

Halfway Brook Lower Watershed Recreation Management Plan

Prepared by:

City of Glens Falls and Town of Queensbury
Lower Watershed Recreation Management Committee

May 7, 2020

Acknowledgements

LOWER WATERSHED RECREATION MANAGEMENT COMMITTEE

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1.0 Introduction

Halfway Brook runs from the forested watershed of the Luzerne Mountains, through the Towns of Queensbury and Fort Ann to the Champlain Canal. The Halfway Brook watershed comprises approximately 56,430 acres located in Warren and Washington Counties and is a sub-watershed within the southern end of the Lake Champlain drainage basin.

The upper reaches of the watershed are the water supply for the City of Glens Falls and adjacent areas of the Town of Queensbury. The Halfway Brook Reservoir is located within the Town of Queensbury and owned by the City of Glens Falls. It is one of four separate reservoir systems that provide drinking water to City residents. The parcels that comprise the City-owned watershed land around Halfway Brook Reservoir include the "Halfway Brook Lower Watershed." Residents of the area rely on the reservoir for drinking water. Within the watershed, stormwater runoff is a water quality concern.

The Town of Queensbury proposes to develop a multi-use trail within the Halfway Brook Lower Watershed. The active use of the Halfway Brook Lower Watershed, for recreation purposes, is permitted by a License Agreement between the Town of Queensbury and City of Glens Falls. The purpose of this Plan is to ensure that the trail's development and limited active recreational use is protective of water quality within the watershed. This Plan developed under the guidance of the Watershed Committee, comprised of representatives from both municipalities.

2.0 Background

2.1 Watershed Management

In 2000, the Warren and Washington County Soil and Water Conservation Districts (SWCDs) prepared “The Halfway Brook Watershed Assessment Plan.” The study was conducted to identify areas of stormwater runoff and associated water quality concerns with the watershed, evaluate what is causing the concerns, and recommend specific solutions. The study found that Halfway Brook’s water quality is influenced by runoff from both developed areas and agricultural lands. A reduction in non-point sources of pollutants would improve water quality and the aquatic habitat available to organisms.

2.2 Trail Planning

Over the past several years, the Town of Queensbury has worked to expand the local and regional pedestrian and bicycle network, including designated bike routes and constructing trails. The Town is currently planning the Halfway Brook Trail. The trail will run between Aviation Road (to the north), Peggy Anne Road (to the south), and through the Halfway Brook Lower Watershed property.

The property is currently not open to public use. However, in recent years, trespassers have become more frequent. There is concern that unregulated use of the land could lead to wildfires, destroy vegetation, introduce invasive species, create erosion and affect the watershed’s water quality. The City of Glens Falls has granted the Town of Queensbury a license agreement for the creation of this trail. This plan developed as a condition of the license agreement.

2.3 Purpose of the Plan

The Halfway Brook Lower Watershed Management Plan (the “Plan”) was prepared to ensure that recreation occurs responsibly and does not negatively affect water quality. The Plan is intended to outline details and standards to guide the trail’s construction, the wise use of the land for recreational purposes, and its continued maintenance and management.

2.3 Planning Process

When working on a project that involves a variety of issues and that impacts several people, representatives of the public should be included. A steering committee comprised of persons with different ideas and interests in the region helps to guide a project through the objectives. Also, having a diverse committee addresses questions and concerns that arise. The Halfway Brook Lower Watershed Recreation Management Plan Steering Committee was created for this purpose. The Committee include representatives from both the Town of Queensbury and the City of Glens Falls. Their goal is to formulate the recommendations included in this Plan.

2.4 Watershed Characteristics

Halfway Brook runs from the forested watershed of the Luzerne Mountains, through the Towns of Queensbury and Fort Ann to the Champlain Canal. In Warren County, Halfway Brook is listed as a Class AA(T) waterbody by the New York State Department of Environmental Conservation (NYSDEC). An AA(T) classification declares that the best use of this water shall be for “drinking, culinary or food processing purposes; primary and secondary contact recreation; and fishing. These waters shall be suitable for fish propagation and survival.” (NYSDEC, 1992).

Halfway Brook Lower Watershed Recreation Management Plan

The Halfway Brook watershed comprises approximately 56,430 acres located in Warren and Washington Counties and is a sub-watershed within the southern end of the Lake Champlain drainage basin. The upper reaches of the watershed (located within the Town of Queensbury and owned by the City of Glens Falls) are the water supply for the City of Glens Falls and adjacent areas of the Town of Queensbury. These parcels comprise the "Halfway Brook Lower Watershed" and are located around the Halfway Brook Reservoir, which was created by the installation of a dam along Halfway Brook.

The Glens Falls Water Department's "Annual Drinking Report for 2018: Glens Falls Water Supply" found the Halfway Brook Reservoir to have "an elevated susceptibility to contamination." The report noted that "the amount of residential land cover in the assessment area results in elevated potential for microbes" (the growth of microorganisms such as algae).

3.0 Halfway Brook Trail Watershed Management Recommendations

The severity of impacts to water quality are tied to the proximity of activities to the water source and the types of uses that are permitted. Designated trails, such as those planned by the Town of Queensbury, help focus impacts of recreation on water sources. They keep people out of areas that could damage water quality through either sedimentation, erosion or contamination from microorganisms.

The Watershed Use Principles outlined below, a condition of the license agreement between the Town of Queensbury and City of Glens Falls, are intended to minimize impacts on the Halfway Brook watershed.

3.1 Construction

The following measures shall be taken in preparation for and during construction.

- The Town shall submit detailed plans for approval by the City (Attachment A).
- The Town shall submit and enforce a soil erosion and sedimentary control plan (Attachment A).
- Before the trail is open to the public the Town shall seek final approval by the City.
- The Town shall inspect all construction and inspection vehicles, and equipment before entering the property, to ensure that non-native and invasive species (e.g., Japanese knotweed) are not brought onto the site.
- The construction of any stream crossings shall be carefully considered to minimize contact with the water and discourage public access to the water.
- One year after construction, the committee shall perform a review to identify any improvements that are needed.

3.2 Signage

The Town shall develop informational signage to be placed within the planned trail alignment. The signage will inform users of the importance of the Halfway Brook Watershed and the Glens Falls Watershed as the sole source of the City's drinking water. Said signage shall include additional descriptive material about the resource. Example signage and language is provided as Attachment B and is subject to final review and approval by the Watershed Committee.

- The Town shall develop informational signage that lists permitted and prohibited uses on the Halfway Brook Trail.
 - Permitted uses shall include walking/pedestrian use and biking (including mountain biking). Dogs shall only be permitted on leash.
 - Prohibited uses shall include camping, fires, any water-based activities (e.g., fishing, swimming, boating), tree clearing, horses/equestrian, dumping, the use of unauthorized motor vehicles (e.g. ATVs, motorcycles, snowmobiles), and the use of firearms; dogs shall not be permitted to be off-leash or in the water.
- The Town shall develop informational signage indicating that the Halfway Brook Trail is open for public use from dawn to dusk, only.

- The Town shall develop informational signage to be posted at the two trailheads to inform users of other local recreation areas. This signage may also be posted at the Dixon Road/utility line point of access frequented by unauthorized users of the watershed property.
- The signage would indicate where activities not permitted within the Glens Falls Watershed are allowed. Said signage would include a map with the location of these other Town recreation areas.
- The Town shall develop informational signage that provides contact information for Halfway Brook Trail users. Said signage shall indicate that the Town of Queensbury should be contacted for all maintenance requests and the City should be contacted if any illegal activities (camping, fires, dumping, tree cutting) are observed on premises.

3.3 Access and Parking

The Town shall install gates at the trailhead before the announcement of any public watershed use. Attachment C-1 depicts the location and details of gates to be installed by the Town Attachment C-2 provides an overall location of gates on the watershed property.

The Town will install boulders or other similar obstructions to discourage illegal access. The City shall have the right to supplement the trailhead gates with 6-inch trees and/or post (or other materials) to discourage illegal access.

Vehicle access to the Halfway Brook Trail shall be allowed for authorized activities including inspection and maintenance of the trail. Emergency access/first responders shall be provided access.

3.4 Maintenance

The Town's municipal forces shall be responsible for routine maintenance of the Halfway Brook Trail, with the assistance of the Town's Parks and Recreation Department for periodic maintenance.

- Select, unique maintenance activities (e.g., the removal of large trees) shall be conducted by an outside contractor, at the discretion of the Town.
- The Town of Queensbury shall notify the City of Glens Falls before the commencement of any major maintenance activities. The definition of major maintenance activities shall be at the discretion of the City.
- The City shall retain the right to interrupt use of the trail, as necessary, for timber harvesting, forest management and property maintenance. The City proposes to maintain a buffer from the proposed trail consistent with the "Harvest Map" prepared by F&W Forestry Services, Inc. and included as Attachment D.

3.5 Patrols and Inspection

Users of the Halfway Brook Trail will informally report illegal activities or maintenance issues using the contact information that shall be provided on informational signage.

- The City of Glens Falls and Town of Queensbury shall continue periodic inspection of the Halfway Brook Trail and encompassing property to ensure the protection of the Halfway Brook and Glens Falls Watershed's water quality.
- Anyone found engaging in any prohibited or illegal use or activity shall be subject to criminal prosecution in connection with said prohibited use, including trespass.

- The Town shall make sufficient periodic inspections of the trail to identify maintenance issues and emerging problems.
- The Town shall actively enforce rules and regulations including trespass, motorized vehicle use and all other unpermitted activities.

3.6 Public Education and Outreach

The Town shall circulate informational mailers (Attachment E) to adjacent landowners containing educational information on the Halfway Brook Watershed and permitted and prohibited uses. Said informational mailer shall include information on stormwater discharges and the use of fertilizer, including the NYS prohibition on the use of phosphorous, in addition to the prohibition of dumping of lawn waste and invasive species. Said mailer shall also include information on where to access additional information on the watershed, including the Warren County Soil and Water Conservation District (WCSWCD).

3.7 Water Quality Monitoring

The Town shall conduct additional sampling and monitoring of outfalls as a component of MS₄ required monitoring of water quality including levels of:

- Phosphorus
- Nitrogen
- Coliform

The results shall be provided to the City on a timely basis.

Attachment A: Construction BID Documents



Town of Queensbury

TOWN OF QUEENSBURY

HALFWAY BROOK TRAIL PROJECT

- | | |
|--------------|-------------------------------------|
| I. | NOTICE TO BIDDERS |
| II. | BID SPECIFICATIONS AND SCOPE |
| III. | ATTACHMENTS |
| IV. | INSTRUCTIONS TO BIDDERS |
| V. | INSURANCE REQUIREMENTS |
| VI. | AFFIDAVIT OF NON-COLLUSION |
| VII. | BID PROPOSAL |
| VIII. | THE IRAN DIVESTMENT ACT |

JANUARY 28, 2020

**DEPARTMENT: Town Supervisor
John Strough, Supervisor
742 Bay Road
Queensbury, New York 12804
(518) 761-8229**

**PURCHASING AGENT: Joanne Watkins
Town of Queensbury
742 Bay Road
Queensbury, New York 12804
Telephone: (518) 761-8239**

I. NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN that the Town of Queensbury Supervisor's Office wishes to accept bids for the Halfway Brook Trail Project, in accordance with the specifications on file with the Town of Queensbury Purchasing Agent at the address listed below.

This project consists of the construction of a trail to be used by pedestrians and bicyclists.

The sealed proposals (no proposal shall be sent via facsimile) will be received by the Purchasing Agent at the Accounting Office, Town of Queensbury, 742 Bay Road, Queensbury, New York, 12804 until **2:00 PM, Friday February 28, 2020** and will then be publicly opened and read aloud. The Purchasing Agent will then submit the Bids and the recommendation to the Town Board for consideration and approval, if any, at its next regularly scheduled meeting.

A pre-bid site visit is scheduled for 2/14/20 at noon.

The right is reserved to reject any or all Bids or to waive any informalities and any bids and to accept any considered advantageous to the Town of Queensbury.

Warranties, if any, may be considered by the Town Board in making a final determination as to whom to award the bid to.

No proposal may be withdrawn without the consent of the Town Board for a period of 45 days after the time for opening bids has passed.

General specifications for the Halfway Brook Trail Project, may be examined and obtained at the Purchasing Agent's Office, 742 Bay Road, Queensbury, New York 12804 during normal business hours any weekday.

Bid submissions are due on or before 2:00 PM on Friday, February 28, 2020

Bidders may request further information by contacting Joanne Watkins, at (518) 761-8239.

Proposals must be made upon and in accordance with the form of proposal prepared and obtainable from the Purchasing Agent, which formal proposal will contain accompanying Instructions to Bidders and Specifications. All statements and requirements of the form proposal, this advertisement, the Instruction to Bidders, Affidavit of Non-Collusion, and the Certification of Compliance with the Iran Divestment Act shall be deemed a part of the contract to purchase entered into by the Town with the successful bidder.

BY ORDER OF THE QUEENSBURY TOWN BOARD.

Publication Date: January 30, 2020

**Joanne Watkins
Purchasing Agent
Town of Queensbury**

II. BID SPECIFICATIONS AND PROJECT SCOPE

PROJECT DESCRIPTION: Construction of a trail, the Halfway Brook Trail. The Halfway Brook Trail (1.2 miles) is to be used by pedestrians and bicyclists.

ATTACHMENTS:

- A. Trail location
- B. Trail design details I
- C. Trail design details II
- D. Water bar and outflow designs and locations
- E. Potter Road parking area location
- F. Peggy Ann Road parking location
- G. Gate locations
- H. Gate details
- I. Stabilized construction entrance
- J. Silt fence and/or silk sock locations

LOCATION: In the Town of Queensbury, the Glens Falls' Lower Watershed, located between Potter Road (north side of watershed) and Peggy Ann Road (south side of watershed). See ATTACHMENT A.

CONSTRUCTION OF TRAIL:

1. Prior to the onset of construction activity, stabilized construction entrances must be created at both Potter Road and Peggy Ann Road entries. See ATTACHMENT I.
2. The proposed trail construction needs to widen the pre-existing trail to create a trail of a minimum of 10 foot wide. However, the clearing for the trail has to be 14 foot in width and 12 foot in height. Therefore, brush clearing, tree removal and grading should occur prior to trail surface application, unless there is a logistical reason to do otherwise. See ATTACHMENT B & C.
3. A pre-bid site visit is scheduled for 2/14/20 at noon so that potential bidders can evaluate existing conditions (figure about 2 hours).
4. The trail surface aggregate (TSA) will be Item #4 and will be supplied and delivered by others. However, the contractor must make arrangements with the Item #4 supplier as to deliveries and delivery location, base at Potter Road or base at Peggy Ann Road.
 - a. The TSA will be a minimum of 4 inches in depth and 10 foot in width.
 - b. The estimated amount of item 4 needed for the 1.15 mile trail is about 1,800 yards of material, including the parking lots.
 - c. The TSA should be placed from the furthest point working towards the source to avoid running equipment on the final trail.
 - d. TSA will be placed with a crown or cross-slope of not less than 2% for drainage and not more than 5%.
 - e. A minimum 3 ton vibratory roller is to be used to compact the final surface.
 - f. Because the immediate approaches to Halfway Brook are steeper, the trail drainage in those areas must be addressed before TSA placement. Water bars

need to be constructed here in accord with trail design - See design detail ATTACHMENT D.

- i. If construction of this part of the trail may need some disturbing of the adjacent bank - then those banks will need to be stabilized with mulch.
- g. Location of silt fences or silt socks will be placed where required by permits. Permits to be provided to contractor by town. See ATTACHMENT J.

5. Trail construction phases 1, 2, 3, 4 and 5:

- a. Phase 1: Clearing and construction of trail from Halfway Brook to Peggy Ann Road. **NOTE: This must be done sometime prior to June 1, 2020** – to enable the construction of the bridge (to be constructed by others).
- b. Phase 2: Clearing and construction of trail from Halfway Brook Bridge to Potter Road.
- c. Phase 3: Backfill to bridge end heights and apply TSA.
- d. Phase 4: Create parking areas.
- e. Phase 5: Install gates.

NOTE: Phases 2 through 5 must be completed prior to November 1, 2020.

CONSTRUCTION OF PARKING AREAS:

- 1. See ATTACHMENTS E and F.

INSTALLATION OF GATES

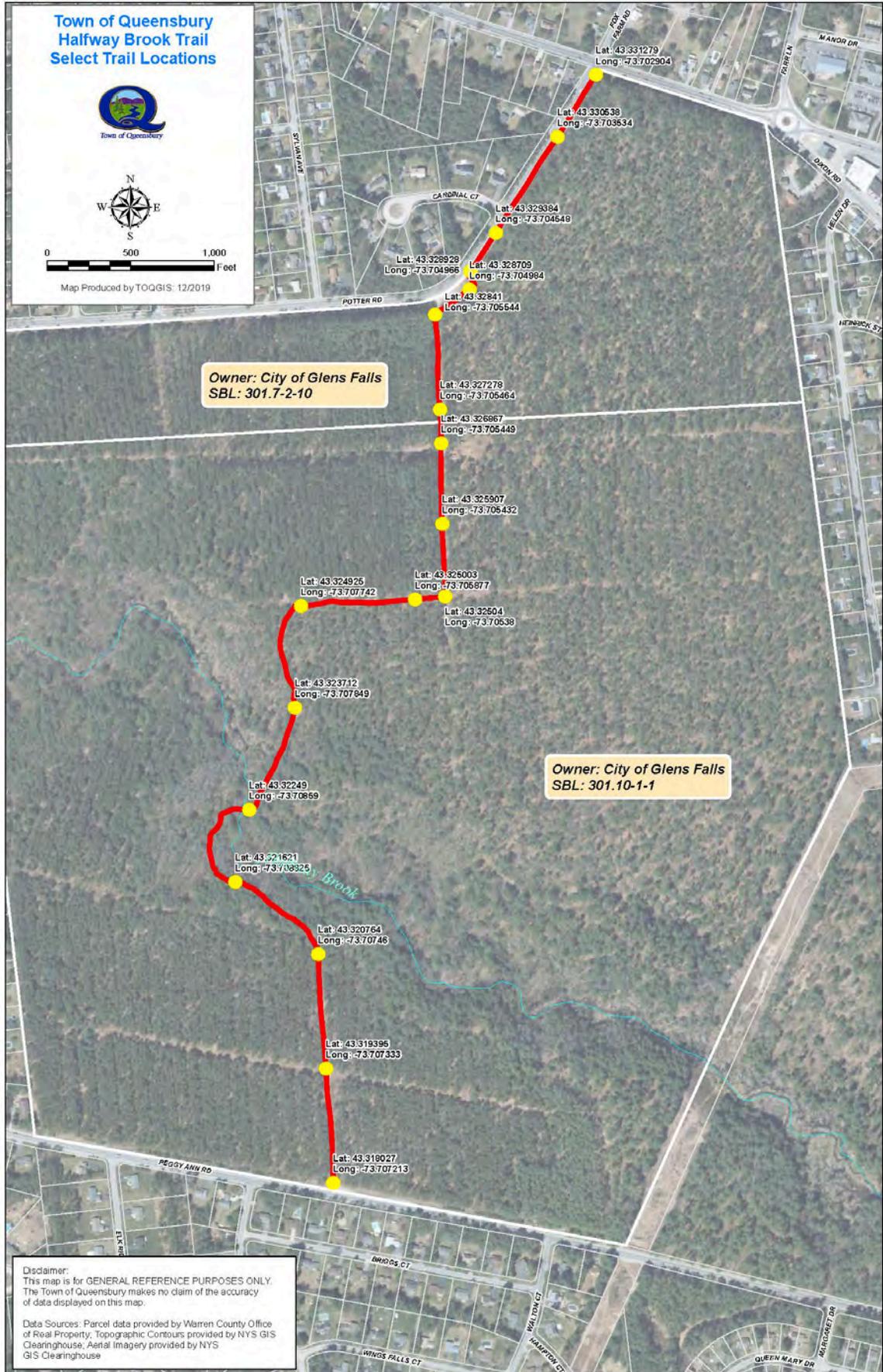
- 1. See ATTACHMENTS G and H.

OTHER:

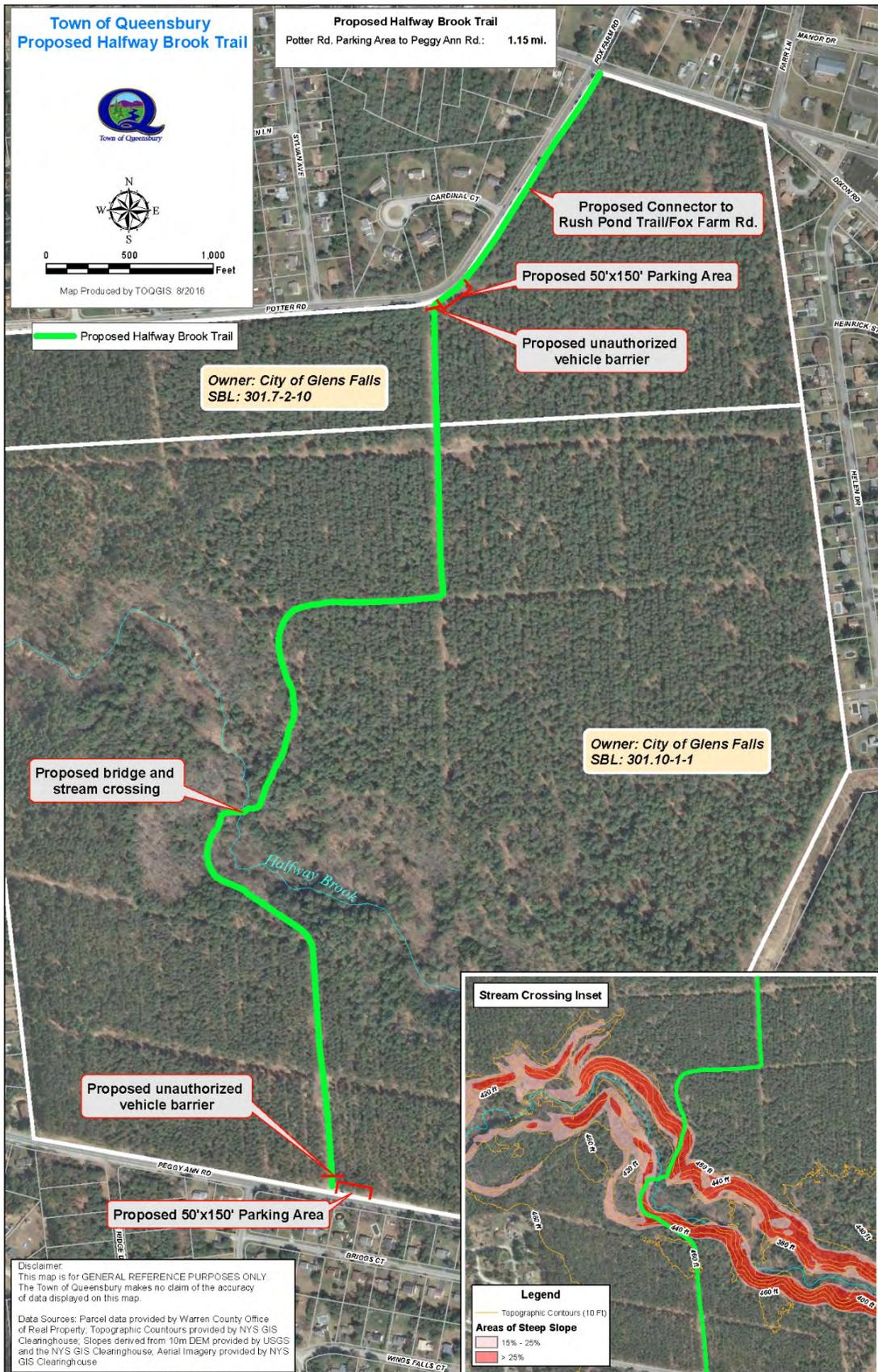
Public use of the trail will be prohibited or restricted for TSA placement and the following day. Permitting and inspections will be done by others.

ATTACHMENT A – Trail location
ATTACHMENT B – Trail design details I
ATTACHMENT C – Trail design details II
ATTACHMENT D – Water bar and outflow designs and locations
ATTACHMENT E – Potter Road parking area
ATTACHMENT F – Peggy Ann Road parking area
ATTACHMENT G – Gate locations
ATTACHMENT H – Gate details
ATTACHMENT I – Stabilized construction entrance
ATTACHMENT J – Silt fence and/or silt sock locations

III. ATTACHMENTS

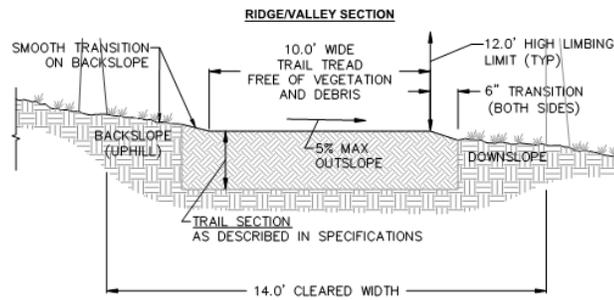
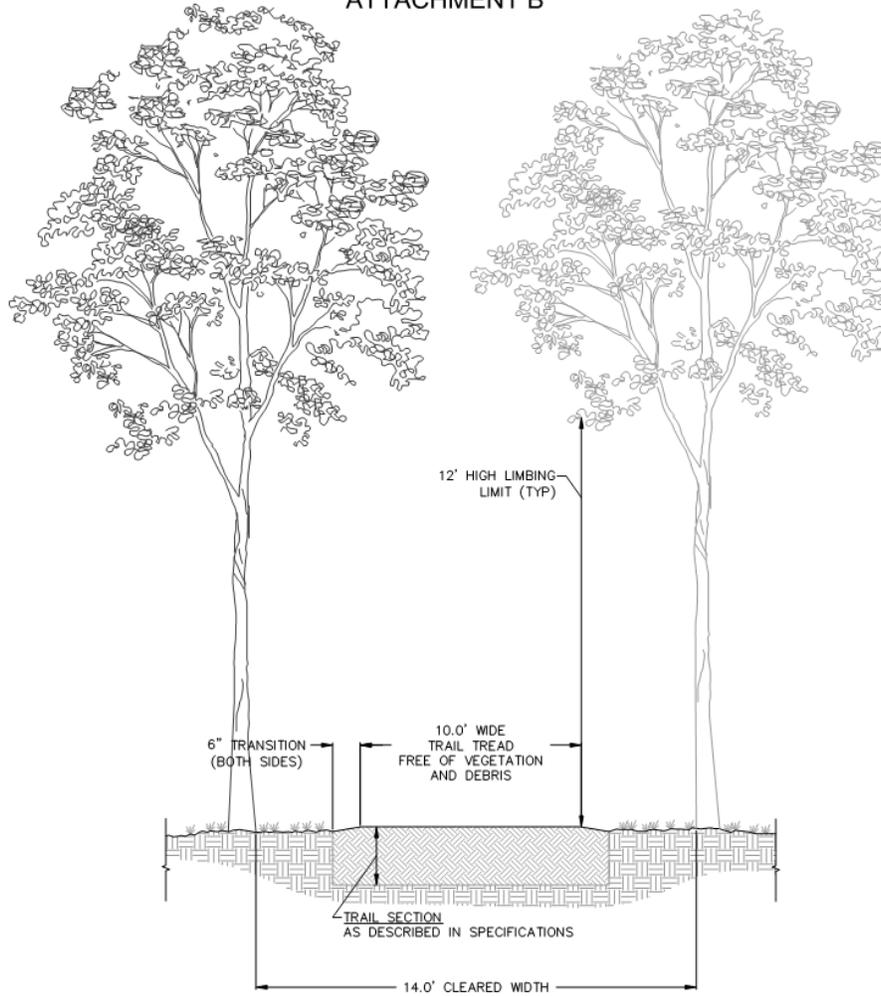


ATTACHMENT A – Trail location



ATTACHMENT B – Trail design details I

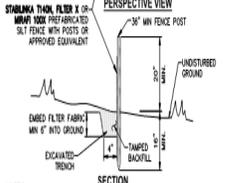
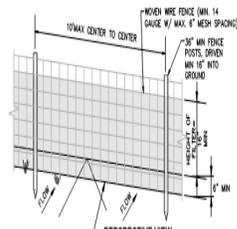
ATTACHMENT B



SLOPED SECTION

© **B** **TYPICAL TRAIL CROSS SECTION**
SCALE: NOT TO SCALE

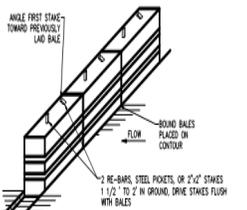
ATTACHMENT C – Trail design details II



- NOTES:**
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL 1\"/>
 - 2. FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24\"/>
 - 3. WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6\"/>
 - 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIALS REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
 - 5. MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 1/4 ACRE PER 100 FEET OF FENCE.
 - 6. SILT FENCE SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
 - 7. SILT FENCE SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
 - 8. MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING TO A HAY OR STRAW BALE DIKE ARE:

SLOPE STEEPNESS	MAXIMUM SLOPE LENGTH(S)
2:1	25
3:1	50
4:1	75
6:1	100

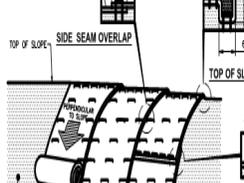
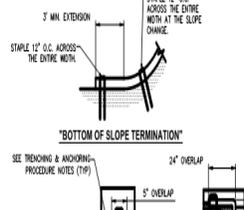
1 SILT FENCE INSTALLATION DETAIL
SCALE: NOT TO SCALE



- NOTES:**
1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ADJUTING THE ADJACENT BALES.
 2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4\"/>
 - 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAD BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
 - 4. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 - 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.
 - 6. HAY OR STRAW BALE DIKES SHALL BE USED WHERE EROSION COULD OCCUR IN THE FORM OF SHEET EROSION.
 - 7. HAY OR STRAW BALE DIKES SHALL NOT BE USED WHEN A CONCENTRATION OF WATER IS FLOWING TO THE BARRIER.
 - 8. MAXIMUM ALLOWABLE SLOPE LENGTHS CONTRIBUTING TO A HAY OR STRAW BALE DIKE ARE:

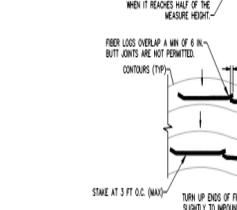
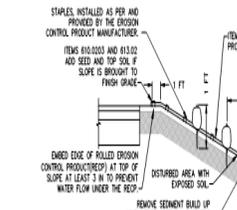
SLOPE STEEPNESS	MAXIMUM SLOPE LENGTH(S)
2:1	25
3:1	50
4:1	75
6:1	100

2 HAY OR STRAW BALE DIKE DETAIL
SCALE: NOT TO SCALE



- NOTES:**
1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.
 2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL EDGE. SECURE ALL PRODUCT OVERLAPS/OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.
 3. KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.
 4. USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE IN LOOSE SOIL CONDITIONS. THE USE OF STAPLES/STAKES LONGER THAN 6\"/>

4 EROSION CONTROL BLANKET INSTALLATION DETAIL
SCALE: NOT TO SCALE



3 FIBER LOG DETAIL
SCALE: NOT TO SCALE

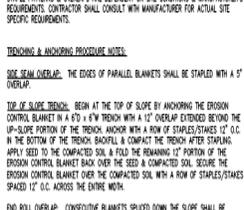
- FIBER LOG APPLICATION NOTES:**
1. THE PRIMARY PURPOSE OF A FIBER LOG DIKE IS TO REDUCE RUNOFF VELOCITY AND TRAP SEDIMENT. VELOCITY IS REDUCED, WATER IS IMPOUNDED BEHIND THE MEASURE, AND SEDIMENT FALLS OUT OF SUSPENSION.
 2. FIBER LOG DIKES CAN BE USED IN SENSITIVE AREAS WHERE CONTROL OF MEASURES AND MINOR PLANT SPECIES IS DESIRED.
 3. FIBER LOG DIKE SHALL BE INSTALLED ON A LINE OF EQUAL ELEVATION (CONTOUR). THEY MAY BE INSTALLED AT INTERMEDIATE POINTS UP SLOPES AS WELL AS AT THE BOTTOM. THE DIKE SHALL CURVE UP SLOPES TO AROUND BARRIERS.
 4. FIBER LOGS SHALL NOT BE USED IN OR ACROSS A FLOWING NATURAL CHANNEL.
 5. FIBER LOGS ARE NOT TO BE INSTALLED SO THAT RUNOFF WILL FLOW ALONG THE FIBER LOG IN A CONCENTRATED MANNER.

- FIBER LOG GENERAL NOTES:**
1. FIBER LOG DIKE SHALL BE PLACED A MINIMUM OF 2 FT FROM THE TOE OF SLOPE (5 FT PREFERRED), TO PROVIDE ADEQUATE AREA FOR SEDIMENT STORAGE AND TO FACILITATE MAINTENANCE OF THE SEDIMENT CONTAINMENT AREA.
 2. POSTS MAY BE 1.5 IN X 1.5 IN (MIN) HORIZONTAL, OR 1.5 IN X 2.5 IN (MIN) VERTICAL. SPACING SHALL BE 5 FT (MAX) BETWEEN STAKES.
 3. THE CONTRACTOR SHALL INSPECT MEASURES EVERY SEVEN CALENDAR DAYS AND/OR AFTER EACH RAINFALL EVENT. MEASURES SHALL BE CLEANED AND REPAIRED AS REQUIRED.
 4. SEDIMENT SHALL BE REMOVED WHEN ACCUMULATION REACHES ONE HALF OF THE MEASURE HEIGHT. SEDIMENT SHALL BE DISPOSED OF AS UNSUITABLE MATERIAL.
 5. MAXIMUM DRAINAGE AREA TRIBUTARY TO 100 FT OF FIBER LOG SHALL BE 0.5 AC.
 6. THE FOLLOWING ARE MAXIMUM SLOPE LENGTHS TO FIBER LOG MEASURES:

SLOPE	5 FT
1:2	10
1:3	15
1:4	20

5 TEMPORARY SOIL STOCKPILE DETAIL
SCALE: NOT TO SCALE

- NOTES:**
1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 1H:2H.
 3. UPON COMPLETION OF SOIL STOCKPILING, EACH PALE SHALL BE SURROUNDING WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
 4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

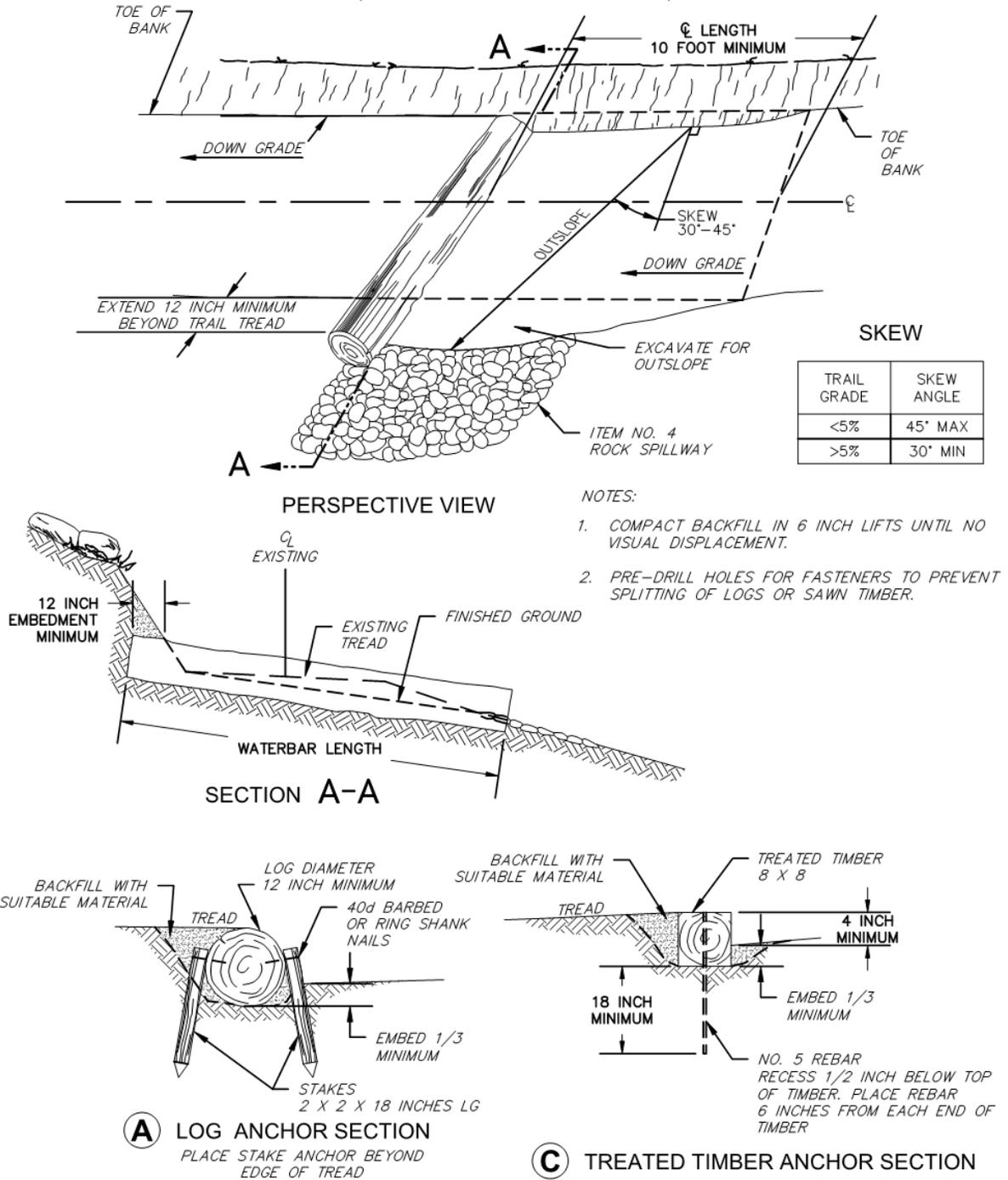


6 STONE DUST TREAD
SCALE: NOT TO SCALE

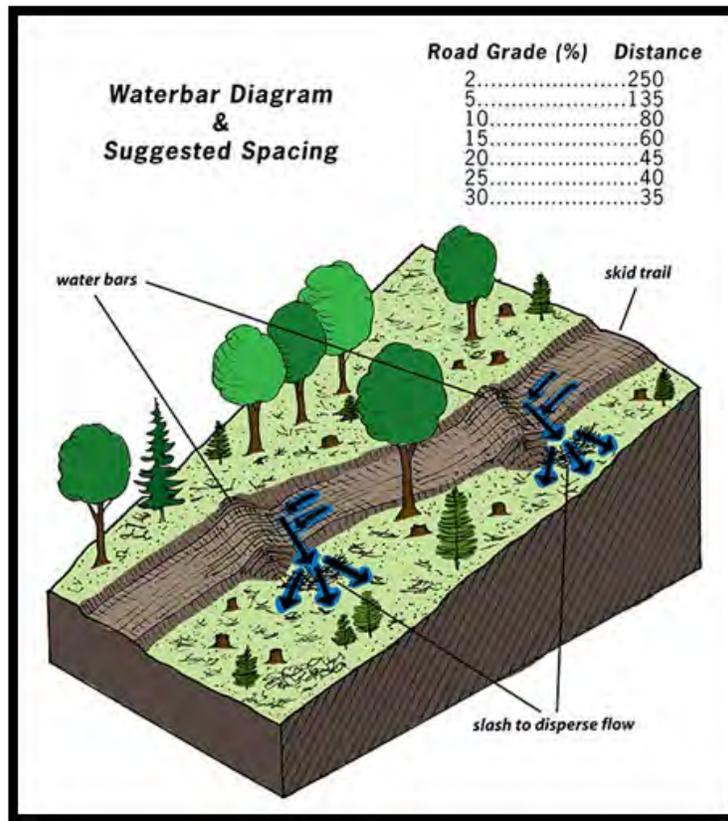


6 STONE DUST TREAD
SCALE: NOT TO SCALE

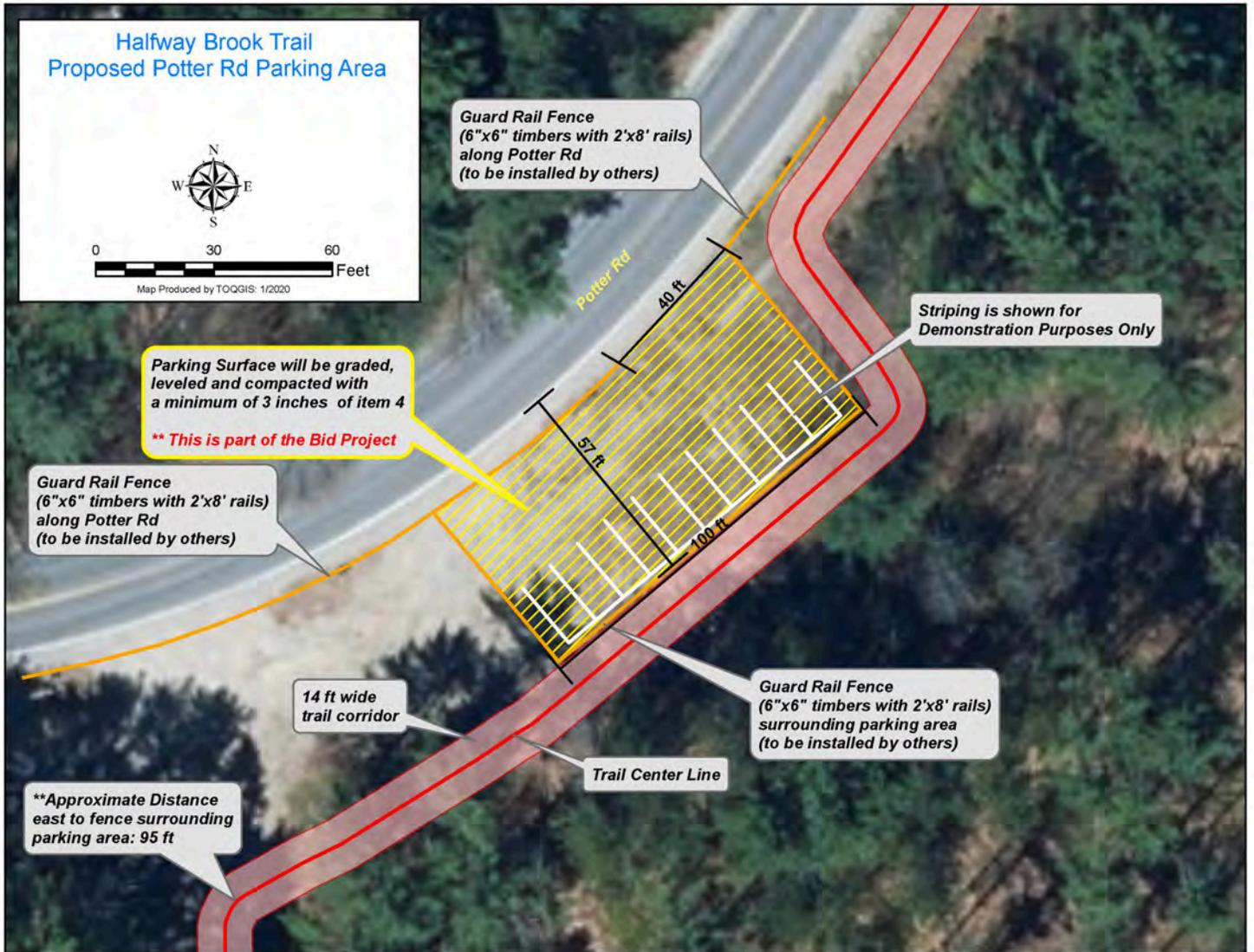
**ATTACHMENT D
LOG OR TREATED TIMBER WATERBAR
(USDA U.S. FOREST SERVICE)**



ATTACHMENT D (PAGE 2) – Water bar and outflow designs and locations

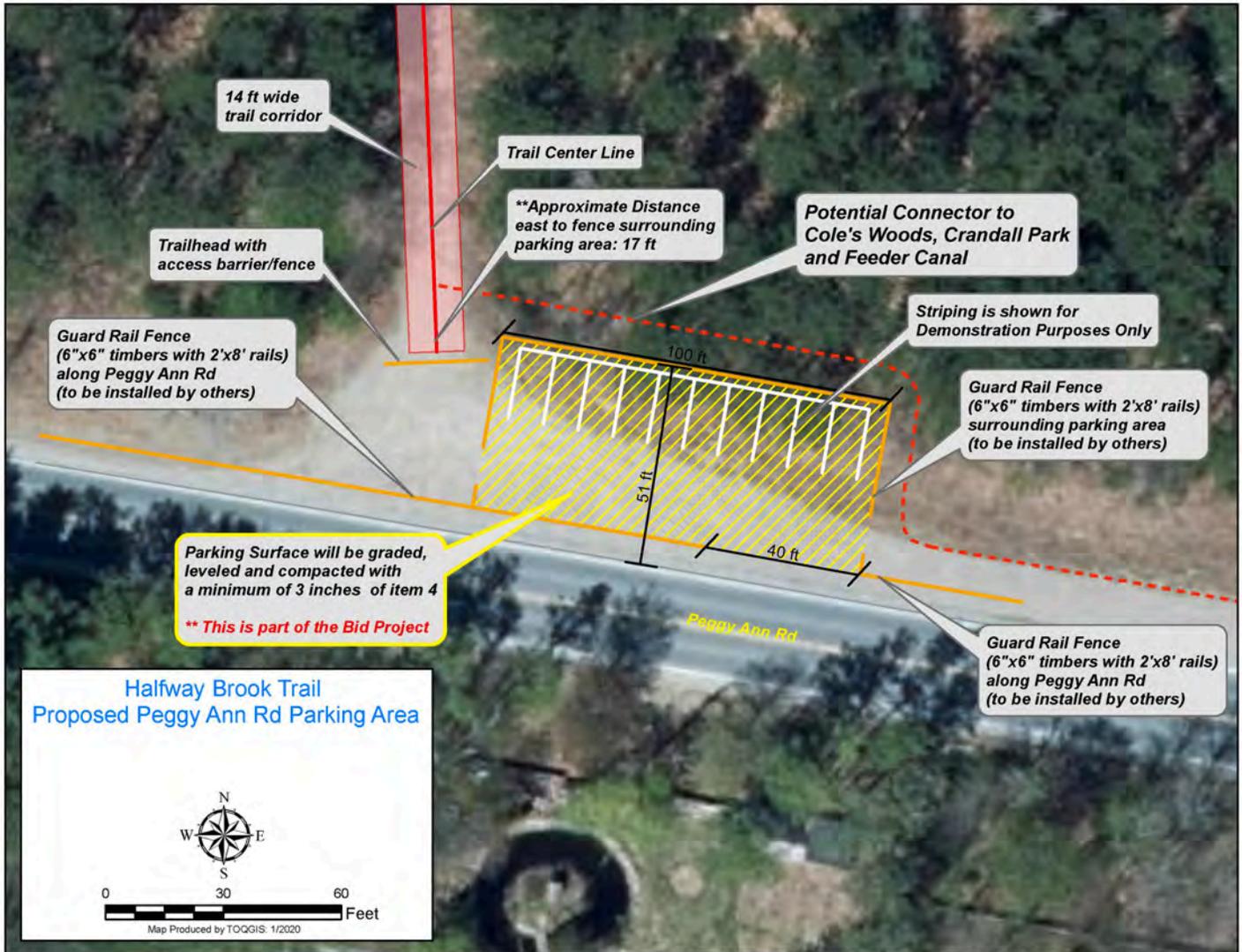


ATTACHMENT E – Potter Road parking area

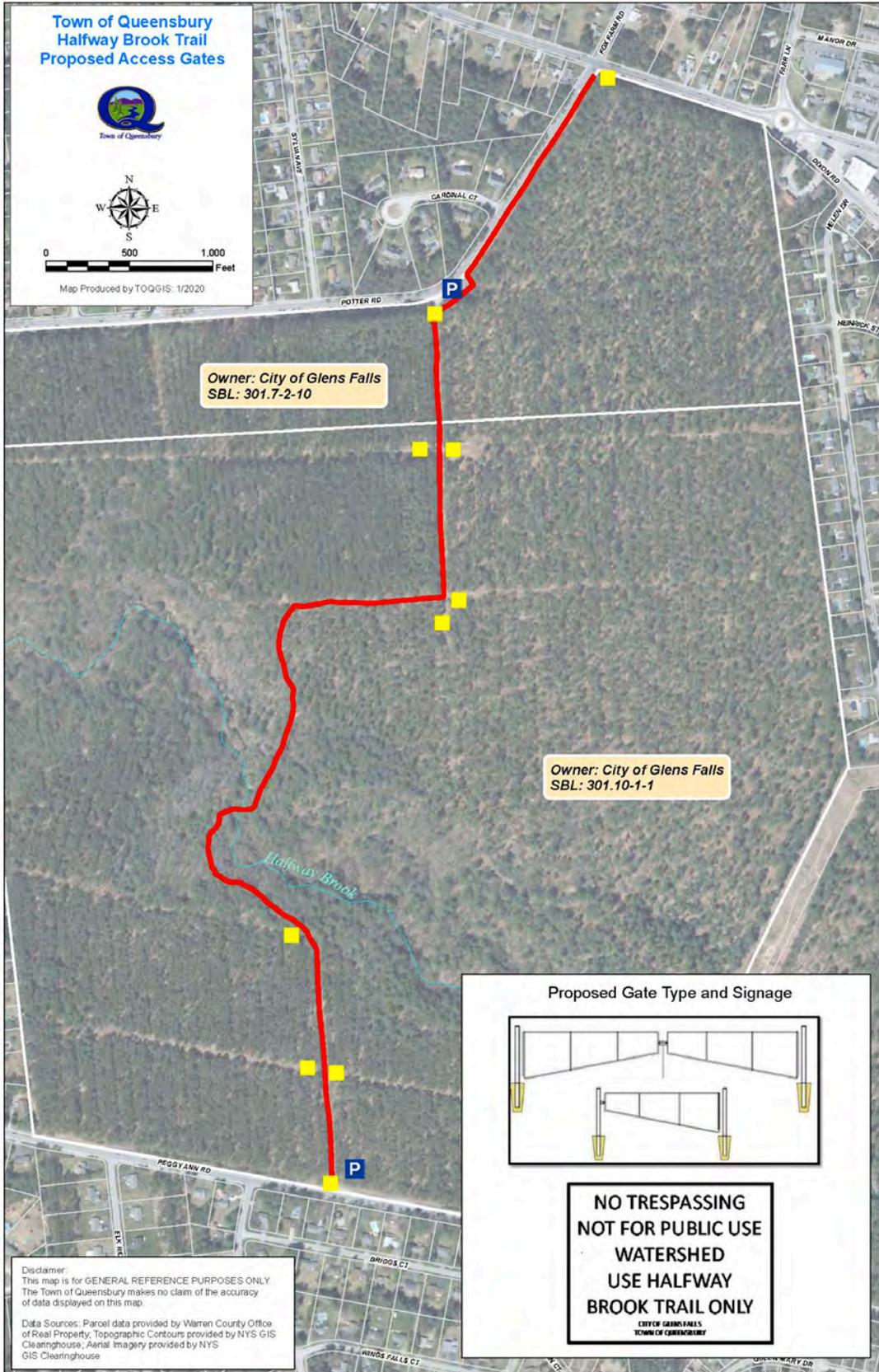


See April 6, 2020 Update

ATTACHMENT F – Peggy Ann Road parking area

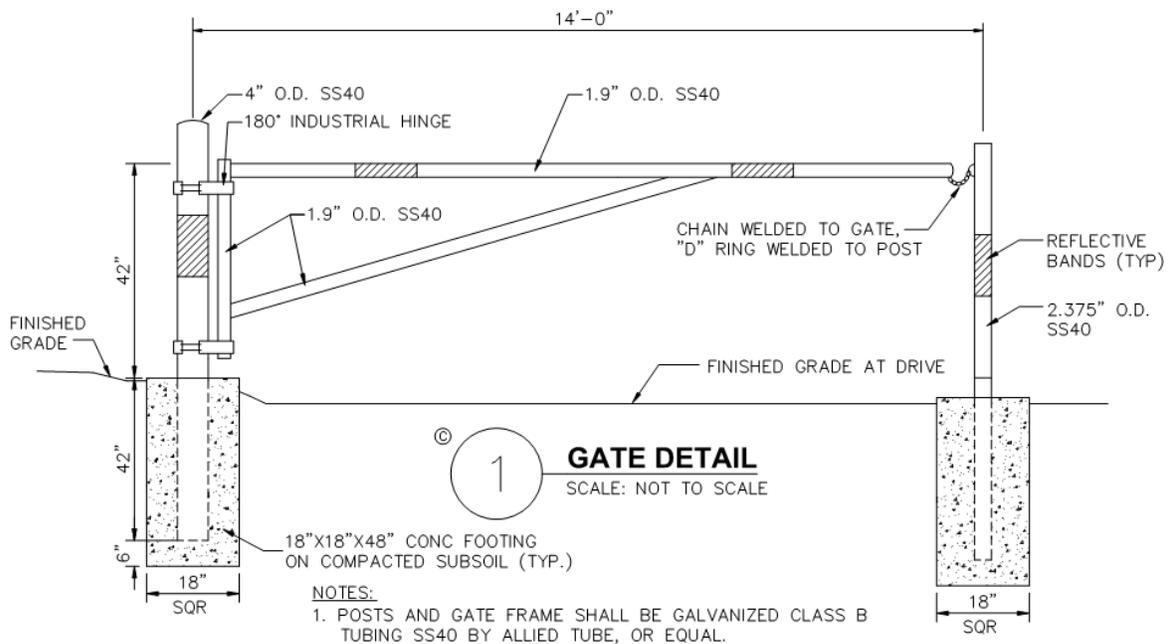


ATTACHMENT G – Gate locations



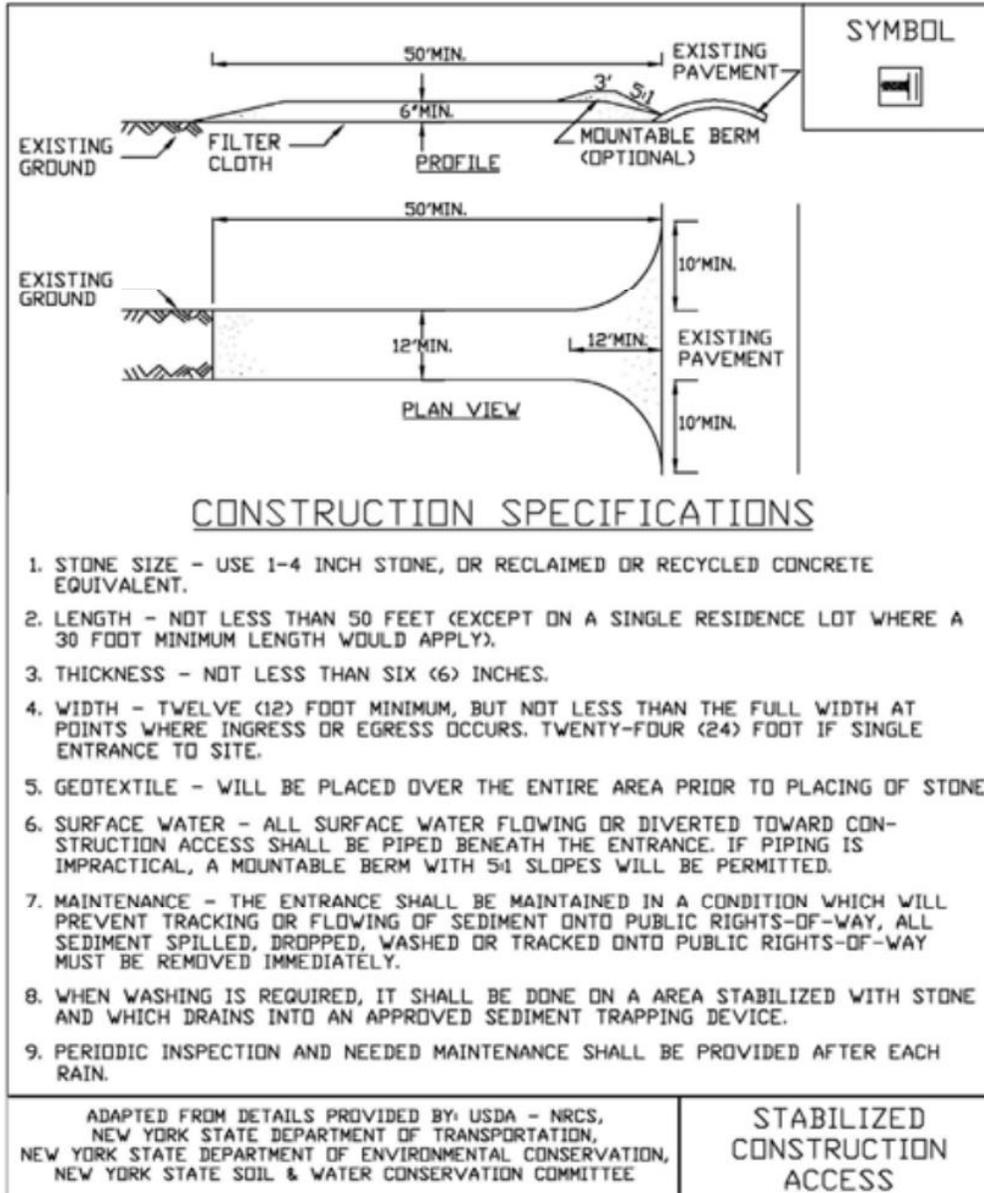
ATTACHMENT H – Gate details

ATTACHMENT H

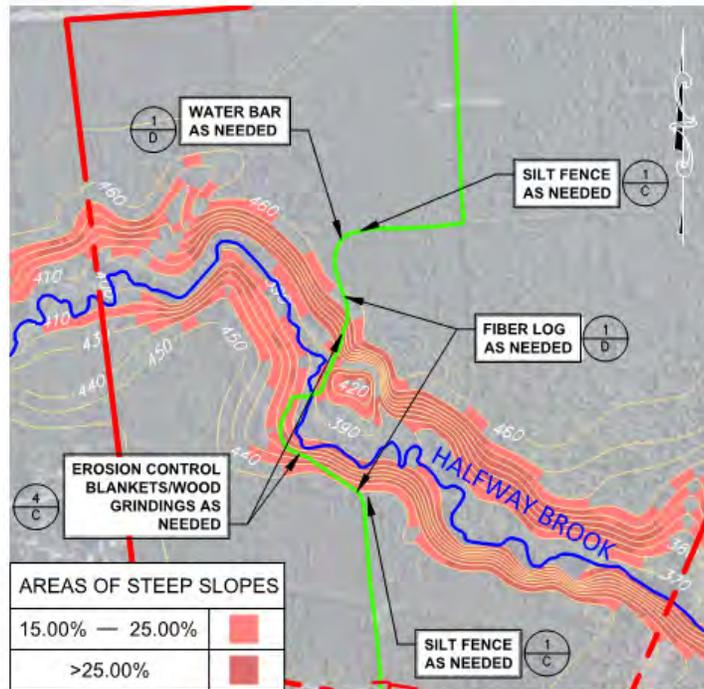


ATTACHMENT I – Stabilized construction entrance

Figure 2.1
Stabilized Construction Access



ATTACHMENT J – Silt fence and/or silt sock locations



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**STREAM CROSSING
AND EROSION & SEDIMENT
CONTROL LOCATIONS**

drawn	checked
date	scale 1" = 1000'
project no.	
sheet no.	
ATTACH. J	

IV. INSTRUCTIONS TO BIDDERS

1. **Receipt of Bids.**

Sealed proposals will be received by the Queensbury Town Board at the Office of the Purchasing Agent, Town Office Building, 742 Bay Road, Queensbury, Warren County, New York, 12804, until 2:00 PM, Monday, February 28, 2020. **All written proposals submitted in response to this notice shall be marked: SEALED PROPOSAL – HALFWAY BROOK TRAIL PROJECT, on the outside of the envelope** The Bids received will be opened at 2:00 PM, and publicly read aloud in the Supervisor's Conference Room. The Purchasing Agent will submit the bid proposals to the Town Board at its next regularly or specially scheduled Town Board Meeting, for its consideration and approval, if any.

2. **Payment Procedures.**

Payment for the Halfway Brook Trail Project shall be made within 30 days of completion. The Town of Queensbury shall not be obligated to process for payment any invoices submitted by the successful Bidder until the Town Supervisor is satisfied with the completed project.

3. **Procurement of Bidding Documents.**

Specifications and bidding documents can be examined and obtained at the Purchasing Agent's Office, Town Office Building, 742 Bay Road, Queensbury, NY during normal business hours, commencing immediately.

4. **Explanation to Bidders.**

Any explanation regarding intent and meaning of bidding specifications or other bidding documents shall be requested in writing to Joanne Watkins, Purchasing Agent, with sufficient allowance of time for receipt and reply before the time of Bid opening. Any such explanations or interpretations shall be made in the form of addenda to the documents and shall be furnished to all Bidders who shall submit all addenda with their bids. Oral explanations and interpretations made prior to the Bid openings shall not be binding.

5. **Bidders Understanding.**

- A. Inspection of general specifications - Bidders shall inform themselves of the specifications that are included as the final page of this bid package.
- B. Documents - Before submitting a proposal, each contractor shall familiarize him/herself with the Bidding documents which include the Notice to Bidders, Instructions to Bidders, Insurance Requirements, Bid Proposal, Affidavit of Non-Collusion, Certification of Compliance with the Iran Divestment Act and specifications and General Specifications.
- C. The failure or omission of any Bidder to receive or examine the Bidding

documents shall in no way relieve any Bidder from any obligation with respect to his Bid. By submitting a Bid, the Bidder agrees and warrants that he/she has examined the Bidding documents, and that the specifications are adequate for bidding purposes, and the required items can be provided under the specifications.

- D. No claim for extra charges will be allowed because of alleged impossibilities or because of inadequate or improper specifications.
- E. Bid Requirements.
 - 1. Each Bidder shall submit a properly completed and signed copies of the following: Bid Proposal, Non-Collusive Affidavit, and the Certification of Compliance with the Iran Divestment Act
 - 2. Each bidder shall satisfy to the Queensbury Town Board his/her ability, financial and otherwise, to so provide the items requested, if requested by the Town Board.
- F. Preparation of Bids.
 - 1. The Bidder shall base his Bid on items complying fully with the Bidding documents and in the event the bidder names or includes in his/her Bid materials which do not conform, if awarded the contract he/she shall be responsible for furnishing items which fully conform, at no change in his/her contract price.
 - 2. Only lump sum, firm bids for the item(s) to be furnished will be accepted.

6. **Submission of Bids.**

- A. Bids shall be submitted as directed in the invitation for bids. All Bids shall be submitted on the form provided and all appropriate spaces shall be fully filled. Proposals shall be submitted in an opaque, sealed envelope marked proposal bearing the title of the work and the name of the Bidder. Bids may not be faxed to the Town Offices.
- B. A Bidder shall not include any retailer, occupation, or use taxes in his Bid. Exemption certificates for these taxes will be furnished by the Town of Queensbury.
- C. Bids shall be submitted prior to the time fixed in the invitation for bids. All bids received after the time stated for the opening in the Notice to Bidders may not be considered and will be returned unopened to the Bidder. The Bidder assumes the risk of any delay in the mail or the handling of the mail by employees of the Town. Whether sent by mail or by means of personal delivery, the Bidder assumes responsibility for having his bid deposited on time at the place specified.
- D. Upon written request to the Bidder, Bids may be withdrawn at any time prior to the expiration of the time for submitting Bids. Negligence on the part of the Bidder in preparing his/her Bid shall not constitute a right to withdraw

his/her Bid subsequent to the Bid opening.

- E. No proposal may be withdrawn without the consent of the Town for a period of 45 days after the time for opening Bids has passed.
- F. At the time and place fixed for opening Bids, the contents of all Bids will be made public for the information of all Bidders and other interested parties who may be present in person or by representative.
- G. If two or more Bidders submit identical bids as to price, the decision of the Town Board to award a contract to one of such identical Bidders shall be final. (General Municipal Law §103(1)).

7. Rejection of Bids.

The right is reserved to reject any and all Bids or to waive any informality in any Bid and to accept any considered advantageous to the Town of Queensbury.

8. Warranties.

Bidders shall supply any and all warranties that apply to the purchase and such may be considered by the Town in determining whether to accept any particular Bid, including a Bid which is higher than another Bid in total sum.

9. Collusive Agreements.

Each person submitting a Bid to the Town of Queensbury for the item contemplated by the Bidding documents shall execute an affidavit in the form herein provided, to the effect that he/she has not colluded with any other person, firm, or corporation in regard to any Bid submitted. Such affidavit shall be attached to the Bid. Failure on the part of the Bidder to observe these conditions shall be cause for rejection of his/her Bid.

10. Certification of Compliance with the Iran Divestment Act

Each person submitting a Bid to the Town of Queensbury for the item contemplated by the Bidding documents shall execute a certification in the form herein provided. Such Certification shall be attached to the Bid. Failure on the part of the Bidder to observe these conditions shall be cause for rejection of his/her Bid.

11. Statement of Bidder's Qualifications.

The Queensbury Town Board hereby reserves the right to request such qualifications of any Bidder submitting a Bid as it deems appropriate concerning the Bidder's financial resources and his/her organization and resources available for the delivery of the items contemplated. This documentation however, need not be submitted with the Bid unless and until such time as required by the Town of Queensbury.

12. Insurance and Liabilities

Liability, workers compensation and disability coverage statements are required of all Bidders. Automobile coverage is required from those who provide delivery. Bidders who use common carriers for delivery do not need automobile coverage statements. See attached insurance requirements.

13. Prevailing Wages

Attached is a copy of the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for PRC#2019016061. In the event the contract is extended beyond the initial one year term, it shall be the successful bidder's responsibility to check with NYS Dept. of Labor for updated wage rates on July 1st of each year, and to provide certified payrolls based on then current rates. Adjustments to prevailing wage rates shall only be allowed upon renewal contracts.

GUARANTEES BY THE SUCCESSFUL BIDDER

1. The successful Bidder guarantees:
 - A. His products against defective material or workmanship and to repair or replace any damages or marring occasioned in transit.
 - B. To furnish adequate protection from damage for all work and repair damages of any kind for which he or his workmen are responsible, to the building or equipment, to his own work, or to the work of other successful Bidders.
 - C. To carry adequate insurance to protect the Town from loss in case of accident, fire, theft, etc.
 - D. That all deliveries will be equal to the accepted Bid.
 - E. That the equipment delivered is standard, new, latest model of regular stock product or as required by the specifications; also that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice. Every unit delivered must be guaranteed against faulty material and

workmanship for a period of at least one (1) year from date of delivery. If during this period such faults develop, the successful Bidder agrees to replace the unit or the part affected without cost to the Town. Any merchandise provided under the contract which is or becomes defective during the guarantee-period shall be replaced by the successful bidder free of charge with the specific understanding that all replacements shall carry the same guarantee as the original equipment. The successful Bidder shall make any such replacement immediately upon receiving notice from the Town.

V. INSURANCE REQUIREMENTS

INSURANCE

Contractor/vendor shall not commence work under this contract until he has obtained all insurance required under the following paragraphs and such insurance has been approved by the Town of Queensbury.

WORKER'S COMPENSATION INSURANCE

Contractor/vendor shall take out and maintain during the life of this contract, worker's compensation insurance and employer's liability insurance for all of his employees employed at the site of the project.

GENERAL LIABILITY INSURANCE

Contractor/vendor shall take out and maintain during the life of the contract, such bodily injury liability and property damage liability insurance as shall protect him and the Town from claims for damages for bodily injury including accidental death, as well as from claims for property damage which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. It shall be the responsibility of the contractor/vendor to maintain such insurance in amounts sufficient to fully protect himself and the Town but in no instance shall amounts be less than those set forth below. These amounts are specified only to establish the minimum coverage acceptable.

Bodily injury liability insurance in amounts not less than \$1,000,000 (one million dollars) for injuries, including wrongful death, to any one person(s). \$2,000,000 (two million dollars) aggregate.

Property damage liability insurance in an amount of not less than \$1,000,000 (one million dollars) for damages on account of any one occurrence.

Or combined single limit of liability in amounts of \$1,000,000 (one million dollars) per occurrence and \$2,000,000 (two million dollars) aggregate.

OTHER CONDITIONS GENERAL LIABILITY INSURANCE

1. Coverage shall be written on comprehensive general liability form.
2. Coverage shall include:
 - A. Contractual liability;
 - B. Independent contractors;

- C. Products and completed operations.
- 3. The “Town of Queensbury, 742 Bay Road, Queensbury, New York” shall be added to the Comprehensive General Liability Policy as “Additional Insured.”

AUTOMOBILE LIABILITY INSURANCE

Automobile bodily injury liability and property damage liability insurance shall be provided by the contractor/vendor with a minimum combined single limit (CSL) of \$1,000,000 (one million dollars).

OTHER CONDITIONS OF AUTOMOBILE LIABILITY INSURANCE

- 1. Coverage shall include:
 - A. All owned vehicles;
 - B. Hired car and non-ownership liability coverage;
 - C. Statutory no-fault coverage.
- 2. If any of the contractors/vendor’s policies of insurance are canceled or not renewed during the life of the contract, immediate written notice of cancellation or non-renewal shall be delivered to the Town no less than 30 days prior to the date and time of cancellation or non-renewal.

UMBRELLA LIABILITY

- 1. Each Occurrence and Aggregate of \$5,000,000 (five million dollars).

CERTIFICATE OF INSURANCE

The Contractor/vendor shall file with the Town of Queensbury prior to commencing work under this contract, a certificate of insurance to be delivered to the Town of Queensbury Accounting Office.

- 1. Certificate of Insurance shall include:
 - A. Name and address of insured
 - B. Issue date of Certificate
 - C. Insurance Company name
 - D. Type of coverage in effect

- E. Policy number
 - F. Inception and expiration dates of policies included on certificate
 - G. Limits of liability for all policies included on certificate
 - H. Certificate holder shall be the Town of Queensbury, 742 Bay Road, Queensbury, New York 12804 and named as additional insured.
2. If the Contractors/Vendor's insurance policies should be non-renewed, canceled, or expire during the life of the contract, the Town shall be provided with a new certificate indicating the replacement policy information as requested above.

INDEMNIFICATION CLAUSE

The Contractor/Vendor agrees to protect, indemnify and save harmless the Town of Queensbury against any and all claims, suits, and demands which the Contractor/Vendor may suffer because of the operation or actions of the Contractor/Vendor, its agents or employees, including but not limited to its failure to properly perform the work under the purchase order, its failure to maintain any policy of insurance required by this purchase order, its failure or refusal to provide any forms, certificates, or documentation required by this agreement or law.

VI. AFFIDAVIT OF NON-COLLUSION

I, _____, being duly sworn, do depose and state:

1. That in connection with this procurement,

(A) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor; and

(B) The prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening directly or indirectly to any other bidder or to any competitor; and

(C) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.

2. The undersigned further states:

(A) Affiant is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that Affiant has not participated, and will not participate, in any action contrary to (1) (A) through (1) (C) above; or

(B) (1) Affiant is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that Affiant has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (1) (A) through (1) (C) above, and as their agent does hereby so certify; and

(2) Affiant has not participated and will not participate, in any action contrary to (1) (A) through (1) (C) above.

3. It is expressly understood that the foregoing statements, representations, and promises are made as a condition to the right of the bidder to receive payment under any award made hereunder.

_____ **Signed**

Subscribed and sworn to before me this ____ day of _____, 20____.

Notary Public

VII. BID PROPOSAL

To: TOWN OF QUEENSBURY:

1. The undersigned hereby declares that he/she is the only person interested in this Bid; that it is made without any connection with any person making another Bid for the same contract; that the Bid is in all respects fair and without collusion or fraud; and that no official of the Town, or any person in the employ of the state, is directly or indirectly interested in the Bid or in the supplies or work to which it relates, or in any portion of the profits thereof.

2. The undersigned also declares that he/she has carefully examined the annexed form of Bid documents and specifications and will provide the following item at the prices indicated, immediately upon request, to be fully paid within 30 days of receipt by the Town.

3. Halfway Brook Trail Project: PRICE: \$ _____

4. **CONTRACT - AGREEMENT:** By execution of this Bid Proposal, Bidder agrees to execute a further agreement if requested by the Town of Queensbury and agrees, in any event, that all understandings, conditions, provisions and specifications referred to in and a part of this Bid Proposal, the Notice to Bidders, the Instructions to Bidders, the Specifications, the Affidavit of Non-Collusion, and the Certification of Compliance with the Iran Divestment Act shall constitute the terms and conditions of an agreement and actually be an agreement, if no other agreement is entered into, between the Bidder and the Town of Queensbury.

X _____
DATE

X _____
***SIGNATURE OF AUTHORIZED COMPANY
OFFICIAL - PRINT NAME NEXT TO SIGNATURE**

X _____
COMPANY NAME

X _____
COMPANY ADDRESS

X _____
COMPANY PHONE NUMBER

VIII. THE IRAN DIVESTMENT ACT

CERTIFICATION OF COMPLIANCE WITH THE IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (the "Act"), Chapter 1 of the 2012 Laws of New York, a new provision has been added to State Finance Law (SFL) § 165-a and New York General Municipal Law § 103-g, both effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law) (the "Prohibited Entities List"). Pursuant to SFL § 165-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date at which time it will be posted on the OGS website.

By submitting a bid in response to this solicitation or by assuming the responsibility of a Contract awarded hereunder, each Bidder/Contractor, any person signing on behalf of any Bidder/Contractor and any assignee or subcontractor and, in the case of a joint bid, each party thereto, certifies, under penalty of perjury, that once the Prohibited Entities List is posted on the OGS website, that to the best of its knowledge and belief, that each Bidder/Contractor and any subcontractor or assignee is not identified on the Prohibited Entities List created pursuant to SFL § 165-a(3)(b)

Additionally, Bidder/Contractor is advised that once the Prohibited Entities List is posted on the OGS Website, any Bidder/Contractor seeking to renew or extend a Contract or assume the responsibility of a Contract awarded in response to this solicitation must certify at the time the Contract is renewed, extended or assigned that it is not included on the Prohibited Entities List.

During the term of the Contract, should the Town receive information that a Bidder/Contractor is in violation of the above-referenced certification, the Town will offer the person or entity an opportunity to respond. If the person or entity fails to demonstrate that he/she/it has ceased engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then the Town shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages or declaring the Bidder/Contractor in default.

The Town reserves the right to reject any bid or request for assignment for a Bidder/Contractor that appears on the Prohibited Entities List prior to the award of a contract and to pursue a responsibility review with respect to any Bidder/Contractor that is awarded a contract and subsequently appears on the Prohibited Entities List.

I, _____, being duly sworn, deposes and says that he/she is the _____ of the _____ Corporation. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to paragraph (b) of subdivision 3 of §165-a of the State Finance Law.

SIGNED

SWORN to before me this

_____ day of _____ 20____

Notary Public: _____

Questions from parties interested in bidding on the Halfway Brook Trail:

1. Question: Is there a recap of the walkthrough?
 - a. Answer: no
2. Question: The gate detail shows a single gate and a double gate. Are all 10 of the gates single?
 - a. Answer: All ten trail-related gates are the 14 foot, single gate style.
3. Question: Are there stumps in the existing trail?
 - a. Answer: No
4. Question: I only see two gates.
 - a. Answer: 10 gates - see attached.
5. Question: Does the contractor supply the following: Silt fence/sock, rebar and stakes for water bars, #4 rock for spillway.
 - a. Answer: yes
6. Question: Will the town be constructing the guard rail fencing around the parking area?
 - a. Answer: yes
7. Question: Will the town be supplying the boulders to provide additional blockage at the trail gate sites?
 - a. Answer: yes
8. Question: Are the stumps to be cut flush or removed?
 - a. Answer: Stumps that are part of the trail need to be removed, stumps that are not part of the trail (outside of the fourteen foot) can be cut flush.
9. Question: Are the edges to be top soiled, seeded or mulched?
 - a. Answer: The edges (two foot margins) on either side of the trail (ten foot in width), just have to be cleared.
10. Question: Are there logs on site to be used for the water bars?
 - a. Answer: The town will supply the water bar logs.
11. Question: Is the owner providing the material necessary to grade the trail to the minimum 5% longitudinal Slope? Or are we simply following the existing grade?
 - a. Answer: I am not sure of the question. Is the contractor asking about the cross-slope for the water bars? If so, see below. For the most part, the contractor will follow existing trail and slope.
12. Question: Will there be a time frame restriction on clearing? If so please provide that date and the when contractor will have notice to proceed with clearing restrictions.
 - a. Answer: Yes, between April and October (bat thing). What we'll do is work with the contractor that gets awarded the bid – we'll walk the trail and parking areas and identify the trees that would have to be taken down prior to March 30. Then we can cut and fall and, when we can get to it, push aside.
13. Question: Please specify the exact number of water bars on each side of the existing stream.
 - a. Answer: Please see attached.
14. Question: What is the number of Waterbars we will need on each side?
 - a. Answer: please see attached.
15. Question: Are we to lay the TSA on top of the existing trail or box out the trail?
 - a. Answer: Yes, the existing trail will need some grooming/preparation prior to application of the item 4.
16. Question: Please acknowledge and confirm that on the severe downhill slopes of the trail the contractor is to pull the material from the downhill slope into the trail to get whatever width we can achieve, which may not be the width specified in the contract documents.

- a. Answer: Yes, pull the material from the downhill slope side. The ideal width is 14 feet. However, there will be times, like a huge tree preservation, where we will have something less than 14 feet – that is OK.
17. Is there any dimension for the rock spillways?
- a. Answer: about 3' x 3' x 1'

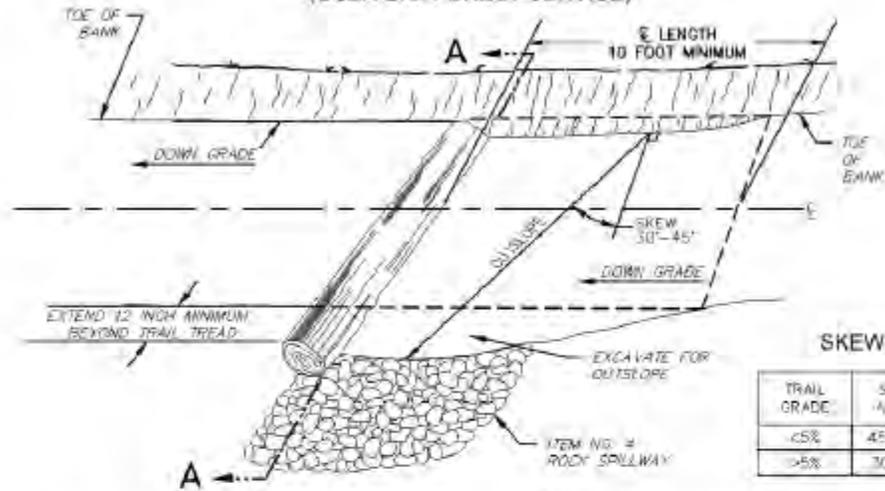
Also, The City of Glens Falls has asked that they too be listed on your insurance as an additional insured; so that means you would need to supply two separate certificates, one for the City of Glens Falls and one for the Town of Queensbury.

Thank you,
John



ATTACHMENT D (PAGE 1) – Water bar and outflow designs and locations

ATTACHMENT D
LOG OR TREATED TIMBER WATERBAR
(USDA U.S. FOREST SERVICE)

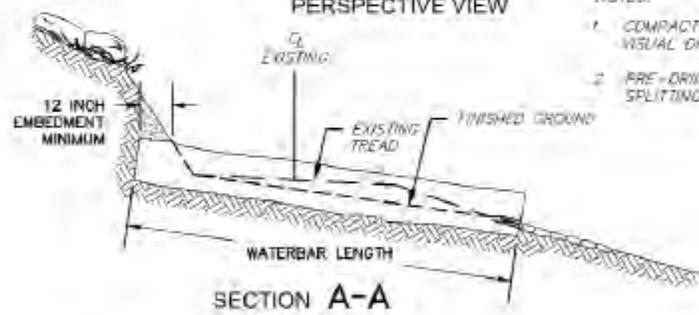


SKEW

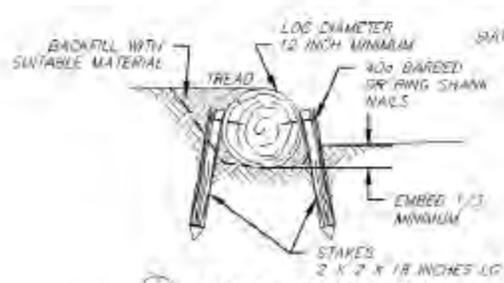
TRAIL GRADE	SKEW ANGLE
<5%	45° MAX
>5%	30° MIN

PERSPECTIVE VIEW

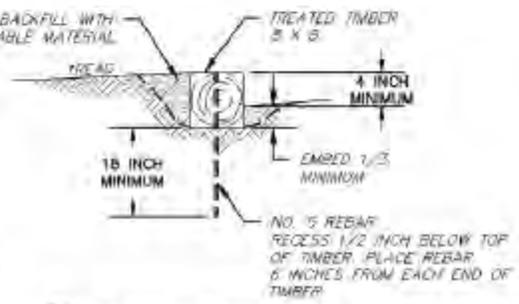
- NOTES:
1. COMPACT BACKFILL IN 6 INCH LIFTS UNTIL NO VISUAL DISPLACEMENT.
 2. PRE-DRILL HOLES FOR FASTENERS TO PREVENT SPLITTING OF LOGS OR SAWN TIMBER.



SECTION A-A



A LOG ANCHOR SECTION
PLACE STAKE ANCHOR BEYOND EDGE OF TREAD



C TREATED TIMBER ANCHOR SECTION

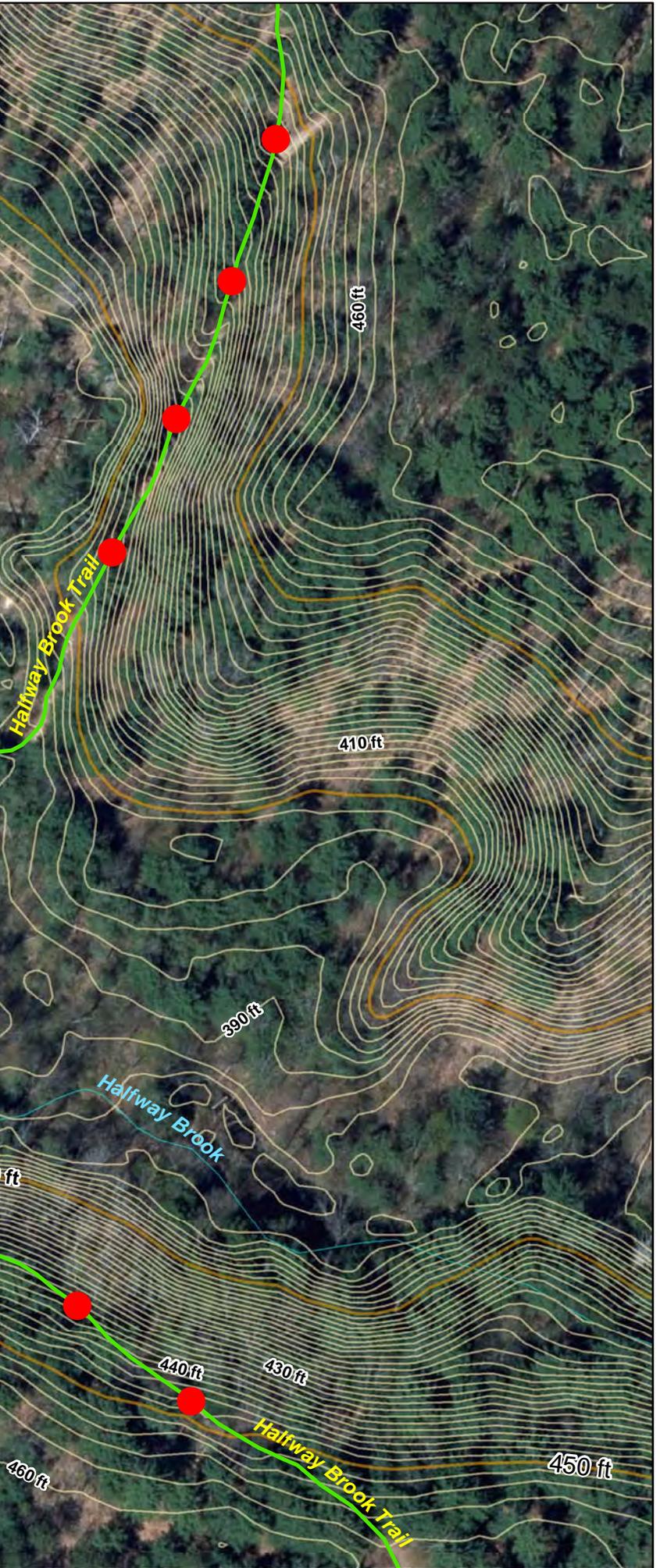
Halfway Brook Trail Potential Stormwater Water Bar Locations

Contour Interval: 2 Ft.



Map Produced by TOGGIS: 2/2020

 Potential Water Bar Locations



Map produced by the Town of Queensbury
for GENERAL REFERENCE PURPOSES ONLY.

Contours provided by NYS GIS Clearinghouse

Attachment B: Informational Signage

B1: Sample Text

B2: Illustrative Location Plan- Parking Areas

Halfway Brook Trail Signage

Kiosk & Trailhead Signage:

- Inform users of other Town recreation areas and their uses.
- Include a map with other Town recreation areas.
- Contact information for maintenance requests (Town) and illegal activities (City)

(A)

**Please Respect the Rules of the Watershed
If you would like to recreate- check out
Queensbury's Recreation Areas:**

Canoeing & Kayaking:

- Hudson River Park
- Glen Lake Canoe Launch
- Feeder Canal Park

Boating:

- Hudson River Park
- Glen Lake

Fishing:

- Hovey Pond
- Gurney Lane Recreation Area
- Glen Lake
- Feeder Canal Park
- Hudson River Park
- Meadowbrook Preserve

Swimming

- Gurney Lane Recreation Area

Picnicking & Pavilions:

- Gurney Lane Recreation Area
- Hovey Pond

Other Trails (no motorized vehicles):

- Feeder Canal Park
- Gurney Lane Recreation Area
- Hudson Point Preserve
- Meadowbrook Preserve
- Rush Pond Trail

(B) MAINTENANCE REQUESTS:

Trail maintenance requests can be made through the Town of Queensbury Parks and Recreation Department.
(518) 761-8216

ILLEGAL ACTIVITY:

Any observed illegal activity or unauthorized uses of the trail should be reported to the Warren County Sherriff's Office

Warren County Sherriff Office
(518)743-2500

Regulatory & Cautionary Signage:

- Permitted Uses
- Prohibited Uses
- "Hours of Operation" – Dawn to Dusk

(C) OPEN TO THE PUBLIC DURING DAYLIGHT HOURS FOR NON-MOTORIZED RECREATION ONLY

Please stay on the trail and observe all posted rules. Dogs are only permitted on leash.

The Following Activities are PROHIBITED:

- Camping
- Fires
- Water-Based Activities
(Fishing, Swimming, Boating)
- Tree Clearing
- Horses & Equestrian
- Dumping
- Motor Vehicles
(ATVs, motorcycles, snowmobiles)
- Use of Firearms: Hunting & Shooting

Interpretive Signage:

- a) Inform users of the importance of the Halfway Brook Watershed in protecting the city's drinking water
- b) Reference WCSWD for additional information about water resources

The Halfway Brook Watershed

The Halfway Brook watershed is a protected resource. It is the primary source for drinking water for the City of Glens Falls. Any impact to water quality as a result of human activities may prove harmful to our drinking water. While some regulations are in place to protect our water resources, it is largely up to individuals and organizations to pay attention to their activities and ensure that their day to day activities do not contribute to non-point source pollution.

For more information about the Halfway Brook Watershed check out the Warren County Soil and Water Conservation District (www.warrenswcd.org). A watershed assessment plan is readily accessible on their website.

SIGNAGE
HALFWAY BROOK TRAIL
To be used at parking area access locations

USE CAUTION
ENTERING
PARKING AREA



SIGNAGE
HALFWAY BROOK TRAIL
To be used at gate locations along trail

PUBLIC PROHIBITED
BEYOND THIS POINT

PLEASE STAY ON
HALFWAY BROOK TRAIL



SIGNAGE

HALFWAY BROOK TRAIL

To be used at various perimeter locations of Lower Watershed

PUBLIC PROHIBITED

NO DUMPING



SIGNAGE
HALFWAY BROOK TRAIL
To be used at trail head parking

HALFWAY BROOK TRAIL
THANK YOU

for your efforts and contribution in helping to create this trail

City of Glens Falls Mayor Dan Hall and Common Council: Jim Campinell, Bill Collins, Diana Palmer, Scott Endieveri, Jim Clark, and Jane Reid

Town of Queensbury Supervisor John Strough and Town Board: Catherine Atherden, George Ferone, Tony Metivier and Jennifer Switzer

City of Glens Falls Water & Sewer Commission: Mayor Dan Hall, Peter Accardi, Woody Green, Ronald Green, David Klingebiel and Chris Reed

Engineering and Design: Chazen Companies, John Strough, GIS Administrator George Hilton, Jim Underwood

Lower Watershed Recreation Management Plan Committee: Scott Endieveri, Steve Gurzler, Woody Green, Wendy Mathews, John Strough, Jim Underwood

Legal: Bob Hafner, Pam Hunsinger and David Klingebiel

Grant: State Senator Betty Little, Governor Andrew Cuomo, New York State Dormitory Authority, Senior Planner Stu Baker

Donors: Richard Schermerhorn, Warren County Safe & Quality Bicycling Organization

Volunteers: ?

SIGNAGE
HALFWAY BROOK TRAIL
To be used at trail head parking

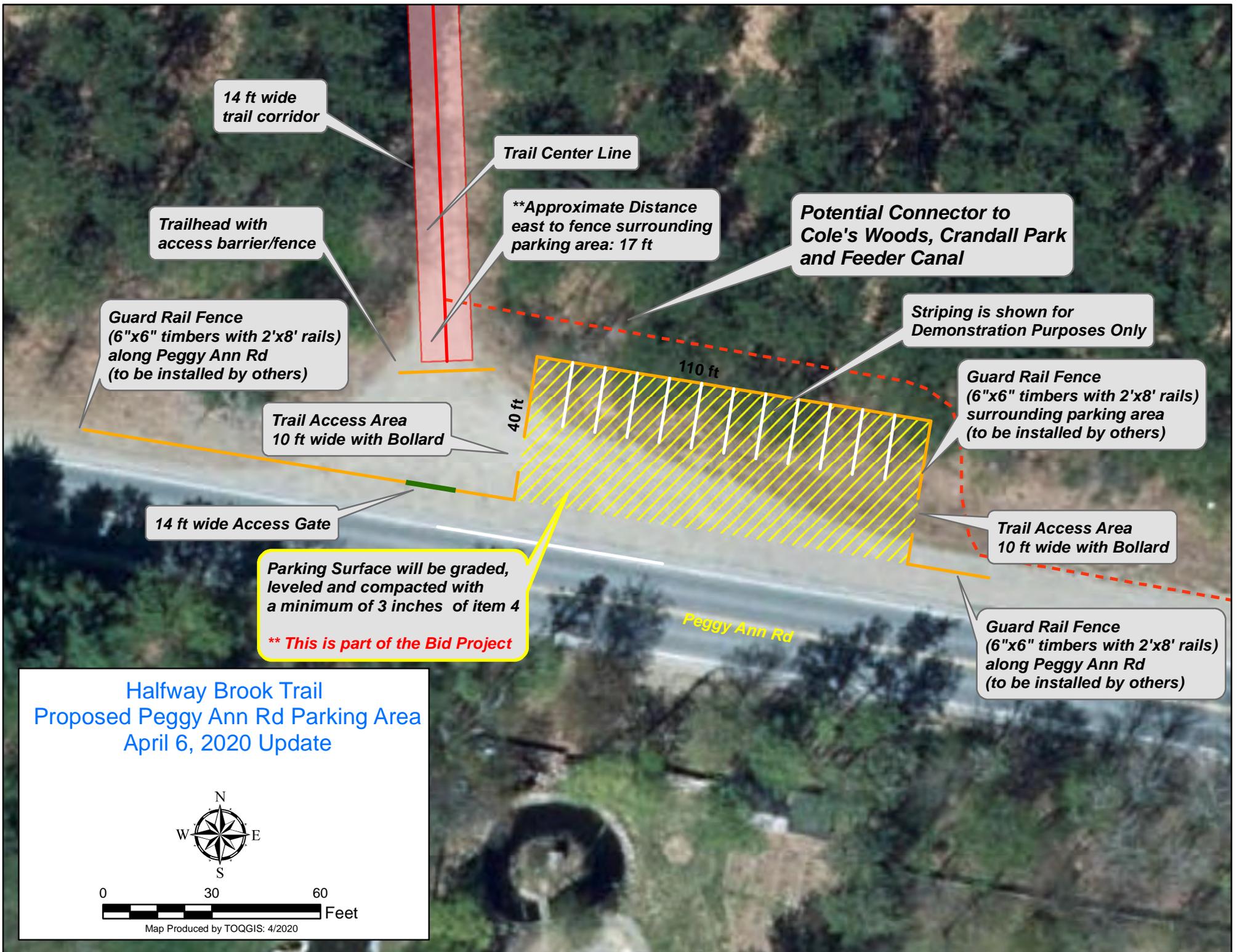
HALFWAY BROOK TRAIL

USER AGREEMENT

- OPEN DAWN TO DUSK
- RESTRICTED TO PEDESTRIAN USE ONLY
- NO MOTORIZED VEHICLES
- ALLOWED: HIKING, SNOWSHOE, SKI, BICYCLE
- DOGS MUST BE LEASHED, TAKE AWAY WASTE
- THIS TRAIL TRAVERSES THE GLENS FALLS WATERSHED, THEREFORE PUBLIC USE IS RESTRICTED TO THIS TRAIL
- PUBLIC ACCESS BEYOND THE TRAIL IS PROHIBITED
- OFFENDERS OF THIS POLICY WILL BE SUBJECT TO PROSECUTION AND FINES

**PLEASE ABIDE BY THESE RESTRICTIONS SO THAT THIS
TRAIL REMAINS A PUBLIC ASSET**





14 ft wide trail corridor

Trail Center Line

Trailhead with access barrier/fence

**Approximate Distance east to fence surrounding parking area: 17 ft

Potential Connector to Cole's Woods, Crandall Park and Feeder Canal

Guard Rail Fence (6"x6" timbers with 2"x8' rails) along Peggy Ann Rd (to be installed by others)

Striping is shown for Demonstration Purposes Only

Trail Access Area 10 ft wide with Bollard

Guard Rail Fence (6"x6" timbers with 2"x8' rails) surrounding parking area (to be installed by others)

14 ft wide Access Gate

Parking Surface will be graded, leveled and compacted with a minimum of 3 inches of item 4
**** This is part of the Bid Project**

Trail Access Area 10 ft wide with Bollard

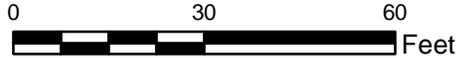
Guard Rail Fence (6"x6" timbers with 2"x8' rails) along Peggy Ann Rd (to be installed by others)

Halfway Brook Trail Proposed Peggy Ann Rd Parking Area April 6, 2020 Update



Map Produced by TOGGIS: 4/2020

Halfway Brook Trail Proposed Potter Rd Parking Area April 6, 2020 Update



Map Produced by TOQGIS: 4/2020

**Guard Rail Fence
(6"x6" timbers with 2'x8' rails)
along Potter Rd
(to be installed by others)**

**Trail Access Area
10 ft wide with Bollard**

**Striping is shown for
Demonstration Purposes Only**

**Parking Surface will be graded,
leveled and compacted with
a minimum of 3 inches of item 4**

**** This is part of the Bid Project**

**Guard Rail Fence
(6"x6" timbers with 2'x8' rails)
along Potter Rd
(to be installed by others)**

14 ft wide Access Gate

**Trail Access Area
10 ft wide with Bollard**

**Guard Rail Fence
(6"x6" timbers with 2'x8' rails)
surrounding parking area
(to be installed by others)**

Trail Center Line

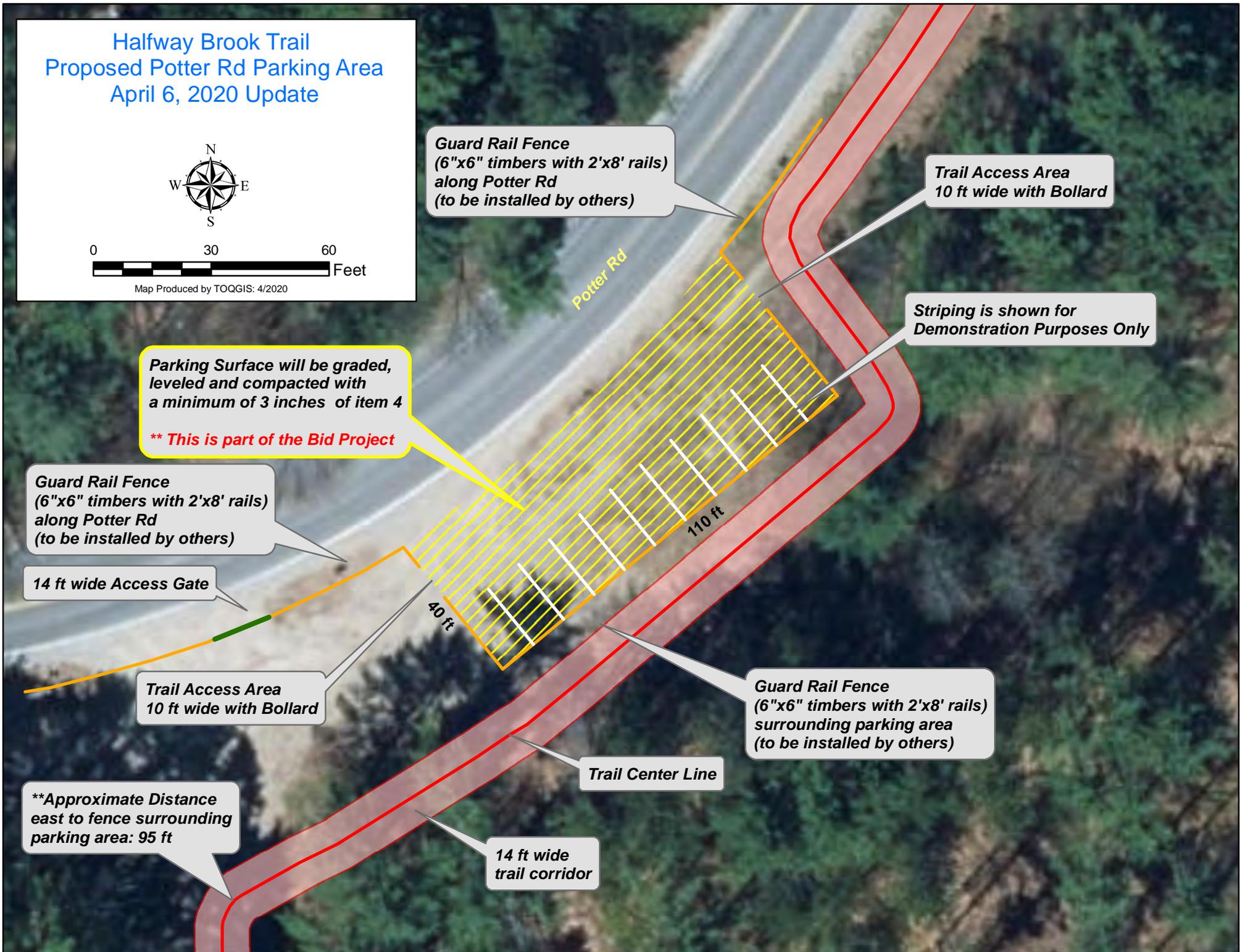
****Approximate Distance
east to fence surrounding
parking area: 95 ft**

**14 ft wide
trail corridor**

Potter Rd

110 ft

40 ft



Attachment C: Gate Locations & Detail

C1: Trail Gates to be Installed by Town -
C2: Watershed Gate Locations

**Town of Queensbury
Halfway Brook Trail
Proposed Access Gates**



0 500 1,000 Feet

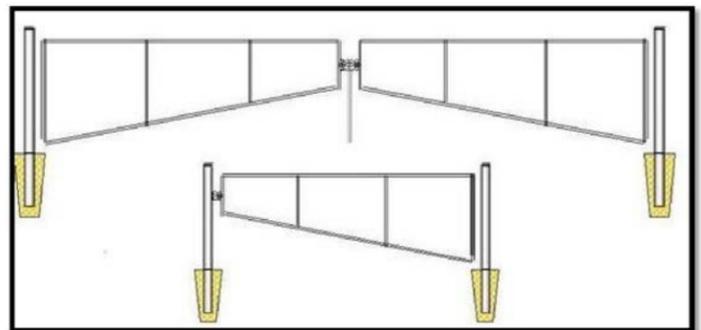
Map Produced by TOQGIS: 1/2020

**Owner: City of Glens Falls
SBL: 301.7-2-10**

**Owner: City of Glens Falls
SBL: 301.10-1-1**

Halfway Brook

Proposed Gate Type and Signage



**NO TRESPASSING
NOT FOR PUBLIC USE
WATERSHED
USE HALFWAY
BROOK TRAIL ONLY**

**CITY OF GLENS FALLS
TOWN OF QUEENSBURY**

Disclaimer:
This map is for GENERAL REFERENCE PURPOSES ONLY.
The Town of Queensbury makes no claim of the accuracy
of data displayed on this map.

Data Sources: Parcel data provided by Warren County Office
of Real Property; Topographic Contours provided by NYS GIS
Clearinghouse; Aerial Imagery provided by NYS
GIS Clearinghouse

Halfway Brook Lower Watershed

Existing and Proposed
Access Barrier Locations

Legend

Access Gate Locations

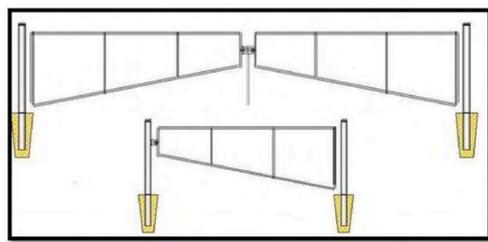
- Existing Gate
- Proposed Gate
- Proposed Halfway Brook Trail
- Roads



Map Produced by TOGIS 6/2018

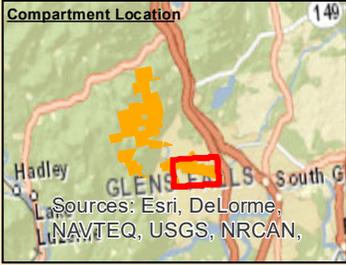


Proposed Gate Type and Signage



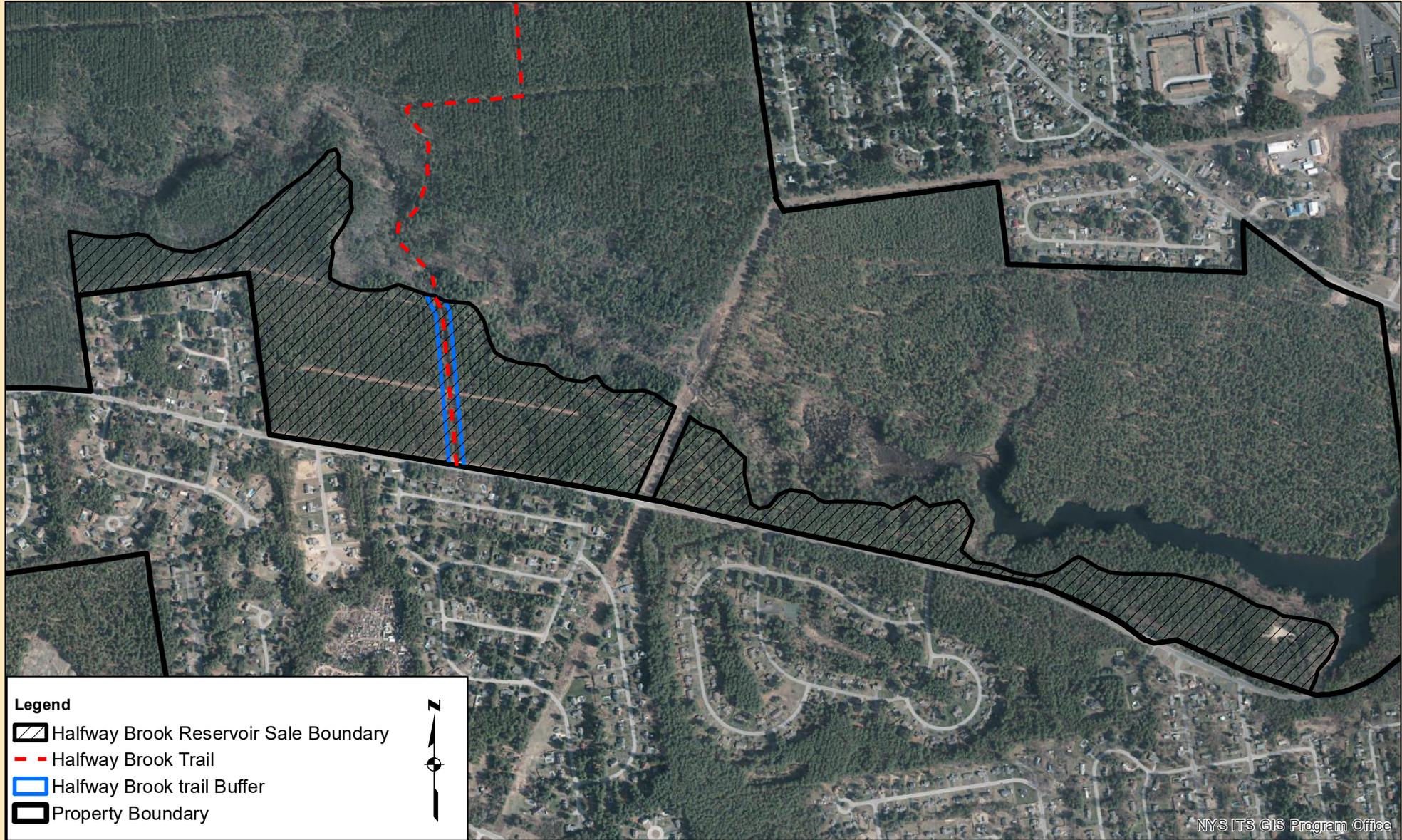
**NO TRESPASSING
NOT FOR PUBLIC USE
WATERSHED
USE HALFWAY
BROOK TRAIL ONLY**
CITY OF GLEN FALLS
TOWN OF CHEBESKUTTY

Attachment D: Harvest Map



Harvest Map
Glens Fall Watershed
Queensbury, Warren County, NY
Owned by: The City of Glens Falls
119 +/- Acres

Mapper: DBARKLEY
Map Date: 3/20/20

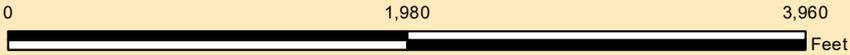


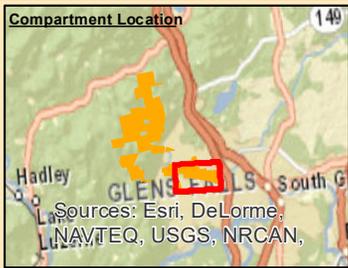
Legend

- Halfway Brook Reservoir Sale Boundary
- Halfway Brook Trail
- Halfway Brook trail Buffer
- Property Boundary



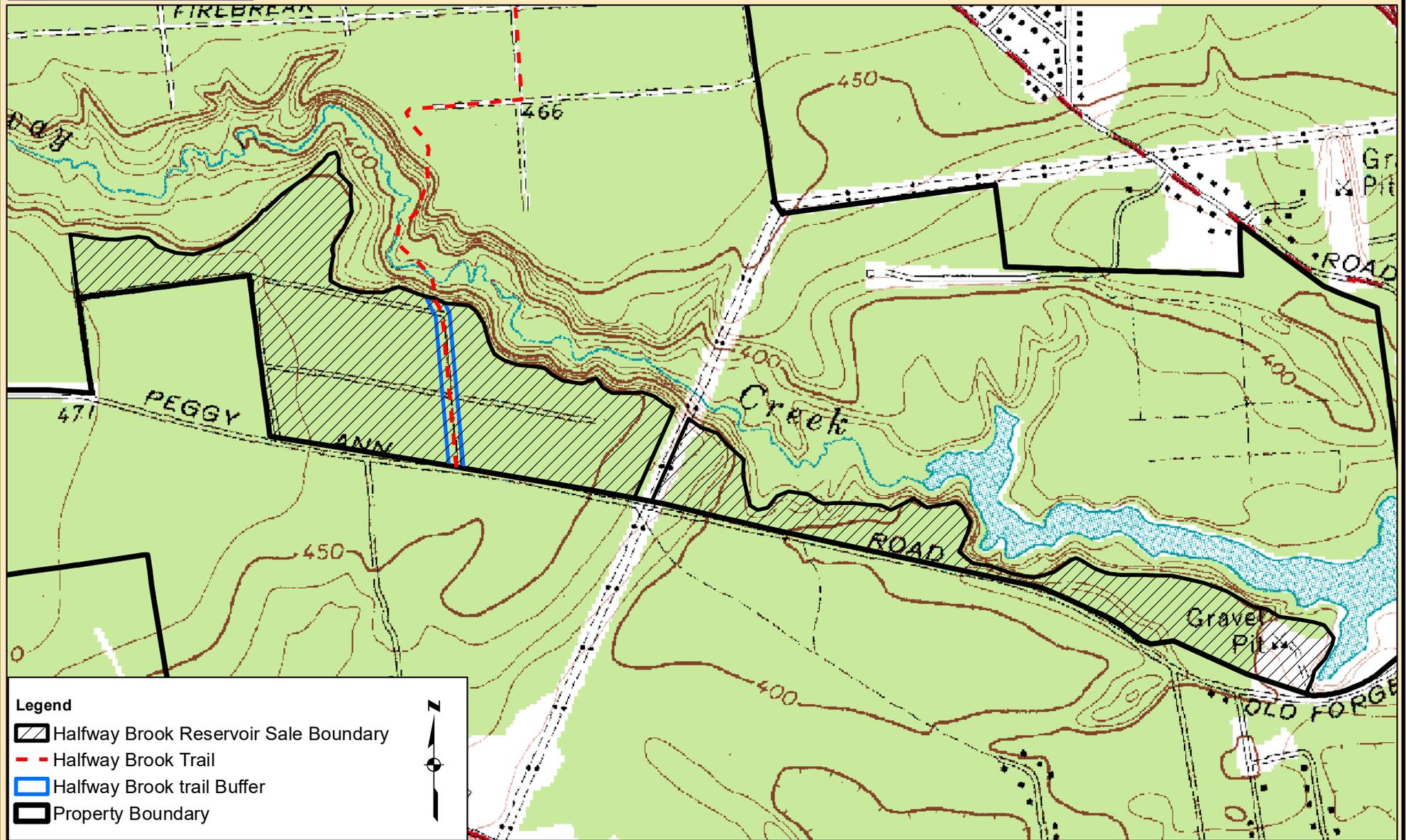
NYS ITS GIS Program Office





Harvest Map
Glens Fall Watershed
Queensbury, Warren County, NY
Owned by: The City of Glens Falls
119 +/- Acres

Mapper: DBARKLEY
Map Date: 3/20/20



Legend

- Halfway Brook Reservoir Sale Boundary
- Halfway Brook Trail
- Halfway Brook trail Buffer
- Property Boundary



Attachment E:
Informational Outline for Mailer

Attachment D:

Halfway Brook Watershed

Public Education Program Outline

Content:

History & Location of Property

Identify location of the brook and watershed with a map

Discuss historic uses of Halfway Brook and its' significance to this area

Recreational Opportunities

How to access the trail

- Include a map with diagram of trail and addresses for trail heads
- Include general information about trail (miles, terrain, surface material, etc.)

Permitted & Prohibited uses of the trail

Water Quality

What is a Watershed?

- Provide graphic demonstrating the cycle of a watershed
- Drinking Water for Glens Falls

How to protect a watershed?

- Stormwater discharges
- Prohibition on use of Phosphorous
- Prohibition of dumping lawn waste and invasive species
- Use of Fertilizer

For more information about the Watershed:

- Check out Warren County Soil and Water Conservation District
- Link to Halfway Brook Watershed Management Plan on Town/City websites

Format and Distribution:

One-Page/Flyer

The educational program content could be formatted on a, one-page front and back, flyer. This would make distribution easier and be cost-effective when mailing.

Direct Mail

Send informational mailer to adjacent landowners and City of Glens Falls residents

Distribute program material to other interest groups such as the Queensbury Land Trust