

MEMORANDUM

To: Sarkis Sarkisian

Director of Planning & Community Development

City of Framingham

From: Brian Kuchar, RLA, P.E.

CC: Ron Chick (Representative to the SUASCO River Stewardship Council.)

Herb Nolan (Solomon Foundation)

Steve Weisman (Conservation Commission)

Date: October 7, 2022

Re: Getchell Trail Summary of Findings and Recommendations

Horsley Witten Group, Inc. (HW) was contracted by the City of Framingham (City) to provide additional trail assessment and surveying services to advance the proposed Getchell Trail improvements projects. The Getchell Trail runs between Danforth Street and the Weston Aqueduct, along the western edge of the Sudbury River, which is designated as a National Wild and Scenic River. The trail begins across the street from the proposed terminus of the Saxonville Levee Trail on Sudbury Landing, and meanders south to north along the river's edge. It is comprised of earthen foot paths and various boardwalk crossings through natural resources areas and their associated buffer zones, which are prone to flooding. On-street, informal parking is provided along Sudbury Landing at the intersection of Danforth Street. There is also limited informal parking at the end of the cul-de-sac on Hillside Drive. A formal parking lot with 7 spaces is provided along the midpoint trailhead located at the end of Little Farms Road where there is also a kayak/canoe launch.

The trail is approximately 4,500 linear feet long and passes through the Hultman Aqueduct and currently terminates, informally, with a steep trail leading up to the Weston Aqueduct. The Weston Aqueduct leads east into Wayland and west to the corner of Water Street and Potter Road in Framingham and beyond.

The proposed trail improvements outlined in this summary are to be based upon the initial Getchell Trail Assessment memo dated December 7, 2021, by HW, the following goals and, the additional site visits, meetings and survey under the scope of work:

- Replacement/Relocation of existing boardwalks.
- Improve ADA accessibility.



Sarkis Sarkisian October 7, 2022 Page 2 of 21

- Create small scenic riverfront overlook(s).
- Improve the connections to Danforth Street, the Mary E. Stapleton Elementary School,
 Cameron Middle School and the Weston Aqueduct.

The data and documents reviewed as part of this analysis include:

- Bureau of Geographic Information (MassGIS), ESRI
- Saxonville Nature Trail Plan and Details, Prepared for the Town of Framingham Planning and Economic Development, Prepared by Sudbury Design Group, Dated January 5, 1998.
- Saxonville Nature Trail Narrative Report by Sudbury Design Group, January 5, 1998.
- Getchell Trail Summary of Findings memo Prepared for the Framingham Department of Public Works dated December 7, 2021.

Site Assessement and Pre-Permitting Review

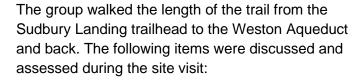
Data Collection

Prior to beginning the analysis, HW created GIS figures using data from MassGIS, the City's GIS, and other sources include parcel boundaries, topography, existing trails, natural resource areas, flood zones and soils for the project area (see attached figures). The data was used along with original "Saxonville Nature Trail Plan" to review trail access, experiences, amenities, features, conditions, and constraints as well as assess trail alignment options and improvements.

Site Visits and Analysis

Two HW staff (Brian Kuchar and Brian Laverriere) visited the site on August 31, 2022, to assess the current trail locations and conditions, notable natural features, viewsheds, existing connections, potential water access and connection to the Weston Aqueduct. During the site visit, HW was joined by the following city representatives and stakeholders.

- Sarkis Sarkisian Director of Planning & Community Development
- Mark Dempsey ADA Coordinator
- Steve Weisman Conservation Commissioner
- Ron Chick Representative to the SUASCO River Stewardship Council.
- Herb Solomon Executive Director of the Solomon Foundation



- General trail improvements
- ADA accessibility
- Boardwalk design and locations
- Select trail re-alignment/relocation
- Overlook/Water Access locations
- Improved connections
- Permitting requirements and approach





Property encroachments

The existing trail corridor was also flagged by the group to identify the agreed upon priority areas, proposed realignment locations, proposed additional boardwalk crossings and potential overlook locations to be surveyed. During the site visit two members of the Conservation Commission maintenance crew joined the site walk and provided feedback on trail improvements, pruning, vista clearing, boardwalk repairs, invasive species management and their capabilities to complete small trail improvement projects.

At this time, the group also discussed the overall permitting approach with the Conservation Commission. The following items were discussed and informally agreed upon:

- It is assumed that the entirety of the proposed trail improvements are located within the Riverfront Area, and likely within the inner 0-100 foot Riverfront Area, as well as portions within the Bordering Vegetated Wetland (BVW), and therefore, there is no need to flag the mean annual high-water line (MAHW) along the full extent of the river or the BVW boundary.
- A Notice of Intent would need to be filed for any proposed improvements. Limited resource delineation within the limit of work could be a viable option to reduce design costs, in lieu of flagging all the resource areas along the length of the trail corridor. The limited resource delineation would be based upon the proposed trail location flagged during the site visit.
- Any proposed improvements should attempt to remain within the existing trail/boardwalk footprint to the maximum extent practicable. Moving the trail closer to the river in strategic locations to improve views to the river was discussed. After reviewing numerous trail alignment alternatives, it was decided the additional disturbance and restoration required could be both cost prohibitive and problematic







Sarkis Sarkisian October 7, 2022 Page 5 of 21

for permitting, due to the 30' No Alteration Zone per the city's wetland regulations.

Upon completion of the assessment and trail layout during the first site visit, a second meeting was scheduled for September 7th, 2022. An email invite was sent to the following additional stakeholders, as identified by the city:

- Sheryl Goldstein Framingham Disability Commission
- Janet Leombruno City Council
- Charlotte Finley Maynard Saxonville Mills
- · David Logden President Friends of Saxonville
- Ben Gustafson Bicycle Trails and Pedestrian Committee Member City of Framingham
- Emma Lord National Park Service representative to the SuAsCo River Stewardship Council
- Anne Slugg Board chair of the SuAsCo River Stewardship Council
- Judith Grove Framingham Community Preservation Committee member
- Cesar Stewart-Morales City Council
- Lynne Damianos Board Member Friends of Saxonville
- Bill Merriman Conservation Commissioner

The second meeting included one HW staff (Brian Kuchar), the five attendees from the August 31st meeting listed above, and the following stakeholders, who were able to attend and accepted the meeting invite:

- Sheryl Goldstein
- Janet Leombruno
- Charlotte Finley Maynard
- Bill Merriman

The purpose of the second meeting was to walk the length of the trail with the larger stakeholder group to build consensus among the stakeholders and to review the overall assessment, trail layout/realignment, and the permitting strategy. During the site walk a hearty discussion occurred amongst the group related to the trail realignment/relocation, trail improvements, possible connections and overlooks, ADA accessibility, connection to the Weston Aqueduct, cost, and permitting.

Some of the flags located during the first site visit were adjusted, based upon further discussion and comments from the stakeholders. The meeting proved to be highly productive and a consensus was reached amongst the group with general agreement on the following items (see also recommendations):

- General trail improvements
 - The final trail location was flagged and agreed to be appropriate and acceptable for permitting.
 - Trail relocation should be kept to a minimum and limited to a few strategic locations to improve access and the overall trail experience (see recommendations).
 - Trail improvements should consider the sensitive nature of the surrounding habitat and keep disturbance to a minimum to the greatest extent practicable to help streamline the permitting process.

ADA accessibility

- ADA access to be provided from the Danforth Street trailhead via a new boardwalk and overlook destination (see recommendations).
- ADA access to be provided from the Little Farms Road trailhead to an overlook destination to the south.
- Boardwalk design and locations
 - o Boardwalk height to be no greater than 30" from grade to eliminate the need for railings and the width to be a maximum of 5' wide to match the existing width.
 - Two locations for boardwalk re-alignment were identified.
 - Some of the small boardwalks at the larger stormwater crossings will require a railing due to heights greater than 30".
- Select trail re-alignment/relocation
 - o Two locations for boardwalk re-alignment were identified.
- Overlook/Water Access locations
 - The following overlook locations were reviewed and have been added to the survey plan:
 - Maintain the existing overlook at the junction with the elementary school connection and provide ADA access.
 - A new overlook to be provided between the Hultman Aqueduct and the middle school connection.
 - A second ADA accessible overlook to be provided from the Little Farms Road trailhead.
 - A new deck overlook to be provided at the Little Farms trailhead.
 - o ADA accessible water access was also discussed for the canoe/kayak launch.
- Improved connections
 - The stair connections to both the elementary and middle schools should remain and be improved.
 - It was agreed ADA accessibility would not be possible.
- Property encroachment
 - o The encroachment issues were reviewed and have been identified on the survey plan.
- Permitting requirements and approach
 - See the approach discussed during the first meeting described above.

Topographic Survey

Based upon the outcome of the site visits and assessment, HW staff completed a field-run topographic survey along the centerline of the existing/proposed trail alignment. The survey includes up to a 30 foot trail corridor (15 feet on either side of the trail). Features located includes the intersection of Danforth and Sudbury Landing, trailheads, boardwalks, stairs, dirt paths, fencing, trees 12" diameter or greater and overlooks. All topographic data was collected using Total Station field instrumentation and data collectors in digital format. Survey data was downloaded into a CAD file to produce an existing conditions plan. Topographic data and features were compiled with a horizontal datum of NAVD Massachusetts State Plane and contours generated in a one-foot contour interval based on NAVD 1988 for vertical control.

Sarkis Sarkisian October 7, 2022 Page 7 of 21

The survey did not include a full property line survey, but did include limited research to examine the existing parcels plans and title/deed documentation in areas where there appear to be property encroachments. A boundary survey, run concurrently with the topographic survey, was completed at the areas that were identified by the city to have possible encroachments.

It is important to note that the nature of property line/ boundary retracement surveying requires reliance on the work of prior others (surveyors, lawyers, scriveners etc.). Any errors, omissions or inaccuracies of those are not usually revealed until the research of recorded documents has been compiled. *Per 250 CMR 6.00: Land Surveying Procedures and Standards*, the survey must include not only the lot to be surveyed but also all abutting lots. If an insufficient number of boundary markers are found within this survey locus the area of survey may need to be extended. If further research and field investigation becomes necessary to certify boundaries, the City will be contacted for a re-evaluation.

Resource Area Delineation

As noted, resource delineation was not included in the scope of work, but GIS wetland boundaries were added to the surveyed plans.

Recommendations and Implementation

Based upon the site visit, assessment and stakeholder discussions the trail improvement recommendations are divided into the following five distinct trail sections, moving south to north:

- 1. Danforth Trailhead to the Elementary School Connection
- 2. Elementary School Connection to Hultman Aqueduct
- 3. Hultman Aqueduct to Middle School Connection
- 4. Middle School Connection to Little Farm Road Trailhead
- 5. Little Farm Road Trailhead to the Weston Aqueduct

The recommendations for each section are numbered to also follow the trail from south to north.

Danforth Trailhead to the Elementary School Connection

This section of trail begins at the Danforth trailhead and the Old Danforth Street pedestrian bridge and is intended to be ADA accessible. The length of trail is comprised predominantly of boardwalk through existing wetlands with small sections of earthen path to break up the boardwalk. This section ends at a small overlook and memorial bench with an awkward 90 degree turn over a boardwalk crossing to connect to the Mary E. Stapleton Elementary School stairs. The understory is fairly healthy and low, which provides nice sight lines along the trail as well as select views to the river. There is a Japanese knotweed (Fallopia japonica) issue within the wetlands at the beginning of the boardwalk section to the north that should be addressed.

Recommendation 1:

- Create parking spaces at the end of Hillside Street.
- Improve drainage and provide additional stormwater treatment along the edge of the cul-de-sac.
- Provide an ADA accessible path to the pedestrian bridge and connection to the Getchell trailhead.



Recommendation 2:

 Replace the existing stone dust path along with pavers to match the Kiosk Plaza to strengthen the connection to the pedestrian bridge and future Levee Trail.



Recommendation 3:

- Extend the boardwalk to the proposed paver path identified in Recommendation 2 to eliminate erosion problems and improve ADA accessibility.
- Boardwalk to maintain 5% maximum slope, 30" maximum height (no railings) and 5' width.
- Install new trailhead signage consistent with other city signage to improve branding and visibility of the trail.



Recommendation 4:

 Re-align the boardwalk at the Danforth trailhead to eliminate the bend and improve ADA accessibility.



Recommendation 5:

- Maintain the existing boardwalk alignment in most locations, but consider more sweeping curves where possible.
- Boardwalk alignment should look to protect and preserve trees.
- Consider pruning/thinning the tree canopy along the trail to provide more sunlight and help reduce moss build up on the boardwalk.



Recommendation 6:

- Extend the boardwalk to eliminate the earthen path section to provide ADA accessibility to the existing overlook and reduce root zone compaction.
- Consider removing the tree shown to provide a straight linear path through this section.



Recommendation 7:

- Extend the boardwalk to eliminate the earthen path section and steep, unsafe transition to the trail.
- Provide ADA accessibility to the existing overlook.



Recommendation 8:

- Create ADA accessible overlook and destination at the existing Carl J. Getchell memorial bench.
- Overlook area with boardwalk decking or an ADA compliant surface.



Recommendation 9:

 Remove the awkward 90 degree bend and continue the boardwalk through the wetland and connect back into the earthen path.



Recommendation 10:

- Re-route the elementary school connection at the awkward 90 degree turn.
- Abandon the planks and trail to connect further down the trail as described above.
- Improve/repair stair connection to the cemetery and elementary school.
- Add trail wayfinding signage.



Elementary School Connection to Hultman Aqueduct

This section of trail begins at the connection to the Mary E. Stapleton Elementary School and ends at the Hultman Aqueduct and is not intended to be ADA accessible. The trail is comprised of an earthen path and is located outside of the wetlands. Overall the woodland along this section of the trail is healthy with minimal understory, limited invasives and good sight lines. There are three stormwater crossings (overland flow) that cross the path, show evidence of erosion and compromise the stability of the trail surface.

Recommendation 1:

- Provide a limited boardwalk crossing/bog bridge at the three stormwater crossings to create safer access and footing along the path. The crossings have been added to the survey plans.
- Repair trail surfaces where erosion has occurred or solid footing has been compromised.



Recommendation 2:

- Remove the remnants of the informal mountain bike track constructed by local youths. In general bike use should be prohibited on the trail.
- Consider constructing an outdoor classroom with existing boulders along the slope where the former mountain bike track exists.



Hultman Aqueduct to Middle School Connection

This section of trail begins at the Hultman Aqueduct, ends at the connection to the Cameron Middle School and is not intended to be ADA accessible. The trail is comprised of earthen paths and sections of limited boardwalks to cross over stormwater crossing/drainage ditches. Based upon the GIS data, the trail appears to be located both within and outside of the wetlands. Upon crossing the aqueduct a noticeable change in the vegetation was observed. After walking thru a pine grove (planted as part of the aqueduct project) the understory vegetation is dense and dominated by green briar (Smilax rotundifolia) and poison ivy (Toxicodendron radicans) in sections. Invasives plant species are also present, including bittersweet (Celastrus orbiculatus) and multiflora rose (Rosa multiflora) to name a few. Overall the sight lines thru this section are limited. Based upon discussions with the Conservation maintenance staff, this section of trail requires the most maintenance, including regularly cutting back the brush, with a brush hog, to maintain a safe trail width.

Recommendation 1:

 Provide trail wayfinding signage at the Hultman Aqueduct.



Recommendation 2:

- Re-align and extend the existing boardwalk crossing over the drainage ditch.
- The crossing height is greater than 30" and a railing should be provided.
- Maintain 5% maximum slope.



Recommendation 3:

- Replace the second boardwalk to improve general accessibility and safety.
- The crossing height is greater than 30" and a railing should be provided.



Recommendation 4:

 Planks to be replaces with a formal boardwalk crossing.



Recommendation 5:

- Replace and extend the third boardwalk beyond the exposed root zone.
- Boardwalk to maintain 5% maximum slope, 30" maximum height (no railings) and 5' width.
- See Recommendation 6



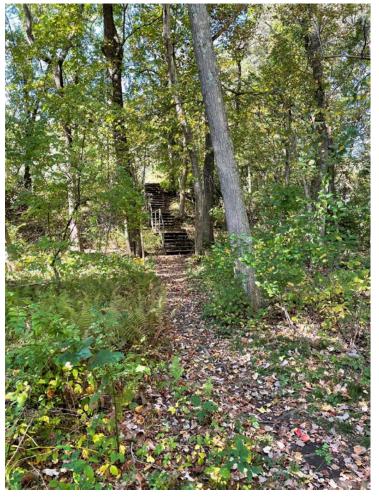
Recommendation 6:

- Extend boardwalk over the exposed root zone.
- Boardwalk to maintain 5% maximum slope, 30" maximum height (no railings) and 5' width.
- Consider minor localized filling along the trail with soil or mulch in areas where roots are exposed and a boardwalk is not practicable.



Recommendation 7:

- Improve/repair stair connection to the and middle school.
- Add trail wayfinding signage.



Middle School Connection to Little Farm Road Trailhead

This section of trail begins at the connection to the Cameron Middle School, ends at the Little Farm Road trailhead. A portion of the trail from the existing overlook clearing to the trailhead is intended to be ADA accessible. The trail is relatively flat through this section and currently comprised of earthen path. The trail is located outside of the wetlands but within the Riverfront area and flood zone. A parking area with 7 spaces along with a canoe/kayak launch are provided at the trailhead. The vegetative understory through this section thins out and opens up as the trail gets closer to the trailhead and parking area. Overall the sight lines thru this section are good.

Recommendation 1:

- Create a formal ADA accessible area at the existing overlook clearing.
- A deck platform with built in benches was discussed.
- This would be the destination point for an ADA trail from the parking area.



Recommendation 2:

- Install an ADA accessible boardwalk over the existing earthen path from the ADA accessible overlook.
- Boardwalk to maintain 5% maximum slope, 30" maximum height (no railings) and 5' width.
- Different materials, in lieu of a boardwalk were discussed. Asphalt was mentioned, but not considered a suitable material for this location. Stabilized stone dust was also considered as an alternative
- Note: A Community Preservation Act (CPA) grant is being submitted to fund the boardwalk project.
 - Grant application is estimated to be for \$150,000 to \$170,000.



Recommendation 3:

- Extend ADA boardwalk to the trailhead.
- Formalize the trailhead with a kiosk bike racks bench(es) and wayfinding signage.



Recommendation 4:

 An overlook deck with railings was proposed by the group along the river at the intersection of the trailhead and parking.



Recommendation 5:

 Provide educational signage and highlight the historical animal crossing visible at low water in the Sudbury River at the trailhead and canoe/kayak launch.



Recommendation 6:

- Provide ADA access to the canoe and kayak launch area.
 - o It was noted that the grade change in this location to access the water will be a challenge and a dock would be required.
- Adjust boulder locations to provide informal seating.



Little Farm Road Trailhead to the Weston Aqueduct

This short section of trail begins at the Little Farm Road trailhead, ends at the Weston Aqueduct and is not currently intended to be ADA accessible. The trail runs through a narrow corridor close to private property and along edge of the river at the top of the river bank and has a significant change in elevation as it approaches the aqueduct. The trail is located outside of the wetlands but within the Riverfront Area and flood zone. There is one stormwater crossing over the trail and the vegetative understory through this section appears to be fairly healthy with good site lines.

Recommendation 1:

 Add trail wayfinding signage at the trail heading north to the aqueduct.



Recommendation 2:

 Provide a limited boardwalk crossing/bog bridge at the stormwater crossings to provide safer access and footing along the trail. The crossings have been added to the survey plans.



Recommendation 3:

- Resolve the potential encroachment issue with the private property owner.
- The encroachment is shown on the survey plan.



Recommendation 4:

 Consider trail re-alignment to lessen the slope to connect to the aqueduct or consider adding stairs to provide a connection to the aqueduct.



Recommended Next Steps

The recommended next steps would include the following

- 1. Submit CPA grant application for the design and construction of the ADA boardwalk connection from Little Farms Road trailhead to the proposed ADA overlook.
- 2. Identify work to be completed by the city's conservation maintenance staff.
- 3. Design and permit the ADA boardwalk connection from Danforth Street to the overlook.
 - a. Grant funding has been awarded to the City for this work.
- 4. Flagged the wetland resource areas, as necessary, based upon the trail alignment.
- 5. Construct ADA accessible trails.

Sarkis Sarkisian October 7, 2022 Page 21 of 21

FIGURES

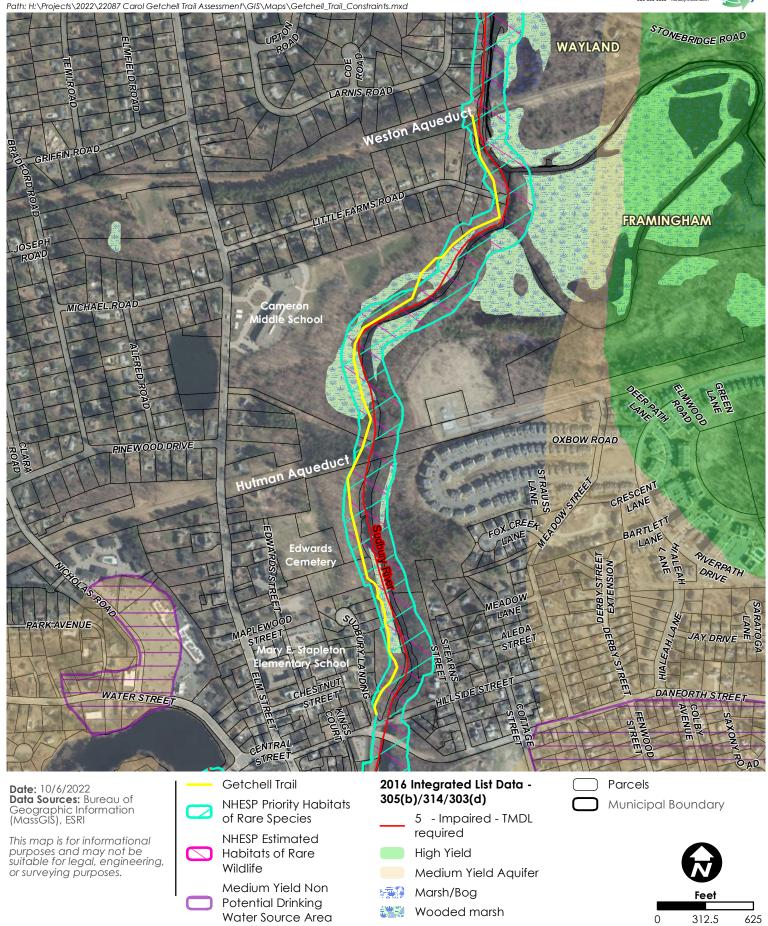


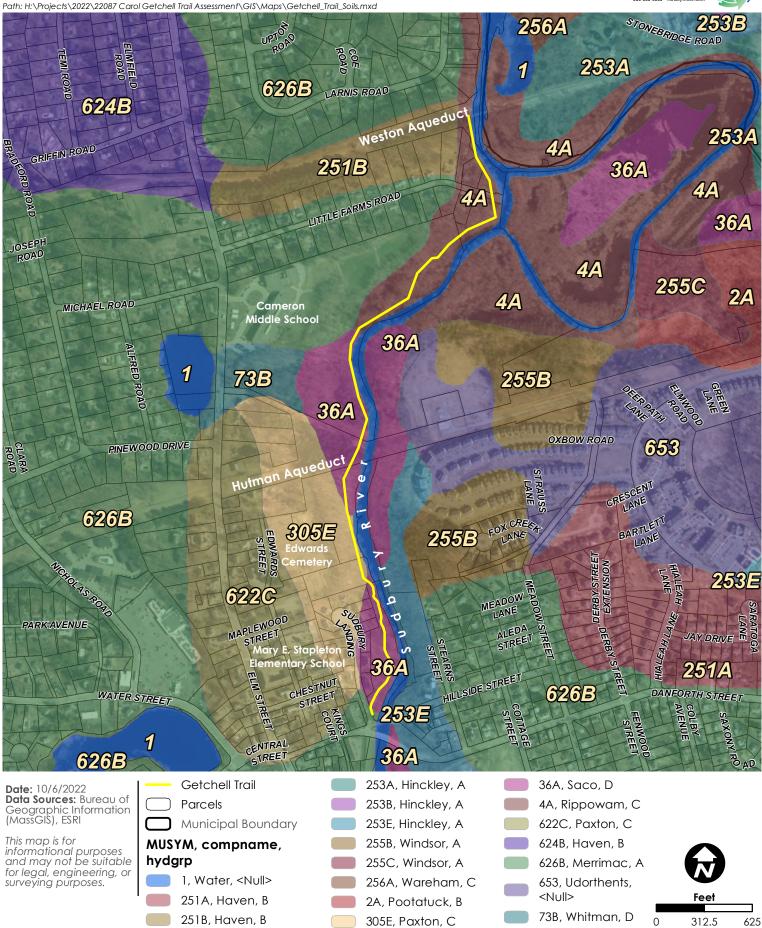


Getchell Trail Framingham, MA.

Figure 1 Aerial.









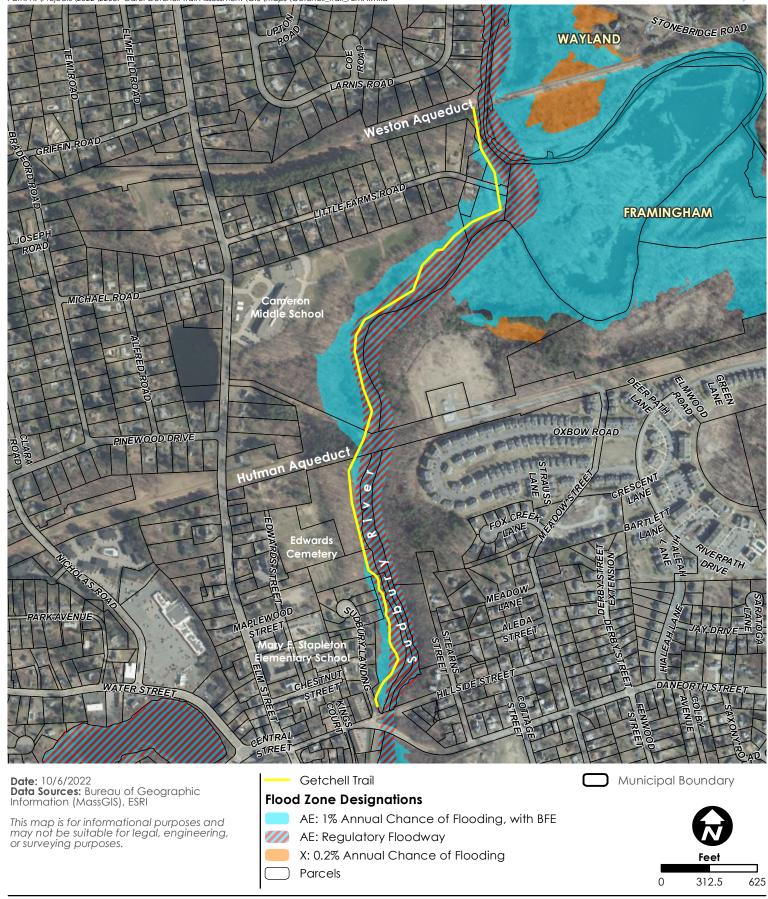


Figure 4Framingham, MA.FEMA National Flood Hazard Layer.