

**NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION/  
U.S. ARMY CORPS OF ENGINEERS  
JOINT APPLICATION FORM**

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**New York City Department of Environmental Protection  
Bureau of Engineering Design and Construction  
Capital Project WM-30, in Westchester County, NY**

**Replacement of Baptist Church Road Bridge, Town of  
Yorktown, NY**

**BIN: 2-26243-0**

**APPLICANT:**

*New York City Department of Environmental Protection  
Bureau of Engineering Design & Construction  
95-05 Horace Harding Expressway  
Corona, NY 11368  
Attn: Ana Barrio*

**DESIGN TEAM:**

*Hardesty & Hanover, LLC  
1501 Broadway  
New York, New York 10036*

**PREPARED BY:**

*EnTech Engineering, P.C.  
17 State Street, 36<sup>th</sup> Floor  
New York, New York 10004*

**July 2021**

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# TABLE OF CONTENTS

## Section/Description

Joint Application Form .....	2
Attachment 1: Supplement – Project Information .....	6
Attachment 2: Project Location Map.....	15
Attachment 3: Site Photographs.....	17
Attachment 4: Project Plans.....	29
Attachment 5: USFWS and Natural Heritage Program Correspondence .....	76
Attachment 6: Historic and Cultural Resources.....	82
Attachment 7: NYSDEC Wetland Boundary Map/ Wetland Survey .....	84
Attachment 8: Approximate Disturbance Limits.....	125
Attachment 9: Environmental Review.....	127

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JOINT APPLICATION FORM

For Permits for activities affecting streams, waterways, waterbodies, wetlands, coastal areas, sources of water, and endangered and threatened species.

You must separately apply for and obtain Permits from each involved agency before starting work. Please read all instructions.

**1. Applications To:**

**>NYS Department of Environmental Conservation**  Check here to confirm you sent this form to NYSDEC.

Check all permits that apply:

<input checked="" type="checkbox"/> Stream Disturbance	<input type="checkbox"/> Dams and Impoundment Structures	<input type="checkbox"/> Tidal Wetlands	<input type="checkbox"/> Water Withdrawal
<input checked="" type="checkbox"/> Excavation and Fill in Navigable Waters	<input checked="" type="checkbox"/> 401 Water Quality Certification	<input type="checkbox"/> Wild, Scenic and Recreational Rivers	<input type="checkbox"/> Long Island Well
<input type="checkbox"/> Docks, Moorings or Platforms	<input type="checkbox"/> Freshwater Wetlands	<input type="checkbox"/> Coastal Erosion Management	<input type="checkbox"/> Incidental Take of Endangered / Threatened Species

**>US Army Corps of Engineers**  Check here to confirm you sent this form to USACE.

Check all permits that apply:  Section 404 Clean Water Act  Section 10 Rivers and Harbors Act

Is the project Federally funded?  Yes  No

If yes, name of Federal Agency:

General Permit Type(s), if known:

Preconstruction Notification:  Yes  No

**>NYS Office of General Services**  Check here to confirm you sent this form to NYSOGS.

Check all permits that apply:

<input type="checkbox"/> State Owned Lands Under Water	<input type="checkbox"/> Utility Easement (pipelines, conduits, cables, etc.)	<input type="checkbox"/> Docks, Moorings or Platforms
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**>NYS Department of State**  Check here to confirm you sent this form to NYSDOS.

Check if this applies:  Coastal Consistency Concurrence

**2. Name of Applicant**

**Taxpayer ID (if applicant is NOT an individual)**

**Mailing Address**

**Post Office / City**  **State**  **Zip**

**Telephone**  **Email**

Applicant Must be (check all that apply):  Owner  Operator  Lessee

**3. Name of Property Owner (if different than Applicant)**

**Mailing Address**

**Post Office / City**  **State**  **Zip**

**Telephone**  **Email**

**For Agency Use Only** Agency Application Number:

**4. Name of Contact / Agent**  
 Maxwell Todd / EnTech Engineering, P.C.

Mailing Address: 17 State Street, 36th Floor  
 Post Office / City: New York  
 State: NY Zip: 10004

Telephone: 646-722-0000 x 147  
 Email: mtodd@entech.nyc

**5. Project / Facility Name**  
 CRO-530B Replacement of Baptist Church Road Bridge  
 Property Tax Map Section / Block / Lot Number: BIN 2-26243-0 / TaxID: 47.13-1-3

Project Street Address, if applicable: N/A  
 Post Office / City: Town of Yorktown  
 State: NY Zip: 10598

Provide directions and distances to roads, intersections, bridges and bodies of water  
 Baptist Church Road Bridge carries Baptist Church Road over Hunter Brook adjacent to the New Croton Reservoir. The project site is approximately 2,300 feet east of Croton Avenue and 1,300 feet west of Hunter Brook Road.

Town  Village  City  
 County: Westchester  
 Stream/Waterbody Name: Hunter Brook

Project Location Coordinates: Enter Latitude and Longitude in degrees, minutes, seconds:  
 Latitude: 41° 15' 34.21" Longitude: 73° 50' 30.20"

**6. Project Description:** Provide the following information about your project. Continue each response and provide any additional information on other pages. **Attach plans on separate pages.**

a. Purpose of the proposed project:  
 The Baptist Church Road Bridge carries light traffic along Baptist Church Road over Hunter Brook, a tributary to the New Croton Reservoir in the Town of Yorktown, New York. The existing structure is a 50' single span closed spandrel unreinforced concrete arch structure constructed in 1906. The proposed project involves the replacement of the Baptist Church Road Bridge to address the poor concrete conditions, structural deficiencies and geometrical substandard features.

b. Description of current site conditions:  
 The existing Baptist Church Road is classified as a minor collector, a two lane roadway with one lane in each direction. The roadway is approximately 20 feet wide, carrying two 10-foot wide lanes and limited to no shoulders and no pedestrian accommodations within the project area. Based on the previous inspection, the railing had been impacted and displaced and has section loss from coating failure; the underside of the arch and wingwalls were in fair condition and exhibited cracks with efflorescence; and the guide railings at both sides of the approaches were in poor condition. See attachment 1 for additional details, attachment 2 for a location map, and attachment 3 for photo log.

c. Proposed site changes:  
 For this project, selected portions of the existing approach roadway, roadway surface over the existing bridge, existing approach guiderail within the project limits, and selected tree and rock outcropping under clearing and grubbing will be removed. The new replacement structure will consist of a single-span precast reinforced concrete arch, with splayed wing walls supported on spread footings founded on bedrock. The current roadway alignment will be shifted slightly to the west. The proposed replacement bridge will have 4 wingwalls and 2 retaining walls. The arch opening shall be 54'-0" and the out-out width shall be 34'-2". The existing granite capstones will be cleaned, piece marked and stored on-site to be reused on the proposed bridge structure. Selected rock outcropping on the southwest approach will be removed.

d. Type of structures and fill materials to be installed, and quantity of materials to be used (e.g., square feet of coverage, cubic yards of fill material, structures below ordinary/mean high water, etc.):  
 Structures to be installed include concrete arch, spandrel wall, steel bridge railing, retaining structure, cofferdam, temporary concrete barrier, temporary work zone traffic devices, and landscaping materials. See attachment 4 for the contract drawings that contain the location of structures and fill materials to be installed and attachment 1 for type and quantity of materials to be used.

e. Area of excavation or dredging, volume of material to be removed, location of dredged material placement:  
 The total area of excavation or dredging is approximately 0.45 acres. Approximately 870 cubic yards of substructure removal, 3,600 cubic yards of unclassified excavation and disposal, 128 linear feet of bridge railing removal and disposal, 213 linear feet corrugated beam guide railing removal and disposal, and 350 cubic yards of rock excavation are planned. See attachment 4 for the contract drawings that illustrate the proposed grading and stockpile location.

f. Is tree cutting or clearing proposed?  Yes If Yes, explain below.  No  
 Timing of the proposed cutting or clearing (month/year): November 1 to March 31  
 Number of trees to be cut: 89 Acreage of trees to be cleared: 0.4

g. Work methods and type of equipment to be used:

For the bridge demolition, the removal of existing signs, bridge railing, unreinforced concrete arch and spandrel walls will be completed according to the drawings DS-1 to DS-3 in attachment 4. For the bridge reconstruction, the proposed signage, striping and structures installation will be completed according to the drawings SGN-1 and GS-1 in attachment 4. Temporary turbidity curtains will be installed in the waterway around bridge abutment prior to the start of construction. For concrete removal, all debris will be contained and collected, ground and waterway protection will be in place. The general types of equipment includes but is not limited to grinder, hoeram, concrete saw, vibrator hammer, hydraulic shears, dump truck, and excavator diesel hydraulic crawler. Equipment for removal of rock outcropping will include drills and hydraulic hammers. See attachment 1 for details on the equipment to be used on site.

h. Describe the planned sequence of activities:

Mobilization; installing detour signs and road closure barricades; soil erosion and sediment control and temporary storm water measures; removing entire bridge superstructure; completely removing the bridge substructure; reconstructing the bridge; grading and landscaping; removing all the detour signs and demobilization. See attachment 1 for additional details.

i. Pollution control methods and other actions proposed to mitigate environmental impacts:

Activities will be conducted such that dust, debris, waste, and construction materials are not released into the air or spilled into the soil, water, and/or sediment in accordance with all applicable laws and regulations. Equipment entering the waterway will be steam cleaned and inspected prior entering the waterbody. The contractors will be required to take appropriate precautions in accordance with OSHA and USEPA regulations when removing lead based paint or performing activities that could result in lead paint disturbance. To reduce dust, the following pollution control methods will be implemented: tarp, dust covers, and wetting the soil. The contractor will use food grade hydraulic oils and environmentally safe antifreeze in the equipment as well to mitigate environmental impacts.

j. Erosion and silt control methods that will be used to prevent water quality impacts:

All stockpiles shall be located on flat areas. Stockpiles will be covered with plastic covers to prevent the erosion of the stockpile. Plastic safety fencing will be installed to keep the work activities within the project limits, as well as individuals from entering the work zone. Sediment controls will be placed at the toe of the slopes as well as around the stockpile areas to prevent soil migration. Turbidity curtains will be placed around the abutments and approach work, the curtains will have a gap in the middle to allow fish passage as per NYSDEC requirements. A cofferdam will be installed to enable construction activities to be performed without disturbing the existing water body. See drawings in attachment 4.

k. Alternatives considered to avoid regulated areas. If no feasible alternatives exist, explain how the project will minimize impacts:

The alternative option to leave the bridge as it is does not meet the project objectives; thus the bridge must be replaced as it poses a safety hazard to the community and the environment. To avoid disturbing the waterbody the following mitigation measures will be implemented: turbidity curtain, plastic covers, silt fences, cofferdam, and rip-rap for erosion control and dust control.

l. Proposed use:  Private  Public  Commercial

m. Proposed Start Date:  Estimated Completion Date:

n. Has work begun on project?  Yes If Yes, explain below.  No

o. Will project occupy Federal, State, or Municipal Land?  Yes If Yes, explain below.  No

New York City Department of Environmental Protection owns the bridge, land and surrounding waterbody.

p. List any previous DEC, USACE, OGS or DOS Permit / Application numbers for activities at this location:

DEC Permit Number: 3-5554-00167/00001, 3-5554-00167/00003  
USACE Application Number: 2005-00070-YW

q. Will this project require additional Federal, State, or Local authorizations, including zoning changes?

Yes If Yes, list below.  No

The project will not require zoning changes. The project will require Federal approvals and authorizations from US Army Corps of Engineers (USACE) and US Fish & Wildlife Service (USFWS); New York State approvals and authorizations from New York State Department of Environmental Conservation (NYSDEC) and New York State Historic Preservation Office (NYSHP); and local town permits and authorizations from the Town of Yorktown. See Attachment 5 for the USFWS and NHP Correspondence . See Attachment 6 for the Historic and Cultural Resources.

**7. Signatures.**

Applicant and Owner (If different) must sign the application. If the applicant is the landowner, the **landowner attestation form** can be used as an electronic signature as an alternative to the signature below, if necessary. Append additional pages of this Signature section if there are multiple Applicants, Owners or Contact/Agents.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief.

Permission to Inspect - I hereby consent to Agency inspection of the project site and adjacent property areas. Agency staff may enter the property without notice between 7:00 am and 7:00 pm, Monday - Friday. Inspection may occur without the owner, applicant or agent present. If the property is posted with "keep out" signs or fenced with an unlocked gate, Agency staff may still enter the property. Agency staff may take measurements, analyze site physical characteristics, take soil and vegetation samples, sketch and photograph the site. I understand that failure to give this consent may result in denial of the permit(s) sought by this application.

False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the NYS Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than \$10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

**Signature of Applicant**

Date

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Applicant Must be (check all that apply):  Owner  Operator  Lessee

Printed Name

Title

Ana Barrio / NYCDEP	Deputy Commissioner
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**Signature of Owner (if different than Applicant)**

Date

--	--

Printed Name

Title

--	--

**Signature of Contact / Agent**

Date

--	--

Printed Name

Title

Maxwell Todd / EnTech Engineering, PC	Environmental Manager
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**For Agency Use Only**

**DETERMINATION OF NO PERMIT REQUIRED**

Agency Application Number

--	--

(Agency Name) has determined that No Permit is required from this Agency for the project described in this application.

Agency Representative:

Printed Name

Title

--	--

Signature

Date

--	--

**ATTACHMENT 1**  
**SUPPLEMENT – PROJECT INFORMATION**

DRAFT

New York City Department of Environmental Protection  
Bureau of Engineering Design and Construction  
Capital Project WM-30  
Contract CRO-530B  
Town of Yorktown, Westchester County, New York

## **ATTACHMENT 1 PROJECT INFORMATION**

### *INTRODUCTION*

This application and supporting documentation is submitted to the New York State Department of Environmental Conservation (DEC) and the United States Army Corps of Engineers (USACE) for a project involving the replacement of the Baptist Church Road Bridge over the Hunter Brook adjacent to the New Croton Reservoir within the Town of Yorktown, Westchester County, New York (BIN 2-26243-0). The bridge is a 50-foot long closed spandrel and unreinforced concrete arch with splayed wingwalls and granite capstones. The arch supports fill topped with asphalt pavement. The New York City Department of Environmental Protection (DEP) owns the Baptist Church Road Bridge. The project is a Design-Bid-Build project. Based on the previous inspection, cracks were identified in the substructure and superstructure with efflorescence and water leakage. Therefore, the replacement of the Baptist Church Road Bridge is necessary to prevent future deterioration and potential continual maintenance. The project involves the removal of a selected portion of existing approach roadway, the entire bridge structure, the approach guiderail, selected trees and rock outcropping for site clearance and grubbing as well as reconstruction of a new bridge with proposed 12 ft travel lanes, 2 ft shoulders on both sides and replacement guiderails. See attachment 2 for site location and attachment 3 for site photograph.

### *DESCRIPTION OF CURRENT SITE CONDITIONS (Continuation of Question 6.b.)*

#### *Watercourses*

The Hunter Brook under the Baptist Church Road Bridge is classified as Class AA source of drinking water according to DEC. A majority of the Hunter Brook stream approximately 0.11 miles northwest to the project site is categorized as a trout-spawning stream. Hunter's Brook is a small stream which meanders from Mill Pond south, and eventually flows into the New Croton Reservoir under the Baptist Church Road Bridge as a part of the New York City water supply system.

#### *Wetlands*

The United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps a non-wetland water (L1UBHh – Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded, Diked/Impounded) on the project site. The connected, non-wetland water



bodies are Hunter Brook and New Croton Reservoir. The site does not contain any mapped NWI wetlands or DEC regulated wetlands although there is a mapped wetland located approximately 600 feet east of the bridge. The offsite DEC mapped wetland is regulated pursuant to Article 24 Freshwater Wetlands Act and is identified as Wetland A-41, Class 1. Class 1 wetlands provide the most critical of the State's wetland benefits, reduction of which is acceptable only in the most unusual circumstances. This same wetland feature is also mapped by NWI as a PFO1A (Palustrine, Forested, Broad-leaved, Deciduous, Temporary Flooded) wetland.

A wetland delineation was conducted by Amy S. Greene Environmental Consultants, Inc. in January 2019. Wetlands within the study area consist of two (2) small palustrine forested freshwater wetland fringes along the edge of the reservoir, southwest of the roadway embankment. See attachment 7 for the DEC Wetland Boundary Map and the Wetland Delineation Survey.

### *Topography*

Topography within the project area is generally variable, with significantly steep slopes occurring along the roadway embankment. The predominant drainage pattern is towards Hunter Brook and New Croton Reservoir.

### *SEQRA and CEQR*

In accordance with the State Environmental Quality Review Act (SEQRA), authorized by Article 8 of the Environmental Conservation Law and its implementing regulations as set forth in 6NYCRR Part 617, and the New York City Environmental Quality Review (CEQR) process as set forth in Executive Order 91 of 1977 and its amendments. The DEP Bureau of Environmental Planning and Analysis (BEPA) has concluded that the proposed action is classified as an Unlisted Action and is conducting a coordinated environmental review. The Short Environmental Assessment Form (SEAF) (EAS) is included in attachment 9 Environmental Review. The Lead Agency Letter will be circulated to the involved regulatory agencies by the NYCDEP Bureau of Environmental Planning & Analysis.

### *Protected Species*

An USFWS online consultation was completed using the Information, Planning, and Consultation System (IPAC) on January 14, 2021. DEP also reviewed data from the Natural Heritage Program (NHP) (dated January 14, 2021). The purpose of the consultations is to identify any threatened species, endangered species, and critical habitats that may be within the project limits or in the vicinity.

- *Indiana Bat*: According to the IPaC species list, the Indiana Bat (*Myotis sodalis*) was identified as potentially present in the area. The nearest hibernaculum is over 11.5 miles from the project site. A Bridge/Structure Assessment would be conducted by DEP. If no

bat presence is identified, demolition may proceed. If presence is identified, DEP Wildlife Studies Section and BEPA would coordinate a response prior to the Contractor proceeding with demolition. Bat identification would be performed between May 15 and August 15. In order to avoid or minimize impacts on bats, tree cutting, or clearing shall not occur between April 1 and October 31 without prior DEP approval.

- Bog Turtle: IPaC also identified Bog Turtle as a potential presence. A DEP wetland scientist determined that no indications of habitat which support Bog Turtle were present and therefore a Phase I Habitat Survey is not required.
- Fence Lizard: The project location falls within a buffer identified by NHP as having the potential for presence of the fence lizard, and NYS threatened species. NHP data identified the Fence Lizard (*Sceloporus undulates*) as a species that was last found in the vicinity in 1930. The DEC Fence Lizard Fact Sheet indicates last sighting of this species in New York State in the 1950s. A DEP biologist conducted a habitat survey on February 10, 2021 and determined that no suitable habitat is present on-site. Therefore, no impacts to the fence lizard are anticipated from the proposed project.
- Bald Eagle: NHP also identified Bald Eagle (*Haliaeetus leucocephalus*) as a potential presence in the vicinity. The nearest Bald Eagle nest is 4.3 miles from the project site. Bald eagles might be located within or adjacent to the project area since they prefer undisturbed areas near large lakes and reservoirs, marshes and swamps, or stretches along rivers. To discourage perching by bald eagles and other raptors at the work site, the contractor would provide flags or anti-perching devices at the high points on cranes or other tall equipment.
- Wild Trout (*Salvelinus fontinalis*): In accordance with data from DEC's Environmental Resource Mapper and New York wild trout map, Hunter Brook upstream of the proposed project is a trout-spawning stream. In general, instream work should occur between June and September during low flow conditions and during periods to mitigate interference with bass and trout spawning. All in water work for the project, including the installation of cofferdams and turbidity curtains, will occur between June and September. Any additional restrictions specified by DEC in the permits will be added to the project specifications.
- Construction Activities: Construction activities would be monitored to prevent surface water pollution, protect threatened and endangered species, and reduce consumption of potable water. Following construction, disturbed landscape would be restored using indigenous plant species, which would provide the following benefits: visual amenity, prevent establishment of invasive species, and manage post-construction storm water runoff. The proposed project is not anticipated to result in a significant adverse impact to natural resources.

### *Historic and Cultural Resources*

Baptist Church Road Bridge is identified as *Not Eligible* to be listed on the National Register of Historic Places based on the New York State Historic Preservation Office (SHPO) website. Based on the response letter dated June 25, 2020 from the New York SHPO, there are no historic properties (including archaeological and/or historic resources) that will be affected by this project. A correspondence from SHPO is amended to this Joint Permit Application Package in attachment 6.

*TYPES OF STRUCTURES AND FILL MATERIALS TO BE INSTALLED, AND QUANTITY OF MATERIALS TO BE USED (Continuation of question 6.d.)*

Structures and materials to be installed include:

- Embankment in place: 1,740 cubic yards
- Select granular fill: 1,587 cubic yards
- Select structural fill: 1,704 cubic yards
- Geotextile bedding: 68 square yards
- Prefabricated composite structural drain: 369 square yards
- Silt fence (temporary): 605 linear feet
- Turbidity curtain (temporary): 764 linear feet
- Subbase course type I: 472 cubic yards
- 12.5 F3 top course HMA, 80 series compaction: 143 tons
- 19 F9 binder course HMA, 80 series compaction: 112 tons
- 37.5 F9 base course HMA, 80 series compaction: 456 tons
- Diluted tack coat: 197 gallons
- Miscellaneous cold milling of bituminous concrete: 233 square yards
- Cofferdams (type I) (temporary): 2 each
- Concrete for structures, class A: 418 cubic yards
- Concrete for structures, class MP: 170 cubic yards
- Footing concrete, class HP: 598 cubic yards
- Epoxy-coated bar reinforcement for structures: 156,719 pounds
- Superstructure slab with separate wearing surface, bottom formwork not required: 160 square yards
- Reinforced concrete span units: 216 square yards
- Steel bridge rail (five-rail): 149 linear feet
- Transition bridge railing: 128 linear feet
- Class B containment system for paint removal (temporary)
- Box beam guide railing (shop bent or shop mitered): 393 linear feet
- Box beam end piece: 5 each
- Box beam guide railing end assembly type IIA: 1 each
- Temporary plastic barrier fence: 962 linear feet

- Hot mix asphalt (HMA) sidewalks, driveways and bicycle paths, and vegetation control strips: 26 tons
- Topsoil – roadside: 105 cubic yards
- Type III construction barricades: 5 each
- Temporary positive barrier - category 1 – pinning prohibited: 40 linear feet
- Stone filling (fine): 6 cubic yards
- Bedding material: 4 cubic yards
- Crushed gravel: 50 cubic yards
- White paint reflectorized pavement stripes - 15 mils: 1,140 linear feet
- Yellow paint reflectorized pavement stripes - 15 mils: 1,140 linear feet
- Ground mounted sign panel less than or equal to 30 sf, with z-bars, high visibility sheeting: 38 square feet
- Type A sign post: 5 each

*WORK METHODS AND TYPE OF EQUIPMENT TO BE USED (Continuation of Question 6.g.)  
DESCRIBE THE PLANNED SEQUENCE OF ACTIVITIES (Continuation of Question 6.h.)*

The sequence of work methods and type of equipment to be used are as follows:

### **Contract Initiation**

#### Project Startup

- Construction NTP
- Approval of Contractor's submittals

### **Mobilization**

#### WZTC Measures

- Install temporary signage & barricades using flatbed truck and earth auger

#### Contractor Facilities

- Setup field office
- Deploy equipment on site

#### Soil Erosion and Sediment Control and Temporary Storm Water Measures

- Install turbidity curtain made of polypropylene mesh with skiff (previously steam cleaned per NYCDEP requirements)

### **Demolition**

1. Clearing and grubbing
2. Post Class B cleaning
3. Remove bridge railing
4. Remove granite capstones along the fascia of the roadway and wingwalls using flat bed truck and hydraulic truck mounted crane
5. Remove cast-in-place wingwalls, cast-in-place concrete arch, and embankment in place using grinder, concrete saw, hydraulic shears, dump truck, and/or excavator diesel hydraulic crawler
6. Install cofferdam and dewater

7. Remove existing foundations using using backhoe loader, hydraulic hammer, F.E. loader, and pavement removal excavator bucket. Provide new concrete spread footing foundation (for arch and wingwalls), founded on bedrock.

### **Reconstruct the Bridge**

1. Provide new concrete spread footing foundation (for arch and wingwalls), founded on bedrock
2. Provide new E54- double hinged pre-cast arch structure
3. Provide new cast in place wingwalls with anchorage for granite accents using
4. concrete truck, reinforcement bender, drills, small excavators, and miscellaneous tools
5. Provide new precast spandrel walls with independent moment slab
6. Provide new structural fill, embankment in place and topsoil (excavated soil to be stockpiled on site for use as top soil as applicable)
7. Clean and modify the existing granite capstones and reuse them on the proposed bridge structure
8. Remove cofferdam
9. Paint the proposed box beam to be rustic brown
10. Install the NYSDOT approved box beam guiderail along both sides of the roadway approaches to connect to the proposed bridge railing along the bridge
11. Reconstruct roadway and driveway

### **Grading and Landscaping**

1. Perform required grading
2. Install the proposed landscaping
3. Restore contractor staging area
4. Remove all detour signs/install proposed signs

### **As Built**

1. Prepare final copy working drawings

### *EROSION AND SEDIMENT CONTROL (Continuation of question 6.j.)*

The Contractor will use all Best Management Practices during construction operations and in a manner so as to minimize soil erosion and ensure sediment control. All necessary precautions will be taken to prevent direct or indirect contamination of all water bodies by silt, sediment, fuels, or any other pollutant associated with construction and construction procedures. All stockpiles shall be located at flat areas. Stockpiles shall be covered with plastic covers to prevent the erosion of the stockpile. The plastic covers will also limit dust and dirt circulation in the air. Sediment control shall be installed at the toe of the slope of a stockpile to prevent soil migration. Turbidity curtains would be installed in the waterway in the area of the existing substructure to control the disturbance caused by the contractor's construction activities. Stabilized construction entrances would be established at any point where construction equipment would be entering or leaving the construction site.

In addition, rip rap swales would be placed behind the wingwalls and at low points for drainage and blaze orange safety fence will be used to define the project site. Cofferdams would be used to facilitate abutment footing construction below the waterline by pumping out the water and dewatering. Sediment filter bags & haybales would be used to remove silt, sand & other debris from the dewatering operations. Winter stabilization will follow page 2.38 of the New York Standards for Erosion and Sediment Control.

### *WATER RESOURCES AND WATER QUALITY*

Any waterway equipment would be steam cleaned prior to entering the Hunter Brook and New Croton Reservoir to prevent the spread of invasive aquatic plants and animals, e.g., zebra mussel, in accordance with the requirements according to DEP's Vessel and Equipment steam cleaning procedures. Erosion and sediment control measures would be implemented during demolition to prohibit stormwater runoff from entering the Hunter Brook. Turbidity curtains will be installed in surface waters around project areas prior to the start of demolition. All stormwater controls will be inspected on a daily basis during construction, in accordance with the project's Stormwater Pollution Prevention Plan (SWPPP). Deficiencies will be brought to the attention of the contractor and corrected immediately. There will be routine monitoring of shoreline stormwater controls.

### *AIR QUALITY*

To protect the health of construction workers and the community, air monitoring will be conducted during all lead paint disturbances. For all soil disturbance and bridge demolition activities, engineering controls, administrative controls, proper PPE and warning systems will be utilized for dust control. During construction, soil stockpiles shall be stabilized and sufficiently watered to reduce fugitive dust. Water shall be applied prior to, during, and after earthmoving operations as necessary to reduce fugitive emissions. To reduce airborne pollutants in emission during construction, the contractor will limit vehicle idling times and eliminate unnecessary consumption of fuel and associated production of carbon emissions.

### *SAFETY MEASURES*

The contractor shall install all detour signs, road closure barricades, maintenance and protection of traffic (MPT), and construction staging as shown on the traffic control plan (see drawings MT-1 to MT-3 in attachment 4).

Public access to work areas at the Baptist Church Road Bridge could endanger a member of the public as well as DEP/Contractor personnel and property. The Contractor will secure work areas with temporary site perimeter protection such as blaze orange fencing, lockable site gates,

lockable gang boxes, and site lighting as appropriate. NYCDEP Recreational Permit holders will not have boat access during construction. Buoys will be placed on south side of the Baptist Church Road Bridge in New Croton Reservoir, to prevent boaters from going under the bridge during replacement.

All operations and site activities performed will follow the safety guidelines found in the Environmental Health and Safety report as well as the Safe Site Work Plan. A copy of both will be kept on site at all times.

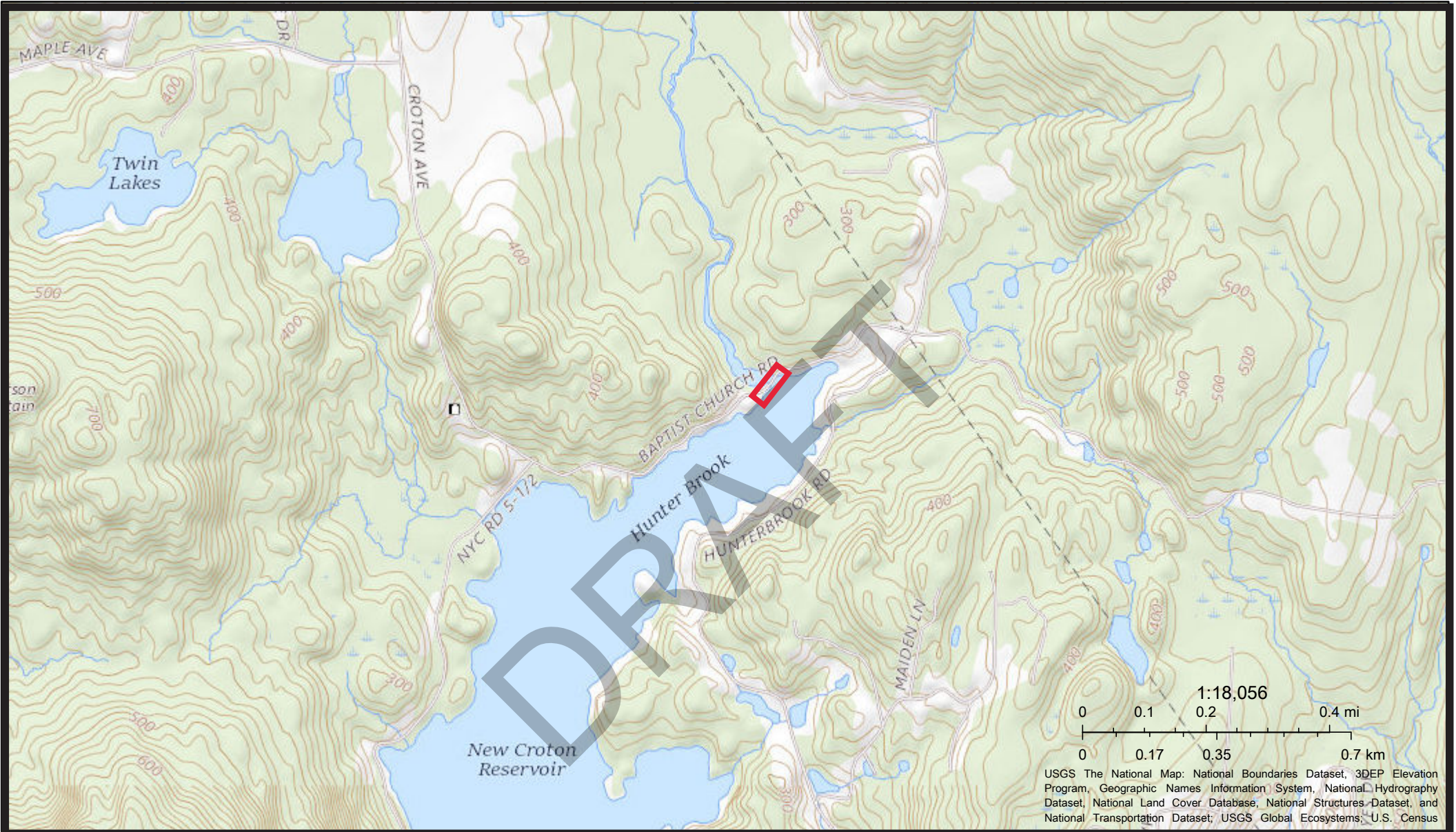
*DISTURBANCES*

<b>Baptist Church Road Bridge</b>	<b>Total Disturbed (Acreage)</b>	<b>Disturbed Open Water Area (Acreage)</b>	<b>Soil Disturbance (Acreage &amp; Activity)</b>	<b>Wetland Disturbance (Acreage &amp; Activity)</b>	<b>Sediment Disturbance (Acreage &amp; Activity)</b>	<b>Volume of Fill Material within Wetland/Buffer Zone (Cubic Yard)</b>
	0.75	0.3	0.45	0	0	0

**ATTACHMENT 2**  
**PROJECT LOCATION MAP**

DRAFT





**LEGEND:**

 Site Location



**Figure 1. Site Location Map**  
- Baptist Church Road Bridge

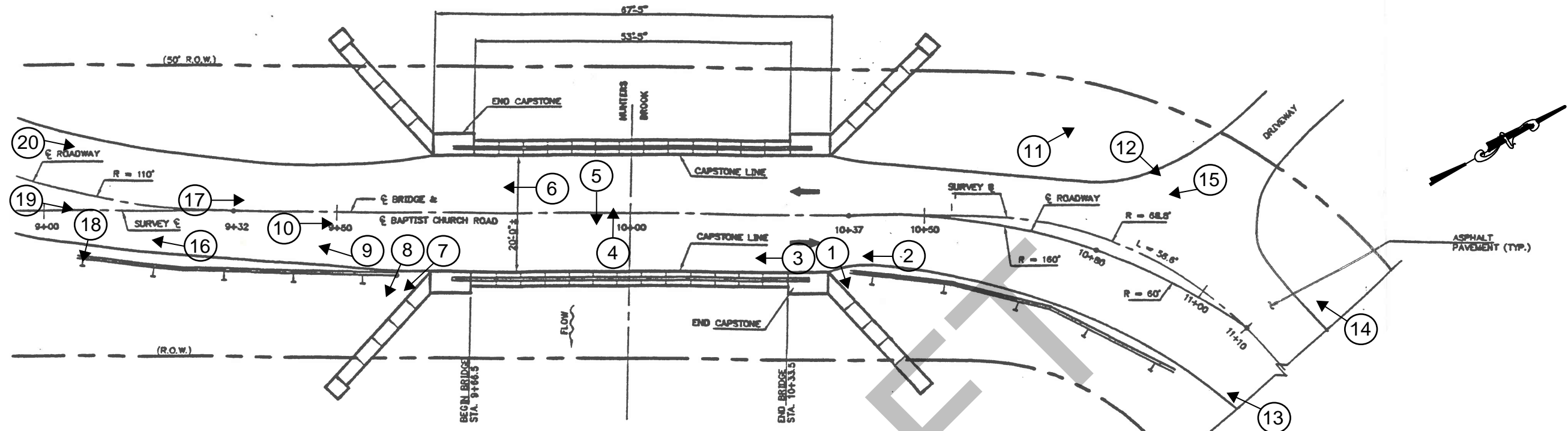


17 State Street, 36th Floor  
New York, NY 10004  
Phone: (646) 722-0000  
Fax: (212) 785-8018

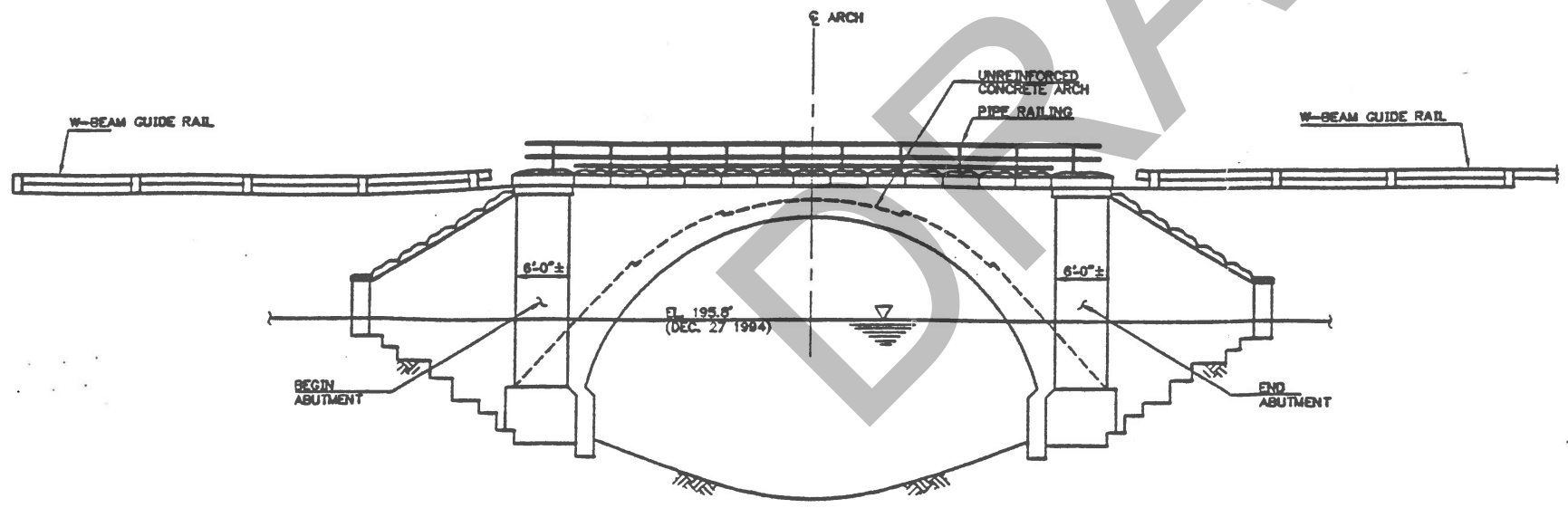
**DATE:**  
08/24/2020

**ATTACHMENT 3**  
**SITE PHOTOGRAPHS**

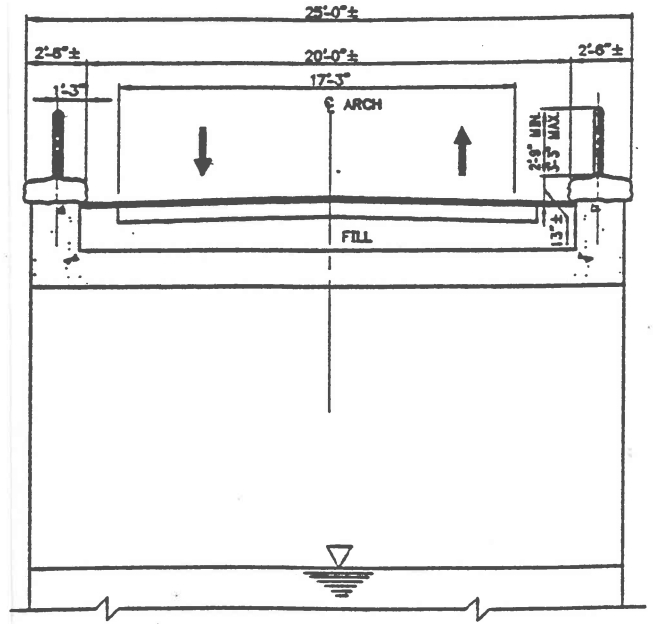
DRAFT



PLAN  
SCALE: 1" = 10'-0"



ELEVATION  
SCALE: 1" = 10'-0"



SECTION AT CROWN  
SCALE: 1/4" = 1'-0"

GRAPHIC SCALES  
CHECK BEFORE USE  
IF SHEET IS LESS THAN 22" X 34"  
IT IS A REDUCED PRINT. SCALE  
ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY:	DRAWN BY:
CHECKED BY:	
DESIGN LEAD:	
SECTION MANAGER:	



PROJECT MANAGER  
Jeffrey A. Busse, PE  
CHIEF, DIVISION OF WASTEWATER  
FACILITIES DESIGN  
DIRECTOR, IN HOUSE DESIGN

\*WARNING—IT IS A VIOLATION, OF THE NEW YORK STATE EDUCATION LAW, SECTION, 7209.2, FOR ANY PERSON, UNLESS (S)HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATION, LAW, SECTION, 7209.2.\*

**NEW YORK CITY ENVIRONMENTAL PROTECTION**  
BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
CORONA, NEW YORK 11368  
www.nyc.gov/dep

CAPITAL PROJECT WM-0030  
**BAPTIST CHURCH ROAD BRIDGE**  
PHOTO LOCATION PLAN

DATE: 09/11/2017
SCALE:
SHEET NO: 5 OF No. 15
DRAWING NO.

All inquiries regarding this drawing(s) or project should be made to NYC Environmental Protection, Bureau of Engineering Design and Construction.



**Photo No. 1**

Location: End Abutment Wingwall

Compass Direction: Northeast

Subject: Note minor vegetation and erosion behind wingwall, granite capstones in good condition.



**Photo No. 2**

Location: End Approach

Compass Direction: Southwest

Subject: Note map cracking in pavement and vegetation along gutter line, no transition between bridge railing and approach railing.



**Photo No. 3**

Location: South Fascia, Granite Capstone and Tubular Bridge Railing

Compass Direction: Southwest

Subject: Vegetation, cracked and settled pavement along gutter line and missing railing.



**Photo No. 4**

Location: Bridge Railing

Compass Direction: North

Subject: Railing is heavily rusted. Excessive map cracking in pavement. Vegetation noted in gutter line.

## Site Visit Memorandum



**Photo No. 5**

Location: Bridge Railing

Compass Direction: South

Subject: Railing is heavily rusted. Excessive map cracking in pavement. Vegetation noted in the gutter line.



**Photo No. 6**

Location: Begin Approach

Compass Direction: Southwest

Subject: Heavy vegetation and trees hinder driver's horizontal sight line; missing bridge/railing transitions.



**Photo No. 7**

Location: Begin Abutment Wingwall

Compass Direction: Southwest

Subject: Wingwall exhibits excessive erosion behind wall. Granite coping is in good condition, note missing railing transition elements.



**Photo No. 8**

Location: Begin Abutment Wingwall

Compass Direction: Southwest

Subject: Wingwall exhibits excessive erosion behind wall. Granite coping is in good condition, note missing railing transition elements.



**Photo No. 9**

Location: Baptist Church Roadway near begin approach

Compass Direction: Southwest

Subject: Roadway exhibits vegetation in travel lane, map cracking and roadway settlement repairs.



**Photo No. 10**

Location: Baptist Church Road Bridge

Compass Direction: Northeast

Subject: Roadway exhibits vegetation, heavy map cracking and pavement settlement.





**Photo No. 11**

Location: Baptist Church Road – Driveway near Baptist Church Road Bridge

Compass Direction: North

Subject: Driveway appears to be in good condition. Note overhead utility over driveway, note it is not an affect to construction.



**Photo No. 12**

Location: Baptist Church Road, north of adjacent driveway

Compass Direction: East

Subject: General View of Baptist Church Road, looking northeast from driveway.



**Photo No. 13**

Location: Baptist Church Road – Roadway leading to End Approach

Compass Direction: Southwest

Subject: Approach slope appears to be stable.



**Photo No. 14**

Location: Baptist Church Road – Roadway leading to End Approach, north of driveway

Compass Direction: West

Subject: Rock outcropping just north of driveway and end approach.



**Photo No. 15**

Location: Baptist Church Road – Roadway leading to End Approach

Compass Direction: Southwest

Subject: General view of Baptist Church Road.



**Photo No. 16**

Location: Baptist Church Road – Roadway before Begin Approach

Compass Direction: West

Subject: General view of Baptist Church Road, condition of approach roadway is fair.



**Photo No. 17**

Location: Baptist Church Road – Roadway to Begin Approach

Compass Direction: East

Subject: General view of Baptist Church Road.



**Photo No. 18**

Location: Baptist Church Road – Existing NYCDEP Boat Area #8

Compass Direction: South

Subject: Boat storage area adjacent to site is heavily utilized by recreational permit holders.



**Photo No. 19**

Location: Baptist Church Road – Roadway leading to Begin Approach

Compass Direction: East

Subject: Ponding of water and cracked/repared roadways visible.



**Photo No. 20**

Location: Baptist Church Road – Roadway leading to Begin Approach

Compass Direction: East

Subject: Ponding of water and cracked roadways visible. Heavy vegetation prohibits a clear line of horizontal sight.

**ATTACHMENT 4**

**PROJECT PLANS**

**(See Town of Yorktown Permit  
Application Attachment B)**

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**ATTACHMENT 5**  
**UNITED STATES FISH AND WILDLIFE**  
**SERVICES AND NATURAL HERITAGE**  
**PACKAGE CORRESPONDENCE**

DRAFT



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New York Ecological Services Field Office  
3817 Luker Road  
Cortland, NY 13045-9385

Phone: (607) 753-9334 Fax: (607) 753-9699

<http://www.fws.gov/northeast/nyfo/es/section7.htm>

In Reply Refer To:

January 14, 2021

Consultation Code: 05E1NY00-2021-SLI-1009

Event Code: 05E1NY00-2021-E-03224

Project Name: Replacement of Baptist Church Road Bridge

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This list can also be used to determine whether listed species may be present for projects without federal agency involvement. New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list.

Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the ESA, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC site at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list. If listed, proposed, or candidate species were identified as potentially occurring in the project area, coordination with our office is encouraged. Information on the steps involved with assessing potential impacts from projects can be found at: <http://www.fws.gov/northeast/nyfo/es/section7.htm>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan ([http://www.fws.gov/windenergy/eagle\\_guidance.html](http://www.fws.gov/windenergy/eagle_guidance.html)). Additionally, wind energy projects should follow the Services wind



energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the ESA. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

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## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

### **New York Ecological Services Field Office**

3817 Luker Road  
Cortland, NY 13045-9385  
(607) 753-9334

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

### **Long Island Ecological Services Field Office**

340 Smith Road  
Shirley, NY 11967-2258  
(631) 286-0485

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## Project Summary

Consultation Code: 05E1NY00-2021-SLI-1009

Event Code: 05E1NY00-2021-E-03224

Project Name: Replacement of Baptist Church Road Bridge

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The proposed project involves the replacement of Baptist Church Road Bridge (the Bridge) over the Hunter Brook within the Town of Yorktown in Westchester County, New York. The New York City Department of Environmental Protection (DEP) owns the Baptist Church Road Bridge. The directly affected area is approximately 0.4 acres. The Baptist Church Road is an approximately 5-mile long rural residential roadway owned by DEP that connects Baldwin Road to Croton Avenue in the Town of Yorktown. This project involves the removal of a selected portion of an existing approach roadway, entire bridge structure, approach guiderail, and selected trees under clearing and grubbing as well as reconstruction of a new bridge with proposed 12 ft travel lanes and 2 ft shoulders on both sides. Replacement of the Bridge is necessary due to severe deterioration of the structure, poor roadway drainage, and potential lead paint contamination of the water body below. The replacement of the Baptist Church Road Bridge is anticipated to be implemented in succession with construction lasting approximately two years. The proposed action is expected to start in November 2023 and be completed in November 2025.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@41.2594839,-73.8417733954447,14z>



Counties: Westchester County, New York

## Endangered Species Act Species

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. The location of the critical habitat is not available. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered

### Reptiles

NAME	STATUS
Bog Turtle <i>Clemmys muhlenbergii</i> Population: Wherever found, except GA, NC, SC, TN, VA No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/6962">https://ecos.fws.gov/ecp/species/6962</a>	Threatened

### Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

**ATTACHMENT 6**  
**HISTORIC AND CULTURAL**  
**RESOURCES**

DRAFT



**Parks, Recreation,  
and Historic Preservation**

**ANDREW M. CUOMO**  
Governor

**ERIK KULLESEID**  
Commissioner

June 25, 2020

Kathryn Kelly  
Senior Project Manager  
NYCDEP  
59-17 Junction Boulevard  
11th Floor, BEPA  
Flushing, NY 11374

Re: USACE  
Baptist Church Road Bridge Replacement (CRO530B)  
Town of Yorktown, Westchester County, NY  
20PR03781

Dear Kathryn Kelly:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8).

Based upon this review, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay  
Deputy State Historic Preservation Officer  
Division for Historic Preservation

**ATTACHMENT 7**  
**NYSDEC WETLAND BOUNDARY**  
**MAP/ WETLAND DELINEATION**  
**SURVEY**  
**(See Town of Yorktown Permit**  
**Application Attachment C)**

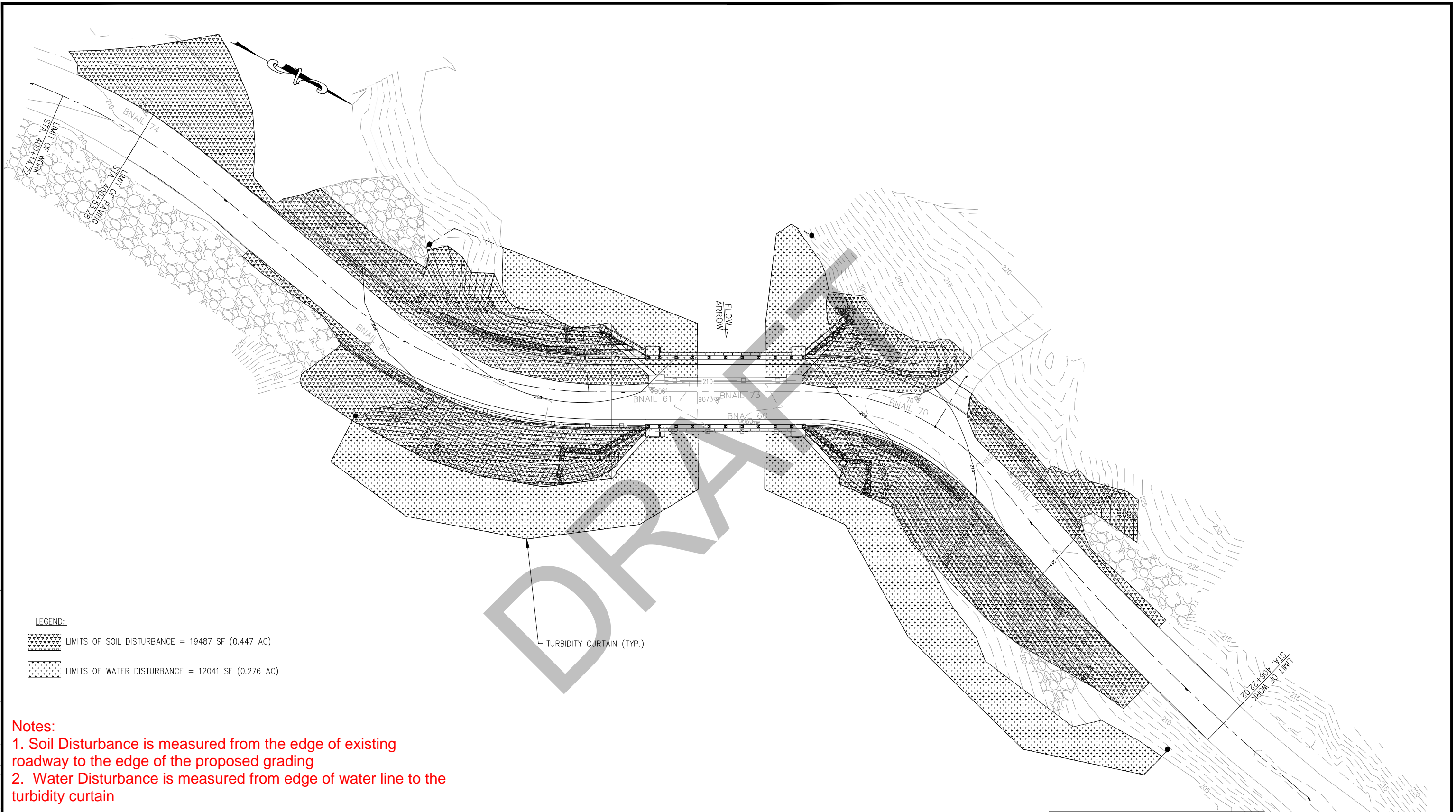
DRAFT

**ATTACHMENT 8**  
**APPROXIMATE DISTURBANCE LIMITS**

DRAFT



Last Saved By: & Date: Ncrevier, Tuesday, April 27, 2021, and Date Plotted: Tuesday, April 27, 2021 Time: 12:13 PM  
 Paper Size: ANSI A (8.50 x 11.00 inches) Plot Scale: 0.386863 Plot Style Table: (N)\_BEDC\_BW.ctb  
 Drawing Name: & Location: C:\users\Ncrevier\Myprod\kms37923\Exhibit\_Disturbance\_Areas.dwg



**LEGEND:**

LIMITS OF SOIL DISTURBANCE = 19487 SF (0.447 AC)  
 LIMITS OF WATER DISTURBANCE = 12041 SF (0.276 AC)

- Notes:**
1. Soil Disturbance is measured from the edge of existing roadway to the edge of the proposed grading
  2. Water Disturbance is measured from edge of water line to the turbidity curtain

60% DESIGN SUBMITTAL  
 SUBMITTAL DATE: 4/23/2021

GRAPHIC SCALES  
 CHECK BEFORE USE

IF SHEET IS LESS THAN 22" X 34"  
 IT IS A REDUCED PRINT. SCALE  
 ACCORDINGLY

NO.	DATE	REVISIONS/DESCRIPTION	APPR'D.

DESIGNED BY:  
N.CREVIER

CHECKED BY:  
R. ROMAN, PE

DESIGN LEAD:  
O. HUNTER, PE

SECTION MANAGER:

DRAWN BY:  
N.CREVIER, PE



HARDESTY & HANOVER, LLC  
 ENGINEERING  
 1501 Broadway New York, NY 10036



ACCOUNTABLE MANAGER  
JEFFREY A. BUSSE, PE

PORTFOLIO MANAGER  
PAUL COSTA, PE

EXECUTIVE DIRECTOR  
SEAN McANDREW, PE

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**NEW YORK CITY**  
**ENVIRONMENTAL PROTECTION**  
 BUREAU OF ENGINEERING DESIGN & CONSTRUCTION  
 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR  
 CORONA, NEW YORK 11368  
 www.nyc.gov/dep

**CAPITAL PROJECT WM-30**  
**IN WESTCHESTER COUNTY, NEW YORK**  
**CONTRACT CRO-530B**

EXHIBIT 1  
 SOIL AND WATER LIMITS OF DISTURBANCE

DATE: 04/23/2021  
 SCALE: 1"=20'-0"  
 SHEET NO:  
 XX OF 46  
 DRAWING NO.  
 EX-1

**ATTACHMENT 9**  
**ENVIRONMENTAL REVIEW**  
**(See Town of Yorktown Permit**  
**Application Attachment A)**

DRAFT