



# 44 Wanoosnoc Road Property Assessment

May 17, 2022



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## Key Takeaways

Horsley Witten Inc. (HW) led/collaborated with a team of experts to provide a preliminary assessment of opportunities and constraints to redevelopment of the former Wanoosnoc Elementary School property at 44 Wanoosnoc Road in Fitchburg, MA. Key findings from the consultants are summarized here. Readers are encouraged to read the full report and attached documents to better understand the process and observations that led to these findings:

1. The property is strategically located in the community with easy access to public transportation, multiple recreation opportunities, commercial use, open space, and the Twin Cities Rail Trail.
2. While the site covers over seven acres, most of the parcel is not practically developable. This is primarily due to a stream network that bifurcates the parcel, precluding access to the southern portion of the site. The area of the site that is current developed is a reasonable approximation of a future development area.
3. The building is generally in good to fair condition based on visual observation. However, the presence of significant levels of hazardous materials (primarily asbestos) will add significant costs to either re-use or demolition. Remediation will be required under either scenario.
4. Research revealed there is an abandoned underground storage tank on the site. The orientation and condition of this tank require further investigation and this increases uncertainty about whether further remediation will be needed.
5. Water supply pipes in this area are reportedly old and made of outdated materials like cast iron.
6. When ranking potential future uses for the site, a medical office scored as the potential highest and best use for the property. While residential ranked as the second highest and best use, it is inconsistent with the City's recent efforts to rezone the property to Neighborhood Business. The next highest and best uses are thought to be a childcare facility or a recreation use.
7. The value of the approximate 1.7 developable acres is estimated to be between \$300,000 to \$500,000 depending on the use. This figure includes the cost of demolition and remediation.
8. The Zoning Ordinance does not contain any major barriers to redevelopment. Special Permits are required for some uses and also for parking relief, which could be required.
9. The wetland buffer is highly disturbed and stormwater management on-site is poor. These conditions will need to be addressed in any redevelopment scenario.
10. The forested area south of the stream that bifurcates the site could be a high quality passive recreation amenity for the community.
11. Public input from two focus groups into the future of the property identified the new construction as their top choice, while also agreeing that retention of the building was the least beneficial to the community.
12. The two focus groups favored the potential of a medical service building, as well as a dislike for an office building. The Spanish-speaking group expressed a need for local

childcare, while the English-speaking group was not in favor of using the space for childcare.

The findings of this report, and supporting information, will help to inform the eventual development of a Request for Proposals (RFP), soliciting interest from private parties to buy the land from the City and develop it into a different use.

## Introduction

The City of Fitchburg (City) received technical assistance resources from MassDevelopment. MassDevelopment offers these funds to provide critical gap funding related to advancing the development goals of municipalities related to specific sites. The City used these resources to perform an assessment of the former Wanoosnoc Elementary School at 44 Wanoosnoc Road. The goal of the project was to gather information and perform analyses that would inform the development of a Request for Proposals (RFP). This RFP would be issued by the City to sell the property to a developer. This report provides the findings of the consultant teams that were engaged by the City in the Spring of 2022.

## Consultant Team

The consultants engaged in this process included:

The Horsley Witten Group, Inc. (HW) served as the lead consultant for a team and examined the neighborhood context, physical site conditions, wetland constraints, local zoning provisions, and hazardous materials.

Landwise Associates (Landwise) served as a subconsultant to HW and performed an assessment of market opportunities and constraints associated with the site.

Environmental Consulting & Management, Inc. served as a subconsultant to HW and specifically assessed the potential presence of asbestos and PCBs on the site.

Archipelago Strategies Group, Inc. (ASG) worked under a separate agreement with the City/MassDevelopment and led efforts related to community engagement.

## Site Description and Neighborhood Context

The Wanoosnoc Elementary School (the Property) lies in the southeastern area of Fitchburg at Wanoosnoc Road, close to the intersection with Water Street (Figure 1). The building has not been used as a school for many years and currently serves as an informal office space for municipal Public Works staff with several workstations and some limited storage on the bottom floor. The upper floors are generally unused with some limited storage of municipal supplies such as computer equipment. The overall site is approximately 7.3 acres with only approximately 1.7 in a developed state. The remainder of the site is undeveloped due primarily to a network of streams that effectively divides the site into two separate areas. The area along Wanoosnoc Road represents the only reasonable development potential, while the area west and south of the stream network provides a forested setting.




In the broader neighborhood context, the location of the site provides easy access to several amenities and interesting neighborhood features. The forested area in the southern part of the



Source: MassGIS  
 This map is for informational purposes and is not suitable for legal, engineering, or surveying purposes.

Figure 1.0  
 Neighborhood Context

**Legend**

-  Site Boundary
-  Twin Cities Rail Trail
-  Locations of Interest



Property connects to the South Fitchburg Playground<sup>1</sup> and a public pool<sup>2</sup> through a series of informal but easily passable trails. Water Street, to the east, is a primary commercial corridor in Fitchburg with many neighbor-scale businesses.

The following commercial properties were located within a half-mile radius of the property at the time of HW’s reconnaissance:

Dollar Tree	Gourmet Donuts
Millbury Fish Market	Pammy’s Place
Royal Fuel	Legends Bar & Grille
J & R Glass Services	Penske Truck Rental
Family Café	FW Webb Company
Funstuf Party Place	Rydemore Heavy Duty Truck Parts, Inc.
Super Liquors	Twin City Stained Glass
R C Excitement, Inc.	The Salvation Army Thrift Store
Mill City Pub	La Reina Bakery
Wachusett Chip Factory	

A Montachusett Regional Transit Authority (MART) bus stop lies within easy walking distance of the Property and the recently completed rail trail installation, which will be part of the Twin Cities rail trail connecting Fitchburg to Leominster. The trail will travel 4.5 miles from the eastern edge of downtown Fitchburg to the northern edge of downtown Leominster, connecting several densely populated residential neighborhoods, industrial areas, parks, and shopping centers along its route.

Coggs Hall Park is located 1.5 miles from the Property. The Park is over 250 acres and includes a gazebo facing Mirror Lake, a stone house facing Mirror Lake, a playground, softball field, and ample parking and walking trails.

### General Field Observations and Research

HW visited the site in March of 2022 to perform a visual inspection of existing conditions and also performed basic research to determine whether any significant development constraints or opportunities exist. Members of the HW team included urban planners, wetland scientists, and environmental professionals (e.g., hazardous materials).

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<sup>1</sup> The playground complex includes Herman Bourque Baseball Field, a softball field, concession stand, small bleachers, and a large gravel parking lot.

<sup>2</sup> The Massachusetts Department of Conservation and Recreation (DCR) Gustave Johnson Memorial Swimming Pool borders the western edge of the property. Open seasonally, the facilities include a pool, lifeguard station, restrooms, and showers.

### Condition of the School Building

The exterior of the building is in good to fair condition based on visual observation. There appears to be minimal degradation of the bricks and the windows appear to be functional and intact. Steps leading into the building show signs of minimal wear. Visual inspection of the roof was not performed as part of HW’s reconnaissance.

The interior of the building appears to be in fair condition. The flooring, walls, and ceiling appear to be intact with more significant wear in areas of higher use. Some areas of the walls and ceiling do show signs of water damage. The Limited Hazardous Materials Inspection Report provided as part of Attachment A describes water damage and the presence of mold in more detail. While a structural analysis was not performed, the team did not notice any signs of cracking or other features that would suggest any structural compromise.

For the purposes of assessing the reuse potential of the building, the presence of hazardous materials or waste is a driving factor. In particular, the presence of large amounts of asbestos will require remediation, whether the building is reused or demolished. Further, records reveal there is an abandoned underground storage tank on-site. The condition and precise location of the tank are unknown and will require further investigation. If the tank has leaked, remediation of contaminated soils will be required. In summary, the presence of hazardous materials is significant, and discussions of these issues are included in the attached Phase 1 Report and Limited Hazardous Materials Inspection Report (Attachment A).

### Topography and Soils

The site is relatively flat across the front area occupied by the drop off driveway and playground area. The closest point of the building (the northwest corner) to the street frontage is approximately 100 feet away. The distance between the northeast corner of the building to the frontage line is approximately a 150 feet. The slight has a steep slope along either side of the building to the back side of the structure, dropping a full story along the side of the building. Table 1 provides a summary of surficial soil types on the Property, indicating predominantly sandy loam soils.

Table 1. NRCS Soil Profile for 44 Wanoosnoc Road, Fitchburg MA\*

Soil Type	Acres	Percent of Parcel
Hinckley loamy sand, 3 to 8 percent slopes	2.4	32.6%
Hinckley loamy sand, 8 to 15 percent slopes	0.2	3.4%
Deerfield loamy fine sand, 0 to 3 percent slopes	3.3	45.5%
Paxton fine sandy loam, 0 to 8 percent slopes, very stony	1.3	18.5%
Totals	7.3	100%

\*See Attachment B NRCS Soil Report for additional details.



However, there are large areas of wetland on the site and large bedrock outcrops were observed in the park just south of the Property. This suggests that site-specific investigations provide more detail than the NRCS classifications.

### Pavement and Drainage

Pavement on the site appears to be in fair to poor condition. There are signs of significant wear including cracking and erosion in areas of higher use. There also appears to be scouring on site near the edges of the pavement where stormwater runoff carved out small channels over time (Photo 1). Drainage infrastructure on the site is minimal. Visual inspection did not show any outfalls discharging to the stream from the property. Observations suggest stormwater runoff collects at the southern edge of the property and drains into a stream via a channelized footpath (Photo 2).



*Photo 1 shows the driveway to the rear of the site with broken pavement and erosion from stormwater runoff. Photo 2 shows the back of the school building where channelized stormwater drains into the stream.*

### Sidewalks and Other Street Features

Wanoosnoc Road is owned by the City of Fitchburg and Water Street is owned by the Commonwealth of Massachusetts. Sidewalks bordering the property on Wanoosnoc Road and Water Street appear to be in good to fair condition. The northern edge of the property bordering Wanoosnoc Road does not have a sidewalk but appears to be well used by pedestrians based on the eroded foot path that has developed at this location (Photo 3). Similarly, a well-worn foot path borders the eastern edge of the property from Wanoosnoc

Road to the Montachusett Regional Transit Authority (MRTA) bus stop on Water Street. Many pedestrians apparently prefer to walk over the grass in a shorter line to the bus stop, rather than a slightly longer walk along the sidewalk (Photos 4 & 5).

Wanoosnoc Road transitions from two lanes to four lanes directly in front of the property leading into Water Street. There is also a narrow median strip in the center of the four lanes. There is a crosswalk sign at the edge of the property on Wanoosnoc Road, but there is not a marked crosswalk next to the sign. During reconnaissance around the neighborhood, crossing the street as a pedestrian generally felt uncomfortable with wide spans of pavement and large volumes of traffic at the intersection of Wanoosnoc Road and Water Street.



Photo 3

*This photo is taken looking west along Wanoosnoc Road across the front of the Property (on the left). The foreground shows damaged pavement across the driveway and the lack of any formal sidewalk along the street. Pedestrians have worn a path along the grassed area adjacent to the expansive road section.*

#### Property Boundary

Readily available information from the City regarding property boundaries or site plans was limited and HW did not perform deed research as part of this assessment. A review of existing information is inconclusive as to whether there is existing encroachment from private property owners onto the City's land. Land that has been cleared by residential property owners and, in some cases, where they have built accessory structures appears to cross the property boundary for at least one data source (MassGIS). Possible encroachment of clearing and existing

structures (including a swimming pool) on City land would need to be verified through further research and possibly field survey. Observations by HW show that several residences are accessing the forested area directly from their back yards.



*This photo is taken looking east along Wanoosnoc Road as it approaches Water Street. The sidewalk meets minimum dimensional requirements and is in good condition. As pedestrians get closer to the intersection, they turn off the sidewalk and walk along the grassy open space to the bus stop.*

## Utilities

### Water Supply

City Water Department staff confirmed that the 2-inch service line connected to the 8-inch main was installed in 1952 (iron pipe). City Water Department staff believe this pipe to be in poor condition. According to City records, the 2-inch valve was replaced in 1977. The eight-inch pipe is most likely cast iron, though City staff have no date of installation, and also no information on the hydrant at the end of the line, as the eight-inch line and hydrant are private. The hydrant was installed in 1998 and has a static pressure of 90 psi. The 6-inch water main associated with the hydrant was installed in 1926 and is a cast iron pipe. While water volume and pressure may be adequate, pipes may need to be replaced based on these reports.

### Sewer Service

Sewage pipes from the site connect to a main trunk line that eventually discharges to the East Fitchburg Wastewater Treatment Plant. City Wastewater Department staff were unaware of

any capacity issues in the sewage pipe running downstream of the property. Other than the trunk line, the lines downstream of the site have not been condition coded, however City staff have no record of any problems with that particular pipe run.

## Market Assessment Summary

Landwise evaluated the properties' development and use potential based on the site analysis performed by the team. Site analysis factors considered included: location, access and visibility, zoning and planning status, neighboring uses, topography, and the wetlands and stream on the property. Landwise then explored multiple development and use options for the property using recent development precedents as case study examples. These uses were evaluated through a suitability matrix considering market strength, site suitability, level of competition, level of traffic impact, economic/tax impact, and City/community goals. When ranked, a medical office scored as the potential highest and best use for the property. While residential ranked as the second highest and best use, it is inconsistent with the City's recent efforts to rezone the property to Neighborhood Business. The next highest and best uses are thought to be a childcare facility or a recreation use. Table 2 (following page) summarizes the ranking of future uses and Attachment C provides additional detail on the analyses and case studies used for comparison.

Following this preliminary evaluation, HW concluded reuse of the building was likely cost prohibitive, and the area available for development was likely limited to an area comparable to that which is occupied by the existing school building and parking lots, approximately 1.7 acres on the north end of the site fronting Wanoosnoc Road. Because the majority of the development value is in the 1.7-acre portion of the land, the subsequent analysis assumes that the site is subdivided with the 1.7 acres disposed of by the City, with the remaining approximate 5.7 acres retained as open space and trails. This remaining space, while potentially valuable as amenity to the neighborhood, provides little to no additional value to a buyer.

Landwise used a residual land value methods to determine the value and potential profitability of the property after the expenses related to land development (demolition of the existing school, remediation, and construction of a new building). Landwise obtained current rental data for recently constructed office and residential projects in Fitchburg, while HW advised on inputs for remediation costs. Based on this approach, the value of the 1.7 developable acres is estimated to be between \$300,000 to \$500,000 depending on the use. It is likely that residential may achieve the higher end of the range, with office likely coming in at the lower end of the range.

Some of the key assumptions in the analysis include:

- The max developable footprint ranges 16,000 to 20,000 which varies based on parking needs and building design.
- The model accounts for approximately \$400,000 of demolition and remediation cost.

Table 2. Preliminary Ranking of Potential Land Uses for the Site

Land Use	Market Strength (high)	Site Suitability*	Market Competition (low)	Low Level of Traffic Impact	Positive Economic/ Tax Impact	City / Community Goals Met	TOTAL
Medical Office	++	++	+	+	++	+	9
Residential	++	+	++	++	-	-	7
Childcare Facility**	+	++	+	+	-	+	6
Recreation	+	++	+	+	-	+	6
Office	-	+	-	+	++	+	5
Retail/ Restaurant	-	++	-	-	++	+	5
Artisan F&B Production	+	-	+	+	+	+	5

\*Taking into consideration factors like zoning, visibility, site requirements, and adjacencies.

\*\*Assumes use may be run by non-profit operator

It is important to note that the City can consider pursuing remediation of the building/site without demolition to add value to the site. Costs for remediation related to asbestos, PCBs, and the UST would likely range between \$120,000 to \$150,000 which might be achieved through brownfields funding or some other grant program. Even if a partial match were required, grant funding would add value the City would realize at the point of sale. While it is hard to determine what that additional value would be, buying a “clean site” with documented remediation would make the site significantly more attractive to a potential buyer. However, assuming responsibility for the remediation would delay the sale of the property at least a couple of years and require staff investment to administer the process. The City will need to weigh the trade-offs associated with this approach.

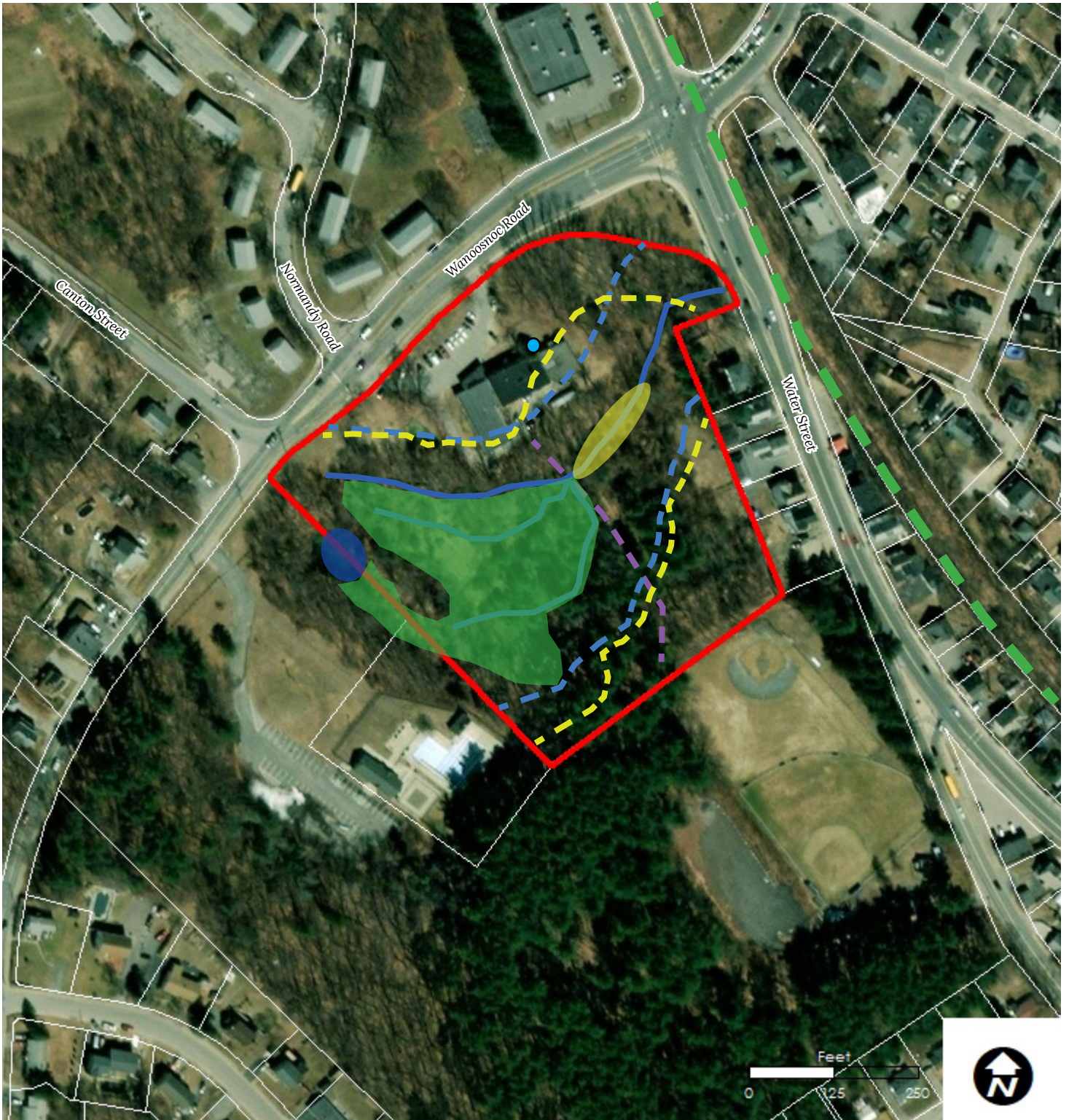
## Ecological Assessment

### Wetlands

There is a significant area of wetland (~1.5 acres) located south of the school building, positioned within lower elevation areas of the western/southwestern section(s) of the property (Figure 2). The perimeter of the wetland is confined and shaped by steep slopes that rise from the wetland basin to north, west, and south. The wetland appears to be fed by multiple sources of stormwater flows, through culverts that daylight at the base of the slopes at various locations along the western side of the property (Photos 6 & 7). Waters collected/concentrated within the wetland basin drain to the east via multiple meandering intermittent streams that flow along the north, central, and southern sections of the wetland, which converge just west of the existing pedestrian stream crossing (Photo 8).

The 1.5-acre wetland is a contiguous whole but is comprised of two different wetland types. Centrally located and comprising approximately 1/3 of the area is a palustrine emergent type of wetland, with vegetation and hydrology consistent with freshwater marsh or wet meadow (Photo 9). Plant species observed within the wet meadow area include cattail (*Typha sp.*), cinnamon fern (*Osmundastrum cinnamomeum*), bulrush (*Scirpus sp.*), sedges (*Carex sp.*), soft rush (*Jucus effusus*), and goldenrod (*Solidago sp.*). Surrounding this central marsh/wet meadow area is palustrine scrub/shrub and forested type wetland, with some sections consisting predominantly of shrubs, and others containing predominantly mature trees (Photo 10). Plant species observed in these areas include red maple (*Acer rubrum*), willow (*Salix sp.*), gray birch (*Betula populifolia*), slippery elm (*Ulmus rubra*), green ash (*Fraxanus pennsilvanica*), river birch (*Betula nigra*), silky dogwood (*Swida amomum*), black elderberry (*Sambucus nigra*), alder (*Alnus sp.*), honeysuckle shrubs (*Lonicera sp.*), and grape vines (*Vitis sp.*).















Source: MassGIS  
 This map is for informational purposes and is not suitable for legal, engineering, or surveying purposes.

Figure 2.0  
 Natural and Existing Features

**Legend**

-  Site Boundary
-  Approximate Location of Intermittent Streams
-  Approximate Location of Observed Pond
-  Potential Bordering Vegetated Wetland
-  Observed Bordering Vegetated Wetland
-  Approximate 100' Stream Buffer Line
-  Approximate 100' Bordering Vegetated Wetland Buffer Line
-  Twin Cities Rail Trail
-  Approximate Location of Path from School to Baseball Field
-  Approximate Location of Underground Storage Tank







**Photo 10**

*Photo 10 above shows scrub forest surrounding the wetland area. Photo 11 below shows a portion of the braided network of intermittent streams that eventually converge into a single channel.*

In addition to the main wetland area(s) noted above, the site may also possess palustrine forested type BVW on either or both the north and south sides of the stream section located directly behind the school building, just after the multiple stream braids from the main wetland area merge to become one stream (Photo 11)<sup>3</sup>. If present, these BVW areas would be directly connected to the larger wetland area to the southwest, and HW estimates the potential for the BVW in this area to range from 20-30 feet wide (on either side) and extend for approximately 200 feet along the stream corridor. The vegetation in this area includes an overstory of red maple (*Acer rubrum*),



**Photo 11**

<sup>3</sup> The presence of these wetlands would need to be confirmed with soil investigations related to wetland flagging.

slippery elm (*Ulmus rubra*), green ash (*Fraxanus pennsylvancia*), and river birch (*Betula nigra*), with the understory being overwhelmed by invasive and/or nuisance species that include bittersweet vine (*Celastrus orbiculatus*), grape vine (*Vitis sp.*), privet (*Ligustrum sp.*), European buckthorn (*Rhamnus cathartica*), shrub honeysuckle (*Lonicera sp.*), crabapple (*Malus sp.*), and multiflora rose (*Rosa multiflora*).

Any proposed work/development within the BVW areas (e.g., pedestrian bridge crossing the stream) and/or their associated buffer zones will require a Notice of Intent (NOI) application to be filed with the Fitchburg Conservation Commission and will need to be designed to meet the applicable BVW performance standards detailed in the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) as well as the resource area protection requirements noted in the City of Fitchburg Wetlands Protection Ordinance Rule and Regulations (see 'Regulatory Considerations' section for more detail). Figure 3 shows the approximate extent of jurisdiction related to wetland resources.

### Streams

As noted above, there are multiple intermittent streams that flow along the north, central, and southern sections of the wetland area, which converge just west of the existing pedestrian stream crossing. After convergence, the stream continues to flow northeast through the property, eventually exiting the northeast corner of the site through a culvert beneath Water Street (Photo 12). The main source of stormwater inputs appears to be flowing from the larger culvert at the western corner of the property, with lesser inputs from smaller culverts at the base of the slope near the southwestern property line. The larger culvert feeds the stream section along the northern perimeter of the wetland, which shows more significant scouring where the culvert daylighting onto the site near Wanoosnoc Road, as well as deeper bank cutting prior to the location of convergence with the other stream sections (Photo 13).



*Photo 12 shows the stream leaving the site. The Water Street bus stop is visible in the background. Photo 13 shows water entering the site from Wanoosnoc Road. The deep pool in front of the culvert suggests water flow can be high volume.*



Source: MassGIS  
 This map is for informational purposes and is not suitable for legal, engineering, or surveying purposes.

Figure 3.0  
 Approximate Wetland Jurisdiction

**Legend**

- ▭ Site Boundary
- ▬ Approximate Location of Intermittent Streams
- ▬ Twin Cities Rail Trail
- ▬ Area Without Sidewalk
- Approximate Area Subject to Stream and Bordering Vegetated Wetland Buffer Zone
- Approximate Location of Catch Basin
- Culverts
- MART Bus Stop



The other stream sections running through the central and southern areas of the wetland do not appear to be receiving flows that are large and/or fast enough to cause any significant erosion along their stretches. After convergence of the intermittent streams, the single stream channel flows through a section behind the school building that possesses a broad, relatively flat floodplain, which (as discussed previously) HW believes to be potential BVW on either side of the stream. The stream banks in this section appear to be lower and more stable, allowing overflow from the stream into the potential BVW areas during more significant storm events. As the stream continues to flow to the northeast, the banks become steeper and more unstable and show similar erosion patterns as those demonstrated along the section flowing north of the larger wetland at the west side of the property (Photo 14).



*Photo 14 shows the stream channel as it approaches the culvert under Water Street (Photo 12). This is an areas where the banks appear to be less stable and susceptible to erosion.*

For the stream section north of the larger wetland area and beyond the stream convergence point, the vegetation above the banks is dominated by invasive or nuisance plant species that include bittersweet vine (*Celastrus orbiculatus*), grape vine (*Vitis sp.*), privet (*Ligustrum sp.*), European buckthorn (*Rhamnus cathartica*), burning bush (*Euonymus alatus*), shrub honeysuckle (*Lonicera sp.*), crabapple (*Malus sp.*), and multiflora rose (*Rosa multiflora*).

The streams and areas within 100 feet of their associated banks (100-foot buffer zones) are subject to the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00) as well as the local City of Fitchburg Wetlands Protection Ordinance Rules and Regulations. Any proposed activity in these areas would require a Notice of Intent (NOI) application to be submitted to the Fitchburg Conservation Commission with a design that meets any/all applicable state and local performance standards and regulations (see Regulatory Considerations section for more detail).

### Upland Areas

The southern half of the site transitions to upland from the wetland and stream areas as the terrain slopes up to the neighboring municipal pool and playing field properties. Just upland of the stream and wetland areas, the vegetation contains a mix of native and invasive trees, shrubs, and vines and transitions to predominantly large native trees (oak-pine woodland) as the slope continues toward the neighboring properties (Photos 15 & 16). Overall, species observed include red oak (*Quercus rubra*), white pine (*Pinus strobus*), sugar maple (*Acer saccharum*), tulip tree (*Lilium americana*), white ash (*Fraxanus americana*), American beech (*Fagus grandifolia*), crabapple (*Malus sp.*), black cherry (*Prunus serotina*), staghorn sumac (*Rhus typhia*), bittersweet vine (*Celastrus orbiculatus*), privet (*Ligustrum sp.*), European buckthorn (*Rhamnus cathartica*), shrub honeysuckle (*Lonicera sp.*), and multiflora rose (*Rosa multiflora*).



*Photo 15 shows the well-worn footpath leading south from the school to the baseball field.*

*Photo 16 shows the white pine forest that contains informal trails and many specimen trees.*

Northeast of the school building HW observed an upland area that is dominated by large black locust (*Robinia pseudoacacia*) with a few smaller cherry birch (*Betula lenta*) and Norway maples (*Acer plantanoides*) also present in the understory (Photo 17). As this area slopes down toward the stream to the south, the vegetation transitions to a more mixed presence of trees, shrubs, and vines that additionally includes crabapple, shrub honeysuckle, bittersweet vine, and staghorn sumac.

The upland areas north and west of the main wetland area also contain a mix of trees, shrubs, and vines which includes white ash (*Fraxanus americana*), white pine (*Pinus strobus*), Norway

maple (*Acer platanoides*), crabapple (*Malus sp.*), shrub honeysuckle, bittersweet vine, and Japanese knotweed (*Fallopia japonica*) (Photo 18).



*Photo 17 shows the mix of Norway maple, cherry birch and other trees along the eastern edge of the Property. Photo 18 shows a tangled collection of invasive species.*

### Invasive Species

As noted in previous sections, there are number of invasive plant species that HW observed at the site. These species were found to be present in significant densities in several areas, causing damage and/or outcompeting native species in many instances (Photo 19). These species include black locust (*Robinia pseudoacacia*), Norway maples (*Acer plantanoides*), bittersweet vine (*Celastrus orbiculatus*), privet (*Ligustrum sp.*), European buckthorn (*Rhamnus cathartica*), shrub honeysuckle (*Lonicera sp.*), Japanese knotweed (*Fallopia japonica*), burning bush (*Euonymus alatus*), privet (*Ligustrum sp.*), and multiflora rose (*Rosa multiflora*). Given the presence of these invasive species, there are opportunities to improve wetland resource areas, resource area buffers, and upland plant communities at the site via design and implementation of an invasive plant management and natural community restoration plan, in conjunction with any potential site developments otherwise. Invasive plant management and restoration activities would facilitate further protection of the interests stated in the MA Wetlands Protection Act and Fitchburg Wetlands Protection Ordinance. Inclusion of such activities in a proposed development plan may increase favorability of an overall plan by the Fitchburg Conservation Commission if the plan includes disturbances/impacts to resource areas and/or associated buffer zones that would require resource area replacement or impact mitigation.

### Specimen Trees

The site contains many mature native trees that are greater than 12 inches in diameter breast height (dbh), located throughout the property. Tree species with dbh greater than 12 inches observed at the site include, oak, ash, maple, and pine. The most significant concentration of such specimen trees can be found in the upland area of the southern portion of the property,

which contains a large quantity of specimen oaks and pines; however, the stream corridor, wetland, and other upland areas were also observed to support native specimen trees.

## Regulatory Considerations

### Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)

#### **Bordering Vegetated Wetlands**

As discussed above, there is the potential presence of BVW areas along the stream network that bifurcates the site. Where any proposed work results in BVW losses between 500 – 5,000 square feet, the proposed project would need to include replacement BVW areas that meet the performance standard detailed in 310 CMR 10.55 (4)(b):

1. *the surface of the replacement area to be created ("the replacement area") shall be equal to that of the area that will be lost ("the lost area");*
2. *the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;*
3. *The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area;*
4. *the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;*
5. *the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;*
6. *at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods; and*
7. *the replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part III of 310 CMR 10.00...*

Where the proposed work results in BVW losses less than 500 square feet, the applicant would be required to meet the performance standard detailed in 310 CMR 10.55 (4)(c):

*Notwithstanding the provisions of 310 CMR 10.55(4)(a), the issuing authority may issue an Order of Conditions permitting work which results in the loss of a portion of Bordering Vegetated Wetland when:*

1. *said portion has a surface area less than 500 square feet;*
2. *said portion extends in a distinct linear configuration ("finger-like") into adjacent uplands; and*

3. *in the judgment of the issuing authority it is not reasonable to scale down, redesign or otherwise change the proposed work so that it could be completed without loss of said wetland.*

If resource area disturbance/loss is greater than 5,000 square foot threshold stated in CMR 10.54(4)(b), there is still potential to gain approval for a pedestrian footbridge via 310 CMR 10.53(3)(j), which allows the conservation commission to approve limited projects of certain types including:

*The construction and maintenance of catwalks, footbridges, wharves, docks, piers, boathouses, boat shelters, duck blinds, skeet and trap shooting decks and observation decks; provided, however, that such structures are constructed on pilings or posts so as to permit the reasonably unobstructed flowage of water and adequate light to maintain vegetation.*

### **Bank (Naturally Occurring Banks and Beaches)**

Where the proposed work is designed to occur on the stream Bank (e.g., pedestrian stream crossing), the applicant would be required to meet the performance standard detailed in 310 CMR 10.54 (4)(a):

#### *General Performance Standard.*

*(a) Where the presumption set forth in 310 CMR 10.54(3) is not overcome, any proposed work on a Bank shall not impair the following:*

1. *the physical stability of the Bank;*
2. *the water carrying capacity of the existing channel within the Bank;*
3. *ground water and surface water quality;*
4. *the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;*
5. *the capacity of the Bank to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of Intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 50 feet (whichever is less) of the length of the bank found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. In the case of a bank of a river or an intermittent stream, the impact shall be measured on each side of the stream or river. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures contained in 310 CMR 10.60.*

### [City of Fitchburg Wetlands Protection Ordinance and Rules and Regulations](#)

The BVW (vegetated wetlands) and/or Bank areas and 100-foot buffer zones to these areas are within jurisdiction of the Fitchburg Conservation Commission and are also regulated by the local Wetlands Protection Ordinance. The project proponent/applicant will need to demonstrate compliance with the Rules and Regulations associated with the local Wetlands Protection



Ordinance, which will require filing an NOI application with the Fitchburg Conservation Commission. Most relevant to the site, the applicant will need to demonstrate compliance with the standards set forth in the following sections of the local Ordinance:

### **Section 3 Construction Standards and Restrictions**

This section contains details for required construction standards relative to construction sequence, wetland setbacks for new activities, wetland setbacks for existing structures, erosion prevention, erosion prevention installation, storage of fill, construction debris, invasive plants, no-disturbance zone demarcation, minor projects, open space, and stormwater regulations.

### **Section 4 Wetlands Replacement**

This section details requirements for wetlands replacement where permanent alteration of wetlands is being proposed. At a minimum, equal wetlands replacements will be required for any/all altered wetlands, unless a waiver is requested by the applicant and approved by the Conservation Commission (see below).

In some cases, there is potential for proposed activities to be waived from strict compliance with the local Ordinances requirements. Where necessary, the applicant would need to submit a waiver request as detailed below:

#### **1.5 WAIVERS FROM RULES AND REGULATIONS**

*Strict compliance with these Rules and Regulations may be waived when, in the judgment of the Commission, such action is in the public interest, and is consistent with the intent and purpose of the Ordinance. Any request for a Waiver must be submitted to the Commission in writing. The Waiver(s) shall be presented at the time of filing. (The Commission shall require the Applicant to submit a written justification stating why a Waiver is desired or needed, is in the public benefit, and is consistent with the intent and purpose of the Ordinance.)*

### **Required Permitting for Pedestrian Bridge**

A footbridge spanning the stream behind the school can be permitted through a Notice of Intent application with the Fitchburg Conservation Commission. The proposed bridge design will need to meet the performance standards for any specific resource areas that may be impacted because of its construction. For example, if the footbridge requires installation of footers within BVW to safely span the stream, the overall design may need to include replacement BVW areas to satisfy state and/or local regulatory requirements relative and proportionate to the footers impacts to the resource area. Consultation with the Fitchburg Conservation Commission during the design process will help to inform design requirements prior to the Commissions official consideration of any proposed impacts.

### **Zoning Ordinance**

The Property is zoned as a Neighborhood Business District. For this district, the minimum lot area without municipal sewer is 65,000 square feet. With a municipal sewer connection, there

is no minimum lot area required. The minimum lot frontage is 20 feet and there is no minimum front, side, or rear yard requirements. The maximum building height for this district is 36 feet. Planted buffer areas along property lines are required to be at a minimum width of 10 feet. Planted buffer areas may be reduced by a Special Permit issued by the Planning Board.

Parcels directly abutting the southern and western sides of 44 Wanoosnoc Road are zoned as Residential B districts. Across Wanoosnoc Street from the northern edge of the property, parcels are zoned for Residential A, Residential B, and Neighborhood Business districts respectively. Across Water Street from the eastern edge of the property, parcels are zoned for Neighborhood Business Districts and Residential C districts respectively.

**Allowable Uses**

A complete list of principal use regulations (residential, institutional, commercial, and industrial uses) for Neighborhood Business Districts in Fitchburg is accessible in the [City of Fitchburg Chapter 181 Zoning, Table 181.313: Table of Principal Use Regulations](#). More common uses in the neighborhood or similar areas in Fitchburg are provided in Table 3.

Table 3. Common Land Uses Found in the Neighborhood or Similar Areas.

Land Use per Zoning Ordinance	Permit
Single-Family Dwellings	Special Permit from Planning Board
Two-Family Dwellings	Special Permit from Planning Board
Three-Family Dwellings	Special Permit from Planning Board
Multi-Family Development*	Special Permit from Planning Board
Child Care Facility	By right (protected use per state law)
Business or Professional Office (including Medical)	By right
Restaurant	By right
Restaurant, Fast Food	Special Permit from Planning Board
Retail stores and services	By right

\* Includes residential use or mixed use on a lot or lots held in common ownership that contain four or more dwelling units in one or more structures.

**Off-Street Parking Requirements**

A complete list of off-street parking requirements by principal use in Fitchburg is accessible in the [City of Fitchburg Chapter 181 Zoning, Table 181.512: Table of Off-Street Parking Requirements](#). Parking requirements for more common uses in the neighborhood or similar areas in Fitchburg are provided in Table 4. Note that the City offers a Special Permit process to reduce minimum parking requirements with language that potentially provides significant discretion and flexibility.

Table 4. Common Land Uses Found in the Neighborhood or Similar Areas.

Land Use per Zoning Ordinance	Minimum Parking Requirement
Single-Family Dwellings	Two parking spaces for each dwelling unit
Two-Family Dwellings	Two parking spaces for each dwelling unit
Three-Family Dwellings	Two parking spaces for each dwelling unit
Multi-Family Development	One space for each one-bedroom dwelling unit. One and a half spaces for each two-bedroom dwelling unit. Two spaces for dwelling units of three or more bedrooms
Childcare Facility	One space per each non-resident employee, plus one space per each six children, plus spaces required for dwelling unit(s)
Business or Professional Office (including Medical)	One parking space per 400 square feet of gross floor area
Restaurant	(One space per four seats, or, where benches are used, one space for each ten linear feet of bench. Where no fixed seats are used, for each one hundred square feet of public floor area, there shall be one parking space
Restaurant, Fast Food	(One space per four seats, or, where benches are used, one space for each ten linear feet of bench. Where no fixed seats are used (as in a museum), for each one hundred square feet of public floor area, there shall be one parking space
Retail stores and services	One parking space per 500 square feet of gross floor area

All off-street parking facilities and other impervious surfaces must conform to all applicable provisions of the Massachusetts Department of Environmental Protection [Stormwater Management Policy Handbook: Volume I & Stormwater Technical Handbook Volume II](#), and all other applicable stormwater regulations, including the City of Fitchburg [Chapter 154 Stormwater Management](#) and City of [Fitchburg Stormwater Management Rules and Regulations](#). Site drainage designs must be approved by the City of Fitchburg Engineer.

## Public Engagement Summary

The City of Fitchburg, in partnership with MassDevelopment, hired Archipelago Strategies Group (ASG) to hold two Community Virtual Round Tables, one for English speaking residents and one for Spanish speaking residents. In April of 2022, ASG held two separate virtual round tables, one in English and one in Spanish, to discuss with Fitchburg community members what they thought the best uses of the parcel of land and building could be.

During the discussion, ASG presented preliminary findings from HW and Landwise site assessment, and participants were welcome to participate in an open discussion as well as complete polls on their thoughts. The English-speaking roundtable was held on April 12<sup>th</sup> and consisted of five community leaders, three Fitchburg City Councilors, one Fitchburg School System Representative and one local residential real estate appraiser. The Spanish-speaking roundtable was held on April 20<sup>th</sup> and consisted of five community leaders, two Fitchburg residents, two community organizers and one Fitchburg School System Representative. Both meetings were held using a virtual engagement platform (not in-person).

After compiling the qualitative and quantitative data collected during the two roundtables, ASG identified community suggestions and opinions for the Wanoosnoc property. For the use of the property, both groups identified the new construction as their top choice, while also agreeing that retaining and re-using the building was the least beneficial to the community. For the land use options, there was agreement between the two groups for the potential of a medical building, as well as a dislike for an office building. However, despite these commonalities between the two groups, there were significant differences in what each group viewed as community gaps that this property could fill. For example, the Spanish-speaking group expressed a need for local childcare, while the English-speaking group was not in favor of using the space for childcare.

A more detailed description of the process and feedback provided during these focus groups is found in Attachment D.