# CATSKILL AQUEDUCT REPAIR AND REHABILITATION PROJECT 

# Permit Applications for Wetland Disturbance, Tree Removal, Floodplain Development, and Excavation 

Town of Yorktown, NY

Prepared for:


Prepared by:
Henningson, Durham \& Richardson Architecture and Engineering, P.C.

July 2018

## Town of Yorktown Permit Application Forms

## 1. Wetland and Tree (Including Excavation) <br> 2. Floodplain Development <br> 3. Excavation <br> Attachment A - Project Description and Need <br> Table of Contents

1. Overall Project Description ................................................................................................. A-1
2. Project Purpose and Need .................................................................................................. A-3
3. Proposed Work Locations ................................................................................................... A-3
4. Permit Needs......................................................................................................................... A-7
5. Regulated Work Activities ................................................................................................ A-11
6. Summary of Project Disturbances ................................................................................... A-17
7. Anticipated Project Schedule............................................................................................ A-19
8. List of Attachments, Figures, and Drawings................................................................... A-20

List of Tables
Table 1. Summary of Work Activities within the Town of Yorktown .................................................. A-6
Table 2. Potential Project-wide Permits for Work Activities within the Town of Yorktown.................. A-9
Table 3. Regulated Water Resources Disturbance............................................................................. A-18

## Attachment B-Figures

Attachment C-Project Drawings
Attachment D-SEQR EAS Form

## Town of Yorktown

## Permit Application Forms

## Wetland and Tree Removal

## TOWN OF YORKTOWN - ENGINEERING DEPARTMENT STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

| Section | 36.09 |
| :--- | :---: |
| Block | 1 |
| Lot \# | 34 |

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received: $\qquad$
Job Site Address: Yorktown-2: Hunters Brook SPS North Chamber, located west of Hunterbrook Road
City/State/Zip: $\quad \frac{\text { Yorktown, NY }}{10567}$

## APPLICANT: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction

ADDRESS: 96-05 Horace Harding Expressway
Date Issued:
1st 90 day Ext:
2nd 90 day Ext:
Paid: \$

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

## OWNER: (PLEASE PRINT)

YOUR NAME. Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction

ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP_11368

PHONE: ( 718 ) 595-6133

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov
$\qquad$

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are Non-Refundable |
| :---: | :---: | :---: |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | \$300.00 - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> (*) Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | \$1,800.00 <br> (*) Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION PLAN - ADMINISTRATIVE | TOWN ENGINEER | \$300.00 - application fee |
| FULL - STORMWATER POLLUTION PREVENTION PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | \$1,500.00 <br> (*) Includes \$1,200 escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | \$0.00 |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond

Control area of lake/pond
b. Stream/River/Brook Control area of stream/river/brook
c. Wetlands Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable

2b. Stormwater/Excavation - Description of proposed activity:
DEP is proposing the establishment of two secondary staging areas at this site to facilitate new boathole (large entry point in the aqueduct) preparation and installation. The secondary staging areas would total approximately 16,140 square feet ( 0.37 acre ) and would require approximately 500 square feet ( 0.01 acre) of excavation for boathole preparation and installation. These activities are discussed in more detail in Attachment A of the permit application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: Not applicable Sizes; approximate DBH: Not applicable
Species of trees to be removed (i.e. Birch, Spruce - if known): Not applicable Reason for removal: Not applicable
Trees marked In field (trees must be marked prior to inspection): Yes: $\qquad$ No: Tree removal contractor: Not applicable

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, $\qquad$ hereby authorize $\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.

Signature: $\qquad$ Date: $\qquad$
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permitee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

Wendy Sperduto
PRINT NAME


## TOWN OF YORKTOWN - ENGINEERING DEPARTMENT STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

| Section | 36.09 |
| :--- | :---: |
| Block | 1 |
| $\#$ | 61 |

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received: $\qquad$
Date Issued:
1st 90 day Ext:
2nd 90 day Ext:
Paid: \$
ob Site Add


APPLICANT: (PLEASE PRINT)
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

OWNER: (PLEASE PRINT)
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

MONE: (718 ) 595-6133
EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | TOWN ENGINEER |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ - application fee <br> $(*)$ Includes $\$ 1,500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | (*) Includes $\$ 500$ escrow fee |  |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

Control area of lake/pond Control area of stream/river/brook Control area of wetlands

| $X$ |
| :--- |

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.
DEP is proposing blow-off chamber reconstruction that would require excavation, a stream diversion, and the construction of a gabion retaining wall and riprap apron to protect the banks of Hunter Brook. A staging area would be established at the blow-off chambers and would require brush and tree removal. Anticipated temporary and permanent disturbance to Hunter Brook would be approximately 1,470 square feet ( 0.03 acre). Anticipated temporary and permanent disturbance to the 100 -foot control area would be approximately 8,840 square feet ( 0.20 acre ). These activities are discussed in more detail in Attachment A of the permit application package.
2b. Stormwater/Excavation - Description of proposed activity:
DEP is proposing excavation for blow-off chamber reconstruction and the establishment of a staging area. Proposed activities would encompass approximately 5,420 square feet ( 0.12 acre), including 820 square feet ( 0.02 acre) within Hunter Brook, and 4600 square feet ( 0.11 acre) within the 100 -foot controlled area. These activities are discussed in more detail in Attachment A of the permit application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: 11
Sizes; approximate DBH: range from 4.0 dbh to 17.0 dbh ; see $\mathrm{Cl}-605.00$ and $\mathrm{Cl}-606.00$ in Attachment C Species of trees to be removed (i.e. Birch, Spruce - if known): ${ }^{\text {Noy }}$ maple, red maple, sycamore, and Reason for removal: Clearing/grading for blow-off chamber reconstruction and staging area Trees marked In field (trees must be marked prior to inspection): Yes: $X$ No:
Tree removal contractor: Not applicable Date of tree tagging was 08/11/2015

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before
inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled to be removed include Tag No. 483-486, 489-491, and 493-496, and can be found on Cl-348: Site Preparation and Restoration Hunters Brook SPS, CI-605: East of Hudson Tree Location, Type and Disposition Schedule Sheet 1 of 3; and CI-606: East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

PLEASE PRINT:
I, $\qquad$ hereby authorize $\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permitter is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16-Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

## Wendy Sperduto <br> PRINT NAME



SIGNATURE OF APPLICANT


Adjacent property owners within 100 feet of Yorktown-2A Work Site (Wetland Application)

| Property Owner | Property Owner's Address | Section, Block and Lot |
| :---: | :---: | :---: |
| VAN DUSEN, H. \& WOLF, W. | 2200 HUNTERBROOK RD. | $36.13-1-8$ |
| TOWN OF YORKTOWN | WHITE HILL RD. | $36.14-1-20$ |
| AHMAD, SYED I. \& | 2150 HUNTERBROOK RD. | $36.13-1-9$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $36.18-1-5$ |
| WILKENS, BARBARA J. | 1313 WHITE HILL RD. | $36.14-1-17$ |
| ALVAREZ, ALEJANDRO | 1475 WHITE HILL RD. | $36.14-1-19$ |
| SCHLOMANN, SIDNEY | 1510 WHITE HILL RD. | $36.13-1-7$ |
| PINETREE LANE, LLC | 2205 HUNTERBROOK RD. | $36.13-1-3$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $36.14-1-21$ |
| WILKENS FAMILY FARM, INC. | WHITE HILL RD. | $36.18-1-6$ |
| GILL, THOMAS K. \& | 1441 WHITE HILL RD. | $36.14-1-18$ |

## STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

| Section | 47.05 |
| :--- | :---: |
| Block | 1 |
| Lot \# | 13 |

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received: -
Date Issued:
1st 90 day Ext:
2nd 90 day Ext:
Paid: \$

Job Site Address: Yorktown-5: Yorktown CCT Access Manhole, Turkey Mountain SPS North Chamber and the proposed location for a new boathole; located north of Turkey Mountain Brook and west of the Taconic State Parkway.

City/State/Zip: Yorktown, NY $\quad 10598 \quad |$| NOTE: Application, Fee, Short/Long Form EAF, |
| :--- |
| Map/Survey to be submitted to the Engineering |

$\frac{\text { APPLICANT: (PLEASE PRINT) }}{\text { Wendy Sperduto, P.E., DEP-BEDC }}$
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

OWNER: (PLEASE PRINT)
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368
PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> $\left.\mathbf{l}^{*}\right)$ Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> $\left({ }^{*}\right)$ Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| FULL - STORMWATER POLLUTION PREVENTION <br> PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,500.00$ <br> $\left({ }^{*}\right)$ Includes $\$ 1,200$ escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | $\$ 0.00$ |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

## \section*{Control area of lake/pond} <br> Control area of stream/river/brook <br> Control area of wetlands

$\qquad$
2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable
$\qquad$
$\qquad$
$\qquad$

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing the establishment of a staging area between Baldwin Road and Underhill Avenue that would cover an area of approximately 15,600 square feet ( 0.36 acre ). Access to the site would require the installation of a stabilized construction entrance at the access point of Underhill Avenue and would require approximately 730 square feet ( 0.02 acre) of excavation. Proposed activities would also include 500 square feet ( 0.01 acre) of excavation for the preparation and installation of a new boathole. For more information, see Attachment A of the permit application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed:

## 2

Sizes; approximate DBH: range from 12.0 dbh to 18.0 dbh ; see $\mathrm{Cl}-606.00$ in Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known): Black walnut and tulip poplar
Reason for removal: Clearing/grading for boathole preparation and gravel placement for access road stabilization
Trees marked In field (trees must be marked prior to inspection): Yes: X No:
Tree removal contractor: Not applicable

Date of tree tagging was 08/11/2015

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled to be removed include Tag No. 497 and 499, and can be found on Cl-315: Staging Area Plan NBH14 Underhill Avenue and $\mathrm{Cl}-606$ : East of Hudson Tree Location Type and Disposition Schedule Sheet 2 of 3.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, ,__ hereby authorize $\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.

Signature:
Date: $\qquad$
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permitee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

Wendy Sperduto
PRINT NAME


## TOWN OF YORKTOWN - ENGINEERING DEPARTMENT STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

Section
47.19

1
Block
Lot \# 25

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received:
Date Issued:
1st 90 day Ext:
$2{ }^{\text {nd }} 90$ day Ext:
Paid: \$ Job Site Address: Yorktown-6: Turkey Mountain SPS Blow-off Chambers and Access Manholes; blow-off chambers

| City/State/Zip: | Yorktown, NY |
| :--- | :--- |
| 10598 |  |

APPLICANT: (PLEASE PRINT)
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

## OWNER: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | TOWN ENGINEER |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TO00.00 - application fee |  |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

Control area of lake/pond Control area of stream/river/brook Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.
DEP is proposing reconstruction of the existing blow-off chambers, which would require excavation activities and streambank restoration and protection of Turkey Mountain Brook. Proposed activities also include the installation of a permanent new concrete culvert. Anticipated temporary and permanent disturbance to Turkey Mountain Brook would be approximately 1,160 square feet ( 0.03 acre). Anticipated temporary and permanent disturbance to the 100 -foot control area would be approximately 8,830 square feet ( 0.20 acre). For more information on the proposed activities, see Attachment A of the permit application package.

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing the excavation for site access and staging at the Turkey Mountain Brook SPS Blow-off Chambers that would result in approximately 1,600 square feet ( 0.04 acre) of temporary disturbance. Excavation for streambank restoration and protection would result in approximately 210 square feet ( $<0.01$ acre) of permanent disturbance to Turkey Mountain Brook, and 7,230 square feet ( 0.17 acre) of permanent disturbance to the 100 -foot controlled area. For more information, see Attachment A of the permit application package.

## 3. TREE REMOVAL:

## Amount of trees and/or stumps to be removed: <br> 8

Sizes; approximate DBH: range from 4.0 dbh to 18.0 dbh ; see $\mathrm{CI}-606.00$ in Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known):
Reason for removal: Clearing/grading for blow-off chamber reconstruction
Trees marked In field (trees must be marked prior to inspection): Yes: X No:
Tree removal contractor: Not applicable
Date of tree tagging was 08/13/2015

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before
inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled to be removed include Tag No. 500-507, Preparation and Restoration Turkey Mountain SPS, and CI-606: East of Hudson Tree Location, Type and Disposition.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, hereby authorize to apply
for this SWPPP/Wetland Permit/Tree Permit on my behalf.
Signature:
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permitee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

## $\underset{\text { Wendy Sperduto }}{\text { BRIT NAME }}$



SIGNATURE OF APPLICANT

Adjacent property owners within 100 feet of Yorktown-6 Work Site (Wetland Application)

| Property Owner | Property Owner's Address | Section, Block and Lot |
| :---: | :---: | :---: |
| GOJCAJ, JOHN \& VALENTINA | 1204 UNDERHILL AVE. | $47.20-1-6$ |
| HAXHIAJ, IDRIZ \& | 1315 ECHO HILL PATH | $47.19-1-17$ |
| RING, DAVID \& ANNE | 1140 BALDWIN RD. | $47.19-1-24$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $47.15-1-13$ |
| BRUCAJ, SADIK | 1303 ECHO HILL PATH | $47.19-1-15$ |
| YANCOPOULOS, KAREN | 1280 ECHO HILL PATH | $47.19-1-22$ |
| LENSETH, ROBERT L., JR. \& | $1145 ~ \& 1155$ BALDWIN RD. | $47.19-1-12$ |
| GRIFFIN, WILLIAM A. \& | 1211 UNDERHILL AVE. | $47.20-1-3$ |
| BRICCETTI, JOHN \& LOREN | 1275 ECHO HILL PATH | $47.19-1-14$ |
| STANTON, HENRY J. \& | 1221 UNDERHILL AVE. | $47.20-1-5$ |
| SANCHEZ, JOAN | 1241 UNDERHILL AVE. | $47.19-1-11$ |
| CELAJ, SEJDIJA \& | 1217 UNDERHILL AVE. | $47.20-1-4$ |

## TOWN OF YORKTOWN - ENGINEERING DEPARTMENT STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

| Section | 58.08 | Approval Authority: TE [ ] PB [ ] TB [ ] <br> Application \#: <br> Date Received: <br> Block A |
| :--- | :---: | :--- |

Job Site Address: Yorktown-7: Turkey Mountain South Chamber; located east of the Taconic State Parkway

| City/State/Zip: | Yorktown, NY |
| :--- | :--- |
| 10598 |  |


#### Abstract

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering


APPLICANT: (PLEASE PRINT)
YOUR NAME: Wendy Sperduto, P.E., DEP-BEDC

COMPANY: |  |
| :--- |

ADDRESS: $96-05$ Horace Harding Expressway

| Corona, New York |
| :--- |
| PHONE: $(718$ ) $1895-6133$ |

EMAIL: wsperduto@dep.nyc.gov

## OWNER: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway

| Corona, New York | ZIP 11368 |
| :--- | :--- |
| PHONE: (718) 595-6133 |  |

EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> $\left.\mathbf{l}^{*}\right)$ Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> $\left(^{*}\right)$ Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| FULL - STORMWATER POLLUTION PREVENTION <br> PLAN - NON- ADMINISTRATIVE | TOWN BOARDIPLANNING BOARD | $\$ 1,500.00$ <br> $\left.\mathbf{(}^{*}\right)$ Includes $\$ 1,200$ escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | $\$ 0.00$ |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

Control area of lake/pond
Control area of stream/river/brook
Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable

## 2b. Stormwater/Excavation - Description of proposed activity:

Not applicable
$\qquad$
$\qquad$
$\qquad$

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: 1
Sizes; approximate DBH: 18.3 dbh ; see Cl-607.00 in Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known): White Ash
Reason for removal: Tree clearing for access road improvements
Trees marked In field (trees must be marked prior to inspection): Yes: $\qquad$ No:

Tree removal contractor: Not applicable

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controis shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.



DATE

Section
58.08

Block
Lot \#
Not applicable

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received:
Date Issued:
1st 90 day Ext:
2nd 90 day Ext:
Paid: \$

Job Site Address: Yorktown-8: Croton Lake PT Downtake Chamber, and Croton Lake PT Blow-off and Waste-Gate Chamber; site access is provided by an access road that connects to Chapman Road

| City/State/Zip: | Yorktown, NY |
| :--- | :--- |
|  |  |

## APPLICANT: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

## OWNER: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are Non-Refundable |
| :---: | :---: | :---: |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | \$300.00 - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> (*) Includes \$500 escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> (*) Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | \$300.00-application fee |
| FULL - STORMWATER POLLUTION PREVENTION <br> PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | \$1,500.00 <br> (*) Includes \$1,200 escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | \$0.00 |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond

Control area of lake/pond
b. Stream/River/Brook Control area of stream/river/brook
c. Wetlands Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing the replacement of blow-off valves and waste gate. This location would serve as a primary staging area, encompassing approximately 33,590 square feet ( 0.77 acre) and would entail approximately 3,750 square feet of excavation ( 0.09 acre). Proposed activities also include access road improvements, including placement of steel plates over two existing culverts and leveling. For more information, see Attachment A of the application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: Not applicable Sizes; approximate DBH: Not applicable
Species of trees to be removed (i.e. Birch, Spruce - if known): Not applicable Reason for removal: Not applicable
Trees marked In field (trees must be marked prior to inspection): Yes: $\qquad$ No: Tree removal contractor: $\qquad$

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, $\qquad$ hereby authorize $\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.
$\qquad$ Date: $\qquad$
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

## Wendy Sperduto <br> PRINT NAME



DATE

Section
58.16

Block

## Lot \# Not applicable

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received: Date Issued: 1st 90 day Ext: 2nd 90 day Ext: Paid: \$

Job Site Address: Yorktown-9: Croton Lake PT Uptake Chamber, Croton CCT Boathole, Leak 7, Croton CCT Access Manhole; site access is provided by a DEP access road that connects to Croton Dam Road

| City/State/Zip: | Yorktown, NY |
| :--- | :--- |
| 10562 |  |

APPLICANT: (PLEASE PRINT)
OWNER: (PLEASE PRINT)
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

COMPANY: |  |
| :--- |
| Construction |

ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP_11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov
Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov
APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are Non-Refundable |
| :---: | :---: | :---: |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | \$300.00 - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> (*) Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> (*) Includes \$1,500 escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | \$300.00- application fee |
| FULL - STORMWATER POLLUTION PREVENTION PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,500.00$ <br> (*) Includes \$1,200 escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | \$0.00 |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

## Control area of lake/pond Control area of stream/river/brook Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

Not applicable

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing the installation of a new air vent at the CCT Boathole that would require approximately 500 square feet ( 0.01 acre ) of excavation to access the cover of the existing boathole. Proposed activities also include internal repairs to Leak 7, and installation of a passive dechlorination system if leak repair is unsuccessful. Installation of the passive dechlorination system would require approximately 5.0 cubic yards of excavation. The footprint of disturbance for this work is approximately 15,200 square feet ( 0.35 acre). For more information, see Attachment A of the permit application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: 3
Sizes; approximate DBH: Ranges from 3.8 dbh to 9.0 dbh ; see $\mathrm{Cl}-607.00$ in Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known): Red Maple and Oak
Reason for removal: Tree removal for access road improvements
Trees marked In field (trees must be marked prior to inspection): Yes: $\quad \mathrm{X}$ No:
Tree removal contractor: Not applicable

Date of tree tagging was 11/09/2016

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled for removal include Tag No. 1087, 1088, and 1098, and can be found on $\mathrm{Cl}-269$ : Site Preparation and Restoration Leak Repair Leak 7 and Cl -607: East of Hudson Tree Location, Type and Disposition Schedule Sheet 3 of 3.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, $\qquad$
$\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.

Signature:
Date: $\qquad$
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.


PRINT NAME


## TOWN OF YORKTOWN - ENGINEERING DEPARTMENT STORMWATER POLLUTION PREVENTION PERMIT APPLICATION WETLAND PERMIT APPLICATION and/or TREE PERMIT APPLICATION

| Section | $\frac{70.09}{18}$ |
| :--- | :--- |
| Block | Not applicable |
| Lot \# |  |

Approval Authority: TE [ ] PB [ ] TB [ ]
Application \#:
Date Received: $\qquad$
Date Issued:
1st 90 day Ext:
2nd 90 day Ext:
Paid: \$

Job Site Address: Yorktown-10: Kitchawan CCT Access Manhole with Culvert Drain; located north of Kitchawan Road immediately north of unnamed tributary 3 to New Croton Reservoir

City/State/Zip:

NOTE: Application, Fee, Short/Long Form EAF, Map/Survey to be submitted to the Engineering

## APPLICANT: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager
NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP_11368

PHONE: (718) 595-6133
EMAIL: wsperduto@dep.nyc.gov

## OWNER: (PLEASE PRINT)

Wendy Sperduto, P.E., DEP-BEDC
YOUR NAME: Program Manager NYCDEP Bureau of Eng. Design \&
COMPANY: Construction
ADDRESS: 96-05 Horace Harding Expressway
Corona, New York ZIP 11368

PHONE: ( 718 ) 595-6133
EMAIL: wsperduto@dep.nyc.gov

APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> $(*)$ Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> $(*)$ Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00-$ application fee |
| FULL - STORMWATER POLLUTION PREVENTION |  |  |
| PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,500.00$ <br> $(*)$ Includes $\$ 1,200$ escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | $\$ 0.00$ |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

Control area of lake/pond
Control area of stream/river/brook Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.
DEP is proposing culvert drain sluice gate replacement and streambank restoration and protection, which would entail restoration of the riprap aprons at the culvert's inlet and outlet. a temporary stream diversion, and installation of a turbidity curtain. Proposed activities would also include temporary access road construction and staging. Anticipated temporary disturbance to tributary 3 to New Croton Reservoir would be approximately 560 square feet ( 0.01 acre). Anticipated temporary disturbance to the 100 -foot control area would be approximately 4,810 square feet ( 0.11 acre). Permanent effects are not anticipated at this site. For more information, see Attachment A of the application package.

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing excavation and gravel placement for temporary access road construction. Excavation for site access and staging would temporarily disturbed 4,810 square feet ( 0.11 acre). For more information, see Attachment A of the application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: 4
Sizes; approximate DBH: Ranges from 10.0 dbh to 26.0 dbh ; see $\mathrm{Cl}-606.00$ \& $\mathrm{Cl}-607.00$, Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known): Tulip Poplar
Reason for removal: Tree removal for temporary access road construction
Trees marked In field (trees must be marked prior to inspection): Yes: $\quad \mathrm{X}$ No:
Tree removal contractor: Not applicable
Date of tree tagging was 08/18/2015

Attach survey/sketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled for removal include Tag No. 654-657 and can be found on EA-158: Area Plan STA 3480+00 to STA 3503+00, CI-606: East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3, and Cl-607: East of Hudson Tree Location, Type and Disposition Schedule Sheet 3 of 3.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, $\qquad$ hereby authorize $\qquad$ to apply for this SWPPP/Wetland Permit/Tree Permit on my behalf.

Signature:
Date:
No application will be processed without the above-mentioned, required information.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.

## Wendy Sperduto <br> PRINT NAME



Adjacent property owners within 100 feet of Yorktown-10 Work Site (Wetland Application)

| Property Owner | Property Owner's Address | Section, Block and Lot |
| :---: | :---: | :---: |
| INTERNATIONAL BUSINESS | AQUEDUCT ST. | $70.05-1-5$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $70.09-1-18$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $70.05-1-2$ |
| CENTERLINE FARM LLC | 800 OLD KITCHAWAN RD. NORTH | $70.05-1-9$ |
| TEATOWN LAKE RESERVATION | 800 KITCHAWAN RD. | $70.05-1-1$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $70.05-1-15$ |
| TEATOWN LAKE RESERVATON, | KITCHAWAN RD. | $70.09-1-17$ |
| CITY OF N.Y. D.W.S.G. $\&$ | DEPT OF WATER RES | $70.05-1-14$ |



APPROVED PLANS AND PERMIT SHALL BE ON-SITE AT ALL TIMES

| Permit Type | Approval Authority | Cost - Application Fees are <br> Non-Refundable |
| :--- | :--- | :--- |
| WETLAND - LEVEL ONE: ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| WETLAND - LEVEL TWO: ADMINISTRATIVE | TOWN ENGINEER | $\$ 800.00$ <br> $\left(^{*}\right)$ Includes $\$ 500$ escrow fee |
| WETLAND- LEVELTHREE: NON-ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,800.00$ <br> $\left(^{*}\right)$ Includes $\$ 1,500$ escrow fee |
| BASIC - STORMWATER POLLUTION PREVENTION <br> PLAN - ADMINISTRATIVE | TOWN ENGINEER | $\$ 300.00$ - application fee |
| FULL - STORMWATER POLLUTION PREVENTION <br> PLAN - NON- ADMINISTRATIVE | TOWN BOARD/PLANNING BOARD | $\$ 1,500.00$ <br> $(*)$ Includes $\$ 1,200$ escrow fee |
| ADMINISTRATIVE TREE PERMIT | TOWN ENGINEER | $\$ 0.00$ |

Application fees are doubled (i.e. $\$ 300$ becomes $\$ 600$ ) with issuance of a Stop Work Order as per amended Town Code Section 178-18(a).

1. Description of wetlands (check all that apply):
a. Lake/pond
b. Stream/River/Brook
c. Wetlands

Control area of lake/pond Control area of stream/river/brook Control area of wetlands

2a. Description of activity in the wetland and/or wetland buffer. Describe the proposed work including the following: i.e. maintenance, construction of dwelling, addition, driveway, culverts, including size and location.

DEP is proposing new access road construction that would require the placement of fill within the 100-foot control area of unnamed tributary 4 to New Croton Reservoir. Anticipated permanent disturbance within the 100-foot control area would be approximately 2,330 square feet ( 0.05 acre) For more information, see Attachment A of the application package.

## 2b. Stormwater/Excavation - Description of proposed activity:

DEP is proposing new access road construction that would require approximately 7,730 square feet ( 0.18 acre ) of excavation. For more information, see Attachment A of the application package.

## 3. TREE REMOVAL:

Amount of trees and/or stumps to be removed: 2
Sizes; approximate DBH: Ranges from 4.0 dbh to 20.0 dbh; see $\mathrm{Cl}-606.00$ in Attachment C
Species of trees to be removed (i.e. Birch, Spruce - if known): Black Locust and Tulip Poplar Reason for removal: Tree removal for new access road construction
Trees marked In field (trees must be marked prior to inspection): Yes: X No:
Tree removal contractor: Not applicable

Date of tree tagging was 08/14/2015

Attach surveylsketch indicating property boundaries, existing structures, driveways, roadways and location of existing trees. Trees must be marked in the field before inspection. See Attachment C for project drawings and tree index sheets. Trees scheduled to be removed include Tag of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3.
4. PROPERTY OWNER CONSENT: If someone (e.g. contractor, consultant) is applying on the owner's behalf, the PROPERTY OWNER is to complete, sign and date this authorization:

## PLEASE PRINT:

I, hereby authorize to apply
for this SWPPP/Wetland Permit/Tree Permit on my behalf.

1. By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the law, all applicable regulations and the conditions specified herein or attached hereto.
2. The permittee is responsible for maintaining an active application. If no activity occurs within a six (6) month period, as measured from the date of application, the application will become null and void. Applications fees are non-refundable. In addition to the application fee, the applicant will be required to post a bond (refundable) to ensure job completion.
3. The permitted work shall be subject to inspection by an authorized representative of the Town of Yorktown, which may order work suspended if the public interest so requires.
4. The Town of Yorktown reserves the right to modify, suspend or revoke this permit at any time after due notice when:
a) scope of the project is exceeded or a violation of any condition of the permit or provision of the law pertinent regulations are found; or
b) permit was obtained by misrepresentation or failure to disclose relevant facts; or
c) newly discovered information or significant physical changes are discovered.
5. The permittee is responsible for keeping the permit active by requesting renewal from the Approval Authority, including any forms, fees or supplemental information that may be required by the Approval Authority, by written notification, 30 days prior to the expiration date. The expiration date is one year from the date the bond is paid to the Engineering Department. In accordance with Chapter 178 of the Town Code, Freshwater Wetlands, Section 178-16 -Expiration of a Permit.
6. This permit shall not be construed as conveying to the applicant any right to trespass upon private lands or interfere with the riparian rights of others in order to perform the permitted work or as authorizing the impairment of any right, title or interest in real or personal property held or vested in person not party to this permit.
7. The permittee is responsible for obtaining any other permits, approvals, easements and right-of-way, which may be required.
8. Any modification of this permit granted by the Approval Authority must be in writing and attached hereto.
9. Granting of this permit does not relieve the applicant of the responsibility of obtaining any other permission, consent or approval from the U.S. Army Corps of Engineers, N.Y.C. Department of Environmental Protection, N.Y.S. Department of Environmental Conservation or local government, which may be required.
10. All necessary precautions shall be taken to prelude contamination of any wetland or waterway by suspended solids, sediment, fuels, solvents, lubricants, epoxy coating, paints, concrete, leachate or other environmentally deleterious materials associated with the project.
11. All activities authorized by this permit must be in strict conformance with the approved plans submitted by the 1 applicant or his agent as part of the permit application.
12. To prevent silting to the wetlands, erosion controls shall be installed. The erosion controls shall be continuously maintained to prevent silting of the wetlands and shall be replaced as necessary or upon the direction of the Environmental Code Officer.


PRINT NAME


## Adjacent property owners within 100 feet of Yorktown-11 Work Site (Wetland Application)

| Property Owner | Property Owner's Address | Section, Block and Lot |
| :---: | :---: | :---: |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $70.09-1-18$ |
| MORMON CHURCH | KITCHAWAN RD. | $70.09-1-34$ |
| PUFF, ERWIN \& ANNE | 210 CHADEAYNE RD. | $70.09-1-40$ |
| LIPS, RAYMOND OTTO | 800 PINES BRIDGE RD. | $70.13-1-42$ |
| CALVERT \& | KITCHAWAN RD. | $70.09-1-31$ |
| COMM. BIBLE CHURCH N. | 301 CHADEAYNE RD. | $70.09-1-36$ |
| CUSTONS, MARGARET | PINES BRIDGE RD. | $70.13-1-40$ |
| RUSTAD, KAREN | 220 CHADEAYNE RD. | $70.09-1-39$ |
| DI LEO, HECTOR \& ALICE | 170 CHADEAYNE RD. | $70.13-1-35$ |
| LINDBERG, LARS \& BRONNER, | 797 PINES BRIDGE RD. | $70.13-1-36$ |
| CITY OF N.Y. D.W.S.G. \& | DEPT OF WATER RES | $70.13-1-53$ |
| KRUSE, CHRISTOPHER \& | 190 CHADEAYNE RD. | $70.13-1-34$ |
| PLITNICK, EDWARD \& LAURA | 875 KITCHAWAN RD. | $70.09-1-32$ |
| HANLEY, ARLO \& SARA | 791 PINES BRIDGE RD. | $70.14-1-11$ |
| VALENZA, MICHAEL \& | 796 PINES BRIDGE RD. | $70.13-1-52$ |
| FYLER, MICHAEL \& PETER | $781 ~ P I N E S ~ B R I D G E ~ R D . ~$ | $70.10-1-2$ |
| AVON, GREGORY \& | 700 ERIN CT. | $70.09-1-41$ |
| PUFF, KENNETH \& KARIN | 240 CHADEAYNE RD. | $70.09-1-38$ |
| KYER, MICHAEL \& LISA | 200 CHADEAYNE RD. | $70.13-1-33$ |
| COMM. BIBLE CHURCH N. | $250 ~ C H A D E A Y N E ~ R D . ~$ | $70.09-1-37$ |
| LA SALA, ANDREW \& | 787 PINES BRIDGE RD. | $70.10-1-1$ |
| KARP, STEVEN \& SUSAN | $795 ~ P I N E S ~ B R I D G E ~ R D . ~$ | $70.13-1-38$ |

Floodplain Development

## Town of Yorktown

## Building Department

Town Hall, 363 Underhill Avenue, Yorktown Heights, NY 10598
Page 1 of 4
Tel. (914) 962-5722 ext. 233

## FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

## Application \#

$\qquad$ Date Received: $\qquad$
Please submit $\mathbf{2}$ copies of this entire application, 4 pages).

## SECTION 1: GENERAL PROVISIONS (Applicant to read and sign):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements.
7. Applicant hereby gives consent to the Local Administrator or his/her representative to make reasonable inspections required to verify compliance.
8. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN PAGES \#s 1 through 4, AND IN ATTACHMENTS THERETO, TO THE BEST OF MY KNOWLEDGE, ARE TRUE AND ACCURATE.

## APPLICANT'S SIGNATURE $\frac{\text { akedysondecto }}{\square}$ DATE:

$\qquad$
OWNER"S SIGNATURE) $\qquad$ DATE: $\qquad$
(If different from Applicant)

## SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT):

Applicant: Complete all information lines, below, except those marked "Office use only". Wendy Sperduto, P.E., DEP-BEDC
Name of Owner: Program Manager
Telephone \#: (718)- 595-6133
Primary Contact for This Project: Wendy Sperduto, P.E.,
Telephone \#: (718)- 595-6133
Fax:
DEP-BEDC Program Manager
$\qquad$ Email:
wsperduto@dep.nyc.gov
Present Address of Owner*: 96-05 Horace Harding Expressway Corona, New York 11368
Address/Location of Proposed Work:_Yorktown-2A: Hunters Brook SPS SPS Blow-off Chambers; located
Section: 36.09 Block: 1 approximately 0.25 mile southeast of Jacob Road
Proposed Work:_Blow-off chamber reconstruction that would require excavation fowl cite. and Town of Yorktown
Contractor: restoration, a temporary stream diversion, and construction staging.

## Address:

Westchester County Home Improvement Contractors Lice. \# $\qquad$
Architect or Engineer_CDM Smith Telephone \#(516)-496-8400
Address 60 Crossways Park Drive West Suite 340, Woodbury, NY 11797

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or will known landmark. A drawing, attached to this application, showing the project location would be helpful. See $\mathrm{Cl}-360.00$ in Attachment C for a detailed drawing of the project location.
DESCRIPTION OF WORK (Check all applicable boxes):

## A. STRUCTURAL DEVELOPMENT

## ACTIVITY

$\otimes$ New Structures
$\square$ Addition
Alteration
$\square$ Relocation
$\square$ Demolition
$\square$ Replacement

## STRUCTURE TYPE

$\square$ Residential (1-4 Family)
$\square$ Residential (More than 4 Family)
$\otimes$ Non-residential Flood proofing? Yes $\square$ No
$\square$ Combined Use (Residential \& Commercial)
$\square$ Manufactured (Mobile) Home
$\square$ "Substantial Improvement"

## ESTIMATED COST OF PROJECT $\$: 1.4 \mathrm{M}$ Note: This is a total cost including all indirect costs. The

 B. OTHER DEVELOPMENT ACTIVITIES: costs include the site work, traffic control, and blow-off chamber work.© Fill
Mining
$\square$ Drilling
® Grading
$\square$ Excavation (Except for Structural Development Checked Above)
$\otimes$ Watercourse Alteration (Including Dredging and Channel Modifications)
$\square$ Drainage Improvements (Including culvert Work)
$\square$ Road, Street or Bridge Construction
$\square$ Subdivision (New or Expansion)
$\square$ Individual Water or Sewer System
$\square$ Other (Please Specify) $\qquad$
*After completing SECTION 2, APPLICANT should submit form to Local Administrator for review.

## (Office Use Only)

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by LOCAL ADMINISTRATOR):
The proposed development is: located on FIRM Panel No. $\qquad$ , Dated $\qquad$ ,
: Pre-FIRM map? Yes $\square$ No
NOT located in a Special Flood Hazard Area (Notify the applicant that the application review is complete and NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED).located in a Special Flood Hazard Area,
FIRM zone designation is $\qquad$ ,100 - Year flood elevation at the site is: $\qquad$ ,
$\qquad$ Ft. NGVD (MSL) Unavailable,
$\square$ The proposed development is located in a Floodway,
$\square$ FBFM Panel no. $\qquad$ Dated $\qquad$ .

SIGNED

SECTION 4: ADDITIONAL INFORMATION (To be completed by LOCAL ADMINISTRATOR):
The applicant must submit the documents checked below before the application can be processed:

A site plan showing the location of all existing structures, water bodies, adjacent roads, lot dimensions and proposed development.
$\square$ Development plans, drawn to scale, and specifications, including where applicable: details for anchoring structures, proposed elevation of lowest floor (including basement), types of water resistant materials used below the first floor, details of flood proofing of utilities located below the first floor and details of enclosures below the first floor.
Plans must also show
$\square$ Subdivision or other development plans (If the subdivision or other development exceeds 50 lots or 5 acres, whichever is the lesser, the applicant must provide 100 -year flood elevations if they are not otherwise available).

Plans showing the extent of watercourse relocation and/or landform alterations.
$\square$ Top of new fill elevation $\qquad$ Ft. NGVD (MSL).
$\square$ Flood proofing protection level (non-residential only) $\qquad$ Ft. NGVD (MSL). For flood proofed structures, applicant must attach certification from registered engineer or architect.
$\square$ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.
$\square$ Other:

## SECTION 5: PERMIT DETERMINATION (To be completed by LOCAL ADMINISTRATOR):

I have determined that the property and/or proposed work:
Is
Is not
In conformance with provisions of Local Law \# 11, 2007. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED $\qquad$ DATE $\qquad$
LOCAL ADMINISTRATOR
If BOX A is checked, the Local Administrator may issue a Development Permit upon payment of designated fee.
If BOX B is checked, the Local Administrator will provide a written summary of deficiencies.
Applicant may revise and resubmit an application of the Local Administrator or may request a hearing from the Board of Appeal.

Floodplain Development Permit fee $\$ 50.00$
$\square$ Paid: $\qquad$ Received by: $\qquad$ Date: $\qquad$

## APPEALS: Appealed to Board of Appeals?

Yes
No
Hearing date: $\qquad$

## Appeals Board Decision - Approved?

Yes
No

> Conditions
$\qquad$

## SECTION 6: AS-BUILD ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued).

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application). Complete 1 or 2 below.

1. Actual (As-Build) Elevation of the top of the lowest floor, including basement and bottom of lowest structural member of the lowest floor, excluding piling and columns) is $\qquad$ FT. NGVD (MSL).
2. Actual (As-Build) Elevation of flood proofing protection is $\qquad$ FT. NGVD (MSL).

SECTION 7: COMPLIANCE ACTION (To be completed by LOCAL ADMINISTRATOR):
The LOCAL ADMINISTRATOR will complete this section as applicable based on inspection of the project to ensure compliance with the community's local law for flood damage prevention.

INSPECTIONS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$

## SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by LOCAL ADMINISTRATOR):

Certificate of Compliance issued: DATE $\qquad$ BY: $\qquad$
[Chapter 175, Flood Damage Prevention, Adopted 7-9-2007 by L.L. No. 12-2007, effective 7-20-2007 (originally adopted 11-17-1987 as L.L. No. 175.]

## Building Department

Town Hall, 363 Underhill Avenue, Yorktown Heights, NY 10598
Page 1 of 4

## FLOODPLAIN DEVELOPMENT PERMIT APPLICATION

## Application \#

$\qquad$ Date Received: $\qquad$
Please submit 2 copies of this entire application, 4 pages).
SECTION 1: GENERAL PROVISIONS (Applicant to read and sign):

1. No work may start until a permit is issued.
2. The permit may be revoked if any false statements are made herein.
3. If revoked, all work must cease until permit is re-issued.
4. Development shall not be used or occupied until a Certificate of Compliance is issued.
5. The permit will expire if no work is commenced within six months of issuance.
6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements.
7. Applicant hereby gives consent to the Local Administrator or his/her representative to make reasonable inspections required to verify compliance.
8. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN PAGES \#s 1 through 4, AND IN ATTACHMENTS THERETO, TO THE BEST OF MY KNOWLEDGE, ARE TRUE AND ACCURATE.


OWNER"S SIGNATURE): $\qquad$ DATE: $\qquad$
(If different from Applicant)

## SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT):

Applicant: Complete all information lines, below, except those marked "Office use only". Wendy Sperduto, P.E., DEP-BEDC
Name of Owner: Program Manager
Primary Contact for This Project: Wendy Sperduto, P.E.,
Telephone \#: (718)-595-6133

Fax: DEP-BEDC Program Manager
Fax: Email: $\qquad$ wsperduto@dep.nyc.gov $\qquad$
Present Address of Owner*: 96-05 Horace Harding Expressway Corona, New York 11368
Yorktown-6: Turkey Mountain SPS Blow-off Chambers and Access Manholes; blow-off chambers
Address/Location of Proposed Work:are located within the median of the Taconic State Parkway, immediately north of Turkey
Section: 47.19 Mlock: 1 Mountain Brook.
Section: 47.19 Block: $1 \quad$ Lot(s): $25 \quad$ Verified by;James w. Date: 7 //23/2013
Proposed Work: Blow-off chamber reconstruction that would require excavation yor site praparation and itspanmbank protection and restoration, a
Contractor: concrete culvert.

## Address:

Westchester County Home Improvement Contractors Lic. \#

## Architect or Engineer

711 Westchester Ave \#103, White Plains, NY 10604

## Address

Engineer 2: CDM Smith
Address: 60 Crossways Park Drive West Suite 340, Woodbury, NY 11797
Telephone \# (516)-496-8400
Contact person.David fanzi

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or will known landmark. A drawing, attached to this application, showing the project location would be helpful. See $\mathrm{Cl}-361.00$ in Attachment C for a detailed drawing of the project location.

## DESCRIPTION OF WORK (Check all applicable boxes):

## A. STRUCTURAL DEVELOPMENT

## ACTIVITY

© New Structures
$\square$ Addition
© Alteration
$\square$ Relocation
Demolition
$\square$ Replacement

## STRUCTURE TYPE

$\square$ Residential (1-4 Family)
$\square$ Residential (More than 4 Family)
( Non-residential
Flood proofing? - Yes 目 No
$\square$ Combined Use (Residential \& Commercial)
$\square$ Manufactured (Mobile) Home
$\square$ "Substantial Improvement"

ESTIMATED COST OF PROJECT $\$: 1.6 \mathrm{M}$ Note: This is a total cost including all indirect costs. The B. OTHER DEVELOPMENT ACTIVITIES: costs include the site work, traffic control, and blow-off chamber work.
$\square$ Fill $\square$ Mining $\square$ Drilling $\otimes$ Grading
$\square$ Excavation (Except for Structural Development Checked Above)
W Watercourse Alteration (Including Dredging and Channel Modifications)
© Drainage Improvements (Including culvert Work)
$\otimes$ Road, Street or Bridge Construction
$\square$ Subdivision (New or Expansion)
$\square$ Individual Water or Sewer System
Other (Please Specify)
*After completing SECTION 2, APPLICANT should submit form to Local Administrator for review.
(Office Use Only)
SECTION 3: FLOODPLAIN DETERMINATION (To be completed by LOCAL ADMINISTRATOR):
The proposed development is: located on FIRM Panel No. $\qquad$ , Dated $\qquad$ ,
: Pre-FIRM map? $\square$ Yes $\square$ No
NOT located in a Special Flood Hazard Area (Notify the applicant that the application review is complete and NO FLOODPLAIN DEVELOPMENT PERMIT IS REQUIRED).
$\square$ located in a Special Flood Hazard Area,
FIRM zone designation is $\qquad$ ,
100 - Year flood elevation at the site is: $\qquad$ ,
$\qquad$ Ft. NGVD (MSL) Unavailable, The proposed development is located in a Floodway,
$\square$ FBFM Panel no. $\qquad$ Dated $\qquad$ .

SECTION 4: ADDITIONAL INFORMATION (To be completed by LOCAL ADMINISTRATOR):
The applicant must submit the documents checked below before the application can be processed:
$\square$ A site plan showing the location of all existing structures, water bodies, adjacent roads, lot dimensions and proposed development.
$\square$ Development plans, drawn to scale, and specifications, including where applicable: details for anchoring structures, proposed elevation of lowest floor (including basement), types of water resistant materials used below the first floor, details of flood proofing of utilities located below the first floor and details of enclosures below the first floor.
Plans must also show
Subdivision or other development plans (If the subdivision or other development exceeds 50 lots or 5 acres, whichever is the lesser, the applicant must provide 100-year flood elevations if they are not otherwise available).

Plans showing the extent of watercourse relocation and/or landform alterations.
$\square$ Top of new fill elevation $\qquad$ Ft. NGVD (MSL).
$\square$ Flood proofing protection level (non-residential only) $\qquad$ Ft. NGVD (MSL). For flood proofed structures, applicant must attach certification from registered engineer or architect.
$\square$ Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood. A copy of all data and calculations supporting this finding must also be submitted.

## Other:

$\qquad$
$\qquad$

## SECTION 5: PERMIT DETERMINATION (To be completed by LOCAL ADMINISTRATOR):

## I have determined that the property and/or proposed work:

Is
$\square$ Is not
In conformance with provisions of Local Law \# 11, 2007. The permit is issued subject to the conditions attached to and made part of this permit.

SIGNED $\qquad$ DATE $\qquad$
LOCAL ADMINISTRATOR
If BOX A is checked, the Local Administrator may issue a Development Permit upon payment of designated fee.
If BOX B is checked, the Local Administrator will provide a written summary of deficiencies. Applicant may revise and resubmit an application of the Local Administrator or may request a hearing from the Board of Appeal.

## Floodplain Development Permit fee \$50.00

$\square$ Paid: $\qquad$ Received by: $\qquad$ Date: $\qquad$

## APPEALS: Appealed to Board of Appeals?

YesNo
Hearing date: $\qquad$
Appeals Board Decision - Approved?
Yes
No
Conditions $\qquad$
$\qquad$
$\qquad$

## SECTION 6: AS-BUILD ELEVATIONS (To be submitted by APPLICANT before Certificate of Compliance is issued).

The following information must be provided for project structures. This section must be completed by a registered professional engineer or a licensed land surveyor (or attach a certification to this application). Complete 1 or 2 below.

1. Actual (As-Build) Elevation of the top of the lowest floor, including basement and bottom of lowest structural member of the lowest floor, excluding piling and columns) is $\qquad$ FT. NGVD (MSL).
2. Actual (As-Build) Elevation of flood proofing protection is $\qquad$ FT. NGVD (MSL).

## SECTION 7: COMPLIANCE ACTION (To be completed by LOCAL ADMINISTRATOR):

The LOCAL ADMINISTRATOR will complete this section as applicable based on inspection of the project to ensure compliance with the community's local law for flood damage prevention.

## INSPECTIONS:

## SECTION 8: CERTIFICATE OF COMPLIANCE (To be completed by LOCAL ADMINISTRATOR):

Certificate of Compliance issued: DATE $\qquad$ BY: $\qquad$
[Chapter 175, Flood Damage Prevention, Adopted 7-9-2007 by L.L. No. 12-2007, effective 7-20-2007 (originally adopted 11-17-1987 as L.L. No. 175.]

## Attachment A

## Project Description and Need

## 1. OVERALL PROJECT DESCRIPTION

The New York City Department of Environmental Protection (DEP) is responsible for supplying clean drinking water to eight million New York City (City) residents and one million upstate customers through the management of the City's three surface water supply systems: the Catskill, Delaware, and Croton systems. Water from these watersheds is conveyed to the City's distribution system by gravity via three main aqueducts: the Catskill Aqueduct, Delaware Aqueduct, and Croton Aqueduct (see Figure B-1). In particular, the Delaware Aqueduct provides approximately 50 percent of the City's water supply. The Delaware Aqueduct is comprised of several sections, the longest section is the Rondout-West Branch Tunnel (RWBT). The RWBT is currently leaking between 15 and 35 million gallons of water per day.

The Water for the Future Program (WFF) was developed to repair leaks in the RWBT. As part of WFF, a three-mile long bypass tunnel is being constructed in the Towns of Newburgh (Orange County, New York) and Wappingers (Dutchess County, New York). To facilitate the necessary repairs, the RWBT would be temporarily shut down and drained to allow for the connection of the bypass tunnel to the existing RWBT and to make repairs in the Town of Wawarsing (Ulster County, New York). During this temporary shutdown, water from the Delaware system west of the Hudson River would be unavailable. DEP is now undertaking several projects to support the connection of the bypass tunnel to the RWBT, including the rehabilitation and repair of the Catskill Aqueduct to increase its capacity. The Catskill Aqueduct Repair and Rehabilitation (CAT-RR) will involve the following activities:

- Site Access and Staging Area Improvements - Construction would require the use of multiple central staging areas established at relatively even increments along the aqueduct throughout the duration of the project. The Croton Lake Pressure Tunnel (PT) Downtake Chamber located within the Town would serve as a central staging area to serve locations within the Town of Yorktown. Smaller, localized staging areas would also be used to support clusters of work sites. These smaller, localized staging areas would be used throughout the duration of the project work activities to support the four central staging areas by providing additional parking, equipment storage and laydown (an area that has been cleared for the temporary storage of equipment and supplies). Some of these staging areas would require minor disturbance, such as excavation and tree clearing. Tree removal would be kept to the minimum necessary, and trees would be replanted where possible. Workers would access these staging areas via local roads, access roads, driving along the top of the aqueduct. Seven localized staging areas are proposed within the Town of Yorktown located at the Hunters Brook Steel Pipe Siphon (SPS) North Chamber, the Hunters Brook SPS Blow-off Chambers, the Hunters Brook SPS South Chamber, the Yorktown Cut-and-Cover Tunnel (CCT) Access Manhole and Turkey Mountain SPS North Chamber, the Turkey Mountain SPS Blow-off Chambers, Turkey

Mountain SPS South Chamber, the Leak 7 site, and the Kitchawan CCT Access Manhole and Culvert Drain.

- Chlorination and Dechlorination - Sodium hypochlorite or chlorine dioxide would be added to the Catskill Aqueduct at a new chlorination facility at the Ashokan Screen Chamber to reduce the extent of biofilm in the aqueduct in advance of biofilm removal (see Biofilm Removal below). This chlorination process is a temporary measure that will be used only during the duration of this project to maintain the increased Catskill Aqueduct capacity by limiting biofilm regrowth. To remove anticipated sodium hypochlorite, chlorine dioxide, and/or chlorine residuals generated during temporary chlorination, sodium bisulfite would be added to the aqueduct at a new dechlorination facility at the Pleasantville Alum Plant prior to water entering Kensico Reservoir.
- Leak Repair and Local Dechlorination - Several leaks along the aqueduct must be repaired to prevent dissemination of chlorine and chlorine dioxide residuals into the surrounding environment. If repairs are not feasible, local dechlorination systems would be installed at the leaks prior to chlorination of the aqueduct. There is one leak site within the Town of Yorktown.
- Mechanical and Structural Repairs - Aging mechanical and structural components of the aqueduct infrastructure would be repaired or replaced. Repairs would restore systems used in unwatering the aqueduct and would facilitate future work. Repairs include: installation of new components, such as air vent structures and boatholes (large points of entry on the aqueduct); repair of bridge structures; replacement of siphon drain blow-off valves, culvert drain sluice gates, and air valve chambers; and permanently sealing unused culvert drain sluice gates. Streambank restoration and protective measures would be implemented prior to and following mechanical and structural repairs to protect the streambed and banks of water resources. These activities will be completed at 10 sites within the Town of Yorktown.
- Biofilm Removal - Removal of biofilm from the aqueduct will be completed through air or water pressure washing, scraping or vacuuming, or an operated cleaning system. Biofilm removal by pressure washing would require the use of wash water treatment systems at select collection points. Biofilm removal will be conducted at all site locations within the Town of Yorktown.


## 2. PROJECT PURPOSE AND NEED

Work proposed within the Town of Yorktown would restore DEP's ability to unwater portions of the Catskill Aqueduct, which are required to facilitate the completion of additional elements of the overall CAT-RR project (e.g., biofilm removal, condition assessment, and repair within the aqueduct) and allow future DEP inspection, repair, and maintenance. Work within the Town includes:

- Establishment of a primary staging area at the Croton Lake PT Downtake Chamber;
- Replacement of seven siphon drain blow-off valves;
- Sealing of three culvert drain sluice gates;
- Replacement of one culvert drain sluice gate;
- Installation of two new boatholes;
- New air vent installation;
- Repair of one waste gate;
- Internal repair at one leak (Leak 7);
- Installation of a local, passive dechlorination system at Leak 7 if internal repair is not completely effective; and
- Staging and access road improvements.

These activities, in conjunction with the overall CAT-RR project, would ultimately restore Catskill Aqueduct capacity to historic levels, and would extend the longevity of existing aqueduct infrastructure. These activities are summarized in Table 1 and discussed in more detail in the following sections.

## 3. PROPOSED WORK LOCATIONS

The CAT-RR project will consist of multiple work sites across 4 counties and 17 municipalities, all along a 74-mile portion of the Catskill Aqueduct (see Figures B-2 and B-3). There are 13 sites within the Town of Yorktown; however, only 9 sites require Town of Yorktown approval of regulated activities. The following locations have proposed activities within the Town of Yorktown (see Figure B-4):

- Yorktown-1: The site can be accessed directly from Field Street. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3193+03 on the aqueduct. This site includes the Peekskill CCT Access Manhole with Culvert Drain (Station 3193+03).
- Yorktown-2: The site is located west of Hunterbrook Road and is accessed directly from Jacob Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations $3225+83$ and $3226+35$ on the aqueduct. This site includes the

Hunters Brook SPS North Chamber (Station 3226+35) and the location of a new boathole (Station 3225+83).

- Yorktown-2A: The site is located approximately 0.25 mile southeast of Jacob Road, just north of Hunter Brook. The site is accessed directly from White Hill Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations $3233+27$ and $3235+85$ on the aqueduct. This site includes the Hunters Brook SPS Access Manholes (Station 3233+27 to 3233+62) and Hunters Brook SPS Blow-off Chambers (Station 3235+72 to $3235+85$ ).
- Yorktown-3: The South Siphon Chamber is located east of Hunterbrook Road and is accessed by an access road from Hunterbrook Road to a private driveway to a DEP access gate. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3241+44. This site includes the Hunters Brook SPS South Chamber (Station 3241+44).
- Yorktown-3A: The site is accessed via an access point from Baptist Church Road and then driving along the aqueduct. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations 3307+23 and 3320+72. This site includes the Yorktown CCT Access Manhole (Station 3307+23) and Yorktown CCT Access Manhole with Culvert Drain (Station 3320+72).
- Yorktown-4: The site is accessed by an access point from Baldwin Road then driving along the aqueduct. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3339+32. This site includes an additional Yorktown CCT Access Manhole with Culvert Drain (Station 3339+32).
- Yorktown-5: This site is located north of Turkey Mountain Brook and west of the Taconic State Parkway. Access to the site would be provided directly from Underhill Avenue. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations 3354+75 and 3361+02. This site includes the Yorktown CCT Access Manhole (Station 3354+75), the proposed location of a new boathole (Station $3360+50$ ), and Turkey Mountain SPS North Chamber (Station 3361+02).
- Yorktown-6: This site is located within the median of the Taconic State Parkway, immediately north of Turkey Mountain Brook, and would be accessed from the left travel lane of the northbound side of the parkway. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations 3368+33 and 3369+54. This site includes the Turkey Mountain SPS Blow-off Chambers (Station 3368+33 to 3369+17) and Turkey Mountain SPS Access Manholes (3369+45 to 3369+54).
- Yorktown-7: This site is located east of the Taconic State Parkway. Access to the South Chamber would be provided by a gravel road off Chapman Road, which leads to the Croton Lake Pressure Tunnel (PT) Downtake Chamber (Station 3397+40), then driving along an access road parallel to the aqueduct. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3376+40. This site includes the Turkey Mountain SPS South Chamber (Station 3376+40).
- Yorktown-8: This site would be accessed from an access road that connects to Chapman Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3397+40 on the aqueduct. This site includes the Croton Lake PT Downtake Chamber (Station 3397+40) and Croton Lake PT Blow-off and Waste-Gate Chamber (Station 3397+40).
- Yorktown-9: Access to this site is provided by a DEP access road that connects to Croton Dam Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction between Stations $3424+03$ and $3447+82$ on the aqueduct. This site includes the Croton Lake PT Uptake Chamber (Station 3424+03), Croton CCT Boathole (Station 3425+33), Leak 7 (Station 3429+55), and Croton CCT Access Manhole (Station $3447+82$ ). Unnamed tributary 1 to New Croton Reservoir and a delineated wetland (7-WL) are located to the west and downstream of Leak 7.
- Yorktown-10: The site is located north of Kitchawan Road immediately north of the unnamed tributary 3 to New Croton Reservoir. The site is accessed by driving over the aqueduct from an entrance off Kitchawan Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station $3482+33$ on the aqueduct. This site includes the Kitchawan CCT Access Manhole with Culvert Drain (Station $3482+33$ ).
- Yorktown-11: The site is accessed from the Pines Bridge Road. The Catskill Aqueduct crosses the proposed site in a northwest to southeast direction at Station 3512+19 on the aqueduct. This site includes the Kitchawan CCT Access Manhole (Station 3512+19).

Table 1. Summary of Work Activities within the Town of Yorktown

| Location | Chlorination and Dechlorination | Leak Repair or Local Dechlorination | Mechanical and Structural Repairs | Site Access and Staging Area Improvements | Biofilm Removal | Land UselZoning |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Yorktown-1 } \\ & (3193+03) \end{aligned}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public <br> Services/R1-40 |
| $\begin{gathered} \text { Yorktown-2 } \\ (3225+83 \text { to } 3226+35) \\ \hline \end{gathered}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public <br> Services/R1-160 |
| $\begin{gathered} \text { Yorktown-2A } \\ (3233+27 \text { to } 3235+85) \end{gathered}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/ R1-160/R1-40 |
| $\begin{aligned} & \text { Yorktown-3 } \\ & (3241+44) \end{aligned}$ |  |  |  | $\checkmark$ | $\checkmark$ | Public <br> Services/R1-160 |
| $\begin{gathered} \text { Yorktown-3A } \\ (3307+23 \text { and } 3320+72) \end{gathered}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/Unknown |
| $\begin{aligned} & \text { Yorktown-4 } \\ & (3339+32) \end{aligned}$ |  |  | $\checkmark$ |  | $\checkmark$ | Public <br> Services/R1-160 |
| $\begin{gathered} \text { Yorktown-5 } \\ (3354+75 \text { to } 3361+02) \end{gathered}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/R1-160 |
| $\begin{gathered} \text { Yorktown-6 } \\ (3368+33 \text { to } 3369+54) \end{gathered}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Taconic State Parkway/Unzoned |
| $\begin{aligned} & \text { Yorktown-7 } \\ & (3376+40) \end{aligned}$ |  |  |  | $\checkmark$ | $\checkmark$ | Public <br> Services/R1-200 |
| $\begin{aligned} & \text { Yorktown-8 } \\ & (3397+40) \end{aligned}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/R1-200 |
| $\begin{gathered} \text { Yorktown-9 } \\ (3424+03 \text { to } 3447+82) \end{gathered}$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/ R1-200 |
| $\begin{aligned} & \text { Yorktown-10 } \\ & (3482+33) \end{aligned}$ |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | Public Services/R1-200 |
| $\begin{aligned} & \text { Yorktown-11 } \\ & (3512+19) \end{aligned}$ |  |  |  | $\checkmark$ | $\checkmark$ | $\begin{gathered} \text { Public } \\ \text { Services/R1-200 } \end{gathered}$ |

## 4. PERMIT NEEDS

The proposed activities described below would require work activities within Federal Emergency Management Agency (FEMA) Zone A ${ }^{1}$ Special Flood Hazard Areas, excavation activities, work within and/or adjacent to watercourses, and tree removal. These activities are regulated by the Town of Yorktown in accordance with the following codes: Chapter 175, Flood Damage Prevention, Chapter 178, Freshwater Wetlands, and Chapter 270, Trees.

Based on DEP's preliminary outreach to Town Supervisor, Michael Grace, in October 2015, maintenance activities, such as aqueduct access via existing manholes, and other structures, do not require permits. Work activities proposed at Yorktown-1, Yorktown-3, Yorktown-3A, and Yorktown-4, would be considered maintenance activities; therefore, they are not subject to the Town of Yorktown municipal regulations and are not discussed further in this application. In addition, activities associated with non-jurisdictional waters, such as flowpath for Leak 7 (Station 3429+55) within Yorktown-9, are not regulated by the Town. Work activities regulated by the Town of Yorktown will occur at nine sites listed below. Complete descriptions of work activities associated with the CAT-RR contract that are regulated by the Town of Yorktown are provided in Section 5.

- Yorktown-2
- Yorktown 2-A
- Yorktown-5
- Yorktown-6
- Yorktown-7
- Yorktown-8
- Yorktown-9
- Yorktown-10
- Yorktown-11

In addition to the Town of Yorktown, this project is being coordinated with the U.S. Army Corps of Engineers (USACE), New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Transportation (NYSDOT), DEP, and Westchester County agencies for activities related to work within regulated wetlands or watercourses, activities within the DEP watershed, and curb cuts on county-owned roads, respectively. Proposed activities would result in soil disturbances regulated under NYSDEC's State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002). A stormwater pollution prevention plan

[^0](SWPPP) has been prepared for the project for all of the applicable sites within the Town. As a Municipal Separate Stormwater Sewer System (MS4) municipality, the SWPPP and MS4 Acceptance Form were submitted to the Town for review. Erosion and sediment control measures are discussed in the SWPPP. The potential project-wide permits for the project sites within the Town of Yorktown are listed in Table 2.

All work activities at Yorktown-6 will occur on DEP property; however, coordination with the NYSDOT is ongoing for a highway road permit required as part of the work zone traffic control plan associated with site access for blow-off chamber reconstruction at the Turkey Mountain SPS Blow-off Chambers (Yorktown-6; Station 3368+33 to 3369+17).

Table 2. Potential Project-wide Permits for Work Activities within the Town of Yorktown

| Location | USACE |  | NYSDEC |  | NYSDOT | Westchester County |  |  | Town of Yorktown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { NWP } \\ 3 \end{gathered}$ | NWP 7 | POW | SPDES | Highway Work Permit | County USDA Consultation | Planning Approval | Public <br> Works <br> Coordination | Wetlands | Excavation | Trees | Floodplain Development | SWPPPIMS4 Approval |
| Yorktown-1 $(3193+03)$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
| $\begin{aligned} & \text { Yorktown-2 } \\ & (3225+83 \text { to } \\ & \hline \underline{3226+35)} \\ & \hline \end{aligned}$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |
| $\begin{aligned} & \text { Yorktown-2A } \\ & (3233+27 \text { to } \\ & \hline 3235+85) \end{aligned}$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Yorktown-3 $(3241+44)$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
| Yorktown-3A <br> $(3307+23$ and <br> $\underline{3320+72)}$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
| $\begin{aligned} & \text { Yorktown-4 } \\ & (3339+32) \end{aligned}$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  |  |  | $\checkmark$ |
| $\begin{aligned} & \text { Yorktown-5 } \\ & \frac{(3354+75 \text { to }}{3361+02)} \end{aligned}$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |
| $\begin{aligned} & \hline \text { Yorktown-6 } \\ & (3368+33 \text { to } \\ & \hline \underline{3369+54)} \\ & \hline \end{aligned}$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Yorktown-7 $(3376+40)$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  |  |  | $\checkmark$ |  | $\checkmark$ |
| Yorktown-8 $(3397+40)$ |  |  |  | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  |  | $\checkmark$ |  |  | $\checkmark$ |
| $\begin{aligned} & \text { Yorktown-9 } \\ & \frac{(3424+03 \text { to }}{3447+82)} \end{aligned}$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ | $\checkmark$ |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |

Table 2. Potential Project-wide Permits for Work Activities within the Town of Yorktown (Continued)

| Location | USACE |  | NYSDEC |  | NYSDOT | Westchester County |  |  | Town of Yorktown |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { NWP } \\ 3 \end{gathered}$ | $\begin{gathered} \text { NWP } \\ 7 \end{gathered}$ | POW | SPDES | Highway Work Permit | County USDA Consultation | Planning Approval | Public <br> Works Coordination | Wetlands | Excavation | Trees | Floodplain Development | SWPPP/MS4 Approval |
| $\begin{aligned} & \text { Yorktown-10 } \\ & (3482+33) \end{aligned}$ | $\checkmark$ |  |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |
| Yorktown-11 $(3512+19)$ |  |  |  |  |  | $\checkmark$ | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |  | $\checkmark$ |

## Notes:

POW = Protection of Waters
SPDES = State Pollutant Discharge Elimination System
USDA = United States Department of Agriculture

## 5. REGULATED WORK ACTIVITIES

Proposed work activities regulated by the Town of Yorktown would occur at the following locations and are described in more detail below: Yorktown -2, Yorktown 2-A, Yorktown-5, Yorktown-6, Yorktown-7, Yorktown-8, Yorktown-9, Yorktown-10, and Yorktown-11. Work activities would include excavation and tree removal for access road construction and/or improvements and staging, streambank restoration and protection, and upgrades at the blow-off chambers. The activities proposed in this application are needed to support the CAT-RR project, and due to the location of existing Catskill Aqueduct infrastructure, the proposed activities cannot be located elsewhere. In addition, without the proposed activities, DEP would not be able to shutdown the RWBT for repairs. Detailed drawings of these activities are provided in Attachment C.

Yorktown-2: Proposed work activities include excavation for the establishment of two localized staging areas. The Croton Lake PT Downtake Chamber would serve as the primary staging area located approximately three miles southeast from the site, and two additional staging areas would be developed at this location to facilitate boathole preparation and installation. The localized staging areas would total approximately 16,140 square feet ( 0.37 acre). Boathole preparation and installation would include 500 square feet ( 0.01 acre) of excavation. These work activities would be completed outside of regulated watercourse areas and floodplain zones. Upon completion of the work, grades will be restored to match existing elevations. Tree removal is not anticipated at this site.

Yorktown-2A: Proposed work activities at this location include reconstruction of the Hunters Brook SPS Blow-off Chambers and streambank restoration and protection. The Croton Lake PT Downtake Chamber, located approximately three miles southeast from the site, would serve as the primary staging area, while a localized staging area would be established at the Blow-off Chambers. Access to the site would be directly from the shoulder of White Hill Road.

The Hunters Brook SPS Blow-off Chambers are located adjacent to Hunter Brook, a NYSDEC Class B (TS) ${ }^{2}$ stream, and Town of Yorktown regulated watercourse. Based on field observations, the substrate of Hunter Brook is comprised of sand and cobble and is best classified as a "Riverine, Lower Perennial, Unconsolidated Bottom, Sand" system based on the Cowardin System (Cowardin et al. 1979). Existing soils at the site are best described as Paxton fine sandy loam, Ridgebury loam, Woodbridge loam, and Fluvaquent-Udifluvents complex, frequently flooded.

[^1]A tree survey conducted on August 11, 2015, found the area surrounding the Blow-off Chambers to be comprised of a beech-maple mesic forest community. Tree species near the Blow-off Chambers include red maple (Acer rubrum), Norway maple (Acer platanoides), black oak (Quercus velutina), sweet birch (Betula lenta), slippery elm (Ulmus rubra), black locust (Robinia pseudoacacia), pignut hickory (Carya glabra) and an understory of royal paulownia (Paulownia spp.), flowering dogwood (Cornus florida), sassafras (Sassafras albidum), sycamore (Platanus occidentalis), and red elm (Ulmus rubra)

Blow-off chamber reconstruction would require excavation, a temporary stream diversion, a turbidity curtain to prevent sediment from moving downstream, and the construction of a gabion retaining wall and riprap aprons to protect the banks of Hunter Brook. Upon completion of the work, grades will be restored to match existing elevations.

An additional staging area would be established at the blow-off chambers to provide additional parking and equipment laydown, and would require brush clearing and the removal of 11 trees ranging from approximately 4.0 diameter at breast height (dbh) to 17.0 dbh (see Attachment C for CI-605.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 1 of 3 and CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3).

The Hunters Brook SPS Blow-off Chambers lie within a FEMA designated 100-year floodplain (Zone A). The floodplain surrounds Hunter Brook and is located between the Hunters Brook SPS Blow-off Chambers and the Hunters Brook SPS Access Manholes. No FEMA designated floodways are located within the site. The proposed activities would not result in permanent grade changes once the work activities are complete. In addition, the proposed temporary and staging work would not increase the watercourse's water surface elevation. Sediment and erosion control measures, such as silt fences and haybale lines, would be installed, as appropriate, to prevent disturbed soils from migrating to the surrounding areas during construction. Floodplain fill has been kept to a minimum so as not to interfere with floodflow passage or storage.

Overall, proposed activities at Yortown-2A would encompass approximately 11,630 square feet ( 0.27 acre). Of this area, approximately 10,310 square feet ( 0.24 acre) would be disturbed within Hunter Brook and the 100 -foot control area. The temporary stream diversion would result in approximately 650 square feet ( 0.01 acre ) of temporary disturbance to Hunter Brook. Approximately, 4,240 square feet ( 0.10 acre) of the 100 -foot control area would be temporarily affected due to staging. The installation of the gabion retaining wall, riprap aprons, and excavation following blow-off chamber reconstruction would permanently disturb approximately 820 square feet ( 0.02 acre) of Hunter Brook and approximately 4,600 square feet ( 0.11 acre) of the 100 -foot control area. See Attachment C for detailed project drawings.

Yorktown-5: Proposed work activities include excavation for the preparation and installation of a new boathole. Primary staging would occur at the Croton Lake PT Downtake Chamber located
approximately 0.75 mile southwest from the site. An additional staging area would be established between Baldwin Road and Underhill Avenue and would encompass an area of approximately 15,600 square feet ( 0.36 acre). Access to the site would be provided directly from Underhill Avenue and would require the installation of a stabilized construction entrance at the access point off Underhill Avenue. The construction entrance would require approximately 730 square feet ( 0.02 acre ) of excavation. The anticipated footprint of disturbance for the new boathole is approximately 2,000 square feet ( 0.05 acre) and would include 500 square feet of excavation ( 0.01 acre). These activities would occur outside of regulated watercourse areas and floodplain zones. Upon completion of the work, grades will be restored to match existing elevations. Proposed activities would require the removal of two trees ranging from approximately 12.0 dbh to 18.0 dbh (see Attachment C for CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3).

Yorktown-6: Proposed work activities at this location include reconstruction of the Turkey Mountain SPS Blow-off Chambers, construction of a new access road just east of the easternmost blow-off chamber, and streambank restoration and protection. The Croton Lake PT Downtake Chamber located approximately 0.5 mile south of the site, would serve as the primary staging area while a localized staging area would be established at the Blow-off Chambers.

The Turkey Mountain SPS Blow-off Chambers are located adjacent to Turkey Mountain Brook, a NYSDEC Class B stream and Town of Yorktown regulated watercourse. Based on field observations, Hunter Brook is best classified as a "Riverine, Upper Perennial, Unconsolidated Bottom, Sand, Seasonally Flooded" based on the Cowardin System (Cowardin et al. 1979). Existing soils at the site are best described as Paxton fine sandy loam.

Tree surveys conducted during field visits on August 11, 2015 and September 17, 2015, found the area surrounding the Turkey Mountain SPS Blow-off Chambers is comprised of oak-tulip tree forest community. Tree species include tulip tree (Liriodendron tulipfera) black walnut (Juglans nigra), white ash (Fraxinus americana), black cherry (Prunus serotina), and black willow (Salix nigra). The area is heavily overgrown in areas with Oriental bittersweet (Celastrus orbiculatus), fox grape (Vitis labrusca), and porcelain berry (Ampelopsis brevipedunculata). Other dominant vegetation consists of multiflora rose (Rosa multiflora), gray dogwood (Cornus racemosa), poison ivy (Toxicodendron radicans), privet (Ligustrum spp.), and pussy willow (Salix discolor)

Blow-off chamber reconstruction would require excavation, and the installation of streambank restorative and protective measures to protect the streambed and banks of Turkey Mountain Brook. Protective measures would include the installation of a temporary cofferdam to divert flows, the installation of a turbidity curtain, and a gabion retaining wall to protect the banks of Turkey Mountain Brook from future scouring. These protective measures would disturb Turkey

Mountain Brook and the 100-foot control area. Upon completion of proposed work activities, grades will be restored to match existing elevations.

Site access road improvements would be required to cross Turkey Mountain Brook, including the installation of a new permanent culvert. On-site staging would be located adjacent to the left lane of the northbound lanes of the Taconic State Parkway, where no guiderail is located and where no additional excavation is required. The removal of eight trees ranging from approximately 4.0 dbh to 18.0 dbh is anticipated for this site (see Attachment C for CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3 and CI-607.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 3 of 3).

The Turkey Mountain Brook SPS Blow-off Chambers lie within a FEMA designated 100-year floodplain (Zone A). The floodplain surrounds Turkey Mountain Brook and runs through the central portion of the site. The proposed activities would not result in permanent grade changes once the work activities are complete. In addition, the proposed temporary and staging work would not increase the watercourse's water surface elevation. Sediment and erosion control measures, such as silt fences and haybale lines, would be installed, as appropriate during construction. Floodplain fill has been kept to a minimum so as not to interfere with floodflow passage or storage.

Overall, proposed activities at Yorktown-6 would encompass approximately 10,510 square feet ( 0.24 acre). Of this area, approximately 9,990 square feet ( 0.23 acre) would be disturbed within Turkey Mountain Brook and the 100 -foot control area. The temporary stream diversion would result in approximately 950 square feet ( 0.02 acre) of temporary disturbance to Turkey Mountain Brook. Approximately 1,600 square feet ( 0.04 acre) would be temporarily disturbed within the 100 -foot control area due to excavation for site access improvements and staging. The installation of the gabion retaining walls and new concrete culvert, and excavation after blow-off chamber reconstruction would result in approximately 210 square feet ( $<0.01$ acre) of permanent disturbance to Turkey Mountain Brook and 7,230 square feet ( 0.17 acre ) of permanent disturbance to the 100 -foot control area. See Attachment C for detailed project drawings.

Yorktown-7: Proposed work activities at this site include access road improvements that would require the placement of steel plates over two culverts along an existing access road off Chapman Road, brush clearing 5 feet from the western edge of the road for approximately 360 linear feet, approximately 375 linear feet of underbrush trimming, and approximately 1,020 square feet of stabilization along the access road. The anticipated disturbance would be located outside of regulated watercourse areas and floodplain zones and would not require excavation. The removal of one tree, measuring approximately 18.3 dbh , is anticipated at this site (see Attachment C for CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3).

Yorktown-8: Proposed work activities at this site include the replacement of blow-off valves and waste gate. This location would serve as the primary staging area for Stations 2390+96 to $3711+50$ on the aqueduct from the Town of Fishkill to the Town of Mount Pleasant. Staging at this site would cover approximately 33,590 square feet ( 0.77 acre) and would entail approximately 3,750 square feet of excavation ( 0.09 acre). This site would be accessed from an existing access road that connects to Chapman Road and would require the placement of steel plates over two existing culverts, leveling, and tree removal. Work activities would be located outside of regulated watercourse areas and floodplain zones. Upon completion of the work, grades will be restored to match existing elevations. Tree removal is not anticipated at this site.

Yorktown-9: Proposed work activities include installation of a new air vent at the CCT Boathole, internal repairs to Leak 7, and installation of a passive dechlorination facility if leak repair is unsuccessful. Primary staging would occur at the Croton Lake PT Downtake Chamber located approximately 0.5 mile north from the site. An additional staging area would be established at the Croton Lake Gate house to provide additional parking. Access to this site is provided by a DEP access road that connects to Croton Dam Road. The proposed work zone for air vent installation would be approximately 1,200 square feet ( 0.03 acre) and would include approximately 500 square feet ( 0.01 acre ) of excavation to access the cover of the existing boathole.

The site contains two existing culverts that would require protection through the placement of steel plates during construction. Access road improvements would entail underbrush clearing and gravel placement in trail ruts. The removal of three trees ranging from approximately 3.8 dbh to 9.0 dbh is anticipated at this site to improve access from the top of the access road at the aqueduct to Croton Dam Road (see Attachment C for the East of Hudson Tree Location, Type and Disposition Schedules). The disturbed area for this work is approximately 15,200 square feet ( 0.35 acre). This includes approximately 210 square feet ( $<0.01$ acre) for work at Leak 7. If leak repair is unsuccessful, a dechlorination system would be installed south of Leak 7 and would require approximately 5.0 cubic yards of excavation. Leak 7 primarily provides wetland hydrology, however surface drainage and groundwater flow from the surrounding hillside also contribute wetland hydrology. Leak repair may result in the permanent loss of Wetland 7-WL; however, this wetland is approximately 0.07 acre in size and provides limited functions and values. These work activities would be located outside of regulated watercourse areas and floodplain zones.

Yorktown-10: Proposed work activities at this location include culvert drain sluice gate replacement and streambank restoration and protection. The Croton Lake PT Downtake Chamber, located approximately 1.5 miles north from the site would serve as the primary staging area while a localized staging area would be established on top of the aqueduct at this location. The Kitchawan CCT Access Manhole and Culvert Drain site is accessible from an entrance off Kitchawan Road to an access road over the Catskill Aqueduct, leading to the work site. The site
contains the unnamed tributary 3 to New Croton Reservoir, a NYSDEC Class B (TS) ${ }^{3}$ stream and Town of Yorktown regulated watercourse. Based on field observations, unnamed tributary 3 to New Croton Reservoir is best classified as "Riverine, Lower Perennial, Unconsolidated Bottom, Intermittently Flooded" based on the Cowardin System (Cowardin et al. 1979). Beyond the limits of proposed work, unnamed tributary 3 flows north to New Croton Reservoir. Existing soils at the site are best described as Ridgebury loam.

A tree survey conducted on November 8, 2016, found the area surrounding the Kitchawan CCT Access Manhole and Culvert Drain site to be comprised primarily of a deciduous forest that may be similar to a rich mesophytic forest (Edinger et al. 2014).

The site can be accessed directly from Kitchawan Road. Work activities at this site would temporarily affect the unnamed tributary 3 to New Croton Reservoir and the Town's designated 100 -foot control area. Restoration and protection of the unnamed tributary would entail restoration of riprap aprons at the culvert's inlet and outlet to their as-built condition. Temporary protective measures would entail a stream diversion and installation of a turbidity curtain to prevent sediment from moving downstream during construction. In addition, excavation and gravel placement would occur for temporary access road construction. The two temporary roads would extend from the aqueduct to the inlet and outlet of the culvert drains. Upon completion of the work, grades will be restored to match existing elevations, and the temporary roads would be reseeded and restored to pre-existing conditions through the use of comparable, native species. The removal of four trees ranging from approximately 10.0 dbh to 26.0 dbh is anticipated for this site (see Attachment C for CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3 and CI-607.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 3 of 3).

Overall, proposed activities at Yorktown-10 would encompass approximately 6,020 square feet ( 0.14 acre). Of this area, approximately 5,370 square feet ( 0.12 acre) would be disturbed within unnamed tributary 3 to New Croton Reservoir and the 100 -foot control area. The temporary stream diversion would result in approximately 560 square feet ( 0.01 acre) of temporary disturbance within unnamed tributary 3 to New Croton Reservoir. Excavation for site access and staging would temporarily disturbed 4,810 square feet ( 0.11 acre) of the 100 -foot control area. Permanent disturbance within unnamed tributary 3 to New Croton Reservoir and the Town's 100 -foot control area is not anticipated. See Attachment C for detailed project drawings.

Yorktown-11: Proposed work activities include placement of fill within the 100-foot control area for new access road construction, excavation, and tree removal. The site contains the

[^2]unnamed tributary 4 to New Croton Reservoir, a NYSDEC Class B (T) stream and Town of Yorktown regulated watercourse. Based on a desktop analyses, unnamed tributary 4 to New Croton Reservoir is best classified as "Riverine, intermittent, Streambed, Seasonally Flooded" based on the Cowardin System (Cowardin et al. 1979). Beyond the limits of proposed work, unnamed tributary 4 flows north to New Croton Reservoir. In addition, the site can be characterized as deciduous forest that may be similar to a rich mesophytic forest (Edinger et al. 2014).

The anticipated footprint of disturbance for temporary staging is approximately 10,000 square feet ( 0.23 acre). The new access road would include approximately 7,730 square feet ( 0.18 acre) of excavation. Of this area, approximately 2,330 square feet ( 0.05 acre) would permanently disturb the Town's designated 100-foot control area of unnamed tributary 3 to New Croton Reservoir. The removal of two trees ranging from approximately 4.0 dbh to 20.0 dbh is anticipated at this site. See Attachment C for detailed project drawings, and CI-606.00 East of Hudson Tree Location, Type, and Disposition Schedule Sheet 2 of 3 and CI-607.00 East of Hudson Tree Location, Type and Disposition Schedule.

## 6. SUMMARY OF PROJECT DISTURBANCES

Provided below are details on the proposed disturbances to water resources, including watercourses, and their regulated control area, floodplains, and terrestrial resources from excavation activities.

### 6.1 WATER RESOURCES

A summary of anticipated temporary and permanent disturbances to regulated water resources (watercourses and/or the municipal regulated control area) at Yorktown-2A, Yorktown-6, Yorktown-10, and Yorktown-11 is provided in Table 3.

Across the nine sites located within the Town of Yorktown, approximately 28,090 square feet ( 0.64 acre) of regulated water resources would be disturbed by CAT-RR. Appropriate restorative and protective measures would be installed within regulated watercourses when access is required for proposed work. These measures would be temporary in nature and removed upon the completion of the proposed work. Areas of temporary disturbance within the Town's 100foot control area would be planted with native species at the conclusion of the proposed work and/or would revegetate naturally, representing a restoration to baseline conditions in these regarded locations.

Table 3. Regulated Water Resources Disturbance

| Location | Watercourse Below Ordinary High Water (Square Feet) |  | 100-foot Control Area (Square Feet) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Temporary | Permanent | Temporary | Permanent |
| Yorktown-2A | 650 | 820 | 4,240 | 4,600 |
| Yorktown-6 | 950 | 210 | 1,600 | 7,320 |
| Yorktown-10 | 560 | 0 | 4,810 | 0 |
| Yorktown-11 | 0 | 0 | 0 | 2,330 |
| Total | 2,160 | 1,030 | 10,650 | 14,250 |
| Total Watercourse Disturbance | 3,190 |  | NA |  |
| Total 100-foot Control Area Disturbance | NA |  | 24,900 |  |
| Total Disturbance to Regulated Water Resources (Watercourses and Control Areas) | 28,090 |  |  |  |

## Notes:

All estimates have been rounded to the nearest hundredth
NA = Not Applicable

### 6.2 SPECIAL FLOOD HAZARD AREA AND FLOODPLAINS

At Yorktown-2A, the streambank restoration measures would have minor encroachment on the Special Flood Hazard Area, as they would be keyed into the existing streambank. These measures would not displace a significant portion of the cross-sectional area of the stream. These activities are not anticipated to result in an alteration of elevations or flood capacity in the mapped floodplain. At Yorktown-6, the streambank restoration measures would have minor encroachment on the 100-year floodplain with base flood elevation ranges from 282 to 290 feet, as they would be keyed into the existing streambank and would not displace a significant portion of the cross-sectional area of the stream. Proposed activities within the FEMA floodplain at Yorktown-2A and Yorktown-6 would not result in any alteration, or relocation of on-site watercourses.

At each of these sites, floodplain fill has been kept to a minimum so as not to interfere with floodflow passage or storage. Sediment and erosion control measures, such as silt fences and haybale lines, would be installed, as appropriate, to prevent disturbed soils from migrating to the surrounding areas during construction. In addition, areas of disturbance within floodplains in Yorktown-2A and Yorktown-6 would be reseeded and restored to pre-existing conditions through the use of native shrub and herbaceous species adapted to floodplain habitat.

### 6.3 EXCAVATION

Site preparation, including access road construction and improvements, the installation of in-water stream protection measures, construction staging, and boathole preparation and installation will require excavation. A total of approximately 500 square feet of excavation would occur at Yorktown-2; approximately 5,420 square feet at Yorktown-2A; 1,230 square feet at Yorktown-5; 7,440 square feet at Yorktown-6; 3,750 square feet at Yorktown-8; 5 cubic yards associated with Leak 7 and 500 square feet for activities at the boathole at Yorktown-9; 4,810 square feet at Yorktown-10; and 7,730 square feet at Yorktown-11.

Proposed activities requiring topsoil excavation are discussed in more detail within each site-specific narrative in Section 5, and the areas of disturbance located within and/or adjacent to regulated water resources are broken out in Section 6.1, and Table 3. Excavation activities for construction of the new access road, at the steel pipe siphon sites, for boathole installation and preparation, and for staging would result in the temporary loss of vegetation and the modification of existing topography. Excavated areas associated with blow-off chamber reconstruction and piping would be revegetated with native species that would largely restore these sites to baseline or improved conditions and restore habitat value at these sites. Other areas temporarily affected by site preparation activities would be reseeded and restored to pre-existing conditions.

### 6.4 TREE REMOVAL

Approximately 31 trees would be removed from the work sites. Removals within the work limits have been noted and trees located in forested areas beyond the work limits will be preserved. In addition, two trees located within the work limits will require protection: Tree No. 1103 located along the access road in Yorktown-9 and Tree No. 524 located within the 100-foot control area of unnamed tributary 3 to New Croton Reservoir in Yorktown-11 (see Attachment C for CI-606.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 2 of 3 and CI-607.00 East of Hudson Tree Location, Type and Disposition Schedule Sheet 3 of 3). Additional information can be found on the Tree Permit Applications included as part of this permit application package.

## 7. ANTICIPATED PROJECT SCHEDULE

The timeline for implementation of the Upstate Water Supply Resiliency project and all construction components are scheduled to be completed by the end of 2022 to support the RWBT temporary shutdown for the connection of the RWBT Bypass Tunnel in 2023. CAT-RR would need to be completed prior to the shutdown. Site preparation would be completed first followed by leak repair, installation of the dechlorination systems, mechanical
repairs andthen biofilm removal. After completion of the connection of the Bypass Tunnel to the RWBT, the water supply system would return to normal operations.

CAT-RR requires a phased approach to construction and operation that would span several years. Since biofilm removal would be the key activity that would restore the aqueduct's capacity to support the RWBT temporary shutdown, much of the proposed work is phased to support this activity. Overall, CAT-RR is anticipated to begin in 2018 and finish in 2023. However, staging areas used to support construction activities would be restored to natural conditions, as it is anticipated that activities would be completed by thattime.

## 8. LIST OF ATTACHMENTS, FIGURES, AND DRAWINGS

Below, please find a list of Attachments, figures, and drawings related to this application:
o Town of Yorktown Permit Application Forms
o Project Description and Need (Attachment A)
o Figures (Attachment B)

- B-1: New York City Surface Water Supply System Map
- B-2: Upper Catskill Aqueduct
- B-3: Leak Repair, Local Dechlorination, and Mechanical and Structural Repairs Along the Upper Catskill Aqueduct
- B-4: Site Location Map - Town of Yorktown, Westchester County, NY
- B-5: Soil Map - Westchester County, New York (Jacob Road Study Area)
- B-6: Soil Map - Westchester County, New York (Chapman Road Study Area)
- B-7: Soil Map - Westchester County, New York (Kitchawan Road Study Area)
o Project Drawings (Attachment C)
o SEQR EAS Form (Attachment D)


## Attachment B

Figures


Figure B-1: New York City Surface Water Supply System Map


Figure B-2: Upper Catskill Aqueduct


Figure B-3: Leak Repair, Local Dechlorination, and Mechanical and Structural Repairs Along the Upper Catskill Aqueduct


Figure B-4: Site Location Map


Figure B-5 Soil Map - Westchester County, New York (Jacob Road Study Area)


Soil Unit - Area of Chapman Road Town of Yorktown Westchester County

[^3]Figure B-6 Soil Map - Westchester County, New York (Chapman Road Study Area)


Soil Unit - Area of Kitchawan Road Town of Yorktown Westchester County
Aqueduct Connection Environmental Support (ACES)

Figure B-7 Soil Map - Westchester County, New York (Kitchawan Road Study Area)

## Attachment C

## Project Drawings

| YORKTOWN-2 |  |
| :---: | :--- |
| DRAWING No. |  |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-148 | AREA PLAN STA 3199+00 TO STA 3228+00 |
| CI-314 | STAGING AREA PLAN NBH13 JACOBS ROAD |
| CI-332 | SITE PREPARATION AND RESTORATION NEW AND EXISTING BOATHOLES - TYPICAL |
| CI-348 | SITE PREPARATION AND RESTORATION HUNTERS BROOK SPS |
| ST-061 | NEW BOATHOLE KEY PLANS AND LOCATION SCHEDULE |
| ST-062 | NEW BOATHOLE CONCRETE COLLAR |
| ST-063 | NEW BOATHOLE FRP LINING |
| ST-064 | NEW BOATHOLE FRP LINING POST INSTALLATION REPAIRS |
| ST-065 | NEW BOATHOLE REMOVABLE PRECAST CONCRETE SLAB |


| YORKTOWN-2A |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-149 | AREA PLAN STA 3228+00 TO STA 3256+00 |
| CI-348 | SITE PREPARATION AND RESTORATION HUNTERS BROOK SPS |
| CI-360 | HUNTERS BROOK SPS BLOW-OFF CHAMBER PIPNG AND GRADING PLAN |
| CI-605 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 1 OF 3 |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| ST-186 | SPS BLOW-OFF CHAMBER REHABILITATION CHAMBER TOP REPLACEMENT PLANS AND |
| ME-041 | SECTIONS |
| ME-042 | STEEL PIPE SIPHON BLOW-OFF CHAMBER DOUBLE KNIFE GATE VALVE DETAILS |
| ME-043 | STEEL PIPE SIPHON BLOW-OFF CHAMBER SCHEDULE |
| ME-045 | STEEL PIPE SIPHON BLOW-OFF CHAMBER DETAILS |
| LP-003 | HUNTERS BROOK SPS BLOW-OFF CHAMBER PLANTING PLAN AND SCHEDULE |
| LP-005 | PLANTING DETAILS |


| YORKTOWN-5 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-153 | AREA PLAN STA 3341+00 TO STA 3370+00 |
| CI-315 | STAGING AREA PLAN NBH14 UNDERHILL AVENUE |
| CI-332 | SITE PREPARATION AND RESTORATION NEW AND EXISTING BOATHOLES - TYPICAL |
| CI-349 | SITE PREPARATION AND RESTORATION TURKEY MOUNTAIN SPS |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| ST-061 | NEW BOATHOLE KEY PLANS AND LOCATION SCHEDULE |
| ST-062 | NEW BOATHOLE CONCRETE COLLAR |
| ST-063 | NEW BOATHOLE FRP LINING |
| ST-064 | NEW BOATHOLE FRP LINING POST INSTALLATION REPAIRS |
| ST-065 | NEW BOATHOLE REMOVABLE PRECAST CONCRETE SLAB |


| YORKTOWN-6 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-153 | AREA PLAN STA 3341+00 TO STA 3370+00 |
| CI-101 | TRAFFIC CONTROL ACCESS TO TURKEY MOUNTAIN SPS BLOW-OFF CHAMBER SHEET 1 OF 2 |
| CI-102 | TRAFFIC CONTROL ACCESS TO TURKEY MOUNTAIN SPS BLOW-OFF CHAMBER SHEET 2 OF 2 |
| CI-161 | SITE ACCESS ROAD IMPROVEMENTS TONGORE SPS BLOW-OFF CHAMBERS PLAN AND PROFILE |
| CI-240 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS BLOW-OFF CHAMBERS |
| CI-331 | SITE PREPARATION AND RESTORATION ACCESS MANHOLE AND SPS ACCESS MANHOLE - TYPICAL |
| CI-349 | SITE PREPARATION AND RESTORATION TURKEY MOUNTAIN SPS |
| CI-361 | TURKEY MOUNTAIN SPS BLOW-OFF CHAMBER PIPING AND GRADING PLAN |
| CI-363 | TURKEY MOUNTAIN SPS PRECAST CONCRETE CULVERT |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| ST-172 | SPS REHABILITATION CML REPAIRS |
| ST-186 | SPS BLOW-OFF CHAMBER REHABILITATION CHAMBER TOP REPLACEMENT PLANS AND SECTIONS |
| ME-034 | MANHOLE REHABILITATION |
| ME-041 | STEEL PIPE SIPHON BLOW-OFF CHAMBER DEMOLITION SECTIONS |
| ME-042 | STEEL PIPE SIPHON BLOW-OFF CHAMBER DOUBLE KNIFE GATE VALVE DETAILS |
| ME-043 | STEEL PIPE SIPHON BLOW-OFF CHAMBER SCHEDULE |
| ME-045 | STEEL PIPE SIPHON BLOW-OFF CHAMBER DETAILS |


| YORKTOWN-7 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-154 | AREA PLAN STA 3370+00 TO STA 3398+00 |
| CI-241 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 1 OF 4 |
| CI-242 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 2 OF 4 |
| CI-243 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 3 OF 4 |
| CI-244 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 4 OF 4 |
| CI-349 | SITE PREPARATION AND RESTORATION TURKEY MOUNTAIN SPS |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |


| YORKTOWN-8 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-154 | AREA PLAN STA 3370+00 TO STA 3398+00 |
| CI-241 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 1 OF 4 |
| CI-242 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 2 OF 4 |
| CI-243 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 3 OF 4 |
| CI-244 | SITE ACCESS ROAD IMPROVEMENTS TURKEY MOUNTAIN SPS SOUTH CHAMBER SHEET 4 OF 4 |
| CI-309 | STAGING AREA PLAN CROTON LAKE PT DOWNTAKE CHAMBER PRIMARY STAGING |
| ST-181 | CROTON LAKE DOWNTAKE CHAMBER PLANS |
| ST-182 | CROTON LAKE DOWNTAKE CHAMBER SECTIONS |
| ST-183 | CROTON LAKE DOWNTAKE CHAMBER SECTIONS 2 |
| ST-184 | CROTON LAKE DOWNTAKE CHAMBER DETAILS |
| ME-021 | CROTON LAKE DOWNTAKE CHAMBER DEMOLITION PLAN EL. 379.79 |
| ME-022 | CROTON LAKE DOWNTAKE CHAMBER DEMOLITION SECTIONS I |
| ME-023 | CROTON LAKE DOWNTAKE CHAMBER DEMOLITION SECTIONS II |
| ME-024 | CROTON LAKE DOWNTAKE CHAMBER DEMOLITION SECTIONS III |
| ME-025 | CROTON LAKE DOWNTAKE CHAMBER PLAN AT EL. 379.79 |
| ME-026 | CROTON LAKE DOWNTAKE CHAMBER SECTIONS I |
| ME-027 | CROTON LAKE DOWNTAKE CHAMBER SECTIONS II |
| ME-028 | CROTON LAKE DOWNTAKE CHAMBER SECTIONS III |


| YORKTOWN-9 |  |
| :---: | :---: |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-155 | AREA PLAN STA 3398+00 TO STA 3425+00 |
| EA-156 | AREA PLAN STA 3425+00 TO STA 3451+00 |
| CI-269 | SITE PREPARATION AND RESTORATION LEAK REPAIR LEAK 7 |
| CI-270 | SITE PREPARATION AND RESTORATION PASSIVE DECHLORINATION SYSTEM LEAK 7 |
| CI-283 | LEAK 7 PASSIVE DECHLORINATION SYSTEM |
| CI-284 | PASSIVE DECHLORINATION SYSTEM TYPICAL DETAIL |
| CI-331 | SITE PREPARATION AND RESTORATION ACCESS MANHOLE AND SPS ACCESS MANHOLE TYPICAL |
| CI-332 | SITE PREPARATION AND RESTORATION NEW AND EXISTING BOATHOLES - TYPICAL |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| CI-607 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 3 OF 3 |
| ST-145 | LEAK 7 LEAK REPAIR - GROUTING OR LINING |
| ST-157 | AQUEDUCT ACCESS MANHOLE DETAIL |
| ST-158 | TYPICAL AQUEDUCT LINER DEFECT TYPES LEAK REPAIR GROUTING SHEET 1 OF 3 |
| ST-159 | TYPICAL AQUEDUCT LINER DEFECT TYPES LEAK REPAIR GROUTING SHEET 2 OF 3 |
| ST-160 | TYPICAL AQUEDUCT LINER DEFECT TYPES LEAK REPAIR GROUTING SHEET 3 OF 3 |
| ST-161 | TYPICAL AQUEDUCT LINER DEFECT TYPES LEAK REPAIR LINING |
| ST-171 | TYPICAL AQUEDUCT LINER DEFECT TYPES CONCRETE REHABILITATION |


| YORKTOWN-10 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-158 | AREA PLAN STA 3480+00 TO STA 3503+00 |
| CI-333 | SITE PREPARATION AND RESTORATION ACCESS MANHOLE CULVERT DRAIN SLUICE GATE - |
| CI-334 | CDPICAL |
| CI-335 | CDSG MECHANICAL WORK (REPLACE) PLANS |
| CI-606 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| CI-607 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 3 OF 3 |
| ST-157 | AQUEDUCT ACCESS MANHOLE DETAIL |
| ME-031 | ACCESS MANHOLE CULVERT DRAIN SLUICE GATE DEMOLITION SECTIONS |
| ME-032 | CDSG MECHANICAL WORK SEAL AND REPLACE SECTIONS |
| ME-033 | CDSG MECHANICAL WORK SEAL AND REPLACE DETAILS |
| ME-034 | MANHOLE REHABILITATION |


| YORKTOWN-11 |  |
| :---: | :--- |
| DRAWING No. | DRAWING TITLE |
| GE-001 | COVER SHEET |
| GE-011 | INDEX OF DRAWINGS SHEET 1 OF 4 |
| GE-012 | INDEX OF DRAWINGS SHEET 2 OF 4 |
| GE-013 | INDEX OF DRAWINGS SHEET 3 OF 4 |
| GE-014 | INDEX OF DRAWINGS SHEET 4 OF 4 |
| GE-021 | ABBREVIATIONS AND SYMBOLS |
| GE-022 | ABBREVIATIONS AND SYMBOLS |
| EA-003 | KEY PLAN STA 2850+00 TO ST 4066+61 |
| EA-020 | EXISTING AND ACCESS NOTES |
| EA-021 | EXISTING AND ACCESS SCHEDULE SHEET 1 OF 3 |
| EA-023 | EXISTING AND ACCESS SCHEDULE SHEET 3 OF 3 |
| EA-024 | ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |
| EA-159 | AREA PLAN STA 3503+00 TO STA 3530+00 |
| CI-245 | SITE ACCESS ROAD IMPROVEMENTS KITCHAWAN ACCESS MANHOLE (MH25) |
| CI-246 | SITE ACCESS ROAD IMPROVEMENTS KITCHAWAN ACCESS MANHOLE (MH25) PROFILE |
| CI-331 | SITE PREPARATION AND RESTORATION ACCESS MANHOLE AND SPS ACCESS MANHOLE - |
| CI-606 | TYPICAL |
| CI-607 | EAST OF HUDSON TREE LOCATION, TYPE AND DISPOSITION SCHEDULE SHEET 2 OF 3 |
| ST-157 | AQUEDUCT ACCESS MANHOLE DETAIL |
| ME-034 | MANHOLE REHABILITATION |

## CATSKILL AQUEDUCT REPAIR AND REHABILITATION

## CONTRACT WFF-CAT-RR



BID SET
DATE: OCTOBER 2017




02 CIVIL


03 PREPARATION AND ENTRY


04 BIOFILM REMOVAL


05 STRUCTURAL


ONATAN HormuN, P.E. UREAU OF ENGINERRING DESIGN\& CONSTRUCTIO


| ACCOUNTABLE MANAGER | "WARNING-IT IS A VIOLATION, OF THE NEWYORK STATE EDUCATION LAW, SECTION,72O9.2, FOR ANY PERSON, UNLESS (S)HEIS ACTING UNDER THE DIRECTION OF ALICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IFALTERED, THE ALTERING PERSON SHALLCOMPLY'WITH THE REQUIREMENTS OF NEWYORK EDUCATION, LAW, SECTION, 72O9.2." | NEW YORK CITY <br> ENVIRONMENTAL PROTECTION <br> BUREAU OF ENGINEERING DESIGN \& CONSTRUCTION 96-05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA, NEW YORK 11368 www.nyc.gov/dep |
| :---: | :---: | :---: |
| Proosen MANGEER OF WF |  |  |
| wenor Serpour, P.E. |  |  |
| PROGRAM DIRECTOR OF WFF SEAN MCANDREW, P.E. |  |  |



| 07 ELECTRICAL |  |  |
| :---: | :---: | :---: |
| SHEET No | DRAWNG No | DRAWNG TITLE |
| ${ }_{468}$ | El-00.00 | Electrcal legen |
| 469 | El-02200 | Electrcal legio 1 |
| 470 | El-021.00 | Croton Lake downtake chamerer lictrical poner plan |
| ${ }^{471}$ | El-02200 |  |
| 472 | El-223.00 | Electrical demals |
| 473 | EL-050.00 |  |
| 474 | -051.00 |  |
| 475 | El-052.00 | New Palt active dechlornatow facult power Phan |
| 476 | $\mathrm{EL-055}^{0}$ |  |


| 09 LANDSCAPE PLAN |  |  |
| :---: | :---: | :---: |
| SHEET No | drawng no | DRAWNG TITE |
| ${ }_{481}$ | Lp-00.00 |  |
| 482 | LP-00200 |  |
| ${ }_{4}^{48}$ | LP-003.00 |  |
| 484 | Lp-outoo |  |
| 485 | LP-005.00 | Plantic ofetals |





## A SERIES GENERAL NOTES:

CAT-RR PROUECT AUUEUCT STATONNG IS CONIITENT WTH RECORD STATOONING ESTABLISHED DURING
CONSTRUCTIN OF THE CATSKLL AOULDUT





 EACH ROUEDUCT STRUCTURE. THE CONTRACTOR SHALL ARS

SURFACE FEATURES AND TOPOGRAPHY PROVDED BY RETTEW ENGNEERNG \& SURVEYNG, P.C. OF DELHI, NEW
YORK. HORIZNTAL GROUND CONTROL SURVEE BASED ON THE NEW YORK STATE PLANE COROINATE SYSTEM EAST, 3101 NAD 83/2011. VERTCAL DATUM BASED UPON NATONAL GEODETCC VERTCAL DATUM OF 1988
(GEOOD 12A).
THE Contractor shall verfy elevanons and dimenions prior to executing the respective work
AND IMMEDATELY NOTFY THE ENGNEER OF ANY DISCREPANCIES IMPACTING THE WORK AS DESIONED.
TAX Map lot lines nolated on the dramngs, are estmates at best of property lines, and do not
Represent actual survere property boundarles. THe contractor is responsile for verfing PROPPERY BOHNADES WHERE PRUDENT, PRIOR TO THE COMMENCEMENT OF ANY ASSOCIATED WORK




SUPERSTRUCTURES MAY POTENTALLY BE IN DEETERORATED CONDTTON. CONTRACTOR SHALL PROVDE
SUPERTRUCTURE PROTECTON AT ALL CAT-RR SUPERSTRUCTURES WHERE WORK IS BEENG PERFORMMD








SEE Cl-031 THRU Cl-032 For typlcal traffic control measures.
10. SEE CI-601 THRU CI-607 FOR TREE LOCATON, TYPE AND DISPosition SCHEDULE


- access manholes (MH)
- bOATHOLES (BH)
- ACCESS MAAHOLES wTH CULVERT DRAN SLLUICE GATES (MHS)
- STEEL PPE SPHON CHAMBERS (SPS-C)
- DOWTAAKE CHAMEERS (DTC)
- ASHOKAN SCREEN CHAMBER (SC1)
$\therefore \quad$ CATSKILL INFLUENT CHAMBER (CIC)


12. NOTE TO CONTRACTOR THAT CAT-RR CONTRACT DOCuMENTS ARE BASED ON BOTH THE NORTH AMERICAN






 Roocraw MNNGER OF WF
WNOY SPREROT, P.E. PRocrac DRECTOR of
SEAN MCNOREMP.E.E.



## BID SET

CATSKILL AQUEDUCT REPAIR AND
REHABILITATION
EXISTING AND ACCESS NOTES


| $\left\lvert\, \begin{gathered} \mid \text { STRUCTURE } \\ / \\ \hline \end{gathered}\right.$ | $\begin{aligned} & \text { STRUCTURE } \\ & \text { STEAKK } \\ & \text { STATION } \end{aligned}$ | MLLES FROM STA $0+00$ (NOTE 1) | $\begin{aligned} & \text { FROMS } \\ & \text { PCOSS } \\ & \text { POCNT NO NO } \\ & \text { (NOTE 2) } \end{aligned}$ | structure / Leak name | DESCRIPTION OF WORK (NOTES 4 TO 8) | SERAES | SERES | $\underset{\text { SERES }}{\text { c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ses7-m5 (M) | $2884+13$ | 56.5 | 57 | PeESSKLL SPS ACCESS MANHOLE (M) W5 | - | Ex-139 |  |  |
| SPS7-w5 (t) | 288414 | 56.5 | 57 | PeESSKLL SPS ACCESS MANHOLE (E) M5 | - | Ex-139 | - |  |
| Se97-M5 (im) | ${ }^{2884+14}$ | 56.5 | 57 | Petesklu sp Access Mantole (M) M5 | - | EA-139 | - |  |
| SPST-M6 (E) | $2889+53$ | 56.6 | 57 | PEESSKLLL SPS ACCESS MANHOLE (E) M6 |  | EA-139 | - |  |
| SeST-M6 (M) | $2889+53$ | 56.6 | 57 | Peeksklu sp access mandole (m) M6 | - | EA-139 | - |  |
| Ses7-M6 (I) | 288954 | 56.6 | 57 | Peeksku sps Access Mandoe (w) M6 | - | EA-139 | - |  |
| Ses7-M7 (M) | $2996+88$ | 56.7 | 57 | Peterskl sps Access mandol (m) M7 | - | EA-140 | - |  |
| Ss57-M7 (E) | ${ }^{2996+96}$ | 56.8 | 57 |  | - | EA-140 | - |  |
| Se57-M7 (M) | $2996+88$ | 56.8 | 57 | Peterskl sps Access Mantol (w) M7 | - | EA-140 | - |  |
| Sest-M8 (M) | 3003596 | 56.9 | 57 | Peekskul sp access mantol (m) M8 | - | EA-140 | - |  |
| SSP7-M8 (E) | $3003+97$ | 56.9 | 57 |  | - | EA-140 | - |  |
| SP57-M8 (I) | $3003+98$ | 56.9 | 57 | Peekskl sps Access mantole (w) M8 | - | EA-140 |  |  |
| SP97-sc | $301+31$ | 57.0 | ${ }_{58}$ | PeEKSKLI SPS SOUH CHameer |  | EA-140 | PE-012 |  |
| MH521 | ${ }^{302945}$ | 57.4 | ${ }_{58}$ | ACCESS MANOLE WHH Culver doan |  | -141 | - | c-333 |
| M $\mathrm{H} 21 / \mathrm{Cc} 13$ | ${ }^{3052+42}$ | 57.8 | 59 |  | - | EA-142 | - | C1-331 |
| wH522 | 3081+57 | 58.4 | 60 | ACCSSE MANOOLE WTH Culver doan | Mechaccal mork (SEAL) ANO MH | EA-1 | - | C1-333 |
| wH523 | ${ }^{3120+46}$ | ${ }_{59,1}$ | 61 | ACCESS MANOLE WHT CULVERT DRAN | Mechacil work (sfll Ano MH | EA-145 | - | C1-333 |
| wH524 | ${ }^{3144}+71$ | ${ }^{59.5}$ | 61 |  |  | EA-145 | - | $\mathrm{c}^{\text {c-333 }}$ |
| MH525 | 3193503 | 60.5 | 62 | Access Mandole wit culver doan | Mectancal Moxk (SEAL) ANO MH | EA-147 | - | ${ }_{\text {c1-333 }}$ |
| N8H13 | ${ }^{3225883}$ | 61.1 | ${ }^{63}$ | NEW BOATOLE | NEM Boatiole | EA-148 | -012 | ${ }^{\text {c,-32 }}$ |
| SPs8-MC | ${ }^{3226+35}$ | 61.1 | 63 | Huntres broo sps north chamer |  | EA-148 | - |  |
| SPS8-M1 (M) | ${ }^{3233} 327$ | 61.2 | ${ }^{64}$ |  | - | EA-49 | - |  |
| SPS8-M1 (E) | ${ }^{3233+52}$ | ${ }^{61.2}$ | ${ }^{64}$ |  | - | EA-149 | - | - |
| SpS8-M1 (M) | ${ }^{3233}+62$ | 61.2 | 64 | Huvirs broo sps Access mandol ( $($ ) | - | EA-149 | - |  |
| SPs8-8(M) | ${ }^{32357 / 2}$ | 61.3 | 64 | HuNTES Broor ss tion-of (m) | MECHaNcat wor ano rehabliatow | EA-149 |  |  |
| Sp98-8 (M) | $3235+80$ | 61.3 | ${ }_{6}$ | Huntres brook sps $\mathrm{Blow-OFF}(\mathrm{M})$ | MEChancal work an rehabutaton | EA-149 | - | ${ }^{\text {c1-348 }}$ |
| SPS8-8 (E) | $3235+85$ | 61.3 | 64 | Huntres brook sps 8,OM-OFF (E) | nechancal work an pehabluaton | Ea-149 |  | $\mathrm{c}_{\text {c-348 }}$ |
| Sps8-Sc | ${ }^{3241+44}$ | 61.4 | 65 | HuNTERS BROo SPs South chmeer | - | EA-149 | -012 |  |
| w+22 | ${ }^{33072} \times 23$ | ${ }^{62} 6$ | ${ }_{6}$ | ACCESS MANHOLE |  | EA-151 |  | c1-331 |
| M ${ }^{\text {H26 }}$ | ${ }_{330+72}$ | ${ }^{62} 9$ | ${ }_{6}$ | AcCess mandole wh cluver dean |  | EA-152 | - | $\mathrm{c}_{1-333}$ |
|  | ${ }^{3} 33932$ | ${ }^{63.2}$ | ${ }^{67}$ | Acess | Mechacil work (sfal) Ano MH | EA-152 | - | $\mathrm{Cl}_{1-333}$ |
| M123 | ${ }^{3354475}$ | 63.5 | 67, 68 | ACCESS MAMHOLE |  | EA-153 |  | ${ }^{\text {c1-331 }}$ |
| NeH4 | ${ }^{3360} 50$ | 63.6 | ${ }^{68}$ | NEW BOATHOLE | NEM Boatiole | EA-153 | PE-012 | $\mathrm{c}_{1-332}$ |
| SPs9-NC | ${ }^{3361+02}$ | 63.6 | ${ }^{68}$ | TUREEY MOONTAN SPS Mort chamer |  | EA-153 |  |  |
| SPS9-B(E) | ${ }^{36588+33}$ | 63.8 | 70 | Turker mownan ses bluw-off (E) | MECHaMcal work ano rehabluaton | EA-153 | - | $\mathrm{c}_{0} 1-349$ |
| Spss-8 (M) | ${ }^{3368844}$ | ${ }^{63.8}$ | 70 | Turere mownan spe diow-off (M) | MEChancal work an rehaiutaton | EA-153 | - | ${ }^{\text {c1-349 }}$ |
|  | ${ }^{3369+17}$ | 63.8 | 70 | turere mownan ses bluw-off (w) | MEChancal work an rehabutatow | EA-153 | - | $\mathrm{cl}_{1-349}$ |
| SPS9-M1 (E) | +45 | ${ }^{63.8}$ | 70 | TURKEY MOUNTAIN SPS ACCESS MANHOLE M1 (NOTE 6) | - | EA-153 | - | - |
| Ssps-M1 (M) | +49 | ${ }^{638}$ | 70 | Tunker mountan ses Access mantole $(M)$ M M ( (NOTE | - | EA-153 | - | - |
| SPSS-M1 (m) | ${ }^{3339+54}$ | 63.8 | 70 | TURKEY MOUNTAIN SPS ACCESS MANHOLE <br> (W) M1 (NOTE 6) | - | EA-153 | - | - |
| Spso-sc | $3376+40$ | 63.9 | 71 | TUREY WOUNTAN SPS SOUH Chamere |  | EA-154 | - |  |
| ${ }^{\text {c014 }}$ | 3338680 | 64.3 | 7 |  | - | EA-154 | - | - |
| OTC4 | ${ }^{3397740}$ | ${ }^{64,3}$ | ${ }^{71}$ | Croin | MECHANCAL Work | EA-154 | PE-012 | c-309 |
| ${ }^{\text {ciso }}$ | ${ }^{3377} 40$ | ${ }^{64.3}$ | 7 |  | MECHaNcal work | EA-15 | - | 01-309 |
| aw6 | ${ }^{3397} 40$ | ${ }^{64.3}$ | 71 |  | MECHANCAL Woak | EA-154 | - | cl-30 |
| UTC4/N7 | ${ }^{3424403}$ | ${ }^{64.8}$ | 72 |  | nev Ar vent | EA-155 | - | ${ }^{\text {c-20 }}$ |
| вня | ${ }^{3425533}$ | 64.9 | 12 | Crotov cit toatiole | - | EA-156 | PE-012 | ${ }^{\text {c1-344 }}$ |
| L7 | 3494955 | 64.9 | 72 | Leak 7 | Leak repar ano dechlornnaton | EA-156 | - | ${ }_{\text {cle }}^{\substack{\text { c-289 } \\ 0}}$ |
| ${ }_{0} 05$ | 3442 +98 | 65.0 | 72 | Crotov gavong chamerr | Onvong Chamer rehamulaton | Ex-156 |  |  |
| M124 | 3477 82 | 65.3 | 72 | ACCESS M MAHOLE |  | EA-156 |  |  |


| $\left\|\begin{array}{c} \text { STRUCTURE } \\ / \\ \text { LEAK ID } \end{array}\right\|$ | $\begin{gathered} \text { STRUCTURE } \\ \text { STEAK } \\ \text { STATON } \end{gathered}$ | $\begin{gathered} \text { MLLES } \\ \left.\begin{array}{c} \text { FROM STA } \\ +00 \\ (\text { NOOTE } \end{array}\right) \end{gathered}$ | $\begin{aligned} & \text { FROM } \\ & \text { FCOSS } \\ & \text { ACNTS NO } \\ & \text { PNOTE 2) } \\ & \hline \text { (Note } \end{aligned}$ | Structure / LEAK NaME | DESCRPTION OF WORK (NOTES 4 TO 8) | SEARSS | SEERES | $\underset{\text { SCRIES }}{\text { a }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| M ${ }^{\text {S } 288}$ | ${ }^{3482231}$ | 65.9 | 73 |  |  | EA-158 | - | 0-333 |
| M125 | $3512+19$ | 66.5 | 738 | ACCESS M MNOLE |  | EA-159 | - | C1-331 |
| MH529 | ${ }^{3542+58}$ | ${ }^{67.1}$ | 74 |  |  | EA-160 |  | cl-333 |
| m43so | 3575+73 | 67.7 | ${ }^{7}$ | Access mantole wh olveri dean | (MECANIAA Work (rephace) AnO MH | ${ }_{\text {EAA }}$-61 | - | $\mathrm{c}^{\text {c-333 }}$ |
| мен15 | $3602+40$ | 68.2 | 75 | NEW Boatiole | NeV воatole | EA-162 |  | ${ }^{\text {c- } 1332}$ |
| w126 | $3608+40$ | 68.3 | 75 | ACCESS MAMHOLE |  | EA-162 |  | $\mathrm{c}_{1-331}$ |
| вно | ${ }^{3608} 70$ | 68.3 | 75 | MLYOOO NoRt CCT Poatole | - | EA-162 | PE-012 | ${ }^{\text {c- }-332}$ |
| oc3 | ${ }_{3611+22}$ | 68.4 | 76 | PUTNAM SPhow dornnee Chamer | - | EA-163 |  |  |
| 8\#11 | 3615665 | 68.5 | 76 | MLLYOOO SOUH CCT BOATHOLE |  | EA-163 | E-012 | C1-332 |
| wh431 | ${ }^{3633}+45$ | 68.8 | 76, 77 | ACCESS MANHOLE WITH CULVERT DRAIN SLUICE GATE | MECHANICAL WORK (REPLACE) AND MH REHABILITATION | EA-164 | - | ${ }^{11-333}$ |
| w $\mathrm{H} 27 / \mathrm{CC15}$ | ${ }^{3653} 380$ | 69.2 | ${ }^{77}$ | ACCESS MANHOLE AND NEW CASTLE AND PLEASANT CHAMBER | - | EA-164 | - | --331 |
| w128 | 3704436 | 70.1 | 78 | ACCESS MNNOLE |  | EA-166 |  | $\mathrm{cl}_{1-331}$ |
| st8 | 3777 95 | 70.2 | 78 | Sufrace Expressow 8 | Leak repar | EA-166 |  | $\mathrm{cl}_{1-271}$ |
| MHS32 | 3710+55 | 70.3 | 78 |  |  | EA-166 | - | ${ }^{\text {c-3-33 }}$ |
| St9 | $3770+55$ | 70.3 | 78 | Sunface Expression 9 | Leak repar | ${ }_{\text {EA-1-16 }}$ |  | C1-271 |
| менн | ${ }^{3769962}$ | 71.4 | 79 | NEW вотноL | Nev $\operatorname{soatrole~}$ | EA-168 | PE-012 | ${ }^{\text {c-3-32 }}$ |
| Spsio-nc | $3770+14$ | 21.4 | 79 | Harlew ralroan Sps north chamer |  | EA-168 |  |  |
| SPsio-m1 (E) | $3773+27$ | 7.5 | 80 | Hartew Rr SP ACCESS MANHOLE (E) M1 | - | EA-169 | - | - |
| spsioml (M) | $3773+30$ | 7.5 | 80 | Hartew Rr Ss AcCess Mantole (W) M1 | - | EA-169 | - | - |
| SPsio-m (M) | ${ }^{3773+37}$ | 71.5 | 80 | Hartew rr ss Access Mantole (M) M1 | - | EA-169 | - |  |
| Ssplo-b (M) | $3773+67$ | 7.5 | 80 | Hartew re ss blow-Off (M) | MECHaNcal work ano rehabluaton | EA-169 |  | $\mathrm{c}_{1-350}$ |
| Ssplo-8 (l) | ${ }^{7773+67}$ | 71.5 | 80 | Hartew re sps blow-off (w) |  | ${ }_{\text {EAA-169 }}$ | - | ${ }_{\text {c1-350 }}$ |
| SPSTO-B (E) | $3773+79$ | 7.5 | 80 | Hartew Res Ss blow-OFf (E) | MECHAMcal work an rehabluaton | EA-169 |  | $\mathrm{cl}_{1-350}$ |
| spsio-sc | $3777+30$ | 7.5 | 81 | Hatelem ralroan Sps Sout chamerr | - | EA-169 | PE-012 | - |
| m+29 | ${ }^{39735+67}$ | 71.8 | 82 | ACCESS MANHOLE | - | EA-169 |  | ${ }^{10-331}$ |
| ${ }^{\text {co }}$ | ${ }^{3808} 389$ | 72. | 83 | Pleasantle alum plant |  | Ea-170 |  |  |
| w1433 | $3881+60$ | ${ }^{2} 2.2$ | ${ }_{8}$ | Access Mantie wit culvert oran | Melatical work (replaces) An M M | EA-170 | - | ${ }^{\text {c1-333 }}$ |
| NeH17 | $3820+32$ | ${ }^{2} 23$ | 8 |  | New boatole | EA-170 | - | $\mathrm{Cl}_{1-32}$ |
| ө412 | $3820+57$ | 72.3 | ${ }^{83}$ | Pleasantule cit baatook |  | EA-170 | - | cl-332 |
| ${ }^{0} 4$ | ${ }^{3822+10}$ | ${ }^{2} 2.4$ |  | Pleasantule venvir M Metr drandace | - | Ea-170 | - | - |
| wne2 | 3822+60 | 72.4 | ${ }^{83}$ | Pleasantule venver Meter registr | - | EA-170 | - |  |
| ocs | 3823774 | ${ }^{72.4}$ | ${ }^{83}$ |  | - | EA-170 | - | - |
| в413 | 382491 | 72.4 | ${ }^{83}$ | Pleasantule cet baatole | - | EA-170 | - | $\mathrm{Cl}_{1-332}$ |
| m+30 | ${ }^{3837764}$ | 72.7 | ${ }^{84}$ | ACCESS MAMMOLE | - | EA-717 | - | $\mathrm{cl}^{\text {-331 }}$ |
| m431 | ${ }^{3888854}$ | 72.9 | 5 | ACCESS MANHOLE |  | ${ }_{\text {EA- }-171}$ | - | ${ }_{\text {cl-31 }}$ |
| m M 32 | ${ }_{387459}$ | ${ }^{12,4}$ | ${ }^{85}$ | ACCESS M MNHOLE | - | EA-172 | - | $\mathrm{Cl}_{1-331}$ |
| w433 | ${ }^{3913774}$ | ${ }^{74.1}$ |  | ACCESS MANHOLE ( NOTE 3) | - | Ea-174 | - |  |
| мен1 | 3324774 | ${ }^{7} 4.3$ | 87 | NEW ВоATOLE | New boatole | EA-174 | PE-012 | ${ }^{\text {c1-332 }}$ |
| ${ }_{\text {cw }}$ | ${ }_{\text {3295564 }}$ | ${ }^{74.3}$ | ${ }^{7}$ | Catsklu weuen wer egen sta. | Cill Rehagiluatow work | Ea-174 |  | ${ }^{\text {c-313 }}$ |
| aw | ${ }^{39277+79}$ | ${ }^{7} 4.4$ | 8 | Catskll meuent mer eno sta. | Cil Retagutatow work | EA-174 |  | ${ }^{\text {c1-310 }}$ |
| ac | 3927-97 | ${ }^{74.4}$ |  | Catskl mivent chamer |  | Ea-174 | PE-012 | $\mathrm{c}_{\text {c-310 }}$ |
| w+34 | $4045+07$ | ${ }^{76.6}$ | ${ }^{\text {8 }}$ |  | Peamanen closune | EA-180 | - | c1-331 |
| uec | $4066+61$ | 77.0 | 89 | KENSCOO UPERE EFFUUENT CHAMEER | Lums of work | EA-180 | PE-012 | ${ }_{\text {cl-3i }}$ |





NOTES:
ADVanced warning sinv: "Construction
VEHCLIES ENTERNG AND ExITTNG ROADWAY"
2. For typlcal flaging operation see ci-031
ANO Cl-032.
3. "-": NO TRAFFIC CONTROL REQUIRED.

|  |  |  |  | ${ }_{\text {cs }}^{\substack{\text { cramw } \\ \text { PYY }}}$ | \% 0 New |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | CHECKED BY: <br> um |  | $0^{\circ}+x^{2} 0^{2} \times$ |  |
|  |  |  | BADE Z. SOZER |  | OTA ${ }^{\text {a }}$ | Environmental Protection |
|  |  |  | Prouec mana crix |  | \% | Water ${ }^{\text {mo }}$ Futur |


| ACCESS POINT AND TRAFFIC CONTROL SCHEDULE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { ACCES } \\ & \text { PNTS No } \end{aligned}$ | EA DWG No. | LATTUDE | LONGITUEE | $\underset{\substack{\text { FROM PUBLC } \\ \text { ROAD }}}{\text { Pa }}$ | TRAFFIC CONTROL (NOTE 1) |
| 兂 | EA-129 | N412 $23^{1} 12.29^{\prime \prime}$ | W73 ${ }^{\text {c } 55^{\prime 1} 18.37^{\prime \prime}}$ | PAllps brook Ro |  |
| 52 | EA-134 | N412 20 5. $5.07^{\prime \prime}$ | W73 54 $25.788^{\prime \prime}$ | OLI ABEAMY Post po | - |
| ${ }_{53}$ | EA-135 | N4120 $20^{3} 35.06^{\prime \prime}$ | W75 54 $07.944^{\prime \prime}$ | CR15/SPPout ropok | fagcong opreatow |
| 54 | EA-212 | N412 $20^{\circ} 07.45^{\circ}$ | W73 54 $540273^{\prime \prime}$ | RIOEE Ro | - |
| 55 | EA-137 | N411 $20^{\circ} 20.203^{\prime \prime}$ |  | aveevect ro | - |
| 56 | EA-213 | N441 $199^{0} 8.8 .46^{\prime \prime}$ |  | OfRECON RO |  |
| 5 | EA-139 | N411 $19^{\circ} 0.9 .58^{\prime \prime}$ | W73 535 $29.980^{\prime \prime}$ | Ofecow ro | fagang oferaton |
| 58 | EA-141 | N441 $188^{\circ} 0.7 .044^{\prime \prime}$ | W/3 53 53 $03.49^{\prime \prime}$ | Locust ANE | atoanceo warnic sins |
| 59 | EA-142 | N417 717 59.74 |  | us6 | adoance warnug sins |
| 60 | EA-143 | N441 $177^{3} 3.73^{\prime \prime}$ | W/73 $52^{150.298 "}$ | Locust Ave | atoance wrenng sins |
| 61 | EA-144 | N417 $177^{170} 3.18^{\prime \prime}$ | W73 52 $52^{\circ} 0.77^{\prime \prime}$ | Croton Ave | aovanceo warnug sicus |
| 62 | EA-147 | N44 $177^{13} 13.00^{\prime \prime}$ | w73 50 $50.9 .06^{\prime \prime}$ | flio st | Aovanceo whenvi sicus |
| 63 | EA-148 | N441 $16^{\prime \prime} 56.18^{\prime \prime}$ | W73 $3^{50}$ 50 $18.200^{\circ}$ | Jacoor ro | ADVancel WRennc sins |
| 64 | EA-149 | N414 $16^{6} 4.422^{\prime \prime}$ | W35 $50^{\circ} 07.88^{\prime \prime}$ | witrewlu ko | Lane closure, Trafic control at access to huntres brook sps (cl-090) |
| 65 | EA-213 | N441 $16^{4} 31.18^{\prime \prime}$ | W73 ${ }^{\text {c } 50^{\prime \prime} 12.727^{\prime \prime}}$ | HUNER BROOK R0 | AODANCED WRANMG SICNS |
| 66 | EA-152 | N441 $15^{2} 26.44^{7}$ | W73 $49^{40} 0200^{\prime \prime}$ | BAPTST CHIRCH Ro |  |
| 6 | EA-153 | N411 $15^{\circ} 0.6 .65^{\prime \prime}$ | W73 48 $48.5 .88^{\prime \prime}$ | вhlown po |  |
| ${ }^{68}$ | EA-153 | N411 $15^{\circ} 0.4 .47^{\prime \prime}$ |  | CRI3/ MNDERALLL AVE | aodancei warnug sins |
| 70 | EA-153 |  | w $3^{4} 48^{4} 4.4 .966^{\prime \prime}$ | TACONIC STATE PKWY (NB) |  |
| ${ }^{11}$ | EA-214 | N41. $14^{2} 24.84^{\prime \prime}$ | W73 $48^{18,787^{\prime}}$ | ChapMan st |  |
| 72 | EA-155 | N411 $14^{40} 5.92^{\prime \prime}$ | W/3 $3^{48} 8^{2} 2.383^{\prime \prime}$ | crooton dam ro | - |
| 73 | EA-158 | N441 $13^{\circ} 0.4 .33^{\prime \prime}$ | W/3 $3^{47} 7^{53} 588^{\prime \prime}$ | NT134/KITCANWN Ro | atoanceo warnug sins |
| 738 | EA-159 | N417 $12^{\prime 2} 4.4 .65^{\prime \prime}$ | W73 $47^{4} 3.355^{\prime \prime}$ | PNES Brobe ro | adoanceo warnic sins |
| 74 | EA-162 | N441111 $11^{13} 8.43^{\prime \prime}$ | w ${ }^{\text {3 }} 477^{4} 50.79^{\prime \prime}$ | NYIOO STMumersiow | AOVANCED Weanvg sins |
| 75 | EA-162 | N41111 $112.44^{\circ}$ | W73 $477^{5} 5.22^{\circ}$ | NT120MLIW000 Ro | advanceo warnuc sins |
| 16 | EA-163 | N441 $111^{14.066^{\prime \prime}}$ | W73 $3^{48} 8^{0} 0.55^{\prime \prime}$ | NYY3/STATOON Place | atoance wrenng sins |
| 77 | EA-164 | N44 $100^{\prime \prime} 3.411^{\prime \prime}$ | W $733^{48} 88^{\circ} 0.3 .99^{\prime \prime}$ | Camprik ro | aodanceo warnve sins |
| 78 | EA-166 | N4109094.6.61" | W/3 $47^{47.4 .57^{\prime \prime}}$ | Chaprava ro | advancel waswnc sins |
| 79 | ${ }_{\text {EA-216 }}$ | N4410848587\% | W73 $47^{47} 13.60^{\circ}$ |  |  |
| 80 | EA-169 | N411 088 $4.299^{\prime \prime}$ |  | wastumgon Ale | flageang operatow |
| 81 | EA-169 |  | W/3 $3^{47}$ 7 $0.777^{\prime \prime}$ | Wastumeon ave | flaceanc operatow |
| 82 | EA-169 | N410 08 $29.399^{\prime \prime}$ |  | NT117MANMLE Ro | adoanceo warnug Sicns |
| ${ }^{83}$ | EA-7\% | N410 08 $8^{1} 13.21^{\circ}$ | W/3 $46^{4} 38.880^{\prime \prime}$ | NT4/PBraovar | atoanceo wernug sins |
| ${ }^{84}$ | EA-171 | N44107 $0758.85^{\prime \prime}$ | W73 46 46 13,700 | Leano ave | advanceo marnuc sins |
| ${ }_{85}$ | EA-171 | N417 $077^{5} 5.3 .34^{\prime \prime}$ | W73 $33^{46} 10.400^{\circ}$ | lake st | ADVANCED Warwnc sins |
| ${ }^{87}$ | 174 | N44. $711.60^{17}$ | W73 $444^{5} 5.34^{4}$ | namv hagee ro |  |
| 0 | EA-180 | N410 $0533.77^{\prime \prime}$ | W73 46 46 10.099 | westrake or | - - |
| 89 | EA-180 | N410 $05^{2} 23.87{ }^{\prime \prime}$ | w73 46 $46^{19.90^{\prime \prime}}$ | westrake or | - |











SUGGESTED WORK SEQUENCE NOTES

## SUGOESTED WORK SEUUENCE FOR STE ACCESS ROAO:

 Conirol measures where reaured.

- STEP 2: Stablize ExSTING ROADS OR INSTALL NEw roados where shown.
- step 3: complete ste restoration, ncluong rewoval of erosion control

SUGGESTED WORK SEOUUNCE FOR LEAK REPAR

- STEP 1: COMPLEET Aaueouct ACCESS STE Work, INcluong Erosion control MEASURES AS REQurED.

- Step 3: complete aqueduct leak repar by grouting or linnce
- Step 4: Restore leak water paths upon leak repar completion
sugeesteo work sevuence for dechlornation:
 For leak 1A/1B Passye dechlornaton faclutir work, nstall temporary bride
for exising steam crossinc. FOR LEAK 2 PASSNE DECHLORNATOON FACLITY WORK, INSTALL ACCESS STARS.
 - STEP 2: INSTALL PASSVE DECHLORNATON SYTTEM, ACTVE
- STEP 3: MAINTAN AND OPERATE THE PASSVE DECHLORNatoon SYStem and Active DECHLORNATON FACLITT

- STEP 5. Complete sit restoration, ncluong gradng and removal of erosion
control meabues.

SUCGESTED WORK SEUENCE FOR STAGING AREEA
 EAARTHWORK, STONE
WHERER REOURED.

- step 2: use the staging area as required.
- Step ja conplet ste restoraton, nincuong grading and removal of erosion




 AND EESIING ACC
MOOFFICATIONS.
- Step 3. Use the exstivg boathole for haueduct access as regured to




SUCGESTED WORK SEOUENCE FOR new boathole ano other work va access by
NEW Boathole:
 Step 2: construct cast-n-PLaCe rennorced concrete collar. backfll as
netedo.
 TIEP 4. cu and zemove the exsting concrete arch and install liner and STEP 4: Cut and rewove the existng concrete arch and install liner and
preasi concere cover. - Step 5: Use the new boathole for auueduct access as regured to perform STEP 6: complete ste restoraton, includng remuval of erosion control
MEASURES ANO STONE AND Cowletion of graing.

 - Step 2. ©enpeta matation

 and INSTALLATON OF STEEL ACCESS hato

- STEE 4: Cowple se ste restoration, includng rewoval of erosion control
MEASURES AND STONE AND COMPLETON OF GRADONG.

SUGGESTED Work Seouence for access manhole rehabllation and other work
VA ACCESS BY MHS:


 ExITIM ACCESS
ACCESS HATCH.
 - SIER 4. Conplete sit restoration, includng emwoval of erosion control

 | Construction |
| :--- |
| 3, F |
| NEEEDED |

SUCEESTED WORK SEOUENCE FOR NEW AR VENT MECHANCAL WORK:


- Step 2: mstall neting nside auveouct to catch construction debris.



| - Step 5: nstall new alr vent ncluong precast slabs or placement of |
| :--- |
| Cast- | - step 6: Remove neting.

- step p: condlete ste restoration, including grading and removal of erosion
control measures Ano stone.

SUGESTED WORK SEOUENCE FOR CULVERT ORAN SLUCE GATE (COSCC) MECHANCA STH COSC:
 Step $2^{*}$ - For manhole rehablitaton work


 - Step $3^{*}$ - For cosg mechancal work (seal):

 - Step 4*: USE THE ACCESS ManHole with cose for raueduct access STEP 4. USE THE ACCESS MANHOLE
REQURED TO PERFRMM N-AOUEOCCT WORK.
STEE 5: Complete ste restoratoon, ncluong grading and removal of erosion
confrol MEASURES AND SToNe.

##  AND STEP 4, IF NEDEDED.




- Step $2^{*}$ - for manhole rehabiltation work:

 Step $3^{*}$ - For cosg mechancal work (replace):





step 5: Conplete ste restoration, ncluong grading and removal of erosion
control MEASURES ANo Stone.
 CONSTRTCOTON SCHEDULE.
AND STEP 4 , IF NEDED.

12. Sugeesteo work sevuence for sps blow-off chamber rehablltaion:


- step 2: complete stream protectoon, incluong installation of ripad and
- STEP 3: Install cofferdam and dematerng accessories.


SUGGESTED WORK SEOUENCE FOR SPS AR VALVE CHAMEER MECHANCAL WORK:


- step 2: Replace sp air valves, replace exsting access hatch, ncluong
Concreit moifications as recurion. - Step 3: complete ste restoration, ncluodng graing and remuval of erosion
control MeASURES ANo Stone.

SUGGESTED WORK SEOUENCE FOR Cl-541 (MH34 PERMANeNT WORK closure): - SEE ST-132

SUGGESTED work seuuence for catskil infuent welr (cim:

- Step 1: Cowblete ste preparaton, incluong erosion control measures
- STEP 2: Complete reservor lsolaton. SEE PE-143.
- step 3: Perform CIW rehablitaton work. SEE Cl-364 and st-189.
- Step 4: complete reservor reconnecton and ste restoration, Includng


16. SUCGESTED WORK SEUENCE CI-251 (STIE ACCESS ROAD IMPROVEMENTS HARLEM RR

 draln where shown
STEE 4: Complete stie restoratoo, ncluong removal of erosion conrrol

|  | cixam suls |
| :---: | :---: |
| BID SET |  |



 venor Spergut, P.E.
Rocram orector of





EROSION AND SEDIMENT CONTROL NOTES







 Even.
Any disturbed area and stockplife materals that wil be left exposed for more








 MaxMuM sie slopes shall not reced (h:V) 2:1 for Earth surface or for rock





 severs





ANY Revion To the certife supp must de sumited to the engmer and town









GLEARNG SHALL BE LMITED TO AREAS REOURED FOR IMMEDATE CONSTrUCTION ACTIVTES. rors





Removed seoment shall be disposed of in such manner as to ensure further
SEDMENT TRANSPORT Does not occur.


 SPACED EVERY $2-0{ }^{2}$


Mantenance Shall be performed as needed and materal removed when
"Bulces" develop in The sli fence




SLT fence shall be in place before any actutes begin and is to be kept


TEMPORARY TREE PROTECTION NOTES
ESTMMATE A TRE'S PRRTECTED ROOT ZONE (PRz) by Calculating the
CRTICAL ROOT RADUS (CRR).
 ABOVE GROUND ON THE UPHILL SIDE OF (TREE) IN INCHES. Multiply measured dbh by 1.5 or 1.0. express the result in

DBH $\times$ 1.5: CRRTICAL ROOT RADUS FOR OLDER, UNHEALTHY, OR
SENSITVE SPECIES.


orive posts frmir into ground

DBH X $\times 1.0:$ CRITICAL ROOT RADUS FOR YOUNGER, HEALTHY
TOLLERANT SPECIES.
 EACH TTEE PROTECTED UNDER THIS PLAN WILL BE MARKED WTH
8. ALL REPLANTED OVERSTORY TREES SHALL BE AT LLAST SIX FEET TAL


## 1 TEMPORARY TREE PROTECTION DETAIL

## PROTECTIVE FENCE NOTES:

LOCATE PROTECTVE FENCE AS SHOWN ON THE DRAWNGS AND/OR
DRECEED BY THE DESION ENGINER. AT A AM


fencing to be used shall be $4^{\prime}-0^{0}$ " "nternatonal orange"
 $\delta^{\prime}-0^{\prime \prime}$ maximum centers.
the fence shall have the followng propertes
TENSLE YELD:
AVG. 2,000 LBS PER $4^{\prime}-0^{\prime \prime}$ WIDT
ULTMATE TENSILE YELD:

CHEMCAL RESISTANCE:
INERT TO MOST CHEMCALS AND ACIIS UV STABIIIZED


Protective fence designateo on the drawng is intenod as
VSUAL WARNG
SARETY

3 (3) SILT FENCE DETAIL

| BID SET <br> DATE ISSUED: | ¢RAPHC SCALES |  |
| :---: | :---: | :---: |
|  |  ACCORDINGLY |  |
| CATSKILL AQUEDUCT REPAIR ANDREHABILITATION |  | DAEE: 10/2/2007 |
|  |  | $\frac{\text { Scale not To Schle }}{\text { ShEET No: }}$ |
| TYPICAL EROSION CONTROL MEASURES SHEET 1 OF 4 |  | 214 of 485 |
|  |  | drawing no. |



 Procera Menagr of

路


TRAFFIC CONTROL NOTES:



 LOCATON ULEES OTHERMSE RELACEO NT THIS COVRRAC.
3. SILNS at or near ntersectons shall be placed so that ther po not obstruct a motorest's

5. Nrg-12 Mar be used in place of ntre-11


 possible

9. THE ENGMER MAY REQURE THAT ALL LANES BE REO OPENED AT ANY TME IF THE ROUTE IS NEEEED FOR


1. SEE EA- 024 for Access pont ano traffic control scheoule.


| TRAFFIC CONTROL LEGEND |  |
| :---: | :---: |
| stmbol | descripton |
| $\therefore \times$ | arrow panel |
| : : | arrow Panel, caution mode |
| -00 | Arrow panel traller or support |
| $\longmapsto$ | Changeable message sign (pums) |
| - | CHANNeLIzING devce |
| 曲 | CRASH CUSHIN/Ttemporary Impact attenuator |
| $\longrightarrow$ | direction of temporary traflc detour |
| $\Rightarrow$ | direction of traffic |
| $\square$ | flagger |
| - | flag tree |
| $\bigcirc$ | LUMINARE |
|  |  |
|  |  |
|  | Pavement markings that shall be REMOVED FOR A LONG TERM PROJECT |
| F | SIIN, Temporary |
| $\square$ | temporary barrier |
| " | temporary barrier wth warning light |
| $\bigcirc$ | TRAFFIC OR Pedestrian sinal |
| ss | TYPE III BARRICADE |
| $\bigcirc$ | warning Lights |
| D/IIAA | work space |
|  | WORK VEHCLLE |
| (1) | work vehlie with truck mounted attenuator |

## NOTES:






FLAGGING OPERATION
SHORT OR INTERMEDIATE TERM STATIONARY
(not to Scale)

IRAFFIC CONTROL MEASURES GENERAL NOTES:
when a side road or drivewar intersects the roadway within a traffic control area


2. WHen paved shoulders havin a wiot of $8^{3}-0^{\prime \prime}$ or More are closed channeling devices SHALL BE USED O OLLOSE EHE SHOULDER IN ADVACE TO DELINEAE THE
WORK AREA AND DRECT VEHCULAR TRAFFCC TO REMAN IN THE TRAVEL LANE.
3. Channeluing devce spacing (center to center) Shall not exceed $40^{\circ}-0^{\prime \prime}$ in the active
4. THE END ROAD WORK SIGN (620-2) SHALL BE PLACED A MAXMUM OF 500' PAST THE END OF
5. WHERE DRECTED BE THE ENGGEER, A BUFEER SPACE SHALL BE PRoviog in order to locate ORDER TO PROVIDE ADEQUATE SICHT DIITANCE FOR THE FLAGGERS AND/OR A QUEUE OF STOPPED
VEHCILES
veh
6. THE FLLAG TREE SHALLLEE LOCATED on the shoulder, at Approximately the distance between

FLAGGER SIGN (W2O-70) AND ONE LANE ROAD AHEAD SIGN (W2O-4) SHALL BE REMOVED,
COVERED OR TURNED ANAY FROM ROAD USERS WHEN FLAGGING OPERATONS ARE NOT OCCURRING.

9. ALL FLAGGERS SHALL USE $2^{\prime}-0^{\prime \prime}$ (MIN.) octagon Shaped stop/slow padoles having $6^{\prime}-0^{\prime \prime}$
10. TRANVVERE DEVICES SHALL BE REQURED (AS PER NYSDOT STANDARD SPECIFCATION 619)
WHEN A PAVED SHOULDER HANING A WDTH OF $8^{\prime}-0^{\prime \prime}$ OR GREATER IS CLOSED FOR A WHEN A PAVED SHOOLDER HAVING
DISTANE GREATER THAN 1,500 .
11. Centerine channellzing devces are optional and may be eliminated where space
12. NO WORK ACTVIT, EOUPMENT, OR STORAGE OF VEHICLES, OR MATERALL
SHALL OCCUR WITHIN THE BUFFRR SPACE AT AMY TMME.
13. THIS SHEET IS INCORPORATED FROM NEW YORK STATE DEPT. of transportaton standard
14. See ci-030 for traffic control tables, notes, and legend.

| ACCOUNTABLE MANAGER JONATHAN HOFFMAN, P.E. | "WARNING-IT IS A VIOLATION, OF THE NEWYORK STATE EDUCATION LAW, SECTION,7209.2, FOR ANY PERSON, UNLESS (S)HEIS ACTING UNDER THE DIRECTION OF ALICENSED PROFESSIONAL ENGINEER, TOALTER THIS DOCUMENT IN ANY WAY. IFALTERED, THE ALTERING PERSON SHALLCOMPLY WITH THE REQUIREMENTS OF NEWYORK EDUCATION, LAW, SECTION, 7209.2." |
| :---: | :---: |
| Proceam MNMESR of WF |  |
| wenor sperour, P.E. |  |
| PROGRAM DIRECTOR OF WFF SEAN MCANDREW, P.E. |  |













ACCESS ROAD STATION
KITCHAWAN ACCESS MANHOLE MH25 SITE ACCESS ROAD PROFILE
SCALE: HOR. $\begin{gathered}1=40^{\circ} \\ V E R 1^{\prime \prime}=8^{\prime}\end{gathered}$






PASSIVE DECHLORINATION SYSTEM

















| ReE Slurey－EAST Of Huoson river |  |  |  |  |  |  |  |  | RVER |  |  |  |  |  |  |  |  |  | TREE SINEY－EAST Of Hosow rive |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | norting | Esfinc | Speciss Io | Soennfo name | conorom |  | ossposmon | toc | ${ }_{\substack{\text { Trab } \\ \text { No．} \\ \hline}}$ | мовннм9 | EAsInc | specers 1 | soenvict Name | conoroon |  |  | Loc |  |  | мовнй | Eassme | Seeeles in | Solentric name | covoron | （080） | ospeosmon |  | 100 |
| ${ }_{6} 65$ | 869，802．005 | 331 | Tulp |  | 6000 | 26.0 | eewove | kTictavan cot |  |  |  |  | OUERCUS Cococea |  |  | BEYOND WORK AREA | Mopan frox sis |  |  |  |  | NORWAY MAPLE | ACCR Platarsols | ${ }_{\substack{\text { Falir } \\ \text { cooo }}}^{\text {coed }}$ | $\begin{aligned} & 5.5 \\ & \hline \\ & \hline . .5 \\ & 5.5 \\ & 11.5 \end{aligned}$ | Bityow work keat |  |  |
| ${ }_{65} 7$ | 869，957．206 | 684，999，131 | Tulp pophr |  | 0000 | 14.0 | rewove |  |  |  |  |  | EELIA LENA |  |  | Etion wor kil | INOAU Brood | Stiole |  |  |  |  |  |  |  |  | Hatem |  |
| 657 | 86，957 | 68999 | TULP POPLAR |  | cooo | 16.0 | rewove | kiteranan cot |  |  |  | Ster fert |  |  |  |  | Monan froo se | blolvorf | 136 |  |  | Uno shac |  |  | ${ }^{11.50}$ |  | Harkem re |  |
|  |  |  | Creen ash |  | 6000 | 7.8 | ， | $\xrightarrow{\text { Speor frole }}$ |  |  |  |  |  |  | $\stackrel{40}{40}$ | Oefov worn Area |  |  |  |  |  | （ |  | cooo | 38 |  |  | Ses iow－orf |
| 999 | 946644.560 | ${ }^{64571 / 480}$ | Black Locust | Roomm Pstuoacacal | FAR | 14.0 | Prenousir remored | Found riof eis Ar vave |  |  |  | Piguch hlitery | CravM | ${ }_{\text {fapr }}^{\text {fora }}$ | ${ }_{4}^{60} 4$ |  | MOAN Proo | 8iolorf | －${ }_{138}^{138}$ |  | ${ }_{\text {bex }}^{6893999999}$ |  | ${ }_{\text {acer }}^{\text {ACPR PRAMOOES }}$ | 6000 | 6． 5 |  |  | R Ses liou－orf |
| 000 | 44666464 | ${ }_{6457999731}$ | Buck Locust | Reoma Psfluoacacala | fak | 5.3 | Prenusil remorep | Founder proid | ${ }^{1067} 10$ |  |  |  |  | $\underset{\substack{\text { fank } \\ \text { FAR }}}{ }$ | 50 130 | EeVOV Wor Aren |  | Sollorf |  |  |  | Norlar Mate | ACER Platmodes |  | ${ }_{5}^{5.5}$ | Ste | $\xrightarrow{\text { Harkex }}$（tarem |  |
| 1001 | 946688832 | 645697．485 | Chiber suac | pelums sp． | Dexo | 4.5 | Peehusir reioved | Founory froi sis Al Vave | ${ }_{108}^{1098}$ |  |  |  |  | coue | ${ }^{17.5}$ | Berov weor Area | Moden frox si |  | ${ }^{1144}$ |  | ${ }^{\text {688930．856 }}$ |  | Ulems spe |  |  | EETYON WORR A AR | Hariew $\begin{aligned} & \text { R } \\ & \text { d }\end{aligned}$ | 2 Ses biou－orf |
| 1002 | 946656778 | 646588783 | ${ }^{\text {BLack Locust }}$ | Rognm Pstuoacain | DEAO | 3. |  | Founory fooc sesid vale |  |  |  |  | Alta | Ca00 | 18.5 | REmOVE | NOOAN Broo sem |  |  |  | ${ }^{\text {689854，199 }}$ | Norive maple | ACER Patamouts | ${ }_{\substack{\text { Poor } \\ \text { Poor }}}$ | ${ }^{10.0}$ |  |  | R sps liow |
| 1003 | 5655 | 737． | ack Loous | Rogna Pstuoacacan | 6000 | 108 | Protect N －PLAM | Founory for sps AR Vave | 1071 | ${ }_{\substack{936512427 \\ 93808856}}$ | ${ }_{\text {6502574．433 }}^{650}$ | Tul Pophr |  | 6000 | ${ }_{6}^{18.8}$ |  | ${ }^{\text {Noman broo se }}$ | sols |  |  |  | Un Svac | Cut Snec | coico | ${ }_{1}^{4.3}$ | EEYYON Wora AR | $\xrightarrow{\text { HaREEE }} \mathrm{H}$ | Sesp |
| 1004 | 8 | 6457710．061 | dous |  | FAR | 10.3 | Prehuosir removel | Founory foros sp al vane | （1073 |  |  | cien |  | $\underset{\substack{\text { fatr } \\ \text { cooo }}}{ }$ | ${ }^{8.8}$ | ${ }_{\text {Reble }}^{\text {Refleve }}$ | Motan froo ss | Biolorf | 1 |  |  |  |  | coiol | 8.5 <br> 8.8 |  | $\xrightarrow{\text { HAREEE }}$ RP | Sters |
| 1005 | 946592，196 | 645704．459 | Black locust | Rrown Pesuoncala | far | 88 | Peekusil remorep | Founory froor spe Al Vave |  |  | 65023．594 |  | ACER RUPrim | （c000 |  | ${ }_{\text {Rebub }}^{\text {Reme }}$ | Mopt brox si | biol |  |  | ${ }^{689821 / 187}$ |  | ACPR PRAAMOOLOES | cooo |  | Eeteno work | $\xrightarrow{\text { Harem }}$ HAREM | R Ses liou－oif |
| 1006 | 94660022 | 645696889 | BLack CHERY | pranus sfronna | c000 | 7.0 |  |  | ${ }_{105}^{1075}$ | 936889．50 |  |  |  | ${ }_{6000}^{6000}$ | ${ }^{10.0}$ |  | Motan froo se |  | ${ }_{1}^{149}$ |  | ${ }_{\text {68926．124 }}^{68971.54}$ | Uno Slat | ACCP Platac inois | OCOAO | ${ }_{7.5}^{5.5}$ |  | $\underset{\substack{\text { Harem } \\ \text { Harle } \\ \text { d }}}{ }$ | R Sps ilio－orf |
| ${ }^{007}$ | 946607.29 | 646893220 | BLack locust | rooma mefloorcican | fan | 10.0 | prevusir remore | Founory droor sef al vave | 1076 |  | ${ }^{650277062}$ |  |  | Cocen | ${ }_{4.8}^{4.5}$ |  |  | Soilleff |  |  |  |  |  | cocoue |  |  | $\xrightarrow{\text { HaRem }}$ | R |
| 008 | 946607．066 | ${ }_{6}^{6} 568884515$ | Buck Locust | Romma Psuooacaia | deat | 4.5 | premoustr fewol | Sill | （1078 |  |  |  |  | cotion | ${ }^{4.5}{ }^{4.5}$ |  | Noten froi se |  |  |  |  | ${ }^{\text {Elumec oak }}$ | Uubilus spi spine | $\underset{\text { fane }}{\text { coin }}$ |  | $\xrightarrow{\text { Rebule }}$（emole |  | Res |
| 009 | 46610．515 | 645688870 | Buch Locust | Reoma Asfluoatacala | FAR | 7.5 | Prehousir remorep |  |  |  |  |  |  | 6000 | ${ }_{5.5}^{4.5}$ |  | Mod feos | Biol－off |  |  |  |  |  | ${ }_{\text {Poos }}^{\text {cooo }}$ | 10.0 | $\xrightarrow{\text { Rebuve }}$ Remove |  | Resps iol－Off |
| 1010 | ${ }_{9466529884}$ | ${ }_{6}^{655692308}$ | Locust siag | Reamı sp． | sat | 48 | Prevousl remorep |  |  |  |  | Slen |  | 6000 | ${ }_{40}^{4.5}$ |  | Mon fro | Siolvorf | ${ }^{1156}$ |  | ${ }_{\substack{688905058 \\ 6880204}}^{\text {cout }}$ | Llack OAK |  | couo | ${ }^{23.0}$ | Stelele | Harkem re | 2esp |
| 101 | 946598，766 | 645690，739 | Black Locust |  | FAR | 5.5 | perevosir remored |  |  |  | ${ }^{650246547}$ |  |  | cooo | 30 | $\xrightarrow{\text { Reblo }}$ | MOMAV Brood |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 946593039 | 645694．551 | Euck locust | Rooma Pstuodacala | EAR | ${ }^{8.5}$ | Prevousir Remoki | Founory roik sis Al Vave | ${ }^{1085}$ | ${ }^{8744460038}$ |  | Coonlar Maple | Cer Platmole | cooo | ${ }^{9.5}$ | BETON WOPR AREA |  |  | 1158 | 8866414643 | 688359．988 | AMERCAN BECOH | FALUS SRANOFOLA | c000 | 10.0 | repacte by fve（5） | MLLumo | so north cot |
| 013 | 946528645 | 645989805 | 日inck Looust | Rooma Pesuonacian | cooo | 7.5 | Peehousir remorep | Foundry foit |  | ${ }_{\text {8 }}^{\substack{\text { 874083838 } \\ 87488.056}}$ | （68522222 | Suter rich |  | coiou | 8.8 <br> 8.0 <br> 8 | No mook |  |  | 159 | ${ }^{864622.121}$ | 688370．732 | Amercan becer | FACUS granoroua | 6000 | 8.0 |  | 000 | eo nort cct |
| 1014 | 946573．078 | 64570．6．64 | buck locust | Romma Pstuoacacia | Poos | ${ }^{8.3}$ | Premulil remorep | Founory yoron sps ir vave |  |  |  |  |  | cooo | ${ }_{6}^{6.0}$ | Fenow wor mea |  |  |  |  |  |  |  |  |  |  |  |  |
| 106 | ${ }_{\text {94656．311 }}$ | 64，587．415 <br> 645878.35 | ${ }_{\text {black loaf }}^{\text {OAK }}$ | Rooma Astuoacacal | 6000 | $\begin{aligned} & 8.5 \\ & 4.0 \\ & 4.0 \end{aligned}$ |  |  | （108 |  |  |  |  | coiol | ${ }_{4}^{6.5}$ |  |  |  | 1160 | 8846892200 | 686870．130 | ameran velcol | FACUS SRENOFOLIA | c000 | 7.38 | PLacte Eff five（5） | MLLuoo | bo nort cor |
| 107 | 9465887．089 | ${ }_{6}^{6556878.5518}$ | BLCOK Loust | QUERCUS SPP． | FAR | 10.8 | Premostere | Founory yroumber |  |  |  |  |  | c000 | ${ }_{5.5}^{3,}$ | Ster |  |  | 1161 |  |  | AMERCAN BECCH | FaCls granofola | 5000 | ${ }^{9.3}$ | br fue（s） | MLLW000 | So Norti |
| 1018 | 946599，434 | 645683705 | black locust | Roont psiluocacalk | FAR | 9.5 | PREMOUSIY RELOOED | Fownory | －1023 |  |  | Sters | 既 | （0000 | ${ }_{4}^{50}$ | Cit |  |  |  |  |  |  |  |  |  | Etrow work Aea |  |  |
| 1019 | 946604．31 | 645885．35 | Loust stag |  | deat | 4.0 | prevoustr remorio | Founory broor sis al vave | los | ${ }^{\text {84748893969 }}$ |  | Rebo Oik | Cutercus fuba | coiol | ${ }^{30.5}$ | Eto |  |  | 1164 |  |  | Shar |  | 6000 | 45 | Eerano work | N000 | On |
| 1020 |  | ${ }_{655557.322}^{658588}$ | Black Ciliray | PRUNUS SEROTINA <br> JUNIPERUS VIRGINIANA <br> PRUNUS SEROTINA <br> PRUNUS SEROTINA | ${ }^{6000}$ | $\begin{array}{r}155 \\ 78 \\ \hline 8\end{array}$ | Eevon wor hat |  |  | ${ }_{\text {874787 } 37}$ |  | Stere | betil tin | couo | ${ }_{4.0}^{3.0}$ | Eeton work ARA |  |  |  |  |  |  |  |  |  | ERemo |  |  |
|  |  |  |  |  | 6000 | $\underset{\substack{1.8 \\ 1.0}}{ }$ | EETOOV WOR AREA |  | ${ }_{\text {cose }}^{1098}$ | ${ }_{\text {874885082 }}$ |  |  |  | （cou0 | ${ }_{7}^{9.0}$ |  |  |  | 1165 | ${ }^{886605744}$ | 688699977 | CREEN ASH | petmstumica | POOR |  |  | mLuwoo | wo nort cot |
| 1024 |  |  |  |  | 6000 | 11，8 | EEVOOV WOPR AREA | Mo | ${ }^{098}$ | ${ }^{8748885082}$ | ${ }^{\text {8882801986 }}$ |  |  | como | ${ }_{38}^{38}$ | Retuote |  |  | 1166 | 884500．884 | 686447701 | Esstren hemook | tsuba camoenss | cooo | 13.8 |  | mLuwoo | no nort cct |
| ${ }_{0} 026$ |  | ${ }_{\text {6505025 }}^{6575}$ |  | FRAXINUS AMERICANA CELTIS OCCIDENTALIS | ${ }_{\substack{\text { cooo } \\ \text { poos }}}$ | ${ }_{8.3}^{4.3}$ | Beron work hat |  | 009 |  |  | Reto Maple |  | （0000 | ${ }_{4}{ }_{4} 5$ |  |  |  | ${ }_{1167}$ |  |  | Momar | actr Platanoos |  |  | SND WORA AREA |  | wo norit cer |
| 1027 | 936787．42 | 65554，278 | Black lous | Roonm Pstuoataia | FAR | 22.0 | betow woek atea | moan brook sps blou－off | ＋102 | ${ }_{\text {87448921／188 }}$ |  | Citio Mrele | Acter ruprum | ${ }_{\text {ctan }}$ | ${ }_{6.0}^{4.0}$ | Ef |  |  | ${ }_{1168}^{1169}$ |  |  | Norima Maf | ACir Pramoles | ${ }_{\substack{\text { far } \\ \text { far }}}$ |  | 3 Etrou wor he |  | So noort cer |
| 1028 | 936774044 | 650560．07 | вuck locust | rooma sfiooacacan | cooo | 14.5 | betovo vork mita | moan mrook sps lion－off | ${ }_{103}^{103}$ |  |  |  |  | couo | ${ }_{6}^{6.8}$ | Prevec M－PACE |  |  |  |  |  | Nophat Moper |  | ${ }_{\substack{\text { Proor } \\ \text { Poor }}}$ |  |  | MLluvoo | Sol |
| ${ }_{\text {l }}^{1029} 10$ | ${ }_{\text {9357878．466 }}^{9858885}$ | ${ }_{\text {650570．61 }}^{65578.388}$ | $\substack{\text { RED MAPE } \\ \text { ReO MPRE }}$ | ACER RUBRUM <br> ACER RUBRUM | $\underset{\substack{\text { cooo } \\ \text { cood }}}{ }$ | 10.0 <br> 7.8 | EEYOV WOOK AREA | Mody brook sps lion－off | 106 |  |  |  |  | coco | ${ }_{1}^{6.0}$ | （efovo work Aren |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{1035}$ |  | ${ }^{605952518}$ |  | $\begin{gathered} \text { ACER RUBRUM } \\ \hline \text { ACER RUBRUM } \\ \text { ACER PLATANOIDES } \end{gathered}$ | ${ }_{\substack{\text { cooo } \\ 6000}}$ | ${ }_{58}^{5.5}$ | Eeron work hat |  | 106 | 874894．498 | 6826822060 |  |  | cooo | 10.0 | Befono work Afen |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{103}$ | 938802．854 | 65055．882 | RED MPPE |  | 6000 | 11.0 | EEPOOD Work her |  | ${ }_{107}^{108}$ | ${ }_{\text {87 }}^{879288724}$ | 68860．010 | STCMOPR | docoterail | Poor | ${ }^{9.5}$ | BeVov wora mea | Lemer leak |  |  |  |  |  |  |  |  |  |  |  |
| O204 |  | coicle | Dobwoo smac | ACER RUBRUM <br> CORNUS SPP． QUERCUS SPP | Ditio | － 5.8 | Berov work Aet | Mod frox Sce fillorf | 1109 | ${ }_{\text {877789024 }}^{80}$ | 6807780208 | WHIE ASH | 为 | Dicto | 183 | Arsmor | werery yis |  |  |  |  |  |  |  |  |  |  |  |
| （1036 |  |  |  | $\begin{array}{c\|} \hline \text { QUERCUS SPP. } \\ \hline \text { ACER RUBRUM } \\ \hline \text { PRUNUS SEROTINA } \\ \hline \end{array}$ |  | 10，3 | EEYOU WMer Ahe | Mod | T12 |  |  | ${ }^{\text {a }}$ | NGCAMS SEA | 6000 | ${ }^{10.0} 1.0$ |  | 号 |  |  |  |  |  |  |  |  |  |  |  |
| 1038 |  |  | ${ }^{\text {black citrery }}$ black Loust | Promus sfoina | ${ }_{\text {cose }}^{\substack{\text { coue } \\ \text { FAR }}}$ | ${ }^{8.5}$ | BEYONW work Afe | Moan brook sps Blow－Of | ${ }^{1112}$ |  |  |  |  | 6000 | ${ }_{3}^{98}$ | ceme | HRemesan |  |  |  |  |  |  |  |  |  |  |  |
| （1040 |  |  | Noplav Maple |  | couo <br> cooo | ${ }_{7.3}^{9.0}$ |  |  | 114 |  |  | Rete of hene | Altartus Alissm | coicteo | 5．5 |  |  | Sele |  |  |  |  |  |  |  |  |  |  |
| 042 | 938866．975 | ${ }_{650518,778}$ | Black locust | $\frac{\text { UID SNAG }}{\text { ROBINIA PSEUDOACACIA }}$ | ${ }_{\text {Fata }}$ | 8.0 | betown work AeA | MDOAN brook sps biol－ofr | ${ }^{1117}$ |  | （exese | 为 | NCLAMS S |  | 1000 <br> 10.5 <br> 105 | $\substack{\text { Reblice } \\ \text { Remo }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1043 | 93881280 | ${ }^{650512789}$ | Buck Locust |  | far | 12.5 | betown work area | moan brook sps lion－off | 119 | ${ }_{\text {8483685351 }}$ | 68898．332 | Uo Slicc | US Slua | CEEA | ${ }^{1350}$ |  | Haterek re sp | Stiole |  |  |  |  |  |  |  |  |  |  |
| 1044 | 936820．292 | ${ }_{6505057,75}$ | Buck Locust | ROBINIA PSEUDOACACIA <br> ROBINIA PSEUDOACACIA | 600 | 7.5 | betown work area | MOAN Rrook sps lion－off | ${ }_{120}$ | ${ }^{843229362}$ | 688895．505 | Coitilim | popuus otitoos | cooo | 13.0 | befovo wara miea | Hariew re spe | seion－off |  |  |  |  |  |  |  |  |  |  |
| 1045 | 936888491 | ${ }^{\text {650505 } 880}$ | Black locust |  | far | 12.0 | BECONO Work ared | Wan broo sps blow－opf | ${ }_{1122}^{122}$ |  | ${ }_{\text {688861．373 }}^{68989358}$ | EASHER | U．WUS Sp． | 6000 | ${ }^{6} .0$ | ${ }^{\text {BrOVOON WORA AREA }}$ | Harte re | selon－of |  |  |  |  |  |  |  |  |  |  |
| 046 | ${ }^{9388857.76}$ | ${ }_{605050.541}$ | ${ }^{\text {back Loust }}$ |  | c000 | 9.3 | betono | MDan brook sps tlou－off | ， | ${ }_{8}^{883885695}$ | 6880835370 | comon | ACCP Plammoes | cooo | 6.0 | BETOVN WOR AREA | Harkeer Rr spe | sion－of |  |  |  |  |  |  |  |  |  |  |
| ${ }_{1047}^{1048}$ |  |  |  |  | ${ }_{\text {cose }} \mathbf{0} 000$ | ${ }^{9.8}$ |  |  |  |  | $\xrightarrow{688978.800}$ | （lack oak |  | 6000 | ${ }_{9.0}^{5.5}$ | Etrov wor Are | Hatien res | Sillen－orf |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {der }}^{1048}$ |  | ${ }_{\text {cose }}^{650517.565}$ |  |  |  | $\begin{aligned} & 1.0 .0 \\ & \left.\begin{array}{l} 8.5 \\ 7.0 \end{array}\right) \end{aligned}$ |  |  | ${ }_{1}^{1127}$ | ${ }_{\text {8483202 } 230}^{885087}$ |  | Noerwa M MPle |  | 6000 | ${ }_{7}^{7.5}$ | Seliole | HAREEER R SP | Stion |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {lioso }}^{1051}$ |  |  |  | $\begin{gathered} \text { ACER RUBRUM } \\ \hline \text { QUERCUS VELUTINA } \\ \hline \end{gathered}$ | 6000 | 7，0 |  |  | ${ }^{1127}$ | ${ }_{8}^{884321020287}$ | 689886874 <br> 6898674 | Nornar Maple | ACCR PLATMODES | 6000 | 5.5 4.0 |  | Harem re sp | Stion－orf |  |  |  |  |  |  |  |  |  |  |
| 1052 | 938859.47 | ${ }^{655524425}$ | buack locust | K OUbrus seuvina | pook | 19.3 | 3 betov wora |  | ${ }^{1128}$ |  |  | norvar Maple | ACCr Platanoes | FAfar | 4.0 | REROOE ANO | Harem re sps | Stion－orf |  |  |  |  |  |  |  |  |  |  |
| ${ }_{1035}^{1054}$ |  |  |  | ACER RUBRUM QUERCUS ALBA | Coob | ${ }^{4.8}$ |  |  | ${ }_{129}$ | ${ }_{8} 843210.352$ | 688009．344 | Uu SIAG | uo suag | deat | 12.0 | ${ }_{\text {Reprect }}^{\text {Remote }}$ | Harelew re sps | sion－orf |  |  |  |  |  |  |  |  |  |  |
| 1056 |  |  |  | APLE ACER PLATANOIDES <br> CORY CARYA GLABRA <br> ROBINIA PSEUDOACACIA  | ${ }_{\text {cooo }}$ | ${ }^{4.8}$ |  | Mody brook sps liliolf | 1129 | 843210．362 | ${ }^{680939394}$ | uo SIMag | vo Svac | deat | 7.5 |  | Hareem res sp | 8ion－of |  |  |  |  |  |  |  |  |  |  |
| 105 | 938688．97） | ${ }^{6550502651}$ | ${ }_{\text {black }}^{\text {bloust }}$ |  | $\underset{\text { FAIR }}{\substack{\text { Paos }}}$ | ${ }_{8.0}^{128}$ | begovo vora AREA |  | $\stackrel{1130}{1131}$ |  | $\frac{680966.21}{68917.300}$ | norway mpre |  | ${ }_{\text {Poor }}^{\text {far }}$ | ${ }_{\substack{5.8 \\ 3.5}}$ | $\xrightarrow{\text { Rebule }}$（exole |  |  |  |  |  |  |  |  |  |  |  |  |
| NOTES： |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1．SEE Cl－601 FOR NOTES． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ADDENDUM 1 <br> DATE ISSUED： |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { LESS TH } \\ & \text { EDUCED P } \\ & \text { ACCORDIN } \end{aligned}$ |  |
|  |  |  |  |  | Sineo ex |  | $\mathrm{CS}_{\text {CRMW }}^{\text {Pr：}}$ |  |  |  |  | ACOOUTAALE MANA GER |  |  | ＂WARNING－IT IS A VIOLATION，OF THE NEWYORK STATE EDUCATION LAW，SECTION，7209．2，FOR ANY PERSON，UNLESS（S）HEIS ACTING UNDER THE DIRECTION OF ALICENSED PROFESSIONAL ENGINEER，TOALTER THIS DOCUMENT IN ANY WAY．IFALTERED，THE ALTERING PERSON SHALLCOMPLY WITH THE REQUIREMENTS OF NEWYORK EDUCATION，LAW，SECTION，7209．2．＂ |  |  | NEW YORK CITY <br> ENVIRONMENTAL PROTECTION <br> BUREAU OF ENGINEERING DESIGN \＆CONSTRUCTION 96－05 HORACE HARDING EXPRESSWAY 5th FLOOR CORONA，NEW YORK 11368 www．nyc．gov／dep |  |  |  |  | CATSKILL AQUEDUCT REPAIR AND REHABILITATION <br> east of hudson tree location， TYPE AND DISPOSITION SCHEDULE SHEET 3 OF 3 |  |  |  |  | 俍： $102 / 2 / 2017$ |
|  |  |  |  |  |  |  |  |  |  |  |  | Proogen M MAnGESR Of WF |  |  |  |  |  |  | SCAEE MOT To Sche |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | AMIR MASHHAD |  |  |  |  |  | 356 of 485 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Revseo oispeston |  |  | so ${ }^{\text {amp }}$ |  |  | WENDY SPERDUTO，P．E． <br> PROGRAM DIRECTOR OF WFF |  | DRAWING No． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8． $0^{2}$ | pate | REVSIONS／DESCRIPTION |  | ${ }_{\text {APPRO．}}^{\text {P }}$ ．${ }^{\text {Pra }}$ | Sotioans |  |  |  |  | PROGRAM DIRECTOR OF WFF SEAN MCANDREW，P．E． |  | C1－607．01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |







2. VIDOS LESS THAN 2 SQUARE INCHES DO NOT REOURE LEES THAN 5\% OF THE TOTAL LAMINATE AREA ANO THERE ARE NO MORE THAN (10) SUCH VOIDS PER 10 SQUARE FOO

For voids Larger than 25 souare inches contact
ENGMEER For remblal Action such cases wli be ADORESSED ON A CASE BY CASE BASIS


VOIDS BETWEEN 2 AND 25 SQ.IN. (NOTE 1)
(5) REPAIR DETAIL OF VOIDS IN CFRP - NTS

PROCEDURE:
STEP 1: DRILL TWO MAXMUM $1 / 4$ N DAMEETER HOLES $\operatorname{NT}$ THE CFRP LAMINATE UP TO THE DELAMINATED LAES OES FIL THE
 DISCHARGE FROM THE OTHER.

STEP 3: INSTALL ONE LAYER OF CFRP IN THE HOOP DIRECTION CENTERED

STEP 4: APPLY Top coat of thlckened epoxy coverng the entre crrp

Yorktown-2:
New Boathole - NBH13 - Jacob Road
Yorktown-5:
New Boathole - NBH14 - Underhill Avenue


 wevo sperouto p.E.


|  |  |
| :--- | :--- |
|  |  |

## BID SET














NOTES:
 EABRICATON ANO CONSTRUCTON,
2. DEFECTS IDENTRFED BY TTE ENGINER DURING CONSTRUCTION
 ACCORDANCE WTH SECTION O3 O1
REHABLTTATON ANO MODFICATONS.

$$
\begin{aligned}
& \begin{array}{l}
\text { PROOBAM M MNN GER OF W. } \\
\text { WENO SPRROUT, P.E. }
\end{array}
\end{aligned}
$$

$\square$

[^4]NEW YORK CITY
ENVIRONMENTAL PROTECTION
ENVEA OF ENGINERRING DESIGN \& CONSTRUCTION
BURED
O--05 HORACE HARDNG horace harding Expressway sur
Corona, new york 11368

CATSKILL AQUEDUCT REPAIR AND
CROTON LAKE DOWNTAKE CHAMBER SECTION
















Yorktown-10:
Kitchawan CCT Access Manhole and Culvert Drain
ENDICULAR TO CENTERLINE OF AQUEDUCT
$\qquad$

PERPENDICULAR TO CENTERLINE OF AQUEDUCT
A SECTION

CULVERT DRAIN SLUICE GATES - REPLACE
CULVERT DRAIN SLUICE GATES - SEAL

$$
\begin{gathered}
\text { SCALE: } 1 / 4^{4}==^{1}-0^{\prime \prime} \\
\text { (SEE CI-333 FOR LOCAONS }
\end{gathered}
$$

 Water ${ }^{\text {Pa }}$ Future

$$
\begin{aligned}
& \frac{\text { NOTES: }}{1 . \text { SEE CI-333 FOR CuLVERT DRAIN SLIUCE GATE REPLACE OR SEAL LOCATONS }}
\end{aligned}
$$

NEW YORK CITY
ENVIRONMENTAL PROTECTION

96-05 HORACE HARDNG EXPRESSWAY
CORONA, NEW YORK 11368

SCALE: $1 / /^{4}=11^{\prime}-0^{\prime \prime}$
(SEE Cl-333 FOR LOCATONS)




EAN CCANBEM, P.





| STRUCTURE ID | STATION | LOCATION | SPS STREAM CONFIGURATION |  |  |  |  | MECHANICAL |  | CIVIL |  |  |  |  | Length of exterior demo |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SPS1-B (w) | 54773 | Esopus SPs blow-off (W) | UNOER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | - | $\times$ | 5 | 0 | 371.00 | 0 |  | ${ }^{20}$ |
| SPS1-8 (m) | $55+13$ | Esopus SPs Blow-off (M) | unoER | $\times$ |  | $\times$ | x | $\times$ | x | $\times$ | $\times$ | $\times$ | $\times$ | 5 | 0 | 372.00 | 0 | 175 | 20 |
| SpS1-B (E) | $55+29$ | Esopus SPs Blow-Off (E) | UNOER | $\times$ |  | $\times$ | $\times$ | $\times$ | - | $\times$ | $\times$ | $\times$ | $\times$ | 5 | - | 371.00 | 0 |  | ${ }^{20}$ |
| SpS2-B (w) | 105+39 | Tongoore spe blow-off ( $W$ ) | OVER | $\times$ |  | $\times$ | - | $\times$ | $\times$ |  |  | - | $\times$ | 5 | 40 | 416.00 | 10 | 55 | 10 |
| SP92-B(M) | $105+54$ | Tongore sps blow-off (M) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | x |  |  | $\times$ | $\times$ | 5 | 40 | 415.00 | 10 | 45 | 10 |
| SpS2-B (E) | 1055+51 | Tonotere spe blow-off (E) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | ${ }^{20}$ | 46.00 | 10 | 25 | 10 |
| SPS3-B (m) Cc 6 | $2026+07$ | WASHINGTON SOUARE SPS Blow-Off (M) | UnoER |  |  |  | $\times$ |  |  |  |  |  |  | 0 | 0 | 0.00 | 0 | 0 | 0 |
| SPS3-B (M) | $2025+71$ | WASHIMGTON Souare sps elow-off (M) | unoER | x |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | x | $\times$ | $\times$ | 5 | 10 | 330.00 | 10 | 60 | ${ }^{25}$ |
| SPS3-B (E) | $2025+96$ | Washmetow souare sps glow-off (E) | under | $\times$ |  | x | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 5 | 15 | 330.00 | 10 | 30 | 25 |
| SPS4-MB( $(\mathrm{m})$ | $2512+09$ | Founorr frook Sps noritern liow-OFF ( $\mathbf{(}$ ) | OVER Converieo To unorr | - |  | $\times$ | - | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | 5 | 55 | 253.00 | 10 |  | 20 |
| SPS4-M8 (M) | $2511+89$ | Founory brook Sps noritern blow-off (M) | OVER CONVEREED To unotr | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | 5 | 40 | 253.00 | 10 | 125 | 20 |
| $\mathrm{SPS4} 4-\mathrm{NB}_{(E)}$ | $2511+79$ | Founory frook Sps noritern blow-off (E) | OVER CoNverted to unoer | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | 5 | 35 | 253.00 | 10 |  | 20 |
| SPS4-S8 (w) | $2199+15$ | Founory brook Sps Southerv liow-OFF (W) | OVER | $\times$ |  | $\times$ | - | $\times$ | $\times$ |  |  | x | $\times$ | 5 | 20 | 20.00 | 10 | 20 | 10 |
| SP54-S8 (M) | $2519+12$ | Founory brook Sps Southerv low-off (M) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | 25 | 200.00 | 10 | 25 | 10 |
| SP54-S8(E) | $2519+12$ | FOUNOR PRook SPS SOUHHERN diow-off (E) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | - |  |  | $\times$ | $\times$ | 5 | 20 | 20.00 | 10 | 30 | 10 |
| sp55-B (w) | $2637+07$ | NOAAN Brook sps blow-off ( $\mathbf{W}$ ) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | ${ }_{3}$ | 318.00 | 10 | 30 | 10 |
| spS5-B (M) | $2637+42$ | Nodan brook sps blow-off (M) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | 85 | 315.00 | 10 | 75 | 10 |
| SPS5-8 (E) | $2636+93$ | WNOAN Brook sps blow-off (E) | OVER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | ${ }_{5}$ | 318.00 | 10 | 40 | 10 |
| SpS6-B (w) | $2881+64$ | Sprout trook sps blow-off (M) | UNOER | - |  | x | $\times$ | ${ }^{\times}$ | - | $\times$ | $\times$ | $\times$ | $\times$ | 5 | 20 | 140.00 | 10 |  | 20 |
| sp56-B (M) | $2880+96$ | Sprout brook sps blow-off (M) | UNOER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 5 | 10 | 141.00 | 10 | 200 | 20 |
| SPS6-B (E) | $2880+51$ | Sprout brook sps blow-off (E) | UnoER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 5 | 15 | 139.00 | 10 |  | 20 |
| SPST-NB ( ${ }^{\text {m }}$ | $2954+36$ | PeEKSKLL SPS Northern blow-off (m) | unoER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ | $\times$ | 5 | 15 | 38.00 | 10 |  | ${ }^{25}$ |
| SP57-n8 (M) | $2954+42$ | PEEKSKLLL SPS Nortiten low-off (M) | unotr | $\times$ |  | $\times$ | $\times$ | * | $\times$ |  |  | $\times$ | $\times$ | 10 | 15 | 37.33 | 10 | 200 | 25 |
| SP57-M8 (E) | $2954+34$ | PeEkSkLL SPS Norrhern mow-off (E)2 | UNOER |  | $\times$ | $x$ | $\times$ | $\times$ |  |  |  | $\times$ | $\times$ | 5 | 15 | 38.00 | 10 |  | 20 |
| SP77-88 (w) | $2976+12$ |  | UNOER | $\times$ |  | $\times$ | - | $\times$ | $\times$ |  | $\times$ | $\times$ | x | 5 | 75 | 103.00 | 10 |  | 20 |
| SSP7-S8 (M) | $2976+0$ | PEESSKLLL SPS SOUTHERN BLow-off (M) | UNOER | $\times$ |  | $\times$ | - | $x$ | $x$ |  | $x$ | $\times$ | $\times$ | 5 | 75 | 10270 | 10 | ${ }^{150}$ | 20 |
| SP57-58 (E) | 2975995 | PEEKSKLL SPS SOUHHERN Blow-off (E) | UNOER | - |  | x | $\times$ | $\times$ | $\times$ |  | $\times$ | - | $\times$ |  | 75 | 103.00 | 10 |  | ${ }^{20}$ |
| SPS8-B (w) | ${ }^{3235}+80$ | Hunters brook sps blow-off (w) | unoer | * |  | - | - | - | x | $\times$ | $\times$ | $\times$ | - | 5 | 15 | 254.00 | 15 |  | 25 |
| SPS8-B (M) | ${ }^{3235+72}$ | HuNERES Brok ses Blow-OFF (M) | UNOER | $\times$ |  | $\times$ | $\times$ | * | - | $\times$ | $\times$ | $\times$ | $\times$ |  | 20 | 254.00 | 10 | 150 | 25 |
| SPS8-B (E) | ${ }^{3235}+85$ | HuNTERS Brook sps blow-off (E) | unotr | - |  | , | - | $\times$ | $\times$ | - | $\times$ | - | $\times$ | 5 | 15 | 256.00 | 25 |  | 25 |
| Sps9-8 (w) | ${ }^{3369+17}$ | turker mownan sps blow-off (M) | UNOER | x |  | x | $\times$ | x | x | $\times$ |  | $\times$ | $\times$ | 5 | 20 | 270.00 | 10 |  | 20 |
| SpS9-B (M) | $3368+44$ | TUREEY MOWNAN SPS BLOW-OFF (M) | UNOER | $\times$ |  | $\times$ | $\times$ | $\times$ | - | $\times$ |  | - | $\times$ | 5 | 15 | 267.00 | 10 | 150 | ${ }^{25}$ |
| Sp99-B (E) | ${ }^{3368+33}$ | Treker Mowntal sps blow-OFF (E) | UNOER | - |  | , | - | - | , | - |  | - | - | 5 | 10 | 270.00 | 10 |  | 20 |
|  | 3773667 | hatrew river falroad sps blow-off (w) | unoER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ | 5 | ${ }^{21}$ | 285.00 | 10 |  | ${ }^{20}$ |
| SPST10-8 (M) | $3773+67$ | harile River ralroad Sps blow-off (M) | UnoER | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | x | - | - | - | 5 | ${ }^{23}$ | 283.00 | 10 | 150 | 25 |
| SPS10-B (E) | $3773+79$ | hatee river ralroad Sps blow-off (E) | UNOER | $\times$ |  | $\times$ | - | $\times$ | - | $\times$ | $\times$ | $x$ | $\times$ | 5 | 12 | 286.00 | 10 |  | 20 |

[^5]Yorktown-2A
Hunters Brook SPS Blow-off Chambers
Yorktown-6
Turkey Mountain SPS Blow-off Chambers







## Attachment D

## SEQR EAS FORM

## Emily Lloyd

Commissioner

Angela Licata Deputy Commissioner of Sustainability alicata@dep.nyc.gov

59-17 Junction Blvd. Flushing, New York 11373

Tel. (718) 595-4398
Fax (718) 595-4479

## NOTICE OF CORRECTION FOR THE RECENTLY RELEASED DRAFT SCOPE OF WORK FOR THE WATER FOR THE FUTURE: UPSTATE WATER SUPPLY RESILIENCY PROJECT

CEQR No. 15DEP006U
October 22, 2014

A Draft Scope of Work was issued on October 10, 2014 for the Water for the Future: Upstate Water Supply Resiliency Project. Please note that Part 3 of the Environmental Assessment Form incorrectly indicated that a conditional negative declaration would be prepared. DEP acknowledges this project may result in one or more significant adverse impacts on the environment and issued a Positive Declaration reflecting that an environmental impact statement will be prepared accordingly.

The corrected Part 3 is enclosed. We apologize for any inconvenience this may have caused you. Please note Parts 1, 2, and 3 of the Environmental Assessment Form as well as the Draft Scope of Work is available on the NYCDEP website: http://www.nyc.gov/dep.


Mark N. Page, Jr. Managing Director

## Enclosure

## Full Environmental Assessment Form Part 1 - Project and Setting

## Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A \& B. In Sections C, D \& E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section $G$ requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

## A. Project and Sponsor Information.

Name of Action or Project:
Water for the Future (WFF): Upstate Water Supply Resiliency
Project Location (describe, and attach a general location map):
Counties of Westchester, Putnam, Dutchess, Orange, Sullivan, Ulster, Greene, Delaware, Broome and Schoharie.
Brief Description of Proposed Action (include purpose or need):
Rehabilitation of the Catskill Aqueduct, WFF Shutdown System Operations, and Rondout-West Branch Tunnel (RWBT) Inspection and Repair.
The Water for the Future program (WFF) was developed to respond to the need to recover capacity and improve resiliency in the RWBT, a vital piece of the City's overall water supply system. WFF addresses significant leakage in the Delaware Aqueduct. To address these leaks, a bypass tunnel in under construction. Once the tunnel is completed in 2022, the RWBT would be temporarily shut down. During this temporary shutdown of the RWBT, water from the Delaware System west of the Hudson River would be unavailable. To ensure the continued supply of clean drinking water during this time, DEP has developed projects and plans comprised of three main components: (1) supply augmentation consisting of rehabilitation of the Catskill Aqueduct (including repair or treatment of minor leaks and replacement of aging mechanical components); (2) WFF Shutdown System Operations, which would allow DEP to rely more heavily on the Catskill and Croton Systems during the temporary shutdown; and (3) RWBT Inspection and Repair during connection of the bypass tunnel (drain, inspect, and repair), including decommissioning the bypassed section of the RWBT.

| Name of Applicant/Sponsor: <br> NYC DEP Bureau of Engineering Design and Construction | Telephone: |  |
| :---: | :---: | :---: |
|  | E-Mail: |  |
| Address: $59-17$ Junction Boulevard, 11th Floor |  |  |
| City/PO: ${ }_{\text {Flushing }}$ | State: ${ }_{\text {NY }}$ | Zip Code: ${ }_{11373}$ |
| Project Contact (if not same as sponsor; give name and title/role): <br> Sean McAndrew, WFF Program Director | Telephone: |  |
|  | E-Mail: |  |
| Address: |  |  |
| City/PO: | State: | Zip Code: |
| Property Owner (if not same as sponsor): | Telephone: |  |
|  | E-Mail: |  |
| Address: |  |  |
| City/PO: | State: | Zip Code: |

B. Government Approvals
B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

| Government Entity | If Yes: Identify Agency and Approval(s) Required | Application Date (Actual or projected) |
| :---: | :---: | :---: |
| a. City Council, Town Board, $\quad \square \mathrm{Yes} \square \mathrm{No}$ or Village Board of Trustees | Various |  |
| b. City, Town or Village $\quad \square \mathrm{Yes} \square$ No Planning Board or Commission | Various |  |
| c. City Council, Town or $\quad$ VYes $\square$ No Village Zoning Board of Appeals | Various |  |
| d. Other local agencies $\quad \square \mathrm{Yes} \square$ No | NYC Public Design Commission |  |
| e. County agencies $\square \mathrm{Yes} \square \mathrm{\square} \mathrm{No}$ |  |  |
| f. Regional agencies $\square \mathrm{Yes} \square \mathrm{DNo}$ |  |  |
| g. State agencies $\quad$ Ø $\mathrm{Yes}^{\square} \square \mathrm{No}$ | DEC, DOT, DOH, DOS, OPRHP, NYCDEP |  |
| h. Federal agencies $\quad$ ØYes $\square$ No | USFWS, USACE |  |
| i. Coastal Resources. <br> i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <br> 7Yes No <br> ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? Yes $\square$ No <br> iii. Is the project site within a Coastal Erosion Hazard Area? Yes $\square$ No |  |  |

## C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the $\quad \mathbf{\nabla}$ Yes $\square$ No only approval(s) which must be granted to enable the proposed action to proceed?

- If Yes, complete sections C, F and G.
- If No, proceed to question C. 2 and complete all remaining sections and questions in Part 1


## C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located?
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action $\quad \mathrm{Z}$ Yes $\square$ No would be located?
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?)
If Yes, identify the plan(s):
DEP's watershed managment plan
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, $\quad \square \mathrm{Yes} \square$ No or an adopted municipal farmland protection plan?
If Yes, identify the plan(s):
Various

| C.3. Zoning |  |
| :---: | :---: |
| a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district? <br> Various | $\square \mathrm{Yes} \square \mathrm{No}$ |
| b. Is the use permitted or allowed by a special or conditional use permit? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| c. Is a zoning change requested as part of the proposed action? If Yes, <br> $i$. What is the proposed new zoning for the site? | $\square \mathrm{Yes} \square \mathrm{No}$ |
| C.4. Existing community services. |  |
| a. In what school district is the project site located? Various |  |
| b. What police or other public protection forces serve the project site? Various |  |
| c. Which fire protection and emergency medical services serve the project site? Various |  |
| d. What parks serve the project site? <br> Various |  |

## D. Project Details

## D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? public utility repair of water supply system for up to nine million customers.
b. a. Total acreage of the site of the proposed action?
b. Total acreage to be physically disturbed?
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?

| Varies acres |
| :---: |
| Varies acres |
| Varies acres |

c. Is the proposed action an expansion of an existing project or use?
$i$. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? $\% \quad 0 \quad$ Units: $\quad 0$
$\begin{array}{ll}\text { d. Is the proposed action a subdivision, or does it include a subdivision? } & \square \mathrm{Yes} \square \mathrm{No}\end{array}$
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? $\square$ Yes $\square$ No
iii. Number of lots proposed?
$i v$. Minimum and maximum proposed lot sizes? Minimum $\qquad$ Maximum
e. Will proposed action be constructed in multiple phases?

$i$. If No, anticipated period of construction:
ii. If Yes:

- Total number of phases anticipated
- Anticipated commencement date of phase 1 (including demolition)
- Anticipated completion date of final phase month year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:
The Proposed Action is intended to be in place prior to the anticipated 8 mon shutdown of the RWBT in 2022. The Proposed Action will continue to be implemented throughout the shutdown. Work for Catskill will occur prior to the shutdown, Operations and Inspection/Repair will occur during the shutdown.



## D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? $\square$ Yes $\square$ No (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)
If Yes:
$i$. What is the purpose of the excavation or dredging?
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards):
- Over what duration of time?
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.
iv. Will there be onsite dewatering or processing of excavated materials? If yes, describe.
$v$. What is the total area to be dredged or excavated?

$v i$. What is the maximum area to be worked at any one time?
vii. What would be the maximum depth of excavation or dredging?
viii. Will the excavation require blasting?
$i x$. Summarize site reclamation goals and plan: $\qquad$ acres acres feet $\square \mathrm{Yes} \square \mathrm{No}$
$\qquad$
b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment $\square \mathrm{Yes} \square \mathrm{No}$ into any existing wetland, waterbody, shoreline, beach or adjacent area?
If Yes:
$i$. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): various wetlands/waterbodies along the aqueducts and receiving waterbodies.
ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres: Proposed Action may require placement of small structures in or near wetlands or waterbodies. Proposed action would reduce the leak water in Roseton, NY.
iii. Will proposed action cause or result in disturbance to bottom sediments? If Yes, describe: Potential disturbance due to increase in releases, primarily associated with Rondout Reservoir
$i v$. Will proposed action cause or result in the destruction or removal of aquatic vegetation?
$\square \mathrm{Yes} \square \mathrm{No}$ If Yes:
- acres of aquatic vegetation proposed to be removed: Yet to be determined
- expected acreage of aquatic vegetation remaining after project completion:Yet to be determined
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):

Removal/disturbance a result of reservoir releases, primarily associated with Rondout Reservoir

- proposed method of plant removal:
- if chemical/herbicide treatment will be used, specify product(s):
$v$. Describe any proposed reclamation/mitigation following disturbance:
c. Will the proposed action use, or create a new demand for water?
$\square \mathrm{Yes} \square \mathrm{No}$
If Yes:
i. Total anlicipated water usage/demand per day: $\qquad$ gallons/day
ii. Will the proposed action obtain water from an existing public water supply? $\square$ Yes $\square$ No
If Yes:
- Name of district or service area:
- Does the existing public water supply have capacity to serve the proposal?
- Is the project site in the existing district?
$\square$ Yes $\square$ No
- Is expansion of the district needed? $\square$ Yes $\square$ No
- Do existing lines serve the project site?
iii. Will line extension within an existing district be necessary to supply the project? $\square$ Yes $\square$ No
If Yes:
- Describe extensions or capacity expansions proposed to serve this project:
- Source(s) of supply for the district:
iv. Is a new water supply district or service area proposed to be formed to serve the project site? If, Yes:
- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- Proposed source(s) of supply for new district:
$v$. If a public water supply will not be used, describe plans to provide water supply for the project:
vi. If water supply will be from wells (public or private), maximum pumping capacity: $\qquad$ gallons/minute.
d. Will the proposed action generate liquid wastes? $\quad 7$ Yes $\square$ No

If Yes:
$i$. Total anticipated liquid waste generation per day:
varies gallons/day
ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):
Proposed Action would include liquid waste associated with biofilm removal within the Catskill Aqueduct
iii. Will the proposed action use any existing public waslewater treatment facilities?
$\square \mathrm{Yes} \square \mathrm{No}$ If Yes:

- Name of wastewater treatment plant to be used: $\qquad$
- Name of district:
- Does the existing wastewater treatment plant have capacity to serve the project?

- Do existing sewer lines serve the project site?
- Will line extension within an existing district be necessary to serve the project? If Yes:
- Describe extensions or capacity expansions proposed to serve this project:
$i v$. Will a new wastewater (sewage) treatment district be formed to serve the project site?
If Yes:
- Applicant/sponsor for new district:
- Date application submitted or anticipated:
- What is the receiving water for the wastewater discharge?
$v$. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):
vi. Describe any plans or designs to capture, recycle or reuse liquid waste:

No.
e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point $\quad \square \mathrm{Yes} \square \mathrm{No}$ sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?
If Yes:
$i$. How much impervious surface will the project create in relation to total size of project parcel?
Square feet or $\quad$ Square feet or $\quad$ acres (impervious surface)
acres (parcel size)
ii. Describe types of new point sources.
iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands:
- Will stormwater runoff flow to adjacent properties?
$i v$. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?
f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuelcombustion, waste incineration, or other processes or operations?
If Yes, identify:
$i$. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)
The Proposed Action may include temporary mobile sources during construction.
ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

The Proposed Action may include temporary stationary sources during construction.
iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

None.
g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, $\square$ Yes $\square$ No or Federal Clean Air Act Title IV or Title V Permit?
If Yes:
i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet $\square$ Yes $\square$ No ambient air quality standards for all or some parts of the year)
ii. In addition to emissions as calculated in the application, the project will generate:

- __Tons/year (short tons) of Carbon Dioxide $\left(\mathrm{CO}_{2}\right)$
- Tons/year (short tons) of Nitrous Oxide ( $\mathrm{N}_{2} \mathrm{O}$ )
- Tons/year (short tons) of Perfluorocarbons (PFCs)
- Tons/year (short tons) of Sulfur Hexafluoride $\left(\mathrm{SF}_{6}\right)$
- Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- Tons/year (short tons) of Hazardous Air Pollutants (HAPs)
h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?
If Yes:
$i$. Estimate methane generation in tons/year (metric):
ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring):
i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?
If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):
j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?
If Yes:
$i$. When is the peak traffic expected (Check all that apply): $\quad \square$ Morning $\quad \square$ Evening $\quad \square$ Weekend $\square$ Randomly between hours of $\qquad$ to $\qquad$ .
ii. For commercial activities only, projected number of semi-trailer truck trips/day:
iii. Parking spaces: Existing Proposed Net increase/decrease
$i v$. Does the proposed action include any shared use parking?
$v$. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:
vi. Are public/private transportation service(s) or facilities available within $1 / 2$ mile of the proposed site?
vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?
viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing $\quad \square \mathrm{Yes} \square$ No pedestrian or bicycle routes?
k . Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?
If Yes:
$i$. Estimate annual electricity demand during operation of the proposed action:
ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
iii. Will the proposed action require a new, or an upgrade to, an existing substation?

1. Hours of operation. Answer all items which apply.
i. During Construction:

- Monday - Friday: varies
- Saturday: varies
- Sunday: varies
- Holidays:


## ii. During Operations:

- Monday - Friday:
varies
- Saturday: $\qquad$
- Sunday: varies
- Holidays:
varies
m . Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?
If yes:
i. Provide details including sources, time of day and duration:

Varies: The Proposed Action may generate temporary short term noise during construction and repair activities.
ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? Describe:
n.. Will the proposed action have outdoor lighting?

If yes:
$i$. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures: Varies: The Proposed Action may require temporary short term lighting during construction and repair activities.
ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? $\square$ Yes $\square$ No Describe:
o. Does the proposed action have the potential to produce odors for more than one hour per day? If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:
p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) $\square$ Yes $\square$ No or chemical products 185 gallons in above ground storage or any amount in underground storage?
If Yes:
$i$. Product(s) to be stored Liquid aluminum sulfate may be stored in a day tank.
ii. Volume (s) per unit time__ (e.g., month, year)
iii. Generally describe proposed storage facilities:

The Proposed Action includes the storage of liquid aluminum sulfate in a day tank at Pleasantville Treatment Facility
q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, $\square$ Yes $\square$ No insecticides) during construction or operation?
If Yes:
$i$. Describe proposed treatment(s):
ii. Will the proposed action use Integrated Pest Management Practices?
$\square$ Yes $\square$ No
r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal $\quad \square$ Yes $\square$ No of solid waste (excluding hazardous materials)?
If Yes:
$i$. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction:
tons per $\qquad$ (unit of time)
- Operation : tons per (unit of time)
ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:
- Construction:
- Operation:
iii. Proposed disposal methods/facilities for solid waste generated on-site:
- Construction:
- Operation:
s. Does the proposed action include construction or modification of a solid waste management facility?

If Yes:
i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities):
ii. Anticipated rate of disposal/processing:

- Tons/month, if transfer or other non-combustion/thermal treatment, or
- Tons/hour, if combustion or thermal treatment
iii. If landfill, anticipated site life: ___ years
t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous $\quad \square$ Yes $\square$ No waste?
If Yes:
i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:

The Proposed Action includes the usage of additional aluminum sulfate and includes the usage of chlorination chemicals.
ii. Generally describe processes or activities involving hazardous wastes or constituents:

The Proposed Action includes additional aluminum sulfate and chlorination chemicals to be used for water treatment.
iii. Specify amount to be handled or generated Varies tons/month
$i v$. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:
v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?

If Yes: provide name and location of facility:
Varies, as applicable
If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

## E. Site and Setting of Proposed Action

## E.1. Land uses on and surrounding the project site

a. Existing land uses.
$i$. Check all uses that occur on, adjoining and near the project site.
$\square$ Urban $\square$ Industrial $\square$ Commercial $\quad \square$ Residential (suburban) $\square$ Rural (non-farm)
$\square$ Forest $\square$ Agriculture $\square$ Aquatic $\square$ Other (specify):_ Water supply system
ii. If mix of uses, generally describe:

Land Uses vary along the water supply system and within the watershed for the Proposed Action

| b. Land uses and covertypes on the project site. |  |  |  |
| :---: | :---: | :---: | :---: |
| Land use or Covertype | Current <br> Acreage | Acreage After Project Completion | Change (Acres +/-) |
| - Roads, buildings, and other paved or impervious surfaces | Varies | Varies | Minor |
| - Forested | Varies | Varies | Minor |
| - Meadows, grasslands or brushlands (nonagricultural, including abandoned agricultural) | Varies | Varies | Minor |
| - Agricultural <br> (includes active orchards, field, greenhouse etc.) | Varies | Varies | Minor |
| - Surface water features (lakes, ponds, streams, rivers, etc.) | Varies | Varies | Minor |
| - Wetlands (freshwater or tidal) | Varies | Varies | Minor |
| - Non-vegetated (bare rock, earth or fill) | Varies | Varies | Minor |
| - Other <br> Describe: |  |  |  |

c. Is the project site presently used by members of the community for public recreation?
d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed $\square$ Yes $\square$ No day care centers, or group homes) within 1500 feet of the project site?
If Yes,
$i$. Identify Facilities:
e. Does the project site contain an existing dam?

Yes $\square$ No
If Yes:
$i$. Dimensions of the dam and impoundment:

- Dam height:

| Varies | feet |
| :--- | :--- |
| Varies | feet |
| Varies | acres |

- Surface area: Varies acres
- Volume impounded: Varies gallons OR acre-feet
ii. Dam's existing hazard classification: Varies
iii. Provide date and summarize results of last inspection:

Varies
f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, $\square$ Yes $\square$ No or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?
If Yes:
i. Has the facility been formally closed?
$\square$ Yes $\square$ No

- If yes, cite sources/documentation:
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:
iii. Describe any development constraints due to the prior solid waste activities:
g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin $\quad \square$ Yes $\square$ No property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:
h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?
If Yes:
$i$. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:
$\square$ Yes - Spills Incidents database
Provide DEC ID number(s):
$\square$ Yes - Environmental Site Remediation database
Provide DEC ID number(s):
$\square$ Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures:

Awaiting completion of Phase I ESA
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?

If yes, provide DEC ID number(s):
$i v$. If yes to (i), (ii) or (iii) above, describe current status of site(s):
$v$. Is the project site subject to an institutional control limiting property uses?

- If yes, DEC site ID number:
- Describe the type of institutional control (e.g., deed restriction or easement):
- Describe any use limitations:
- Describe any engineering controls:
- Will the project affect the institutional or engineering controls in place?
- Explain: $\qquad$
$\qquad$ $\longrightarrow$


## E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site?

## Varies feet

$\begin{array}{ll}\text { b. Are there bedrock outcroppings on the project site? } & \square \text { Yes } \square \text { No }\end{array}$
If Yes, what proportion of the site is comprised of bedrock outcroppings?
Varies \%

| c. Predominant soil type(s) present on project site: | Varies | \%$\%$$\%$ |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |

d. What is the average depth to the water table on the project site? Average: Varies feet

f. Approximate proportion of proposed action site with slopes: $\square 0-10 \%$ : $\quad \frac{\mathrm{N} / \mathrm{A} \% \text { of site }}{\square}$


N/A $\%$ of site
$\mathrm{N} / \mathrm{A} \%$ of site
g. Are there any unique geologic features on the project site?

Yes $\sqrt{ }$ No
If Yes, describe:
h. Surface water features.
$i$ Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?
$i i$. Do any wetlands or other waterbodies adjoin the project site?
If Yes to either $i$ or $i i$, continue. If No, skip to E.2.i.
iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?
$i v$. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name Various Classification Various
- Lakes or Ponds: Name Various Classification Various
- Wetlands: Name Various, awaiting Jurisdiction Determination. Approximate Size Various
- Wetland No. (if regulated by DEC)
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?
If yes, name of impaired water body/bodies and basis for listing as impaired:
Lower Hudson River Basin and Delaware River Basin

| i. Is the project site in a designated Floodway? | $\square$ Yes $\square$ No |
| :--- | :--- |
| j. Is the project site in the 100 year Floodplain? | $\square$ Yes $\square$ No |
| k. Is the project site in the 500 year Floodplain? | $\square$ Yes $\square$ No |
| 1. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? | $\square$ Yes $\square$ No |

If Yes:
i. Name of aquifer: Woodburne Primary Aquifer near Rondout Reservoir.
m . Identify the predominant wildlife species that occupy or use the project site:
n. Does the project site contain a designated significant natural community?
ene

If Yes:
$i$. Describe the habitat/community (composition, function, and basis for designation):
ii. Source(s) of description or evaluation:
iii. Extent of community/habitat:

- Currently: acres
- Following completion of project as proposed: acres
- Gain or loss (indicate + or -):
acres
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as $\square$ Yes $\square$ No endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species?

Various, awaiting NYS Natural Heritage Program and US Fish and Wildlife Service responses. Listed species are considered sensitive and may not be released to the public without permission from the NYS Natural Heritage Program.
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern?

Various, awaiting NYS Natural Heritage Program responses.
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? $\square$ Yes $\square$ No If yes, give a brief description of how the proposed action may affect that use:
Use of lands for recreational hunting, trapping and fishing by permit. Proposed action will not affect this use.

## E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to $\quad \square \mathrm{Yes} \square$ No Agriculture and Markets Law, Article 25-AA, Section 303 and 304?
If Yes, provide county plus district name/number: Various
b. Are agricultural lands consisting of highly productive soils present? $\square$ Yes $\square$ No
i. If Yes: acreage(s) on project site? $\qquad$
ii. Source(s) of soil rating(s):
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?
If Yes:
i. Nature of the natural landmark: $\quad \square$ Biological Community $\quad \square$ Geological Feature
ii. Provide brief description of landmark, including values behind designation and approximate size/extent:
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area?

If Yes:
i. CEA name: Various
ii. Basis for designation: Protection of Water Supply Resources
iii. Designating agency and date: Various
e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?
If Yes:
i. Nature of historic/archaeological resource: $\square$ Archaeological Site $\quad$ Historic Building or District
ii. Name: Various
iii. Brief description of attributes on which listing is based:

Awaiting SHPO responses.
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for $\quad \square \mathrm{Yes} \square$ No archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?
g. Have additional archaeological or historic site(s) or resources been identified on the project site? $\square$ Yes $\square$ No

If Yes:
i. Describe possible resource(s):
ii. Basis for identification: Awaiting SHPO responses.
h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local $\quad \square \mathrm{Yes} \square$ No scenic or aesthetic resource?
If Yes:
i. Identify resource: Various - Note: Proposed Action is not anticipated to be visible from any scenic or aesthetic resources.
ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): Various
iii. Distance between project and resource: $\quad$ Varies miles.
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers $\quad \square$ Yes $\square$ No Program 6 NYCRR 666?
If Yes:
i. Identify the name of the river and its designation: Upper Delaware River, Scenic and Recreational
ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?
$\square \mathrm{Yes} \square \mathrm{No}$

## F. Additional Information

Attach any additional information which may be needed to clarify your project.
If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

## G. Verification

I certify that the information provided is true to the best of my knowledge.


## Full Environmental Assessment Form <br> Part 2 - Identification of Potential Project Impacts

Part 2 is to be completed by the lead agency. Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency's reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency and the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

## Tips for completing Part 2:

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer "Yes" to a numbered question, please complete all the questions that follow in that section.
- If you answer "No" to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box "Moderate to large impact may occur."
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the "whole action".
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.


## 1. Impact on Land

Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)
If "Yes", answer questions $a-j$. If "No", move on to Section 2.

|  | $\begin{gathered} \hline \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. The proposed action may involve construction on land where depth to water table is less than 3 feet. | E2d | V | $\square$ |
| b. The proposed action may involve construction on slopes of $15 \%$ or greater. | E2f | , | $\square$ |
| c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface. | E2a | , | $\square$ |
| d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material. | D2a | V | $\square$ |
| e. The proposed action may involve construction that continues for more than one year or in multiple phases. | D1e | 7 | $\square$ |
| f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides). | D2e, D2q | 7 | $\square$ |
| g. The proposed action is, or may be, located within a Coastal Erosion hazard area. | B1i | V | $\square$ |
| h. Other impacts: |  | $\square$ | $\square$ |

2. Impact on Geological Features

The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, 7 NO $\square \mathrm{YES}$ minerals, fossils, caves). (See Part 1. E.2.g)
If "Yes", answer questions $a-c$. If "No", move on to Section 3.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :--- | :--- | :---: |
| a. Identify the specific land form(s) attached: | E2g | $\square$ | $\square$ |
| b. The proposed action may affect or is adjacent to a geological feature listed as a <br> registered National Natural Landmark. <br> Specific feature: | E3c | $\square$ | $\square$ |
| c. Other impacts: |  | $\square$ | $\square$ |

## 3. Impacts on Surface Water

The proposed action may affect one or more wetlands or other surface water
$\square \mathrm{NO} \quad \square \mathrm{YES}$ bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) If "Yes", answer questions $a-l$. If "No", move on to Section 4.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> impact large <br> occur |
| :--- | :--- | :--- | :--- |
| a. The proposed action may create a new water body. |  |  |  |

$\qquad$

| $\square$ | $\square$ | $\square$ |
| :--- | :--- | :--- |

4. Impact on groundwater

The proposed action may result in new or additional use of ground water, or
 may have the potential to introduce contaminants to ground water or an aquifer.
(See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t)
If "Yes", answer questions a -h. If "No", move on to Section 5.

|  | $\begin{gathered} \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells. | D2c | $\square$ | $\square$ |
| b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. <br> Cite Source: | D2c | $\square$ | $\square$ |
| c. The proposed action may allow or result in residential uses in areas without water and sewer services. | D1a, D2c | $\square$ | $\square$ |
| d. The proposed action may include or require wastewater discharged to groundwater. | D2d, E21 | $\square$ | $\square$ |
| e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated. | D2c, E1f, <br> E1g, E1h | $\square$ | $\square$ |
| f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer. | D2p, E21 | $\square$ | $\square$ |
| g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources. | $\begin{aligned} & \text { E2h, D2q, } \\ & \text { E21, D2c } \end{aligned}$ | $\square$ | $\square$ |
| h. Other impacts: |  | $\square$ | $\square$ |


| 5. Impact on Flooding <br> The proposed action may result in development on lands subject to flooding. (See Part 1. E.2) <br> If "Yes", answer questions $a-g$. If "No", move on to Section 6. | $\square \mathrm{NO} \quad \square \mathrm{YES}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may result in development in a designated floodway. | E2i | , | $\square$ |
| b. The proposed action may result in development within a 100 year floodplain. | E2j | , | $\square$ |
| c. The proposed action may result in development within a 500 year floodplain. | E2k | , | $\square$ |
| d. The proposed action may result in, or require, modification of existing drainage patterns. | D2b, D2e | 7 | $\square$ |
| e. The proposed action may change flood water flows that contribute to flooding. | $\begin{aligned} & \text { D2b, E2i, } \\ & \text { E2j, E2k } \end{aligned}$ | $\square$ | , |
| f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade? | E1e | - | $\square$ |

## 6. Impacts on Air

The proposed action may include a state regulated air emission source.

(See Part 1. D.2.f., D,2,h, D.2.g)
If "Yes", answer questions $a-f$. If "No", move on to Section 7.
$\left.\begin{array}{|l|l|l|l|}\hline\end{array} \begin{array}{c}\text { Moderate } \\ \text { to large } \\ \text { impact may } \\ \text { occur }\end{array}\right]$

## 7. Impact on Plants and Animals

The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.)


If "Yes", answer questions $a-j$. If "No", move on to Section 8.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :--- | :---: | :---: |
| a. The proposed action may cause reduction in population or loss of individuals of any <br> threatened or endangered species, as listed by New York State or the Federal <br> government, that use the site, or are found on, over, or near the site. | E2o | $\square$ |  |
| b. The proposed action may result in a reduction or degradation of any habitat used by <br> any rare, threatened or endangered species, as listed by New York State or the federal <br> government. | E2o | $\square$ |  |
| c. The proposed action may cause reduction in population, or loss of individuals, of any <br> species of special concern or conservation need, as listed by New York State or the <br> Federal government, that use the site, or are found on, over, or near the site. | E2p | $\square$ |  |
| d. The proposed action may result in a reduction or degradation of any habitat used by <br> any species of special concern and conservation need, as listed by New York State or <br> the Federal government. | E2p | $\square$ | $\square$ |


| e. The proposed action may diminish the capacity of a registered National Natural <br> Landmark to support the biological community it was established to protect. | E3c | $\square$ |  |
| :--- | :--- | :--- | :--- |
| f. The proposed action may result in the removal of, or ground disturbance in, any <br> portion of a designated significant natural community. <br> Source: | E2n | $\square$ |  |
| g. The proposed action may substantially interfere with nesting/breeding, foraging, or <br> over-wintering habitat for the predominant species that occupy or use the project site. | E2m | $\square$ |  |
| h. The proposed action requires the conversion of more than 10 acres of forest, <br> grassland or any other regionally or locally important habitat. <br> Habitat type \& information source: <br> - | E1b | $\square$ | $\square$ |
| i. Proposed action (commercial, industrial or recreational projects, only) involves use of <br> herbicides or pesticides. | D2q | $\square$ |  |
| j. Other impacts: | $\square$ | $\square$ |  |


| 8. Impact on Agricultural Resources <br> The proposed action may impact agricultural resources. (See Part 1. E.3.a. If "Yes", answer questions $a-h$. If "No", move on to Section 9. | b.) | $\boxed{\nabla} \mathrm{NO}$ | $\square \mathrm{YES}$ |
| :---: | :---: | :---: | :---: |
|  | Relevant Part I Question(s) | No, or small impact may occur | Moderate to large impact may occur |
| a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System. | E2c, E3b | $\square$ | $\square$ |
| b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc). | E1a, Elb | $\square$ | $\square$ |
| c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land. | E3b | $\square$ | $\square$ |
| d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District. | E1b, E3a | $\square$ | $\square$ |
| e. The proposed action may disrupt or prevent installation of an agricultural land management system. | El a, Elb | $\square$ | $\square$ |
| f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland. | $\begin{aligned} & \mathrm{C} 2 \mathrm{c}, \mathrm{C} 3, \\ & \mathrm{D} 2 \mathrm{c}, \mathrm{D} 2 \mathrm{~d} \end{aligned}$ | $\square$ | $\square$ |
| g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan. | C 2 c | $\square$ | $\square$ |
| h. Other impacts: |  | $\square$ | $\square$ |

9. Impact on Aesthetic Resources

The land use of the proposed action are obviously different from, or are in
 sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) If "Yes", answer questions $a-g$. If "No", go to Section 10 .

|  | $\begin{gathered} \hline \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. | E3h | $\square$ | $\square$ |
| b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views. | E3h, C2b | $\square$ | $\square$ |
| c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round | E3h | $\square$ $\square$ | $\square$ $\square$ |
| d. The situation or activity in which viewers are engaged while viewing the proposed action is: <br> i. Routine travel by residents, including travel to and from work <br> ii. Recreational or tourism based activities | E3h <br> E2q, <br> E1c | $\square$ | $\square$ |
| e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource. | E3h | $\square$ | $\square$ |
| f. There are similar projects visible within the following distance of the proposed project: <br> 0-1/2 mile <br> $1 / 2-3$ mile <br> 3-5 mile <br> 5+ mile | D1a, E1a, D1f, D1g | $\square$ | $\square$ |
| g. Other impacts: |  | $\square$ | $\square$ |

10. Impact on Historic and Archeological Resources

The proposed action may occur in or adjacent to a historic or archaeological

resource. (Part 1. E.3.e, f. and g.)
If "Yes", answer questions $a-e$. If "No", go to Section 11 .

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :---: | :---: | :---: |
| a. The proposed action may occur wholly or partially within, or substantially contiguous <br> to, any buildings, archaeological site or district which is listed on or has been <br> nominated by the NYS Board of Historic Preservation for inclusion on the State or <br> National Register of Historic Places. | E3e | $\square$ |  |
| b. The proposed action may occur wholly or partially within, or substantially contiguous <br> to, an area designated as sensitive for archaeological sites on the NY State Historic <br> Preservation Office (SHPO) archaeological site inventory. | E3f | $\square \square$ | $\square$ |
| c. The proposed action may occur wholly or partially within, or substantially contiguous <br> to, an archaeological site not included on the NY SHPO inventory. <br> Source: | E3g | $\square$ |  |



## 11. Impact on Open Space and Recreation

The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan.
(See Part 1. C.2.c, E.1.c., E.2.q.)
If "Yes", answer questions $a-e$. If "No", go to Section 12.

|  | $\begin{gathered} \hline \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. The proposed action may result in an impairment of natural functions, or "ecosystem services", provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat. | D2e, E1b <br> E2h, <br> E2m, E2o, <br> E2n, E2p | $\square$ | $\square$ |
| b. The proposed action may result in the loss of a current or future recreational resource. | $\begin{aligned} & \mathrm{C} 2 \mathrm{a}, \mathrm{E} 1 \mathrm{c}, \\ & \mathrm{C} 2 \mathrm{c}, \mathrm{E} 2 \mathrm{q} \end{aligned}$ | $\square$ | , |
| c. The proposed action may eliminate open space or recreational resource in an area with few such resources. | $\begin{aligned} & \mathrm{C} 2 \mathrm{a}, \mathrm{C} 2 \mathrm{c} \\ & \mathrm{E} 1 \mathrm{c}, \mathrm{E} 2 \mathrm{q} \end{aligned}$ | , | $\square$ |
| d. The proposed action may result in loss of an area now used informally by the community as an open space resource. | C2c, E1c | จ | $\square$ |
| e. Other impacts: |  | $\square$ | $\square$ |

## 12. Impact on Critical Environmental Areas

The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d)
If "Yes", answer questions $a-c$. If "No", go to Section 13.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :--- | :---: | :---: |
| a. The proposed action may result in a reduction in the quantity of the resource or <br> characteristic which was the basis for designation of the CEA. | E3d | $\square$ |  |
| b. The proposed action may result in a reduction in the quality of the resource or <br> characteristic which was the basis for designation of the CEA. | E3d | $\square$ | $\square$ |
| c. Other impacts: |  | $\square$ | $\square$ |

13. Impact on Transportation

The proposed action may result in a change to existing transportation systems.


NO
(See Part 1. D.2.j)
If "Yes", answer questions a - g. If "No", go to Section 14.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> mpact may <br> occur |
| :--- | :--- | :--- | :---: |
| a. Projected traffic increase may exceed capacity of existing road network. | D 2 j | $\square$ |  |
| b. The proposed action may result in the construction of paved parking area for 500 or <br> more vehicles. | D 2 j | $\square$ | $\square$ |
| c. The proposed action will degrade existing transit access. | D 2 j | $\square$ | $\square$ |
| d. The proposed action will degrade existing pedestrian or bicycle accommodations. | D 2 j | $\square$ | $\square$ |
| e. The proposed action may alter the present pattern of movement of people or goods. | D 2 j | $\square$ |  |
| f. Other impacts: $\quad$ |  | $\square$ | $\square$ |
|  |  | $\square$ | $\square$ |

## 14. Impact on Energy

The proposed action may cause an increase in the use of any form of energy.

(See Part 1. D.2.k)
If "Yes", answer questions $a-e$. If "No", go to Section 15.

|  | $\begin{gathered} \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. The proposed action will require a new, or an upgrade to an existing, substation. | D2k | - | $\square$ |
| b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use. | $\begin{aligned} & \text { D1f, } \\ & \text { D1q, D2k } \end{aligned}$ | V | $\square$ |
| c. The proposed action may utilize more than $2,500 \mathrm{MWhrs}$ per year of electricity. | D2k | V | $\square$ |
| d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed. | D1g | V | $\square$ |
| e. Other Impacts: |  | $\square$ | $\square$ |

15. Impact on Noise, Odor, and Light

The proposed action may result in an increase in noise, odors, or outdoor lighting.

$\boxed{\square} \mathrm{YES}$
(See Part 1. D.2.m., n., and o.)
If "Yes", answer questions a - f. If "No", go to Section 16.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :--- | :---: | :---: |
| a. The proposed action may produce sound above noise levels established by local <br> regulation. | D 2 m | $\square$ | $\square$ |
| b. The proposed action may result in blasting within 1,500 feet of any residence, <br> hospital, school, licensed day care center, or nursing home. | D2m, E1d | $\boxed{\nabla}$ | $\square$ |
| c. The proposed action may result in routine odors for more than one hour per day. | D2o | $\boxed{\square}$ | $\square$ |


| d. The proposed action may result in light shining onto adjoining properties. | D2n | $\square$ | $\square$ |
| :--- | :--- | :--- | :--- |
| e. The proposed action may result in lighting creating sky-glow brighter than existing <br> area conditions. | D2n, E1a | $\square$ |  |
| f. Other impacts: | $\square$ | $\square$ | $\square$ |


| 16. Impact on Human Health <br> The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. a If "Yes", answer questions a - m. If "No", go to Section 17. | $\boxed{\square} \mathrm{NO}$$\square$ YES |  |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No,or small impact may cccur | Moderate to large impact may occur |
| a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community. | E1d | $\square$ | $\square$ |
| b. The site of the proposed action is currently undergoing remediation. | E1g, E1h | $\square$ | $\square$ |
| c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action. | E1g, E1h | $\square$ | $\square$ |
| d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction). | E1g, E1h | $\square$ | $\square$ |
| e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health. | Elg, E1h | $\square$ | $\square$ |
| f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health. | D2t | $\square$ | $\square$ |
| g. The proposed action involves construction or modification of a solid waste management facility. | D2q, E1f | $\square$ | $\square$ |
| h. The proposed action may result in the unearthing of solid or hazardous waste. | D2q, E1f | $\square$ | $\square$ |
| i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste. | D2r, D2s | $\square$ | $\square$ |
| j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste. | E1f, E1g E1h | $\square$ | $\square$ |
| k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures. | E1f, Elg | $\square$ | $\square$ |
| 1. The proposed action may result in the release of contaminated leachate from the project site. | $\begin{aligned} & \text { D2s, E1f, } \\ & \text { D2r } \end{aligned}$ | $\square$ | $\square$ |
| m. Other impacts: |  |  |  |

17. Consistency with Community Plans

The proposed action is not consistent with adopted land use plans.

(See Part 1. C.1, C.2. and C.3.) If "Yes", answer questions a - h. If "No", go to Section 18.

|  | $\begin{gathered} \hline \text { Relevant } \\ \text { Part I } \\ \text { Question(s) } \end{gathered}$ | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: | :---: |
| a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s). | $\begin{aligned} & \text { C2, C3, D1a } \\ & \text { E1a, E1b } \end{aligned}$ | $\square$ | $\square$ |
| b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than $5 \%$. | C2 | $\square$ | $\square$ |
| c. The proposed action is inconsistent with local land use plans or zoning regulations. | C2, C2, C3 | $\square$ | $\square$ |
| d. The proposed action is inconsistent with any County plans, or other regional land use plans. | C2, C2 | $\square$ | $\square$ |
| e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure. | C3, D1c, D1d, D1f, D1d, Elb | $\square$ | $\square$ |
| f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure. | $\begin{aligned} & \mathrm{C} 4, \mathrm{D} 2 \mathrm{c}, \mathrm{D} 2 \mathrm{~d} \\ & \mathrm{D} 2 \mathrm{j} \end{aligned}$ | $\square$ | $\square$ |
| g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action) | C2a | $\square$ | $\square$ |
| h. Other: |  | $\square$ | $\square$ |

## 18. Consistency with Community Character

The proposed project is inconsistent with the existing community character.

(See Part 1. C.2, C.3, D.2, E.3)
If "Yes", answer questions $a$ - g. If "No", proceed to Part 3.

|  | Relevant <br> Part I <br> Question(s) | No, or <br> small <br> impact <br> may occur | Moderate <br> to large <br> impact may <br> occur |
| :--- | :--- | :---: | :---: |
| a. The proposed action may replace or eliminate existing facilities, structures, or areas <br> of historic importance to the community. | E3e, E3f, E3g | $\square$ | $\square$ |
| b. The proposed action may create a demand for additional community services (e.g. <br> schools, police and fire) | C4 | $\square$ | $\square$ |
| c. The proposed action may displace affordable or low-income housing in an area where <br> there is a shortage of such housing. | C2, C3, D1f <br> D1g, E1a | $\square$ | $\square$ |
| d. The proposed action may interfere with the use or enjoyment of officially recognized <br> or designated public resources. | C2, E3 | $\square$ | $\square$ |
| e. The proposed action is inconsistent with the predominant architectural scale and <br> character. | C2, C3 | $\square$ |  |
| f. Proposed action is inconsistent with the character of the existing natural landscape. | C2, C3 <br> E1a, E1b <br> E2g, E2h | $\square$ | $\square$ |
| g. Other impacts: | $\square$ | $\square$ |  |

# Full Environmental Assessment Form Part 3-Evaluation of the Magnitude and Importance of Project Impacts and Determination of Significance 

Part 3 provides the reasons in support of the determination of significance. The lead agency must complete Part 3 for every question in Part 2 where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.

Based on the analysis in Part 3, the lead agency must decide whether to require an environmental impact statement to further assess the proposed action or whether available information is sufficient for the lead agency to conclude that the proposed action will not have a significant adverse environmental impact. By completing the certification on the next page, the lead agency can complete its determination of significance.

## Reasons Supporting This Determination:

To complete this section:

- Identify the impact based on the Part 2 responses and describe its magnitude. Magnitude considers factors such as severity, size or extent of an impact.
- Assess the importance of the impact. Importance relates to the geographic scope, duration, probability of the impact occurring, number of people affected by the impact and any additional environmental consequences if the impact were to occur.
- The assessment should take into consideration any design element or project changes.
- Repeat this process for each Part 2 question where the impact has been identified as potentially moderate to large or where there is a need to explain why a particular element of the proposed action will not, or may, result in a significant adverse environmental impact.
- Provide the reason(s) why the impact may, or will not, result in a significant adverse environmental impact
- For Conditional Negative Declarations identify the specific condition(s) imposed that will modify the proposed action so that no significant adverse environmental impacts will result.
- Attach additional sheets, as needed.

An Environmental Impact Statement will be prepared.

## Determination of Significance - Type 1 and Unlisted Actions

SEQR Status: $\quad \square$ Type $1 \quad \square$ Unlisted
and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the NYCDEP Bureau of Environmental Planning and Analysis as lead agency that:
A. This project will result in no significant adverse impacts on the environment, and, therefore, an environmental impact statement need not be prepared. Accordingly, this negative declaration is issued.
$\square$ B. Although this project could have a significant adverse impact on the environment, that impact will be avoided or substantially mitigated because of the following conditions which will be required by the lead agency:

There will, therefore, be no significant adverse impacts from the project as conditioned, and, therefore, this conditioned negative declaration is issued. A conditioned negative declaration may be used only for UNLISTED actions (see 6 NYCRR 617.d).
$\boxed{\square}$ C. This Project may result in one or more significant adverse impacts on the environment, and an environmental impact statement must be prepared to further assess the impact(s) and possible mitigation and to explore alternatives to avoid or reduce those impacts. Accordingly, this positive declaration is issued.

| Name of Action: Water for the Future: Upstate Water Supply Resiliency |
| :--- |
| Name of Lead Agency: NYCDEP Bureau of Environmental Planning and Analysis |
| Name of Responsible Officer in Lead Agency: Mark N. Page, Jr. |
| Title of Responsible Officer: Managing Director |
| Signature of Responsible Officer in Lead Agency: |
| Signature of Preparer (if different from Responsible Officer) |
| For Further Information: |
| Contact Person: Jennifer Farmwald |
| Address: 59-17 Junction Boulevard, 11th Floor |
| Telephone Number: |
| E-mail: WFFComments@dep.nyc.gov |
| For Type 1 Actions and Conditioned Negative Declarations, a copy of this Notice is sent to: |
| Chief Executive Officer of the political subdivision in which the action will be principally located (e.g., Town / City / Village of) |
| Other involved agencies (if any) |
| Applicant (if any) |
| Environmental Notice Bulletin: http://www.dec.ny.gov/enb/enb.html |


[^0]:    ${ }^{1}$ Zone A represents areas subject to inundation by the 1-percent annual-chance flood event.

[^1]:    ${ }^{2}$ Class B represents waters used for swimming and other contact recreation. TS indicates trout spawning.

[^2]:    ${ }^{3}$ Class B (TS) indicates a best usage for swimming and other contact recreation. TS indicates trout spawning.

[^3]:    Aqueduct Connection Environmental Support (ACES)

[^4]:    

[^5]:    NOTES:
    PEESKLL Sps Northenn boow-off (M) contans Adoitional valves and pipng in exiting blow off chamber, exiting valve
    

