

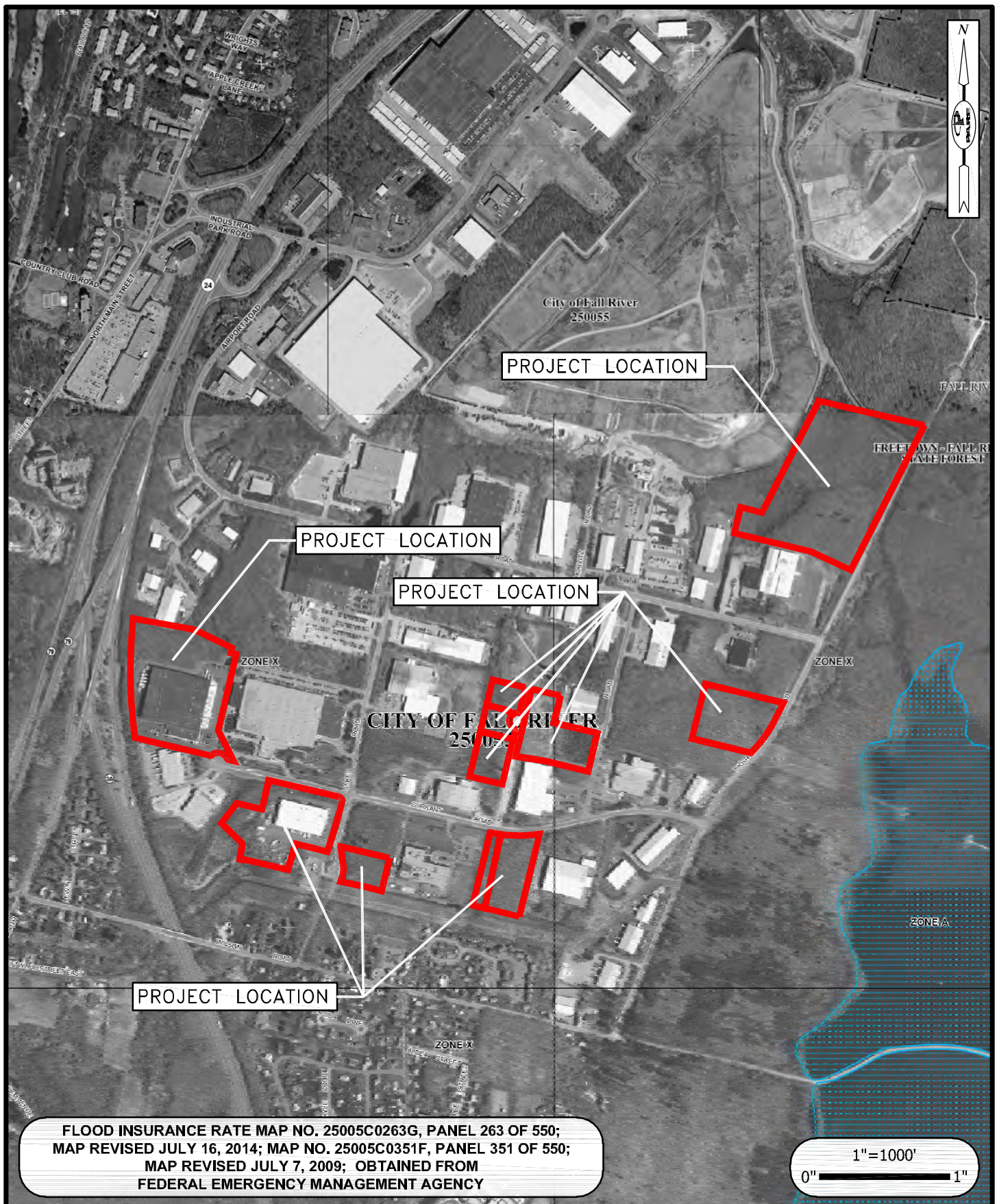
FALL RIVER INDUSTRIAL PARK  
AIRPORT ROAD, RIGGENBACH ROAD,  
CURRANT ROAD  
FALL RIVER, MASSACHUSETTS

HISTORICAL  
USGS  
PLAN

MARCH 2017

FIGURE 3





**FALL RIVER INDUSTRIAL PARK**  
 AIRPORT ROAD, RIGGENBACH ROAD,  
 CURRANT ROAD  
 FALL RIVER, MASSACHUSETTS

**FEMA  
 FLOOD  
 PLAN**

MARCH 2017


FIGURE 4





## MAP LEGEND

### Area of Interest (AOI)









 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons





 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Lines

 A  
 A/D  
 B  
 B/D  
 C  
 C/D  
 D  
 Not rated or not available

#### Soil Rating Points





 A  
 A/D  
 B  
 B/D

 C  
 C/D  
 D  
 Not rated or not available


### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bristol County, Massachusetts, Southern Part

Survey Area Data: Version 10, Sep 14, 2016

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 8, 2011—Apr 9, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydrologic Soil Group

Hydrologic Soil Group— Summary by Map Unit — Bristol County, Massachusetts, Southern Part (MA603)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
51A	Swansea muck, 0 to 1 percent slopes	B/D	0.0	0.0%
53A	Freetown muck, ponded, 0 to 1 percent slopes	B/D	3.2	0.6%
71A	Ridgebury fine sandy loam, 0 to 3 percent slopes, extremely stony	D	82.6	14.6%
71B	Ridgebury fine sandy loam, 3 to 8 percent slopes, extremely stony	D	36.1	6.4%
73A	Whitman fine sandy loam, 0 to 3 percent slopes, extremely stony	D	51.0	9.0%
305B	Paxton fine sandy loam, 3 to 8 percent slopes	C	23.3	4.1%
305C	Paxton fine sandy loam, 8 to 15 percent slopes	C	0.1	0.0%
306B	Paxton fine sandy loam, 0 to 8 percent slopes, very stony	C	15.1	2.7%
307B	Paxton fine sandy loam, 0 to 8 percent slopes, extremely stony	C	94.7	16.8%
307C	Paxton fine sandy loam, 8 to 15 percent slopes, extremely stony	C	27.6	4.9%
310B	Woodbridge fine sandy loam, 3 to 8 percent slopes	C/D	1.0	0.2%
311B	Woodbridge fine sandy loam, 0 to 8 percent slopes, very stony	C/D	66.8	11.8%
312B	Woodbridge fine sandy loam, 0 to 8 percent slopes, extremely stony	C/D	7.5	1.3%
446B	Gloucester - Hinckley complex, undulating, very stony	A	2.4	0.4%
602	Urban land		45.3	8.0%
651	Udorthents, smoothed	A	21.5	3.8%

Hydrologic Soil Group— Summary by Map Unit — Bristol County, Massachusetts, Southern Part (MA603)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
652	Dumps		53.5	9.5%
656	Udorthents - Urban land complex		16.4	2.9%
705B	Charlton-Paxton fine sandy loams, 0 to 8 percent slopes, very rocky	B	4.8	0.8%
705C	Charlton-Paxton complex, 8 to 15 percent slopes, very rocky	B	12.3	2.2%
<b>Totals for Area of Interest</b>			<b>565.1</b>	<b>100.0%</b>

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Higher



W-19 0185  
Map Lot

1 of 1  
CARD

Fall River

TOTAL ASSESSED: 2,837,500  
1222291

PROPERTY LOCATION

No	Alt No	Direction/Street/City
		INNOVATION WAY, FALL RIVER

OWNERSHIP

Owner 1:	REDEVELOPMENT AUTHORITY FALL RIVER
Owner 2:	SOUTH COAST BIO PARK
Owner 3:	
Street 1:	ONE GOVERNMENT CENTER
Street 2:	
Town/City:	FALL RIVER
Sup/Prov:	MA
Postal:	02722

PREVIOUS OWNER

Owner 1:	
Owner 2:	
Street 1:	
Town/City:	
Sup/Prov:	Chity
Postal:	

NARRATIVE DESCRIPTION

This Parcel contains 5,706,360 SQ FT of land mainly classified as CITY VAC LD

OTHER ASSESSMENTS

Code	Descr/No	Amount	Com. Int

PROPERTY FACTORS

Item	Code	Descr	%	Item	Code	Descr
Z				U		
O				I		
N						
Census:				Exempt		
Flood Haz:						
D				Topo		
S				Street		
T				Traffic		

LAND SECTION (First 7 lines only)

Use Code	Description	LU	No of Units	Depth/ PiceUnits	Unit Type	Land Type
930	CITY VAC LD		25		ACRES	SITE
930	CITY VAC LD		106		ACRES	EXCESS

Total AC/H/A:	131.00000	Total SF/SM:	5706360.00	Parcel LUC:	930	CITY VAC LD	Prime NB Desc:	CI 10 REARPR	Total:	2,837,500	Spl Credit:		Total:	2,837,500
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IN PROCESS APPRAISAL SUMMARY

Use Code	Building Value	Yard Items	Land Size	Land Value	Total Value	Legal Description	User Acct
930			5706360.000	2,837,500	2,837,500		
Total Card			131.000	2,837,500	2,837,500	Entered Lot Size	GIS Ref
Total Parcel			131.000	2,837,500	2,837,500	Total Land:	GIS Ref
Source: Market Adj Cost			Total Value per SQ unit /Card: N/A	/Parcel: N/A	/Parcel: N/A	Land Unit Type:	Insp Date

PREVIOUS ASSESSMENT

Tax Yr	Use	Cat	Bigg Value	Yrd Items	Land Size	Land Value	Total Value	Asses'd Value	Notes	Date
2017	930	FV		0	5,706,360.	2,837,500	2,837,500	2,837,500	Year End Roll	12/8/2016
2016	930	FV		0	5,706,360.	2,837,500	2,837,500	2,837,500	YEAR END	1/1/2016
2015	930	FV		0	5,706,360.	2,837,500	2,837,500	2,837,500	Year End Roll	1/5/2015
2014	930	FV		0	5,706,360.	2,837,500	2,837,500	2,837,500	Year end	12/6/2013
2013	930	EX		0	5,706,360.	2,837,500	2,837,500	2,837,500	Year End Roll	12/14/2012
2013	930	FV		0	5,706,360.	2,837,500	2,837,500	2,837,500		2/13/2013
2013	930	PR		0	5,706,360.	1,572,000	1,572,000	1,572,000	Prelim Bill file	4/27/2012
2012	930	EX		0	10,625,580.	2,927,200	2,927,200	2,927,200	Year End Roll	12/23/2011

SALES INFORMATION

Grantor	Legal Ref	Type	Date	Sale Code	Sale Price	V	Tst	Verif	Assoc Pcl Value	Notes
	N/A		1/1/1900			No	No			

PAT ACCT.

Date	Result	By	Name
1/1/1999	MEAS+INSPCTD	000	

BUILDING PERMITS

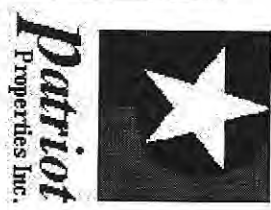
Date	Number	Descr	Amount	C/O	Last Visit	Fed Code	F. Descr	Comment

ACTIVITY INFORMATION

Date	Result	By	Name
1/1/1999	MEAS+INSPCTD	000	

Sign: VERIFICATION OF VISIT NOT DATA

nd Type	LT Factor	Base Value	Unit Price	Adj	Neigh	Neigh Infl	Neigh Mod	Int 1	%	Int 2	%	Int 3	%	Appraised Value	Alt Class	%	Spec Land	J Code	Fact	Use Value	Notes
ESS		0	25,000.	0.300	9510		A2							187,500						187,500	
		0	25,000.	1,000	9510									2,650,000						2,650,000	



USER DEFINED

Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
House:	
Prior Id # 2:	
Prior Id # 3:	
Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
ASR Map:	
Fact Dist:	
Reval Dist:	
Year:	
Land Reason:	
Bld Reason:	



### EXTERIOR INFORMATION

Type:					Full Bath	Rating:
Sly Ht:					A Bath:	Rating:
(Liv) Units:		Total	0		3/4 Bath:	Rating:
Foundation:					A 3Cbh	Rating:
Frame:					1/2 Bath:	Rating:
Prime Wall:					A HBht:	Rating:
Sec Wall:			%		Othr/Fix:	Rating:
RooF Struct:						
RooF Cover:						
Color:					Kits:	Rating:
View / Desir:					A Kits:	Rating:
					Fpri:	Rating:

**OTHER FEATURES**

	Kits:	Rating:
	A Kits:	Rating:
	Fpri:	Rating:

## BATH FEATURES

Full Bath	Rating:
A Bath:	Rating:
3/4 Bath:	Rating:
A 3Q8th	Rating:
1/2 Bath:	Rating:
A HBth:	Rating:
Ohn/Fix:	Rating:

### COMMENTS

FY10: SPLT FRM LT 1 / WS PRT OF FREETOWN  
STATE FOREST / HS 51.8 AC BUFFER ZONE  
ALONG E SIDE. SUB-DIVIDED LOT FOR FY2013  
4+ ACRES TO NEW LOT W-19-0184 AND 131.15+  
ACRES TO NEW LOT W-19-0185.

## SKETCH

## GENERAL INFORMATION

CONDO INFORMATION			
Grade:	Eff Yr Bld:	Location:	
Year Bld:		Total Units:	
Alt LUG:	Alt %:	Floor:	
Jurisdct:	Fact:	% Own:	
Const Mod:		Name:	
Lump Sum Adj:			

## CONDO INFORMATION

Location:	
Total Units:	
Floor:	
% Own:	
Name:	

## REMODELING

Exterior:		No Unit	RMS	BRS	FL
Interior:					

## RES BREAKDOWN

No	Unit	RMS	BRS	FL
1				
2				
3				
4				
5				
6				
7				
8				
9				
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11				
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100				

## INTERIOR INFORMATION

Avg H/H/L:		Plys Cond:	0.0%
Prim Int Wall		Functional:	%
Sec Int Wall:	%	Economic:	%
Partition:		Special:	%
Plin Floors:		Overide:	%
Sec Floors:	%	Total:	0%

## DEPRECIATION

Phys Cond:	0.0%
Functional:	%
Economic:	%
Special:	%
Override:	%
Total:	0%

## CALC SUMMARY

Basic \$ / Sq.	
Size Adj.	1,000000000
Const Adj.	1,000000000
Adj \$ / Sq.	
Other Features:	0
Grade Factor:	
Neighborhood Inf.	1,000000000
LUC Factor	1,00
Adj Total:	0
Depreciation:	0
Depreciated Total:	0

## COMPARABLE SALES

[illegible]

## SUB AREA

[illegible]

## SUB AREA DETAIL

[illegible]

## SPEC FEATURES/YARD ITEMS

Code	Description	A	Y/S	Qty	Size Dim	Qual	Con	Year	Unit Price	D/S	Dep	LUC	Fact	NB/Fa	Appr Value	JCod	JFact	Jurs. Value
------	-------------	---	-----	-----	----------	------	-----	------	------------	-----	-----	-----	------	-------	------------	------	-------	-------------

PARCEL ID W-19-0185

W-19-0185

IMAGE

**AssessPro** Patriot Properties, Inc.







# SITE 4: ANAWAN MILLS

## Site Development Requirements

Anawan Mills consists of two buildings constructed in 1823 and 1880. The site is located at 18 Pocasset Street, Fall River, MA on two parcels totaling 6.1± acres of land according to the City of Fall River ("City") Assessors Database (Parcels N-12-0002 and N-12-0007). The southern parcel is accessible via several drives off Pocasset Street. The northern site is accessible via one two-way driveway off Anawan Street. The northern parcel, N-12-0007 to the north, previously the Anawan Mill, has been converted into commercial spaces. The facility is currently in use as "Budget Drapery, inc.", "AAA Products, Inc.", "AAA Sewing Machine Co.", "Hometex Design", "Professional Business Printing, Inc." and "Workout World" and Anawan Street Parking. Parcel N-12-0002 to the south, provides the overflow parking for the commercial complex.

The parcels are bound by Pocasset Street running through them in an east-west direction. The parcels are also bounded by Interstate Route 195 to the north, Broadway Extended to the west and I-195 on and off ramp to the east.

### **Zoning Regulations**

According to the "Zoning Map of the City of Fall River" updated March, 1 2013, the Site is located in an area zoned Waterfront and Transit Oriented Development District (WTOD) and the Arts Overlay District (AOD). Educational facilities are not allowed within a zone WTOD by right and would need a variance from the ZBA according to "the Revised Ordinances of the City of Fall River: Chapter 86" with Amendments through July, 2013. The Zoning

Ordinance indicates the following would control the development on this Site:

#### **WTOD – Waterfront and Transit Oriented Development District:**

- 2,500 square feet minimum area
- 50 feet minimum lot frontage
- 10 feet minimum front yard setback
- 10 feet minimum side yard setback
- 10 feet minimum rear yard setback
- 6 stories or 80-feet maximum building height (whichever is greater)
- 80% maximum lot area coverage\*

\*defined as all impervious area

The parking capacity requirement for an educational facility are one (1) space for each employee per shift and one (1) loading space each building. The Institute for Transportation Engineers (ITE) develops a Parking Generation informational report provides data for estimated parking demand at various land uses. The 4th edition of the Parking Generation report suggests 0.23 vehicles per student for High Schools in Suburban Areas (Land Use 530).

### **Natural Environment**

**Topography:** The topography of the site generally pitches gradually downgradient from the east to the west. The highest elevations on site appear to be at the southeastern corner of the southern property at elevation 55ft. The lowest elevation appears to be at the north corner of the north property at elevation 10ft. Record USGS topographic maps from 1944 do not show wetlands on or in proximity to the site. There do not appear to be topographic changes which indicate that the school and parking areas do not appear to have been constructed on filled wetlands or a landfill.

**Soils:** Existing soils were evaluated based on the USDA Natural Resource Conservation Services Web Soil Survey. Below is a description of the soils that are shown throughout the site as shown on the web soil survey (attached NRCS Soil Survey).

The entire site consists of unrated urban land (Map Unit 602). This map unit consists of areas where 85 percent or more of the land is covered with impervious surfaces, such as buildings, pavement, etc.



Based on the web soil survey information it is anticipated that soils may limit infiltration for stormwater due to existing fill material in regards to future development. Stormwater detention may alternatively be considered.

For purposes of building foundations and future site improvements, we would recommend additional site specific soil boring and test pit investigation program.

**Wetlands:** After review of the Massachusetts GIS data layers (MassGIS) it does not appear that there are any Critical Resources including wetlands, Aquifers, Natural Heritage Areas, or potential or certified vernal pools as defined by the Natural Heritage and Endangered Species Program (NHESP). If it is determined in an environmental review that a vernal pool exists on the site the local regulations require a 100-foot No-Disturbance Zone around the upland area edge or the wetland area edge that encompasses the vernal pool.

According to the Flood Insurance Rate Maps available through FEMA (Federal Emergency Management Agency), approximately 40% of the combined site is located within Zone VE – Special Flood Area is defined by FEMA as a coastal flood zone with velocity hazard (wave action) (Figure 2). There are no zoning restrictions for development in the Zone VE 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 known significant habitat areas within the Site.

### **Infrastructure**

**Roadways and Parking Lots:** The southern parcel is accessible via several drives off Pocasset Street. The northern site is accessible via one two-way driveway off Anawan Street. Pocasset Street is under the city's jurisdiction, and therefore will require only local approval for future modifications. However, the Ramp to and Routes 195, 79 and 138 are 24 considered a state roads under Massachusetts DOT jurisdiction and therefore any future development to these roads would require a MassDOT Access Permit.

The site is furnished with the existing buildings, and parking facilities. The existing paved parking and drives are in fair condition with surface cracks and pavement patches throughout. Future development and parking options could look to Pocasset Street for potential entrance/exit locations for vehicles. We would recommend a traffic impact analysis to further asses existing traffic patterns, existing roadways, and the future development.

Future development design considerations will likely require vehicular travel lanes surrounding the perimeter of the school to assist in access as well as provide emergency routes to each face of the school building.

**Utilities:** The existing conditions utility information was collected through site visits, communications with the Engineering Department, and the Water Department. Future development options would require that the existing utilities be located and included in design plans.

**Sewer:** A record As-Built titled "Plan and Profile of Sewer on Pocasset Street" dated January 1871 was available at the City to review. The record drawing shows the sewer main in Pocasset Street is a brick arch sewer flowing west. There are not available record drawings showing the service connection to the mill building, however, sanitary waste from the building is likely conveyed via gravity sewer to the sewer main as there is a sewer manhole in Pocasset Street along the frontage of the property.

During design, the capacity of the existing sewer line will need to be evaluated to determine if it can handle the increased use or the need to provide an additional connection to the sewer main in Globe Mills Avenue. Future development would require PVC sewer services and the installation of an exterior grease trap to service cafeteria functions.

**Water:** Record utility plans were not available at the City to review and Fall River GIS does not provide utility information. There is one fire hydrants located on Pocasset Street along the frontage of the site, but none visible on site. There is a gate valves located on Pocasset Street along the frontage of the site.

During design, a hydrant flow test will be required to determine available flow for fire suppression system design. The existing service should be evaluated for use in the proposed system as well as need for an additional service for fire suppression. If future developments plans include that the building is to be demolished and relocated, the service could be evaluated for feasibility for reuse. However, it is likely that it would require replacement.

**Drainage:** Record drainage plans were not available at the City to review and Fall River GIS does not provide utility information. However, it appears that the on-site drainage system ties into the municipal drainage system in Pocasset Street. The stormwater ultimately discharges west into the Taunton River.

On site drainage appears to be collected from impervious and pervious surfaces via catch basins and conveyed via a closed drainage system to the discharge point in Pocasset Street. It appears that the stormwater system is receiving little treatment in regards to TSS removal. During design, it should be evaluated if the current drainage pattern should be maintained or rerouted. This would also include review of an existing conditions plan that will be provided by a surveyor in a later phase of this project. The existing on-site drainage system should be evaluated for integrity and for re-use in future development conditions.

The future development drainage design will need to be re-designed to meet the Massachusetts Department of Environmental Protection stormwater standards, the City of Fall River Stormwater and Construction Site Management Ordinance and will require quantity and quality mitigation measures.

**Gas:** Liberty Utilities is the supplier of

natural gas to the City of Fall River. Record drawings depicting the gas connections were not available. Future development options would require that the existing system be located and analyzed for capacity. Coordination should occur with Liberty Utilities regarding any service improvements.

**Electric:** National Grid is the supplier of electricity to the City of Fall River. Record drawings depicting the gas connections were not available. 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.

### **Summary**

The entire Anawan Mill site, including both parcels, is only 6.1 acres, roughly equivalent to the existing the existing Durfee High School building and therefore does not provide adequate area to effectively house a new high school with all the necessary facilities. Additionally, the two parcels are separated by Pocasset Street. The physical separation does not allow for a connected school campus.

The site contains steep slopes according to the LIDAR contouring from MassGIS, starting at elevation 10ft on the northernmost portion and increasing to elevation 60ft at the southernmost portion. This represents an average slope of between 9-10%, which is not ideal for a school and associated grounds.

The site is bound by Interstate I-195 to the north and associated on and off ramps to the east and to the south, and the Broadway Extended (expressway) to the west. These roads limit expansion opportunity of the campus in addition to negative impacts incurred due to site proximity to heavily trafficked roads include noise and air pollution, traffic congestion, and aesthetics. The abutting properties are zoned Central Business District (CBD) which does not provide a strong community connection to the school being constructed at this site.

The former use of the sites as a textile mills increases the risk of the potential for unknown contamination. Known and potential unknown sources of contamination increase the cost of development on the site. In addition to investigations during design, there will likely be an increased cost during construction of due to required export of soils and groundwater management. In addition to known costs, there is the risk of unknown costs if conditions are encountered during construction.

In addition to special constraints, design considerations should include stormwater practices consistent with onsite soils. Development should include recognition of the FEMA Flood Boundary in regards to development. We would recommend



these considerations be made part of future development options. However, we do not believe this is a viable site for future school development.