA Final Site:

Certified Name: DANIEL LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: MMitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 03/12/2008 End Date: 03/26/2008 Date Entered: Not reported Entry Date: 02/15/2008

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Quantity Materical Removed SF: Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 94614 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2008 Sticker Number: 100068041 ANF-001 Form Type: Fee Status: Fifty 5082352007 Facility Phone: Sub Town: Not reported BOILER HOUSE Worksite:

Occupied: -1

Contractor: AC000120
Contract Type: WRITTEN

Hours: Week days: 7AM-7PM Week end:

Project Type: Rpr
Abatement Process: Fcontain
Location: Indoors

Decon Process: 3 STAGE DECON CONSTRUCTED OUTSIDE OF THE WORK AREA, USED AS ONLY

ENTRANCE/EXIT

Disposal Methods: WET DOWN, DOUBLE BAG, LABEL AND SHIP IN DOT APPROVED CONTAINERS

Facility Usage: SOMERSET POWER ELECTRICAL

Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: 5

Owner Name: SOMERSET POWER
Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: JEFFREY ARAUJO On Site Manager Phone: 508-235-2007

Ins Comp: ZURICH AMERICAN INSURANCE

Policy Number: WC9428620-00 EXP Date: 1/18/2009 Facility Size: Not reported

Transporter Name: FLEET ENVIRONMENTAL SERVICES

Transporter Address: 75 D YORK AVENUE
Transporter City: RANDOLPH
Transporter State: Not reported

Final Site: 47

Certified Name: KATE TIMBERLAKE

Cert Sign Date: 02/15/2008

Certified Company: FLEET ENVIRONMENTAL SVC

Certified Phone: 7818151100 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 10/03/2002 End Date: 10/13/2002 Date Entered: Not reported Entry Date: 09/19/2002

Map ID
Direction
Distance
Elevation Site

Database(s) EP

EDR ID Number EPA ID Number

1001493262

FORMER SOMERSET POWER LLC (Continued)

Quantity Materical Removed SF: .00

Quantity Material Removed LF: 200.00

Project Description: Thermal solid core
AR Tracking ID: 15180
Super Lic Number: AS040221

Monitor Lic Number: Not reported
Lab Lic Number: AA000144
Year: 2002
Sticker Number: 556993
Form Type: ANE-001

 Sticker Number:
 556993

 Form Type:
 ANF-001

 Fee Status:
 50

 Facility Phone:
 (508) 235-2000

Worksite: pumphouse oil tank #3

Occupied: 0

Sub Town:

Contractor: AC000490
Contract Type: Not reported
Hours: m-f 7-330
Project Type: Renovation

Abatement Process: glove Bag\\cleanup\\encapsulation

Not reported

Location: Indoors

Decon Process: wetwipe,hepavac,isolated
Disposal Methods: 2 Ply Poly Bag with Label

Facility Usage: power generator Waiver Given: 0

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ:

Owner Name: NRG somerset ops
Owner Address: 1606 riverside avenue

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported

Ins Comp: amer protection ins co
Policy Number: Not reported
EXP Date: Not reported
Facility Size: 140000 sf 7 fl
Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037
Transporter City: CHELSEA

Transporter State: MA
Final Site: 7

Certified Name: daniel p labastie jr
Cert Sign Date: 09/18/2002
Certified Company: Not reported
Certified Phone: (508) 755-1355
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/07/2003 End Date: 07/25/2003 Date Entered: Not reported 06/26/2003 Entry Date: Quantity Materical Removed SF: Not reported

Map ID Direction Distance

MAP FINDINGS

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Quantity Material Removed LF: 620.00 Project Description: Thermal solid core AR Tracking ID: 26908 Super Lic Number: Not reported Monitor Lic Number: Not reported Lab Lic Number: Not reported Not reported Year Sticker Number: 200363 ANF-001 Form Type: Fee Status: 60 Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported Occupied: Not reported Contractor: AC000120 Not reported Contract Type: Hours: Not reported Project Type: Not reported **Abatement Process:** Not reported Location: Not reported Decon Process: Not reported Disposal Methods: Not reported Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp: Policy Number: Not reported

EXP Date: Not reported Facility Size: Not reported SERVICE TRAN Transporter Name: Transporter Address: Not reported Transporter City: BRISTOL PΑ Transporter State: Final Site: 37 Certified Name: MARY FORD

Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered_by: swhite

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/09/2003 End Date: 07/11/2003 Date Entered: Not reported Entry Date: 06/26/2003 Quantity Materical Removed SF: 240.00 Quantity Material Removed LF: 60.00

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Project Description: **Boiler Coatings** AR Tracking ID: 26921 Super Lic Number: Not reported Monitor Lic Number: Not reported Lab Lic Number: Not reported Year: Not reported 200406 Sticker Number: Form Type: ANF-001 Fee Status: 60

Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported Occupied: Not reported AC000490 Contractor: Contract Type: Not reported Not reported Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: Not reported Disposal Methods: Not reported Facility Usage: Not reported Not reported Waiver Given: **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF INC Transporter Name: Transporter Address: Not reported Transporter City: **CHELSEA**

Final Site: 7
Certified Name: LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: fuminski

MA

Transporter State:

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 10/17/2007 End Date: 10/17/2007 Date Entered: Not reported Entry Date: 10/23/2007 Quantity Materical Removed SF: 64.00 Quantity Material Removed LF: Not reported Project Description: **Boiler Coatings**

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

 AR Tracking ID:
 90373

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 304015

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: BOILER AT 203' LEVEL/NORTH AND SOUTH WALL

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: 2 CHAMBER

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: -1
DEP Waiver Number: SE07263
DLWD Waiver Number: SP07364
Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: ATLANTIC CONTRACTING
Transporter Address: 25 KENWOOD CIR, STE H

Transporter City: FRANKLIN Transporter State: MA

Final Site: Not reported

Certified Name: J GERARD ANDRUS

Certified Name: J GERARD AND
Cert Sign Date: 10/16/2007
Certified Commonwell

Certified Company: Not reported Certified Phone: Not reported Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 04/20/2016 Start Date: End Date: 04/29/2016 Not reported Date Entered: Entry Date: 04/20/2016 Quantity Materical Removed SF: 1600.00 Quantity Material Removed LF: Not reported Project Description: OTHER SOIL AR Tracking ID: 236542

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

AS061838 Super Lic Number: Monitor Lic Number: AM002542 AA000197 Lab Lic Number: 2016 Year: Sticker Number: 100241313 Form Type: ANF-001 HUNDRED Fee Status: Facility Phone: 7819073598 Sub Town: Not reported Worksite: TANK #2 Occupied: 0 AC000877 Contractor: Contract Type: WRITTEN 7AM - 5PM Hours: Project Type: Dem Abatement Process: Clnp Location: **OUTDOORS**

Decon Process: DECONTAMINATION STATION/WASH STATION
Disposal Methods: 2- 10 MIL LINERS IN ROLL-OFF CONTAINER

Facility Usage: FORMER OIL STORAGE TANK

Waiver Given: Not reported DEP Waiver Number: SAW-16-112 DLWD Waiver Number: 1B-1669BS

Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER
Owner Address: 40 SYLVAN ROAD

Owner City: WALTHAM

Owner State: MA

On Site Manager Name: ERIN WHORISKEY
On Site Manager Phone: 7819073598

Ins Comp: STARR INSURANCE COMPANY

Policy Number: 10000336719151 EXP Date: 9/28/2016 Facility Size: 500000

Transporter Name: WL FRENCH EXCAVATING CORP

Not reported

Transporter Address: 3 SURVEY CIRCLE Transporter City: NORTH BILLERICA

Transporter State: MA

Notification:

Final Site: Not reported
Certified Name: ED PRICE
Cert Sign Date: 04/20/2016
Certified Company: CHARTER
Certified Phone: 6175930997
Entered_by: EPRICE

DEP Region: Not reported Notifiers Name: Not reported Start Date: 02/17/2011 End Date: 02/20/2011 Date Entered: Not reported 02/16/2011 Entry Date: Quantity Materical Removed SF: .00 20.00 Quantity Material Removed LF: Project Description: Other: AR Tracking ID: 137836 Super Lic Number: AS040887

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2011 Sticker Number: 100120902 Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5089228691 Sub Town: Not reported POWER HOUSE Worksite: Occupied:

Contractor: AC000701
Contract Type: WRITTEN

Hours: Week days: 7AM330PM Week end: 7AM330PM

Project Type: Rpr Abatement Process: Fcontain Location: Indoors

Decon Process: THREE CHAMBER DECONTAMINATION UNIT ADJACENT TO THE WORK AREA.

Disposal Methods: ALL WASTE WILL BE PROPERLY WETTED & DOUBLED STORED IN A EPA APPROVED

CONTAINER FOR DISPOSAL.

Facility Usage: ELECTRICAL POWER

Waiver Given: Not reported DEP Waiver Number: SE11033 DLWD Waiver Number: HV11053 Small Owner Occ: 5

Owner Name: NRG

Owner Address: 1606 RIVERSIDE AVE
Owner City: SOMERSET, MA

Owner State: MA

On Site Manager Name: MIKE COSTA
On Site Manager Phone: 508-922-8691
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Transporter Address: 75 YORK AVE
Transporter City: RANDOLPH, MA
Transporter State: Not reported

Final Site: 39

Certified Name: JIM SILVIA SR
Cert Sign Date: 02/16/2011
Certified Company: MORAN
Certified Phone: 7818151100
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 12/10/2007 Fnd Date: 12/10/2007 Date Entered: Not reported 11/27/2007 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 12.00

Project Description: Thermal solid core

AR Tracking ID: 91926 Super Lic Number: AS000913

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

(508) 235-2000

Indoors

FORMER SOMERSET POWER LLC (Continued)

Facility Phone:

Location:

1001493262

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 304019

 Form Type:
 ANF-001

 Fee Status:
 F

Sub Town:

Worksite:

Cocupied:

Contractor:

Contract Type:

Hours:

Project Type:

Abatement Process:

Not reported

Repair

Repair

About reported

Glove Bag

Decon Process: AS REQUIRED
Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported Not reported EXP Date: Facility Size: Not reported Not reported Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported

Certified Name: J. GERALD ANDRUS

Cert Sign Date: 11/26/2007
Certified Company: Not reported
Certified Phone: Not reported

Entered_by: SBa

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 11/08/2004 End Date: 11/10/2004 Date Entered: Not reported Entry Date: 10/28/2004 Quantity Materical Removed SF: 84.00 Quantity Material Removed LF: Not reported Project Description: Transite Board AR Tracking ID: 46633 Super Lic Number: AS070095 Monitor Lic Number: AM061057

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 1561642

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: SAMPLE HOUSE
Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: AS REQUIRED

Disposal Methods: WET 2 PLY POLY BAG Facility Usage: Not reported

Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported
Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: Not reported Not reported Owner City: Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFFS POB 6037 Transporter Address: Transporter City: **CHELSEA** Transporter State: MA Final Site:

Certified Name: PAUL CAMARA
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered by: MMitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 03/30/2016 End Date: 04/08/2016 Date Entered: Not reported Entry Date: 03/30/2016 Quantity Materical Removed SF: 200.00 Quantity Material Removed LF: Not reported Project Description: **BOILER** AR Tracking ID: 234976 AS071733 Super Lic Number: Monitor Lic Number: Not reported AA000208 Lab Lic Number:

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

 Year:
 2016

 Sticker Number:
 100239966

 Form Type:
 ANF-001

 Fee Status:
 HUNDRED

 Facility Phone:
 9789073598

 Sub Town:
 Not reported

 Worksite:
 TANK #2

 Occupied:
 0

 Contractor:
 AC000639

 Contractor:
 AC000639

 Contract Type:
 WRITTEN

 Hours:
 7AM - 5PM

 Project Type:
 Dem

Abatement Process: Glv,Clnp,Disp, oth:EXTERIOR ABATEMENT

Location: OUTDOORS

Decon Process: REMOTE 3 CHAMBER DECON

Disposal Methods: WETTED ACM TO BE PACKAGED IN TWO 6-MIL POLY BURIAL BAG LINED DRUMS OR

WRAPPED IN TWO LAYERS OF 6-MIL POLY, THEN SEALED AND LABELLED

Facility Usage: TANK FARM Waiver Given: Not reported DEP Waiver Number: SAW-16-085 DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER COMPANY

Owner Address: 40 SYLVAN ROAD
Owner City: WALTHAM
Owner State: MA
On Site Manager Name: ERIN WHORISKEY

On Site Manager Name: ERIN WHORISK On Site Manager Phone: 7819073598

Ins Comp: STATE NATIONAL INSURANCE COMPANY

 Policy Number:
 NFA 0824093

 EXP Date:
 3/29/2017

 Facility Size:
 36000

Transporter Name: AMERICAN ENVIRONMENTAL, INC.

Transporter Address: 18 CANAL STREET

Transporter City: HOLYOKE
Transporter State: MA
Final Site: Not reported
Certified Name: RANDY REYNOLDS
Cert Sign Date: 03/30/2016

Certified Company: AMERICAN ENVIRONMENTAL, INC.

Certified Phone: 4133227190

Entered_by: METROREMEDIATOR

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 10/01/2003 End Date: 10/01/2003 Date Entered: Not reported Entry Date: 09/18/2003 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 15.00

Project Description: Thermal solid core

 AR Tracking ID:
 31097

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Year: Not reported Sticker Number: 201893 Form Type: ANF-001 Fee Status: F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: ELEVATION 137 STEAM DOWNCOMER UNIT N9

Not reported

Occupied: -1

AC000434 Contractor: Not reported Contract Type: 7A-330P Hours: Project Type: Renovation Abatement Process: Glove Bag Location: Indoors Decon Process: AS REQUIRED Disposal Methods: WET 2 PLY POLY BAG Facility Usage: **ELEC GENERA** Waiver Given: Not reported **DEP Waiver Number:** Not reported

Small Owner Occ:

DLWD Waiver Number:

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF INC Transporter Name: Transporter Address: PO BOX 6037 CHELSEA Transporter City:

Transporter State: MA Final Site: 9

Certified Name: DANIEL LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: (860) 423-6048
Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 08/25/2008 Start Date: End Date: 08/29/2008 Date Entered: Not reported 08/19/2008 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 85.00

Project Description: ThERermal solid core

 AR Tracking ID:
 102719

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Sticker Number: 305468 Form Type: ANF-001

Fee Status:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: GRADE 105 MID LEVEL; GRADE 118 MID LEVEL

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported

Decon Process: AS REQUIRED
Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: 10

Certified Name: J GERARD ANDRUS

Cert Sign Date: 08/07/2008
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 06/18/2003 End Date: 06/27/2003 Date Entered: Not reported Entry Date: 06/26/2003 Quantity Materical Removed SF: 700.00 Quantity Material Removed LF: 15.00

Project Description: THERmaL,BOILER BLOCK

 AR Tracking ID:
 26939

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 200404

Map ID Direction Distance Elevation

Site

MAP FINDINGS

Database(s)

FORMER SOMERSET POWER LLC (Continued)

1001493262

EDR ID Number

EPA ID Number

Form Type: ANF-00
Fee Status: 60
Facility Phone: Not repo

Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported Not reported Occupied: Contractor: AC000490 Contract Type: Not reported Hours: 7A-3:3P Project Type: Renovation Abatement Process: Glove Bag Location: Indoors HEPA VAC Decon Process: Disposal Methods: Not reported Facility Usage: Not reported

Waiver Given: -1

DEP Waiver Number: SE03099 1B03161BS **DLWD Waiver Number:** Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Not reported Owner City: Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC PO BOX 6037 Transporter Address: Transporter City: CHELSEA

Transporter State: MA Final Site: 7

Certified Name: Not reported
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: swhite

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 11/09/2010 Start Date: End Date: 11/17/2010 Date Entered: Not reported Entry Date: 10/27/2010 Quantity Materical Removed SF: 150.00 .00 Quantity Material Removed LF: Project Description: Blr AR Tracking ID: 133674 AS040887 Super Lic Number: Monitor Lic Number: AM033696 Lab Lic Number: AA000170 2010 Year: Sticker Number: 100115601 Form Type: ANF-001

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Fee Status: Fifty

Facility Phone: 8606383018
Sub Town: Not reported

Worksite: MAIN POWER PLANT

Occupied: -

Contractor: AC000701
Contract Type: WRITTEN

Hours: Week days: 7AM330PM Week end: N/A

Project Type: Rpr

Abatement Process: Clnp,Fcontain

Location: Indoors

Decon Process: THREE CHAMBER DECONTAMINATION UNIT ADJACENT TO THE WORK AREA.
Disposal Methods: ALL WASTE WILL PROPERLY WETTED & DOUBLE BAGGED & STORED IN EPA

APPROVED CONTAINER.

Facility Usage: ELECTRICAL POWER PLANT

Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported
Small Owner Occ: 5
Owner Name: NRG ENERGY
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET, MA
Owner State: MA

On Site Manager Name: MIKE COSTAS
On Site Manager Phone: 860-638-3018
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Not reported

Not reported

Transporter Address: 75 YORK AVE
Transporter City: RANDOLPH, MA
Transporter State: Not reported
Final Site: 39
Certified Name: JIM SILVIS SR.
Cert Sign Date: 10/27/2010
Certified Company: MORAN
Certified Phone: 7818151100

Certified Company: MORAN
Certified Phone: 7818151100
Entered_by: Not reported

Notification:

DEP Region:

Notifiers Name: Not reported Start Date: 07/23/2007 End Date: 07/27/2007 Date Entered: Not reported Entry Date: 07/09/2007 Quantity Materical Removed SF: 80.00 Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 85483 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2007 Sticker Number: 100058082 ANF-001 Form Type:

Distance EDR ID Number Elevation Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Fee Status: 5082352007 Facility Phone: Sub Town: Not reported Worksite: **BOILER HOUSE**

Occupied: -1

Contractor: AC000120 Contract Type: WRITTEN

Hours: Week days: 7AP-7PM Week end: 7AM-7PM

Project Type: Rpr **Abatement Process:** Encp Location: Indoors

TWO CHAMBER DECON AS ONLY ENTRANCE/EXIT Decon Process:

Disposal Methods: WETDOWN, DOUBLE BAGGED, LABELLED AND SHIPPED IN DOT APPROVED

CONTAINERED **BOILER HOUSE**

Facility Usage: Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported

Small Owner Occ:

NRG SOMERSET POWER LLC Owner Name: 1606 RIVERSIDE AVENUE Owner Address:

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: JEFFREY ARAUJO

On Site Manager Phone: 508-235-2007

ZURICH AMERICAN INSURANCE Ins Comp:

Policy Number: WC5869371-01 EXP Date: 12/31/2007 Facility Size: Not reported

FLEET ENVIRONMENTAL SERVICES Transporter Name:

Transporter Address: 75 D YORK AVENUE

Transporter City: **RANDOLPH** Transporter State: Not reported Final Site: 47

KATE TIMBERLAKE Certified Name:

Cert Sign Date: 07/09/2007

FLEET ENVIRONMENTAL SVC Certified Company:

Certified Phone: 7818151100 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 03/10/2003 End Date: 03/21/2003 Date Entered: Not reported Entry Date: 02/14/2003 Quantity Materical Removed SF: 200.00

Quantity Material Removed LF: 175.00

Project Description: boiler Coatings, thermal solid core pipe insulatio

AR Tracking ID: 22491 Super Lic Number: AS031575 Monitor Lic Number: AA000144 Lab Lic Number: AA000144 Year: Not reported Sticker Number: 553832 ANF-001 Form Type:

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Fee Status: (508) 677-0616 Facility Phone: Sub Town: Not reported Worksite: lighting plant Occupied: Not reported Contractor: AC000062 Contract Type: Not reported Hours: m-f 7-3 Project Type: removal Abatement Process: Glove Bag Location: Indoors

Decon Process: wet,glovebag,neg pressure
Disposal Methods: Wet 2 Ply Poly Bag
Facility Usage: power plant
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported
Small Owner Occ: Not reported
Owner Name: nrg

Owner Name: nrg
Owner Address: 1606 riverside avenue

Owner City: somerset Owner State: MA On Site Manager Name: Not reported On Site Manager Phone: Not reported commerce&industry Ins Comp: Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: NEW ENGLAND ABATEMENT RESOURCES INC

Transporter Address: 55 NORTH STREET PO BOX 376

Transporter City: CANTON Transporter State: MA Final Site: 7

Certified Name: sharon g cohen
Cert Sign Date: 02/12/2003
Certified Company: Not reported
Certified Phone: (781) 828-1812
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 08/05/2002 End Date: 08/07/2002 Date Entered: Not reported 07/18/2002 Entry Date: Quantity Materical Removed SF: 24.00 Quantity Material Removed LF: .00

Project Description: **Boiler Coatings** AR Tracking ID: 15274 Super Lic Number: AS040221 Monitor Lic Number: Not reported Lab Lic Number: AA000144 Year: 2002 Sticker Number: 557078 Form Type: ANF-001 Fee Status: 50

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: numphouse c. oil

Worksite: pumphouse c oil tr 3 Occupied: 0

Contractor: AC000490
Contract Type: Not reported
Hours: m-f 7-330
Project Type: Renovation
Abatement Process: glove Bag&cleanup

Location: Indoors

Decon Process: wetwipe hepa isolated
Disposal Methods: 2 Ply Poly Bag with Label

Facility Usage: Not reported

Waiver Given: 0

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: 0

Owner Name: nrg somerset ops Owner Address: 1606 riverside avenue

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported
On Site Manager Phone: Not reported

Ins Comp: amer protection ins co

Policy Number: Not reported
EXP Date: Not reported
Facility Size: 140000 sf 7 fl
Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037
Transporter City: CHELSEA
Transporter State: MA

Final Site: 29

Certified Name: daniel p la bastie jr
Cert Sign Date: 07/16/2002
Certified Company: Not reported
Certified Phone: (508) 755-1355
Entered_by: Not reported

Notification: 100205366R1

DEP Region: SE

Notifiers Name: ENVIRO STAFFING SOLUTIONS

Start Date: 08/13/2014 End Date: 02/28/2015 Date Entered: 10/11/2014 Entry Date: 11/10/2014 Quantity Materical Removed SF: 22500 Quantity Material Removed LF: 8000 Project Description: Blr,Spr,Trns AR Tracking ID: Not reported Super Lic Number: Not reported Monitor Lic Number: Not reported Lab Lic Number: Not reported Year: Not reported Sticker Number: Not reported Form Type: Not reported Fee Status: Not reported Facility Phone: Not reported

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site EDA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Sub Town: Not reported Worksite: Not reported Occupied: Not reported Not reported Contractor: Contract Type: Not reported Hours: Not reported Not reported Project Type: Abatement Process: Not reported Location: Not reported **Decon Process:** Not reported Disposal Methods: Not reported Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp: Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: Not reported Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Not reported Entered_by:

Notification: 100205366R2

DEP Region: SE

Notifiers Name: ENVIRO STAFFING SOLUTIONS

Start Date: 08/13/2014 End Date: 02/28/2015 Date Entered: 26/11/2014 Entry Date: 11/26/2014 Quantity Materical Removed SF: 22500 Quantity Material Removed LF: 8000 Project Description: Blr,Spr,Trns AR Tracking ID: Not reported Super Lic Number: Not reported Monitor Lic Number: Not reported Lab Lic Number: Not reported Not reported Year Sticker Number: Not reported Form Type: Not reported Fee Status: Not reported Facility Phone: Not reported Sub Town: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Worksite: Not reported Occupied: Not reported Contractor: Not reported Not reported Contract Type: Not reported Hours: Project Type: Not reported **Abatement Process:** Not reported Location: Not reported Decon Process: Not reported Disposal Methods: Not reported Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported Not reported Owner Name: Owner Address: Not reported Not reported Owner City: Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp: Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: Not reported Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered_by: Not reported

Notification: 100236964R1

DEP Region: SE

Notifiers Name: AMERICAN ENVIRONMENTAL INC

 Start Date:
 02/19/2016

 End Date:
 04/29/2016

 Date Entered:
 29/03/2016

 Entry Date:
 03/29/2016

 Quantity Materical Removed SF:
 37660

 Quantity Material Removed LF:
 500

Project Description: PIPEINSUL OTHER MASTIC COATING

AR Tracking ID: Not reported Not reported Super Lic Number: Monitor Lic Number: Not reported Lab Lic Number: Not reported Year: Not reported Sticker Number: Not reported Form Type: Not reported Fee Status: Not reported Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Occupied: Not reported Contractor: Not reported Contract Type: Not reported Not reported Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: Not reported Not reported Disposal Methods: Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Not reported Small Owner Occ: Owner Name: Not reported Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: Not reported Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered_by: Not reported

Notification: 100236964R2

DEP Region: SE

Notifiers Name: AMERICAN ENVIRONMENTAL INC

 Start Date:
 02/19/2016

 End Date:
 05/27/2016

 Date Entered:
 25/04/2016

 Entry Date:
 04/25/2016

 Quantity Materical Removed SF:
 37660

 Quantity Material Removed LF:
 500

Project Description: PIPEINSUL OTHER MASTIC COATING

AR Tracking ID: Not reported Super Lic Number: Not reported Not reported Monitor Lic Number: Lab Lic Number: Not reported Not reported Year: Sticker Number: Not reported Not reported Form Type: Fee Status: Not reported Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported Occupied: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Contractor: Not reported Contract Type: Not reported Hours: Not reported Not reported Project Type: **Abatement Process:** Not reported Location: Not reported Not reported Decon Process: Disposal Methods: Not reported Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported Owner Name: Not reported Owner Address: Not reported Not reported Owner City: Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Not reported Transporter Address: Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: Not reported Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered by: Not reported

Notification: 100244951R1

DEP Region: SE

Notifiers Name: NON LICENSED REMOVAL

 Start Date:
 06/22/2016

 End Date:
 07/29/2016

 Date Entered:
 11/07/2016

 Entry Date:
 07/11/2016

 Quantity Materical Removed SF:
 32000

 Quantity Material Removed LF:
 0

Project Description: OTHER ACM COATED STEEL

AR Tracking ID: Not reported Super Lic Number: Not reported Monitor Lic Number: Not reported Lab Lic Number: Not reported Not reported Year: Sticker Number: Not reported Form Type: Not reported Fee Status: Not reported Facility Phone: Not reported Sub Town: Not reported Worksite: Not reported Occupied: Not reported Contractor: Not reported

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Contract Type: Not reported Hours: Not reported Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: Not reported Disposal Methods: Not reported Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: Not reported Owner Name: Not reported Not reported Owner Address: Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Not reported Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: Not reported Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 05/06/2014 Start Date: End Date: 08/28/2014 Date Entered: Not reported Entry Date: 04/23/2014 Quantity Materical Removed SF: 8000.00 Quantity Material Removed LF: .00 Project Description: Insl AR Tracking ID: 187845 Super Lic Number: AS053930 Monitor Lic Number: AM000146 Lab Lic Number: AA000208 Year: 2014 Sticker Number: 100197444 ANF-001 Form Type: Fee Status: Fifty Facility Phone: Not reported Sub Town: Not reported CAT WALK Worksite: Occupied:

AC000831

WRITTEN

TC5741137.2s Page 151

Contractor:

Contract Type:

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Hours: Week days: 7-3:30PM Week end:

Project Type: Dem

Abatement Process: Encl,Fcontain,Encp Location: Not reported

Decon Process: THREE CHAMBER DECON

Disposal Methods: WETTED MATERIALS TO BE DOUBLE BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: SE-14-134 DLWD Waiver Number: 9391-2014

Small Owner Occ:

Owner Name: GREAT NORTHERN SITE CORP

Owner Address: 85-87 BOSTON STREET.

Owner City: EVERETT, MA

Owner State: MA

On Site Manager Name: ETHAN OWEN
On Site Manager Phone: Not reported
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: RECOERY EXPRESS, INC
Transporter Address: 180 CANAL STREET
Transporter City: BOSTON, MA
Transporter State: Not reported
Final Site: 39
Certified Name: JESSDA
Cert Sign Date: 04/22/2014

Certified Company: ASP ENVIRONMENTAL

Not reported

Certified Phone: 9789059936 Entered_by: Not reported

Notification:

Contractor:

DEP Region: Not reported Notifiers Name: Not reported Start Date: 06/21/2007 End Date: 06/22/2007 Date Entered: Not reported 06/08/2007 Entry Date: Quantity Materical Removed SF: 50.00 Quantity Material Removed LF: 00 Project Description: Trwl AR Tracking ID: 84081 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2007 100056572 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5082352007 Sub Town: Not reported Worksite: AREA#2 Occupied: -1

Contract Type: Off
Hours: Week days: 7AM-7PM Week end:

AC000120

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Project Type: **Abatement Process:** Clnp Location: Indoors

Decon Process: 3 CHAMBER DECON AS ONLY METHOD OF ENTRANCE AND EXIT

Disposal Methods: WET METHODS, DOUBLE BAGGED, LABELLED AND SHIPPED IN DOT APPROVED

CONTAINERS

HEAT EXCHANGE TANK Facility Usage:

Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: NRG Owner Name:

Owner Address: 1606 RIVERSIDE AVENUE

SOMERSET Owner City:

Owner State: MA

JEFF ARAUJO On Site Manager Name: On Site Manager Phone: 508-235-2007

Ins Comp: **ZURICH AMERICAN INSURANCE**

Policy Number: WC5869371-01 EXP Date: 12/31/2007 Facility Size: Not reported

Transporter Name: FLEET ENVIRONMENTAL SERVICES

75 D YORK AVENUE Transporter Address:

Transporter City: **RANDOLPH** Transporter State: Not reported Final Site: 47

Certified Name:

Notification:

KATE TIMBERLAKE

Cert Sign Date: 06/07/2007

Certified Company: FLEET ENVIRONMENTAL SVC

Not reported

Certified Phone: 7818151100 Entered_by: Not reported

DEP Region: Not reported Notifiers Name: Not reported Start Date: 08/13/2014 02/28/2015 End Date: Not reported Date Entered: 08/12/2014 Entry Date: Quantity Materical Removed SF: 22500.00 Quantity Material Removed LF: 8000.00 Project Description: Blr,Spr,Trns AR Tracking ID: 195635 Super Lic Number: AS901198 Monitor Lic Number: AM040493 AA000152 Lab Lic Number: Year: 2014 100205366 Sticker Number: ANF-001 Form Type: Fee Status: HUNDRED Facility Phone: 6173871497 Sub Town: Not reported Worksite: POWER STATION

Occupied: 0

AC000737 Contractor: WRITTEN Contract Type: 7AM - 330PM Hours:

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Project Type: Dem

Abatement Process: Glv,Clnp,Fcontain Location: INDOORS

Decon Process: REMOTE DECON, CRITICAL BARRIERS, EXCLUSIONS ZONES, FULL CONTAINMENT.
Disposal Methods: 2 LAYERS OF 6 MIL POLY, WETTED, SEALED AND SENT TO LICENSED LANDFILL

Facility Usage: POWER STATIONS
Waiver Given: Not reported
DEP Waiver Number: SE-14-174

DLWD Waiver Number: 10339-2014 Small Owner Occ: 0

Owner Name: BILL THIBEAULT
Owner Address: 85 BOSTON ST.
Owner City: EVERETT
Owner State: MA

On Site Manager Name: ETHAN OWEN
On Site Manager Phone: 4132815851

Ins Comp: AIM MUTUAL INSURANCE Policy Number: AWC-400-7029587-2013

EXP Date: 8/26/2014 Facility Size: 50000

Transporter Name: EAST COAST SYSTEMS

Transporter Address: 6 CEDAR ST.
Transporter City: COTUIT
Transporter State: MA

Final Site: Not reported
Certified Name: RAMON QUEZADA
Cert Sign Date: 08/12/2014

Certified Company: ENVIRO STAFFING SOLUTIONS

Certified Phone: 9787947800

Entered_by: ENVIROSTAFFING28

Notification: Not reported **DEP Region:** Not reported Notifiers Name: Not reported Start Date: 05/27/2008 End Date: 05/30/2008 Date Entered: Not reported 05/08/2008 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 200.00

Project Description: Thermal solid core AR Tracking ID: 98006 Super Lic Number: AS000913 Monitor Lic Number: AM061057 Lab Lic Number: AA000144 Year: Not reported Sticker Number: 305456 Form Type: ANF-001

Fee Status: F Facility Phone: (508) 235-2000

Sub Town: Not reported

Worksite: NORTH TANK YARD NEAR RDWY AND GUARD SHACK

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Abatement Process: Not reported
Location: Not reported
Decon Process: AS REQUIRED
Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Transporter Name: DUMPSTER ON SITE

Transporter Address: Not reported
Transporter City: Not reported
Transporter State: Not reported
Final Site: Not reported
Certified Name: j GERARD ANDRUS

Cert Sign Date: 05/06/2008
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: mmitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 06/08/2011 End Date: 06/17/2011 Not reported Date Entered: Entry Date: 05/25/2011 Quantity Materical Removed SF: 12.00 Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 142348 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2011 100126897 Sticker Number: Form Type: ANF-001

Fee Status: Fifty
Facility Phone: 5082352000
Sub Town: Not reported
Worksite: POWER PLANT

Occupied: 0

Contractor: AC000701
Contract Type: Off

Hours: Week days: 0700-1700 Week end: 0700-1700

Project Type: Rpr,Renv
Abatement Process: Glv,Encl,Fcontain

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Location: Indoors

Decon Process: THREE CHAMBER DECONTAMINATION SETUP ADJACENT TO THE WORK AREA
Disposal Methods: ACM WILL BE THOROUGHLY WETTED AND PLACED INTO DOUBLE 6-MIL POLY BAGS

Facility Usage: POWER PLANT
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ: 5

Owner Name: NRG ENERGY
Owner Address: 1606 RIVERSIDE AVE

Owner Address: 1606 RIVERSIDE AVE Owner City: SOMERSET

Owner City: SOI Owner State: MA

On Site Manager Name: MICHAEL COSTA
On Site Manager Phone: 508 922 8691

Ins Comp: GREAT DIVIDE INSURANCE CO

Policy Number: WCA15278710
EXP Date: 2/28/2012
Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Not reported

Transporter Address: 75 D YORK AVE
Transporter City: RANDOLPH
Transporter State: Not reported

Final Site: 39

Notification:

Certified Name: JOHN TRAVIS
Cert Sign Date: 05/25/2011
Certified Company: 05/25/2011
Certified Phone: 7818151109
Entered_by: Not reported

DEP Region: Not reported Notifiers Name: Not reported Start Date: 06/09/2011 End Date: 06/17/2011 Date Entered: Not reported 05/25/2011 Entry Date: Quantity Materical Removed SF: 10.00 Quantity Material Removed LF: .00 Project Description: Blr AR Tracking ID: 142350 Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 Year: 2011 100126901 Sticker Number: Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5082352000 Sub Town: Not reported Worksite: POWER PLANT

Occupied: 0

Contractor: AC000701 Contract Type: Off

Hours: Week days: 0700-1700 Week end: 0700-1700

Project Type: Rpr,Renv
Abatement Process: Glv,Encl,Fcontain

Location: Indoors

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Decon Process: THREE CHAMBER DECONTAMINATION SETUP ADJACENT TO THE WORK AREA
Disposal Methods: ACM WILL BE THOROUGHLY WETTED AND PLACED INTO DOUBLE 6-MIL POLY BAGS

Facility Usage: POWER PLANT
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported

Small Owner Occ: 5

Owner Name: NRG ENERGY
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: MICHAEL COSTA
On Site Manager Phone: 508 922 8691

Ins Comp: GREAT DIVIDE INSURANCE CO

Policy Number: WCA15278710
EXP Date: 2/28/2012
Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Transporter Address: 75 D YORK AVE
Transporter City: RANDOLPH
Transporter State: Not reported

Final Site: 39

 Certified Name:
 JOHN TRAVIS

 Cert Sign Date:
 05/25/2011

 Certified Company:
 05/25/2011

 Certified Phone:
 7818151109

 Entered_by:
 Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 01/02/2008 Start Date: End Date: 01/11/2008 Date Entered: Not reported Entry Date: 12/18/2007 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 120.00

Project Description: Thermal solid core

 AR Tracking ID:
 92681

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 304867

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: FLR 118 NEAR ELEVATOR #3

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: AS REQUIRED

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported
Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: Not reported
On Site Manager Phone: Not reported
Ins Comp: Not reported
Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported

Transporter Name: DUMPSTER ON SITE

Transporter Address: Not reported
Transporter City: Not reported
Transporter State: Not reported
Final Site: Not reported
Certified Name: J GERARD ANDRUS

Cert Sign Date: 12/12/2007
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: mmitchell

Notification: Not reported Not reported DEP Region: Notifiers Name: Not reported Start Date: 12/10/2007 12/13/2007 End Date: Date Entered: Not reported 11/28/2007 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 100.00

Project Description: Thermal solid core

 AR Tracking ID:
 92023

 Super Lic Number:
 AS000913

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 304020

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: MENS ROOM GRADE 118 MIDWAY OF BLDG

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7-330
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: AS REQUIRED

Disposal Methods: WET 2 PLY POLY BAG

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Not reported Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported Certified Name: J GERAD ANDRUS

Certified Name:

Cert Sign Date:

11/26/2007

Certified Company:

Not reported

Entered_by:

Not reported

mmitchell

Notification:

DEP Region: Not reported Notifiers Name: Not reported 04/25/2013 Start Date: End Date: 05/03/2013 Not reported Date Entered: Entry Date: 04/24/2013 Quantity Materical Removed SF: 2700.00 Quantity Material Removed LF: .00 Project Description: Trns AR Tracking ID: 172197 Super Lic Number: AS900109 AA000216 Monitor Lic Number: Lab Lic Number: AA000188 2013 Year: Sticker Number: 100176214 Form Type: ANF-001 Fee Status: Fifty 0000000000 Facility Phone: Sub Town: Not reported Worksite: OUT SIDE LOT AREA

Occupied: 0
Contractor: AC000509

Contractor: AC000509
Contract Type: WRITTEN

Hours: Week days: 0700-1700 Week end: N/A

Not reported

Project Type: Dem
Abatement Process: CInp
Location: Not reported
Decon Process: 3 STAGE REMOTE

Disposal Methods: ROOFING MATERIAL WET MECHANICALLY PLACE IN ROLL-OFF, CONCRETE WET

PLACED IN DUMP TRAILERS

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Facility Usage: FORMER POWER PLANT

Waiver Given: Not reported DEP Waiver Number: SE-13-130 DLWD Waiver Number: 6290-2013

Small Owner Occ: 5

Owner Name: ASSET RECOVERY GROUP

Owner Address: 162 VALLEY BLVD
Owner City: WOOD RIDGE, NJ
Owner State: MA

On Site Manager Name: KEVIN DOWNEY
On Site Manager Phone: 508-431-8990

Ins Comp: HDI GERLING AMERICA INSURANCE

Policy Number: EWGCC000084913

EXP Date: 4/21/2014 Facility Size: 20,000

Transporter Name: TMC ENVIRONMENTAL Transporter Address: 19 NATIONAL DRIVE

Transporter City: FRANKLIN
Transporter State: Not reported
Final Site: 39

Certified Name: JIM CONNOLLY
Cert Sign Date: 04/24/2013

Certified Company: TMC ENVIRONMENTAL

Certified Phone: 5089663737 Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/29/2004 End Date: 04/30/2004 Date Entered: Not reported Entry Date: 04/14/2004 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 21.00

Project Description: Thermal solid core

 AR Tracking ID:
 38492

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 1561622

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: BASEMENT BEARING ROOM-COOLING WATER PUMP SET

Occupied: -

Contractor: AC000490 Contract Type: Not reported Hours: 7A-330P Not reported Project Type: Abatement Process: Not reported Location: Not reported AS REQUIRED Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported

MAP FINDINGS Map ID Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Not reported Small Owner Occ:

NRG SOMERSET OPERATIONS Owner Name:

Owner Address: 1606 RIVERSIDE AVE

SOMERSET Owner City:

Owner State: MA On Site Manager Name:

Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC PO BOX 6037 Transporter Address: Transporter City: **CHELSEA** Transporter State: MA Final Site: 18

Certified Name: DANIEL LABASTIE Cert Sign Date: 04/13/2004 Certified Company: Not reported Certified Phone: Not reported Entered by: MMitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/27/2005 04/28/2005 End Date: Date Entered: Not reported 04/07/2005 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 15.00

Project Description: Thermal solid core

AR Tracking ID: 51918 AS070095 Super Lic Number: Monitor Lic Number: AM061057 Lab Lic Number: AA000144 Not reported Year: Sticker Number: 300741 Form Type: ANF-001 Fee Status: 85

Facility Phone: (508) 235-2000 Sub Town: Not reported LEVEL 118 Worksite: Occupied: -1

AC000490 Contractor: Not reported Contract Type: 7A-53P Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: HEPA VAC

WET 2 PLY POLY BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site:

Certified Name: GEORGE DOBBS
Cert Sign Date: 04/01/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: fuminski

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 04/28/2005 Start Date: End Date: 04/28/2005 Date Entered: Not reported Entry Date: 04/07/2005 Quantity Materical Removed SF: Not reported

Quantity Material Removed LF: 3.00

Project Description: Thermal solid core

AR Tracking ID: 51919 Super Lic Number: AS070095 AM061057 Monitor Lic Number: AA000144 Lab Lic Number: Not reported Year: 300742 Sticker Number: Form Type: ANF-001 Fee Status: 85

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: LEVELS 137

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7A-53P
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: HEPA VAC

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported

Map ID
Direction
Distance

Elevation Site Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

EDR ID Number

DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATION

Owner Address: Not reported Not reported Owner City: Owner State: Not reported Not reported On Site Manager Name: On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported

Final Site:

Certified Name: GEORGE DOBBS
Cert Sign Date: 04/01/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered by: fuminski

Notification: Not reported **DEP Region:** Not reported Notifiers Name: Not reported Start Date: 04/28/2005 04/29/2005 End Date: Date Entered: Not reported 04/07/2005 Entry Date: Quantity Materical Removed SF: Not reported

Quantity Material Removed LF: 9.00

Project Description: Thermal solid core

 AR Tracking ID:
 51920

 Super Lic Number:
 AS070095

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 300743

 Form Type:
 ANF-001

Fee Status: 85

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: LEVELS 105

Occupied: -1

Contractor: AC000490
Contract Type: Not reported
Hours: 7A-53P
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: HEPA VAC

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: Not reported Not reported Owner City: Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported

Final Site:

Certified Name: GEORGE DOBBS
Cert Sign Date: 04/01/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: swhite

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 05/16/2005 05/16/2005 End Date: Date Entered: Not reported Entry Date: 05/03/2005 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 4.00

Project Description: Thermal solid core

AR Tracking ID: 52971 AS070095 Super Lic Number: Monitor Lic Number: AM061057 Lab Lic Number: AA000144 Year: Not reported Sticker Number: 300765 Form Type: ANF-001 Fee Status: 85

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: LEVEL 212

Occupied: -1

AC000490 Contractor: Contract Type: Not reported Hours: 7A-33P Not reported Project Type: Abatement Process: Not reported Location: Not reported Decon Process: HEPA VAC DBL BAG Disposal Methods: Facility Usage: Not reported Waiver Given: Not reported **DEP Waiver Number:** Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: Not reported

Map ID
Direction
Distance

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Owner Name: NRG SOMERSET OPERATIONS Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp: Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported

Final Site: 7

Certified Name: GEORGE DOBBS
Cert Sign Date: 05/02/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: fuminski

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 05/04/2005 End Date: 05/06/2005 Date Entered: Not reported 04/21/2005 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 10.00

Project Description: Thermal solid core

AR Tracking ID: 52588 Super Lic Number: AS070095 Monitor Lic Number: AM061057 Lab Lic Number: AA000144 Not reported Year: Sticker Number: 300774 Form Type: ANF-001 Fee Status: 85

Facility Phone: (508) 235-2000 Sub Town: Not reported Worksite: LEVELS 137 Occupied: -1 Contractor: AC000490 Contract Type: Not reported 7A-33P Hours: Project Type: Not reported **Abatement Process:** Not reported Location: Not reported Decon Process: DBL SUIT TYVEK Disposal Methods: **SEAL BAGS** Facility Usage: Not reported Waiver Given: Not reported

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported JOB ROLLOFF Transporter Name: Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site:

Certified Name: GEORGE DOBBS
Cert Sign Date: 04/20/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: fuminski

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 02/08/2006 End Date: 02/14/2006 Date Entered: Not reported Entry Date: 01/26/2006 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 200.00

Project Description: Thermal solid core

 AR Tracking ID:
 63799

 Super Lic Number:
 AS052056

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 302159

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: STOREROOM GROUND FLOOR SOUTH END

Occupied: Contractor: AC000490 Contract Type: Not reported Hours: 7-3:30 Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: AS REQUIRED Disposal Methods:

Disposal Methods: WET 2 PLY POLY BAG Facility Usage: Not reported

Waiver Given:
DEP Waiver Number:
DLWD Waiver Number:
Not reported
Not reported
Not reported
Small Owner Occ:
Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Owner City: SOMERSET Owner State: MA On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC Transporter Address: PO BOX 6037 Transporter City: **CHELSEA** Transporter State: MA

Certified Name: J GERARD ANDRUS

Not reported

Cert Sign Date: Not reported Certified Company: Not reported Certified Phone: Not reported Entered_by: esandler

Final Site:

Notification:

DEP Region: Not reported Notifiers Name: Not reported 11/24/2008 Start Date: End Date: 12/04/2008 Not reported Date Entered: Entry Date: 11/10/2008 80.00 Quantity Materical Removed SF: Quantity Material Removed LF: .00 Project Description: Blr 106624 AR Tracking ID: Super Lic Number: AS040887 Monitor Lic Number: AM033696 Lab Lic Number: AA000170 2008 Year: Sticker Number: 100081170 Form Type: ANF-001 Fee Status: Fifty Facility Phone: 5082352000 Not reported Sub Town: Worksite: **BOILER HOUSE** Occupied:

Contractor: AC000701 Contract Type: WRITTEN

Hours: Week days: 7AM-3:30PM Week end:

Project Type: Rpr Fcontain Abatement Process: Location: Indoors

Decon Process: THREE CHAMBER DECON UNIT

Disposal Methods: DOUBLE BAG ALL ASBESTOS MATERIALS USING WET METHODS

Facility Usage: **ELECTRICAL POWER**

Waiver Given: Not reported DEP Waiver Number: Not reported **DLWD Waiver Number:** Not reported Small Owner Occ: 5

NRG Owner Name:

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Owner State: MA

On Site Manager Name: TODD ANNARUMMO

On Site Manager Phone: 508-235-2000

Ins Comp: ZURICH AMERICAN INSURANCE

Policy Number: WC9428620-00 EXP Date: 1/18/2009 Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY, LLC

Transporter Address: 75 D YORK AVENUE

Transporter City: RANDOLPH Transporter State: Not reported

Final Site: 47

Certified Name: KATE TIMBERLAKE

Cert Sign Date: 11/10/2008
Certified Company: MER, LLC
Certified Phone: 7818151100
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/20/2006 End Date: 04/26/2006 Date Entered: Not reported 04/11/2006 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 9.00

Project Description: Thermal solid core

 AR Tracking ID:
 66583

 Super Lic Number:
 AS052056

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 302790

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: ELEVATION 203 NORTH SIDE MAIN STEAM

Occupied: Not reported AC000490 Contractor: Contract Type: Not reported 7-3:30 Hours: Project Type: Not reported Abatement Process: Not reported Location: Not reported Decon Process: REMOTE DECON WET 2 PLY POLY BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS
Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET

Owner State: MA

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: EXP Date: Not reported Not reported Facility Size: Not reported JOB ROLLOFF Transporter Name: Transporter Address: P O BOX 6037 Transporter City: CHELSEA Transporter State: MA

Final Site: 7
Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: esandler

Notification: Not reported **DEP Region:** Not reported Notifiers Name: Not reported Start Date: 04/20/2006 End Date: 04/26/2006 Date Entered: Not reported Entry Date: 04/11/2006 Quantity Materical Removed SF: Not reported

Quantity Material Removed LF: 3.00

Project Description: Thermal solid core

 AR Tracking ID:
 66582

 Super Lic Number:
 AS052056

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 000302789

 Form Type:
 ANF-001

 Fee Status:
 F

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: ELEVATION 218

Occupied: -1

Contractor: AC000490 Contract Type: Not reported Hours: 7-3:30 Not reported Project Type: Abatement Process: Not reported Location: Not reported REMOTE DECON Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS
Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF Transporter Address: PO BOX 6037 Transporter City: **CHELSEA** Transporter State: MA

Final Site: 7
Certified Name: J GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: esandler

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 04/25/2007 Start Date: 04/28/2007 End Date: Date Entered: Not reported 04/03/2007 Entry Date: Quantity Materical Removed SF: 32.00 Not reported Quantity Material Removed LF: Project Description: **Insulating Cement**

 AR Tracking ID:
 81321

 Super Lic Number:
 AS070258

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 302785

 Form Type:
 ANF-001

Fee Status:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: 8 BOILER ECONOMIZER INLET VALVE LEVEL 194 SOUTH SIDE

Occupied: -1

AC000490 Contractor: Not reported Contract Type: 7-330 Hours: Project Type: Not reported **Abatement Process:** Not reported Location: Not reported Decon Process: AS REQUIRED WET 2 PLY POLY BAG Disposal Methods:

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPS
Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported
On Site Manager Phone: Not reported

MAP FINDINGS Map ID Direction

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: Not reported Transporter Address: Not reported Transporter City: Not reported Transporter State: Not reported Final Site: Not reported J GERARD ANDRUS Certified Name:

Cert Sign Date: 03/28/2007 Certified Company: Not reported Certified Phone: Not reported

mmitchell Entered_by:

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 04/20/2006 04/26/2006 End Date: Date Entered: Not reported Entry Date: 04/12/2006 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 12.00

Project Description: Thermal solid core

AR Tracking ID: 66599 Super Lic Number: AS052056 AM061057 Monitor Lic Number: Lab Lic Number: AA000144 Year: Not reported Sticker Number: 302788 ANF-001

Fee Status:

Form Type:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: **ELEVATION 118 UNDER TURBINE REHEAT LINE**

Occupied:

AC000490 Contractor: Not reported Contract Type: 7-3:30 Hours: Not reported Project Type: **Abatement Process:** Not reported Location: Not reported REMOTE DECON Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Not reported Ins Comp:

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Policy Number:

EXP Date:
Not reported
Facility Size:
Not reported
Transporter Name:
JOB ROLLOFF INC
Transporter Address:
PO BOX 6037
Transporter City:
CHELSEA
Transporter State:
MA

Final Site: 7
Certified Name: 7
GERARD ANDRUS

Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: esandler

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 02/04/2004 End Date: 02/04/2004 Date Entered: Not reported 01/15/2004 Entry Date: Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 9.00

Project Description: Thermal solid core

 AR Tracking ID:
 35429

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 202860

 Form Type:
 ANF-001

Fee Status:

Facility Phone: (508) 235-2000
Sub Town: Not reported
Worksite: ELEVATION 118

Occupied: -1

AC000490 Contractor: Not reported Contract Type: 7A-330P Hours: Project Type: Not reported Not reported **Abatement Process:** Location: Not reported Decon Process: AS REQUIRED Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

EXP Date: Not reported
Facility Size: Not reported
Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037
Transporter City: CHELSEA
Transporter State: MA
Final Site: 18

Certified Name: DANIEL LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: MMitchell

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 09/13/2016 09/16/2016 End Date: Date Entered: Not reported 08/31/2016 Entry Date: Quantity Materical Removed SF: .00 Quantity Material Removed LF: 50.00

Project Description: OTHER CAULK AR Tracking ID: 247372 Super Lic Number: AS071733 Monitor Lic Number: Not reported Lab Lic Number: AA000208 Year: 2016 Sticker Number: 100250086 Form Type: ANF-001 HUNDRED Fee Status: Facility Phone: 9789073598 Sub Town: Not reported **VAULT** Worksite: Occupied: 0 Contractor: AC000639 Contract Type: WRITTEN Hours: 7AM-5PM

Project Type: Dem
Abatement Process: oth:EXTERIOR ABATEMENT

Location: OUTDOORS

Decon Process: THREE STAGE REMOTE DECONTAMINATION UNIT WITH HOT AND COLD WATER

Disposal Methods: DOUBLED 6 MIL POLY BAGS

Facility Usage: TANK FARM Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER COMPANY

Owner Address: 40 SYLVAN ROAD
Owner City: WALTHAM

Owner State: WALTI

On Site Manager Name: ERIN WHORSKEY
On Site Manager Phone: 7819073598

Ins Comp: STATE NATIONAL INSURANCE COMPANY

Policy Number: NFA 08424093 EXP Date: 3/29/2017

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Facility Size: 36000

Transporter Name: AMERICAN ENVIRONMENTAL

Transporter Address: 18 CANAL STREET

Transporter City: HOLYOKE Transporter State: MA

Final Site: Not reported
Certified Name: RANDY REYNOLDS

Cert Sign Date: 08/31/2016

Certified Company: AMERICAN ENVIRONMENTAL

Certified Phone: 4133227190

Entered_by: METROREMEDIATOR

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/18/2005 End Date: 04/19/2005 Date Entered: Not reported Entry Date: 04/07/2005 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 12.00

Project Description: Thermal solid core

AR Tracking ID: 51917 Super Lic Number: AS070095 AM061057 Monitor Lic Number: Lab Lic Number: AA000144 Year Not reported 300740 Sticker Number: Form Type: ANF-001 Fee Status: 85

 Facility Phone:
 (508) 235-2000

 Sub Town:
 Not reported

 Worksite:
 LEVELS 212 & 203

Occupied:

Contractor: AC000490
Contract Type: Not reported
Hours: 7A-33P
Project Type: Not reported
Abatement Process: Not reported
Location: Not reported
Decon Process: HEPA VAC

Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported
Waiver Given: Not reported
DEP Waiver Number: Not reported
DLWD Waiver Number: Not reported
Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: Not reported Owner City: Not reported Owner State: Not reported On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported

Distance EDR ID Number EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Name: JOB ROLLOFF
Transporter Address: PO BOX 6037
Transporter City: CHELSEA
Transporter State: MA
Final Site: 7

Certified Name: GEORGE DOBBS
Cert Sign Date: 04/01/2005
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: fuminski

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 10/11/2016 11/02/2016 End Date: Date Entered: Not reported Entry Date: 09/28/2016 Quantity Materical Removed SF: 100.00 Quantity Material Removed LF: 815.00

Project Description: PIPEINSUL OTHER DEBRIS

AR Tracking ID: 249499 Super Lic Number: AS071733 Monitor Lic Number: Not reported AA000208 Lab Lic Number: Year: 2016 100251826 Sticker Number: Form Type: ANF-001 Fee Status: HUNDRED 9789073598 Facility Phone: Sub Town: Not reported

Worksite: STEAM TUNNELS AND VAULTS

Occupied:

Contractor: AC000639
Contract Type: WRITTEN
Hours: 7AM-4PM
Project Type: Renv
Abatement Process: Glv,Fcontain
Location: OUTDOORS

Decon Process: THREE STAGE PERSONNEL DECONTAMINATION UNIT WITH SHOWER REMOTE TO THE

WORK AREAS

Disposal Methods: WETTED DOUBLE LAYER 6 MIL POLY BAGS DRUMS AND GAYLORD BOXES

Facility Usage: TANK FARM Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER COMPANY

Owner Address: 40 SYLVAN ROAD Owner City: WALTHAM

Owner State: MA

On Site Manager Name: ERIN WHORINSKEY

On Site Manager Phone: 7819073598

Ins Comp: STATE NATIONAL INSURANCE COMPANY

 Policy Number:
 NFA 0824093

 EXP Date:
 3/29/2017

 Facility Size:
 36000

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Name: AMERICAN ENVIRONMENTAL, INC.

Transporter Address: 18 CANAL STREET

Transporter City: HOLYOKE
Transporter State: MA
Final Site: Not reported
Certified Name: RANDY REYNOLDS

Cert Sign Date: 09/28/2016

Certified Company: AMERICAN ENVIRONMENTAL

Certified Phone: 4133227190

Entered_by: METROREMEDIATOR

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 07/09/2002 Fnd Date: 07/09/2002 Date Entered: Not reported Entry Date: 06/21/2002 Quantity Materical Removed SF: .00 Quantity Material Removed LF: 30.00

Project Description: THERMAL SOLID CORE

AR Tracking ID: 1380 AS040221 Super Lic Number: Monitor Lic Number: Not reported Lab Lic Number: Not reported Year: 2002 Sticker Number: 556827 Form Type: ANF-001 Fee Status: 50

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: ELAV. 137 RELOCATE 3/4 STEAM PIPE IN PWR PLANT

 Occupied:
 -1

 Contractor:
 AC000490

 Contract Type:
 Not reported

 Hours:
 7 am - 3:30 pm

Hours: 7 am - 3:30 pm
Project Type: RENOVATION
Abatement Process: GLOVE BAG
Location: INDOORS
Decon Process: HEPA VAC

Disposal Methods: WET 2 PLY POLY BAG WITH DUMPSTER

Facility Usage: ELEC. GENERATOR

Waiver Given: 0

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ: 0

Owner Name: NRG - SOMERSET OP'S
Owner Address: 1606 RIVERSIDE AVE.

Owner City: SOMERSET Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported

Ins Comp: AMERICAN PROTECTION INS. CO.

Policy Number: Not reported EXP Date: Not reported Facility Size: 100,000

Transporter Name: JOB ROLLOFF INC

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Address: PO BOX 603
Transporter City: CHELSEA
Transporter State: MA
Final Site: 29

Certified Name: DANIEL PL LABASTIE, JR.

Cert Sign Date: 06/20/2002
Certified Company: Not reported
Certified Phone: (508) 755-1355
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 06/10/2002 End Date: 06/10/2002 Date Entered: Not reported 05/22/2002 Entry Date: Quantity Materical Removed SF: Quantity Material Removed LF: 30.00

Project Description: THERMAL SOLID CORE

AR Tracking ID: 282 Super Lic Number: AS040221 Monitor Lic Number: Not reported Lab Lic Number: Not reported Year: 2002 Sticker Number: 554693 ANF-001 Form Type: Fee Status: **EXEMPT** Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: 2 WATER PIPE BREAKERHOUSE

Occupied: 0

Contractor: AC000490
Contract Type: Not reported
Hours: 2a-3:30p
Project Type: RENOVATION
Abatement Process: GLOVE BAG
Location: INDOORS
Decon Process: 2 CHAMBER

Disposal Methods: 2 PLY POLY BAG WITH LABEL Facility Usage: POWER GENERATION

Waiver Given: 0

DEP Waiver Number: Not reported DLWD Waiver Number: Not reported

Small Owner Occ:

Owner Name: NRG-SOMERSET-OPS
Owner Address: 1606 RIVERSIDE AVENUE

Owner City: SOMERSET

Owner State: MA

On Site Manager Name: Not reported On Site Manager Phone: Not reported

Ins Comp: AMERICAN PROTECTION INS

Policy Number: Not reported
EXP Date: Not reported
Facility Size: Not reported
Transporter Name: JOB ROLLOFF INC
Transporter Address: PO BOX 6037

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter City: CHELSEA Transporter State: MA Final Site: 29

Certified Name: DANIEL P LABASTIE JR

Cert Sign Date: 05/21/2002
Certified Company: Not reported
Certified Phone: (508) 755-1355
Entered_by: Not reported

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported Start Date: 04/14/2004 End Date: 04/14/2004 Not reported Date Entered: Entry Date: 03/24/2004 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 12.00

Project Description: Thermal solid core

 AR Tracking ID:
 37747

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 1561620

 Form Type:
 ANF-001

Fee Status:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: ELEVATION 108 STEAM TRAP LINE NEAR PULVERIZERS

Occupied: -1

Contractor: AC000490 Contract Type: Not reported 7A-330P Hours: Project Type: Not reported Not reported Abatement Process: Location: Not reported AS REQUIRED Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

Not reported On Site Manager Name: On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC Transporter Address: PO BOX 6037 Transporter City: **CHELSEA**

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter State: MA Final Site: 18

Certified Name: DANIEL LABASTIE
Cert Sign Date: Not reported
Certified Company: Not reported
Certified Phone: Not reported
Entered_by: MMitchell

Notification: Not reported DEP Region: Not reported Not reported Notifiers Name: Start Date: 06/22/2016 End Date: 07/29/2016 Date Entered: Not reported Entry Date: 06/14/2016 Quantity Materical Removed SF: 32000.00

Quantity Material Removed LF: .00
Project Description: OTHER ACM COATED STEEL

AR Tracking ID: 240948 Super Lic Number: AS000000 Monitor Lic Number: Not reported Lab Lic Number: Not reported 2016 Year: Sticker Number: 100244951 ANF-001 Form Type: HUNDRED Fee Status: Facility Phone: 7819073598

Worksite: TANK #2
Occupied: 0
Contractor: AC000000

Sub Town:

Contract Type: WRITTEN
Hours: 7 AM - 4:00 PM

Project Type: Dem
Abatement Process: Disp
Location: OUTDOORS

Decon Process: THREE CHAMBER REMOTE DECONTAMINATION WITH HOT AND COLD WATER

Disposal Methods: DOUBLED 10-MIL TRUCK LINERS

Not reported

Facility Usage: TANK FARM
Waiver Given: Not reported
DEP Waiver Number: SAW-16-133
DLWD Waiver Number: Not reported
Small Owner Occ: 0

Owner Name: NEW ENGLAND POWER COMPANY

Owner Address: 40 SYLVAN ROAD Owner City: WALTHAM

Owner State: MA

On Site Manager Name: ERIN WHORISKEY
On Site Manager Phone: 7819073598

Ins Comp: GREAT DIVIDE INSURANCE CO.

Policy Number: WCA1523267-15
EXP Date: 11/1/2016
Facility Size: 36000
Transporter Name: W. L. FRENCH
Transporter Address: 3 SURVEY CIRCLE
Transporter City: N. BILLERICA

Transporter State: MA

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Final Site: Not reported
Certified Name: JOHN COSTELLO

Cert Sign Date: 06/14/2016

Certified Company: COSTELLO DISMANTLING CO., INC.

Certified Phone: 5089589242 Entered_by: SANDICLOUTIER

Notification: Not reported DEP Region: Not reported Notifiers Name: Not reported 06/08/2004 Start Date: End Date: 06/11/2004 Date Entered: Not reported Entry Date: 05/26/2004 Quantity Materical Removed SF: Not reported Quantity Material Removed LF: 100.00

Project Description: Thermal solid core

 AR Tracking ID:
 40092

 Super Lic Number:
 AS070996

 Monitor Lic Number:
 AM061057

 Lab Lic Number:
 AA000144

 Year:
 Not reported

 Sticker Number:
 1561626

 Form Type:
 ANF-001

Fee Status:

Facility Phone: (508) 235-2000 Sub Town: Not reported

Worksite: ELEVATION 118 STEAM DRAIN

Occupied: -1

Contractor: AC000490 Not reported Contract Type: Hours: 7A-330P Project Type: Not reported Abatement Process: Not reported Location: Not reported AS REQUIREED Decon Process: Disposal Methods: WET 2 PLY POLY BAG

Facility Usage: Not reported Waiver Given: Not reported DEP Waiver Number: Not reported DLWD Waiver Number: Not reported Small Owner Occ: Not reported

Owner Name: NRG SOMERSET OPERATIONS

18

Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET

Owner State: MA

Final Site:

On Site Manager Name: Not reported On Site Manager Phone: Not reported Ins Comp: Not reported Policy Number: Not reported EXP Date: Not reported Facility Size: Not reported Transporter Name: JOB ROLLOFF INC Transporter Address: PO BOX 6037 Transporter City: **CHELSEA** Transporter State: MA

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Certified Name: DANIEL LABASTIE 05/24/2004 Cert Sign Date: Certified Company: Not reported Certified Phone: Not reported Entered_by: MMitchell

Notification: Not reported **DEP Region:** Not reported Notifiers Name: Not reported 11/03/2010 Start Date: End Date: 11/05/2010 Date Entered: Not reported Entry Date: 10/15/2010 Quantity Materical Removed SF: 100.00 Quantity Material Removed LF: .00 Project Description: Thrm AR Tracking ID: 133128 Super Lic Number: AS040887 Monitor Lic Number: AM033696 AA000170 Lab Lic Number: 2010 Year: Sticker Number: 100114867 ANF-001 Form Type: Fee Status: Fifty Facility Phone: 8603348081 Sub Town: Not reported STORAGE TANK #3 Worksite:

Occupied: 0

Contractor: AC000701 Contract Type: Off

Hours: Week days: 0700-1600 Week end: 0700-1600

Project Type: Renv **Abatement Process:** Glv, Encl, Encp Location: Not reported

THREE CHAMBER DECONTAMINATION UNIT ADJACENT TO THE WORK AREA Decon Process: Disposal Methods: ACM WILL BE THOROUGHLY WETTED AND PLACED INTO DOUBLE 6-MIL POLY BAGS

FUEL OIL STORAGE TANK Facility Usage:

Waiver Given: Not reported 0901180 **DEP Waiver Number: DLWD Waiver Number:** 0901802

Small Owner Occ:

Owner Name: SOMERSET POWER LLC Owner Address: 1606 RIVERSIDE AVE

Owner City: SOMERSET Owner State: MA TIM SISK On Site Manager Name: On Site Manager Phone: 860 334 8081

NATIONAL UNION FIRE INSURANCE Ins Comp:

Policy Number: WC6506877 EXP Date: 2/28/2011 Facility Size: Not reported

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Transporter Address: 75 YORK AVE Transporter City: RANDOLPH Transporter State: Not reported Final Site:

Certified Name: JOHN TRAVIS

Distance EDR ID Number
Elevation Site EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

 Cert Sign Date:
 10/15/2010

 Certified Company:
 10/15/2010

 Certified Phone:
 7818151109

 Entered_by:
 Not reported

HW GEN:

Name: FORMER SOMERSET POWER LLC

Address: 1606 RIVERSIDE AVE
City, State, Zip: SOMERSET, MA 02726
EPA Id: MAR000014308
RCRA Generator Status: Not reported
State Generator Status: SQG-MA

NJ MANIFEST:

 EPA Id:
 MAR000014308

 Mail Address:
 1606 RIVERSIDE AVE

 Mail City/State/Zip:
 SOMERSET, MA 02726-0000

Facility Phone: Not reported Emergency Phone: Not reported JEFF ARAUJO Contact: Comments: Not reported SIC Code: Not reported County: MA005 Municipal: Not reported Previous EPA Id: Not reported Gen Flag: Not reported Trans Flag: Not reported TSDF Flag: Not reported Name Change: Not reported Date Change: Not reported

Manifest:

Manifest Number: 000380034VES EPA ID: MAR000014308 Date Shipped: 04/01/2010 TSDF EPA ID: NJD980536593 Transporter EPA ID: NJD080631369 Transporter 2 EPA ID: NJD054126164 Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 04/01/2010 04/09/2010 Date Trans2 Transported Waste: Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 04/09/2010

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: SOMERSET, MA 02726-0000

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: U159
Hand Code: H141
Quantity: 60 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 60 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 20 P

Manifest Number: 000380703VES EPA ID: MAR000014308 Date Shipped: 02/22/2010 TSDF EPA ID: NJD980536593 Transporter EPA ID: NJD080631369 Transporter 2 EPA ID: NJD054126164 Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 02/22/2010 Date Trans2 Transported Waste: 02/24/2010 Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 02/28/2010

MAP FINDINGS

Site EDR ID Number

Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: SOMERSET, MA 02726-0000

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D003
Hand Code:
H141
Quantity:
170 P

Manifest Year:
Waste Code:
Hand Code:
Quantity:

Not reported
D001
H4141
Quantity:
60 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 170 P

Manifest Year:
Waste Code:
U123
Hand Code:
H141
Quantity:
10 P

Manifest Year:
Waste Code:
Hand Code:
Quantity:

Not reported
D002
H141
Quantity:
5 P

Manifest Year:
Waste Code:
Hand Code:
Quantity:
Not reported
P012
H141
Quantity:
5 P

Manifest Year:
Waste Code:
Hand Code:
Quantity:

Not reported
P120
H141
Quantity:
5 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 25 P

Manifest Year: Not reported

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Waste Code: U133 Hand Code: H141 Quantity: 5 P

Manifest Year: Not reported Waste Code: U123 Hand Code: H141 Quantity: 5 P

Manifest Year: Not reported Waste Code: D004 Hand Code: H141 Quantity: 40 P

Manifest Year: Not reported Waste Code: D009
Hand Code: H141
Quantity: 150 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 5 P

Manifest Year:
Waste Code:
Hand Code:
Quantity:

Not reported
D002
H141
Quantity:
60 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 10 P

Manifest Year: Not reported Waste Code: D001 Hand Code: H141 Quantity: 45 P

Manifest Year:
Waste Code:
D009
Hand Code:
H141
Quantity:
5 P

Manifest Number: 000380708VES EPA ID: MAR000014308 Date Shipped: 02/22/2010 TSDF EPA ID: NJD980536593 Transporter EPA ID: NJD080631369 Transporter 2 EPA ID: NJD054126164 Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Not reported Transporter 8 EPA ID:

MAP FINDINGS

EDR ID Number
Site Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 02/22/2010 Date Trans2 Transported Waste: 02/24/2010 Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 02/28/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: SOMERSET, MA 02726-0000

Reason Load Was Rejected: Not reported

Waste:

Manifest Year: Not reported Waste Code: D002 Hand Code: H141 Quantity: 5 P

Manifest Year:

Waste Code:
Hand Code:
Quantity:

Not reported
D001
H141
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Manifest Number: 000380707VES EPA ID: MAR000014308 Date Shipped: 02/22/2010 TSDF EPA ID: NJD980536593 Transporter EPA ID: NJD080631369 Transporter 2 EPA ID: NJD080631369 Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Not reported Transporter 10 EPA ID: Date Trans1 Transported Waste: 02/22/2010 Date Trans2 Transported Waste: 03/05/2010 Date Trans3 Transported Waste: Not reported

Site

MAP FINDINGS

Database(s)

FORMER SOMERSET POWER LLC (Continued)

1001493262

EDR ID Number

EPA ID Number

Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 03/05/2010 TSDF EPA Facility Name: Not reported QTY Units: Not reported Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: SOMERSET, MA 02726-0000

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
D003
Hand Code:
H141
Quantity:
5 P

Manifest Number: 000358322VES EPA ID: MAR000014308 Date Shipped: 11/19/2009 TSDF EPA ID: NJD002454544 Transporter EPA ID: NJD080631369 Transporter 2 EPA ID: NJD054126164 Transporter 3 EPA ID: Not reported Transporter 4 EPA ID: Not reported Transporter 5 EPA ID: Not reported Transporter 6 EPA ID: Not reported Transporter 7 EPA ID: Not reported Transporter 8 EPA ID: Not reported Transporter 9 EPA ID: Not reported Transporter 10 EPA ID: Not reported Date Trans1 Transported Waste: 11/19/2009 Date Trans2 Transported Waste: 11/19/2009 Date Trans3 Transported Waste: Not reported Date Trans4 Transported Waste: Not reported Date Trans5 Transported Waste: Not reported Date Trans6 Transported Waste: Not reported Date Trans7 Transported Waste: Not reported Date Trans8 Transported Waste: Not reported Date Trans9 Transported Waste: Not reported Date Trans10 Transported Waste: Not reported Date TSDF Received Waste: 11/20/2009 TSDF EPA Facility Name: Not reported QTY Units: Not reported

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter SEQ ID: Not reported Transporter-1 Date: Not reported Waste SEQ ID: Not reported Waste Type Code 2: Not reported Waste Type Code 3: Not reported Waste Type Code 4: Not reported Waste Type Code 5: Not reported Waste Type Code 6: Not reported Date Accepted: Not reported Manifest Discrepancy Type: Not reported Data Entry Number: Not reported

Was Load Rejected: SOMERSET, MA 02726-0000

Reason Load Was Rejected: Not reported

Waste:

Manifest Year:
Waste Code:
Hand Code:
Quantity:

Not reported
D001
H061
400 P

RI MANIFEST:

 EPA Id:
 MAR000014308

 GEN Cert Date:
 2/2/2010

 Manifest Document Number:
 006574821JJK

Waste Description: HEAVY METALS FOR STABILIZATION

TSDF Id: RID040098352

TSDF Name: Northland Environmental

 Qty:
 2000

 WT/Vol Units:
 P

 TSDF Date:
 2/2/2010

 Transporter 2 Id:
 Not reported

 Item Number:
 28769

 Transporter 2 Name:
 Not reported

Transporter Name 2: MORAN ENVIRONMENTAL RECOVERY Transporter EPAID: FLD092718576

Transporter Receipt Date: 2/2/2010 Number Of Containers: Not reported Container Type: Not reported Waste Code1: MA99R004 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Waste Code6: Not reported Fee Exempt Code: Not reported Comment: Not reported Transporter Name 2: Not reported Company Permit Number: Not reported Year: Not reported Quarter: Not reported Transporter Contact Name: Not reported Transporter Contact Email: Not reported Filing Date: Not reported Total Fee: Not reported

Map ID
Direction
Distance

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Billing Name: Not reported Paid Date: Not reported Paid Time: Not reported Facility Receipt Date: Not reported Fee: Not reported Manifest Created Date: Not reported Manifest Updated Date: Not reported Not reported Manifest Updated Date: Not reported

RI MANIFEST:

2/2/2010 Transporter Receipt Date: Number Of Containers: Not reported Container Type: Not reported Waste Code1: MA99R004 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Not reported Waste Code5: Not reported Waste Code6: Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: Northland Environmental

TSDF Id: RID040098352
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported
EPA ID: MAR000014308
Manifest Docket Number: 006574821JJK
Quarter: Not reported

Waste Description: HEAVY METALS FOR STABILIZATION

Transporter Contact Name: Not reported Quantity: 2000
Transporter Contact Email: Not reported WT/Vol Units: P

Filing Date: Not reported
Total Fee: Not reported
Item Number: 28769

Transporter Name: MORAN ENVIRONMENTAL RECOVERY Billing Name: Not reported

FLD092718576 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported GEN Cert Date: 2/2/2010 Not reported Facility Receipt Date: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 2/2/2010 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

5/15/2009 Transporter Receipt Date: Number Of Containers: 2 Container Type: DM Waste Code1: D001 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: NORTHLAND ENVIRONMENTAL LLC

TSDF Id: Not reported
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported
EPA ID: MAR000014308
Manifest Docket Number: 002982240JJK
Quarter: Not reported

Waste Description: RQ WASTE FLAMMABLE LIQUIDS N.O.S. 3,UN1993,PGII

Transporter Contact Name: Not reported

Quantity: 110

Transporter Contact Email: Not reported

WT/Vol Units:

Filing Date: Not reported
Total Fee: Not reported
Item Number: 001

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Billing Name: Not reported Transporter EPA ID: MAR000504928 Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 5/15/2009 Facility Receipt Date: Not reported Fee: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/15/2009 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 5/15/2009 Number Of Containers: 10 Container Type: DM Waste Code1: MA99 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Not reported Waste Code5: Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: NORTHLAND ENVIRONMENTAL LLC

TSDF Id: Not reported
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported
EPA ID: MAR000014308
Manifest Docket Number: 002982240JJK
Quarter: Not reported

Waste Description: NONDOT NONRCRA MATERIAL

Transporter Contact Name: Not reported

Quantity: 550

Transporter Contact Email: Not reported

WT/Vol Units: G

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Filing Date: Not reported Total Fee: Not reported

Item Number: 002

MORAN ENVIRONMENTAL RECOVERY Transporter Name:

Billing Name: Not reported Transporter EPA ID: MAR000504928 Date Paid: Not reported Not reported Time Paid: 5/15/2009 GEN Cert Date: Facility Receipt Date: Not reported Fee: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/15/2009 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 5/15/2009 Number Of Containers: Container Type: DM Waste Code1: MA99 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

NORTHLAND ENVIRONMENTAL LLC TSDF Name:

TSDF Id: Not reported Transporter Name 2: Not reported Company Permit Number: Not reported Year: Not reported EPA ID: MAR000014308 002982240JJK Manifest Docket Number: Not reported Quarter:

Waste Description: NONDOT NONRCRA MATERIAL (CITRIC ACID)

Transporter Contact Name: Not reported

Quantity: 200 Transporter Contact Email:

Not reported WT/Vol Units: Filing Date: Not reported

Total Fee: Not reported Item Number: 003

MORAN ENVIRONMENTAL RECOVERY Transporter Name:

Billing Name: Not reported MAR000504928 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported GEN Cert Date: 5/15/2009 Not reported Facility Receipt Date: Fee: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/15/2009 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Map ID
Direction

MAP FINDINGS

Distance EDR ID Number EDR atabase(s) EPA ID Number EDR ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Transporter Receipt Date: 5/15/2009 Number Of Containers: Container Type: DM Waste Code1: D001 Waste Code2: Not reported Waste Code3: Not reported Not reported Waste Code4: Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: NORTHLAND ENVIRONMENTAL LLC

TSDF Id: Not reported
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported
EPA ID: MAR000014308
Manifest Docket Number: 002982240JJK
Quarter: Not reported

Waste Description: RQ WASTE FLAMMABLE LIQUIDS N.O.S. 3,UN1993,PGII

Transporter Contact Name: Not reported Quantity: 110
Transporter Contact Email: Not reported WT/Vol Units: G

Filing Date: Not reported Total Fee: Not reported

Item Number: 001

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Billing Name: Not reported MAR000504928 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 5/15/2009 Facility Receipt Date: Not reported Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/15/2009 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 5/15/2009 Number Of Containers: Container Type: DM Waste Code1: MA99 Waste Code2: Not reported Not reported Waste Code3: Waste Code4: Not reported Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: NORTHLAND ENVIRONMENTAL LLC

TSDF Id: Not reported
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

EPA ID: MAR000014308
Manifest Docket Number: 002982240JJK
Quarter: Not reported

Waste Description: NONDOT NONRCRA MATERIAL (CITRIC ACID)

Transporter Contact Name: Not reported Quantity: 200
Transporter Contact Email: Not reported

WT/Vol Units: P

Filing Date: Not reported Total Fee: Not reported

Item Number: 003

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Billing Name: Not reported Transporter EPA ID: MAR000504928 Date Paid: Not reported Not reported Time Paid: GEN Cert Date: 5/15/2009 Facility Receipt Date: Not reported Fee: Not reported Not reported Transporter 2 Receipt Date: Manifest Created Date: Not reported TSDF Receipt Date: 5/15/2009 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

5/15/2009 Transporter Receipt Date: Number Of Containers: 10 Container Type: DM Waste Code1: MA99 Not reported Waste Code2: Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Not reported Waste Code6: Comment: Not reported Not reported Fee Exempt Code:

TSDF Name: NORTHLAND ENVIRONMENTAL LLC

TSDF Id: Not reported
Transporter Name 2: Not reported
Company Permit Number: Not reported
Year: Not reported
EPA ID: MAR000014308
Manifest Docket Number: 002982240JJK
Quarter: Not reported

Waste Description: NONDOT NONRCRA MATERIAL

Transporter Contact Name: Not reported Quantity: 550
Transporter Contact Email: Not reported WT/Vol Units: G

Total Fee: Not reported Item Number: 002

Transporter Name: MORAN ENVIRONMENTAL RECOVERY

Billing Name: Not reported
Transporter EPA ID: MAR000504928
Date Paid: Not reported
Time Paid: Not reported

Map ID
Direction
Distance

Elevation

Site

MAP FINDINGS

Database(s) E

EDR ID Number EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

GEN Cert Date: 5/15/2009
Facility Receipt Date: Not reported
Fee: Not reported
Transporter 2 Receipt Date: Not reported
Manifest Created Date: Not reported
TSDF Receipt Date: 5/15/2009
Transporter 2 ID: Not reported
Manifest Updated Date: Not reported

Transporter Receipt Date: 2/21/2007 Number Of Containers: 19 Container Type: DM Waste Code1: MA01 Waste Code2: Not reported Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported TSDF Name: CYN OIL CORP TSDF Id: MAD082303777 Transporter Name 2: Not reported Not reported Company Permit Number: Year: Not reported EPA ID: MAR000014308 Manifest Docket Number: 000660441JJK Quarter: Not reported

Waste Description: STATE REGULATED WASTE OILY SOLIDS NON DOT

Transporter Contact Name: Not reported Quantity: 2000

Transporter Contact Email: Not reported WT/Vol Units: P

Filing Date: Not reported

Filing Date: Not reported Total Fee: Not reported

Item Number:

Transporter Name: CYN OIL CORPORATION

Billing Name: Not reported Transporter EPA ID: MAD082303777 Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 3/8/2007 Facility Receipt Date: Not reported Not reported Fee: Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: Not reported Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 11/6/2007
Number Of Containers: Not reported
Container Type: Not reported
Waste Code1: D001D035
Waste Code2: Not reported
Waste Code3: Not reported
Waste Code4: Not reported

Map ID MAP FINDINGS Direction Distance

EDR ID Number Elevation Site Database(s) **EPA ID Number**

FORMER SOMERSET POWER LLC (Continued)

1001493262

Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: Northland Environmental Inc.

TSDF Id: rid040098352 Not reported Transporter Name 2: Company Permit Number: Not reported Not reported Year MAR000014308 EPA ID: Manifest Docket Number: 001707263JJK Quarter: Not reported LABPACK PROFILE Waste Description:

Transporter Contact Name: Not reported

Quantity: 165 Transporter Contact Email: Not reported WT/Vol Units:

Filing Date: Not reported Total Fee: Not reported 75370652 Item Number:

Transporter Name: FLEET ENVIRONMENTAL

Billing Name: Not reported Transporter EPA ID: MAR000504928 Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 11/6/2007 Facility Receipt Date: Not reported Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 11/6/2007 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 5/22/2007 Number Of Containers: Not reported Container Type: MA01 Waste Code1: Not reported Not reported Waste Code2: Waste Code3: Not reported Waste Code4: Not reported Waste Code5: Not reported Not reported Waste Code6: Comment: Not reported Fee Exempt Code: Not reported

Northland Environmental Inc. TSDF Name:

TSDF Id: rid040098352 Transporter Name 2: Not reported Not reported Company Permit Number: Not reported Year: EPA ID: MAR000014308 Manifest Docket Number: 001707059JJK Quarter: Not reported Waste Description: OILY SOLIDS Transporter Contact Name: Not reported

300 Quantity:

Not reported Transporter Contact Email:

Map ID
Direction
Distance

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

WT/Vol Units:

Filing Date: Not reported
Total Fee: Not reported
Item Number: 48913508

Transporter Name: FLEET ENVIRONMENTAL

Billing Name: Not reported MAR000504928 Transporter EPA ID: Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 5/22/2007 Facility Receipt Date: Not reported Fee: Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/22/2007 Transporter 2 ID: Not reported Manifest Updated Date: Not reported

Transporter Receipt Date: 5/22/2007 Number Of Containers: Not reported Container Type: MA01 Waste Code1: Not reported Not reported Waste Code2: Waste Code3: Not reported Not reported Waste Code4: Waste Code5: Not reported Waste Code6: Not reported Comment: Not reported Fee Exempt Code: Not reported

TSDF Name: Northland Environmental Inc. TSDF Id: rid040098352

Transporter Name 2: Not reported Company Permit Number: Not reported Not reported Year: EPA ID: MAR000014308 Manifest Docket Number: 001707059JJK Quarter: Not reported OILY SOLIDS Waste Description: Transporter Contact Name: Not reported 300 Quantity:

Transporter Contact Email: Not reported WT/Vol Units: P
Filing Date: Not reported Total Fee: Not reported Item Number: 48913508

Transporter Name: FLEET ENVIRONMENTAL

Billing Name: Not reported Transporter EPA ID: MAR000504928 Date Paid: Not reported Time Paid: Not reported **GEN Cert Date:** 5/22/2007 Facility Receipt Date: Not reported Not reported Transporter 2 Receipt Date: Not reported Manifest Created Date: Not reported TSDF Receipt Date: 5/22/2007 Transporter 2 ID: Not reported

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

FORMER SOMERSET POWER LLC (Continued)

1001493262

Manifest Updated Date: Not reported

Click this hyperlink while viewing on your computer to access 39 additional RI_MANIFEST: record(s) in the EDR Site Report.

 28
 SHAWOMET ST
 MA SHWS
 \$105736283

 ENE
 113 SHAWOMET ST
 MA LUST
 N/A

 1/2-1
 SOMERSET, MA
 MA RELEASE

1/2-1 0.793 mi. 4185 ft.

Actual:

87 ft.

Relative: SHWS: Lower Facility ID:

4-0017443 PIPE Source Type: Release Town: SOMERSET Notification Date: 10/23/2002 Category: TWO HR Associated ID: Not reported **Current Status: RAO** Status Date: 12/09/2002 Phase: Not reported

Response Action Outcome: A2
Oil Or Haz Material: Oil

LUST:

Facility:

Current Status: Not reported
Release Tracking Number/Current Status: 4-0017443 / RAO
Status Date: 12/09/2002

Source Type: UST
Release Town: SOMERSET
Notification Date: 10/23/2002
Category: TWO HR
Associated ID: Not reported
Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil Or Haz Material: Oil

Location Type: RESIDNTIAL
Source: UST
Source: PIPE

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 1520 gallons

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: FLDISS
Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

Distance EDR ID Number
Elevation Site EDR ID Number

SHAWOMET ST (Continued) S105736283

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1A
Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 10/24/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/28/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/18/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/6/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 12/9/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Release:

Release Tracking Number/Current Status: 4-0017443 / Primary ID: Not reported Official City: SOMERSET Notification: 10/23/2002 Category: TWO HR

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

SHAWOMET ST (Continued)

S105736283

Status Date: 12/09/2002 Phase: Not reported

Response Action Outcome: A2 - A permanent solution has been achieved. Contamination has not

been reduced to background.

Oil / Haz Material Type:

Click here to access the MA DEP site for this facility:

Actions:

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: FLDISS
Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FLDD1A
Action Date: 10/23/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RLFA
Action Status: FOLOFF
Action Date: 10/24/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/28/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/18/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 12/6/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Distance EDR ID Number
Elevation Site EDR ID Number

SHAWOMET ST (Continued) S105736283

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 12/9/2002

Response Action Outcome: A permanent solution has been achieved. Contamination has not been

reduced to background.

Chemicals:

Chemical: #2 FUEL OIL
Quantity: 1520 gallons
Location Type: RESIDNTIAL
Source: UST
Source: PIPE

29 COMMUNITY CLEANSERS MA SHWS S122833078

ENE 875 COUNTY STREET 1/2-1 SOMERSET, MA 02726

0.884 mi. 4666 ft.

Relative: SHWS: Lower Facility

Facility ID: 4-0027260 Source Type: LINE Actual: Release Town: SOMERSET 61 ft. Notification Date: 05/25/2018 Category: 72 HR Associated ID: Not reported **Current Status:** UNCLSS Status Date: 05/25/2018

Phase: Not reported Response Action Outcome: Not reported Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0027260 / UNCLSS

 Primary ID:
 Not reported

 Official City:
 SOMERSET

 Notification:
 05/25/2018

 Category:
 72 HR

 Status Date:
 05/25/2018

 Phase:
 Not reported

Response Action Outcome:

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 5/25/2018
Response Action Outcome: Not reported

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 5/25/2018
Response Action Outcome: Not reported

TC5741137.2s Page 200

MA RELEASE

N/A

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

COMMUNITY CLEANSERS (Continued)

S122833078

Chemicals:

Chemical: Not reported
Quantity: Not reported
Location Type: COMMERCIAL

Source: LINE

30 BRIGHTMAN ST BRIDGE MA SHWS S102404153
SSE BRIGHTMAN ST MA RELEASE N/A
1/2-1 FALL RIVER, MA

1/2-1 0.929 mi. 4906 ft.

Relative: SHWS: Lower Facility ID:

4-0012673 Source Type: Not reported Actual: Release Town: FALL RIVER 4 ft. Notification Date: 11/15/1996 120 DY Category: Associated ID: Not reported **Current Status:** RAO 11/15/1996 Status Date: Phase: Not reported

Response Action Outcome: B1

Oil Or Haz Material: Oil and Hazardous Material

Release:

Release Tracking Number/Current Status: 4-0012673 / Primary ID: Not reported
Official City: FALL RIVER
Notification: 11/15/1996
Category: 120 DY
Status Date: 11/15/1996
Phase: Not reported

Response Action Outcome: B1 - Remedial actions have not been conducted because a level of No

Significant Risk exists.
Oil and Hazardous Material

Click here to access the MA DEP site for this facility:

Actions:

Oil / Haz Material Type:

Action Type: Response Action Outcome - RAO Action Status: RAO Statement Received

Action Date: 11/15/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: RNF

Action Status: Reportable Release under MGL 21E

Action Date: 11/15/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 11/15/1996

Response Action Outcome: Remedial actions have not been conducted because a level of No

Distance EDR ID Number
Elevation Site EDR ID Number

BRIGHTMAN ST BRIDGE (Continued)

S102404153

Significant Risk exists.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 4/15/2005

Response Action Outcome: Remedial actions have not been conducted because a level of No

Significant Risk exists.

Chemicals:

Chemical: VOCS

Quantity: 12000 parts per billion

Chemical: METALS

Quantity: 49035 parts per billion Chemical: TPH

Quantity: 1700 parts per million

31 NEW ENGLAND POWER/DBA NATIONAL GRID South 375 RIVERSIDE AVE

MA SHWS S121394477 MA RELEASE N/A

1/2-1 SOMERSET, MA 02725

0.988 mi. 5216 ft. Relative:

SHWS:

4-0026909 Lower Facility ID: Source Type: UNKNOWN Actual: 10 ft. Release Town: SOMERSET Notification Date: 11/06/2017 Category: 120 DY Associated ID: Not reported Current Status: **URAM** Status Date: 10/20/2017

Status Date: 10/20/2017
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

Release:

Release Tracking Number/Current Status: 4-0026909 / URAM

Primary ID: Not reported
Official City: SOMERSET
Notification: 11/06/2017
Category: 120 DY
Status Date: 10/20/2017
Phase: Not reported
Response Action Outcome: -

Oil / Haz Material Type: Not reported

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 10/13/2017 Response Action Outcome: Not reported

Action Type: Utility-related Abatement Measure
Action Status: Notice of Intent to Conduct a URAM

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

NEW ENGLAND POWER/DBA NATIONAL GRID (Continued)

S121394477

Action Date: 10/13/2017
Response Action Outcome: Not reported

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 10/17/2017
Response Action Outcome: Not reported

Action Type: Utility-related Abatement Measure
Action Status: Notification of URAM Received

Action Date: 10/20/2017 Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 10/27/2017
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 11/6/2017 Response Action Outcome: Not reported

Action Type: BOL
Action Status: SHPFAC
Action Date: 2/12/2018
Response Action Outcome: Not reported

Action Type: Utility-related Abatement Measure
Action Status: Completion Statement Received

Action Date: 2/12/2018
Response Action Outcome: Not reported

Chemicals:

Chemical: Not reported
Quantity: Not reported
Location Type: PRIVPROP
Location Type: UTILEASE
Source: UNKNOWN

32 TAUNTON RIVER MA SHWS \$104774386 SSE BRIGHTMAN STREET BRG MA RELEASE N/A 1/2-1 FALL RIVER, MA

1/2-1 0.991 mi. 5234 ft.

Relative: SHWS:

 Lower
 Facility ID:
 4-0015656

 Actual:
 Source Type:
 PIPE

 13 ft.
 Release Town:
 FALL RIVER

 Notification Date:
 08/09/2000

 Category:
 TWO HR

 Associated ID:
 Not reported

 Current Status:
 ADOREG

 Current Status:
 ADQREG

 Status Date:
 08/09/2000

 Phase:
 Not reported

 Response Action Outcome:
 Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

TAUNTON RIVER (Continued) S104774386

Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0015656 / ADQREG

Primary ID: Not reported
Official City: FALL RIVER
Notification: 08/09/2000
Category: TWO HR
Status Date: 08/09/2000
Phase: Not reported

Response Action Outcome: Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: RAO Not Required
Action Status: Adequately Regulated

Action Date: 8/9/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FOLOFF
Action Date: 8/9/2000
Response Action Outcome: Not reported

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 8/9/2000
Response Action Outcome: Not reported

Action Type: RLFA
Action Status: FLDD1U
Action Date: 8/9/2000
Response Action Outcome: Not reported

Chemicals:

Chemical: VEGETABLE OIL
Quantity: 100 gallons
Location Type: WATERBODY

Source: PIPE

E33 SPEEDWAY STORE #2416 MA SHWS S121394531
West 35 G.A.R. HWY MA LUST N/A

1/2-1 SWANSEA, MA

0.997 mi.

5266 ft. Site 1 of 3 in cluster E

Relative: SHWS:

 Lower
 Facility ID:
 4-0027047

 Actual:
 Source Type:
 TANK

 12 ft.
 Release Town:
 SWANSEA

 Notification Date:
 01/23/2018

 Category:
 72 HR

Category: 72 HR
Associated ID: Not reported
Current Status: RAONR

TC5741137.2s Page 204

MA RELEASE

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SPEEDWAY STORE #2416 (Continued)

S121394531

Status Date: 03/23/2018
Phase: Not reported
Response Action Outcome: Not reported
Oil Or Haz Material: Not reported

LUST:

Facility:

Current Status: Not reported

Release Tracking Number/Current Status: 4-0027047 / RAONR

 Status Date:
 03/23/2018

 Source Type:
 UST

 Release Town:
 SWANSEA

 Notification Date:
 01/23/2018

 Category:
 72 HR

 Associated ID:
 Not reported

 Phase:
 Not reported

Response Action Outcome: Oil Or Haz Material: Not reported

Location Type: COMMERCIAL

Source: TANK Source: UST

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: Not reported Quantity: Not reported

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 1/23/2018
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 1/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/26/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/12/2018
Response Action Outcome: Not reported

Distance EDR ID Number Elevation Site EDR ID Number Database(s) EPA ID Number

SPEEDWAY STORE #2416 (Continued)

S121394531

Action Type: RAO Not Required

Action Status: Linked to a Tier Classified Site

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: RTN Linked to TCLASS Via IRA Completion Statement

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/9/2016
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/25/2011
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Tier 2 Classification

Action Date: 4/25/2011
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 5/17/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published

Action Date: 5/19/2011
Response Action Outcome: Not reported

Release:

Release Tracking Number/Current Status: 4-0027047 / RAONR

Primary ID: Not reported
Official City: SWANSEA
Notification: 01/23/2018
Category: 72 HR
Status Date: 03/23/2018
Phase: Not reported

Response Action Outcome:

Oil / Haz Material Type: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number
EPA ID Number

SPEEDWAY STORE #2416 (Continued)

S121394531

Click here to access the MA DEP site for this facility:

Actions:

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 1/23/2018
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 1/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014
Response Action Outcome: Not reported

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 2/26/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/12/2018
Response Action Outcome: Not reported

Action Type: RAO Not Required

Action Status: Linked to a Tier Classified Site

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: RTN Linked to TCLASS Via IRA Completion Statement

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 3/23/2018
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/9/2016
Response Action Outcome: Not reported

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/25/2011
Response Action Outcome: Not reported

Distance EDR ID Number
Elevation Site EDR ID Number

SPEEDWAY STORE #2416 (Continued)

S121394531

Action Type: Tier Classification
Action Status: Tier 2 Classification
Action Date: 4/25/2011
Response Action Outcome: Not reported

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 5/17/2017
Response Action Outcome: Not reported

Action Type: Tier Classification
Action Status: Legal Notice Published

Action Date: 5/19/2011
Response Action Outcome: Not reported

Chemicals:

Chemical: Not reported
Quantity: Not reported
Location Type: COMMERCIAL
Source: TANK
Source: UST

HESS STATION MA SHWS S108476765
t 35 GRAND ARMY HWY MA RELEASE N/A

West 35 GRAND ARMY HWY 1/2-1 SWANSEA, MA 02777 0.997 mi.

5266 ft. Site 2 of 3 in cluster E

Relative: SHWS:

E34

 Lower
 Facility ID:
 4-0020351

 Actual:
 Source Type:
 LINE

 12 ft.
 Release Town:
 SWANSEA

 Notification Date:
 02/24/2007

 Category:
 TWO HR

Associated ID: Not reported Current Status: RAO Status Date: 04/06/2007 Phase: Not reported

Response Action Outcome: A1
Oil Or Haz Material: Oil

Release:

Release Tracking Number/Current Status: 4-0020351 / RAO
Primary ID: Not reported
Official City: SWANSEA
Notification: 02/24/2007
Category: TWO HR
Status Date: 04/06/2007
Phase: Not reported

Response Action Outcome: A1 - A permanent solution has been achieved. Contamination has been reduced to background or a threat of release has been eliminated.

Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

HESS STATION (Continued)

S108476765

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 2/24/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 2/24/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 3/5/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: RAO Statement Received

Action Date: 4/6/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RN

Action Status: Reportable Release under MGL 21E

Action Date: 4/6/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 5/15/2007

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Action Type: RLFA
Action Status: FLDRUN
Action Date: 6/10/2008

Response Action Outcome: A permanent solution has been achieved. Contamination has been reduced

to background or a threat of release has been eliminated.

Chemicals:

Chemical: GASOLINE
Quantity: 10 gallons
Location Type: COMMERCIAL

Source: LINE

Map ID MAP FINDINGS

Direction
Distance
Elevation Site

EDR ID Number

EDR ID Number

EDR ID Number

E35 SPEEDWAY #2416 MA SHWS U002008376

West 35 GAR HWY MA LUST N/A
1/2-1 SWANSEA, MA 02777 MA UST

1/2-1 SWANSEA, MA 02777 MA UST 0.997 mi. MA RELEASE

5266 ft. Site 3 of 3 in cluster E

 Relative:
 SHWS:

 Lower
 Facility ID:
 4-0022576

 Actual:
 Source Type:
 TANKDISP

 12 ft.
 Release Town:
 SWANSEA

Notification Date: 04/26/2010
Category: TWO HR
Associated ID: 4-0022576
Current Status: TMPS
Status Date: 04/25/2016
Phase: PHASE IV
Response Action Outcome: TE

Response Action Outcome: TF
Oil Or Haz Material: Oil

LUST:

Facility:

Current Status: Not reported
Release Tracking Number/Current Status: 4-0022576 / TMPS

Status Date: 04/25/2016 Source Type: UST **SWANSEA** Release Town: Notification Date: 04/26/2010 Category: TWO HR Associated ID: 4-0022576 Phase: PHASE IV Response Action Outcome: TF - TF Oil Or Haz Material: Oil

 Location Type:
 COMMERCIAL

 Location Type:
 PRIVPROP

 Source:
 TANKDISP

 Source:
 UST

 Source:
 USTOTHER

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: GASOLINE Quantity: 12 gallons

Actions:

Action Type: BOI

Action Status: Transmittal, Notice, or Notification Received

Action Date: 1/25/2018 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 10/10/2018
Response Action Outcome: TF

Site

MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number**

U002008376

SPEEDWAY #2416 (Continued)

Response Action Outcome - RAO

Action Type: Action Status: Inspection and Monitoring Report Received

10/10/2018 Action Date:

Response Action Outcome:

Action Type: Tier Classification Action Status: **TCTRAN** Action Date: 10/2/2014

Response Action Outcome:

Action Type: Response Action Outcome - RAO

Action Status: **RMRINT** Action Date: 10/24/2016 Response Action Outcome: TF

Response Action Outcome - RAO Action Type:

Action Status: Inspection and Monitoring Report Received

Action Date: 10/24/2016

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/25/2017

Response Action Outcome:

Action Type: Response Action Outcome - RAO

Action Status: **RMRINT** Action Date: 10/25/2017 Response Action Outcome:

Action Type: Phase 4

Status or Interim Report Received Action Status:

Action Date: 10/28/2014

Response Action Outcome:

Action Type: Phase 4 Action Status: **RMRINT** Action Date: 10/28/2014

Response Action Outcome:

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 10/28/2015

Response Action Outcome: TF

Phase 4 Action Type: Action Status: **RMRINT** 10/28/2015 Action Date:

Response Action Outcome:

Action Type: Release Abatement Measure Action Status: Completion Statement Received

Action Date: 11/16/2012

Response Action Outcome: TF

Action Type: BOL Action Status: SHPFAC

MAP FINDINGS

EDR ID Number

te Database(s) EPA ID Number

U002008376

SPEEDWAY #2416 (Continued)

Action Date: 11/16/2012

Response Action Outcome: TF

Action Type: Phase 2

Action Status: Scope of Work Received

Action Date: 11/9/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 12/12/2017

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/15/2010

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2016

Response Action Outcome: TF

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/12/2018
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure

Action Status: NPERTN
Action Date: 3/14/2016
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notice of Intent to Conduct a URAM

Action Date: 3/14/2016

Response Action Outcome: TF

Action Type: BOL
Action Status: SHPFAC
Action Date: 3/15/2018
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notification of URAM Received

Action Date: 3/21/2016

Response Action Outcome: TF

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Action Type: Tier Classification

Action Status: RTN Linked to TCLASS Via IRA Completion Statement

Action Date: 3/23/2018

Response Action Outcome:

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/9/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 4/24/2018

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/24/2018
Response Action Outcome: TF

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/25/2011 Response Action Outcome: TF

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 4/25/2011
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Tier 2 Classification

Action Date: 4/25/2011 Response Action Outcome: TF

Action Type: Phase 3

Action Status: Completion Statement Received

Action Date: 4/25/2013
Response Action Outcome: TF

Action Type: Phase 2

Action Status: Completion Statement Received

Action Date: 4/25/2013 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: TSFRCD
Action Date: 4/25/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/25/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Map ID Direction Distance

MAP FINDINGS

Distance Elevation Site EDR ID Number EPA ID Number

SPEEDWAY #2416 (Continued)

Action Date: 4/25/2017 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/25/2017
Response Action Outcome: TF

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 4/26/2010 Response Action Outcome: TF

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 4/26/2010 Response Action Outcome: TF

Action Type: Phase 4

Action Status: Written Plan Received

Action Date: 4/28/2014
Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 4/28/2015 Response Action Outcome: TF

Action Type: Phase 4
Action Status: RMRINT
Action Date: 4/28/2015
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Completion Statement Received

Action Date: 5/13/2016 Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Legal Notice Published

Action Date: 5/19/2011 Response Action Outcome: TF

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 5/20/2010

Response Action Outcome: TF

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 6/22/2010 Response Action Outcome: TF

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

Action Date: 6/22/2010 Response Action Outcome: TF

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U002008376

EDR ID Number Distance Elevation Site Database(s) **EPA ID Number**

SPEEDWAY #2416 (Continued) U002008376

Immediate Response Action Action Type: Action Status: Level I - Technical Screen Audit

Action Date: 7/22/2010 Response Action Outcome: TF

BOL Action Type:

Action Status: Transmittal, Notice, or Notification Received

Action Date: 7/5/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure Action Status: Written Plan Received

Action Date: 7/5/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure Action Status: Written Plan Received

Action Date: 8/16/2017 Response Action Outcome:

Facility:

Current Status: http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_MA_

DEP&facid=4-0022576

Release Tracking Number/Current Status: 4-0022576 / TMPS

Status Date: 04/25/2016 **USTOTHER** Source Type: Release Town: **SWANSEA** Notification Date: 04/26/2010 Category: TWO HR Associated ID: 4-0022576 PHASE IV Phase: Response Action Outcome: TF - TF Oil Or Haz Material: Oil

COMMERCIAL Location Type: Location Type: **PRIVPROP** Source: **TANKDISP** Source: UST **USTOTHER** Source:

Click here to access the MA DEP site for this facility:

Chemicals:

Chemical: **GASOLINE** Quantity: 12 gallons

Actions:

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 1/25/2018

Response Action Outcome:

Action Type: Response Action Outcome - RAO

RMRINT Action Status:

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

U002008376

SPEEDWAY #2416 (Continued)

Action Date: 10/10/2018

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/10/2018

Response Action Outcome: TF

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT Action Date: 10/24/2016

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/24/2016

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/25/2017

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT Action Date: 10/25/2017

Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 10/28/2014

Response Action Outcome: TF

Action Type: Phase 4
Action Status: RMRINT
Action Date: 10/28/2014

Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 10/28/2015

Response Action Outcome: TF

Action Type: Phase 4
Action Status: RMRINT
Action Date: 10/28/2015

Response Action Outcome:

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 11/16/2012

Response Action Outcome: TF

Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

U002008376

SPEEDWAY #2416 (Continued)

Action Type:

Action Status:

BOL SHPFAC 11/16/2012

Action Date:
Response Action Outcome:

Action Type: Phase 2

Action Status: Scope of Work Received

Action Date: 11/9/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 12/12/2017

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/15/2010

Response Action Outcome:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2016

Response Action Outcome: TF

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/12/2018
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure

Action Status: NPERTN
Action Date: 3/14/2016
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notice of Intent to Conduct a URAM

Action Date: 3/14/2016

Response Action Outcome: TF

Action Type: BOL
Action Status: SHPFAC
Action Date: 3/15/2018
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notification of URAM Received

MAP FINDINGS

Site EDR ID Number

EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Action Date: 3/21/2016 Response Action Outcome: TF

Action Type: Tier Classification

Action Status: RTN Linked to TCLASS Via IRA Completion Statement

Action Date: 3/23/2018

Response Action Outcome: TF

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/9/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 4/24/2018 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/24/2018
Response Action Outcome: TF

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/25/2011

Response Action Outcome: TF

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 4/25/2011
Response Action Outcome: TF

Action Type: Tier Classification

Action Status: Tier 2 Classification
Action Date: 4/25/2011

Response Action Outcome: 4/25/

Action Type: Phase 3

Action Status: Completion Statement Received

Action Date: 4/25/2013 Response Action Outcome: TF

Action Type: Phase 2

Action Status: Completion Statement Received

Action Date: 4/25/2013

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: TSFRCD
Action Date: 4/25/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/25/2016
Response Action Outcome: TF

Site

MAP FINDINGS

Database(s)

EDR ID Number **EPA ID Number**

U002008376

SPEEDWAY #2416 (Continued)

Action Type: Response Action Outcome - RAO Action Status: Inspection and Monitoring Report Received

4/25/2017 Action Date:

Response Action Outcome:

Action Type: Response Action Outcome - RAO

RMRINT Action Status: Action Date: 4/25/2017 Response Action Outcome: TF

Release Disposition Action Type:

Action Status: Reportable Release under MGL 21E

Action Date: 4/26/2010 Response Action Outcome: TF

Immediate Response Action Action Type: Action Status: Oral Approval of Plan or Action

Action Date: 4/26/2010 Response Action Outcome: TF

Action Type: Phase 4

Action Status: Written Plan Received

Action Date: 4/28/2014 Response Action Outcome:

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 4/28/2015 Response Action Outcome:

Action Type: Phase 4 **RMRINT** Action Status: Action Date: 4/28/2015 Response Action Outcome:

Utility-related Abatement Measure Action Type: Action Status: Completion Statement Received

Action Date: 5/13/2016 Response Action Outcome:

Action Type: Tier Classification Action Status: Legal Notice Published

Action Date: 5/19/2011 Response Action Outcome:

A Notice sent to a Potentially Responsible Party (PRP) Action Type:

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

5/20/2010 Action Date: Response Action Outcome: TF

Action Type: Immediate Response Action Action Status: Completion Statement Received

Action Date: 6/22/2010 Response Action Outcome:

Action Type:

Transmittal, Notice, or Notification Received Action Status:

MAP FINDINGS

EDR ID Number Database(s) **EPA ID Number**

SPEEDWAY #2416 (Continued)

U002008376

Action Date: 6/22/2010 Response Action Outcome:

Immediate Response Action Action Type: Level I - Technical Screen Audit Action Status:

Action Date: 7/22/2010 Response Action Outcome: TF

BOL Action Type:

Transmittal, Notice, or Notification Received Action Status:

Action Date: 7/5/2012 Response Action Outcome: TF

Release Abatement Measure Action Type: Action Status: Written Plan Received

Action Date: 7/5/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure Action Status: Written Plan Received

Action Date: 8/16/2017

Response Action Outcome:

UST:

Facility:

SPEEDWAY #2416 Name: Address: 35 GAR HWY City,State,Zip: SWANSEA, MA 02777

Facility ID: 3804 1025368 Owner Id: Owner: Speedway LLC 500 Speedway Drive Owner Address: Enon, OH 45323 Owner City,St,Zip: Telephone: 5086780589

Description: Retail Motor Vehicle Fuel

Facility address 2: Not reported Owner address 2: Not reported 41.74115 Latitude: Longitude: -71.18798 Contact name: Glenn D'antuono 500 Speedway Drive Contact address1: Contact address2: Not reported

Contact city: Enon Contact state: ОН Contact zip: 45323

GDantuono@speedway.com Contact email: Update: 2018-01-29 00:00:00 Update by: Lea McCleave

Fac status: CLOSED

Tank ID:

Tank Status: **Tank Removed** Status Date: 01/23/2018 04/04/1974 Date Installed:

Distance EDR ID Number
Elevation Site Database(s) EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Capacity: 10000.00000
Contents: Gasoline
Tank Usage: Motor Vehi

Tank Leak Detection: Continuous In-Tank Monitoring System

Pipe Leak Detection: Annual Tightness Test of Single-Walled Pressurized Piping Systems

Latitude: Not reported Longitude: Not reported

Tank construct: Single-walled metal tank (cathodic protection required)

Pipe construct: Single-walled non-corrodible material (No corrosion protection required)
Ptype: Pressurized piping system with mechanical automatic line leak detection

Number of compartment: Not reported Pipe install date: 04/04/1974
Pipe leak install date: Not reported

Submersible sump:

Submersible sump install date: Not reported

Turbine sump: N
Turbine sump sensor: N
Intermediate sump: N
Intermediate sump sensor: N

Spill bucket installed date: Not reported

Spill bucket sensor: N

Overfill protect install: Not reported

Overfill protect type: Automatic shut-off valve Automatic line leak detect: Not reported

Tank corrosion type: Field Constructed Impressed Current System

Leak corrosion type: Not reported

Tank ID: 2

Tank Status:Tank RemovedStatus Date:01/24/2018Date Installed:04/04/1974Capacity:10000.00000Contents:GasolineTank Usage:Motor Vehi

Tank Leak Detection: Continuous In-Tank Monitoring System

Pipe Leak Detection: Annual Tightness Test of Single-Walled Pressurized Piping Systems

Latitude: Not reported Longitude: Not reported

Tank construct: Single-walled metal tank (cathodic protection required)

Pipe construct: Single-walled non-corrodible material (No corrosion protection required)
Ptype: Pressurized piping system with mechanical automatic line leak detection

Number of compartment: Not reported Pipe install date: 04/04/1974 Pipe leak install date: Not reported

Submersible sump: Y

Submersible sump install date: Not reported

Turbine sump: N
Turbine sump sensor: N
Intermediate sump: N
Intermediate sump sensor:

Spill bucket installed date: Not reported

Spill bucket sensor: N

Overfill protect install: Not reported

Overfill protect type: Automatic shut-off valve Automatic line leak detect: Not reported

Tank corrosion type: Field Constructed Impressed Current System

Map ID MAP FINDINGS
Direction

Distance EDR ID Number
Elevation Site EDR ID Number
EDR ID Number

SPEEDWAY #2416 (Continued)

U002008376

Leak corrosion type: Not reported

Tank ID: 3

 Tank Status:
 Tank Removed

 Status Date:
 01/24/2018

 Date Installed:
 04/04/1974

 Capacity:
 10000.00000

 Contents:
 Gasoline

 Tank Usage:
 Motor Vehi

Tank Leak Detection: Continuous In-Tank Monitoring System

Pipe Leak Detection: Annual Tightness Test of Single-Walled Pressurized Piping Systems

Latitude: Not reported Longitude: Not reported

Tank construct: Single-walled metal tank (cathodic protection required)

Pipe construct: Single-walled non-corrodible material (No corrosion protection required)
Ptype: Pressurized piping system with mechanical automatic line leak detection

Number of compartment: Not reported Pipe install date: 04/04/1974
Pipe leak install date: Not reported

Submersible sump:

Submersible sump install date: Not reported

Turbine sump: N
Turbine sump sensor: N
Intermediate sump: N
Intermediate sump sensor:

Spill bucket installed date: Not reported

Spill bucket sensor: N

Overfill protect install: Not reported

Overfill protect type: Automatic shut-off valve Automatic line leak detect: Not reported

Tank corrosion type: Field Constructed Impressed Current System

Leak corrosion type: Not reported

Release:

Release Tracking Number/Current Status: 4-0022576 / TMPS

Primary ID: 4-0022576 **SWANSEA** Official City: Notification: 04/26/2010 Category: TWO HR Status Date: 04/25/2016 Phase: PHASE IV Response Action Outcome: TF - TF Oil / Haz Material Type: Oil

Click here to access the MA DEP site for this facility:

Actions:

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 1/25/2018 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 10/10/2018

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Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/10/2018

Response Action Outcome: TF

Action Type: Tier Classification
Action Status: TCTRAN
Action Date: 10/2/2014
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 10/24/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/24/2016

Response Action Outcome:

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 10/25/2017

Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 10/25/2017
Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 10/28/2014

Response Action Outcome:

Action Type: Phase 4
Action Status: RMRINT
Action Date: 10/28/2014

Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 10/28/2015

Response Action Outcome: TF

Action Type: Phase 4
Action Status: RMRINT
Action Date: 10/28/2015

Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Completion Statement Received

Action Date: 11/16/2012

Response Action Outcome: TF

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Action Type: BOL
Action Status: SHPFAC
Action Date: 11/16/2012

Response Action Outcome:

Action Type: Phase 2

Action Status: Scope of Work Received

Action Date: 11/9/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Status or Interim Report Received

Action Date: 12/12/2017

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Level I - Technical Screen Audit

Action Date: 12/13/2012

Response Action Outcome: TF

Action Type: RLFA
Action Status: FLDRUN
Action Date: 12/15/2010

Response Action Outcome:

Action Type: Response Action Outcome - RAO
Action Status: Level I - Technical Screen Audit

Action Date: 12/29/2016

Response Action Outcome: TF

Action Type: Tier Classification
Action Status: TCEXT
Action Date: 3/12/2018

Response Action Outcome: TF

Action Type: Utility-related Abatement Measure

Action Status: NPERTN
Action Date: 3/14/2016
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notice of Intent to Conduct a URAM

Action Date: 3/14/2016
Response Action Outcome: TF

Action Type: BOL
Action Status: SHPFAC
Action Date: 3/15/2018
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Notification of URAM Received

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Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Action Date: 3/21/2016 Response Action Outcome: TF

Action Type: Tier Classification

Action Status: RTN Linked to TCLASS Via IRA Completion Statement

Action Date: 3/23/2018
Response Action Outcome: TF

Action Type: Tier Classification

Action Status: TCEXT
Action Date: 3/9/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 4/24/2018 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/24/2018
Response Action Outcome: TF

Action Type: Tier Classification

Action Status: Transmittal, Notice, or Notification Received

Action Date: 4/25/2011

Response Action Outcome:

Action Type: Phase 1

Action Status: Completion Statement Received

Action Date: 4/25/2011
Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Tier 2 Classification

Action Date: 4/25/2011 Response Action Outcome: TF

Action Type: Phase 3

Action Status: Completion Statement Received

Action Date: 4/25/2013 Response Action Outcome: TF

Action Type: Phase 2

Action Status: Completion Statement Received

Action Date: 4/25/2013 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: TSFRCD
Action Date: 4/25/2016
Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/25/2016
Response Action Outcome: TF

Site

MAP FINDINGS

Database(s) E

EDR ID Number EPA ID Number

SPEEDWAY #2416 (Continued)

U002008376

Action Type: Response Action Outcome - RAO

Action Status: Inspection and Monitoring Report Received

Action Date: 4/25/2017 Response Action Outcome: TF

Action Type: Response Action Outcome - RAO

Action Status: RMRINT
Action Date: 4/25/2017
Response Action Outcome: TF

Action Type: Release Disposition

Action Status: Reportable Release under MGL 21E

Action Date: 4/26/2010 Response Action Outcome: TF

Action Type: Immediate Response Action
Action Status: Oral Approval of Plan or Action

Action Date: 4/26/2010 Response Action Outcome: TF

Action Type: Phase 4

Action Status: Written Plan Received

Action Date: 4/28/2014 Response Action Outcome: TF

Action Type: Phase 4

Action Status: Status or Interim Report Received

Action Date: 4/28/2015 Response Action Outcome: TF

Action Type: Phase 4
Action Status: RMRINT
Action Date: 4/28/2015
Response Action Outcome: TF

Action Type: Utility-related Abatement Measure
Action Status: Completion Statement Received

Action Date: 5/13/2016 Response Action Outcome: TF

Action Type: Tier Classification
Action Status: Legal Notice Published

Action Date: 5/19/2011
Response Action Outcome: TF

Action Type: A Notice sent to a Potentially Responsible Party (PRP)

Action Status: A MassDEP piece of correspondence was issued (approvals, NORs, etc.

Action Date: 5/20/2010 Response Action Outcome: TF

Action Type: Immediate Response Action
Action Status: Completion Statement Received

Action Date: 6/22/2010 Response Action Outcome: TF

Action Type: RNFE

Action Status: Transmittal, Notice, or Notification Received

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Site

MAP FINDINGS

Database(s)

EDR ID Number EPA ID Number

U002008376

SPEEDWAY #2416 (Continued)

6/22/2010

Action Date: 6/22/2
Response Action Outcome: TF

Action Type: Immediate Response Action
Action Status: Level I - Technical Screen Audit

Action Date: 7/22/2010 Response Action Outcome: TF

Action Type: BOL

Action Status: Transmittal, Notice, or Notification Received

Action Date: 7/5/2012
Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 7/5/2012 Response Action Outcome: TF

Action Type: Release Abatement Measure
Action Status: Written Plan Received

Action Date: 8/16/2017 Response Action Outcome: TF

Chemicals:

Chemical: GASOLINE
Quantity: 12 gallons
Location Type: COMMERCIAL
Location Type: PRIVPROP
Source: TANKDISP
Source: UST
Source: USTOTHER

City	EDR ID	Site Name	Site Address	Zip Database(s)
FALL RIVER	S104179974	S104179974 WATTUPA WATER	2929 BLOSSOM RD	MA LUST, MA RELEASE, MA ASBES
FALL RIVER	S106030224	PG&E POWER STA	BRAYTON PT	MA SHWS, MA RELEASE
FALL RIVER	S104482722	BEHIND DANGELOS	WORDELL ST	MA SHWS, MA RELEASE
SOMERSET	S113411869	RT 195 WEST AT EXIT 4	RT 195 WEST AT EXIT 4	MA SHWS, MA RELEASE
SOMERSET	S107678348	POWER PLANT	BRAYTON POINT RD	MA SHWS, MA RELEASE
SOMERSET	S107678289	NO LOCATION AID	BRAYTON POINT STA	MA SHWS, MA LAST, MA RELEASE
SOMERSET	S107405460	S107405460 @BRAYTON PT POWER	BRAYTON POINT RD	MA SHWS, MA RELEASE
SOMERSET	S110822295	BRAYTON AVE.	INT. BRAYTON AVE NEW HILL	02726 MA SHWS, MA RELEASE
SOMERSET	S109546276	RT 195 WEST-EXIT 4 OFF-RAMP	LEES RIVER AVE	02726 MA SHWS, MA RELEASE
SOMERSET	S117679437	SOMERSET TRANSFER STATION	OFF BRAYTON POINT RD	02726 MA SWF/LF
SOMERSET	S117679436	SOMERSET LANDFILL	OFF BRAYTON POINT RD	02726 MA SWF/LF
SWANSEA	S109330118	BORGE LANDFILL	RTE 6 GAR HYW	02777 MA SWF/LF
SWANSEA	S102088589	BLDG 19 PARKING LOT	RTE 6-COLES RIVER BRG	02777 MA SHWS, MA RELEASE
SWANSEA	S114004870	S114004870 UTILITY POLE	LOCUST & CRANE STREETS	MA SHWS. MA RELEASE

ORPHAN SUMMARY

Count: 14 records.

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/14/2019

Telephone: N/A Last EDR Contact: 07/02/2019

Source: EPA

Number of Days to Update: 26

Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: 202-564-7333

EPA Region 1 EPA Region 6

Telephone 617-918-1143 Telephone: 214-655-6659

EPA Region 3 EPA Region 7

Telephone 215-814-5418 Telephone: 913-551-7247

EPA Region 4 EPA Region 8

Telephone 404-562-8033 Telephone: 303-312-6774

EPA Region 5 EPA Region 9

Telephone 312-886-6686 Telephone: 415-947-4246

EPA Region 10

Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/18/2019
Date Made Active in Peneda: 05/14/2010

Source: EPA Telephone: N/A

Date Made Active in Reports: 05/14/2019

Last EDR Contact: 07/02/2019

Number of Days to Update: 26 Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991 Date Data Arrived at EDR: 02/02/1994 Date Made Active in Reports: 03/30/1994

Number of Days to Update: 56

Source: EPA

Telephone: 202-564-4267 Last EDR Contact: 08/15/2011

Next Scheduled EDR Contact: 11/28/2011 Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/14/2019

Date Made Active in Reports: 05/14/201

Number of Days to Update: 26

Source: EPA Telephone: N/A

Last EDR Contact: 07/02/2019

Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 04/03/2019 Date Data Arrived at EDR: 04/05/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 703-603-8704 Last EDR Contact: 07/03/2019

Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 35

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 07/02/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 35

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 07/02/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: EPA

Telephone: 800-424-9346 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (888) 372-7341 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (888) 372-7341 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (888) 372-7341 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (888) 372-7341 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 41

Source: Department of the Navy Telephone: 843-820-7326 Last EDR Contact: 05/10/2019

Next Scheduled EDR Contact: 08/26/2019 Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019 Date Data Arrived at EDR: 02/04/2019 Date Made Active in Reports: 03/08/2019

Number of Days to Update: 32

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 05/29/2019

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019 Date Data Arrived at EDR: 02/04/2019 Date Made Active in Reports: 03/08/2019

Number of Days to Update: 32

Source: Environmental Protection Agency

Telephone: 703-603-0695 Last EDR Contact: 05/29/2019

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous

substances.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/26/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 36

Source: National Response Center, United States Coast Guard

Telephone: 202-267-2180 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SHWS: Site Transition List

Contains information on releases of oil and hazardous materials that have been reported to DEP.

Date of Government Version: 02/28/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/09/2019

Number of Days to Update: 30

Source: Department of Environmental Protection

Telephone: 617-292-5990 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

LF PROFILES: Landfill Profiles Listing

This spreadsheet describes landfills that have actively accepted waste or have closed under MassDEP Solid Waste Regulations first adopted in 1971 (310 CMR 16.00 and 310 CMR 19.00). The list does not include landfills that closed before 1971 (and which never had a MassDEP permit or approval), or for which agency data is incomplete.

Date of Government Version: 07/01/2015 Date Data Arrived at EDR: 10/27/2015 Date Made Active in Reports: 12/14/2015

Number of Days to Update: 48

Source: Department of Environmental Protection

Telephone: 617-292-5868 Last EDR Contact: 07/03/2019

Next Scheduled EDR Contact: 10/14/2019
Data Release Frequency: Varies

SWF/LF: Solid Waste Facility Database/Transfer Stations

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites

Date of Government Version: 05/01/2018 Date Data Arrived at EDR: 07/05/2018 Date Made Active in Reports: 08/14/2018

Number of Days to Update: 40

Source: Department of Environmental Protection

Telephone: 617-292-5989 Last EDR Contact: 07/19/2019

Next Scheduled EDR Contact: 10/14/2019 Data Release Frequency: Annually

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Listing

Sites within the Leaking Underground Storage Tank Listing that have a UST listed as its source.

Date of Government Version: 02/28/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/09/2019

Number of Days to Update: 30

Source: Department of Environmental Protection

Telephone: 617-292-5990 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Quarterly

LAST: Leaking Aboveground Storage Tank Sites

Sites within the Releases Database that have a AST listed as its source.

Date of Government Version: 02/28/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/09/2019

Number of Days to Update: 30

Source: Department of Environmental Protection

Telephone: 617-292-5500 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/12/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA, Region 5 Telephone: 312-886-7439 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 02/19/2019 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/17/2018 Date Data Arrived at EDR: 03/07/2019

Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 10/10/2018 Date Data Arrived at EDR: 03/08/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 54

Source: Environmental Protection Agency

Telephone: 415-972-3372 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 8 Telephone: 303-312-6271 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/01/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 6 Telephone: 214-665-6597 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 09/24/2018 Date Data Arrived at EDR: 03/12/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 50

Source: EPA Region 4 Telephone: 404-562-8677 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/13/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017 Date Data Arrived at EDR: 05/30/2017 Date Made Active in Reports: 10/13/2017

Number of Days to Update: 136

Source: FEMA Telephone: 202-646-5797 Last EDR Contact: 07/10/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Varies

UST: Summary Listing of all the Tanks Registered in the State of Massachusetts

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 06/01/2019 Date Data Arrived at EDR: 06/07/2019 Date Made Active in Reports: 07/16/2019

Number of Days to Update: 39

Source: Department of Fire Services, Office of the Public Safety

Telephone: 617-556-1035 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Quarterly

AST: Aboveground Storage Tank Database Registered Aboveground Storage Tanks.

Date of Government Version: 12/19/2018 Date Data Arrived at EDR: 12/20/2018 Date Made Active in Reports: 02/11/2019

Number of Days to Update: 53

Source: Department of Public Safety Telephone: 617-556-1035 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: No Update Planned

AST 2: Aboveground Storage Tanks
Aboveground storage tanks

Date of Government Version: 04/17/2019 Date Data Arrived at EDR: 04/19/2019 Date Made Active in Reports: 05/10/2019

Number of Days to Update: 21

Source: Department of Fire Services Telephone: 978-567-3181

Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/17/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 10 Telephone: 206-553-2857 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 11/07/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 7 Telephone: 913-551-7003 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/16/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 8 Telephone: 303-312-6137 Last EDR Contact: 04/26/2019

Next Scheduled EDR Contact: 08/05/2019 Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/01/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 6 Telephone: 214-665-7591 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/12/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA Region 5 Telephone: 312-886-6136 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 09/24/2018 Date Data Arrived at EDR: 03/12/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 50

Source: EPA Region 4 Telephone: 404-562-9424 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/03/2018 Date Data Arrived at EDR: 03/07/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 55

Source: EPA, Region 1 Telephone: 617-918-1313 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 10/10/2018 Date Data Arrived at EDR: 03/08/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 54

Source: EPA Region 9 Telephone: 415-972-3368 Last EDR Contact: 07/24/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

State and tribal institutional control / engineering control registries

INST CONTROL: Sites With Activity and Use Limitation

Activity and Use Limitations establish limits and conditions on the future use of contaminated property, and therefore allow cleanups to be tailored to these uses.

Date of Government Version: 02/28/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/09/2019

Number of Days to Update: 30

Source: Department of Environmental Protection

Telephone: 617-292-5990 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008 Date Data Arrived at EDR: 04/22/2008 Date Made Active in Reports: 05/19/2008

Number of Days to Update: 27

Source: EPA, Region 7 Telephone: 913-551-7365 Last EDR Contact: 04/20/2009

Next Scheduled EDR Contact: 07/20/2009 Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015 Date Data Arrived at EDR: 09/29/2015 Date Made Active in Reports: 02/18/2016

Number of Days to Update: 142

Source: EPA, Region 1 Telephone: 617-918-1102 Last EDR Contact: 06/20/2019

Next Scheduled EDR Contact: 10/07/2019
Data Release Frequency: Varies

State and tribal Brownfields sites

BROWNFIELDS: Completed Brownfields Covenants Listing

Under Massachusetts law, M.G.L. c. 21E is the statute that governs the cleanup of releases of oil and/or hazardous material to the environment. The Brownfields Act of 1998 amended M.G.L. c. 21E by establishing significant liability relief and financial incentives to spur the redevelopment of brownfields, while ensuring that the Commonwealth's environmental standards are met. Most brownfields are redeveloped with the benefit of liability protections that operate automatically under M.G.L. c. 21E.

Date of Government Version: 04/05/2017 Date Data Arrived at EDR: 08/03/2017 Date Made Active in Reports: 10/10/2017

Number of Days to Update: 68

Source: Office of the Attorney General Telephone: 617-963-2423 Last EDR Contact: 05/03/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Annually

BROWNFIELDS 2: Potential Brownfields Listing

A listing of potential brownfields site locations in the state.

Date of Government Version: 05/22/2017 Date Data Arrived at EDR: 08/03/2017 Date Made Active in Reports: 09/22/2017

Number of Days to Update: 50

Source: Department of Environmental Protection

Telephone: 617-556-1007 Last EDR Contact: 05/03/2019

Next Scheduled EDR Contact: 08/12/2019

Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018 Date Data Arrived at EDR: 12/18/2018 Date Made Active in Reports: 01/11/2019

Number of Days to Update: 24

Source: Environmental Protection Agency

Telephone: 202-566-2777

Last EDR Contact: 06/04/2019

Next Scheduled EDR Contact: 09/30/2019 Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998 Date Data Arrived at EDR: 12/03/2007 Date Made Active in Reports: 01/24/2008

Number of Days to Update: 52

Source: Environmental Protection Agency

Telephone: 703-308-8245

Last EDR Contact: 04/26/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009 Date Data Arrived at EDR: 05/07/2009 Date Made Active in Reports: 09/21/2009

Number of Days to Update: 137

Source: EPA, Region 9 Telephone: 415-947-4219 Last EDR Contact: 07/19/2019

Next Scheduled EDR Contact: 11/04/2019
Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985 Date Data Arrived at EDR: 08/09/2004 Date Made Active in Reports: 09/17/2004

Number of Days to Update: 39

Source: Environmental Protection Agency

Telephone: 800-424-9346 Last EDR Contact: 06/09/2004 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014 Date Data Arrived at EDR: 08/06/2014 Date Made Active in Reports: 01/29/2015 Number of Days to Update: 176

Telephone: 301-443-1452 Last EDR Contact: 04/23/2019

Next Scheduled EDR Contact: 08/12/2019

Source: Department of Health & Human Serivces. Indian Health Service

Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019 Date Data Arrived at EDR: 02/26/2019 Date Made Active in Reports: 04/17/2019 Source: Drug Enforcement Administration Telephone: 202-307-1000

Last EDR Contact: 05/24/2019

Number of Days to Update: 50

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019 Date Data Arrived at EDR: 02/26/2019 Date Made Active in Reports: 04/17/2019 Source: Drug Enforcement Administration

Telephone: 202-307-1000 Last EDR Contact: 05/24/2019

Number of Days to Update: 50

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Quarterly

PFAS: PFAS Contaminated Sites Listing

Detection of Per- and Polyfluoroalkyl Substances (PFAS) in drinking water.

Date of Government Version: 06/28/2019 Date Data Arrived at EDR: 07/02/2019 Date Made Active in Reports: 07/12/2019 Source: Department of Environmental Protection

Telephone: 617-292-6770 Last EDR Contact: 07/02/2019

Number of Days to Update: 10

Next Scheduled EDR Contact: 10/14/2019 Data Release Frequency: Varies

Local Land Records

LIENS: Liens Information Listing A listing of environmental liens.

> Date of Government Version: 03/07/2018 Date Data Arrived at EDR: 03/09/2018 Date Made Active in Reports: 06/21/2018 Number of Days to Update: 104

Source: Department of Environmental Protection Telephone: 617-292-5628

Last EDR Contact: 05/16/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 35

Source: Environmental Protection Agency

Telephone: 202-564-6023 Last EDR Contact: 07/02/2019

Next Scheduled EDR Contact: 10/14/2019 Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/26/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 49

Source: U.S. Department of Transportation

Telephone: 202-366-4555 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

MA SPILLS: Historical Spill List

The Spills Database was the release notification tracking system for spills that occurred prior to October 1, 1993. This information should be considered to be primarily of historical interest since all of the listed spills

have either been cleaned up or assigned new tracking numbers and moved to the Reportable Releases or Sites Transition

List databases.

Date of Government Version: 09/30/1993 Date Data Arrived at EDR: 12/03/2003 Date Made Active in Reports: 12/31/2003

Number of Days to Update: 28

Source: Department of Environmental Protection

Telephone: 617-292-5720 Last EDR Contact: 12/03/2003 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

RELEASE: Reportable Releases

Contains information on all releases of oil and hazardous materials that have been reported to DEP

Date of Government Version: 02/28/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/09/2019

Number of Days to Update: 30

Source: Department of Environmental Protection

Telephone: 617-292-5990 Last EDR Contact: 07/23/2019

Next Scheduled EDR Contact: 10/21/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/11/2012 Date Data Arrived at EDR: 01/03/2013 Date Made Active in Reports: 02/08/2013

Number of Days to Update: 36

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 03/10/1998 Date Data Arrived at EDR: 01/03/2013

Date Made Active in Reports: 03/05/2013

Number of Days to Update: 61

Source: FirstSearch Telephone: N/A

Last EDR Contact: 01/03/2013 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/27/2019 Date Made Active in Reports: 04/17/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: (888) 372-7341 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 03/07/2019 Date Data Arrived at EDR: 04/03/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 50

Source: U.S. Army Corps of Engineers

Telephone: 202-528-4285 Last EDR Contact: 05/21/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 11/10/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 62

Source: USGS Telephone: 888-275-8747 Last EDR Contact: 07/09/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 02/06/2006 Date Made Active in Reports: 01/11/2007

Number of Days to Update: 339

Source: U.S. Geological Survey Telephone: 888-275-8747 Last EDR Contact: 07/10/2019

Next Scheduled EDR Contact: 10/21/2019

Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017 Date Data Arrived at EDR: 02/03/2017 Date Made Active in Reports: 04/07/2017

Number of Days to Update: 63

Source: Environmental Protection Agency Telephone: 615-532-8599

Last EDR Contact: 05/13/2019

Next Scheduled EDR Contact: 08/26/2019 Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/25/2019 Date Data Arrived at EDR: 03/26/2019 Date Made Active in Reports: 05/07/2019

Number of Days to Update: 42

Source: Environmental Protection Agency

Telephone: 202-566-1917 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013 Date Data Arrived at EDR: 03/21/2014 Date Made Active in Reports: 06/17/2014

Number of Days to Update: 88

Source: Environmental Protection Agency

Telephone: 617-520-3000 Last EDR Contact: 05/06/2019

Next Scheduled EDR Contact: 08/19/2019 Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017 Date Data Arrived at EDR: 05/08/2018 Date Made Active in Reports: 07/20/2018

Number of Days to Update: 73

Source: Environmental Protection Agency

Telephone: 703-308-4044 Last EDR Contact: 05/10/2019

Next Scheduled EDR Contact: 08/19/2019 Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 06/21/2017 Date Made Active in Reports: 01/05/2018

Number of Days to Update: 198

Source: EPA

Telephone: 202-260-5521 Last EDR Contact: 06/18/2019

Next Scheduled EDR Contact: 09/30/2019 Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016 Date Data Arrived at EDR: 01/10/2018

Date Made Active in Reports: 01/12/2018

Number of Days to Update: 2

Source: EPA

Telephone: 202-566-0250 Last EDR Contact: 05/24/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009 Date Data Arrived at EDR: 12/10/2010 Date Made Active in Reports: 02/25/2011

Number of Days to Update: 77

Source: EPA

Telephone: 202-564-4203 Last EDR Contact: 04/24/2019

Next Scheduled EDR Contact: 08/05/2019 Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 35

Source: EPA

Telephone: 703-416-0223 Last EDR Contact: 07/01/2019

Next Scheduled EDR Contact: 09/16/2019 Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/25/2019 Date Data Arrived at EDR: 05/02/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 21

Source: Environmental Protection Agency

Telephone: 202-564-8600 Last EDR Contact: 07/22/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995 Date Data Arrived at EDR: 07/03/1995 Date Made Active in Reports: 08/07/1995

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-4104 Last EDR Contact: 06/02/2008

Next Scheduled EDR Contact: 09/01/2008 Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 35

Source: EPA

Telephone: 202-564-6023 Last EDR Contact: 07/01/2019

Next Scheduled EDR Contact: 08/19/2019 Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 03/20/2019 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 34

Source: EPA

Telephone: 202-566-0500 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES)

program.

Date of Government Version: 11/18/2016 Date Data Arrived at EDR: 11/23/2016 Date Made Active in Reports: 02/10/2017

Number of Days to Update: 79

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 07/03/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009 Source: EPA

Date of Government Version: 04/09/2009 Date Data Arrived at EDR: 04/16/2009 Date Made Active in Reports: 05/11/2009

Number of Days to Update: 25

Telephone: 202-566-1667 Last EDR Contact: 08/18/2017

Next Scheduled EDR Contact: 12/04/2017 Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency,

EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016 Date Data Arrived at EDR: 09/08/2016 Date Made Active in Reports: 10/21/2016

Number of Days to Update: 43

Source: Nuclear Regulatory Commission

Telephone: 301-415-7169 Last EDR Contact: 07/22/2019

Next Scheduled EDR Contact: 11/04/2019 Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005 Date Data Arrived at EDR: 08/07/2009 Date Made Active in Reports: 10/22/2009

Number of Days to Update: 76

Source: Department of Energy Telephone: 202-586-8719 Last EDR Contact: 06/07/2019

Next Scheduled EDR Contact: 09/16/2019 Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014 Date Data Arrived at EDR: 09/10/2014 Date Made Active in Reports: 10/20/2014

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: N/A

Last EDR Contact: 06/07/2019

Next Scheduled EDR Contact: 09/16/2019 Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017 Date Data Arrived at EDR: 11/30/2017 Date Made Active in Reports: 12/15/2017

Number of Days to Update: 15

Source: Environmental Protection Agency

Telephone: 202-566-0517 Last EDR Contact: 04/26/2019

Next Scheduled EDR Contact: 08/05/2019 Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/02/2019 Date Data Arrived at EDR: 04/02/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 42

Source: Environmental Protection Agency

Telephone: 202-343-9775 Last EDR Contact: 07/01/2019

Next Scheduled EDR Contact: 10/14/2019 Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2007

Next Scheduled EDR Contact: 03/17/2008

Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006 Date Data Arrived at EDR: 03/01/2007 Date Made Active in Reports: 04/10/2007

Number of Days to Update: 40

Source: Environmental Protection Agency

Telephone: 202-564-2501 Last EDR Contact: 12/17/2008

Next Scheduled EDR Contact: 03/17/2008 Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018 Date Data Arrived at EDR: 01/29/2019 Date Made Active in Reports: 03/21/2019

Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety

Telephone: 202-366-4595 Last EDR Contact: 04/30/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 30

Source: Department of Justice, Consent Decree Library

Telephone: Varies

Last EDR Contact: 07/08/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015 Date Data Arrived at EDR: 02/22/2017 Date Made Active in Reports: 09/28/2017

Number of Days to Update: 218

Source: EPA/NTIS Telephone: 800-424-9346 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres

Date of Government Version: 12/31/2014 Date Data Arrived at EDR: 07/14/2015 Date Made Active in Reports: 01/10/2017

Number of Days to Update: 546

Source: USGS

Telephone: 202-208-3710 Last EDR Contact: 07/10/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017 Date Data Arrived at EDR: 09/11/2018 Date Made Active in Reports: 09/14/2018

Number of Days to Update: 3

Source: Department of Energy Telephone: 202-586-3559 Last EDR Contact: 05/02/2019

Next Scheduled EDR Contact: 08/19/2019 Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017 Date Data Arrived at EDR: 10/11/2017 Date Made Active in Reports: 11/03/2017

Number of Days to Update: 23

Source: Department of Energy Telephone: 505-845-0011 Last EDR Contact: 05/24/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 04/11/2019 Date Data Arrived at EDR: 04/18/2019 Date Made Active in Reports: 05/14/2019

Number of Days to Update: 26

Source: Environmental Protection Agency

Telephone: 703-603-8787 Last EDR Contact: 07/01/2019

Next Scheduled EDR Contact: 10/14/2019 Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001 Date Data Arrived at EDR: 10/27/2010 Date Made Active in Reports: 12/02/2010 Number of Days to Update: 36

Telephone: 703-305-6451 Last EDR Contact: 12/02/2009 Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

Source: American Journal of Public Health

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Source: EPA

Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017 Number of Days to Update: 100

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data A listing of minor source facilities

> Date of Government Version: 10/12/2016 Date Data Arrived at EDR: 10/26/2016 Date Made Active in Reports: 02/03/2017

Source: EPA

Telephone: 202-564-2496 Last EDR Contact: 09/26/2017

Number of Days to Update: 100

Next Scheduled EDR Contact: 01/08/2018 Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information

Date of Government Version: 11/27/2018 Date Data Arrived at EDR: 02/27/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration

Telephone: 303-231-5959 Last EDR Contact: 05/29/2019

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005 Date Data Arrived at EDR: 02/29/2008 Date Made Active in Reports: 04/18/2008

Number of Days to Update: 49

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 05/31/2019

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011 Date Data Arrived at FDR: 06/08/2011 Date Made Active in Reports: 09/13/2011

Number of Days to Update: 97

Source: USGS

Telephone: 703-648-7709 Last EDR Contact: 05/31/2019

Next Scheduled EDR Contact: 09/09/2019

Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/27/2019 Date Data Arrived at EDR: 03/28/2019 Date Made Active in Reports: 05/01/2019

Number of Days to Update: 34

Source: Department of Interior Telephone: 202-208-2609 Last EDR Contact: 06/19/2019

Next Scheduled EDR Contact: 09/23/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019 Date Data Arrived at EDR: 03/05/2019 Date Made Active in Reports: 03/15/2019

Number of Days to Update: 10

Source: EPA Telephone: (617) 918-1111 Last EDR Contact: 06/05/2019

Next Scheduled EDR Contact: 09/16/2019 Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 04/07/2019 Date Data Arrived at EDR: 04/09/2019 Date Made Active in Reports: 05/23/2019

Number of Days to Update: 44

Source: Environmental Protection Agency

Telephone: 202-564-2280 Last EDR Contact: 07/09/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 01/17/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 74

Source: Department of Defense Telephone: 703-704-1564 Last EDR Contact: 07/15/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018 Date Data Arrived at EDR: 07/26/2018 Date Made Active in Reports: 10/05/2018

Number of Days to Update: 71

Source: Environmental Protection Agency

Telephone: 202-564-0527 Last EDR Contact: 05/24/2019

Next Scheduled EDR Contact: 09/09/2019 Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019 Date Data Arrived at EDR: 02/21/2019 Date Made Active in Reports: 04/01/2019

Number of Days to Update: 39

Source: EPA

Telephone: 800-385-6164 Last EDR Contact: 05/21/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Quarterly

AIRS: Permitted Facilities Listing

A listing of Air Quality permit applications.

Date of Government Version: 04/18/2019
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 05/10/2019

Number of Days to Update: 21

Source: Department of Environmental Protection

Telephone: 617-292-5789 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Varies

ASBESTOS: Asbestos Notification Listing

Asbestos sites

Date of Government Version: 05/28/2019 Date Data Arrived at EDR: 05/30/2019 Date Made Active in Reports: 06/10/2019

Number of Days to Update: 11

Source: Department of Environmental Protection

Telephone: 617-292-5982 Last EDR Contact: 05/09/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Varies

DRYCLEANERS: Regulated Drycleaning Facilities

A listing of Department of Environmental Protection regulated drycleaning facilities that use perchloroethylene

 $under\ the\ Environmental\ Results\ Program.$

Date of Government Version: 06/04/2019 Date Data Arrived at EDR: 06/07/2019 Date Made Active in Reports: 07/16/2019

Number of Days to Update: 39

Source: Department of Environmental Protection

Telephone: 617-292-5633 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Varies

ENFORCEMENT: Enforcement Action Cases

A listing of enforcement action cases tracked by Department of Environmental Protection programs, including Solid Waste and Hazardous Waste.

Date of Government Version: 04/26/2019 Date Data Arrived at EDR: 04/30/2019 Date Made Active in Reports: 06/10/2019

Number of Days to Update: 41

Source: Department of Environmental Quality

Telephone: 617-292-5979 Last EDR Contact: 04/26/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/01/2010 Date Data Arrived at EDR: 12/23/2010 Date Made Active in Reports: 02/03/2011

Number of Days to Update: 42

Source: Department of Environmental Protection

Telephone: 617-292-5970 Last EDR Contact: 06/10/2019

Next Scheduled EDR Contact: 09/23/2019 Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for underground storage tanks. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 07/11/2018 Date Data Arrived at EDR: 07/17/2018 Date Made Active in Reports: 09/05/2018

Number of Days to Update: 50

Source: Office of State Fire Marshal Telephone: 978-567-3100 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Varies

Financial Assurance 3: Financial Assurance Information listing

Information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay

Date of Government Version: 01/16/2018 Date Data Arrived at EDR: 04/17/2018 Date Made Active in Reports: 06/15/2018

Number of Days to Update: 59

Source: Department of Environmental Protection

Telephone: 617-292-5970 Last EDR Contact: 07/08/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Varies

GWDP: Ground Water Discharge Permits

The Ground Water Discharge Permits datalayer (formerly known as Groundwater Discharge Points) is a statewide point dataset containing approximate locations of permitted discharges to groundwater.

Date of Government Version: 04/08/2019 Date Data Arrived at EDR: 05/03/2019 Date Made Active in Reports: 06/10/2019

Number of Days to Update: 38

Source: MassGIS Telephone: 617-556-1150 Last EDR Contact: 05/03/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Varies

HW GEN: List of Massachusetts Hazardous Waste Generators

Permanent generator identification numbers for all Massachusetts generators of hazardous waste and waste oil that have registered with or notified MassDEP of their hazardous waste activities.

Date of Government Version: 06/21/2019 Date Data Arrived at EDR: 06/26/2019 Date Made Active in Reports: 07/16/2019

Number of Days to Update: 20

Source: Department of Environmental Protection

Telephone: 617-292-5500 Last EDR Contact: 06/26/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Semi-Annually

MERCURY: Mercury Product Recyling Drop-Off Locations Listing

A listing of locations, collecting and recycling for mercury-added products. Mercury is toxic to the human nervous system, as well as fish and animals. Mercury can enter the body either through skin absorption or through inhalation of mercury vapors. At room temperature, small beads of mercury will vaporize.

Date of Government Version: 05/07/2018 Date Data Arrived at EDR: 05/25/2018 Date Made Active in Reports: 06/25/2018

Number of Days to Update: 31

Source: Department of Environmental Protection

Telephone: 617-292-5632 Last EDR Contact: 05/16/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Varies

NPDES: NPDES Permit Listing

Listing of treatment plants in Massachusetts that hold permits to discharge to groundwater.

Date of Government Version: 11/14/2018 Date Data Arrived at EDR: 11/15/2018 Date Made Active in Reports: 12/17/2018

Number of Days to Update: 32

Source: Department of Environmental Protection

Telephone: 508-767-2781 Last EDR Contact: 05/17/2019

Next Scheduled EDR Contact: 08/26/2019

Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/25/2019 Date Made Active in Reports: 07/16/2019

Number of Days to Update: 82

Source: Massachusetts Emergency Management Agency

Telephone: 508-820-2019 Last EDR Contact: 07/12/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Annually

TSD: TSD Facility

List of Licensed Hazardous Waste Treatment, Storage Disposal Facilities (TSDFs) in Massachusetts.

Date of Government Version: 06/24/2019 Date Data Arrived at EDR: 06/27/2019 Date Made Active in Reports: 07/16/2019

Number of Days to Update: 19

Source: Department of Environmental Protection

Telephone: 617-292-5580 Last EDR Contact: 06/24/2019

Next Scheduled EDR Contact: 10/07/2019 Data Release Frequency: Varies

UIC: Underground Injection Control Listing

A list of UIC registration data and their locations

Date of Government Version: 03/21/2019 Date Data Arrived at EDR: 03/22/2019 Date Made Active in Reports: 05/22/2019

Number of Days to Update: 61

Source: Department of Environmental Protection

Telephone: 617-566-1172 Last EDR Contact: 05/10/2019

Next Scheduled EDR Contact: 08/26/2019 Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A Date Data Arrived at FDR: N/A Date Made Active in Reports: N/A

Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last EDR Contact: N/A

Next Scheduled EDR Contact: N/A

Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Date Data Arrived at EDR: N/A Date Made Active in Reports: N/A Number of Days to Update: N/A

Source: EDR, Inc. Telephone: N/A Last FDR Contact: N/A

Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A Source: EDR, Inc.

Date Data Arrived at EDR: N/A Telephone: N/A

Date Made Active in Reports: N/A Last EDR Contact: N/A

Number of Days to Update: N/A Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/2013
Number of Days to Update: 176

Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

Source: Department of Environmental Protection

Source: Department of Environmental Protection

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Protection in Massachusetts.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/24/201

Date Made Active in Reports: 12/24/2013 Number of Days to Update: 176 Telephone: N/A Last EDR Contact: 06/01/2012 Next Scheduled EDR Contact: N/A Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019 Date Data Arrived at EDR: 02/12/2019 Date Made Active in Reports: 03/04/2019

Number of Days to Update: 20

Source: Department of Energy & Environmental Protection

Telephone: 860-424-3375 Last EDR Contact: 05/14/2019

Next Scheduled EDR Contact: 08/26/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2018 Date Data Arrived at EDR: 04/10/2019 Date Made Active in Reports: 05/16/2019

Number of Days to Update: 36

Source: Department of Environmental Protection

Telephone: N/A

Last EDR Contact: 07/09/2019

Next Scheduled EDR Contact: 10/21/2019 Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 05/01/2019
Date Made Active in Reports: 06/21/2019

Number of Days to Update: 51

Source: Department of Environmental Conservation

Telephone: 518-402-8651 Last EDR Contact: 05/01/2019

Next Scheduled EDR Contact: 08/12/2019 Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 10/23/2018 Date Made Active in Reports: 11/27/2018

Number of Days to Update: 35

Source: Department of Environmental Protection

Telephone: 717-783-8990 Last EDR Contact: 07/15/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 02/23/2018 Date Made Active in Reports: 04/09/2018

Number of Days to Update: 45

Source: Department of Environmental Management

Telephone: 401-222-2797 Last EDR Contact: 05/17/2019

Next Scheduled EDR Contact: 09/02/2019 Data Release Frequency: Annually

VT MANIFEST: Hazardous Waste Manifest Data Hazardous waste manifest information.

Date of Government Version: 04/22/2019 Date Data Arrived at EDR: 04/23/2019 Date Made Active in Reports: 06/25/2019

Number of Days to Update: 63

Source: Department of Environmental Conservation

Telephone: 802-241-3443 Last EDR Contact: 07/15/2019

Next Scheduled EDR Contact: 10/28/2019 Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017 Date Data Arrived at EDR: 06/15/2018 Date Made Active in Reports: 07/09/2018

Number of Days to Update: 24

Source: Department of Natural Resources

Telephone: N/A

Last EDR Contact: 06/10/2019

Next Scheduled EDR Contact: 09/23/2019 Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services,

a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary

and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are

comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: MassDEP Telephone: 617-292-5907

Current USGS 7.5 Minute Topographic Map Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK®-PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

SOMERSET MIDDLE SCHOOL 1141 BRAYTON AVENUE SOMERSET, MA 02726

TARGET PROPERTY COORDINATES

41.738279 - 41° 44' 17.80" Latitude (North): Longitude (West): 71.165099 - 71° 9' 54.36"

Universal Tranverse Mercator: Zone 19 UTM X (Meters): UTM Y (Meters): 319948.9 4622770.5

Elevation: 149 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 5641997 FALL RIVER, MA

Version Date: 2012

5641999 SOMERSET, MA North Map:

Version Date: 2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

- 1. Groundwater flow direction, and
- 2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

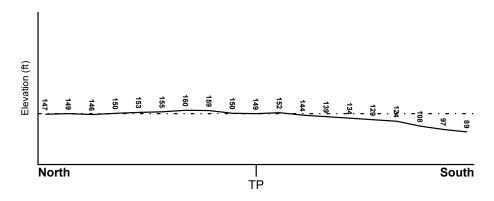
TOPOGRAPHIC INFORMATION

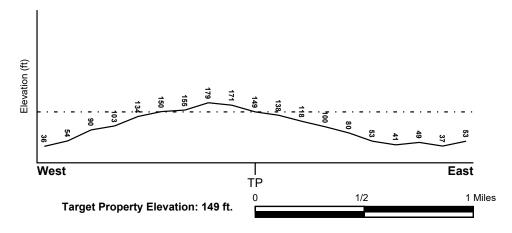
Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General ESE

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES





Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property **FEMA Source Type** 25005C0331G FEMA FIRM Flood data

Additional Panels in search area: **FEMA Source Type**

25005C0243F FEMA FIRM Flood data FEMA FIRM Flood data 25005C0244G 25005C0332G FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Electronic NWI Quad at Target Property Data Coverage

FALL RIVER YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

> LOCATION GENERAL DIRECTION MAP ID FROM TP GROUNDWATER FLOW Not Reported

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

GEOLOGIC AGE IDENTIFICATION

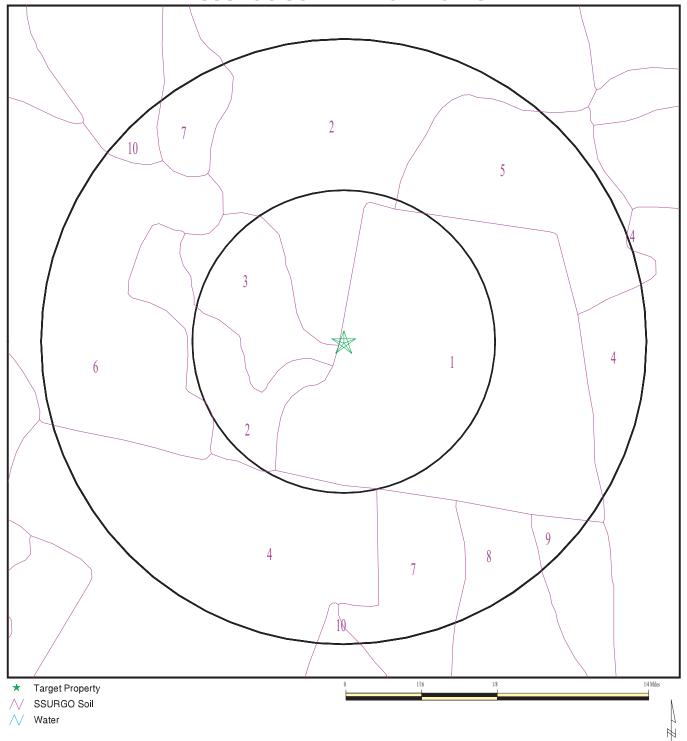
Paleozoic Category: Stratifed Sequence

System: Pennsylvanian Series: Pennsylvanian

PP (decoded above as Era, System & Series) Code:

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5741137.2s



SITE NAME: Somerset Middle School ADDRESS: 1141 Brayton Avenue Somerset MA 02726 41.738279 / 71.165099 LAT/LONG:

CLIENT: The Vertex Companies, Inc. CONTACT: Nicollette Lynch

INQUIRY #: 5741137.2s DATE: August 05, 2019 2:26 pm

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DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Udorthents
Soil Surface Texture: variable

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep,

moderately well and well drained soils with moderately coarse

textures.

Soil Drainage Class: Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

	Soil Layer Information							
	Bou	ndary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec (pH)		
1	0 inches	5 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:	
2	5 inches	59 inches	variable	Not reported	Not reported	Max: 141.14 Min: 0.42	Max: Min:	

Soil Map ID: 2

Soil Component Name: Paxton

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Bou	ndary		Classi	Classification				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	hydraulic conductivity micro m/sec (pH)			
1	0 inches	7 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
2	7 inches	22 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
3	22 inches	59 inches	gravelly sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		

Soil Map ID: 3

Soil Component Name: Woodbridge

Soil Surface Texture: fine sandy loam

Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. Hydrologic Group:

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Boui	ndary		Classification Saturated hydraulic					
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec (pH)			
1	0 inches	9 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
2	9 inches	27 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		

	Soil Layer Information							
	Bou	ndary		Classification		Saturated hydraulic		
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		Soil Reaction (pH)	
3	27 inches	59 inches	gravelly fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5	

Soil Map ID: 4

Soil Component Name: Urban land

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Hydric Status: Unknown

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

No Layer Information available.

Soil Map ID: 5

Soil Component Name: Pittstown
Soil Surface Texture: silt loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Bou	ındary		Classi	Classification				
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	J Con Reaction		
1	0 inches	9 inches	silt loam	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5		
2	9 inches	29 inches	channery loam	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5		
3	29 inches	59 inches	channery silt loam	Not reported	Not reported	Max: 1.41 Min: 0.42	Max: 6 Min: 4.5		

Soil Map ID: 6

Soil Component Name: Paxton

Soil Surface Texture: fine sandy loam

Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. Hydrologic Group:

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Bou	ındary		Classi	fication	Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec	Soil Reaction (pH)		
1	0 inches	7 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
2	7 inches	22 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
3	22 inches	59 inches	gravelly sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		

Soil Map ID: 7

Soil Component Name: Pittstown

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 69 inches

	Soil Layer Information								
	Bou	ndary		Classi	fication	Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec (pH)			
1	0 inches	9 inches	loam	Not reported	Not reported	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5		
2	9 inches	29 inches	channery loam	Not reported	Not reported	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5		
3	29 inches	59 inches	channery loam	Not reported	Not reported	Max: 4.23 Min: 0.42	Max: 6 Min: 4.5		

Soil Map ID: 8

Soil Component Name: Newport
Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Bou	ndary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity So	Soil Reaction (pH)		
1	0 inches	9 inches	loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
2	9 inches	27 inches	channery loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
3	27 inches	59 inches	channery loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		

Soil Map ID: 9

Soil Component Name: Woodbridge

fine sandy loam Soil Surface Texture:

Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures. Hydrologic Group:

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches Depth to Watertable Min: > 61 inches

	Soil Layer Information								
	Bou	ndary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil				
1	0 inches	9 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
2	9 inches	27 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		
3	27 inches	59 inches	gravelly fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6 Min: 4.5		

Soil Map ID: 10

Soil Component Name: Ridgebury

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward

movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Poorly drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 8 inches

	Soil Layer Information								
	Bou	ındary		Classification		Saturated hydraulic			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	conductivity micro m/sec (pH)			
1	0 inches	12 inches	fine sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6.5 Min: 4.5		
2	12 inches	29 inches	sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6.5 Min: 4.5		
3	29 inches	59 inches	sandy loam	Not reported	Not reported	Max: 1.41 Min: 0	Max: 6.5 Min: 4.5		

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE SEARCH DISTANCE (miles)

Federal USGS 1.000

Federal FRDS PWS Nearest PWS within 1 mile

State Database 1.000

FEDERAL USGS WELL INFORMATION

MAP ID WELL ID FROM TP

1 USGS40000459431 1/8 - 1/4 Mile SW

FEDERAL USGS WELL INFORMATION

		LOCATION
MAP ID	WELL ID	FROM TP
2	USGS40000459521	1/8 - 1/4 Mile NE
3	USGS40000459421	1/4 - 1/2 Mile SE
4	USGS40000459541	1/4 - 1/2 Mile NNW
5	USGS40000459584	1/4 - 1/2 Mile North
6	USGS40000459384	1/4 - 1/2 Mile SE
A7	USGS40000459532	1/4 - 1/2 Mile NW
A8	USGS40000459533	1/4 - 1/2 Mile WNW
9	USGS40000459403	1/4 - 1/2 Mile SW
B10	USGS40000459585	1/4 - 1/2 Mile NW
11	USGS40000459634	1/4 - 1/2 Mile North
12	USGS40000459535	1/4 - 1/2 Mile WNW
13	USGS40000459508	1/4 - 1/2 Mile WNW
B14	USGS40000459600	1/4 - 1/2 Mile NW
15	USGS40000459655	1/2 - 1 Mile North
16	USGS40000459560	1/2 - 1 Mile WNW
18	USGS40000459640	1/2 - 1 Mile NE
C19	USGS40000459392	1/2 - 1 Mile WSW
C21	USGS40000459404	1/2 - 1 Mile WSW
22	USGS40000459697	1/2 - 1 Mile NNE
D23	USGS40000459291	1/2 - 1 Mile SSE
D25	USGS40000459284	1/2 - 1 Mile SSE
27	USGS40000459722	1/2 - 1 Mile North
F28	USGS40000459721	1/2 - 1 Mile North
F29	USGS40000459733	1/2 - 1 Mile North
30	USGS40000459732	1/2 - 1 Mile NNE
31	USGS40000459468	1/2 - 1 Mile West
32	USGS40000459265	1/2 - 1 Mile SSE
34	USGS40000459181	1/2 - 1 Mile South
35	USGS40000459442	1/2 - 1 Mile East
36	USGS40000459180	1/2 - 1 Mile SSE
37	USGS40000459402	1/2 - 1 Mile ESE
38	USGS40000459255	1/2 - 1 Mile SE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
17	MA90000000004765	1/2 - 1 Mile SW
20	MA9000000003940	1/2 - 1 Mile WSW
E24	MA9000000004341	1/2 - 1 Mile SW
E26	MA900000005684	1/2 - 1 Mile SW
33	MA900000005365	1/2 - 1 Mile SSW

STATE DATABASE WELL INFORMATION

MAP ID

WELL ID

LOCATION FROM TP

PHYSICAL SETTING SOURCE MAP - 5741137.2s Buffington S **₩**7₩ (W²2 **W**8 **W ₩33 34** 1/4 1 Miles County Boundary Major Roads Potentially Productive Aquifers Groundwater Flow Direction Contour Lines GI) Indeterminate Groundwater Flow at Location Not Potentially Productive Aquifers Earthquake epicenter, Richter 5 or greater GV Groundwater Flow Varies at Location DEP Approved Zone IIs Water Wells

SITE NAME:	Somerset Middle School	CLIENT:	The Vertex Companies, Inc.
ADDRESS:	1141 Brayton Avenue	CONTACT:	Nicollette Lynch
	Somerest MA 02726	INIOHIBV#	57/11127 2c

Somerset MA 02/26 INQUIRY #: 5/4113/.2s LAT/LONG: 41.738279 / 71.165099 DATE: August 05, 2019 2:26 pm

EPA Designated Sole Src. Aq.

Public Water Supply Wells Cluster of Multiple Icons

Map ID Direction Distance

Elevation Database EDR ID Number

św 1/8 - 1/4 Mile

Aquifer:

Aquifer Type:

FED USGS USGS40000459431

Higher Organization ID:

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 34 Type: HUC: Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported

Not Reported

Not Reported

USGS-MA

Not Reported Contrib Drainage Area Unts: Formation Type: Not Reported Construction Date: Not Reported

Well Depth Units:

Level reading date:

Feet to sea level:

Not Reported

Well

01090004

Not Reported

Well Depth: Well Hole Depth:

Not Reported Well Hole Depth Units:

> 1952-10-01 Not Reported

Ground water levels, Number of Measurements: Feet below surface:

Note: Not Reported

FED USGS USGS40000459521

ΝE 1/8 - 1/4 Mile Lower

> Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 170 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Not Reported Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 95 Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

FED USGS USGS40000459421

1/4 - 1/2 Mile

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 35 Well Not Reported HUC: 01090004 Description: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth Units: Well Depth: 24

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-10-01 1 Feet below surface: 14.00 Feet to sea level: Not Reported

Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

NNW 1/4 - 1/2 Mile Higher FED USGS USGS40000459541

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 174 Well Type: HUC: 01090004 Description: Not Reported Not Reported Drainage Area: Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 25.00 Feet to sea level: Not Reported

Note: Not Reported

North FED USGS USGS40000459584

1/4 - 1/2 Mile Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 173 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Not Reported Formation Type: Aquifer Type: Construction Date: Not Reported Not Reported Well Depth Units: Well Depth: 115

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

6 SE FED USGS USGS40000459384

1/4 - 1/2 Mile I ower

Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-SPW 36 Well Not Reported HUC: 01090004 Description: Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Formation Type: Not Reported Aquifer: Not Reported Aquifer Type: Not Reported Construction Date: 1915 Well Depth Units: Not Reported Well Depth: Not Reported Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

NW 1/4 - 1/2 Mile

Α7

FED USGS USGS40000459532

Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 24 Type: Well HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Bedrock Aguifer Type: Not Reported Construction Date: 1951 Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-10-01 Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

A8 WNW **FED USGS** USGS40000459533

1/4 - 1/2 Mile Higher

> Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-SPW 25 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Bedrock Aquifer Type: Not Reported Construction Date: 1950 Well Depth: 86 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-01-01 Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

USGS40000459403 SW FED USGS

1/4 - 1/2 Mile Lower

> Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center MA-SPW 31 Monitor Location: Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Not Reported Formation Type: Not Reported Aquifer: Aquifer Type: Not Reported Construction Date: 1920 Well Depth: Well Depth Units: 16

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 9.00 Feet to sea level: Not Reported

Note: Not Reported

NW FED USGS USGS40000459585

NW 1/4 - 1/2 Mile Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center MA-S9W 166 Monitor Location: Well Type: Description: Not Reported 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Bedrock Aquifer Type: Not Reported Construction Date: 1929 Well Depth: 70 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

11 North FED USGS USGS40000459634

North 1/4 - 1/2 Mile Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 160 Well Type: Description: Not Reported 01090004 Drainage Area: Not Reported Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Not Reported Aquifer Type: Not Reported Construction Date: Well Depth: 38 Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 18.00 Feet to sea level: Not Reported

Note: Not Reported

12 WNW FED USGS USGS40000459535

1/4 - 1/2 Mile Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 26 Well Type: HUC: Description: 01090004 Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Bedrock Not Reported Aquifer Type: Construction Date: 1931 Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

FED USGS

Well

USGS40000459508

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance

Elevation Database EDR ID Number

WNW 1/4 - 1/2 Mile Higher

Organization ID: Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 27 Type: HUC: Description: Not Reported

USGS-MA

01090004 Drainage Area: Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-10-01 Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

B14 NW **FED USGS** USGS40000459600

1/4 - 1/2 Mile Higher

> Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 167 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Bedrock Aquifer Type: Not Reported Construction Date: 1951 Well Depth: 115 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

North **FED USGS** USGS40000459655

1/2 - 1 Mile

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 169 Well HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area Unts: Contrib Drainage Area: Not Reported Not Reported Formation Type: Aquifer: Not Reported Bedrock Aquifer Type: Not Reported Construction Date: 1947 Well Depth: Well Depth Units: 97

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

WNW 1/2 - 1 Mile Higher

FED USGS USGS40000459560

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 168 Type: Well 01090004 Description: Not Reported HUC: Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1952 Well Depth: 152 Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-08-01 Feet below surface: 14.00 Feet to sea level: Not Reported

Note: Not Reported

17 SW MA WELLS MA90000004765

1/2 - 1 Mile Lower

PWS ID: Not Reported Site Name: Not Reported Type: Not Reported Facility Name: CVS 0237

SubBasin: NARRAGANSET BAY

 Basemap:
 DOQ
 Accuracy Estimate (ft):
 100

 Feature Type:
 CB
 Location Method:
 PHO

 Primary Location Source:
 DD_PAR
 Secondary Location Source:
 AP_DOQ

Tertiary Location Source: Not Reported UST ID: 0

Date Mapped: 19-SEP-14

18 NE FED USGS USGS40000459640

1/2 - 1 Mile

Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-S9W 175 Well Not Reported HUC: 01090004 Description: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area Unts: Contrib Drainage Area: Not Reported Not Reported Not Reported Formation Type: Not Reported Aquifer:

Aquifer Type:Not ReportedConstruction Date:1942Well Depth:385Well Depth Units:ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

C19 WSW 1/2 - 1 Mile Lower

FED USGS USGS40000459392

Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-SPW 21 Type: Well HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Bedrock Aquifer Type: Not Reported Construction Date: 1949 Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

1949-08-01 Ground water levels, Number of Measurements: Level reading date: Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

20 wsw 1/2 - 1 Mile Lower

MA WELLS MA900000003940

PWS ID: Not Reported Site Name: Not Reported AUTOZONE Not Reported Facility Name: Type:

SubBasin: NARRAGANSET BAY

DOQ Accuracy Estimate (ft): 16 Basemap: PHO Feature Type: CB Location Method: Primary Location Source: MS GMAP Secondary Location Source: Not Reported

Not Reported Tertiary Location Source: UST ID:

16-DEC-09 Date Mapped:

FED USGS USGS40000459404

Organization ID: USGS-MA

1/2 - 1 Mile Lower

> Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 20 Well Not Reported HUC: 01090004 Description: Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Bedrock Aquifer Type: Not Reported Construction Date: 1952 Well Depth: Well Depth Units: 102

> Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

> Ground water levels, Number of Measurements: Level reading date: 1952-08-01 1 Feet below surface: 11.00 Feet to sea level: Not Reported

Note: Not Reported

Map ID Direction Distance

Elevation Database EDR ID Number

22 NNE 1/2 - 1 Mile

FED USGS USGS40000459697

USGS40000459291

FED USGS

1/2 - 1 Mile Lower

Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-S9W 172 Well Type: HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 15.00 Feet to sea level: Not Reported

Note: Not Reported

D23 SSE 1/2 - 1 Mile Lower

- 1 MILE Net

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPB 19 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Not Reported Formation Type: Aquifer Type: Construction Date: Not Reported 1971 Well Depth: 13 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1971-01-01 Feet below surface: Not Reported Feet to sea level: Not Reported

Note: The site was dry (no water level recorded).

E24 SW MA WELLS MA900000004341 1/2 - 1 Mile

1/2 - 1 Mile Lower

PWS ID: Not Reported Site Name: Not Reported

Type: Not Reported Facility Name: SOMERSET CHRYSLER JEEP

SubBasin: NARRAGANSET BAY

Basemap:DOQAccuracy Estimate (ft):16Feature Type:CBLocation Method:PHOPrimary Location Source:WWWSecondary Location Source:Not Reported

Tertiary Location Source: Not Reported UST ID: 0

Date Mapped: 23-OCT-09

Map ID Direction Distance

Elevation Database EDR ID Number

SSE 1/2 - 1 Mile Lower

D25

FED USGS USGS40000459284

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 28 Type: Well HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 18.00 Feet to sea level: Not Reported

Note: Not Reported

E26 SW MA WELLS MA900000005684

1/2 - 1 Mile Lower

PWS ID: Not Reported Site Name: Not Reported

Type: Not Reported Facility Name: SOMERSET SUBARU

SubBasin: NARRAGANSET BAY

Basemap:DOQAccuracy Estimate (ft):16Feature Type:CBLocation Method:PHOPrimary Location Source:WWWSecondary Location Source:DD PAR

Tertiary Location Source: Not Reported UST ID: 0

Date Mapped: 23-OCT-09

27

27 North 1/2 - 1 Mile Higher

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 159 Well HUC: 01090004 Description: Not Reported Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Formation Type: Aquifer: Not Reported Bedrock Aquifer Type: Not Reported Construction Date: 1928 Well Depth Units: Well Depth: 95

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

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FED USGS

USGS40000459722

Map ID Direction Distance

Elevation Database EDR ID Number

F28 North 1/2 - 1 Mile

FED USGS USGS40000459721

Lower

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 156 Well Type: HUC: 01090004 Description: Not Reported Not Reported Not Reported Drainage Area: Drainage Area Units: Contrib Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1920 Well Depth: 100 Well Depth Units: Well Hole Depth: Well Hole Depth Units: Not Reported Not Reported

USGS-MA

F29 North **FED USGS** USGS40000459733 1/2 - 1 Mile

Organization ID:

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 157 Type: Well Description: Not Reported HÜC: 01090004 Drainage Area Units: Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts: Not Reported Contrib Drainage Area: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1917 Well Depth: Well Depth Units: Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

NNE **FED USGS** USGS40000459732 1/2 - 1 Mile

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-S9W 171 Well Type: Description: HUC: Not Reported 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Not Reported Not Reported Aquifer: Not Reported Formation Type: **Bedrock** Aquifer Type: Construction Date: Not Reported Not Reported Well Depth: 66 Well Depth Units:

Well Hole Depth Units: Well Hole Depth: Not Reported Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-01-01 1 Feet below surface: 10.00 Feet to sea level: Not Reported

Not Reported Note:

Map ID Direction Distance

Elevation Database EDR ID Number

31 West 1/2 - 1 Mile Lower

FED USGS USGS40000459468

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 19 Type: Well Description: HUC: 01090004 Not Reported Not Reported Drainage Area: Not Reported Drainage Area Units: Contrib Drainage Area: Not Reported Not Reported Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1910 Well Depth: Well Depth Units: Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

32 SSE 1/2 - 1 Mile

FED USGS USGS40000459265

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPB 20 Well Type: Description: Not Reported HÜC: 01090004 Drainage Area Units: Drainage Area: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: 1971

Well Depth: Well Depth Units: Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1971-01-01 Feet below surface: Feet to sea level: Not Reported

Note: Not Reported

SSW **MA WELLS** MA900000005365 1/2 - 1 Mile Lower

PWS ID: Not Reported Site Name: Not Reported

MASSACHUSETTS ELECTRIC COMPANY Not Reported Facility Name: Type:

SubBasin: **TAUNTON**

DOQ Basemap: Accuracy Estimate (ft): 100 PHO Feature Type: CB Location Method: Primary Location Source: AP DOQ Secondary Location Source: DD PAR

Not Reported Tertiary Location Source: UST ID: 0

Date Mapped: 11-MAY-07

Map ID Direction Distance

Elevation Database EDR ID Number

34 South 1/2 - 1 Mile

FED USGS USGS40000459181

Lower

Organization ID: USGS-MA

USGS Massachusetts Water Science Center Organization Name: Monitor Location: MA-SPW 30 Well Type: HUC: 01090004 Description: Not Reported Not Reported Drainage Area: Drainage Area Units: Not Reported Not Reported Not Reported Contrib Drainage Area: Contrib Drainage Area Unts: Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1952-10-01 Feet below surface: 2.00 Feet to sea level: Not Reported

Note: Not Reported

35 East FED USGS USGS40000459442 1/2 - 1 Mile Lower

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPW 39 Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Bedrock Aquifer Type: Construction Date: Not Reported 1924 Well Depth: 198 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: 1 Level reading date: 1924-05-01 Feet below surface: 18.00 Feet to sea level: Not Reported

Note: Not Reported

36 SSE FED USGS USGS40000459180

1/2 - 1 Mile Lower

Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center MA-SPW 29 Monitor Location: Well Type: Description: Not Reported HUC: 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Not Reported Formation Type: Not Reported Aquifer: Aquifer Type: Not Reported Construction Date: Not Reported

Well Depth: 25 Well Depth Units: ft

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

Ground water levels, Number of Measurements: Level reading date: 1952-10-01 Not Reported Feet to sea level: Feet below surface: 20.00

Note: Not Reported

ESE 1/2 - 1 Mile **FED USGS** USGS40000459402

Lower

USGS-MA Organization ID:

Organization Name: USGS Massachusetts Water Science Center Monitor Location: MA-SPX 6 Well Type: Description: Not Reported 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Formation Type: Not Reported Aquifer: Not Reported Aquifer Type: Not Reported Construction Date: Not Reported Well Depth: Well Depth Units:

63

Well Hole Depth: Well Hole Depth Units: Not Reported Not Reported

FED USGS USGS40000459255

SE 1/2 - 1 Mile Lower

> Organization ID: USGS-MA

Organization Name: USGS Massachusetts Water Science Center MA-SPB 4 Monitor Location: Well Type: Description: Not Reported 01090004 Drainage Area: Not Reported Drainage Area Units: Not Reported Contrib Drainage Area: Not Reported Contrib Drainage Area Unts: Not Reported Aquifer: Not Reported Formation Type: Not Reported Aquifer Type: Construction Date: Not Reported 1905 Well Depth: Well Depth Units:

Well Hole Depth: Not Reported Well Hole Depth Units: Not Reported

AREA RADON INFORMATION

State Database: MA Radon

Radon Test Results

 County
 % of sites>4 pCi/L
 Median

 —
 —

 BRISTOL
 23
 1.8

Federal EPA Radon Zone for BRISTOL County: 2

Note: Zone 1 indoor average level > 4 pCi/L.

: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.

: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 02726

Number of sites tested: 7

% <4 pCi/L % 4-20 pCi/L % >20 pCi/L Area Average Activity Living Area - 1st Floor Not Reported Not Reported Not Reported Not Reported Living Area - 2nd Floor Not Reported Not Reported Not Reported Not Reported Basement 1.371 pCi/L 100% 0% 0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: MassDEP Telephone: 617-292-5907

HYDROGEOLOGIC INFORMATION

AQUIFLOWR Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

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PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after

August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Massachusetts Geographic Information System (MassGIS) Datalayers

Source: Executive Office of Environmental Affairs

Telephone:

Public Water Supply Database

Telephone:

The Public Water Supply datalayer contains the locations of public community surface and groundwater supply sources and public non-community supply sources as defined in 310 CMR 22.00.

Areas of Critical Environmental Concern

Telephone:

The Areas of Critical Environmental Concern (ACEC) datalayer shows the location of areas that have been designated ACECs by the Secretary of Environmental Affairs. ACEC designation requires greater environmental review of certain kinds of proposed development under state jurisdiction within the ACEC boundaries. The ACEC Program is administered by the Department of Environmental Management (DEM) on behalf of the Secretary of Environmental Affairs. The Massachusetts Coastal Zone Management (MCZM) Office managed the original Coastal ACEC Program from 1978 to 1993, and continues to play a key role in monitoring coastal ACECs. Procedures for ACEC designation and the general policies governing the effects of designation are contained in the ACEC regulations (301 CMR 12.00). The ACEC datalayer has been compiled by MCZM and DEM and includes both coastal and inland areas.

EPA Designated Sole Source Aquifers

Telephone:

The Sole Source Aquifer datalayer was compiled by the Department of Environmental Protection (DEP) Division of Water Supply (DWS). Seven Sole Source Aquifers have been designated by the US Environmental Protection Agency (EPA) for Massachusetts. A Sole Source Aquifer (SSA) is an aquifer designated by US EPA as the sole or principal source of drinking water for a given aquifer service area; that is, an aquifer which is needed to supply 50% or more of the drinking water for that area and for which there are no reasonably available alternative sources should that aquifer become contaminated. The aquifers were defined by an EPA hydrogeologist.

Aquifers

Telephone:

MassGIS produced an aquifer datalayer composed of 20 individual panels, generally based on the boundaries of the major drainage basins. Areas of high and medium yield were mapped. This datalayer includes polygon attribute coding to help in the identification of areas in which cleanup of hazardous waste sites must meet drinking water standards, as defined in the Massachusetts Contingency Plan (MCP) (310 CMR 40.00000).

Non-Potential Drinking Water Source Areas

Telephone:

Non-Potential Drinking Water Source Areas (NPDWSA) are regulatory in nature representing one of many considerations used in determining the standards to which ground water must be cleaned in the event of a release of oil or hazardous material. NPDWSAs are not based on existing water quality and do not indicate poor ambient conditions.

DEP Approved Zone IIs TC5741137.2s Page PSGR-2

Telephone:

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER STATE DATABASE INFORMATION

RADON

State Database: MA Radon Source: Department of Health Telephone: 413-586-7525 Radon Test Results

Area Radon Information Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor

radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared

in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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APPENDIX H: RESUMES OF ENVIRONMENTAL PROFESSIONALS



Genevieve Reynolds Senior Project Manager

[greynolds@vertexeng.com / 781-952-6031]

Highlights:

Compliance Management for Global Firms Nationwide Due Diligence Experience Coaching and Mentoring in Project Management

Expertise:

Compliance Audits
Database Review
Environmental Permitting
Environmental Portfolio
Reviews
Exit Assessment
Limited Compliance Review
Peer Review
Phase I ESAs
Transaction Screen
Litigation Support & Expert
Testimony (Environmental)

Education/Training:

A.B., Earth and Planetary Sciences, Harvard College, 2004

Biography:

Ms. Reynolds has over 10 years of experience in environmental research and environmental consulting. Currently, Ms. Reynolds serves as a Senior Project Manager at VERTEX. As Senior Project Manager, she is responsible for specific job functions related to Phase I Environmental Site Assessments (ESAs), due diligence projects, portfolio risk analysis, and subsurface investigations. Ms. Reynolds also oversees environmental compliance assessments for Due Diligence clients.

Ms. Reynolds is responsible for overall Due Diligence services, including management of large portfolio work. She also oversees VERTEX's compliance with client and ASTM scopes of work. Ms. Reynolds developed VERTEX's internal training program for Phase I ESAs.

Licenses/Certifications:

40 Hour OSHA Training Asbestos Inspector Qualified Environmental Professional under All Appropriate Inquiry Final Rule (40 CFR Part 312) OSHA 10

Genevieve Reynolds Page 1/1



Nicollette Lynch Scientist II

[nlynch@vertexeng.com / 781-952-6088]

Expertise:

Database Review Limited Compliance Review Phase I ESAs Radon Sampling Transaction Screen

Education/Training:

B.S. Ecology and Environmental Science, Nicollette Lynch, University of Maine, 2014

Biography:

Ms. Lynch is a Staff Scientist at VERTEX. Her due diligence and relevant experience includes Transaction Screens, Database Reviews, and Phase I Environmental Site Assessments at residential, commercial, gas stations, manufacturing facilities, machine shops, and other industrial facilities. Ms. Lynch has also conducted radon and drinking water sampling at both residential and commercial facilities. As Staff Scientist, Ms. Lynch's specific duties include: conducting site visitations and environmental site assessments, technical writing and report preparation.

Licenses/Certifications:

40 Hour OSHA HAZWOPER 10 Hour OSHA General Industry Certification Asbestos Awareness

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