

# TOWN OF CAIRO WATER SYSTEM IMPROVEMENTS

PRELIMINARY ENGINEERING REPORT  
IN SUPPORT OF DWSRF APPLICATION

Prepared for:

## **The Town of Cairo**

512 Main Street, P.O. Box 728  
Cairo, New York 12413

Prepared by:



Delaware Engineering, P.C.

28 Madison Avenue Extension  
Albany, New York 12203  
PHONE: 518-452-1290 • FAX 518-452-1335

May 17, 2024

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Figure 1. Existing Water District No. 1 and Census Tract

Table 1. Cost Estimate and Rate Analysis

Appendix A Design Plans and Specifications

Appendix B SEQR Review and Determinations

## 1.0 INTRODUCTION

The Town of Cairo currently supplies water to 782 customers in the water district. The Cairo Water District is shown on Figure 1. In 1991 the Town undertook a large-scale improvement project, the focus of which was switching from an unfiltered surface water source to wells for the District's source of supply in response to the Surface Water Treatment Rule. In 1998 this project was extended to include construction of a second source of supply using wells located at the old Water Company Reservoir. Unfortunately, the geologic conditions beneath the Town of Cairo and westward though Durham pose significant difficulties in development of larger municipal well fields.

In 2017-19 the Town secured funding through EFC and completed additional improvements to the water system including:

1. Replacement of the old 350,000-gallon water tank with a new 300,000-gallon gall-lined tank 80-ft high,
2. Replacement of Water Mains, and
3. Construction of a new well near the existing Park Well.

When the project was bid for construction, there was not sufficient funds to replace water mains on Jerome and Phelps Avenue, which are frequently subject to breaks, which in turn aggravates the water capacity limitations. In addition, it appears that not enough aggregate was placed around the well to make the intended hydraulic connection between the stream and the well.

The funds were insufficient to replace one section of water main, which unfortunately is the oldest and increasingly subject to leakage, which exacerbates the water supply limitations and affects the entire District water supply.

## 2.0 EXISTING WATER SYSTEM

The District's original water supply came directly from surface water (the Reservoir) and the water was used without filtration. In 1991 the Town abandoned use of the reservoir and began to rely instead on wells. Water storage was provided by a 350,000-gallon tank. Much of the water system has been rebuilt within the past 20-years and old cast iron pipe was replaced with new PVC pipe. Leakage from the two remaining old cast iron lines remains a significant problem.

### 2.1 SOURCES OF WATER SUPPLY

The Town of Cairo historically relied on surface water sources south and west of the hamlet since the water system was first built in or around 1898. In 1991 the Town acquired the Cairo Water Company, and installed a caisson well in the Town Park and ceased use of the reservoir. The Park Well (also referred to as Well No. 1 and Well No. 2 since it is equipped with two pumps) is permitted for 216,000 gallons per day (GPD).

The caisson is fed by radial collector(s), typically produces high quality water and, despite its shallow depth and proximity to the Shinglekill has been determined by DOH to not be surface water influenced.

To provide a back-up source of water two new wells were drilled on land owned by the Town at the old Reservoir. These wells (No. 3 and No. 4) have significant water quality problems which have prevented them from being integrated into the routine operations of the water system since 1998.

Well No. 3 is an eight-inch well drilled in 1998 to a depth of 300-ft. This well was tested and permitted at a flow of 144,000-GPD. Well water is chlorinated and receives no further treatment. The well water contains sulfur, iron, manganese, and methane in amounts that make water unusable as a supply.

Well No. 4 is an eight-inch well drilled in 2006 to a depth of 540-feet. The well does not appear to have been subjected to a full scale 72-hour pumping test and there is no record of a full analysis for Part 5 pollutants being conducted. In 2009 a pumping step-test was completed to assess yield and quality and the well was found to also contain iron and manganese above the MCL.

The 2019 project constructed a new well at the Park to supplement the water supply. That well appears to yield less than intended and means to increase the yield there are still being investigated.

## 2.2 TRANSMISSION, DISTRIBUTION AND STORAGE

Much of the water distribution piping system was replaced in the 1990s with new PVC water mains. There are several streets (Railroad, Grove, Bross, Schmidt and Ross) which still have 4-inch or smaller cast iron main which poses continuing problems due to leakage. It also appears that many of the old water service lines were not replaced to the curb stop at the time the new main was put in on Main Street. Since this street is a heavily trafficked street with significant streetscape improvements, curb and sidewalks replacement of those service lines will be costly and disruptive at this time.

The Park Wells pump directly into the collection system to meet demand and maintain the tank level. Water storage is provided by a new 300,000-gallon glass lined steel tank located on Klingermann Drive, off Main Street at the western end of the District. The tank was constructed in 2009. Water mains were also replaced on Bross Street, Railroad Avenue and Grove Street. The EFC project funding was insufficient fund to complete Jerome Avenue (C.R. 41, also known as Lame Mills Road) and Phelps Avenue. Jerome Avenue is the oldest cast iron main left in the distribution system and has a history of water breaks and leaks which may have become more frequent due to the increase in pressure from the new taller water tank.

**2.3 TREATMENT**

At Angello Canna Park, the Well #1 and the new Well #2 are treated using NSF rated positive filters for GWUDI and disinfected using sodium hypochlorite injection. The well near the Old Reservoir is equipped with a separate chlorine disinfection system. In the Park, contact time is provided by oversized pipe after both pump houses which provides more than 10-minutes of contact time before reaching the first customer.

**2.4 SERVICE AREA AND CUSTOMERS**

The water service is concentrated in the central business area of Cairo along Main Street. Currently water service is provided to 782 customers in the water district. The 2011-15 ACS Data for Census Tract 805.02, Block Group 3, Greene County, New York closely parallels the limits of the Cairo Water District (Figure 1).

The water services by type are estimated to be as follow:

		<u>Water Usage GPD</u>
Residential	70%	84,000
Commercial	20%	24,000
Institutional	10%	12,000
		120,000

**2.5 WATER USAGE**

Pumping records from the wells indicate an average day flow over the past three years of 120,000-GPD. Typical peak day flow is 240,000 GPD, however higher flows have occurred during water breaks. Water Meters with remote-read capabilities were installed as part of the EFC project.

**3.0 PROJECT OBJECTIVES**

The current project objectives include:

1. Installation of new 8" water main on Jerome and Phillips Avenue.
2. Remedial work as needed to improve hydraulic connectivity between the new Well #2 and the adjoining Shingle Kill.

**4.0 PROJECT READINESS**


Design Plans and Bid Documents were previously prepared and approved by NYSDOH (Appendix A). And a coordinated SEQR review was complete as part of the EFC project which includes Jerome and Phillips Avenue and Well #2 (Appendix B).


**5.0 SUMMARY AND CONCLUSION**

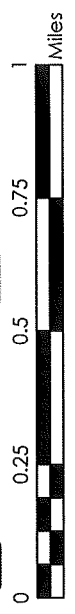
The Town of Cairo has made significant efforts over the past few years to address water capacity issues. The remaining problems are leakage form the two oldest mains on Jerome and Phillips Avenue which, along with flow limitations on the Park wells, still pose a significant challenge for the systems overall water supply capacity.


# HAMLET OF CAIRO

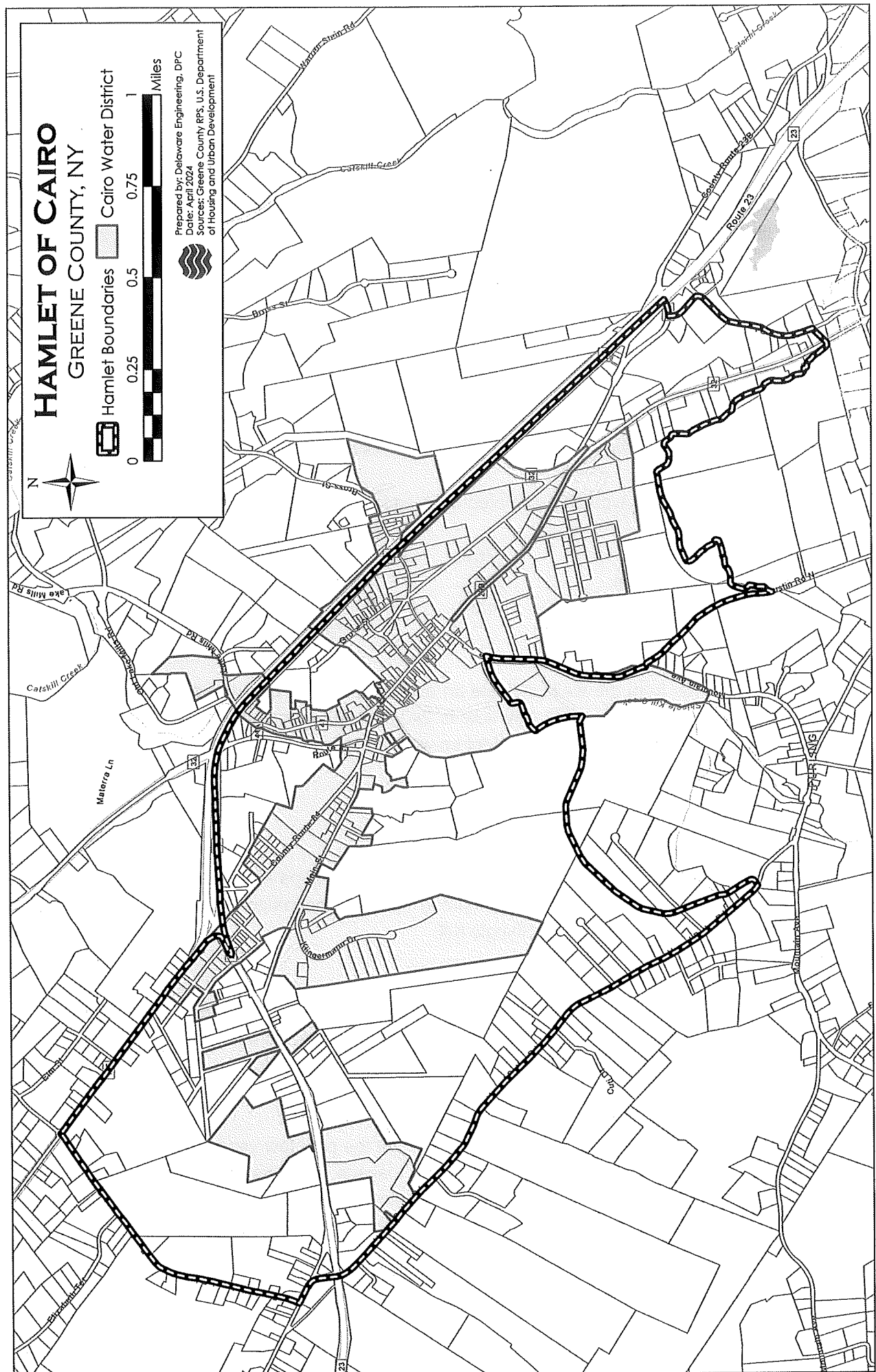
## GREENE COUNTY, NY

 Hamlet Boundaries

 Cairo Water District



  
Prepared by: Delaware Engineering, DPC  
Date: April 2024  
Sources: Greene County RPS, U.S. Department  
of Housing and Urban Development



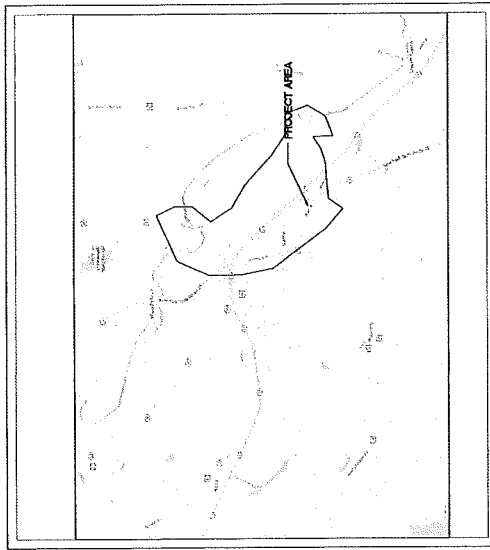
TOWN OF CAIRO  
GREENE COUNTY

# WATER DISTRIBUTION UPGRADES

CONTRACT NO.2  
BID PLANS  
NOVEMBER 2018

## TOWN BOARD MEMBERS

DANIEL BENOIT, SUPERVISOR  
JASON WATTS  
DANIEL JOYCE  
MARY JOE CORDS  
GARY WARNER



PROJECT LOCATION MAP

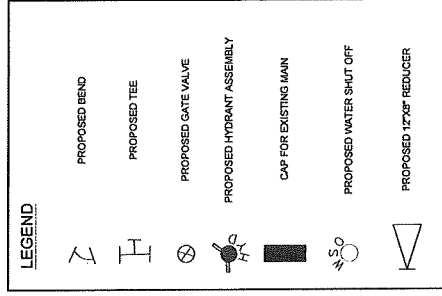
**DELAWARE ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, ALBANY, NY 12203 - 518.452.1290  
8-12 DIETZ STREET, SUITE 303, ONEONTA, NY 13820 - 607.432.8073

APPROVED  
NEW YORK STATE DEPARTMENT OF HEALTH  
BUREAU OF WATER SUPPLY PROTECTION  
DW:OFF #10-0571 - Our Log #1819 - WSA #  
Project Date: 10/24/18  
Town: GREENE COUNTY, NEW YORK  
Cairo  
Date: 10/24/18  
By: [Signature] PE  
Title: Chief, Design Section

DRAWING INDEX:

- G-001 COVER SHEET
- G-002 GENERAL NOTES AND LEGEND
- G-003 NEW WATER MAIN KEY, MAP
- C-101 COUNTY ROUTE 41 (JEROME AVENUE) WATER PLAN & PROFILE
- C-102 COUNTY ROUTE 41 (JEROME AVENUE) WATER PLAN & PROFILE
- C-103 COUNTY ROUTE 41 (JEROME AVENUE) WATER PLAN & PROFILE
- C-104 COUNTY ROUTE 41 (JEROME AVENUE) WATER PLAN & PROFILE
- C-105 COUNTY ROUTE 41 (LAKE MILLS ROAD) WATER PLAN & PROFILE
- C-106 PHELPS ROAD WATER PLAN & PROFILE
- C-107 RAILROAD AVENUE WATER PLAN & PROFILE
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- C-109 GROVE STREET WATER PLAN & PROFILE
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- C-114 BROSS STREET WATER PLAN & PROFILE
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- C-402 TANK ELEVATION & PROFILE VIEW
- C-403 TANK FOUNDATION DETAIL
- C-404 TYPICAL TANK DETAIL
- C-504 GENERAL WATER DETAIL
- C-505 GENERAL WATER DETAIL
- C-506 EROSION & SEDIMENT CONTROL DETAILS
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- C-802 PUMP STATION & WELL DETAILS
- C-803 WELL & FILTER DETAILS
- C-804 PIPE & DRAINAGE DETAIL
- T-101 MAINTENANCE AND PROTECTION OF TRAFFIC PLANS
- T-102 BROSS STREET CLOSURE WITH OFF SITE DETOUR

DATE: 6/29/2018	DRAWN BY: SGR/LSJ	SCALE:	REVIEWED BY:	PROJECT NO.: JZ-1137	FILE CODE: 5531
<b>DELaware ENGINEERING, D.P.C.</b> CIVIL AND ENVIRONMENTAL ENGINEERING 28 MADISON AVENUE EXTENSION ALBANY, NY 12203 - 518.452.1290 8-12 DIETZ STREET, SUITE 303 ONEONTA, NY 13820 - 607.432.8073 31 NORTH MAIN STREET, LEWISTON, NY 12543 - 518.452.1290 6 TOWNSEND STREET, WATSON, NY 13995 - 607.669.2923					
<b>IMPROVEMENTS</b> <b>CAIRO WATER</b>					



**OUTLINE SPECIFICATIONS FOR CONSTRUCTION OF WATER DISTRIBUTION SYSTEM**

- GENERAL: ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF "RECOMMENDED PRACTICES FOR WATER WORKS". MATERIALS SHALL BE NEW AND UNUSED. MATERIALS SHALL BE WARRANTED BY THE CONTRACTOR AS TO MATERIALS. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.
- INSTALLATION: ALL WATER MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF "RECOMMENDED PRACTICES FOR WATER WORKS". MATERIALS SHALL BE NEW AND UNUSED. MATERIALS SHALL BE WARRANTED BY THE CONTRACTOR AS TO MATERIALS. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.
- CONNECTIONS: ALL CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE LATEST EDITION OF "RECOMMENDED PRACTICES FOR WATER WORKS". MATERIALS SHALL BE NEW AND UNUSED. MATERIALS SHALL BE WARRANTED BY THE CONTRACTOR AS TO MATERIALS. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.
- TESTING: ALL TESTS SHALL BE MADE IN ACCORDANCE WITH THE LATEST EDITION OF "RECOMMENDED PRACTICES FOR WATER WORKS". MATERIALS SHALL BE NEW AND UNUSED. MATERIALS SHALL BE WARRANTED BY THE CONTRACTOR AS TO MATERIALS. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.
- PROTECTION: ALL EXCAVATIONS SHALL BE PROTECTED IN ACCORDANCE WITH THE LATEST EDITION OF "RECOMMENDED PRACTICES FOR WATER WORKS". MATERIALS SHALL BE NEW AND UNUSED. MATERIALS SHALL BE WARRANTED BY THE CONTRACTOR AS TO MATERIALS. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.

**GENERAL CONSTRUCTION NOTES**

- THE CONTRACTOR SHALL EXAMINE AND VERIFY ALL FIELD CONDITIONS AND RECORDS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF CAIRO AND THE STATE OF NEW YORK.
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DELAWARE ENGINEERING, P.C. 26 KAYWOOD DRIVE, WILMINGTON, DE 19806-3523 301.485.8222

NEW YORK STATE DEPARTMENT OF HEALTH DIVISION OF WATER SUPPLY AND WASTEWATER TREATMENT 110 W. WASHINGTON ST., ALBANY, NY 12242-1500 518.474.2929

REVISIONS NO. DATE DESCRIPTION



C-101

SHEET:

COUNTY ROUTE 41  
(JEROME AVENUE) WATER  
PLAN AND PROFILE

CAROL WATER  
IMPROVEMENTS

NO.	DATE	DESCRIPTION



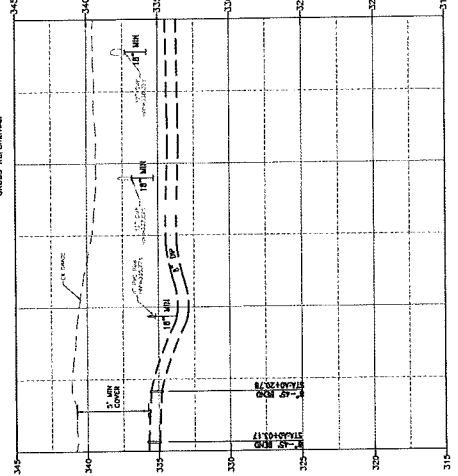
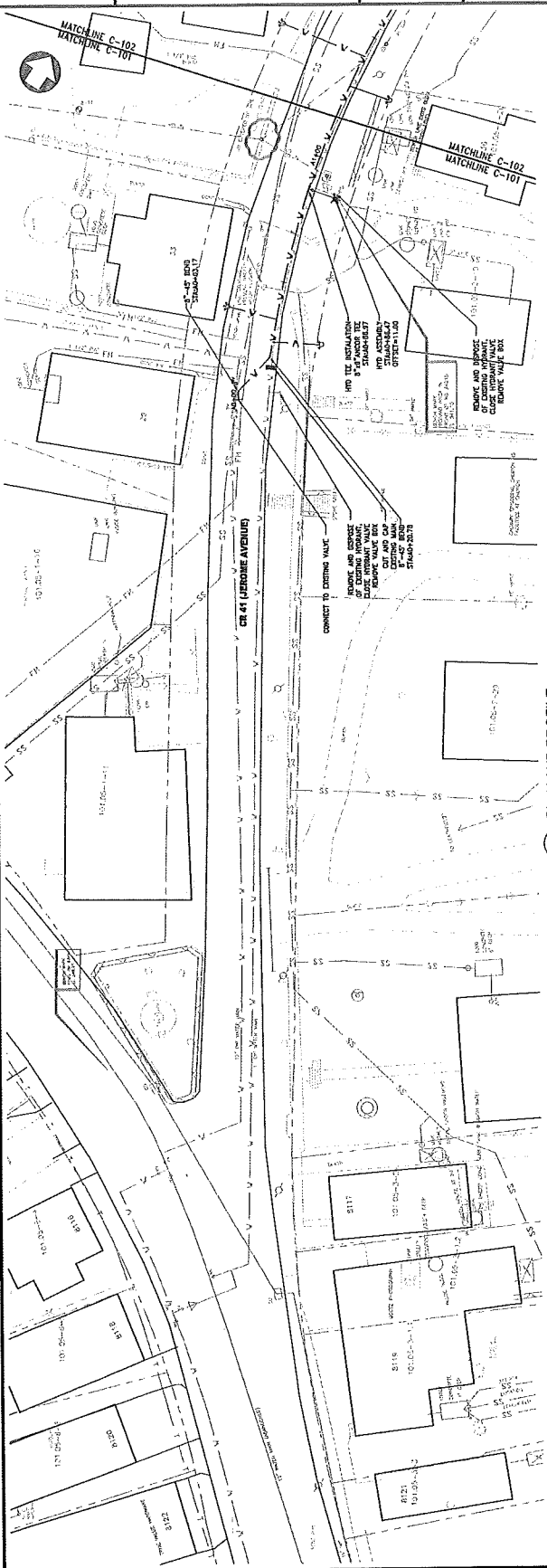
**DELAWARE**  
**CIVIL AND ENVIRONMENTAL ENGINEERING**  
**ENGINEERING, P.C.**  
2400 WASHINGTON STREET, WILMINGTON, DELAWARE 19808  
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REVIEWED BY: AS SHOWN  
PROJECT NO: 17-1933  
FILE: WTR-PRF-01

### BID PLANS



NEW YORK STATE  
DEPARTMENT OF HEALTH  
Division of Public Safety, Preconstruction  
Division of Planning and Design  
Division of Environmental Health  
Division of Food and Drug  
Division of Radiation  
Division of State and Local Government  
Division of State and Local Government



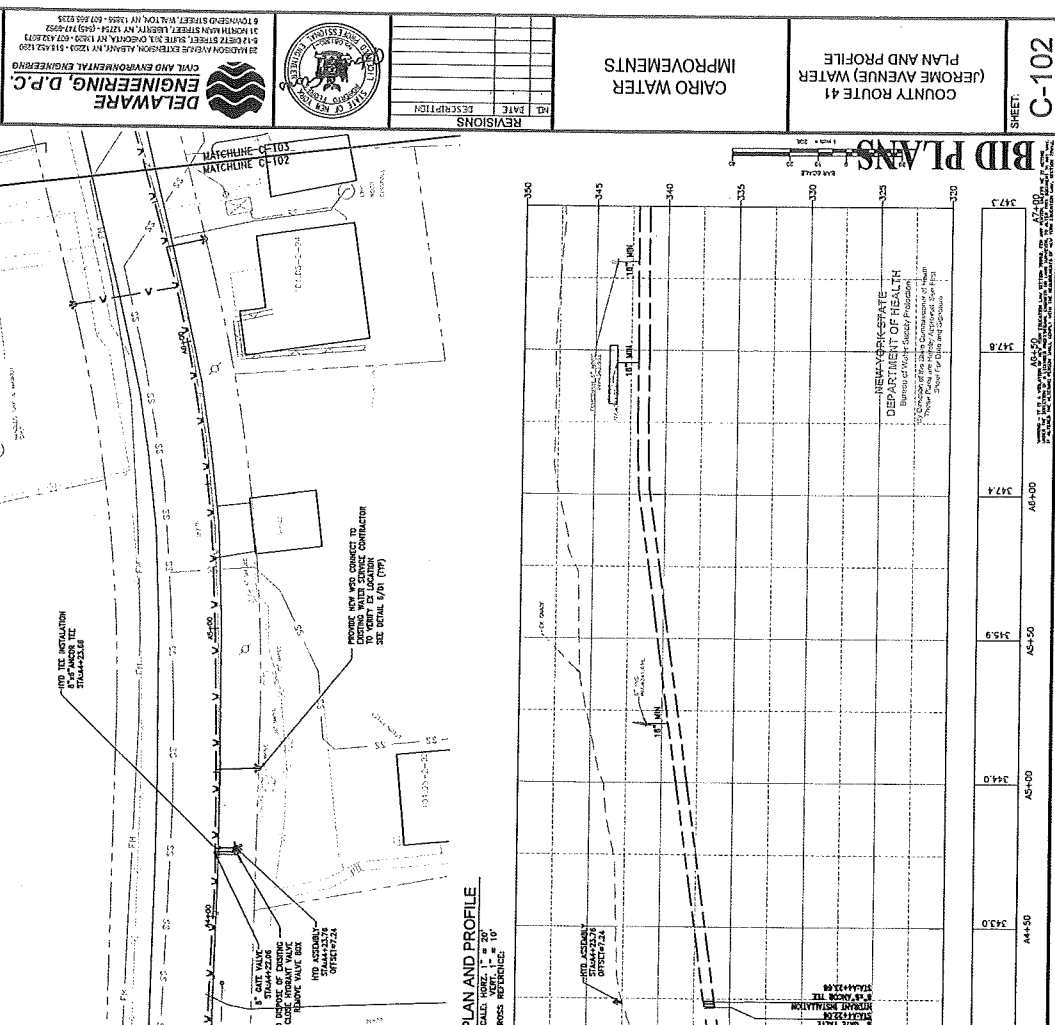
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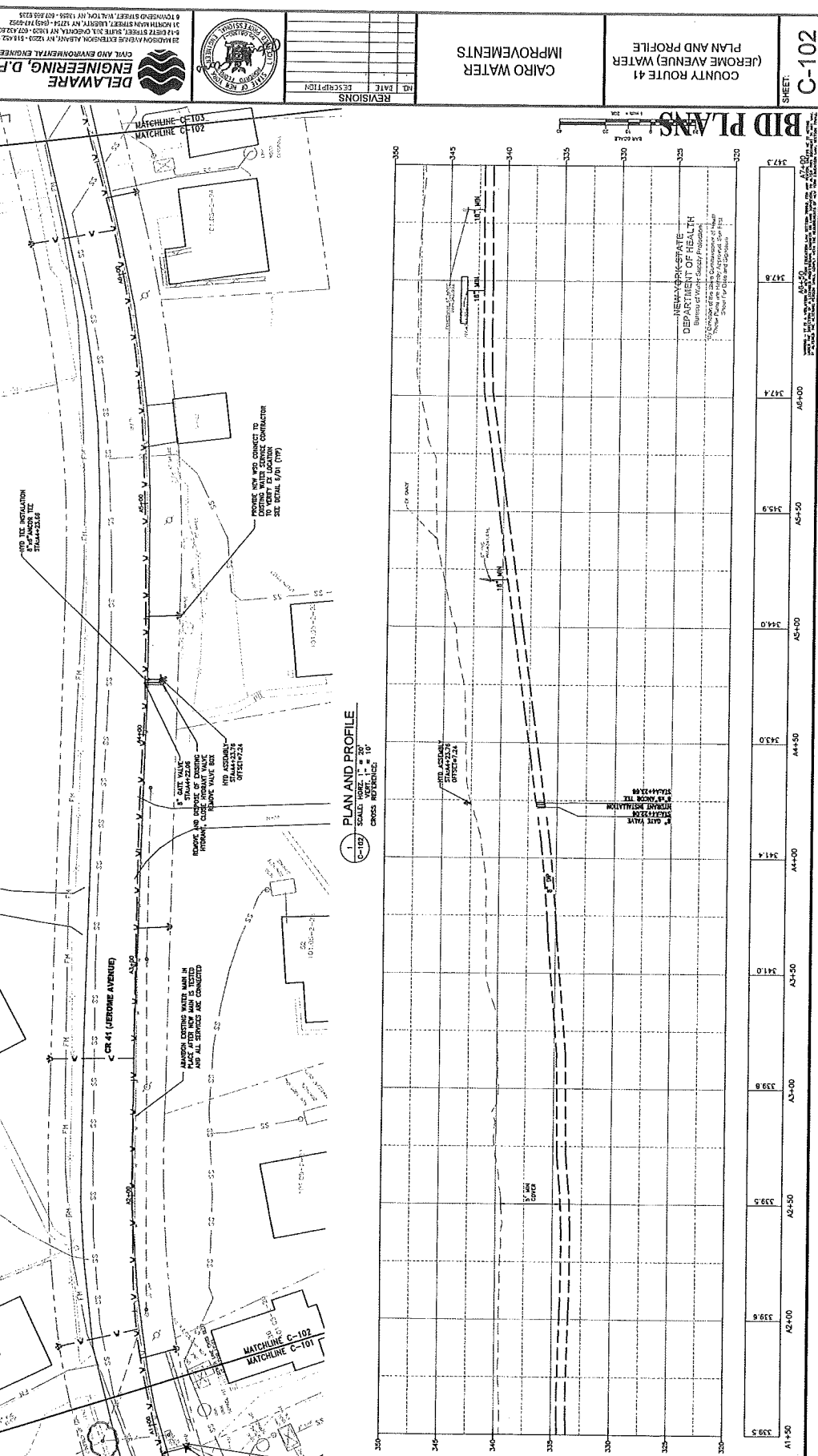
**BID PLANS**  
 COUNTY ROUTE 41  
 (JEROME AVENUE) WATER  
 IMPROVEMENTS  
 CAIRO WATERS

REVISIONS  
 NO. DATE DESCRIPTION

SHEET: C-102



1 PLAN AND PROFILE  
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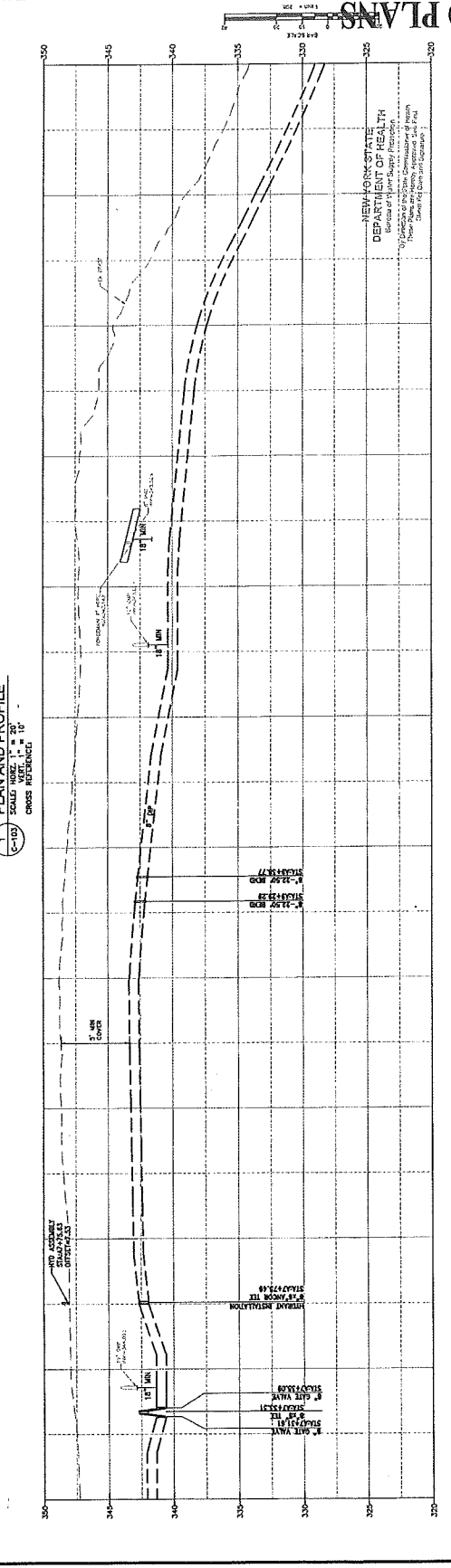
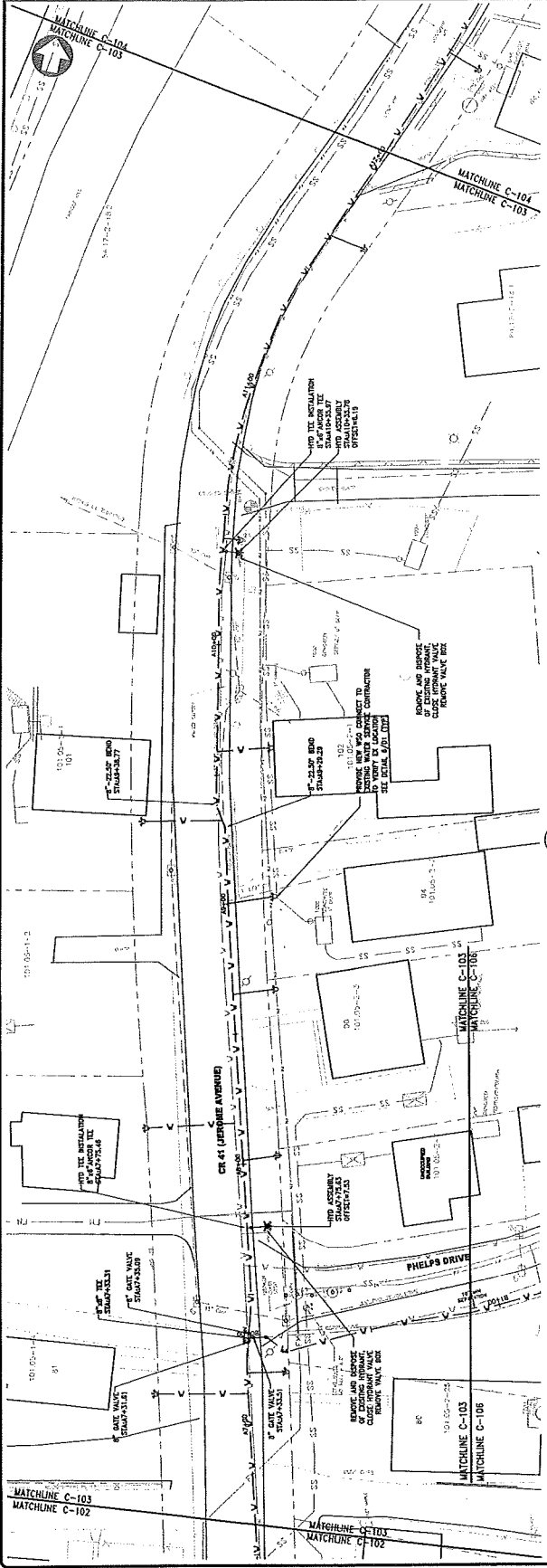
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42+00	339.6
42+50	339.5
43+00	339.8
43+50	341.0
44+00	341.4
44+50	343.0
45+00	344.0
45+50	345.9
46+00	347.4
46+50	347.3

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CIVIL AND ENVIRONMENTAL ENGINEERING  
28 MADISON AVENUE EXTENSION, MANAYUNK, NJ 08250-5192  
81 NORTH MAIN STREET, LIBERTY, NJ 07938-0253  
610-968-3600  
WWW.DELAWAREENGINEERING.COM



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348.6	A2+50
348.8	A3+00
349.3	A4+00
349.7	A5+00
349.3	A10+00
347.2	A11+00
346.6	A11+50
343.0	A12+00
348.1	A12+50

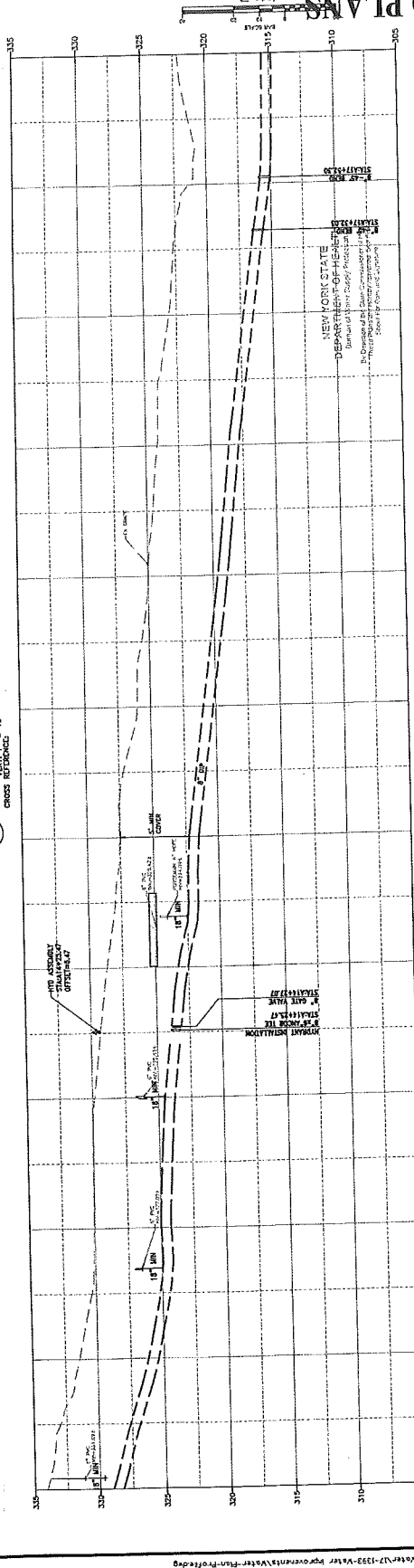
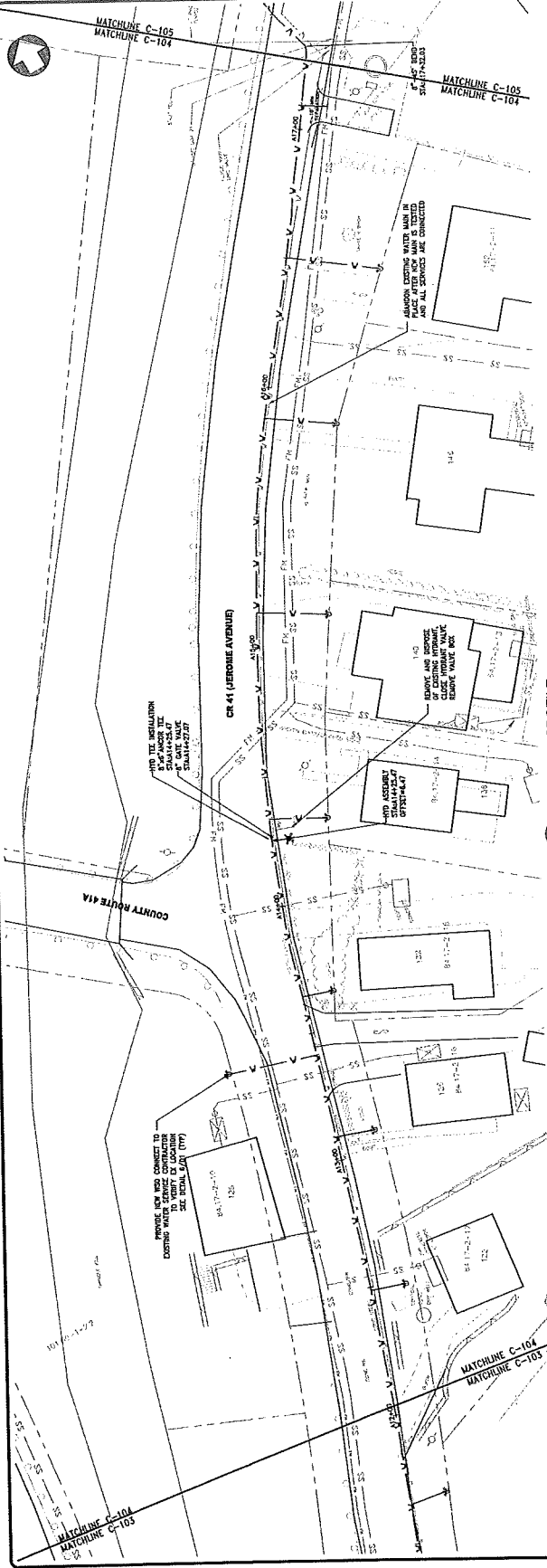
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NO	DATE	DESCRIPTION



**DELAWARE ENGINEERING, P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 HICKORY STREET, LEBANON, NY 13224-0755 (518) 535-2825  
8 NORTH MAIN STREET, LEHICHTY, NY 13224-0755 (518) 535-2825  
17 NORTH MAIN STREET, SALES BOX ONE, OGDENSA, NY 13229-0742 (518) 535-1800

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PROJECT NO.: JZ-1234  
FILE: WTR-PLAN-PROFILE



STATION	ELEVATION
327.6	327.6
328.7	328.7
329.8	329.8
330.1	330.1
331.4	331.4
334.1	334.1
335.0	335.0
336.0	336.0
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**BID PLANS**

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**NOTICE OF INTENT TO SERVE AS LEAD AGENCY UNDER SEQRA**  
Lead Agency Must Be Designated within Thirty (30) Calendar Days

This Notice is issued pursuant to Part 617, Article 8 of the Environmental Conservation Law (State Environmental Quality Review Act) for the purpose of designating a Lead Agency for coordinated environmental quality review of the following Proposed Action:

**Date:** January 4, 2016  
**Project Name:** Water System Improvements  
**Location:** Town of Cairo, Greene County  
**SEQRA Status:** Type I Action

**Project Description:**

The Town of Cairo has been working to supplement the Town's water supply and identify additional groundwater sources along with planning for other such improvements including the following:

1. Improvement of disinfection capacity at the Park Well.
2. Improvements to decayed and leaking water tank.
3. Replacement of old mains and services that cause frequent leakage and breaks.
4. Extension of water service to insufficient yielding private wells at existing residential housing.
5. Installation of new meters and remote reading equipment.

The Town intends to apply for funding through the Drinking Water State Revolving Fund (DWSRF) subsidized loan to finance the engineering, administration and construction of the improvements. As such, the project will be treated as a Type I Action as required by the DWSRF program.

**Declaration of Intent to Serve as Lead Agency:**

Please take notice that, under the applicable standards of Title 6 Part 617.6 NYCRR, the Cairo Town Board has concluded that this action requires a coordinated environmental review. The Town Board passed a resolution on January 4, 2016 stating their willingness to serve as lead agency.

This Notice, accompanied by the Part 1 of the Full EAF and a copy of the project description and site map, is being sent to you and all other identified involved agencies with a request for consent in writing to the Town Board serving as Lead Agency. Should you not respond within thirty (30) calendar days from the date shown above, it will be interpreted as consent that the Town Board serve as Lead Agency.

Copies of all subsequent environmental documents will be distributed to you. You will be notified of the scheduling of any related proceedings and hearings, and of any subsequent SEQRA determination.

Should you not agree with the Town Board's designation as Lead Agency, please follow the procedures outlined in Title 6 Part 617.6(b) NYCRR. In addition to your consideration of Lead Agency designation, the Town Board welcomes any comments you may have regarding the Proposed Action. Receipt of these comments within thirty (30) calendar days would be appreciated.

**Contact Person:** Lindsay Ostrander (518) 452-1290 (Telephone)  
Delaware Engineering, D.P.C. (518) 452-1335 (Facsimile)  
28 Madison Avenue Ext.  
Albany, New York 12203

*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: Town of Cairo Water System Improvements		
Project Location (describe, and attach a general location map): Town of Cairo Water District, Greene County, New York		
Brief Description of Proposed Action (include purpose or need): Develop additional sources of supply for the Town of Cairo Public water system to meet existing and future demands. Replacement of old and obsolete water transmission and storage systems. Extension of water service and connection of residential customers with inadequate supply.		
Name of Applicant/Sponsor: Town of Cairo		Telephone: 518-622-3120
		E-Mail: supervisor@townofcairo.com
Address: 512 Main Street		
City/PO: Cairo/PO Box 728	State: New York	Zip Code: 12413
Project Contact (if not same as sponsor; give name and title/role): Daniel Benoit, Town Supervisor		Telephone: 518-622-3120
		E-Mail: supervisor@townofcairo.com
Address: 512 Main Street		
City/PO: Cairo/PO Box 728	State: New York	Zip Code: 12413
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

**B. Government Approvals**

<b>B. Government Approvals, Funding, or Sponsorship.</b> ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
<b>Government Entity</b>	<b>If Yes: Identify Agency and Approval(s) Required</b>	<b>Application Date (Actual or projected)</b>
a. City Council, Town Board, or Village Board of Trustees <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Town Board Sponsors	
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
c. City Council, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	County Highway (Work Permit)	5/1/2017
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	DOH (Plan approval); DEC (Water Supply); EFC (Funding Agency)	3/1/2016
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**C. Planning and Zoning**

<b>C.1. Planning and zoning actions.</b>	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<ul style="list-style-type: none"> <li>• If Yes, complete sections C, F and G.</li> <li>▪ If No, proceed to question C.2 and complete all remaining sections and questions in Part 1</li> </ul>	
<b>C.2. Adopted land use plans.</b>	
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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located?	<input type="checkbox"/> Yes <input type="checkbox"/> No
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?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	
_____	
_____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes, identify the plan(s):	
_____	
_____	
_____	

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance.  Yes  No  
 If Yes, what is the zoning classification(s) including any applicable overlay district?  
Hamlet District, Commercial Use District Residential District

b. Is the use permitted or allowed by a special or conditional use permit?  Yes  No

c. Is a zoning change requested as part of the proposed action?  Yes  No  
 If Yes,  
 i. What is the proposed new zoning for the site? \_\_\_\_\_

**C.4. Existing community services.**

a. In what school district is the project site located? Cairo Durham Central School District

b. What police or other public protection forces serve the project site?  
Town of Cairo Police Department

c. Which fire protection and emergency medical services serve the project site?  
Town of Cairo Ambulance, Cairo Fire Department/Cairo Hose Company, Round Top Fire Company

d. What parks serve the project site?  
Angelo Canna Town Park, Dog Park, The Cairo Nature Center

**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)? Residential, Rural Residential, Commercial, Institutional, Main Street, Hamlet

b. a. Total acreage of the site of the proposed action? \_\_\_\_\_ 2 acres  
 b. Total acreage to be physically disturbed? \_\_\_\_\_ 2 acres  
 c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? \_\_\_\_\_ N/A acres

c. Is the proposed action an expansion of an existing project or use?  Yes  No  
 i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % 50 Units: Wells/Water Tank

d. Is the proposed action a subdivision, or does it include a subdivision?  Yes  No  
 If Yes,  
 i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) \_\_\_\_\_  
 ii. Is a cluster/conservation layout proposed?  Yes  No  
 iii. Number of lots proposed? \_\_\_\_\_  
 iv. Minimum and maximum proposed lot sizes? Minimum \_\_\_\_\_ Maximum \_\_\_\_\_

e. Will proposed action be constructed in multiple phases?  Yes  No  
 i. If No, anticipated period of construction: \_\_\_\_\_ months  
 ii. If Yes:  
 • Total number of phases anticipated \_\_\_\_\_  
 • Anticipated commencement date of phase 1 (including demolition) \_\_\_\_\_ month \_\_\_\_\_ year  
 • 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: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



f. Does the project include new residential uses?  Yes  No  
 If Yes, show numbers of units proposed.

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)?  Yes  No  
 If Yes,

i. Total number of structures \_\_\_\_\_  
 ii. Dimensions (in feet) of largest proposed structure: \_\_\_\_\_ height; \_\_\_\_\_ width; and \_\_\_\_\_ length  
 iii. Approximate extent of building space to be heated or cooled: \_\_\_\_\_ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?  Yes  No  
 If Yes,

i. Purpose of the impoundment: \_\_\_\_\_  
 ii. If a water impoundment, the principal source of the water:  Ground water  Surface water streams  Other specify: \_\_\_\_\_  
 iii. If other than water, identify the type of impounded/contained liquids and their source. \_\_\_\_\_  
 iv. Approximate size of the proposed impoundment. Volume: \_\_\_\_\_ million gallons; surface area: \_\_\_\_\_ acres  
 v. Dimensions of the proposed dam or impounding structure: \_\_\_\_\_ height; \_\_\_\_\_ length  
 vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):  
 Concrete and wood

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both?  Yes  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?  Yes  No  
 If yes, describe. \_\_\_\_\_  
 \_\_\_\_\_  
 v. What is the total area to be dredged or excavated? \_\_\_\_\_ acres  
 vi. What is the maximum area to be worked at any one time? \_\_\_\_\_ acres  
 vii. What would be the maximum depth of excavation or dredging? \_\_\_\_\_ feet  
 viii. Will the excavation require blasting?  Yes  No  
 ix. Summarize site reclamation goals and plan: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area?  Yes  No  
 If Yes:  
 i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): \_\_\_\_\_  
 \_\_\_\_\_

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:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

iii. Will proposed action cause or result in disturbance to bottom sediments?  Yes  No  
 If Yes, describe: \_\_\_\_\_

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation?  Yes  No  
 If Yes:

- acres of aquatic vegetation proposed to be removed: \_\_\_\_\_
- expected acreage of aquatic vegetation remaining after project completion: \_\_\_\_\_
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): \_\_\_\_\_
- proposed method of plant removal: \_\_\_\_\_
- if chemical/herbicide treatment will be used, specify product(s): \_\_\_\_\_

v. Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

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c. Will the proposed action use, or create a new demand for water?  Yes  No  
 If Yes:

i. Total anticipated water usage/demand per day: \_\_\_\_\_ 6000 gallons/day

ii. Will the proposed action obtain water from an existing public water supply?  Yes  No  
 If Yes:

- Name of district or service area: Cairo Water District
- Does the existing public water supply have capacity to serve the proposal?  Yes  No
- Is the project site in the existing district?  Yes  No
- Is expansion of the district needed?  Yes  No
- Do existing lines serve the project site?  Yes  No

iii. Will line extension within an existing district be necessary to supply the project?  Yes  No  
 If Yes:

- Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_  
Extension of water service are and connection of residential customers with inadequate supply.
- Source(s) of supply for the district: Existing water supply wells.

iv. Is a new water supply district or service area proposed to be formed to serve the project site?  Yes  No  
 If, Yes:

- Applicant/sponsor for new district: Town of Cairo
- Date application submitted or anticipated: 6/1/2016
- Proposed source(s) of supply for new district: Town of Cairo

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: \_\_\_\_\_ 4 gallons/minute.

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d. Will the proposed action generate liquid wastes?  Yes  No  
 If Yes:

i. Total anticipated liquid waste generation per day: \_\_\_\_\_ 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): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

iii. Will the proposed action use any existing public wastewater treatment facilities?  Yes  No  
 If Yes:

- Name of wastewater treatment plant to be used: \_\_\_\_\_
- Name of district: \_\_\_\_\_
- Does the existing wastewater treatment plant have capacity to serve the project?  Yes  No
- Is the project site in the existing district?  Yes  No
- Is expansion of the district needed?  Yes  No

• Do existing sewer lines serve the project site?  Yes  No  
 • Will line extension within an existing district be necessary to serve the project?  Yes  No  
 If Yes:  
 • Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_  
 \_\_\_\_\_

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  Yes  No  
 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: \_\_\_\_\_  
 \_\_\_\_\_

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point 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?  Yes  No  
 If Yes:  
 i. How much impervious surface will the project create in relation to total size of project parcel?  
 \_\_\_\_\_ Square feet or \_\_\_\_\_ acres (impervious surface)  
 \_\_\_\_\_ Square feet or \_\_\_\_\_ 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?  Yes  No

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater?  Yes  No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?  Yes  No  
 If Yes, identify:  
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)  
 \_\_\_\_\_  
 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)  
 \_\_\_\_\_  
 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)  
 \_\_\_\_\_

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?  Yes  No  
 If Yes:  
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)  Yes  No  
 ii. In addition to emissions as calculated in the application, the project will generate:  
 • \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)  
 • \_\_\_\_\_ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)  
 • \_\_\_\_\_ Tons/year (short tons) of Perfluorocarbons (PFCs)  
 • \_\_\_\_\_ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)  
 • \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)  
 • \_\_\_\_\_ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

<p>h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate methane generation in tons/year (metric): _____</p> <p>ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____</p>		
<p>i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____</p>		
<p>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? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend  <input type="checkbox"/> Randomly between hours of _____ to _____.</p> <p>ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____</p> <p>iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____</p> <p>iv. Does the proposed action include any shared use parking? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____</p>		
<p>vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>		
<p>k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? <span style="float: right;"><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</span></p> <p>If Yes:</p> <p>i. Estimate annual electricity demand during operation of the proposed action: _____</p> <p>ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____</p> <p>iii. Will the proposed action require a new, or an upgrade to, an existing substation? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>		
<p>l. Hours of operation. Answer all items which apply.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><i>i. During Construction:</i></p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ 7 a.m. to 6 p.m.</li> <li>• Saturday: _____ 7 a.m. to 6 p.m.</li> <li>• Sunday: _____ 7 a.m. to 6 p.m.</li> <li>• Holidays: _____ 7 a.m. to 6 p.m.</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p><i>ii. During Operations:</i></p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ WTP operated 24/7</li> <li>• Saturday: _____ WTP operated 24/7</li> <li>• Sunday: _____ WTP operated 24/7</li> <li>• Holidays: _____ WTP operated 24/7</li> </ul> </td> </tr> </table>	<p><i>i. During Construction:</i></p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ 7 a.m. to 6 p.m.</li> <li>• Saturday: _____ 7 a.m. to 6 p.m.</li> <li>• Sunday: _____ 7 a.m. to 6 p.m.</li> <li>• Holidays: _____ 7 a.m. to 6 p.m.</li> </ul>	<p><i>ii. During Operations:</i></p> <ul style="list-style-type: none"> <li>• Monday - Friday: _____ WTP operated 24/7</li> <li>• Saturday: _____ WTP operated 24/7</li> <li>• Sunday: _____ WTP operated 24/7</li> <li>• Holidays: _____ WTP operated 24/7</li> </ul>
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m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?  Yes  No  
 If yes:  
 i. Provide details including sources, time of day and duration:  
 \_\_\_\_\_  
 \_\_\_\_\_

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen?  Yes  No  
 Describe: \_\_\_\_\_  
 \_\_\_\_\_

n.. Will the proposed action have outdoor lighting?  Yes  No  
 If yes:  
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:  
 \_\_\_\_\_  
 \_\_\_\_\_

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?  Yes  No  
 Describe: \_\_\_\_\_  
 \_\_\_\_\_

o. Does the proposed action have the potential to produce odors for more than one hour per day?  Yes  No  
 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) or chemical products 185 gallons in above ground storage or any amount in underground storage?  Yes  No  
 If Yes:  
 i. Product(s) to be stored \_\_\_\_\_  
 ii. Volume(s) \_\_\_\_\_ per unit time \_\_\_\_\_ (e.g., month, year)  
 iii. Generally describe proposed storage facilities: \_\_\_\_\_  
 \_\_\_\_\_

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?  Yes  No  
 If Yes:  
 i. Describe proposed treatment(s):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

ii. Will the proposed action use Integrated Pest Management Practices?  Yes  No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?  Yes  No  
 If Yes:  
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:  
 • Construction: \_\_\_\_\_ tons per \_\_\_\_\_ (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?  Yes  No  
 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 waste?  Yes  No  
 If Yes:  
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: \_\_\_\_\_  
 \_\_\_\_\_  
 ii. Generally describe processes or activities involving hazardous wastes or constituents: \_\_\_\_\_  
 \_\_\_\_\_  
 iii. Specify amount to be handled or generated \_\_\_\_\_ tons/month  
 iv. 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?  Yes  No  
 If Yes: provide name and location of facility: \_\_\_\_\_  
 \_\_\_\_\_  
 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.  
 Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)  
 Forest  Agriculture  Aquatic  Other (specify): \_\_\_\_\_  
 ii. If mix of uses, generally describe:  
 \_\_\_\_\_  
 \_\_\_\_\_

b. Land uses and covertypes on the project site.

Land use or Coverture	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	1.15	1.15	0
• Forested	0	0	N/A
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.85	0.85	0
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	N/A
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0	N/A
• Wetlands (freshwater or tidal)	0	0	N/A
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: <u>New Water Supply Storage Tank</u>	0.5	0.5	0

c. Is the project site presently used by members of the community for public recreation?  Yes  No  
*i. If Yes: explain: The Park Well site is located in Angelo Canna Park.*

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d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?  Yes  No  
 If Yes,  
*i. Identify Facilities:*  
Cairo-Durham Elementary School

---

e. Does the project site contain an existing dam?  Yes  No  
 If Yes:  
*i. Dimensions of the dam and impoundment:*  
 • Dam height: \_\_\_\_\_ feet  
 • Dam length: \_\_\_\_\_ feet  
 • Surface area: \_\_\_\_\_ acres  
 • Volume impounded: \_\_\_\_\_ gallons OR acre-feet  
*ii. Dam's existing hazard classification:* \_\_\_\_\_  
*iii. Provide date and summarize results of last inspection:*  
 \_\_\_\_\_

---

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?  Yes  No  
 If Yes:  
*i. Has the facility been formally closed?*  Yes  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 property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?  Yes  No  
 If Yes:  
*i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:*  
 \_\_\_\_\_

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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?  Yes  No  
 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:*  Yes  No  
 Yes – Spills Incidents database Provide DEC ID number(s): \_\_\_\_\_  
 Yes – Environmental Site Remediation database Provide DEC ID number(s): \_\_\_\_\_  
 Neither database  
*ii. If site has been subject of RCRA corrective activities, describe control measures:*  
 \_\_\_\_\_  
*iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? If yes, provide DEC ID number(s):*  Yes  No  
*iv. 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?  Yes  No

- 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?  Yes  No
- Explain: \_\_\_\_\_

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

a. What is the average depth to bedrock on the project site? \_\_\_\_\_ >5 feet

b. Are there bedrock outcroppings on the project site?  Yes  No  
 If Yes, what proportion of the site is comprised of bedrock outcroppings? \_\_\_\_\_ %

c. Predominant soil type(s) present on project site:

VaC - Valois gravelly loam, rolling	67.8 %
Fu - Fluvaquents-Udifuvents complexes	12.6 %
MeC - Mardin gravelly silt loam, 3-15%	11.1 %

d. What is the average depth to the water table on the project site? Average: \_\_\_\_\_ 1.5-6 feet

e. Drainage status of project site soils:  Well Drained: \_\_\_\_\_ 75 % of site  
 Moderately Well Drained: \_\_\_\_\_ 12 % of site  
 Poorly Drained \_\_\_\_\_ 13 % of site

f. Approximate proportion of proposed action site with slopes:  0-10%: \_\_\_\_\_ 90 % of site  
 10-15%: \_\_\_\_\_ 10 % of site  
 15% or greater: \_\_\_\_\_ % of site

g. Are there any unique geologic features on the project site?  Yes  No  
 If Yes, describe: \_\_\_\_\_

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h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)?  Yes  No

ii. Do any wetlands or other waterbodies adjoin the project site? *Potential new water source may be investigated in alluvial deposits along Catskill Creek, 863-97 B(T).*  Yes  No  
 If Yes to either i or ii, 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?  Yes  No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 863-172 (Shingle Kill), 863-175, 863-182, 863-180 Classification C(TS), C
- Lakes or Ponds: Name Old Reservoir Classification A
- Wetlands: Name Freshwater Pond (Old Reservoir classified as NWI wetland) Approximate Size 2.5
- 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?  Yes  No  
 If yes, name of impaired water body/bodies and basis for listing as impaired: \_\_\_\_\_

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i. Is the project site in a designated Floodway?  Yes  No

j. Is the project site in the 100 year Floodplain?  Yes  No

k. Is the project site in the 500 year Floodplain?  Yes  No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?  Yes  No  
 If Yes:  
 i. Name of aquifer: \_\_\_\_\_



m. Identify the predominant wildlife species that occupy or use the project site: \_\_\_\_\_  
*Waterline project is primarily in road ROWs with no significant wildlife species. New water source locations are yet to be determined.*

---

n. Does the project site contain a designated significant natural community?  Yes  No  
 If Yes: *None per NYSDEC Environmental Resource Mapper.*  
 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

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o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species?  Yes  No  
*None per NYSDEC Environmental Resource Mapper.*

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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?  Yes  No  
*None per NYSDEC Environmental Resource Mapper.*

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q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing?  Yes  No  
 If yes, give a brief description of how the proposed action may affect that use: \_\_\_\_\_

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**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 Agriculture and Markets Law, Article 25-AA, Section 303 and 304?  Yes  No  
 If Yes, provide county plus district name/number: \_\_\_\_\_

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b. Are agricultural lands consisting of highly productive soils present?  Yes  No  
 i. If Yes: acreage(s) on project site? \_\_\_\_\_  
 ii. Source(s) of soil rating(s): \_\_\_\_\_

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c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?  Yes  No  
 If Yes:  
 i. Nature of the natural landmark:  Biological Community  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?  Yes  No  
 If Yes:  
 i. CEA name: \_\_\_\_\_  
 ii. Basis for designation: \_\_\_\_\_  
 iii. Designating agency and date: \_\_\_\_\_

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?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
i. Nature of historic/archaeological resource:	<input type="checkbox"/> Archaeological Site <input checked="" type="checkbox"/> Historic Building or District
ii. Name: Susquehannah Turnpike	
iii. Brief description of attributes on which listing is based: One of the first turnpikes authorized by NYS (1800) connecting the Hudson River Valley over the Catskill Mts. to the Susquehanna River.	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>None per CRIS</i>
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Describe possible resource(s): _____	
ii. Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
i. Identify resource: <u>Susquehannah Turnpike, Catskill Park, Eastern range of Catskill Mts: Round Top, Black Head, Acra Point, Bunt Knob</u>	
ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): <u>Designated NYS Scenic Road, NYS Forest Preserve, hiking trails and scenic views.</u>	
iii. Distance between project and resource: <u>0.5 - 5 miles.</u>	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes:	
i. Identify the name of the river and its designation: _____	
ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> 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.

Applicant/Sponsor Name Town of Cairo Date 1-4-2016

Signature  Title Daniel Benolt, Town Supervisor

**Full Environmental Assessment Form**  
**Part 2 - Identification of Potential Project Impacts**

Agency Use Only [If applicable]

Project:   
 Date:

**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.

<b>1. Impact on Land</b> Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1) <i>If "Yes", answer questions a - j. If "No", move on to Section 2.</i>			
		<input type="checkbox"/> NO	<input checked="" type="checkbox"/> YES
	Relevant Part I Question(s)	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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**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, minerals, fossils, caves). (See Part 1, E.2.g)  NO  YES  
*If "Yes", answer questions a - c. If "No", move on to Section 3.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**3. Impacts on Surface Water**  
 The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1, D.2, E.2.h)  NO  YES  
*If "Yes", answer questions a - l. If "No", move on to Section 4.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/>	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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**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 I, 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.*

NO       YES

	Relevant Part I Question(s)	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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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, E1g, E1h	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**5. Impact on Flooding**  
 The proposed action may result in development on lands subject to flooding.  
 (See Part I, E.2)  
*If "Yes", answer questions a - g. If "No", move on to Section 6.*

NO       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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input checked="" type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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**6. Impacts on Air**  
 The proposed action may include a state regulated air emission source.  NO  YES  
 (See Part I. D.2.f., D.2.h, D.2.g)  
 If "Yes", answer questions a - f. If "No", move on to Section 7.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO <sub>2</sub> ) ii. More than 3.5 tons/year of nitrous oxide (N <sub>2</sub> O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF <sub>6</sub> ) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**7. Impact on Plants and Animals**  
 The proposed action may result in a loss of flora or fauna. (See Part I. E.2. m.-q.)  NO  YES  
 If "Yes", answer questions a - j. If "No", move on to Section 8.

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

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

<b>8. Impact on Agricultural Resources</b>			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.)		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**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.*

NO       YES

	Relevant Part I Question(s)	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	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**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.*

NO       YES

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, 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.	E3e	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input checked="" type="checkbox"/>	<input type="checkbox"/>



d. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>
If any of the above (a-d) are answered "Moderate to large impact may occur", continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property's setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

<b>11. Impact on Open Space and Recreation</b> 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. <span style="float: right;"><input checked="" type="checkbox"/> NO <input type="checkbox"/> YES</span> (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If "Yes", answer questions a - e. If "No", go to Section 12.</i>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
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, E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c, E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/>	<input type="checkbox"/>
e. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>12. Impact on Critical Environmental Areas</b> The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <span style="float: right;"><input checked="" type="checkbox"/> NO <input type="checkbox"/> YES</span> <i>If "Yes", answer questions a - c. If "No", go to Section 13.</i>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

**13. Impact on Transportation**  
 The proposed action may result in a change to existing transportation systems.  NO  YES  
 (See Part 1. D.2.j)  
*If "Yes", answer questions a - f. If "No", go to Section 14.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**14. Impact on Energy**  
 The proposed action may cause an increase in the use of any form of energy.  NO  YES  
 (See Part 1. D.2.k)  
*If "Yes", answer questions a - e. If "No", go to Section 15.*

	Relevant Part I Question(s)	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	<input type="checkbox"/>	<input type="checkbox"/>
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.	D1f, D1q, D2k	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			

**15. Impact on Noise, Odor, and Light**  
 The proposed action may result in an increase in noise, odors, or outdoor lighting.  NO  YES  
 (See Part 1. D.2.m., n., and o.)  
*If "Yes", answer questions a - f. If "No", go to Section 16.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**16. Impact on Human Health**

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. and h.)

NO

YES

*If "Yes", answer questions a - m. If "No", go to Section 17.*

	Relevant Part I Question(s)	No, or small impact may occur	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	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
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.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

<b>17. Consistency with Community Plans</b> 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.			
		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	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).	C2, C3, D1a E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/>	<input type="checkbox"/>
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, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/>	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>18. Consistency with Community Character</b> 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.			
		<input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/>	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**Resolution No. 82 -16** “Water System Improvements – SEQR Lead

Agency, Classification and Determination of Significance” offered by Councilperson Warner and seconded by Councilperson Ostrander:

WHEREAS, by resolution dated January 4, 2016, the Town of Cairo Town Board declared its intention to act as Lead Agency for the conduct of the State Environmental Quality Review (SEQR) process and to undertake a Coordinated Review of capital improvements to the water system (hereafter, the “Project”); and

WHEREAS, each involved agency was notified by letter of the Town’s intent to act as lead agency and provided with Part I of the Long Environmental Assessment Form (EAF); and

WHEREAS, no other agency has requested in writing to act as lead agency; NOW

THEREFORE, in consideration of the foregoing:

1. The Town Board is the lead agency for the environmental review of the Project.
2. The project is a Type I action under SEQR per 6 NYCRR Part 617.4(b)(9).
3. Review of Part II of the Long EAF results in the determination that the project will not have a significant negative effect on the environment and therefore, a Negative Declaration is hereby adopted as documented in the narrative attached hereto and part hereof.
4. Filing of this Negative Declaration is hereby ordered in accordance with 6 NYCRR Part 617.11.
5. This resolution will take effect immediately.

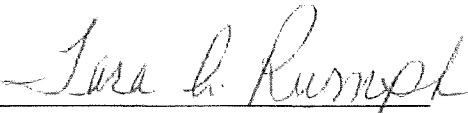
Supervisor Benoit	Aye
Councilperson Ostrander	Aye
Councilperson Cords	Aye
Councilperson Warner	Aye
Councilperson Joyce	Aye

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# Certification of Resolution

I, Tara A. Rumph, Town Clerk of the Town of Cairo located in the State of New York, hereby certify that attached hereto is a true copy of certain resolution duly adopted by the Town of Cairo at a meeting duly called and held on March 7, 2016 at which a quorum was present and acting throughout, and that such resolutions have not been amended or revoked and are in full force and effect on the date hereof.

IN WITNESS WHEREOF, the undersigned has executed this certificate this 14<sup>th</sup> day of April, 2016.

  
\_\_\_\_\_  
Tara A. Rumph



**NEGATIVE DECLARATION  
NOTICE OF DETERMINATION OF SIGNIFICANCE  
State Environmental Quality Review (SEQR)**

This notice is issued pursuant to Part 617 of the implementing regulations pertaining to Article 8 of the Environmental Conservation Law (SEQR).

The Town of Cairo, as lead agency, has determined that the proposed Action described herein will not have a significant effect on the environment and that an Environmental Impact Statement will not be prepared.

**DATE:** March 7, 2016

**NAME OF ACTION:** Water System Improvements

**LOCATION:** Town of Cairo, Greene County, New York

**SEQR STATUS:** Type I

**LEAD AGENCY:** Town of Cairo  
512 Main Street  
Cairo, New York 12413

**DESCRIPTION OF ACTION:**

The Town of Cairo is planning a comprehensive water improvement project to address problems with insufficient capacity and aging storage, treatment and distribution systems. The project includes development of additional sources of supply to meet existing and future demands; replacement of old water transmission lines; replacement/rehabilitation of the existing water tank; improved disinfection capacity at the Park Well; water meter replacement and automated reading system; and extension of water service to residential customers on private wells with inadequate supply.

**Reasons Supporting This Determination:**

The Town Board has reviewed the FEAF and the criteria contained in 6 NYCRR §617.7 and has determined that the water improvement project will not have a significant impact on the environment for the following reasons:

As required by §617.7(b), the Town has:

- Considered the Action as defined in subdivisions 617.2(b) and 617.3(g).
- Reviewed the FEAF, the criteria identified in Subdivision (c) of this section and other documentation to identify relevant areas of environmental concern.
- Analyzed the identified relevant areas of environmental concern to determine whether the action will have a significant adverse impact.

- Set forth herein its written Finding of No Significant Environmental Impact

The following indicators of significant adverse impacts on the environment, as listed in 617.7(c)(1), were considered:

1. Will the Proposed Action result in a physical change to the project site?  
**Small to moderate impact. The project will disturb approximately 2 acres of land that has previously been disturbed.**
2. Will there be an effect to any unique or unusual land forms found on the site?  
**No impact. No such land forms exist in the project area.**
3. Will Proposed Action affect any water body designated as protected? (Under Articles 15, 24, 25 of the Environmental Conservation Law, ECL)?  
**Small to moderate impact. In accordance with applicable regulations, a Stormwater Pollution Prevention Plan (SWPP) may be prepared and implemented for the construction so as to mitigate potential impacts to surface water quality. A DEC Water Supply may also be required. Work will be completed under terms of DEC permits (if required) to mitigate the potential environmental impacts.**
4. Will Proposed Action affect any non-protected existing or new body of water?  
**No impact has been identified.**
5. Will Proposed Action affect surface or groundwater quality or quantity?  
**Small to moderate impact.**
6. Will Proposed Action alter drainage flow or patterns, or surface water runoff?  
**No impact has been identified.**
7. Will Proposed Action affect air quality?  
**No impact has been identified.**
8. Will Proposed Action affect any threatened or endangered species?  
**No impact. No rare or state-listed animals or plants, significant communities or other significant habitats are known to occur in the vicinity of the project site.**
9. Will Proposed Action substantially affect non-threatened or non-endangered species?  
**No impact has been identified.**
10. Will Proposed Action affect agricultural land resources?  
**No impact has been identified.**
11. Will Proposed Action affect aesthetic resources?  
**No impact has been identified.**



12. Will Proposed Action impact any site or structure of historic, prehistoric or paleontological importance?  
**No impact has been identified. The proposed project is located outside of any previously identified archaeologically sensitive areas. Correspondence with NYS OPRHP will occur throughout the life of the project to ensure that historic and archaeological resources are preserved.**
13. Will proposed Action affect the quantity or quality of existing or future open spaces or recreational opportunities?  
**No impact has been identified.**
14. Will Proposed Action impact the exceptional or unique characteristics of a critical environmental area (CEA) established pursuant to subdivision 6NYCRR 617.14(g)?  
**No impact has been identified. No such areas have been designated in the project area.**
15. Will there be an effect to existing transportation systems?  
**Small to moderate impact. Work within the roadway and roadway right of way may impact traffic slightly. A Greene County Highway Work Permit may be required. Work will be completed under terms of Greene County permits (if required) to mitigate the potential impacts.**
16. Will Proposed Action affect the community's sources of fuel or energy supply?  
**No impact has been identified.**
17. Will there be objectionable odors, noise, or vibration as a result of the Proposed Action?  
**No impact has been identified.**
18. Will Proposed Action affect public health and safety?  
**No impact has been identified.**
19. Will Proposed Action affect the character of the existing community?  
**No impact has been identified.**
20. Is there, or is there likely to be, public controversy related to potential adverse environment impacts?  
**No impact has been identified.**

617.7(c)(2) – For the purpose of determining significant adverse impacts on the environment of those factors listed above, the long-term, short-term, direct, indirect and cumulative impacts, including simultaneous or subsequent actions, to the extent reasonable, as included in any long-range plan for the action, any action that is a result of the reviewed action or is dependent on the action were reviewed.

617.7(c)(3) – The significance of any likely consequences were assessed in connection with the setting of the action, the likelihood of occurrence, duration, irreversibility, geographic scope, magnitude and the number of people affected as a consequence of the action.

**Based on this review, no adverse environmental impacts would result from this Action.**

**CONTACT PERSON: Daniel Benoit, Supervisor  
Town of Cairo  
512 Main Street  
Cairo, New York 12413**

Project : \_\_\_\_\_

Date : \_\_\_\_\_

**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.

No impacts have been identified that will have a moderate to large impact on the environment. See NEGATIVE DECLARATION, NOTICE OF DETERMINATION OF SIGNIFICANCE, adopted on March 7, 2016 by the Cairo Town Board (Resolution #82-16).

**Determination of Significance - Type 1 and Unlisted Actions**

SEQR Status:       Type 1                       Unlisted

Identify portions of EAF completed for this Project:    Part 1             Part 2             Part 3

Upon review of the information recorded on this EAF, as noted, plus this additional support information

and considering both the magnitude and importance of each identified potential impact, it is the conclusion of the  
Town of Cairo 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.

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).

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: Town of Cairo Water System Improvements

Name of Lead Agency: Town of Cairo

Name of Responsible Officer in Lead Agency: Daniel Benoit

Title of Responsible Officer: Supervisor

Signature of Responsible Officer in Lead Agency: Daniel Benoit Date: 4/15/2016

Signature of Preparer (if different from Responsible Officer) Lindsay Ostrander Date: 4/15/2016

**For Further Information:**

Contact Person: Lindsay Ostrander, Project Engineer, Delaware Engineering, DPC

Address: 28 Madison Avenue Extension, Albany, NY 12203

Telephone Number: 518-452-1290

E-mail: lostrander@delawareengineering.com

**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>

**PRINT FULL FORM**



Department of  
Environmental  
Conservation

## ENB - Region 4 Notices 3/30/2016

### Negative Declaration

**Greene County** - The Town of Cairo, as lead agency, has determined that the Water System Improvements will not have a significant adverse environmental impact. The action involves improvements to Water District # 1 including sources of water supply; well disinfection capacity; and decayed and leaking water tank. It will also involve the replacement and extension of water mains and installation of new meters. The project is located in the Town of Cairo, New York.

**Contact:** Daniel Benoit, Town of Cairo, P.O. Box 728, Cairo, NY 12413, Phone: (518) 622-3120, E-mail: [supervisor@townofcairo.com](mailto:supervisor@townofcairo.com).

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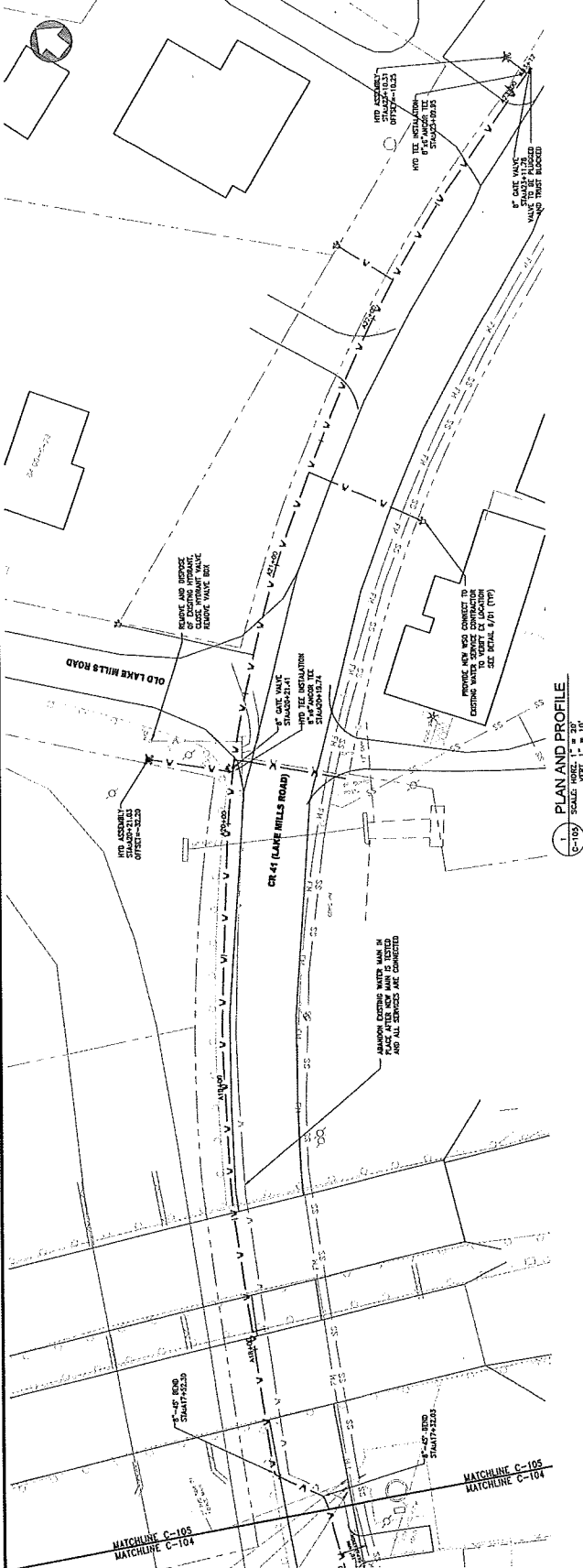
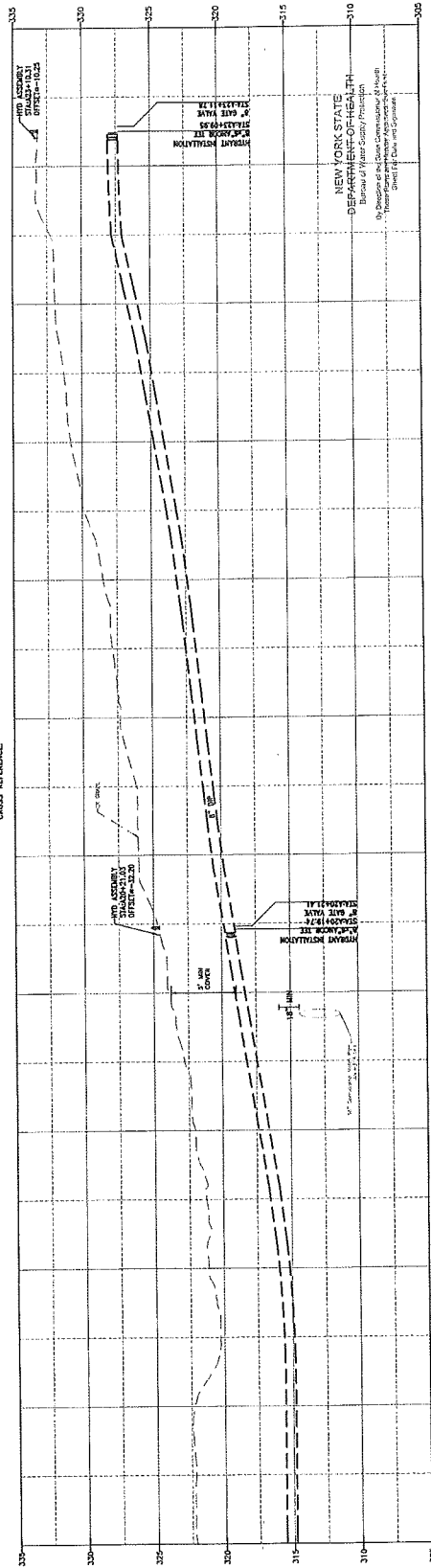
**Schoharie County** - The New York State Department of Environmental Conservation (NYS DEC), as lead agency, has determined that the proposed Schoharie RA #3 Herbicide Application will not have a significant adverse environmental impact. The action involves the application of registered herbicides to control the spread of invasive species (multiflora rose, honeysuckle, wild grape, barberry, Virginia creeper, and Oriental bittersweet) on 5 acres, and interfering vegetation, to cause a reduction of ferns and undesirable low valued tree species (beech, striped maple, witchhazel) on 59 acres to allow natural regeneration to flourish and to prepare sites for reforestation. This is needed to create conditions suitable for seed germination and the establishment of desirable (commercial) timber species. The abundance of these undesirable plant species present on the site are growing at a density that interferes with the development of desirable regeneration. Herbicide application is the most effective way to eliminate undesirable plant species that interfere with the development of desirable forest regeneration. The project is located on Schoharie RA #3, Stands D-25, 26, 30.2, 32, 36, 37.2, 38, 41, 45, 46, 49, 711, 940; Schoharie RA #4, Stand A-711; on Burnt Hill and Duck Pond Roads in the Town of Blenheim and Town of Fulton, New York.

**Contact:** Robert Cross, NYS DEC - Region 4 Stamford Sub Office, Division of Lands and Forests, 65561 State Highway 10, Stamford, NY 12167, Phone: (607) 652-7365, E-mail: [robert.cross@dec.ny.gov](mailto:robert.cross@dec.ny.gov).

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BID PLANS

322.2	A18+00	322.3	A18+50	321.1	A19+00	322.0	A19+50	323.9	A20+00	326.0	A20+50	327.3	A21+00	328.5	A21+50	330.8	A22+00	331.9	A22+50	333.3	A23+00
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1 PLAN AND PROFILE  
SCALE: HORIZ. 1" = 20'  
VERT. 1" = 10'  
CROSS REFERENCE

DATE: 04/22/2019  
DRAWN BY: ESJ/STJ  
SCALE: AS SHOWN  
REVIEWED BY:  
PROJECT NO.: 17-1333  
FILE: W17-1333-012

**DELAWARE ENGINEERING, P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
22 MADISON AVENUE EXTENSION, ARLING, NY 12003-5123 518.122.1230  
4-15 NORTH MAIN STREET, DELAWARE, NY 12035-4023 518.122.1230  
8 TOWNSEND STREET, WALTON, NY 13591-6073 518.823.5235



NO.	DATE	DESCRIPTION

H:\Drawings\Caro\Water\17-1333-Water-Improvements\Water-Plan-Profile.dwg

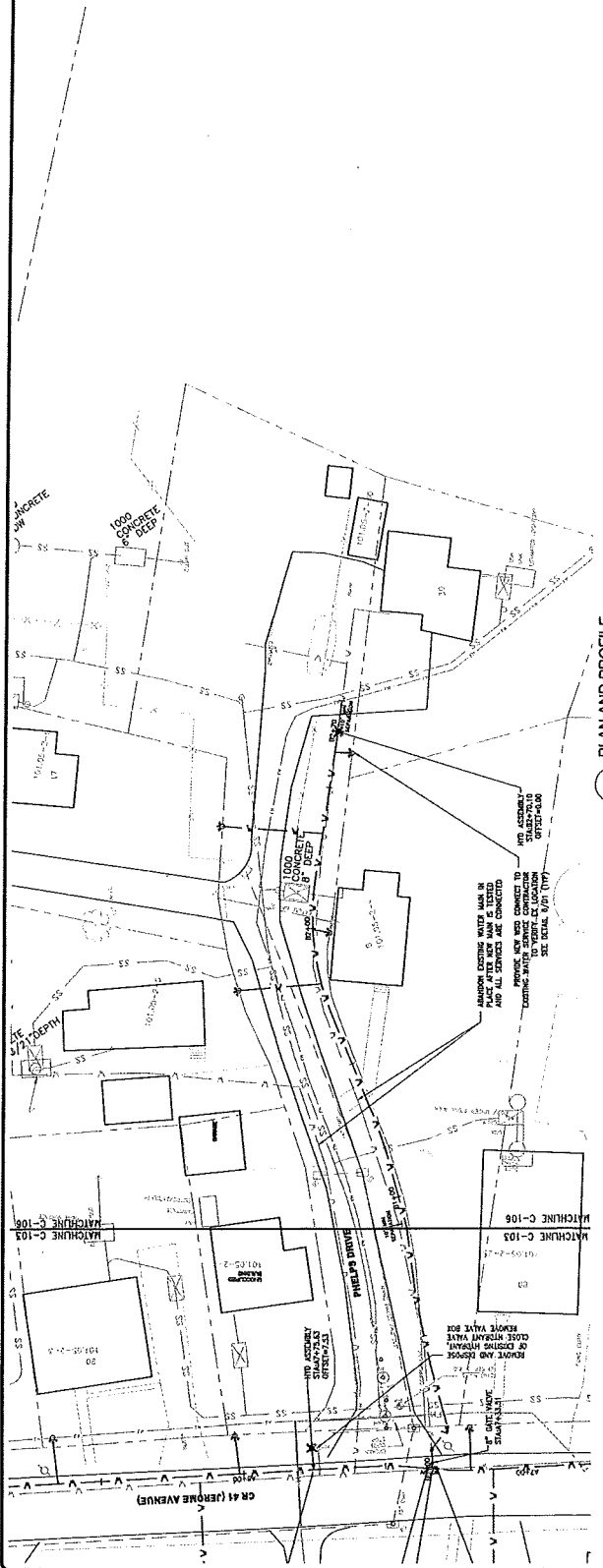
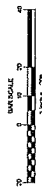
NO.	DATE	DESCRIPTION

DELAWARE ENGINEERING, P.C.  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 21 MARCHAND STREET, SUITE 203, GARDENA, NY 11530-6152, NY  
 516-466-8888  
 PROJECT NO.: 12-133  
 FILE: VARS-04-07-01  
 DATE: 6/27/10  
 DRAWN BY: ESO/ESI  
 SCALE: AS SHOWN  
 REVIEWED BY:

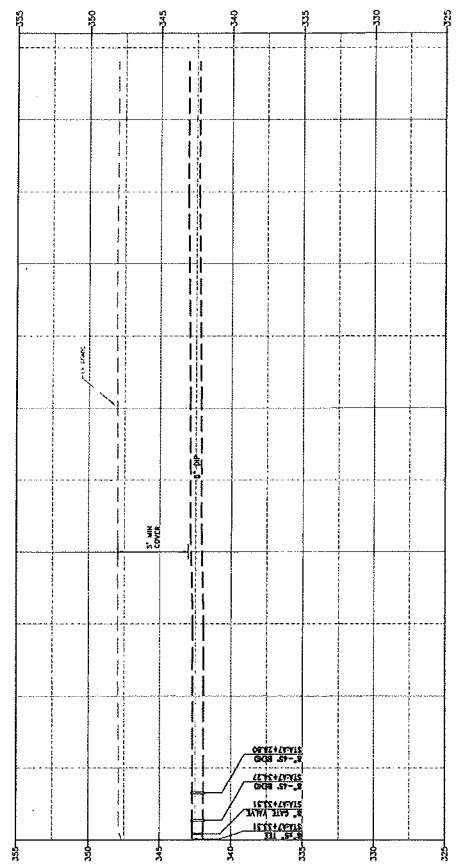


# BID PLANS

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Bureau of Water Supply, Inspection  
 and Enforcement  
 110 West Street, Albany, New York 12242  
 518-474-2300  
 www.doh.state.ny.us  
 State of New York  
 Board of Water and Sewerage



**1. PLAN AND PROFILE**  
 SCALE: 1" = 10'  
 CROSS SECTIONS



347.9	348.0	348.1	348.0	348.0	348.0
B0+00	B1+00	B1+50	B2+00	B2+50	B2+90

H:\Drawings\CAIRO\Waters\12-133\Water Improvements\Water-Plan-Profile.dwg

RAILROAD AVENUE WATER  
PLAN AND PROFILE

CAIRO WATER  
IMPROVEMENTS

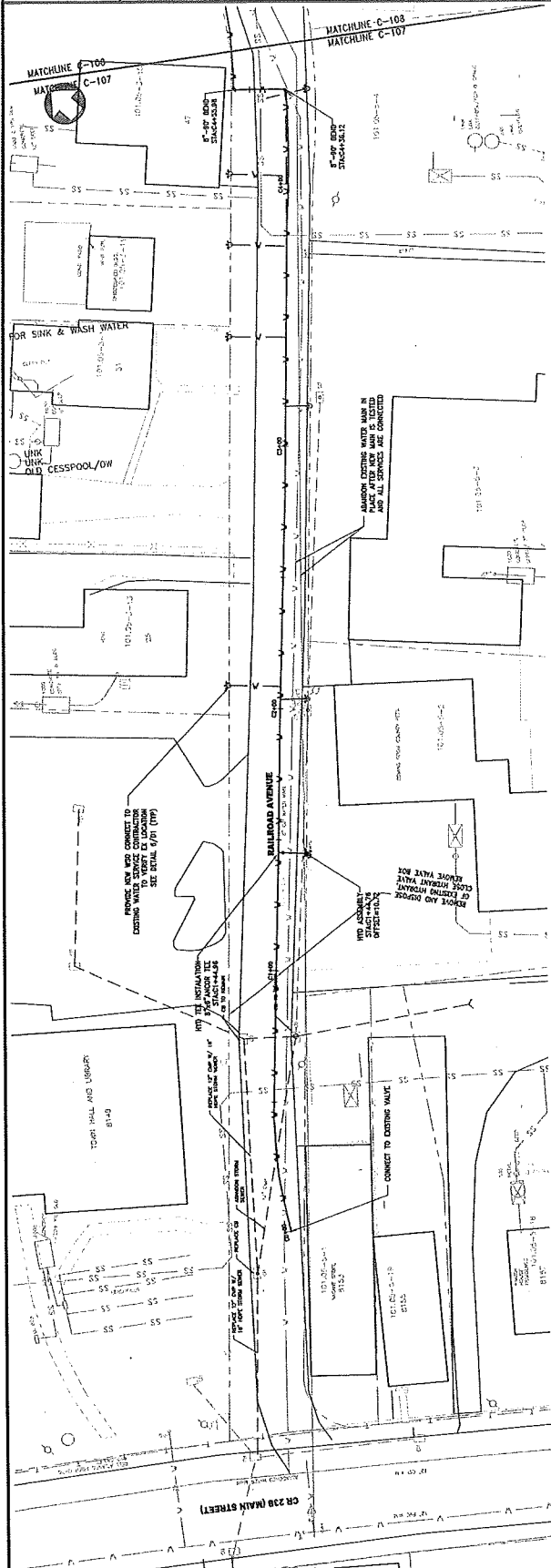
DELAWARE  
ENGINEERING, P.C.  
CIVIL AND ENVIRONMENTAL ENGINEERING

28 MAGNOLIA AVENUE, ALBANY, NY 12203-6143-1200  
417-875-1111 FAX: 417-875-1112  
8117 STREET, BIRKENHEAD, NY 12014-4920  
6 TOWNSEND STREET, WATKINS, NY 12095-6745-6745

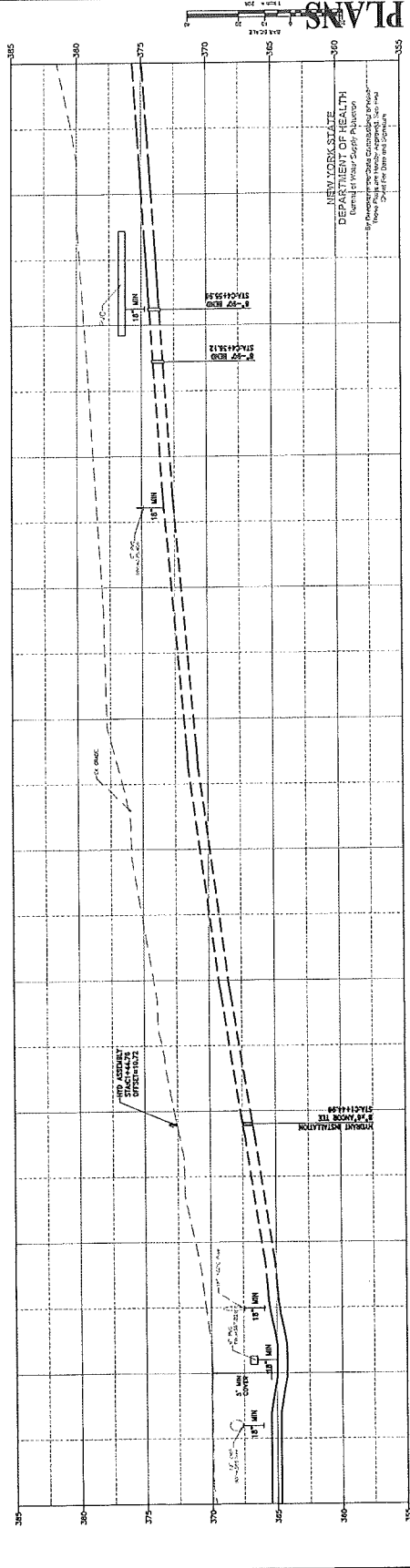
PROJECT NO. 17-1373  
DRAWN BY: ERS/EST  
SCALE: AS SHOWN  
REVIEWED BY:  
DATE: 6/27/2018

REVISIONS

NO.	DATE	DESCRIPTION



1 PLAN AND PROFILE  
SCALE: 1" = 20'  
CROSS REFERENCE: C-107



381.3	380.0	379.4	378.8	378.1	377.8	375.9	374.3	372.8	371.2	370.0
		C4+50	C4+00	C3+50	C3+00	C2+50	C2+00	C1+50	C1+00	C0+50

NEW YORK STATE  
DEPARTMENT OF HEALTH  
Bureau of Water Supply Division  
New York State Sanitary Code  
Chapter 17.10 - Water Supply

18780473 (Rev. 10/10) Water Plan Profile



DATE: 04/23/2018  
 DRAWN BY: JHGL  
 SCALE: AS SHOWN  
 REVIEWED BY: ...  
 PROJECT NO.: 17-1333

**DELAWARE ENGINEERING, P.C.**  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 20 HARRISON AVENUE, EXTENSION 1, WILMINGTON, DE 19801-4515  
 310 NORTH BAY STREET, 1ST FLOOR, WILMINGTON, DE 19801-4213  
 8 TOMHOBBS STREET, WILMINGTON, DE 19801-4225



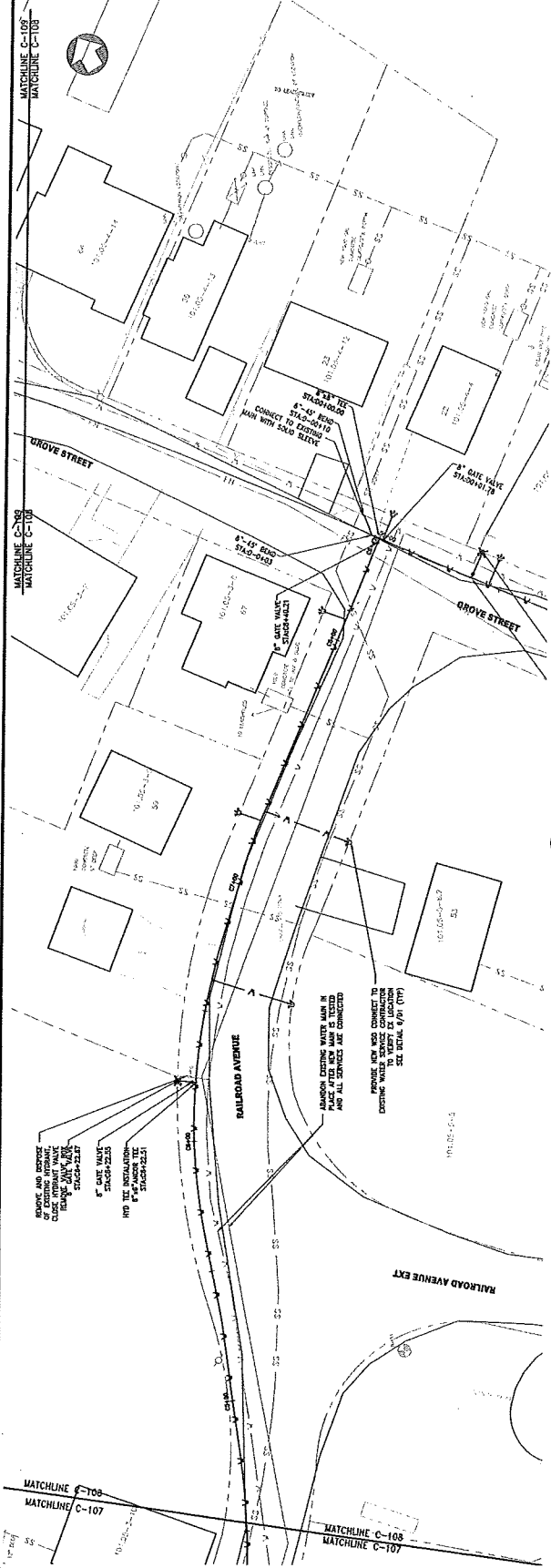
NO.	DATE	DESCRIPTION

CARRO WATER IMPROVEMENTS

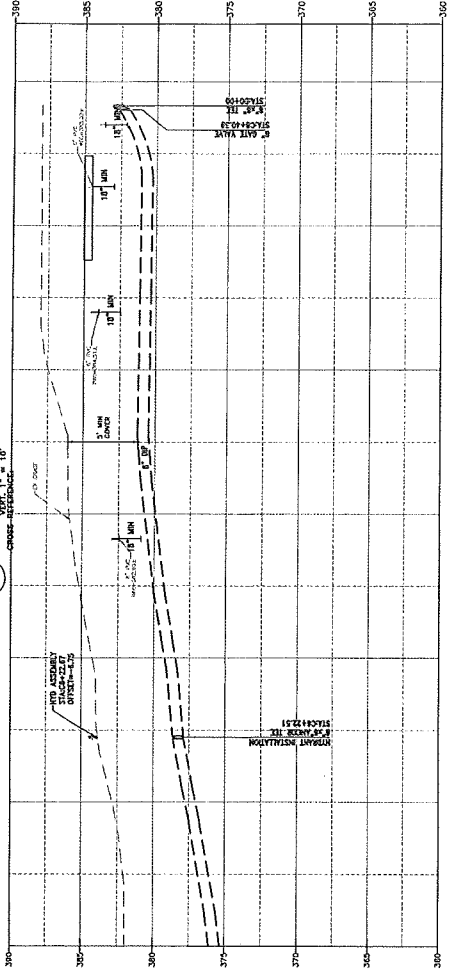
RAILROAD AVENUE WATER PLAN AND PROFILE

SHEET: C-108

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Bureau of Water Supply Programs  
 By Direction of the State Commissioner of Health  
 (Received and Approved for the State of New York)



1. PLAN AND PROFILE  
 C-108



Station	Elevation
C6+50	362.0
C6+55	364.3
C7+00	365.9
C7+50	367.5
C8+00	368.0
C8+50	368.5
C8+70	369.0



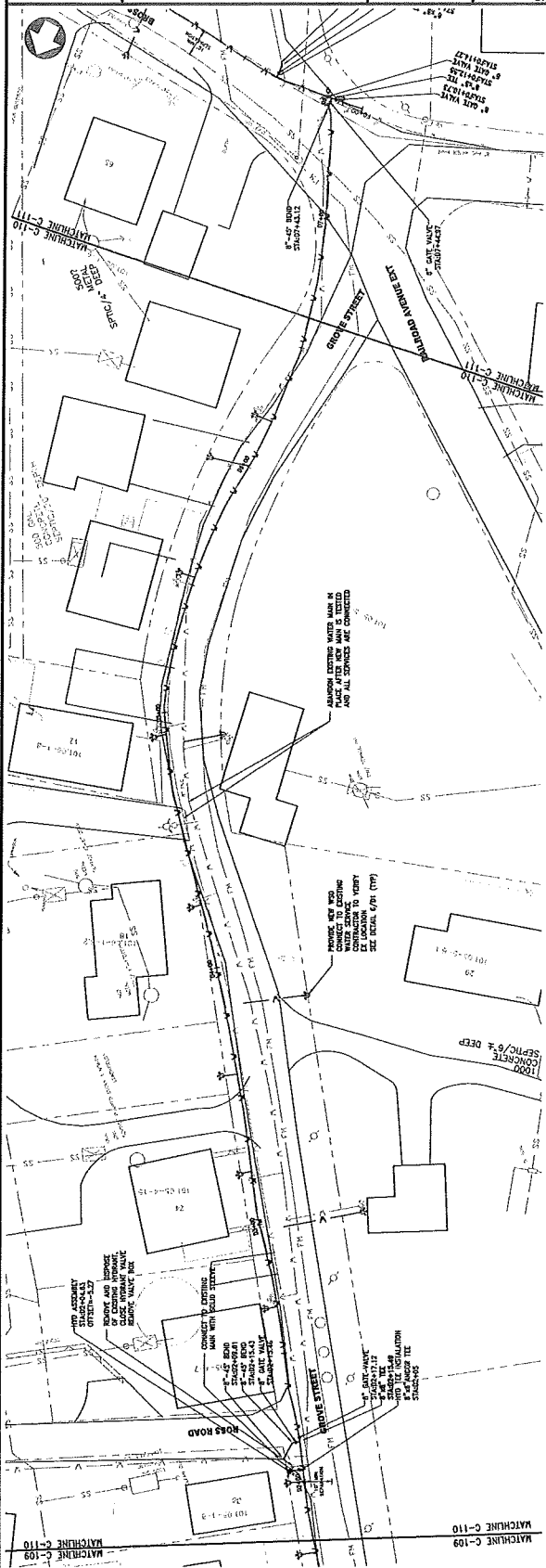


**DELAWARE ENGINEERING, P.C.**  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 28 HANCOCK STREET, SUITE 203, CHICOMA, NY 12520, 518.532.1800  
 81 NORTH LAMAR STREET, LEBANON, NY 12544, 518.537.4023  
 8 TOWNSEND STREET, WATKINS, NY 12597, 518.855.5533

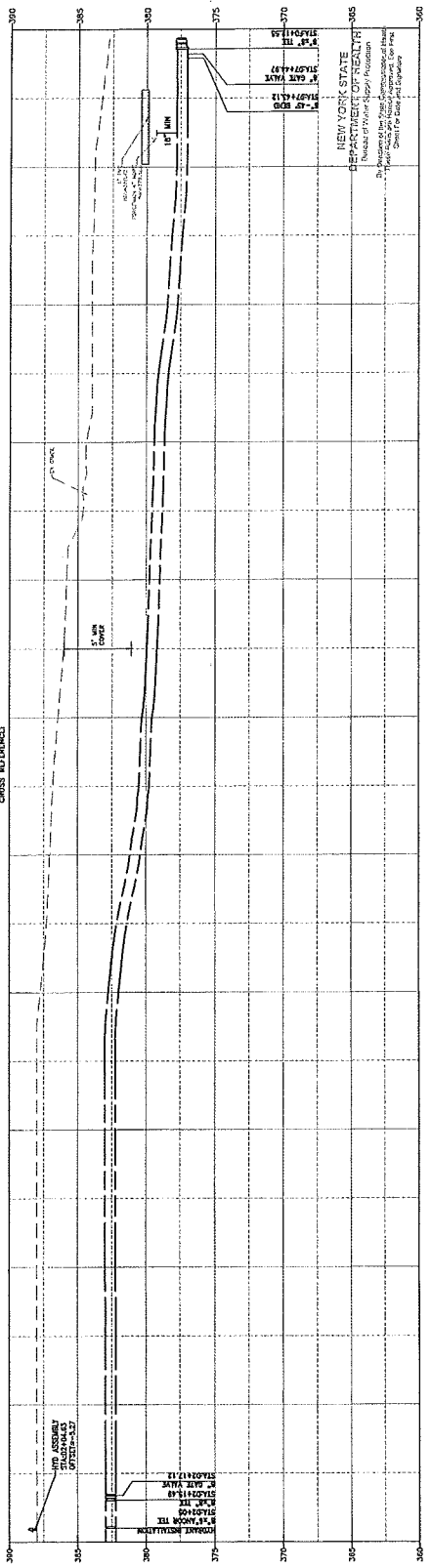
DATE: 04/29/2018  
 DRAWN BY: BSH/LSJ  
 SCALE: AS SHOWN  
 PROJECT NO.: 121293  
 FILE: WTR-IMP-2018

NO.	DATE	DESCRIPTION

**BID PLANS**



**1 PLAN AND PROFILE**  
 SCALE: HORIZ. 1" = 10'  
 VERT. 1" = 10'  
 CROSS SECTIONS AS SHOWN



STATION	ELEVATION
0+00	388.0
0+25.0	388.0
0+34.50	388.0
0+44.00	387.7
0+44.50	387.1
0+54.00	388.5
0+54.50	385.8
0+64.00	384.4
0+64.50	383.0
0+75.0	383.0

MATCHLINE C-109  
 MATCHLINE C-110

MATCHLINE C-110  
 MATCHLINE C-111

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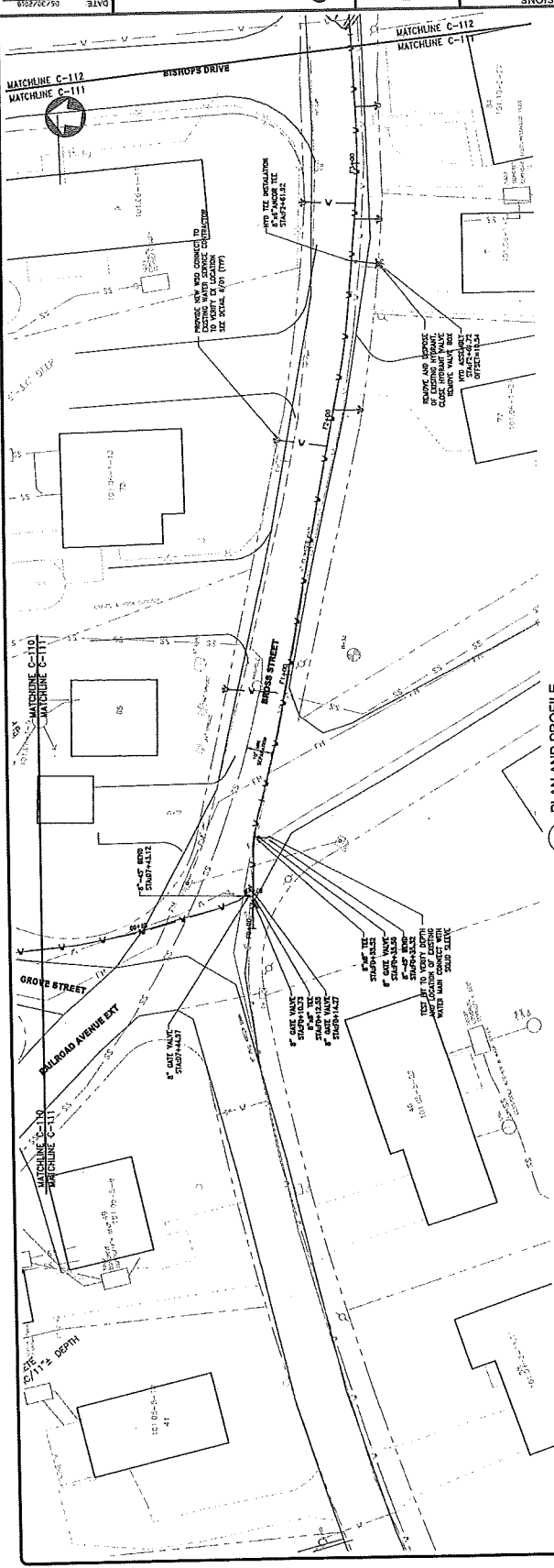
REVISIONS

NO.	DATE	DESCRIPTION

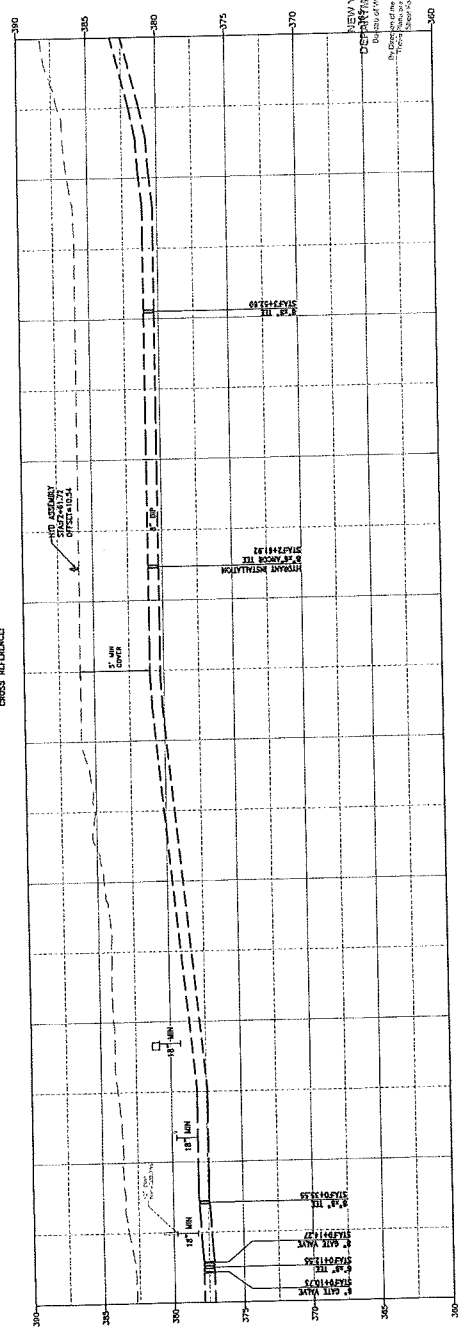


**DELAWARE ENGINEERING, P.C.**  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 24 HANCOCK AVENUE EXTENSION, WILMINGTON, DE 19801-4220  
 311 NORTH MARKET STREET, WILMINGTON, DE 19801-4220  
 PROJECT NO.: 17-1393  
 FILE: WTR-15A-10717

DATE: 06/20/2018  
 DRAWN BY: PROJECT  
 SCALE: AS SHOWN  
 REVIEWED BY: AS SHOWN

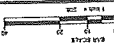


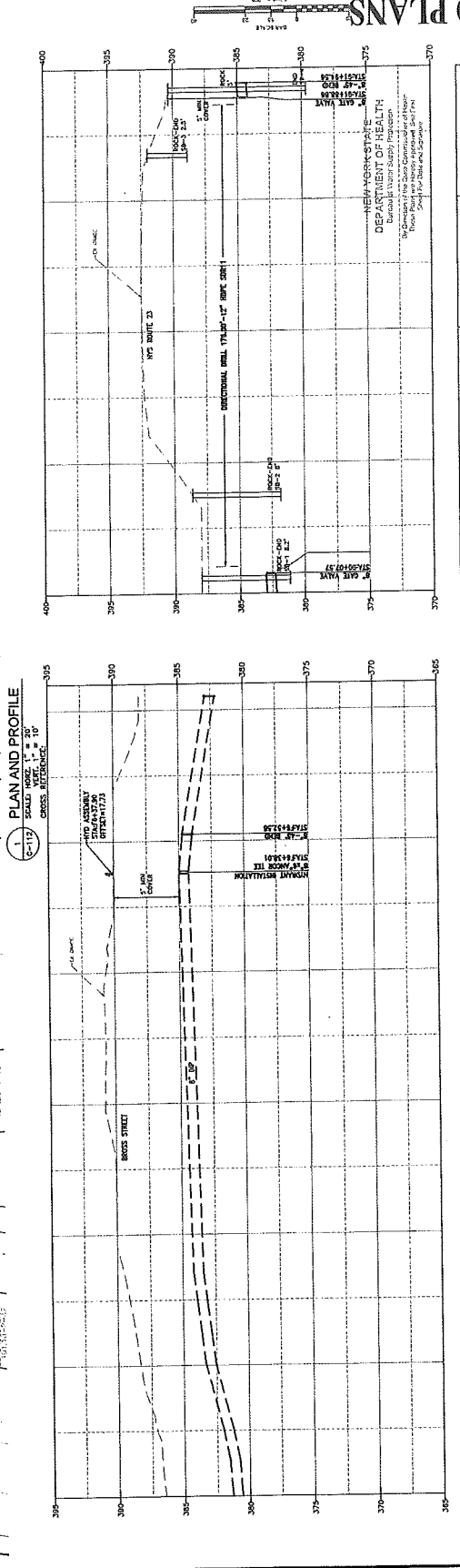
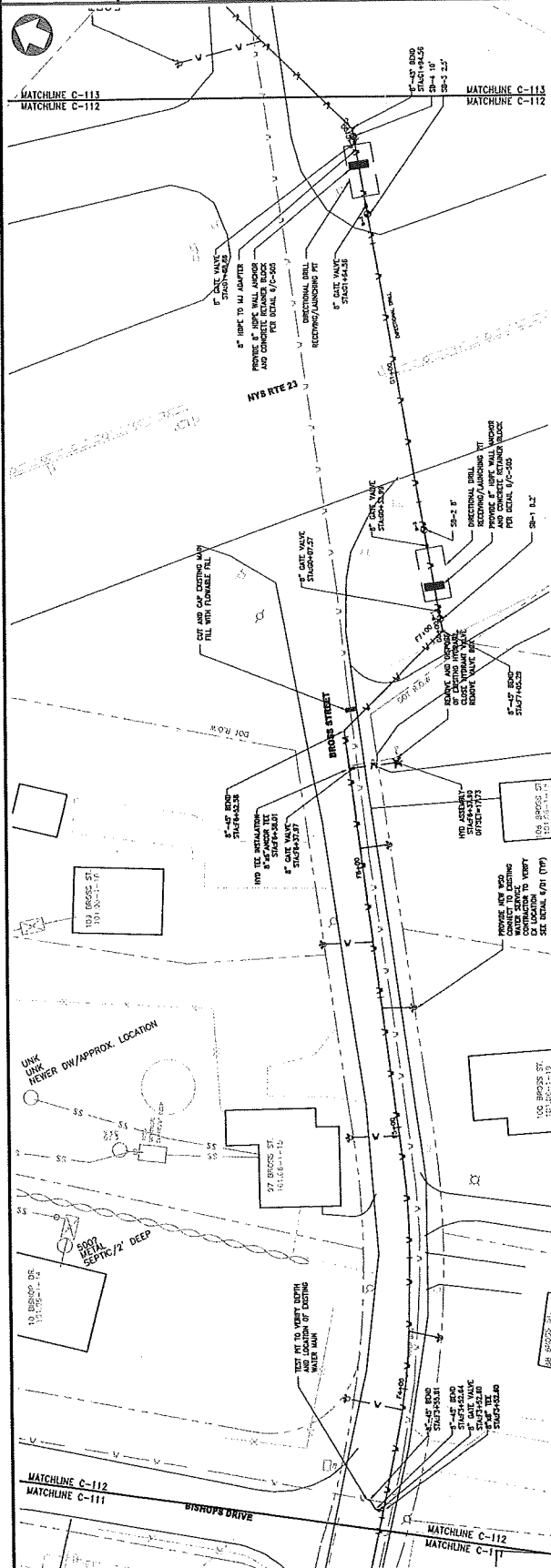
1 PLAN AND PROFILE  
 SCALE: HORIZ. 1" = 30'  
 VERT. 1" = 10'  
 CROSS REFERENCE



STATION	ELEVATION
F0+50	363.6
F1+00	364.1
F1+50	364.5
F2+00	365.0
F2+50	366.0
F3+00	365.0
F3+50	366.0
F4+00	368.4

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Division of Environmental Hygiene  
 Bureau of Water Supply  
 Bureau of Water Treatment  
 Bureau of Water Pollution Control  
 Bureau of Water Resources  
 Bureau of Water Supply and Distribution





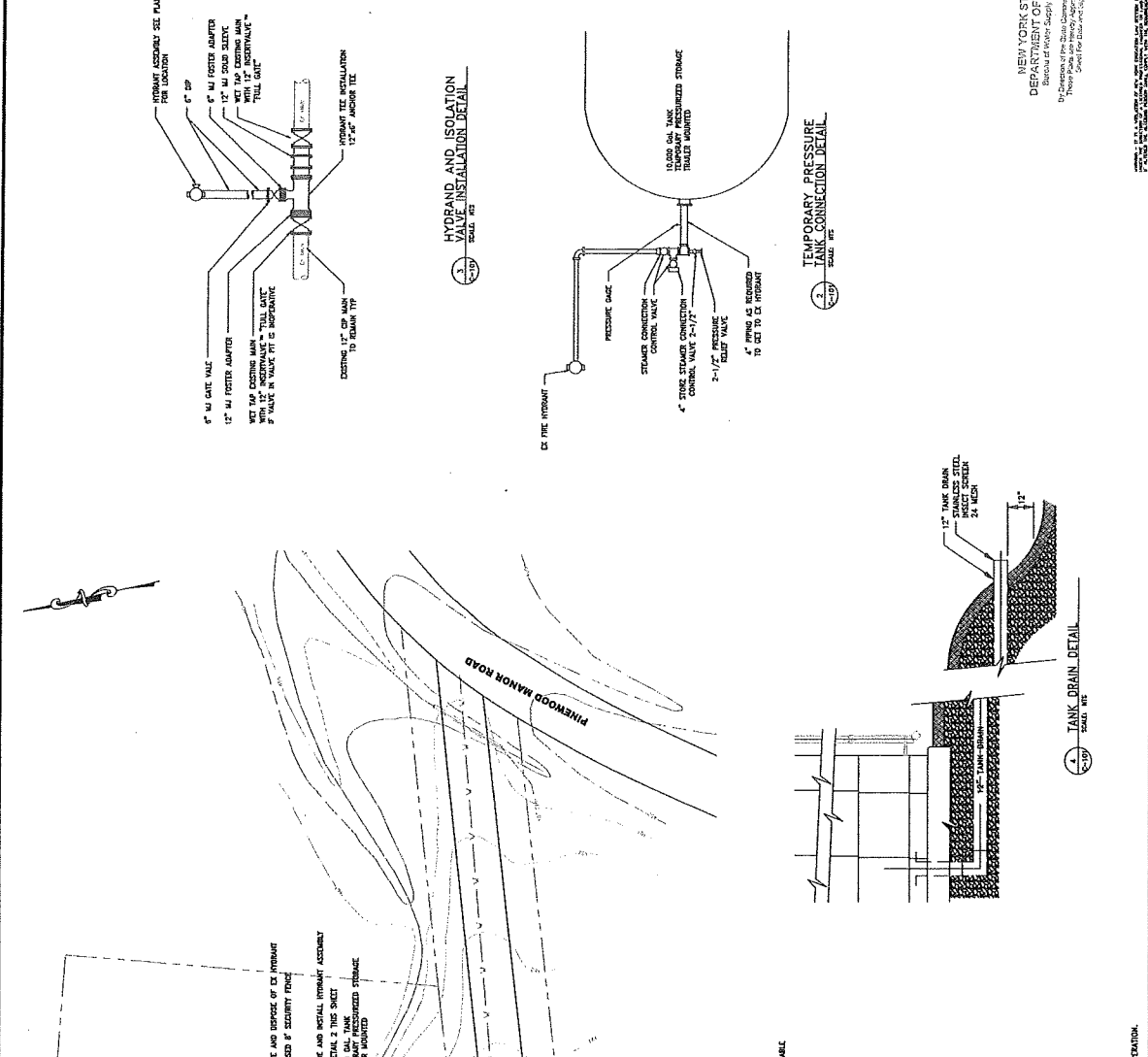
STATION	ELEVATION
74+00	305.4
74+50	305.3
75+00	305.0
75+50	300.7
76+00	300.7
76+50	300.0
77+00	302.0





NO.	DATE	DESCRIPTION

BID PLANS  
 NEW YORK STATE DEPARTMENT OF HEALTH  
 Bureau of Water Supply Protection  
 Division of Water Supply Administration  
 Project No. 17-1393-001-01-01  
 Scale: As Shown



**NOTES:**  
 SEE SHEET C-102 FOR SECTION A-A.  
 CONTRACTOR SHALL VERIFY ALL ELEVATIONS AND DIMENSIONS.  
 CONTRACTOR SHALL HOLD ALL UTILITY PIPES AND PIPES AS REQUIRED AT NO EXPENSE TO THE OWNER.  
 CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND REGULATIONS AT HIS/HER OWNERS RISK AND COST TO THE OWNER.  
**GENERAL NOTES:**  
 ALL CONSTRUCTION RELATED TO THE INSTALLATION AND OPERATION OF THE NEW WATER SYSTEM SHALL BE PHASE 1.  
 PHASE 1 WORK INCLUDES BUT IS NOT LIMITED TO:  
 - REMOVAL OF EXISTING TANK AND FOUNDATION  
 - INSTALLATION OF VALVE AND HYDRANT TEE AND HYDRANT ASSEMBLY  
 - INSTALLATION AND CONNECTION OF HYDRANTS TANK TO EXISTING SYSTEM  
 ALL EXISTING WORK, AND RECONNECTION OF THE EXISTING TANK TO EXISTING 12" WATER LINE SHALL BE PHASE 2.  
 PHASE 2 WORK SHALL INCLUDE BUT IS NOT LIMITED TO:  
 - DRIVING AND RECOMMISSIONING OF EXISTING TANK INCLUDING ALL PIPES AND APPURTENANCES  
 - INSTALLATION OF 12" TANK BRAN (STANDARD STEEL, 24 MESH)  
 - REMOVAL OF EXISTING CONCRETE FOUNDATION AS NEEDED  
 ALL CONSTRUCTION RELATED TO THE INSTALLATION AND OPERATION OF THE NEW TANK SHALL BE PHASE 3.  
 PHASE 3 WORK SHALL INCLUDE BUT IS NOT LIMITED TO:  
 - INSTALLATION OF HYDRANT TEE AND HYDRANT ASSEMBLY  
 - INSTALLATION AND DISPOSITION OF FITTINGS AND PIPE TO CONNECT 12" LINE TO NEW VALVE AT VALVE VAULT  
 - ALL OTHER SITE RESTORATION  
 THE HYDRANTS TANK AND ASSOCIATED WATER LINE SHALL REMAIN IN SERVICE UNTIL THE NEW TANK IS COMPLETE AND IN OPERATION.

CONSTRUCTION SEQUENCING  
 ALL CONSTRUCTION RELATED TO THE INSTALLATION AND OPERATION OF THE NEW WATER SYSTEM SHALL BE PHASE 1.  
 PHASE 1 WORK INCLUDES BUT IS NOT LIMITED TO:  
 - REMOVAL OF EXISTING TANK AND FOUNDATION  
 - INSTALLATION OF VALVE AND HYDRANT TEE AND HYDRANT ASSEMBLY  
 - INSTALLATION AND CONNECTION OF HYDRANTS TANK TO EXISTING SYSTEM  
 ALL EXISTING WORK, AND RECONNECTION OF THE EXISTING TANK TO EXISTING 12" WATER LINE SHALL BE PHASE 2.  
 PHASE 2 WORK SHALL INCLUDE BUT IS NOT LIMITED TO:  
 - DRIVING AND RECOMMISSIONING OF EXISTING TANK INCLUDING ALL PIPES AND APPURTENANCES  
 - INSTALLATION OF 12" TANK BRAN (STANDARD STEEL, 24 MESH)  
 - REMOVAL OF EXISTING CONCRETE FOUNDATION AS NEEDED  
 ALL CONSTRUCTION RELATED TO THE INSTALLATION AND OPERATION OF THE NEW TANK SHALL BE PHASE 3.  
 PHASE 3 WORK SHALL INCLUDE BUT IS NOT LIMITED TO:  
 - INSTALLATION OF HYDRANT TEE AND HYDRANT ASSEMBLY  
 - INSTALLATION AND DISPOSITION OF FITTINGS AND PIPE TO CONNECT 12" LINE TO NEW VALVE AT VALVE VAULT  
 - ALL OTHER SITE RESTORATION  
 THE HYDRANTS TANK AND ASSOCIATED WATER LINE SHALL REMAIN IN SERVICE UNTIL THE NEW TANK IS COMPLETE AND IN OPERATION.



DATE: 02/09/2018  
 DRAWN BY: JB  
 SCALE: AS SHOWN  
 REVISIONS: RT  
 PROJECT NO.: 12-1393  
 FILE:

**DELAWARE ENGINEERING, P.C.**  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 23 HICKSON WAY/2ND FLOOR/SPRING LAKE, NJ 07174-1001  
 810 NORTH MAIN STREET/3RD FLOOR/NEWARK, NJ 07102-1022  
 973.767.2333 FAX 973.767.2334  
 973.767.2333



NO.	DATE	DESCRIPTION

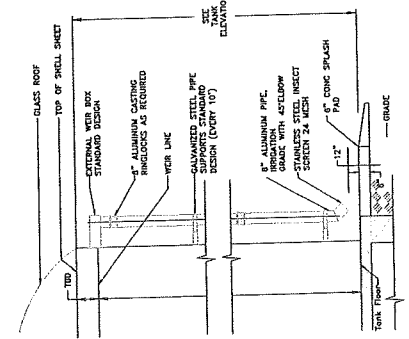
TOWN OF CAIRO WATER  
 TANK REPLACEMENT  
 CONTRACT #3

TANK ELEVATION AND  
 PROFILE VIEW

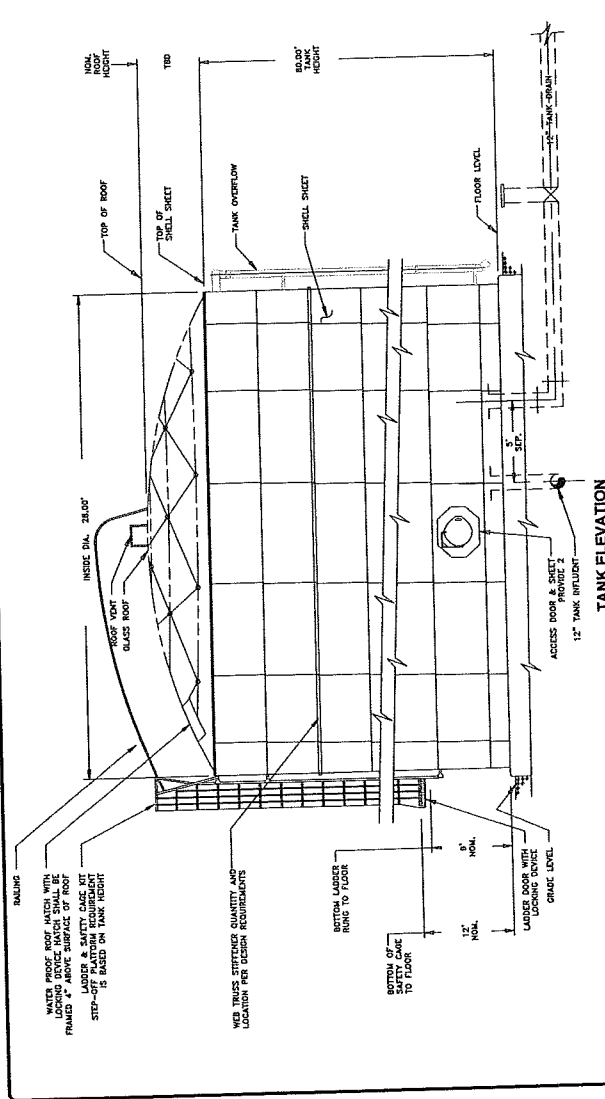
SHEET: C-10

**BID PLANS**

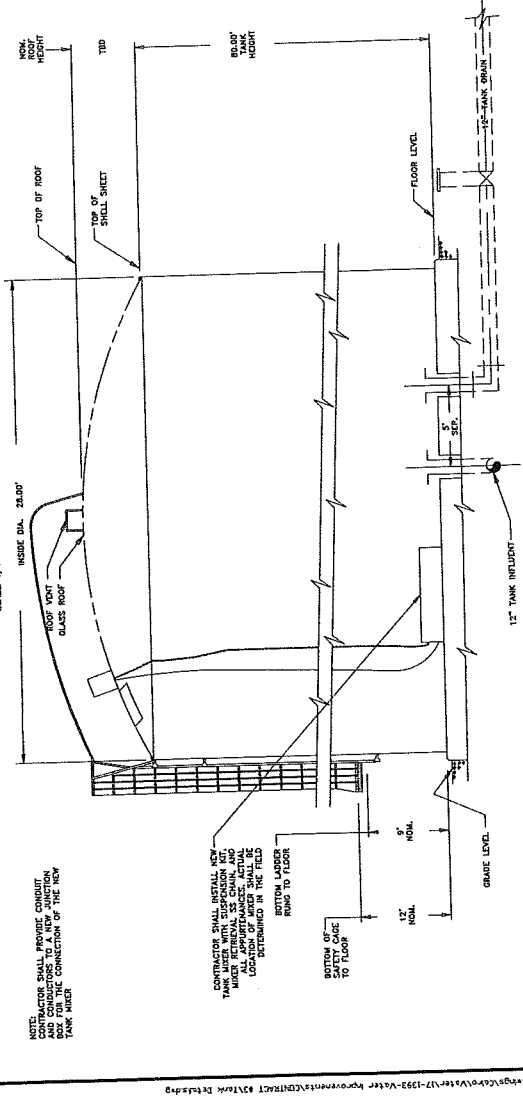
NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Bureau of Water Supply Regulation  
 By Order of the State Commissioner of Health  
 Thomas F. Duane, M.D., Statewide Health Officer  
 Project No. 15-027-001-0000



**TANK STAND PIPE**  
 SCALE: 1/2" = 1'-0"



**TANK ELEVATION**  
 SCALE: 1/4" = 1'-0"



**SECTION A-A INTERIOR TANK ELEVATION**  
 SCALE: 1/4" = 1'-0"

WATER PROOF ROOF HATCH WITH LANDING DEVICE MATCH SHEET 12-1393-02. HATCH FRAME, LADDERS & SAFETY CAGE SET STEP-OFF PLATFORM EQUIVALENT IS BASED ON TANK HEIGHT

WEB TRUSS SUPPORT QUANTITY AND LOCATION PER DESIGN REQUIREMENTS

12" NOM. SAFETY CAGE TO FLOOR

9" NOM. LADDER DOOR WITH LOCKING DEVICE TO FLOOR LEVEL

NOTE: CONTRACTOR SHALL PROVIDE CONDUIT AND CONDUCTORS TO A NEW JUNCTION BOX AND MAKE THE CONNECTION OF THE NEW TANK MAIN

CONTRACTOR SHALL INSTALL NEW TANK LINER WITH SUSPENSION CUT MESH ALL APPROPRIATE. ACTUAL LOGS/PLUMBING IN THE FIELD DETERMINED IN THE FIELD

9" NOM. BOTTOM OF SAFETY CAGE TO FLOOR

12" NOM. BOTTOM LADDER RING TO FLOOR

GRADE LEVEL

DELAWARE  
ENGINEERING, P.C.  
CIVIL AND ENVIRONMENTAL ENGINEERING

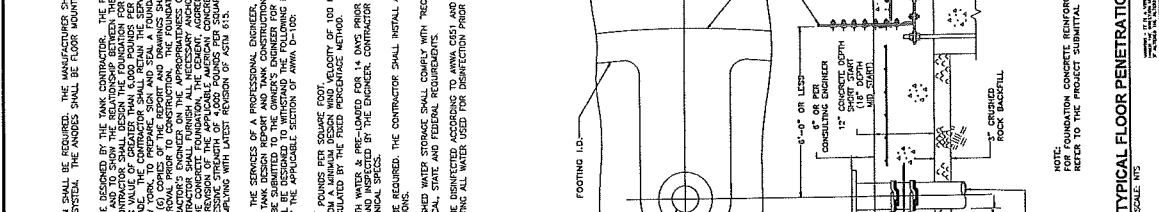
3200 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232  
1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232  
4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

# TANK FOUNDATION DETAILS

## TYPICAL MAT FOUNDATION SECTION

**GENERAL NOTES**

- A CANOE PROTECTION SYSTEM SHALL BE REQUIRED. THE MANUFACTURER SHALL DESIGN AND CONSTRUCT A PASSIVE, SACRIFICIAL MANGANESE ANODE SYSTEM. THE ANODES SHALL BE FLOOR MOUNTED.
- TANK FOUNDATION DESIGN: THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOUNDATION DESIGN. THE FOUNDATION SHALL BE DESIGNED TO SUPPORT THE TANK AND TO SHOW THE RELATIONSHIP BETWEEN THE FOUNDATION AND OTHER APPLICANCES. THE TANK CONTRACTOR SHALL DESIGN THE FOUNDATION FOR SITE CONDITIONS, BUT MAY NOT CONSIDER APPLICANCES. THE TANK CONTRACTOR SHALL DESIGN THE FOUNDATION FOR SITE CONDITIONS, BUT MAY NOT CONSIDER APPLICANCES. THE TANK CONTRACTOR SHALL DESIGN THE FOUNDATION FOR SITE CONDITIONS, BUT MAY NOT CONSIDER APPLICANCES. THE TANK CONTRACTOR SHALL DESIGN THE FOUNDATION FOR SITE CONDITIONS, BUT MAY NOT CONSIDER APPLICANCES.



**TYPICAL FLOOR PENETRATION DETAIL**  
SCALE: NTS

NOTE: FOR FOUNDATION CONCRETE REINFORCEMENT STEEL REFER TO THE PROJECT SUBMITTAL DOCUMENTATION.

NEW YORK STATE DEPARTMENT OF CORRECTIONS  
Office of the State Comptroller of Finance  
Three State Street, Albany, New York 12242  
Date: 02/09/2018

REVISIONS

NO. DATE DESCRIPTION

DATE: 02/09/2018

DRAWN BY: JB

SCALE: AS SHOWN

REVIEWED BY: NF

PROJECT NO.: 17-1353

DELAWARE ENGINEERING, P.C. CIVIL AND ENVIRONMENTAL ENGINEERING

3200 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

REVISIONS

NO. DATE DESCRIPTION

DATE: 02/09/2018

DRAWN BY: JB

SCALE: AS SHOWN

REVIEWED BY: NF

PROJECT NO.: 17-1353

DELAWARE ENGINEERING, P.C. CIVIL AND ENVIRONMENTAL ENGINEERING

3200 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

REVISIONS

NO. DATE DESCRIPTION

DATE: 02/09/2018

DRAWN BY: JB

SCALE: AS SHOWN

REVIEWED BY: NF

PROJECT NO.: 17-1353

DELAWARE ENGINEERING, P.C. CIVIL AND ENVIRONMENTAL ENGINEERING

3200 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

REVISIONS

NO. DATE DESCRIPTION

DATE: 02/09/2018

DRAWN BY: JB

SCALE: AS SHOWN

REVIEWED BY: NF

PROJECT NO.: 17-1353

DELAWARE ENGINEERING, P.C. CIVIL AND ENVIRONMENTAL ENGINEERING

3200 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

REVISIONS

NO. DATE DESCRIPTION

DATE: 02/09/2018

DRAWN BY: JB

SCALE: AS SHOWN

REVIEWED BY: NF

PROJECT NO.: 17-1353

DELAWARE ENGINEERING, P.C. CIVIL AND ENVIRONMENTAL ENGINEERING

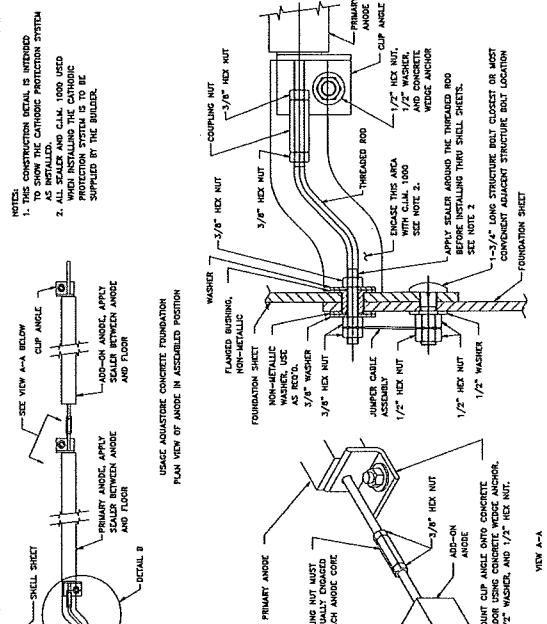
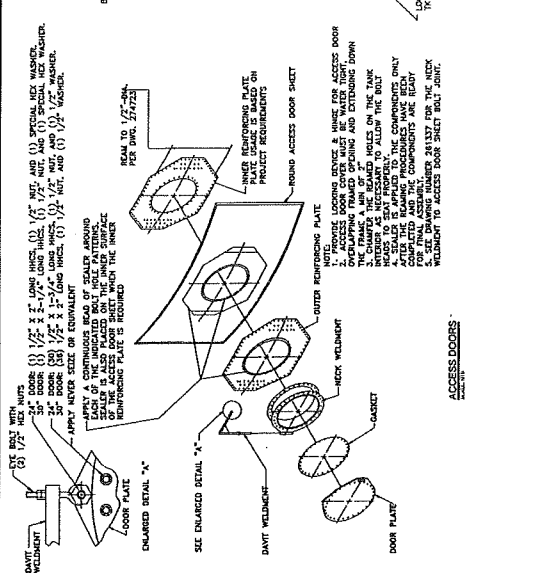
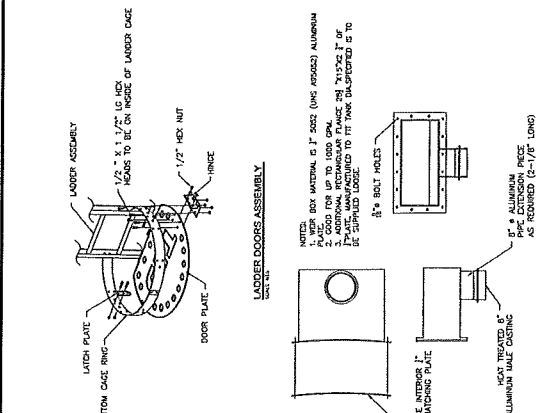
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1000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

4000 MARKET STREET, SUITE 200, DEWBTN, NJ 08040-4232

REVISIONS

NO. DATE DESCRIPTION



**LADDER BOTTOM**

**LADDER TOP**

**TABLE 1: LADDER BOTTOM**

ITEM	DESCRIPTION	QTY.
1	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
2	MIT - 1/2" X 1/2" U-B	1
3	WASHER 1/2"	2

**TABLE 2: LADDER TOP**

ITEM	DESCRIPTION	QTY.
1	MIT - 1/2" X 1/2" U-B	1
2	WASHER 1/2"	2
3	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
4	MIT - 1/2" X 1/2" U-B	1
5	WASHER 1/2"	2
6	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
7	MIT - 1/2" X 1/2" U-B	1
8	WASHER 1/2"	2
9	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
10	MIT - 1/2" X 1/2" U-B	1
11	WASHER 1/2"	2
12	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
13	MIT - 1/2" X 1/2" U-B	1
14	WASHER 1/2"	2
15	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
16	MIT - 1/2" X 1/2" U-B	1
17	WASHER 1/2"	2
18	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
19	MIT - 1/2" X 1/2" U-B	1
20	WASHER 1/2"	2
21	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
22	MIT - 1/2" X 1/2" U-B	1
23	WASHER 1/2"	2
24	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
25	MIT - 1/2" X 1/2" U-B	1
26	WASHER 1/2"	2
27	SHORT BOTTOM LADDER & SAFETY GATE KIT	1
28	MIT - 1/2" X 1/2" U-B	1
29	WASHER 1/2"	2
30	SHORT BOTTOM LADDER & SAFETY GATE KIT	1

# BID PLANS

GENERAL WATER DETAILS

TOWN OF CAIRO WATER  
TANK REPLACEMENT #3  
CONTRACT #3

NO.	DATE	DESCRIPTION



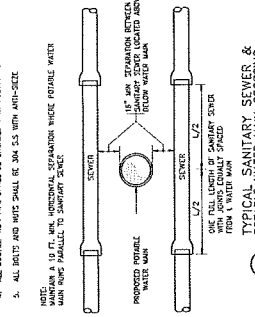
**DELAWARE ENGINEERING, P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
23 WASHINGTON AVENUE, EXTENSION 1, NEWARK, DELAWARE 19702  
810 NORTH BAY STREET, LIBERTY, NEW YORK 11754  
1000 KENTZ STREET, SUITE 200, ROCKY HILL, CONNECTICUT 06067  
TELEPHONE: (302) 366-2255  
FAX: (302) 366-2255

DATE: 02/23/2019  
DRAWN BY: [Signature]  
SCALE: AS SHOWN  
PROJECT NO.: 17-1393

SHEET  
**C-504**

NEW YORK STATE  
DEPARTMENT OF HEALTH  
Bureau of Water Supply Protection  
Office of Water Supply Construction  
200 West Street, Albany, New York 12242  
Tel: (518) 474-2200  
Fax: (518) 474-2201

- NOTES:**
1. THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION THAT ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS SET FORTH IN THE CONTRACT DOCUMENTS.
  2. THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION THAT ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS SET FORTH IN THE CONTRACT DOCUMENTS.
  3. THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION THAT ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARDS SET FORTH IN THE CONTRACT DOCUMENTS.
  4. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  5. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  6. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.

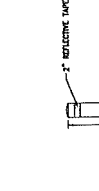


TYPICAL SANITARY SEWER & POTABLE WATER MAIN CROSSING  
SCALE: NOT TO SCALE

1. 12" AND 18" DIAMETERS SHALL BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE REQUIRED CLEARANCES.
2. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.

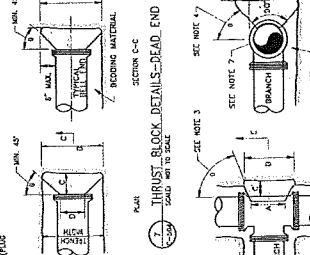
MINIMUM PIPE DIAMETER	MINIMUM COVER DEPTH	MINIMUM COVER HEIGHT
4	2.0	2.0
6	3.0	3.0
8	3.5	3.5
10	5.0	5.0
12	6.0	6.0

1. NORMAL LENGTHS IN FEET TO BE INDICATED IN EACH DIRECTION.
2. ACTUAL LENGTH SHALL BE BASED ON GROUND CONDITIONS.
3. APPROVED ESTIMATES APPROVED FOR THE TYPE AND SIZE OF MATERIALS AND METHODS TO BE USED FOR JOINTS.
4. ALL RESTRAINT BOLTS AND NUTS SHALL BE 3/4" DIA. S.S. WITH ANTI-SIEVE PER SPEC.
5. APPROVED ESTIMATES APPROVED FOR THE TYPE AND SIZE OF MATERIALS AND METHODS TO BE USED FOR JOINTS.
6. APPROVED ESTIMATES APPROVED FOR THE TYPE AND SIZE OF MATERIALS AND METHODS TO BE USED FOR JOINTS.
7. APPROVED ESTIMATES APPROVED FOR THE TYPE AND SIZE OF MATERIALS AND METHODS TO BE USED FOR JOINTS.
8. MIN. 3" COVER OVER VALVE.
9. APPROVED ESTIMATES APPROVED FOR THE TYPE AND SIZE OF MATERIALS AND METHODS TO BE USED FOR JOINTS.
10. ALL RESTRAINT BOLTS AND NUTS SHALL BE 3/4" DIA. S.S. WITH ANTI-SIEVE PER SPEC.



TYPICAL BOLLARD DETAIL  
SCALE: NOT TO SCALE

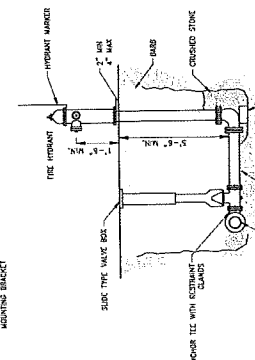
1. 12" AND 18" DIAMETERS SHALL BE AS LARGE AS POSSIBLE WITHOUT INTERFERING WITH THE REQUIRED CLEARANCES.
2. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.



TYPICAL THURST BLOCK DETAILS - DEAD END  
SCALE: NOT TO SCALE

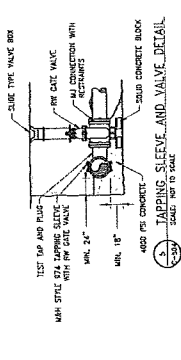
PIPE SIZE (IN)	PIPE LENGTH (FEET)	PIPE WEIGHT (LBS)	PIPE WEIGHT (LBS)	PIPE WEIGHT (LBS)	PIPE WEIGHT (LBS)
12"	10'	100	100	100	100
12"	15'	150	150	150	150
12"	20'	200	200	200	200
12"	25'	250	250	250	250
12"	30'	300	300	300	300
12"	35'	350	350	350	350
12"	40'	400	400	400	400
12"	45'	450	450	450	450
12"	50'	500	500	500	500

- NOTES:**
1. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  2. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  3. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  4. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.
  5. ALL JOINTS SHALL BE PROTECTED WITH AN APPROPRIATE JOINT PROTECTION.

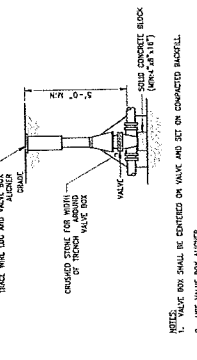


TYPICAL HYDRANT DETAIL  
SCALE: NOT TO SCALE

1. TEMPORARILY SUPPORT TAPPING SADDLE AND VALVE AND APPLY STANDARD HYDROSTATIC TEST.
2. 2" NO LAPS, NON REINFORCED PERMANENT CONCRETE BLOCK AND SUPPORT PINS.
3. MAKE 1/4" DIA. LIFT EXTENSION AND BACKSET.
4. SET CONCRETE FROM TAPPING SADDLE TO VALVE TO BE "WRAPPED-UP" IN CONCRETE.
5. CON. TAPPING SLEEVES AND JOINTS WITH AN APPROPRIATE JOINT PROTECTION.



TYPICAL TAPPING SLEEVE AND VALVE DETAIL  
SCALE: NOT TO SCALE



TYPICAL VALVE  
SCALE: NOT TO SCALE

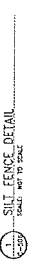
NO.	DATE	DESCRIPTION



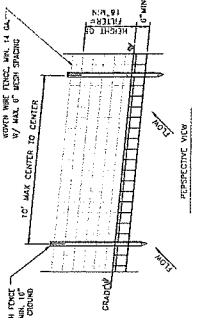
**DELAWARE ENGINEERING, P.C.**  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 28 MADISON AVENUE, ENCLAVE PLAZA, 3RD FL., ALBANY, NY 12203-5124  
 518-435-8100 FAX 518-435-8102  
 PROJECT NO.: 17-1339  
 REVISED BY: RY  
 SCALE: AS SHOWN  
 DRAWN BY: RB  
 DATE: 09/09/2018

NEW YORK STATE DEPARTMENT OF HEALTH  
 Bureau of Sanitary Protection  
 Division of Water Administration  
 Bureau of Water Pollution Control

CONTRACT #3  
 TANK REPLACEMENT #3



1. THE SLOPE OF THE SILT FENCE SHALL BE 35 DEGREES OR APPROVED EQUIVALENT.
2. THE FABRIC SHALL BE 35 MILS OR MORE THICK AND SHALL BE MADE OF A 30% STRETCHABLE POLYPROPYLENE OR POLYESTER FABRIC.
3. THE FABRIC SHALL BE STAPLED TO THE GROUND AT 3' ON CENTER.
4. THE SILT MAT SHALL BE 4" THICK AND SHALL BE MADE OF A POLYPROPYLENE OR POLYESTER FABRIC.
5. THE SILT MAT SHALL BE STAPLED TO THE GROUND AT 3' ON CENTER.
6. THE SILT MAT SHALL BE STAPLED TO THE FABRIC AT 3' ON CENTER.
7. THE SILT MAT SHALL BE STAPLED TO THE FABRIC AT 3' ON CENTER.
8. THE SILT MAT SHALL BE STAPLED TO THE FABRIC AT 3' ON CENTER.
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9. THE SILT MAT SHALL BE STAPLED TO THE FABRIC AT 3' ON CENTER.
10. THE SILT MAT SHALL BE STAPLED TO THE FABRIC AT 3' ON CENTER.

CONTRACTOR SHALL MAINTAIN A 10' WIDE CLEARANCE FROM THE SILT FENCE TO THE PROPERTY LINE. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. THE SILT FENCE SHALL BE REPAIRED IMMEDIATELY UPON NOTIFICATION OF DAMAGE. THE SILT FENCE SHALL BE REMOVED IMMEDIATELY UPON COMPLETION OF THE PROJECT.

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**BID PLANS**

SHEET: C-507

TYPICAL DETAILS

TOWN OF CAIRO WATER  
TANK REPLACEMENT #3

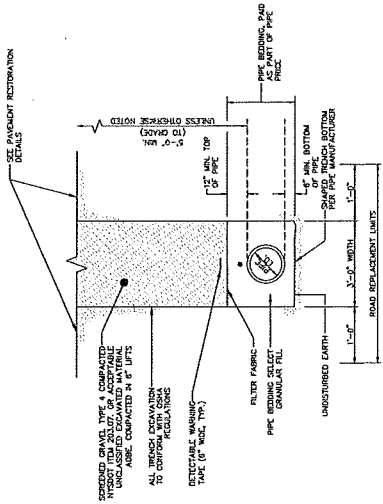
NO.	DATE	DESCRIPTION



**DELAWARE**  
**ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
28 HANCOCK AVENUE, NEWARK, NJ 07102-4120  
11 NORTH MAIN STREET, LEBANON, NJ 07924-0671  
611 NORTH STREET, SUITE 304, ROSELAND, NJ 07068-3613  
8 TOWNSEND STREET, WILMINGTON, NJ 08411-3837

DATE: 02/20/19  
DRAWN BY: IB  
SCALE: AS SHOWN  
REVIEWED BY: RZ  
PROJECT NO.: 17-1393  
FILE:

NEW YORK STATE  
DEPARTMENT OF HEALTH  
Office of Water  
100 North Street  
Albany, NY 12242  
Phone: 518-402-2640, Fax: 518-402-6021  
www.health.ny.gov/doh



**TYPICAL TRENCH DETAIL**  
NOT TO SCALE

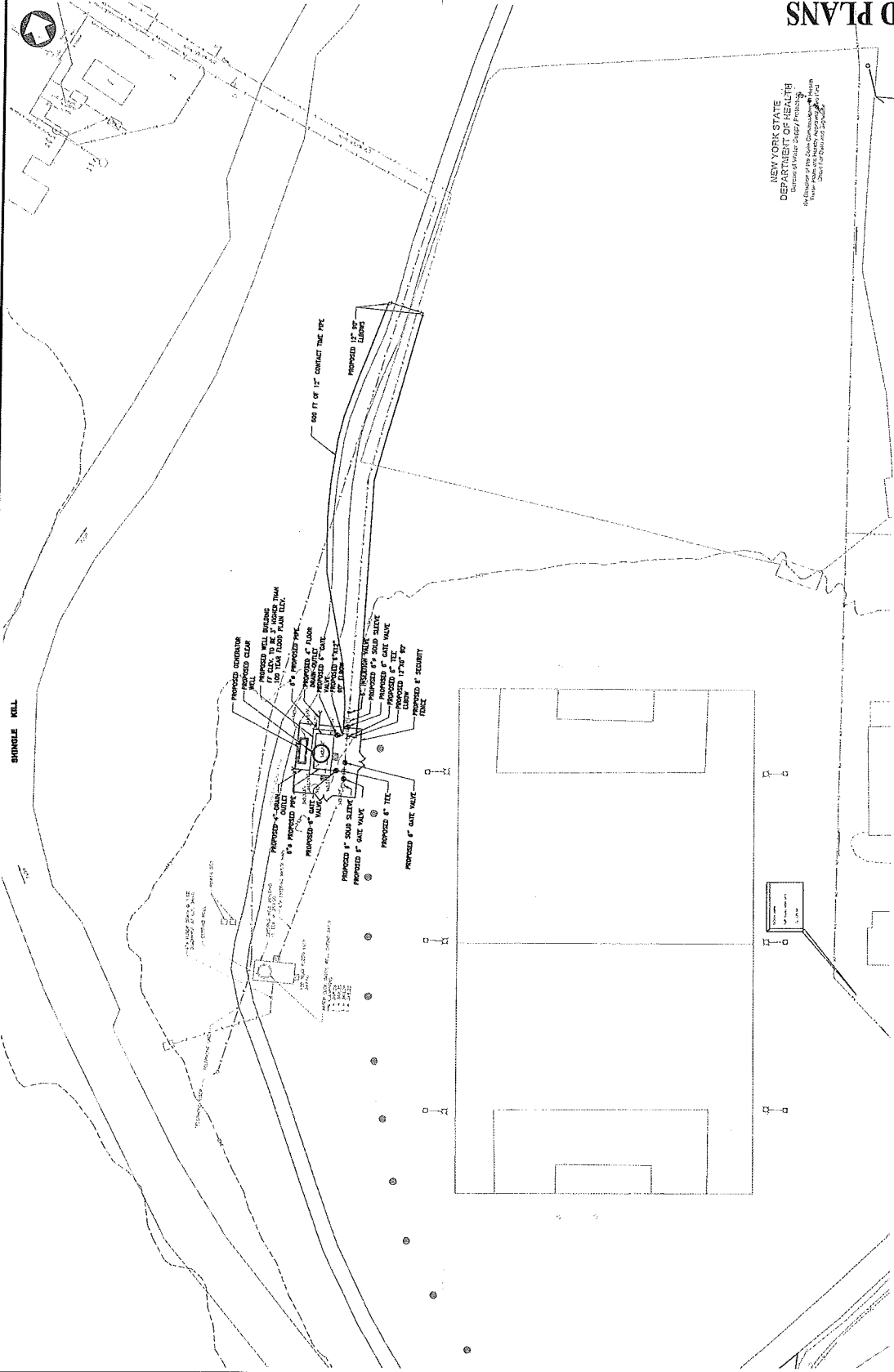
NO.	DATE	DESCRIPTION



**DELAWARE ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
25 WASHINGTON STREET, SUITE 200, OXFORD, OHIO 43087  
PROJECT NO.: 11-1331  
REVIEWED BY: [Signature]  
SCALE: [Blank]  
DRAWN BY: HJB  
DATE: 12/18

# BID PLANS

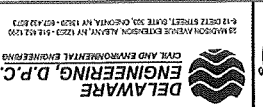
NEW YORK STATE  
DEPARTMENT OF HEALTH  
100 Rockefeller Plaza, 25th Floor  
New York, NY 10020  
Chief of Bureau and Supervisor



SHINGLE MILL



DATE: 8/2018  
 DRAWN BY: RAS  
 SCALE: AS SHOWN  
 PROJECT NO.: 181333  
 REVIEWED BY: [Signature]  
 8-11 DEZ STREET, SUITE 303, CHEVY CHASE, MD 20841-4103  
 DELAWARE ENGINEERING, P.C.  
 CIVIL AND ENVIRONMENTAL ENGINEERS



REVISIONS

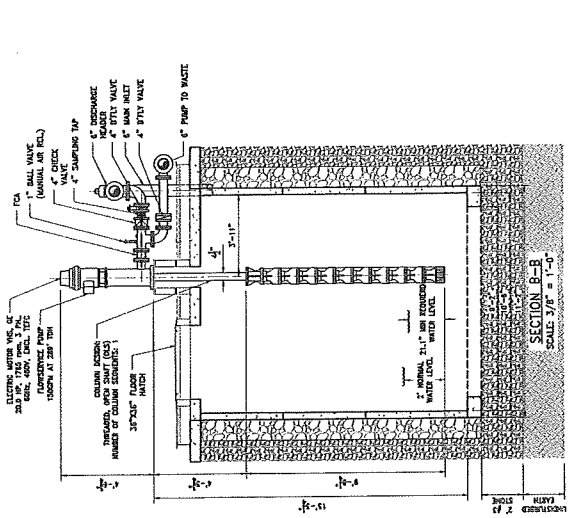
NO.	DATE	DESCRIPTION

CAIRO WATER IMPROVEMENTS/  
 NEW PARK WELL

PUMP STATION AND WELL DETAILS

SHEET  
**C-602**

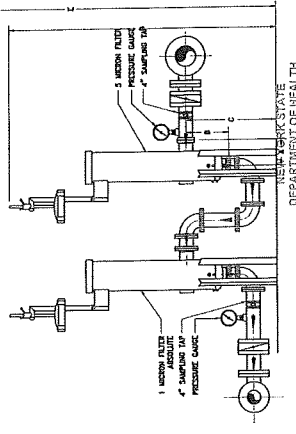
**BID PLANS**



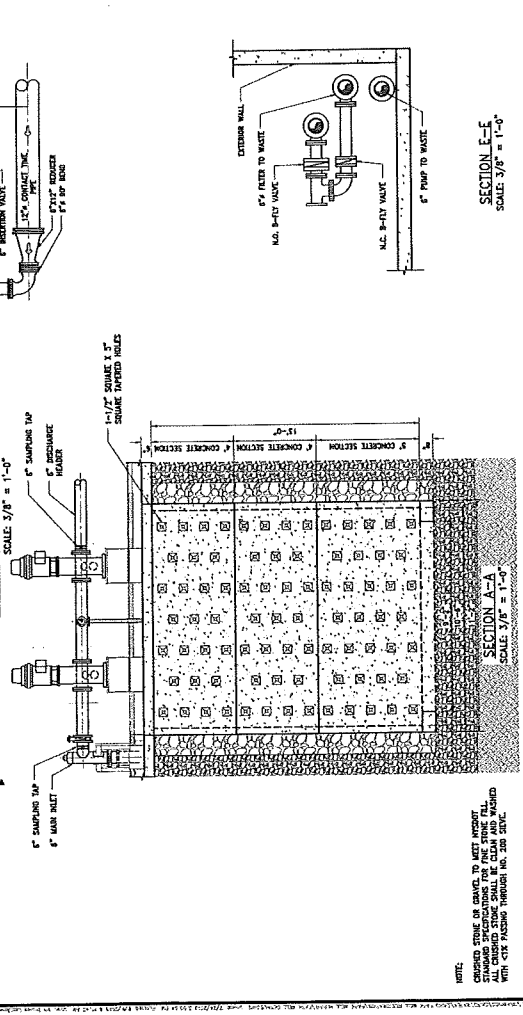
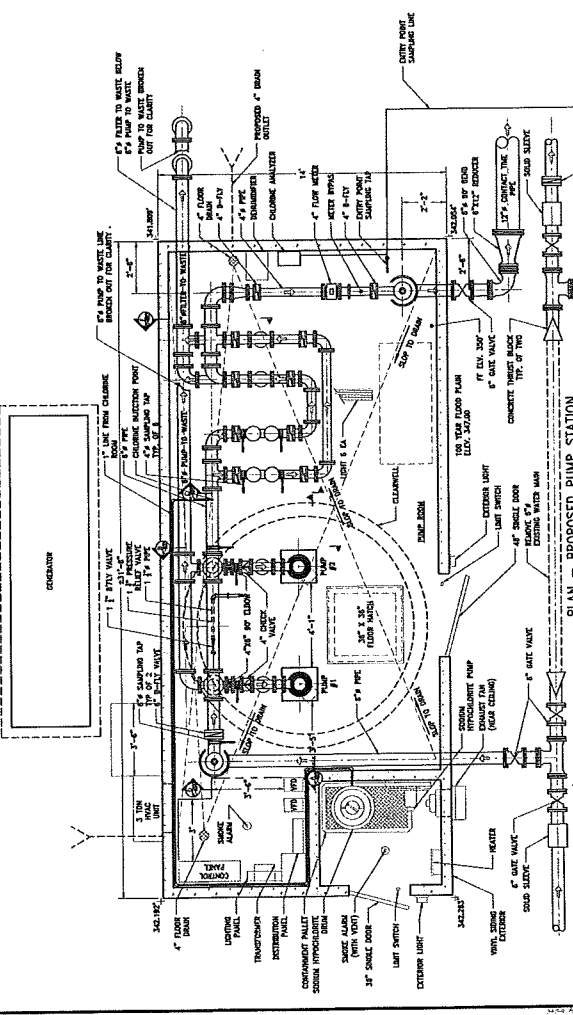
3/4\"/>

HOUSING MODEL	DIMENSIONS (IN)				
	A	B	C	D	E
11F-40F	8	7 1/2	12 1/2	2 1/2	7 1/8, 12 0

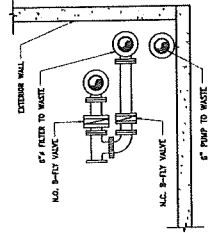
VERTICAL HOUSING MODELS (AVAILABLE FOR 40\"/>



SECTION C-C  
 SCALE: NOT TO SCALE



SECTION A-A  
 SCALE: 3/8\"/>



SECTION E-E  
 SCALE: 3/8\"/>

NOTE:  
 CONCRETE SHALL BE CAST IN PLACE AND CURED PROPERLY. ALL REINFORCING SHALL BE PLACED WITH 4\"/>

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Division of Water Supply Protection  
 110 South Street, Albany, NY 12242-5400  
 Phone: 518-474-2222  
 Fax: 518-474-2222



NO.	DATE	DESCRIPTION

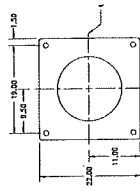
CARO WATER IMPROVEMENTS/  
 NEW PARK WELL

WELL AND FILTER DETAILS  
 SHEET: C-603

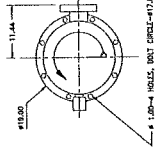
**BID PLANS**

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Division of Water Supply Protection  
 Department of the State's Commissioner of Health  
 Division of Water Supply Protection  
 State of New York  
 State of New York

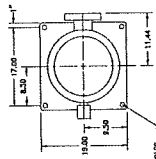
A



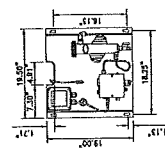
SOLE PLATE DETAIL  
 (IF SUPPLIED)  
 SCALE: NOT TO SCALE



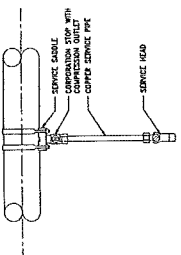
DISCHARGE HEADS TYPE: G.  
 GHP, C. CHP, FRA  
 SCALE: NOT TO SCALE



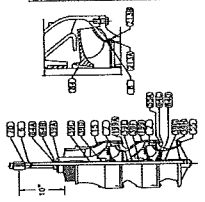
DISCHARGE HEADS  
 TYPE: S. SPH, FA  
 SCALE: NOT TO SCALE



CHLORINE ANALYZER  
 DETAIL  
 SCALE: NOT TO SCALE



SAMPLING TAP DETAIL  
 SCALE: 1" = 1'-0"



BOWL ASSEMBLY  
 SECTION  
 SCALE: NTS

ITEM NO.	PART DESCRIPTION	MATERIAL
1	FLANGE	BRASS
2	WASHER	BRASS
3	NUT	BRASS
4	SPRING WASHER	BRASS
5	WASHER	BRASS
6	NUT	BRASS
7	SPRING WASHER	BRASS
8	WASHER	BRASS
9	NUT	BRASS
10	SPRING WASHER	BRASS
11	WASHER	BRASS
12	NUT	BRASS
13	SPRING WASHER	BRASS
14	WASHER	BRASS
15	NUT	BRASS
16	SPRING WASHER	BRASS
17	WASHER	BRASS
18	NUT	BRASS
19	SPRING WASHER	BRASS
20	WASHER	BRASS
21	NUT	BRASS
22	SPRING WASHER	BRASS
23	WASHER	BRASS
24	NUT	BRASS
25	SPRING WASHER	BRASS
26	WASHER	BRASS
27	NUT	BRASS
28	SPRING WASHER	BRASS
29	WASHER	BRASS
30	NUT	BRASS
31	SPRING WASHER	BRASS
32	WASHER	BRASS
33	NUT	BRASS
34	SPRING WASHER	BRASS
35	WASHER	BRASS
36	NUT	BRASS
37	SPRING WASHER	BRASS
38	WASHER	BRASS
39	NUT	BRASS
40	SPRING WASHER	BRASS
41	WASHER	BRASS
42	NUT	BRASS
43	SPRING WASHER	BRASS
44	WASHER	BRASS
45	NUT	BRASS
46	SPRING WASHER	BRASS
47	WASHER	BRASS
48	NUT	BRASS
49	SPRING WASHER	BRASS
50	WASHER	BRASS

NO.	DATE	DESCRIPTION

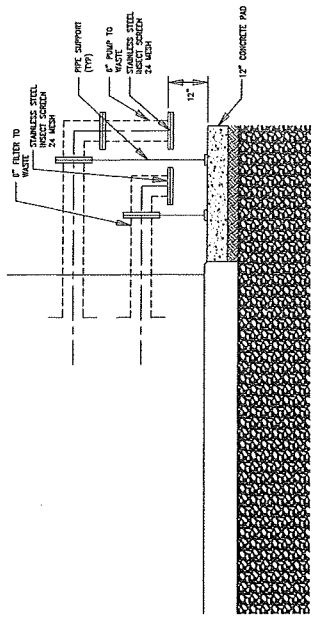


**DELAWARE ENGINEERING, D.P.C.**  
CIVIL AND ENVIRONMENTAL ENGINEERING  
23 WASHINGTON AVENUE, SUITE 303, OXFORD, NY 12021 • 518 452-2300  
F-120172 ENGINEER, STATE 303, OXFORD, NY 12021

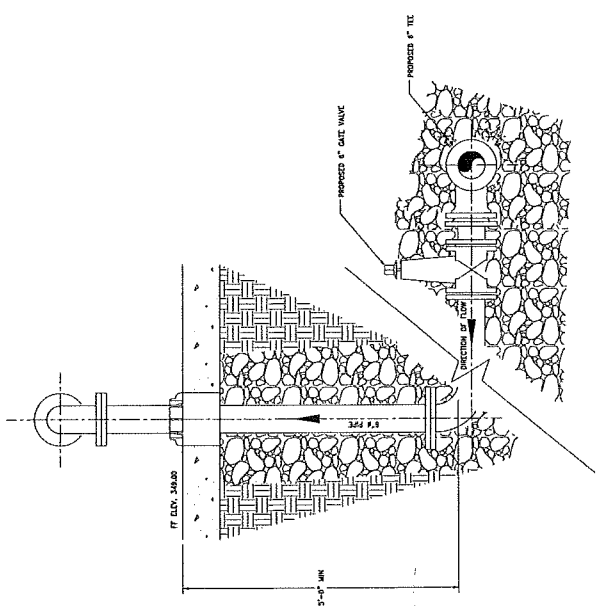
DATE: 8/25/18  
DRAWN BY: MJS  
SCALE: AS SHOWN  
REVIEWED BY: \_\_\_\_\_  
PROJECT NO.: 17-133

**BID PLANS**

NEW YORK STATE  
DEPARTMENT OF HEALTH  
Division of Public Safety/Prevention  
1990 New York State Building, Albany, NY 12242  
Approved for Bid by: \_\_\_\_\_  
Date: \_\_\_\_\_



FILTER TO WASTE OUTLET DETAIL  
SCALE: 3/8" = 1'-0"



SECTION D-D  
SCALE: 3/8" = 1'-0"

DATE: 04/29/2018  
 DRAWN BY:  
 SCALE:  
 PROJECT NO.: 17-1333  
 FILE:

DELAWARE  
 ENGINEERING, P.C.  
 CIVIL AND ENVIRONMENTAL ENGINEERING  
 28 MADISON AVENUE EXTENSION, NEWARK, NJ 07102 - 542.423.1293  
 8 NORTH WALKER STREET, LIBERTY, NJ 07938 - 609.855.9733  
 8 TOMMINGS STREET, WALTON, NY 12588 - 609.855.9733



NO.	DATE	REVISIONS	DESCRIPTION

CAIRO WATER  
 IMPROVEMENTS

PROTECTION OF TRAFFIC PLANS  
 MAINTENANCE AND

SHEET  
 T-101

**ADVANCED WARNING SIGN SPACING**

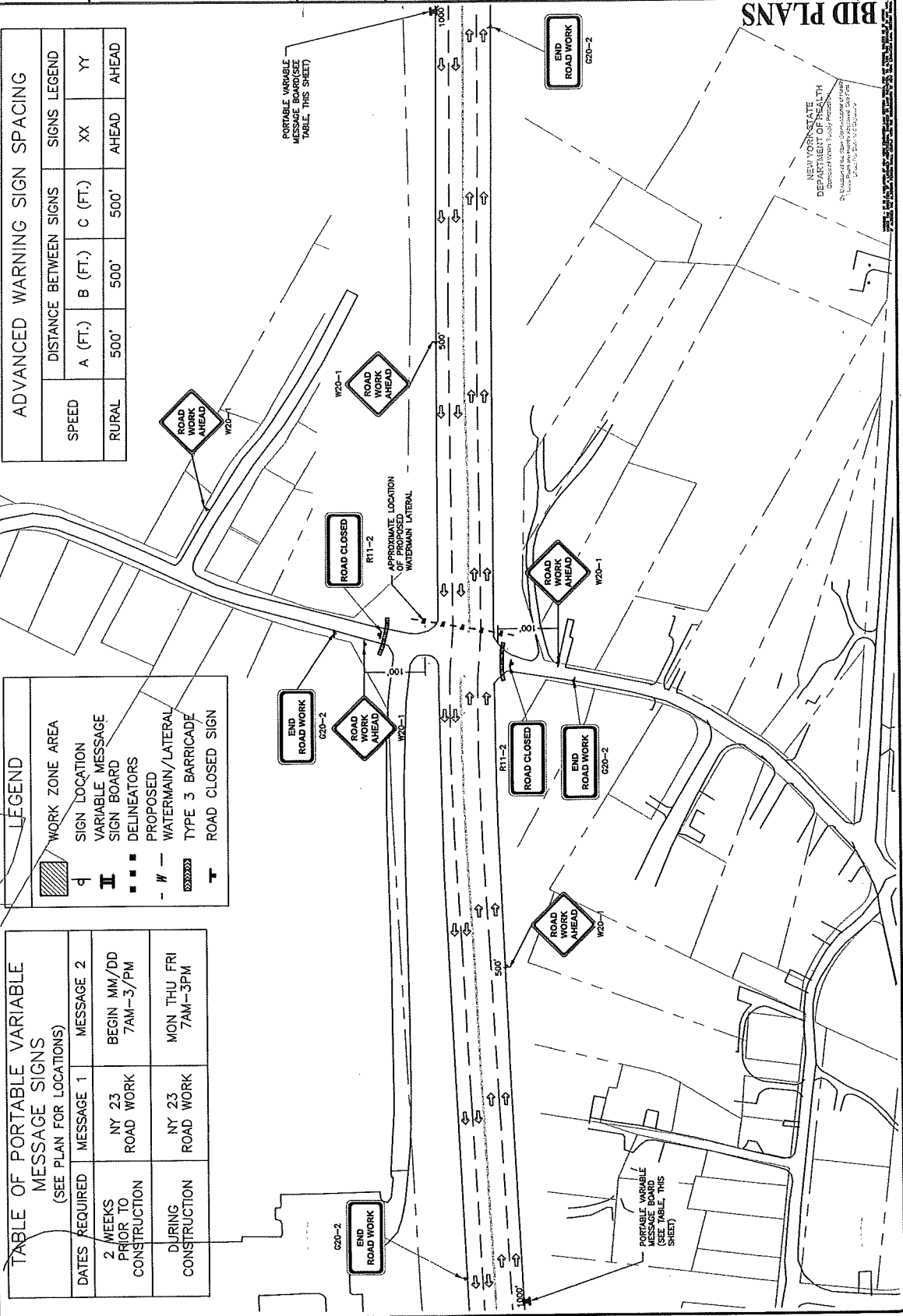
SPEED	DISTANCE BETWEEN SIGNS			SIGNS LEGEND
	A (FT.)	B (FT.)	C (FT.)	
RURAL	500'	500'	500'	XX AHEAD AHEAD

**LEGEND**

- WORK ZONE AREA
- SIGN LOCATION
- VARIABLE MESSAGE
- SIGN BOARD
- DELINEATORS
- PROPOSED WATERMAIN/LATERAL
- TYPE 3 BARRICADE
- ROAD CLOSED SIGN

**TABLE OF PORTABLE VARIABLE MESSAGE SIGNS (SEE PLAN FOR LOCATIONS)**

DATES REQUIRED	MESSAGE 1	MESSAGE 2
2 WEEKS PRIOR TO CONSTRUCTION	NY 23 ROAD WORK	BEGIN MM/DD 7AM-3/PM
DURING CONSTRUCTION	NY 23 ROAD WORK	MON THU FRI 7AM-3PM



**BID PLANS**

NEW YORK STATE  
 DEPARTMENT OF HEALTH  
 Division of Public Health  
 Division of Environmental Health  
 Division of Occupational Safety and Health  
 Division of Radiation  
 Division of Vector Control  
 Division of Zoonoses

HW-1007-CAI-01-V18-17-1333-Water Improvements, RT-171049



