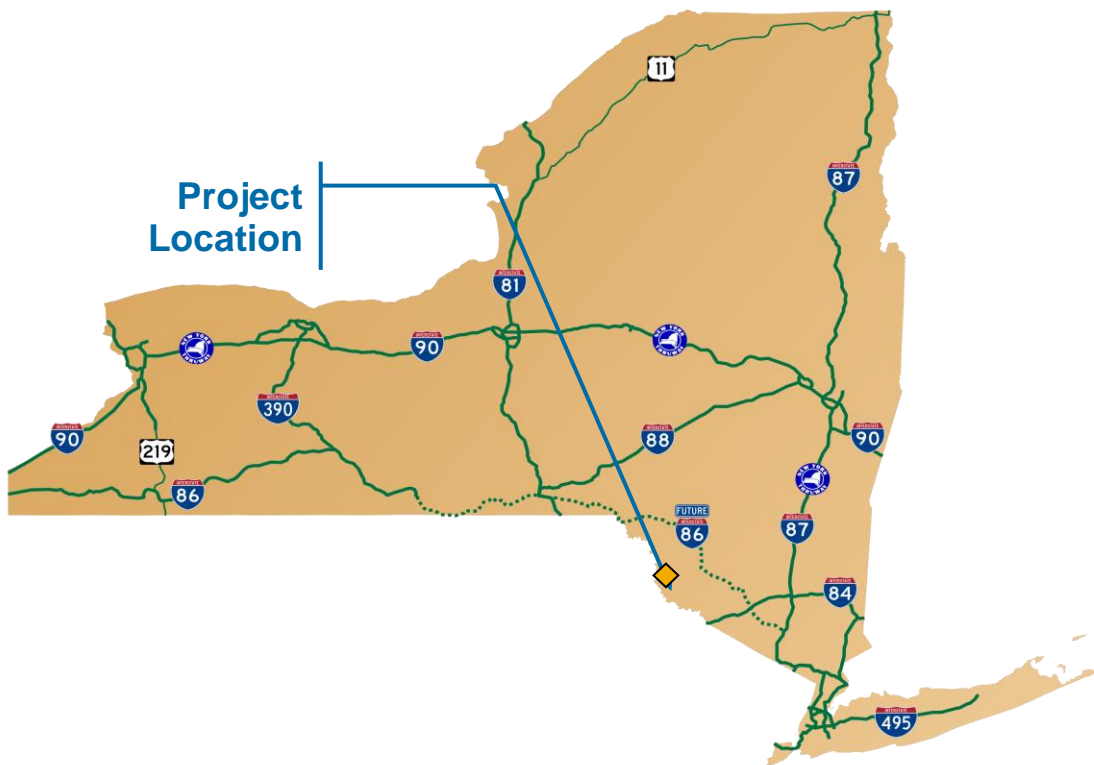


# Transportation Project Report

## Draft Project Scoping Report/Final Design Report

January 2020

Main Street over Little Lake Erie Outlet Culvert Replacement  
Project Identification Number (PIN): 9754.85  
Bridge Identification Number (BIN): NA  
Town of Tusten  
Sullivan County



Department of  
Transportation



**Project Approval Sheet****Milestones****Signatures****Dates**

<b>A.</b> Recommendation for, Scope and Design Approval:	The project cost and schedule are consistent with the Regional Capital Program.	
	<u>Name, Regional Program Manager</u>	<u>Date</u>
<b>B.</b> Recommendation for Scope and Design Approval	No nonstandard features have been identified, created, or retained.	
	<u>Name, (Select)</u>	<u>Date</u>
<b>C.</b> Public Hearing Certification (23 USC 128):	A public hearing was not required.	
	<u>Name, (Select)</u>	<u>Date</u>
<b>D.</b> Scope and Design Approval	The required environmental determinations have been made, and the preferred alternative for this project is ready for final design. No nonstandard features are being retained or created.	
	<u>Name, (Select)</u>	<u>Date</u>
<b>E.</b> Local Project Scope and Design Approval	The required environmental determinations have been made, and the preferred alternative for this project is ready for final design.	
	<u>Name, (Select)</u>	<u>Date</u>

## List of Preparers

### Group Director Responsible for Production of this Project Scoping Report/Final Design Report (PSR/FDR):

Joseph Bayer, PE, Principal, Shumaker Consulting Engineering & Land Surveying, DPC.

Description of Work Performed: Directed the preparation of the PSR/FDR in accordance with established standards, policies, regulations and procedures, except as otherwise explained in this document.

PLACE P.E. STAMP

**Note:** *It is a violation of law for any person, unless they are acting under the direction of a licensed professional engineer, architect, landscape architect, or land surveyor, to alter an item in any way. If an item bearing the stamp of a licensed professional is altered, the altering engineer, architect, landscape architect, or land surveyor shall stamp the document and include the notation "altered by" followed by their signature, the date of such alteration, and a specific description of the alteration.*

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## CHAPTER 1 – PROJECT DEVELOPMENT

### 1.1. Introduction

This report was prepared in accordance with the NYSDOT Project Development Manual, 17 NYCRR (New York Codes, Rules and Regulations) Part 15. Transportation needs have been identified (section 1.2), objectives established (1.2.3) to address the needs, and cost-effective alternatives developed (1.3). This project is 100% State funded.

#### 1.1.1. Project Location

- A. Local Road
- B. Main Street
- C. SH off state highway system
- D. BIN N/A; Culvert is Town Bridge #17 over Little Lake Erie Outlet
- E. Town of Tusten
- F. Sullivan
- G. Length is approximately 175 ft
- H. Limits of Work: Between Erie Avenue and Depot/Lake Streets (NYSDOT Milepoints and Reference Markers are N/A)

### 1.2. Purpose, Need and Objectives

#### 1.2.1. Project Need

Based on the Culvert Assessment Report (Appendix E) dated 11/21/17, the recommendation is to replace the superstructure and spillway as they are integral. The existing fascia beams are deteriorated, and live loads have been removed from the fascia beams by narrowing the deck to one lane. Note that the culvert is the spillway for a NYSDEC regulated dam. This culvert is the only connection to a residential neighborhood, sewer plant and one of Tusten's largest employers and needs to remain open for access to the neighborhood and emergency vehicles.

#### 1.2.2. Project Purpose

The purpose of this project is to replace the existing culvert in the original location with a pre-cast concrete box culvert within the earthen fill of the dam which carries Main Street over the Little Lake Erie outlet. Operational improvements will include returning two (2) lanes of traffic over Little Lake Erie outlet.

#### 1.2.3 Project Objectives

- (1) Restore the culvert to new condition for at least 50 years using cost effective techniques to minimize the life cycle cost of maintenance and repair.
- (2) Improve dam spillway and outlet controls which are integral to the culvert.
- (3) Improve dam to current design standards including overtopping protection.

### 1.3. Project Alternative(s)

Alternatives Under Consideration:

No Build: This alternative would not meet the project needs or objectives. The culvert would continue to deteriorate and eventually be closed due to structural deficiencies. This would sever access to a several residences, sewage treatment plant and commercial businesses.

## Alternative 1: Replace culvert with a precast concrete box culvert

This alternative will meet the project objectives and needs by continuing to provide access to the residences, sewage treatment plant and commercial properties from Main Street. There is no other access to these properties other than Main Street. The culvert and roadway embankment are a New York State Department of Environmental Conservation (NYSDEC) permitted dam. The culvert is the spillway and control structure. Hence the culvert and control structure will need to meet NYSDEC Dam requirements.

Alternatives Dismissed from Consideration: Since the culvert is controlled/permitted by DEC as a dam structure types are limited to a concrete box structure.

For a more in-depth discussion of the design criteria for the reasonable alternative(s) under consideration see Section 2.5 of this report.

**1.4 Project Effects****1.4.1 Environmental Classification**

Exhibit 1-1 Environmental Classification Summary				
NEPA Classification	None	BY	NYSDOT	
SEQRA Type:	II	BY	6 NYCRR Part 617	

**1.4.2 Comparison of Considered Alternatives**

Exhibit 1-2 Comparison of Considered Alternatives		
Category	Alternatives Evaluated	
	No Build	Preferred Alt. 1
Environmental Impacts		
Wetlands	None	No recorded wetlands
Cultural Resources (Section 106)	None	None (Concurrence from NYSOPRHP)
Section 4(f)	None	None

Endangered/ Threatened Species	None	May Affect, Not Likely to Adversely Affect the northern long eared bat Not likely to adversely affect dwarf wedgemussel Not likely to adversely affect bald eagle Not likely to adversely affect timber rattlesnake
Noise	None	Not anticipated
<b>Social Impacts</b>		
Property/Relocations	None	None
Mobility (Pedestrian, bicycle, transit, etc.)	No Effect	Placement of Bailey Bridge during construction. No effect.
Environmental Justice	No Effect	No disproportionate high and adverse effects to minority or low-income populations
General Social Groups	No Effect	No Effect
<b>Economic and/or Operational Impacts</b>		
Economic Impacts	No Effect	No Effect
Temporary Detours	No Effect	Placement of Bailey Bridge adjacent to existing bridge. No Effect.
Reduction of Parking	No Effect	No Effect
Operation at ETC +10	None	None
Utilities	None	No Effect
Construction Cost	None	\$659,000

### 1.4.3 Anticipated Permits/Coordination/Certifications

Exhibit 1-3 Anticipated Permits/Certifications/Coordination	
<u>Permits</u>	
<b>NYS Department of Environmental Conservation (NYSDEC):</b>	
<ul style="list-style-type: none"> <li>Article 15 Protection of Waters Permit</li> <li>Dam Permit</li> </ul>	
<b>Army Corps of Engineers (USACE):</b>	

<ul style="list-style-type: none"> <li>Nationwide Permit #3</li> </ul>
<b>Others</b>
<ul style="list-style-type: none"> <li>None</li> </ul>
<b><u>Coordination</u></b>
NYSDEC
New York State Historic Preservation Officer (SHPO)
US Fish and Wildlife Service
New York Natural Heritage Program
Municipality(ies) – Town of Tusten, Sullivan County

### 1.5 Preferred Alternative

Only one reasonable build alternative has been identified that meets the project objectives. A decision to enter final design will not be made until after the environmental determination and evaluation of the comments on the draft design approval document and comments received from the public informational meeting. The No Build Alternative will be retained for use as a baseline to measure and evaluate impacts that might accrue from the preferred alternative.

### 1.6 Project Schedule and Cost

Exhibit 1-4 - Project Schedule	
Activity	Date Occurred/Tentative
Scope/Design Approval	March 2020
ROW Acquisition	December 2020
Construction Start	April 2021
Construction Complete	December 2021

### 1.7 Public Involvement

Refer to Appendix G for the project's Public Involvement Plan and for related project correspondence.

Exhibit 1-6 Public Involvement Plan Schedule of Milestone Dates	
Activity	Date Occurred/Tentative
Initial Environmental Findings	2/26/2019

Exhibit 1-6 Public Involvement Plan Schedule of Milestone Dates	
Activity	Date Occurred/Tentative
Meeting with Town Officials	2/8/2019
Public Informational Meeting	March 2020
Current Project Letting date	February 2021

For additional information or to provide comments, please contact. . .

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Telephone: (607) 798-8081

Please include the six-digit Project Identification Number (PIN) 9754.85 in any correspondence.

The deadline for submitting comments is March 1, 2020.

The remainder of this report is a detailed technical evaluation of existing conditions, anticipated impacts of the one reasonable/preferred alternative and comparison to the null alternative, copies of technical reports and plans and other supporting information.



## CHAPTER 2 – EXISTING AND PROPOSED CONDITIONS AND CONSIDERATIONS

### 2.1 Functional Classification/National Highway System/Truck Access

Route(s)	Main Street
Functional Classification	Local Road
National Highway System (NHS)	No
Designated Truck Access Route	No
Qualifying Highway	No
Within 1 mile of a Qualifying Highway	No
Within the 16 ft vertical clearance network	No

### 2.2 Planning Considerations

#### 2.2.1 Abutting Highway Segments and Future Plans

Refer to abutting highway segments match the typical section of the existing highway with the project limits.

The Regional Planning Group has confirmed that there are no plans to reconstruct or widen this highway segment, or the adjoining segments, within the next 20 years.

#### 2.2.2 Local Plans for the Project Area

This project is on the approved Bridge New York Culvert Program. Project funding has been fully allocated within the Bridge New York Culvert Program.

The Regional Planning Group has reviewed the local master plan prepared for the Town of Tusten. This project is consistent with the local master plan.

There are no approved developments planned within the project area that will impact traffic operations.

#### 2.2.3. Access Control

Access is not controlled on Main Street. This project will not change the existing access control.

## 2.3. Traffic Considerations

### 2.3.1 Traffic Volumes

		Main Street	
	Year	ADT	DHV
	Existing 2017	250	40
	ETC (2020)	250	40
	ETC+10	NA	NA
	ETC+20	NA	NA
	ETC+30 (2050)	350	55

Note: ETC is the Estimated Time of Completion

Forecast no-build design year traffic volumes – The Estimated Time of Completion (ETC) + 30 design year was selected per PDM Appendix 5.

### 2.3.2 Speed Studies

Route	Main Street
Existing Speed Limit (mph)	30
Operating Speed (mph) and Method Used for Measurement	30
Travel Speed and Delay Runs for Existing Conditions	Not required since existing LOS is C or better.
Travel Time and Delay Runs Estimates	Not required since existing LOS is C or better.

### 2.3.3 Level of Service Analysis

Capacity improvements are not anticipated within 30 years.

Exhibit 2-4 Level of Service – Alternative X				
LOCATION	EXISTING (2017)	ETC (2020)	ETC+10	ETC+30
Main Street	A	A	A	A

Exhibit 2-5 Intersection Level of Service and Delays (sec) Alternative X					
YEAR ETC 2020	EB	WB	NB	SB	Overall
<b>Intersection of Main Street / Erie Avenue</b>					
EXISTING 2019		A	A	A	A
ETC+20 YYYY					
ETC+30 2050		A	A	A	A
<b>Intersection of Main Street / Depot Street / Lake Street</b>					
EXISTING 2019	A	A		A	A
ETC YYYY					
ETC+20 YYYY					
ETC+30 2050	A	A		A	A

### 2.3.4 Safety and Crash History Analysis

A crash analysis was performed in accordance with NYS Highway Design Manual Chapter 5. The analysis extends from the Main Street intersection with 5<sup>th</sup> Street to the Main Street intersection with Depot St. / Lake Street. In the most recent five year period, there was only one accident identified. See Appendix C. That accident was not related to the culvert, and is not preventable within the scope of this project. A truck struck the adjacent railroad overpass as it was unaware of the height restriction.

### 2.3.5 Pedestrians, Bicyclists and Transit (Complete Streets)

#### Pedestrians

There are no existing separate provisions for pedestrians within the project limits. There is low-density residential development in the project area that generates infrequent pedestrian travel. The pedestrian trips that do exist are anticipated to be primarily recreational trips without a specific destination along with some residence to downtown travel. Pedestrians may legally use the 6-ft. paved shoulder per the NYS Vehicle and Traffic Law Section 1156(b). No pedestrian-specific accommodations are warranted. This is consistent with HDM Chapter 18 and the Capital Projects Complete Streets Checklist in Appendix C.

#### Bicyclists

The existing level of and potential for bicycling is characterized as low due to the low-density residential nature of the project area. There are generators of infrequent bicycle traffic within and near the project limits, such as a commercial/downtown district. The route is not a designated bicycle route.

Given the rural nature of the roadway, a shoulder is the primary means of accommodating bicyclists. Bicyclists may legally use the paved shoulder and roadway consistent with the NYS Vehicle and Traffic Law Section 1234.

The existing shoulder width is 2 ft. The proposed shoulder width is 4 ft. per the shoulder width standard for a non-NHS local road with a design year ADT of 250.

Transit

Public transit does not exist in the project area.

**2.4 Structures****2.4.1 Structures Data**

There is not a bridge within the project limits and a bridge is not being proposed.

Exhibit 2-7 Structure Data		
DATA	EXISTING STRUCTURE	PROPOSED STRUCTURE
BIN	NA	NA
Feature Carried/Crossed	NA	NA
Type of Bridge	NA	NA
Number and Length of Spans	NA	NA
Lane Width(s)	NA	NA
Shoulder Width(s)	NA	NA
Sidewalk(s)	NA	NA
Utilities Carried	NA	NA
Horizontal Clearance(s)	NA	NA
Vertical Clearance(s)	NA	NA
State Condition Rating	NA	NA

Waterway –

A Coast Guard Checklist is not required.

**2.4.2 Hydraulic Considerations**

See Appendix J.

**2.5 Design Standards****2.5.1 Critical Design Elements**

**Exhibit 2-8  
Critical Design Elements for Main Street**

<b>PIN:</b>		9754.85	<b>NHS/Non-NHS</b>	Non-NHS	
<b>Route No. &amp; Name:</b>		Main Street	<b>Functional Classification:</b>	Local Street	
<b>Project Type:</b>		Culvert Replacement	<b>Design Classification/Character:</b>	Local Road	
<b>% Trucks:</b>		10% estimated	<b>Terrain:</b>	Level	
<b>ADT:</b>		250	<b>Truck Access/Qualifying Hwy.</b>	Access-No; Qualifying-No	
Element		Standard		Existing Condition	Proposed Condition <sup>2</sup>
1	Design Speed	30 MPH HDM Section 2.7.4.1.A		30 MPH posted	30 MPH
2	Lane Width	11 ft HDM Section 2.7.4.1.B		11 ft	11 ft
3	Shoulder Width	4 ft HDM Section 2.7.4.1 C		4 ft	4 ft
4	Horizontal Curve Radius	167 ft Min (at $e_{max}=8\%$ ) HDM Section 2.7.4.1. D		150**	150
5	Superelevation	4 % Max. HDM Section 2.7.4.1. E		NA	NA
6	Stopping Sight Distance (Horizontal and Vertical)	175 ft Min. HDM Section 2.7.4.1.F		695 ft	695 ft
7	Maximum Grade	7% HDM Section 2.7.4.1.G		1.15%	1.15%
8	Cross Slope	1.5% Min. to 3% Max. HDM Section 2.7.4.1.H		2%	2%
9	Vertical Clearance	BM Section 2		NA	NA
10	Design Loading Structural Capacity	NA		NA	NA
11	Americans with Disabilities Act Compliance	Comply with HDM Chapter 18 procedures <sup>3</sup>		No	Yes

Notes:

- 1 The Regional Traffic Engineer has concurred that the use of a Design Speed of 30 mph is consistent with the anticipated off-peak 85<sup>th</sup> percentile speed within the range of functional class speeds for the terrain and volume.
- 2 \*\* Denotes non-standard feature

## 2.5.2 Other Design Parameters

Element		Criteria
1	NYSDEC Permitted Dam	Outlet Control Structure/Emergency Spillway

## 2.5.3 Existing and Proposed Highway Plan and Section

The proposed highway section will remain the same. Cross slopes will be adjusted where feasible and necessary. Existing longitudinal grade will be maintained. Existing geometry will be maintained.

Refer to Appendix A for a typical section.

## 2.5.4 Nonstandard/Nonconforming Features

The following nonstandard feature is proposed to be retained.

### Nonstandard Features

- 1) Horizontal Curve Radius

## 2.6 Other Infrastructure Considerations

### 2.6.1 Pavement and Shoulder Conditions

The pavement along Main Street is in fair condition. The project will include new full-depth asphalt concrete pavement.

### 2.6.2 Right of Way

Exhibit 2-15 Anticipated Right-of-Way Acquisitions					
Owner	Tax Map No.	Type of Acquisition	Estimated Acquisition Area	Parcel Size	Percentage of Acquisition
Yard Sale Shop, Inc.	12-1-1 & 12-1-2	TE	281 SF	5,227 SF	5%
Roger Dirlam	12-1-3	TE	5,592 SF	33,106 SF	16.9%
Roger Dirlam	12-1-3	FEE	2,410 SF	33,106 SF	7%
Stephen Stuart & Laura M. Stuart	12-3-1	FEE	657 SF	10,890 SF	6%
Town of Tusten	12-3-11	TE	1,161 SF	229,997 SF	<1%
Ronald C. Littke & Benita Hack	12-3-12	TE	219 SF	4,356 SF	5%
Ronald C. Littke & Benita Hack	12-3-12	FEE	109 SF	4,356 SF	2.5%

### 2.6.3 Geotechnical

Geotechnical investigation was undertaken. See report in Appendix I.

### 2.6.4 Access Management

Access to Main Street will be uncontrolled.

## 2.6.5 Traffic Control Devices

2.6.5.1. (1) Traffic Signals - No new traffic signals are proposed.

2.6.5.2 (2) Signs – New signs and pavement markings will be added where required.

## 2.6.6 Drainage Systems

Culvert (NYSDEC Regulated spillway) will be replaced with a concrete pre-cast box culvert.

## 2.6.7 Utilities and Lighting

Utility involvement is anticipated to be the temporary relocation of two (0) utility poles for the temporary structure and approaches. Any utility relocation will be coordinated by the Design Engineer and the Town of Tusten.

Exhibit - 2-16 Utilities				
Owner	Type	Location/Side	Length	Condition/Conflict
NYSEG	OH Electric	West Side	140 FT	Temporary Relocation
Frontier Communications	OH Phone	West Side	140 FT	Temporary Relocation
Spectrum Cable	Cable	West Side	140 FT	Temporary Relocation

## 2.6.8 Guide Railing, Median/Roadside Barriers and Impact Attenuators

The existing guiderail will be upgraded to current standards.

Exhibit 2-17 Proposed Location of Guide Railing, Median Barriers and Impact Attenuators			
Type	Location	Side	Length (FT)
Box Beam	Between Erie Ave and Lake/Depot St	Left	200±
Box Beam	Between Erie Ave and Lake/Depot St	Right	175±

## 2.6.9 Intelligent Transportation Systems (ITS)

No ITS measures are planned.

## 2.6.10 Landscape and Community Enhancement Considerations

Lawns and ornamental trees will be reestablished/replaced where disturbed in temporary detour area.

## 2.7 Work Zone Safety and Mobility

- A. Work Zone Traffic Control Plan (WZTCP)– Traffic will be maintained on-site during construction utilizing a temporary structure to the west. A traffic control plan implementing staged construction will be included to the contract plans to minimize impact to both pedestrian and vehicular access as well as businesses on Depot Street. Provisions for access to all businesses during

construction will be incorporated into the construction contract. Construction activities will not affect access for emergency services vehicles.

- B. Special Provisions – The WZTCP will need to be coordinated with local officials, emergency services and residents.

### **2.7.1 Transportation Management Plan**

The Region has determined that the subject project is not significant per 23 CFR 630.1010.

A Transportation Management Plan (TMP) will be prepared for the project consistent with 23 CFR 630.1012. The TMP will consist of a Temporary Traffic Control (TTC) plan.

### **2.7.2 Proposed Work Zone Traffic Control**

Refer to Appendix A of this report for the proposed traffic control stages. Two-way traffic will be maintained at all times. A temporary structure will be utilized during the culvert replacement. Two-way traffic will be maintained when temporary is removed and area restored utilizing lane closures and flaggers. No off-site detours will be required. Routes for emergency vehicles will be maintained and open during construction. The details for the work zone traffic control will be prepared and evaluated during final design. No additional environmental impacts will occur.

#### Special Provisions

Due to the close proximity to residences and the ability to maintain traffic with acceptable delays during the daylight hours, nighttime construction will not be utilized. The use of time related provisions will be evaluated during final design. The work zone traffic control will need to be coordinated with local officials and residents.

## **2.8 Additional Considerations**

### **2.8.1 Constructability Review**

### **2.8.2 Ownership and Maintenance Jurisdiction**

No changes to maintenance jurisdiction or ownership are anticipated.

### **2.8.3 NYS Smart Growth Public Infrastructure Policy Act (SGPIPA)**

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act (SGPIPA).

To the extent practicable this project has met the relevant criteria as described in ECL § 6-0107. The Smart Growth Screening Tool was used to assess the project's consistency and alignment with relevant Smart Growth criteria; the tool was completed by the Region's Planning and Program Management group in February of 2019 and reflects the current project scope. The Smart Growth Screening Tool is included in Appendix B.

#### **2.8.4 Miscellaneous Information**

None



## CHAPTER 3 – SOCIAL, ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS

Refer to the Social, Economic and Environmental Resources Checklist (SEERC) included in Appendix B for information on all environmental issues for which the project was screened.

### 3.1 National Environmental Policy Act (NEPA)

This project is 100% State funded; therefore, following the FHWA NEPA process is not required.

### 3.2 State Environmental Quality Review Act (SEQRA)

In accordance with 6 NYCRR Part 617, the Department has determined that this project meets the requirements of a SEQRA Type II Action. A Type II Action is one that is of a class or type of action which has been determined in 6 NYCRR Part 617 to not have a significant effect on the environment. No further SEQRA processing is required. The project is identified as Type II per 6 NYCRR Part 617, Subdivision (c), Item 2.

### 3.3 Additional Environmental Information

#### 3.3.1 Surface Waters

The project is situated adjacent to Little Lake Erie, and spans a stream known as the Little Lake Erie outlet. The substrate consists of cobble, gravel and silt. A concrete slab is located in the Little Lake Erie culvert immediately west of the culvert. The outlet stream is regulated by the NYSDEC as a Class B Standard B waterbody. Although not mapped, Little Lake Erie would presumably also be considered a Class B Standard B waterbody. These waterbodies flow directly into the Delaware River, approximately 1,200 feet downstream of the culvert crossing. Neither Little Lake Erie nor the outlet is listed on the NYSDEC 303(d) list of impaired waters.

Any work below the ordinary high water mark of either the lake or the outlet stream would require authorizations from the USACE and NYSDEC.

#### 3.3.2 Flood Zone

Per FEMA Flood Map 36105C0531F, the bridge and outlet stream are within the 100-year flood zone. The proposed rehabilitation project will not include an increase in impervious area or construction of new structures which would increase the base flood elevation.

#### 3.3.3 Threatened and Endangered Species

An official list of federally-listed species in proximity to the project has been obtained from the U.S. Fish & Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) website. The USFWS identifies the endangered dwarf wedgemussel (*Alasmodonta heterodon*) and the threatened northern long-eared bat (*Myotis septentrionalis*) as potentially within the project area.

Correspondence with the New York Natural Heritage Program (NYNHP) was initiated on May 28, 2019. A response letter dated June 24, 2019 indicates the threatened bald eagle (*Haliaeetus leucocephalus*) has been documented in two locations within 0.75 miles of the project site. Further, the threatened timber rattlesnake (*Crotalus horridus*) has been documented within 1 mile of the project site, and the unlisted swallowtail shiner (*Notropis procne*) has been documented within 275 yards northwest of the project site. The rapids clubtail (*Phanogomphus quadricolor*), green-faced clubtail (*Hylogomphus viridifrons*), spine-

crowned clubtail (*Hylogomphus abbreviatus*), cobra clubtail (*Comphurus vastus*), and Delaware River clubtail (*Gomphurus septima delawarensis*) have been documented within 0.35 miles of the project site. The rapids clubtail is considered vulnerable in New York State. The green-faced clubtail, spine-crowned clubtail, cobra clubtail, and Delaware River clubtail are all considered critically imperiled in New York State. The Delaware River Clubtail is considered Globally Rare. The alewife floater (*Anodonta implicata*) has been documented in the Upper Delaware River and is considered critically imperiled in NYS. Floodplain Grassland's are documented within 0.2 miles northwest of the project site; they are considered an Uncommon Community Type.

Suitable summer roosting habitat for the northern long-eared bat is described as trees 3 inches or greater in diameter at breast height, living or dead, with cracks, crevices, holes, broken limbs, and/or loose bark. Trees meeting this description were observed within the immediate project area. Mature trees are common along the outlet stream to the northwest of the bridge. It is anticipated that tree clearing may be required to accommodate the project. To avoid impacts to the northern long-eared bat, tree clearing should be limited to the November 1 – March 31 timeframe.

The dwarf wedgemussel is a small freshwater mussel found in slow-moving streams and rivers. Coordination with the NYSDEC Bureau of Habitat has confirmed that this location is not within the NYSDEC's screening layer for this species, and they will not require a mussel survey. This project is not likely to adversely affect this species.

### 3.3.4 Section 106

A review of the NYS Office of Parks Recreation and Historic Preservation (NYSOPRHP) Cultural Resources Information System (CRIS) website revealed that the project is within an archaeologically sensitive area. Coordination with the NYSOPRHP was initiated on May 13, 2019 requesting concurrence from the SHPO that 61 culverts, including the culvert referenced in this project, were not eligible for the National Register of Historic Places. A letter was received from the NYSOPRHP on May 24, 2019, stating that the 61 culverts listed on the document "National Register Eligibility Recommendations with Supporting Information (Non-Bundled Culverts)" are not eligible for the National Register. No historic structures are present within the project area. The Methodist church on Lake Road, approximately 350 feet south of the bridge, is listed on the National Register of Historic Places. This resource is not anticipated to be affected by the activities of this project.

### 3.3.5 Asbestos/Hazardous Materials/Hazardous Waste

The project area was screened for suspect asbestos-containing materials (SACM) on February 26, 2019. The existing structure was found to be constructed mostly of non-suspect materials such as bare concrete, metal, and plastic. Two SACMs were noted; a white masonry coating on the concrete structure, and a black tar/adhesive under the steel footers of the metal railing. These materials have not been sampled or analyzed by an approved laboratory, and should be considered SACM unless proven negative by laboratory analysis.

The project area was concurrently visually screened for hazardous materials including lead-based paints and polychlorinated biphenyls (PCBs). One white paint was noted on the concrete structure. No suspect PCBs were observed. The paint was not sampled and has not been analyzed by an approved laboratory.

A visual screening for hazardous wastes and contaminated materials was also conducted concurrently with the asbestos, lead, and PCB screenings. Small amounts of miscellaneous trash were noted throughout the project area. No signs of staining, stunted or stressed vegetation, spills, odors, or other indicators of contaminated were observed. The surrounding businesses were noted to be a lumber yard, shop, pub, and The River Reporter newspaper. The nature of these businesses does not suggest there is an increased likelihood of hazardous wastes or contaminated materials.

A review of federal and state databases was completed by Environmental Data Resources (EDR) for the Site. The results of this review were presented by EDR in an EDR Radius Map™ dated April 8, 2019. The EDR report was compiled in accordance with ASTM standards for a government record review and provided information which included ASTM and Non-ASTM sources of information.

Historical topographic maps of the area indicate that Main Street was constructed in its current alignment as early as 1920. Historic maps also depict a railroad running north of the project site, and limited development of structures as early as 1920. Additional development of roadways and structures in the project vicinity occur as early as 1968. Historical aerial imagery confirms the development indicated in historical topographic maps.

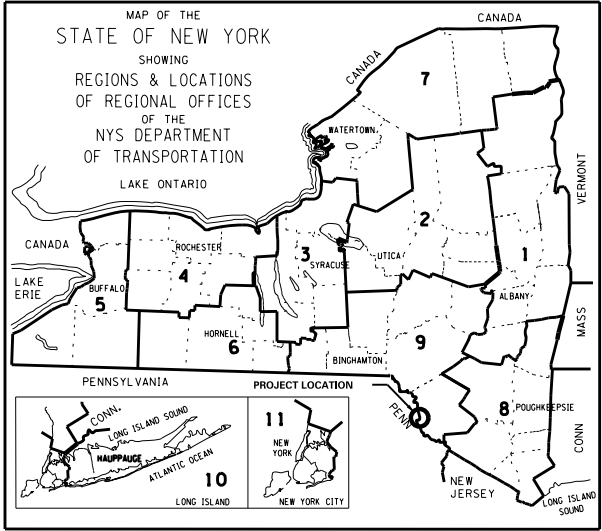
The EDR report identified federal and state database listings in the project vicinity on the following databases: NY LTANKS, NY Spills, NPL, SEMS, US ENG CONTROLS, US INST CONTROL, ROD, PRP, NY UST, RCRA NonGen/NLR, FINDS, ECHO, NY AST. The U.S. Post Office on Main Street (approximately 0.1 miles north) is associated with two spills, neither of which are thought to represent a concern to this project. No other recognized environmental concerns were identified.



# **APPENDICES**

# APPENDIX

## A



TOWN OF TUSTEN  
DEPARTMENT OF PUBLIC WORKS  
MAIN ST OVER LITTLE LAKE ERIE OUTLET - CULVERT REPLACEMENT  
TOWN OF TUSTEN  
SULLIVAN COUNTY, NEW YORK 12764

DRAFT DESIGN REPORT

TYPE OF CONSTRUCTION  
CULVERT REPLACEMENT

STANDARD SHEETS

203-01, 203-04, 209-01, 209-05, 402-01, 603-05, 606-04,  
609-03, 619-01, 619-10, 619-11, 619-12, 619-66, 663-05

SUBMITTED IN ACCORDANCE WITH THE HIGHWAY LAW AND THE  
STANDARD SPECIFICATIONS OFFICIALLY FINALIZED AND  
ADOPTED ON SEPTEMBER 01, 2019 AS POSTED ON THE DEPARTMENT'S  
WEBSITE.

CONTRACTOR'S NAME \_\_\_\_\_

AWARD DATE \_\_\_\_\_

COMPLETION DATE \_\_\_\_\_

FINAL ACCEPTANCE DATE \_\_\_\_\_

REGIONAL DIRECTOR \_\_\_\_\_

ENGINEER IN CHARGE \_\_\_\_\_

FINAL COST TOTAL \_\_\_\_\_

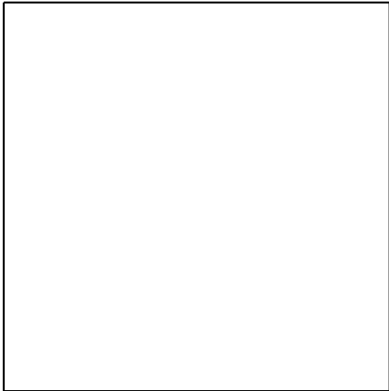
FISCAL SHARE	COST(S)

PREPARED AND RECOMMENDED BY

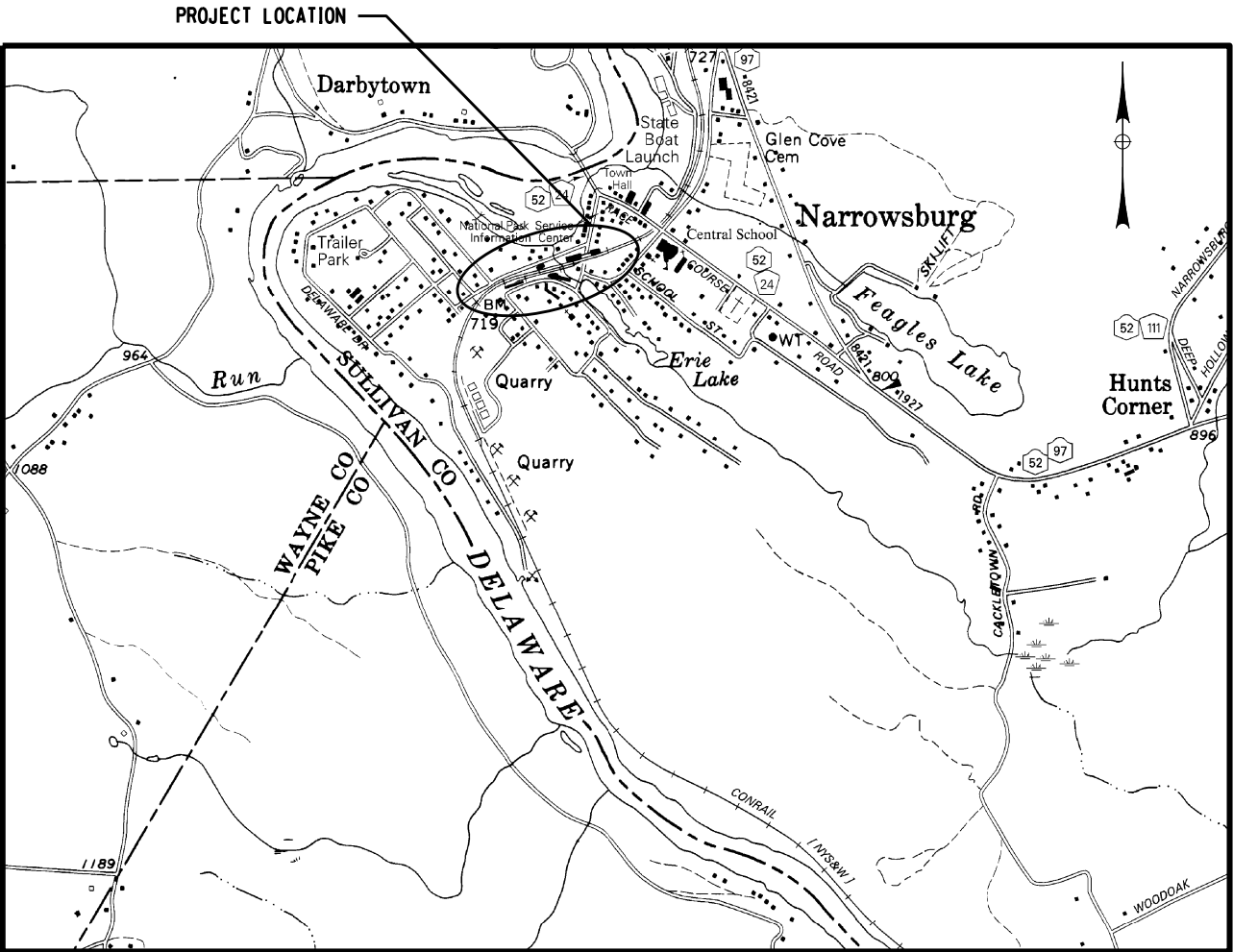
**SHUMAKER**  
Consulting Engineering & Land Surveying, P.C.

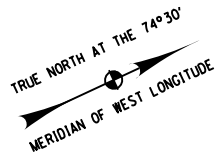
JAMES CUMMINGS, PE  
NYSPE NO. 080958

DATE



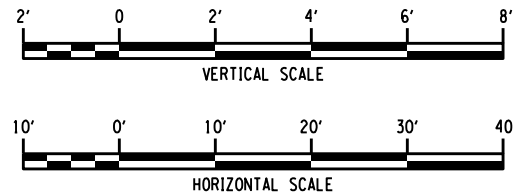
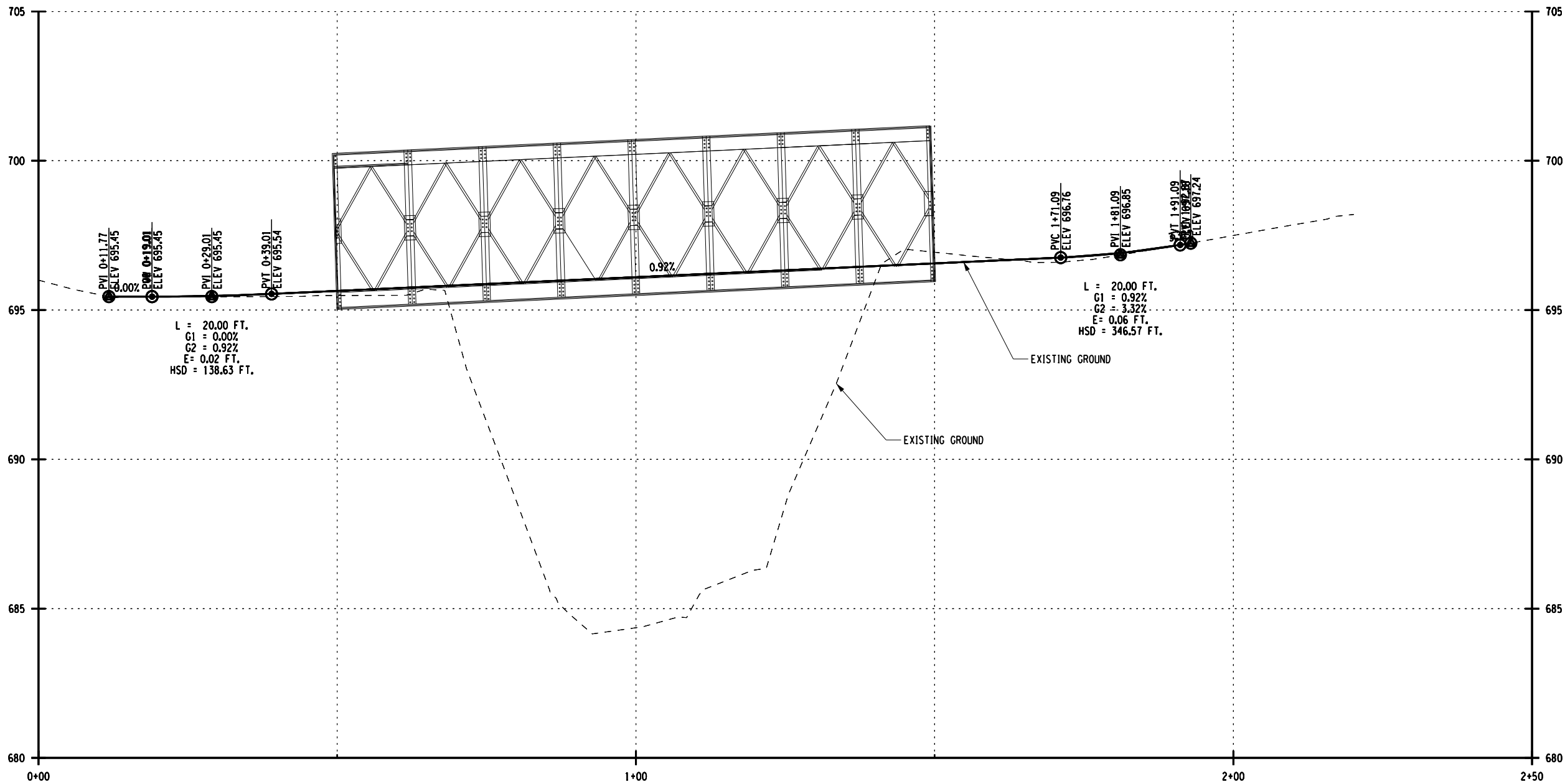
SHUMAKER CONSULTING ENGINEERING  
& LAND SURVEYING, P.C.  
**DRAFTING ALTERATION**  
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OR LAND SURVEYOR SHALL STAMP THE  
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HER SIGNATURE, THE DATE OF SUCH  
ALTERATION, AND SPECIFIC  
DESCRIPTION OF THE ALTERATIONS.





**SHUMAKER**  
Consulting Engineering & Land Surveying, P.C.





NOTE:  
1. ABUTMENTS NOT SHOWN FOR CLARITY.

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AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MAIN STREET OVER LITTLE LAKE ERIE	PIN 9754.85	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED	CONTRACT NUMBER	
	PROPOSED CULVERT REHABILITATION						
	TOWN OF TUSTEN (NARROWSBURG)						
	NEW YORK						
COUNTY: SULLIVAN	REGION: 9	TEMPORARY BRIDGE PROFILE				DRAWING NO. PRO-2 SHEET NO. 4	
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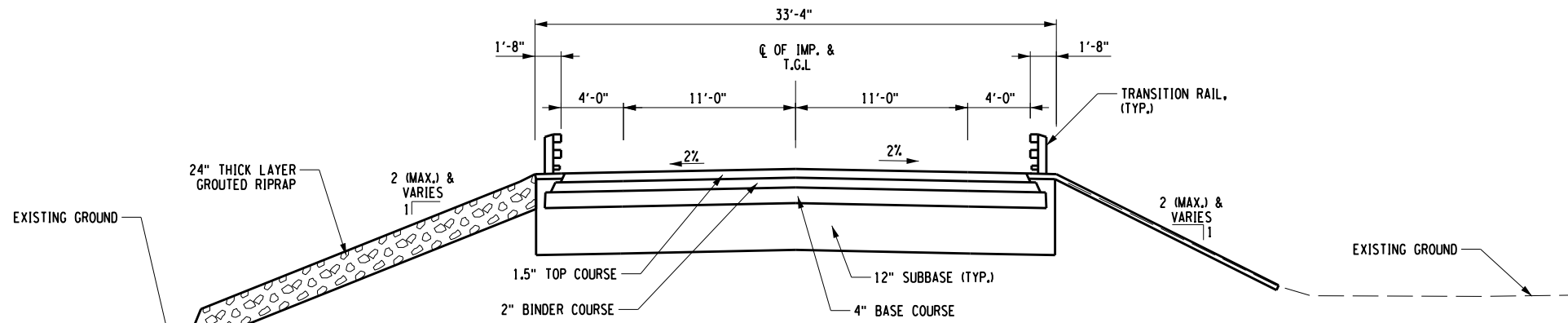
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DESIGN

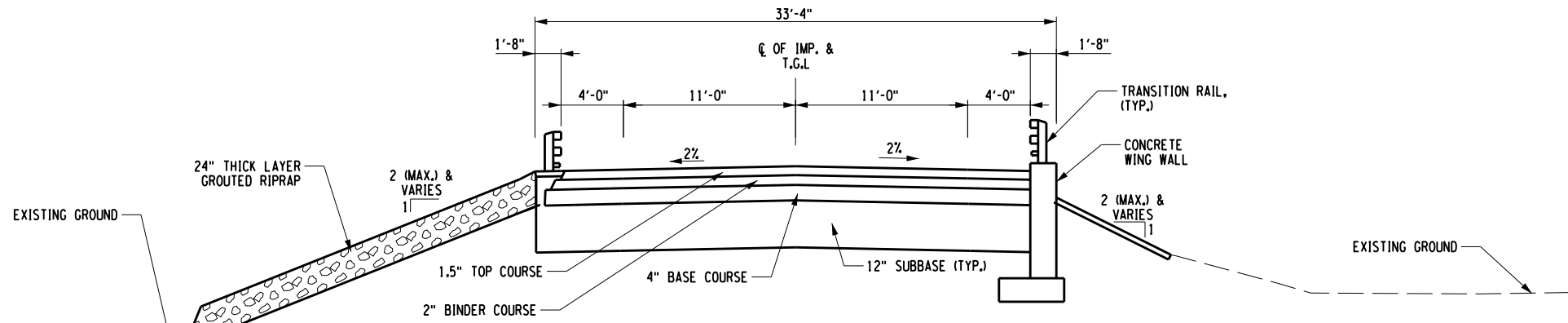
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DESIGN SUPERVISOR



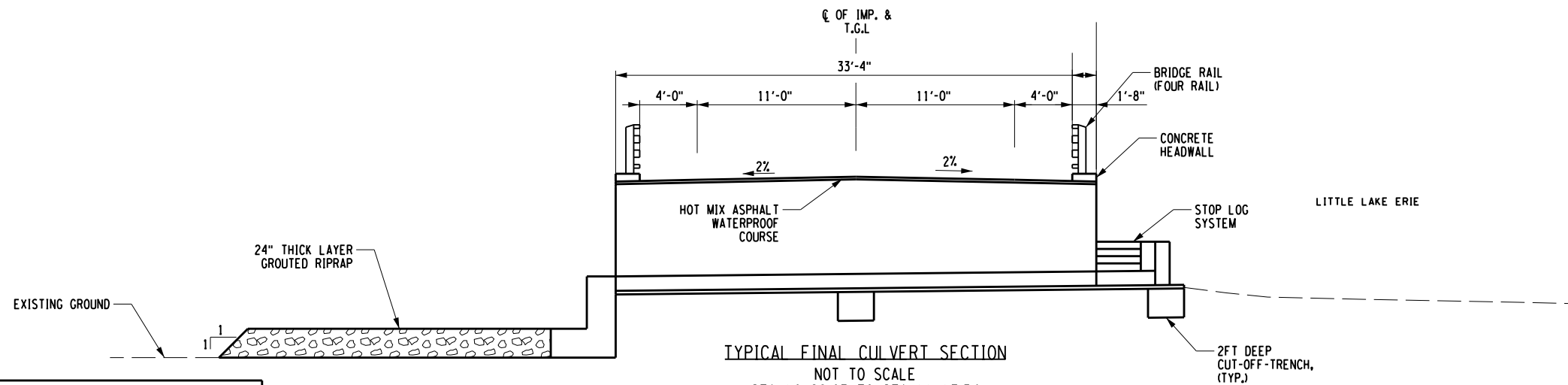
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NOT TO SCALE  
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STA 11+27.54 TO STA 11+48.86



TYPICAL FINAL APPROACH SECTION

NOT TO SCALE  
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TYPICAL FINAL CULVERT SECTION

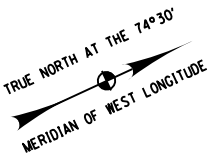
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STA 10+98.03 TO STA 11+17.54

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	PROPOSED CULVERT REHABILITATION				TYPICALS SECTIONS	DRAWING NO. TYP-1 SHEET NO. 5
	TOWN OF TUSTEN (NARROWSBURG)					
	NEW YORK					
	COUNTY: SULLIVAN REGION: 9					
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CURVE 01	CURVE 02
P.C. = 1+52.26	P.C. = 1+73.48
P.T. = 1+63.03	P.T. = 2+34.46
R = 50.00	R = 80.00
L = 21.23	L = 60.97
$\Delta = 24^{\circ}19'21''$ RT.	$\Delta = 43^{\circ}40'12''$ LT.

10' 0' 10' 20' 30' 40'

SCALE IN FEET

NOTE:

1. PLAN SHOWN IS FOR ILLUSTRATION ONLY. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TEMPORARY STRUCTURE AND APPROACH IN ACCORDANCE WITH ITEM 619.0601 AND THE PLANS.

AFFIX SEAL: ON:		ALTERED BY: ON:						<div>NOTE: 1. PLAN SHOWN IS FOR ILLUSTRATION ONLY. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A TEMPORARY STRUCTURE AND APPROACH IN ACCORDANCE WITH ITEM 619.0601 AND THE PLANS.</div>					
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		TOWN OF TUSTEN (NARROWSBURG)											
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JOB MANAGER

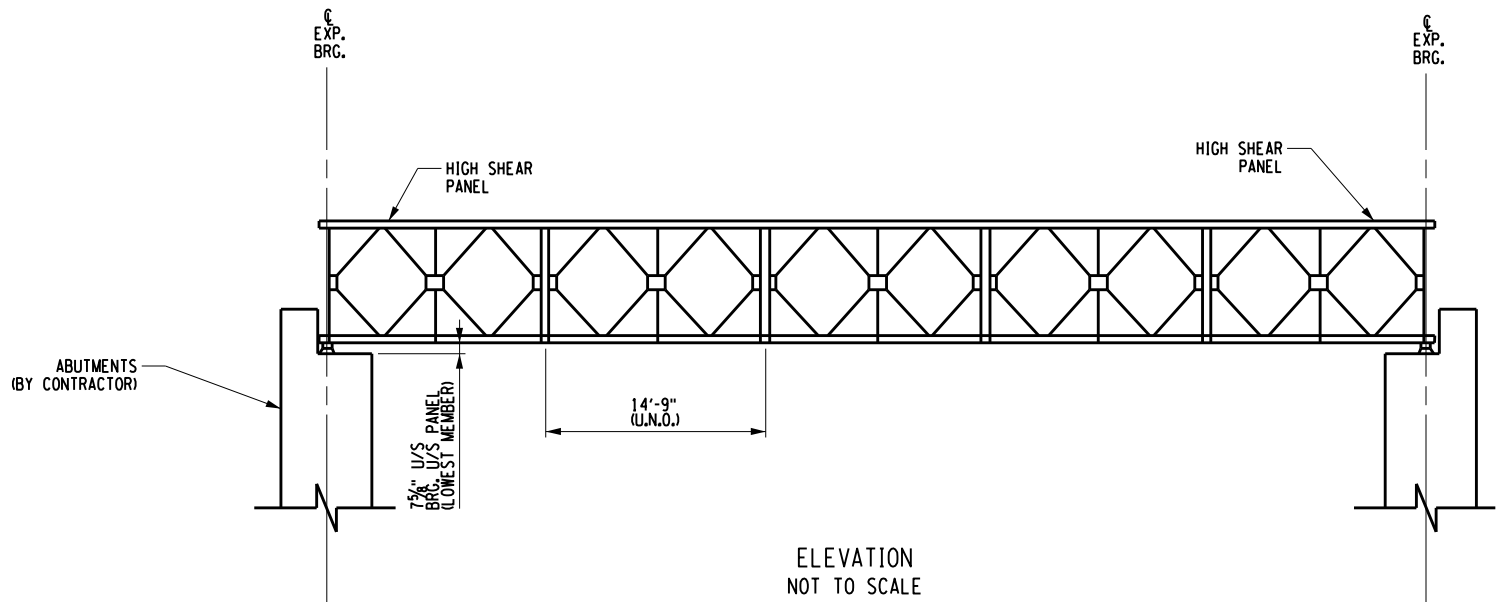
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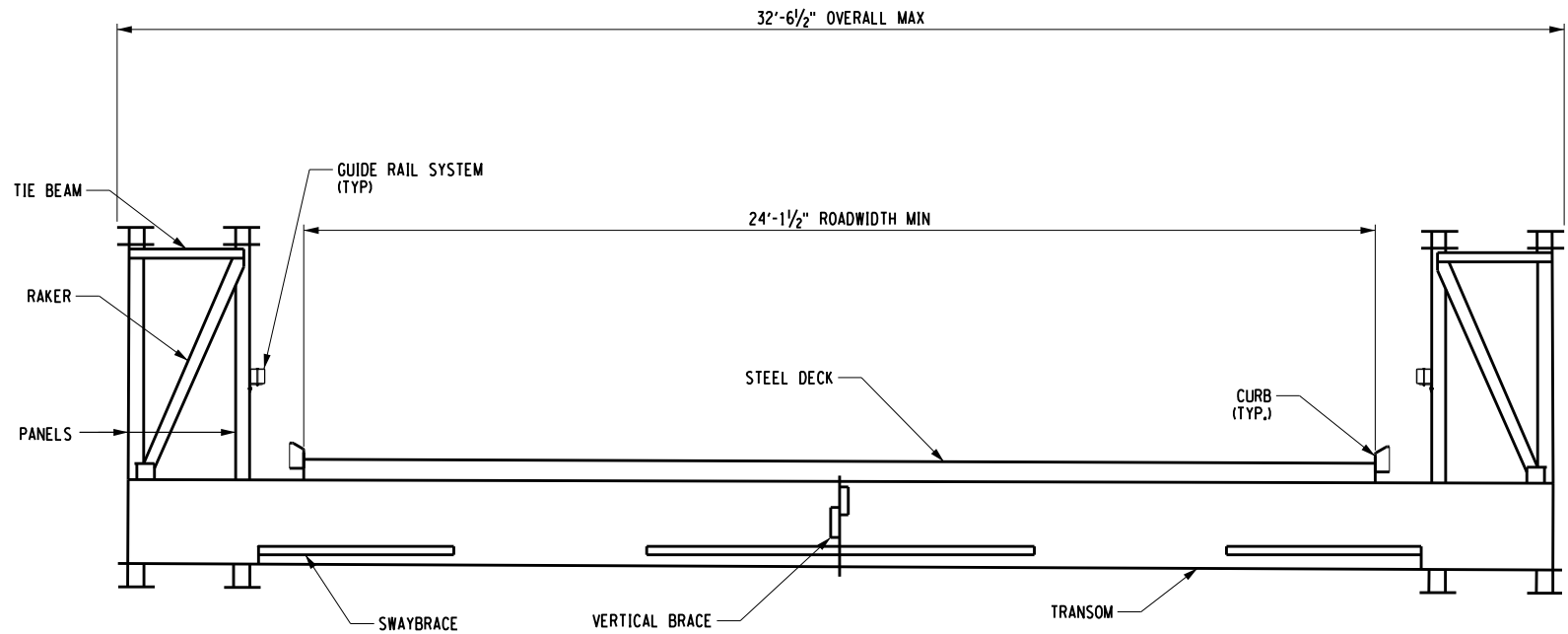
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- NOTE:
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  - TEMPORARY STRUCTURE SHALL HAVE A DECK WITH A FRICTION AGGREGATE OF 2 OR EQUAL.
  - REQUIREMENTS:
    - MINIMUM TEMPORARY STRUCTURE CLEAR WIDTH BETWEEN CURBS ON THE THE BRIDGE = 24 FT. (2 - 6 FT. SHOULDERS AND 1 - 24 FT. LANE)
    - MINIMUM TEMPORARY APPROACH ROADWAY WIDTH = 24 FT.
    - ESTIMATED TEMPORARY BRIDGE SPAN = 73 FT.
    - MINIMUM APPROACH ROADWAY ASPHALT PAVEMENT THICKNESS = 6 IN.
    - MINIMUM APPROACH ROADWAY SUBBASE THICKNESS = 10 IN.
    - ALL TURNING RADIUS SHALL MEET THE MINIMUM TURNING RADIUS FOR A WB-62.



TRANSVERSE SECTION  
NOT TO SCALE

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	PROPOSED CULVERT REHABILITATION				TEMPORARY BRIDGE ELEVATIONS	DRAWING NO. ELE-1 SHEET NO. 7
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	COUNTY: SULLIVAN					
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July 15, 2019  
12.0076808.00

Mr. Joseph Bayer, P.E., Senior Managing Engineer  
Shumaker Consulting Engineering and Land Surveying D.P.C  
143 Court Street  
Binghamton, NY 13901

Re: Alternative Evaluation Summary Report  
Rehabilitation of Little Lake Erie Dam (DEC # 134-4786)  
Town of Tusten, Sullivan County, New York

Dear Mr. Bayer:

GZA GeoEnvironmental of NY (GZANY) is pleased to provide Shumaker Consulting Engineering and Land Surveying D.P.C with this alternative evaluation summary report for the rehabilitation of Little Lake Erie Dam. We performed the work in general accordance with the scope of work outlined in our proposal dated January 10, 2019.

This letter presents a summary of our evaluation of alternatives to increase the spillway capacity and improve the dam stability which are the critical dam deficiencies. This alternative evaluation is subject to the limitations in **Appendix A**.

## BACKGROUND

Shumaker Consulting Engineering and Land Surveying D.P.C (Shumaker) is working for the Town of Tusten to design a replacement for the existing Town Bridge 17 (Main Street) over the outlet of Little Lake Erie. The bridge work is being funded through a New York State Department of Transportation (NYSDOT) grant program. However, the roadway is a regulated dam per the New York State Dam Safety Regulations. In other words, the existing culvert below the bridge functions as the service spillway for the dam. Therefore, work on the bridge will also be subject to New York State Department of Environmental Conservation (NYSDEC) Guidelines for Design of Dams.

Little Lake Erie Dam is an earth dam, with a maximum height of about 12 feet and a length of about 75 feet. The dam consists of left (south) and right (north) earthfill embankments which form abutments for a central spillway. The spillway is a reinforced concrete culvert with Town Bridge 17 over the culvert which carries Main Street. Town Bridge 17 is also referred to as the Narrowsburg Culvert or the Tusten Culvert. The dam is currently classified as a Class A – Low Hazard potential structure.

According to the culvert condition assessment report by Foit-Albert Associates dated November 2017, the culvert consists of a jack-arch multiple-girder structure spanning between reinforced concrete abutments that provide an about 10'-11" wide opening. The floor of the culvert is a



concrete slab. The out-to-out culvert length (across the roadway) is approximately 30'-8" and the two-lane roadway width over the culvert is approximately 24'-0" between 10-inch wide concrete curbs.

There is a 3'-3" wide concrete sluiceway on the left side of the culvert which extends from the upstream to downstream side. The sluiceway is composed of concrete sidewalls and a concrete slab, and a fabricated gate at the upstream end of the sluiceway consisting of a steel plate which slides along vertical steel side angles. The sluiceway was reported to not be functional.

The bridge over the culvert is in poor condition and in need of replacement. Shumaker is conducting the studies and analysis to design a replacement bridge. However, before that work can be conducted, the condition of the dam needs to be assessed.

### **DAM EMBANKMENT CONDITIONS**

GZA visited the site on March 19, 2019. On the day of our visit, we observed active flow through the culvert at a depth of about 4 to 6 inches.

The upper portions of the upstream embankment slope above the reservoir water level were observed to have a gradient of about 3H:1V to 4H:1V (horizontal to vertical). We observed overflow pipes passing through the left and right embankments, about 30 inches in diameter with the pipe inverts a couple of inches above the reservoir normal level.

On the downstream side, the observable portions of the dam embankment have a near vertical face formed by dry-stone walls, with the bottom of the walls seemingly on top of the left and right extensions of the concrete sill below the culvert outlet.

### **SUBSURFACE CONDITIONS**

Empire Geotechnical Engineering Services (Empire) performed subsurface investigations and a geotechnical evaluation for this site. Empire investigated subsurface conditions through two test borings designated as B-1 and B-2 located at the road shoulders right and left of the culvert, respectively, and advanced through the dam embankments to total depths of 48.7 and 50 feet below the existing grade. Empire issued a geotechnical evaluation report on April 11, 2019.

Based on the Empire findings, the dam embankment general subsurface stratigraphy includes an about 6- to 8-foot thick superficial fill layer underlain by native soils. The fill consists of loose to dense sand or sand and gravel with lesser amounts of silt and trace amounts of foreign materials such as slag, and represents the dam embankment material which also provides abutments for the existing bridge. The native soils below the fill consist of loose to dense interlayers of silts and sands, with varying proportions of gravel. A dense glacial till deposit was encountered at boring B-1 at the depth of about 35 feet below grade.

The groundwater level at boring B-1, which is closer to the lake edge, was encountered a few feet below grade or at about the lake level. The groundwater level at boring B-2, which is on the downstream side of the dam, was encountered deeper at about 10 feet below grade, which is more consistent with the discharge channel water elevation.



## HYDROLOGIC AND HYDRAULIC (H&H) ANALYSES

Shumaker performed H&H analyses in May and June 2019. Shumaker investigated storms with recurrence intervals of 1, 2, 5, 10, 25, 50 and 100 years and noted the 100-year (1% annual chance) flood as the Spillway Design Flood (SDF) for a Class A – Low Hazard dam.

Shumaker's key conclusions are summarized below, and considered in this alternatives evaluation (elevations referenced to NAVD88):

- Beginning at the 5-year storm, the water surface elevation exceeds the lowest top (elevation 697.0) of the dam crest, which implies a severe inadequacy in spillway capacity.
- A railroad embankment located about 200 feet downstream of the dam with top elevation of 716.0 and an 8-foot by 8-foot arch culvert underneath acts as a downstream hydraulic control structure.
- The railroad embankment starts to control the Little Lake Erie spillway capacity at approximately the 10-year storm. Therefore, spillway capacity improvements (such as enlarging the spillway) are not effective above the 10-year storm, and not recommended.  
The dam and the culvert discharge channel will be submerged beginning at about the 10-year storm. Therefore, storms larger than a 10-year event will result in a deeper submergence rather than more erosion. So, a 10-year event is recommended as the design flood for overtopping protection design.
- Considering an about 150-foot overtopping length along the dam (road) embankment and a 10-year event as the design flood for overtopping protection design, the overtopping depth and unit discharge are 1.2 feet and 2.8 cubic feet per second per foot (cfs/ft), respectively.
- Two 30-inch overflow CIP pipes located to the left and right of the primary spillway have no considerable effect on outflows and associated reservoir stages. Therefore, it is recommended that the pipes be removed or plugged to control erosion on the downstream embankment.

## EVALUATION OF ALTERNATIVES TO INCREASE SPILLWAY CAPACITY

As mentioned above, increasing the spillway capacity above the 10-year storm will not be effective, because of the downstream railroad embankment controlling the flood water level. Therefore, alternatives were evaluated with the purpose of increasing the spillway capacity to safely pass the 10-year storm. The following alternatives were considered and are described below:

- Enlarging the existing spillway (culvert) structure.
- Raising the dam crest.
- A combination of the above alternatives.
- Protecting the dam for overtopping.

In addition to safely passing the 10-year event, it is important that the proposed alternative does not create any significant additional impacts upstream or downstream of the dam. Specifically, we evaluated alternatives that would limit increases in the peak water surface elevations to limit impacts to the upstream lake edge. Furthermore, we evaluated alternatives considering the downstream flow conditions controlled by the downstream railroad embankment.



### **Enlarging the Existing Spillway**

This alternative consists of enlarging the existing spillway while maintaining the existing dam crest (no raise in the road elevation). With the existing spillway culvert, the dam and road begin to overtop at about a 5-year storm. As the existing spillway culvert capacity is estimated to be less than half of a 10-year storm event without overtopping, an enlarged culvert capable of passing the 10-year storm will need to be more than twice as wide as the existing culvert. Therefore, this alternative is not recommended.

### **Raising the Crest of the Dam (Heightening the Culvert)**

This alternative consists of maintaining the existing culvert width and raising the dam and heightening the culvert. However, the dam would have to be raised several feet and the topography of the abutments and Main Street passing over the culvert will not support a raise since the abutments are low.

Most importantly, raising the dam to prevent overtopping will result in the peak water surface elevation in the lake increasing during larger storm events and subsequently increase the flooding upstream of the dam. Therefore, raising the dam is not recommended.

### **Combination of Enlarging the Existing Spillway Culvert and Raising the Dam**

Given the concerns discussed above, a combination of raising the dam crest and enlarging the spillway is also not recommended.

### **Overtopping Protection**

The alternative of protecting the dam for safe overtopping appears to be the most feasible option to increase the spillway capacity. Such an alternative does not increase the peak water surface elevation or increase downstream flows during storm events.

Protecting the dam for overtopping will require improvements to the downstream slope of the dam. Specifically, the current downstream facing of near vertical dry-stone wall would need to be flattened and protected from scour and erosion during overtopping. This alternative is discussed further below.

## **EVALUATION OF OVERTOPPING PROTECTION ALTERNATIVES**

The evaluation of the structural integrity of the existing bridge superstructure by others concluded that the bridge superstructure needs to be replaced with a new structure. Based on our experience with similar dam and culvert configurations, we previously recommended use of a precast box culvert to function as the new spillway and bridge structure. This approach was accepted by Shumaker. Therefore, the dam overtopping protection system should be designed in conjunction with the spillway culvert replacement.

The following overtopping protection alternatives were evaluated.

### **Installing a Stepped Gabion Buttress**

A stepped buttress made of gabion baskets can flatten and stabilize the dam embankment downstream slope, and also protect it against overtopping. However, limited space along the existing downstream channel makes the installation of gabion baskets difficult. Also, the lower portion of the gabion baskets will be exposed to frequent water flow in the spillway culvert discharge channel, and subject to abrasion and deterioration. Therefore, this alternative is not recommended.



### **Flattening Downstream Slope and Protecting with Articulated Concrete Blocks (ACB)**

This alternative includes backfilling and flattening the dam embankment downstream slope to 2.5H:1V, and armoring it with ACBs. This alternative is a feasible option to stabilize the dam embankment and protect it against overtopping.

### **Flattening Downstream Slope and Protecting with Grouted Riprap**

Similar to alternative B2, this alternative includes embankment flattening, but instead of ACBs, a layer of grouted riprap will be used to armor the downstream slope for overtopping protection. This alternative is a feasible option to stabilize the dam embankment and protect it against overtopping.

## **RECOMMENDED ALTERNATIVE**

Both the use of ACBs and grouted riprap are feasible for the dam embankment rehabilitation. Between these two alternatives, we recommend grouted riprap because we believe it will be less expensive, and it does not need specialty contractor experienced with the installation of ACBs.

Based on the information and discussions presented in this summary report, we recommend the following remedial works to bring the dam into compliance with the NYSDEC dam safety guidelines. Conceptual sketches of the recommended remedial works are presented on the attached drawings 1 and 2.

Proposed replacement of spillway culvert will include the following steps:

- Lower the lake level to provide dry condition at the existing culvert. Install a temporary stream diversion system to divert water to the downstream channel.
- Excavate dam embankment around the existing culvert.
- Demolish, remove and dispose off-site the existing bridge deck and culvert.
- Prepare the culvert subgrade, install cutoff trenches and place wet concrete bedding.
- Install precast reinforced concrete culvert, set in wet concrete bedding.
- Install reinforced concrete headwalls.
- Install downstream concrete buttress and riprap at the discharge channel.
- Backfill around the culvert to the road level, and install pavement.
- Remove or properly plug the two 30-inch overflow CIP pipes located to the left and right of the spillway culvert.

Proposed overtopping protection of the dam embankment downstream slope and toe will include the following steps:

- Prepare subgrade and install downstream reinforced concrete training walls.
- Backfill behind training walls to shape the dam embankment downstream slope to 2.5H:1.0V.
- Install filter fabric, gravel bedding and toe drain.
- Install grouted riprap to protect the downstream slope.
- Extend grouted riprap protection on the downstream toe to form an apron, and towards left and right abutments.



## PRELIMINARY CONSTRUCTION COST ESTIMATE

A preliminary construction cost estimate is developed for the recommended alternative, including the replacement of the spillway culvert and overtopping protection with grouted riprap. This cost estimate should be finalized once detail design of repair works is completed.

The preliminary construction cost for Little Lake Erie Dam rehabilitation work is estimated to be a total of about \$485,000, as presented in Table 1. This estimate includes a lump sum cost of \$50,000 for non-dam related items (such as traffic control, guiderails, fencing, and paving) and a 30-percent contingency.

Thank you and please contact us at 973-774-3345 with any questions or comments.

Sincerely,

A handwritten signature in black ink, reading 'H. Fallah'.

Hamid Fallah, P.E.  
Senior Project Manager

A handwritten signature in black ink, reading 'C. Adams'.

Christopher S. Adams, P.E.  
Principal/Senior Vice President

A handwritten signature in blue ink, reading 'Ernest Hanna'.

Ernest R. Hanna, P.E.  
Senior Principal/Reviewer

## APPENDICES

Appendix A – Limitations

Appendix B – Conceptual Drawings (2 Sheets)

**TABLE 1**  
**PRELIMINARY CONSTRUCTION COST ESTIMATE**  
**CONCEPTUAL DESIGN FOR REHABILITATION OF LITTLE LAKE ERIE DAM**

**DIVISION 01 - GENERAL REQUIREMENTS**

	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Total</u>
01-57-13 Soil Erosion and Sediment Control	1	LS	\$4,000	\$4,000
01-57-19 Environmental Protection	1	LS	\$3,000	\$3,000
01-57-22 Lake Lowering	1	LS	\$5,000	\$5,000
01-57-22 Temporary Stream Diversion	1	LS	\$10,000	\$10,000
01-71-13 Mobilization, Admin. and Demobilization	1	LS	\$20,000	\$20,000
01-71-23 Field Engineering	1	LS	\$5,000	\$5,000

**DIVISION 02 - EXISTING CONDITIONS**

02-40-00 Demolition				
Removal and offsite disposal of the existing culvert	1	LS	\$15,000	\$15,000
Removal and offsite disposal of 30" CIP pipes	1	LS	\$4,000	\$4,000

**DIVISION 03 - CONCRETE**

33-42-16 Precast concrete spillway culvert	1	LS	\$130,000	\$130,000
03-30-00 Cast-In-Place Concrete				
Reinforced concrete headwalls	6	CY	\$1,100	\$6,600
Reinforced concrete training walls	25	CY	\$1,100	\$27,500
Mass concrete buttress at discharge	12	CY	\$600	\$7,200
Concrete bedding and cutoff trenches	18	CY	\$600	\$10,800
03-11-00 Concrete Formwork				
Formwork for headwalls and training walls	1	LS	\$7,000	\$7,000

**DIVISION 31 - EARTHWORK**

31-14-00 Stripping	10	CY	\$30	\$300
31-23-16 Excavation				
Excavation for culvert and CIP pipes removal	185	CY	\$40	\$7,400
31-23-23 General fill	250	CY	\$50	\$12,500
Gravel fill	18	CY	\$60	\$1,080
31-37-00 Riprap (Includes Geotextile Filter Fabric )	75	Tons	\$70	\$5,250
Grouted Riprap (Includes Geotextile Filter Fabric )	145	Tons	\$200	\$29,000
33-46-13 Toe drain	1	LS	\$5,000	\$5,000

**DIVISION 35 - WATERWAY CONSTRUCTION AND EQUIPMENT**

Stoplog System	1	LS	\$8,000	\$8,000
----------------	---	----	---------	---------

**UNLISTED ITEMS (traffic control, guiderails, fencing, paving, etc)** **\$50,000**

**30% CONTINGENCY** **\$112,089**

**ESTIMATED TOTAL** **\$485,000**



July 15, 2019  
Mr. Joseph Bayer, P.E.  
Shumaker Consulting Engineering and Land Surveying D.P.C

## Appendix A

### **Limitations**



## USE OF REPORT

1. GeoEnvironmental, Inc. (GZA) prepared this report on behalf of, and for the exclusive use of the Client for the stated purpose(s) and location(s) identified in the Report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's sole risk, and without any liability to GZA.

## STANDARD OF CARE

2. Our findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the limited data gathered during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. Our services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

## SUBSURFACE CONDITIONS

4. If presented, the generalized soil profile(s) and description, along with the conclusions and recommendations provided in our Report, are based in part on widely-spaced subsurface explorations by GZA and/or others, with a limited number of soil and/or rock samples and groundwater /piezometers data and are intended only to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and were based on our assessment of subsurface conditions. The composition of strata, and the transitions between strata, may be more variable and more complex than indicated. For more specific information on soil conditions at a specific location refer to the exploration logs. The nature and extent of variations between these explorations may not become evident until further exploration or construction. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.
5. Any water level readings made in test holes (as described in the Report), monitoring wells and piezometers, at the specified times and under the stated conditions. These data have been reviewed and interpretations have been made in this Report. Fluctuations in the groundwater and piezometer levels, however, occur due to temporal or spatial variations in areal recharge rates, soil heterogeneities, reservoir and tailwater levels, the presence of subsurface utilities, and/or natural or artificially induced perturbations.

## GENERAL

6. The observations described in this report were made under the conditions stated therein. The conclusions presented were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.
7. In preparing this report, GZA relied on certain information provided by the Client, state and local officials, and other parties referenced therein available to GZA at the time of the evaluation. GZA did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this evaluation.
8. Any GZA hydrologic analysis presented herein is for the rainfall volumes and distributions stated herein. For storm conditions other than those analyzed, the response of the site's spillway, impoundment, and drainage network has not been evaluated.



9. Observations were made of the site and of structures on the site as indicated within the report. Where access to portions of the structure or site, or to structures on the site was unavailable or limited, GZA renders no opinion as to the condition of that portion of the site or structure. In particular, it is noted that water levels in the impoundment and elsewhere and/or flow over the spillway may have limited GZA's ability to make observations of underwater portions of the structure. Excessive vegetation, when present, also inhibits observations.
10. In reviewing this Report, it should be realized that the reported condition of the dam is based on observations of field conditions during the course of this study along with data made available to GZA. It is important to note that the condition of a dam depends on numerous and constantly changing internal and external conditions, and is evolutionary in nature. It would be incorrect to assume that the present condition of the dam will continue to represent the condition of the dam at some point in the future. Only through continued inspection and care can there be any chance that unsafe conditions be detected.

#### **COMPLIANCE WITH CODES AND REGULATIONS**

11. We used reasonable care in identifying and interpreting applicable codes and regulations. These codes and regulations are subject to various, and possibly contradictory, interpretations. Compliance with codes and regulations by other parties is beyond our control.
12. This scope of work does not include an assessment of the need for fences, gates, no-trespassing signs, repairs to existing fences and railings and other items which may be needed to minimize trespass and provide greater security for the facility and safety to the public. An evaluation of the project for compliance with OSHA rules and regulations is also excluded.

#### **COST ESTIMATES**

13. Unless otherwise stated, our cost estimates are for comparative, or general planning purposes. These estimates may involve approximate quantity evaluations and may not be sufficiently accurate to develop construction bids, or to predict the actual cost of work addressed in this Report. Further, since we have no control over the labor and material costs required to plan and execute the anticipated work, our estimates were made using our experience and readily available information. Actual costs may vary over time and could be significantly more, or less, than stated in the Report.

#### **ADDITIONAL SERVICES**

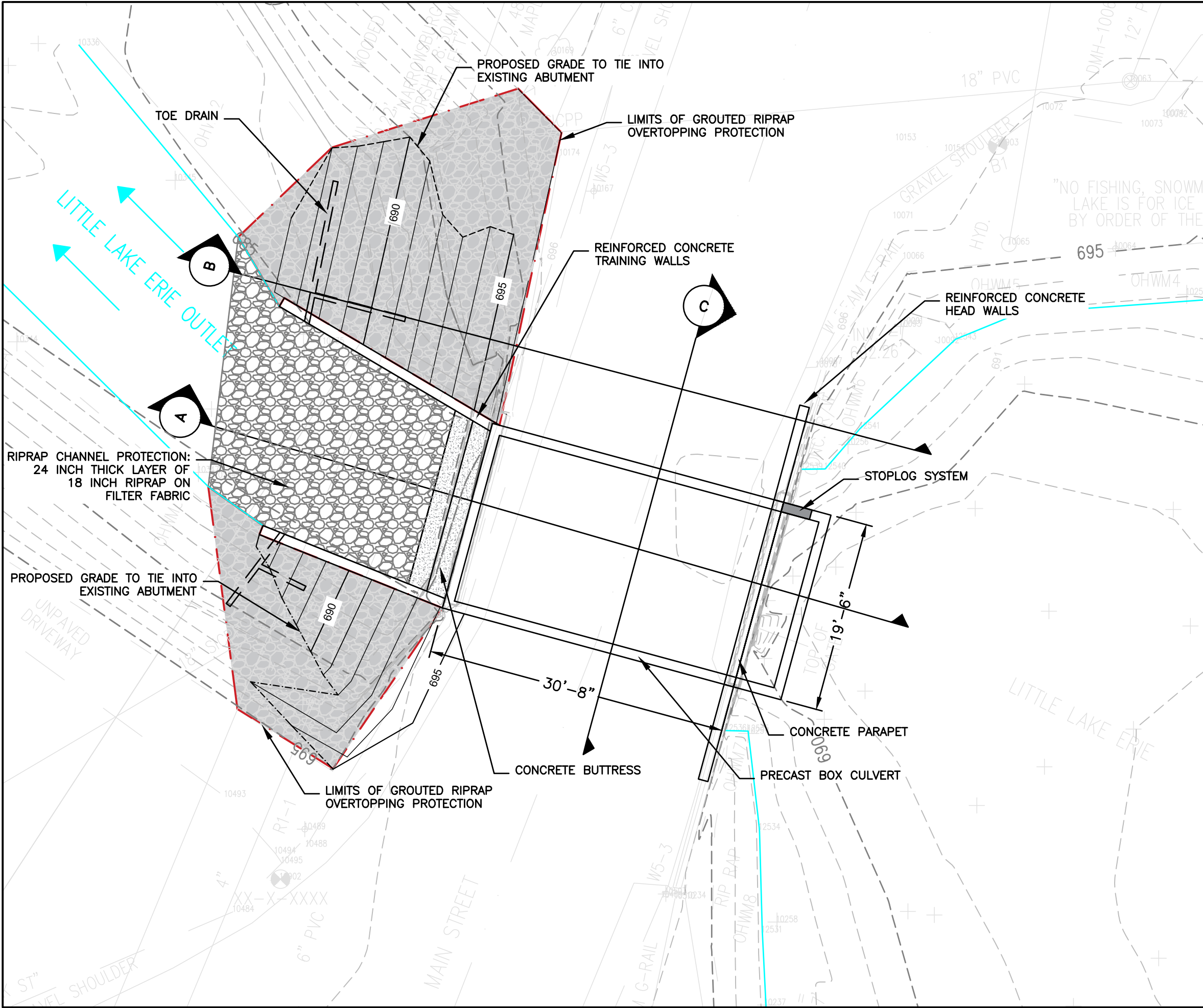
14. It is recommended that GZA be retained to provide services during any future: site observations, explorations, evaluations, design, implementation activities, construction and/or implementation of remedial measures recommended in this Report. This will allow us the opportunity to: i) observe conditions and compliance with our design concepts and opinions; ii) allow for changes in the event that conditions are other than anticipated; iii) provide modifications to our design; and iv) assess the consequences of changes in technologies and/or regulations.



July 15, 2019  
Mr. Joseph Bayer, P.E.  
Shumaker Consulting Engineering and Land Surveying D.P.C

Appendix B  
**Conceptual Drawings**

©2016 - GZA GeoEnvironmental, Inc. GZA-C:\Users\anthony.colzaretta\appdata\local\temp\AcPublish\_23956\Little Lake Erie.dwg [DWG1] July 11, 2019 - 12:02pm anthony.colzaretta

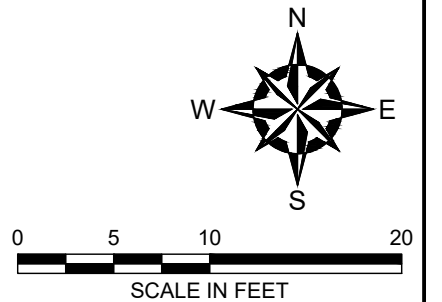



## GENERAL NOTES

1. TOPO AND FEATURES BASED ON SURVEY CONDUCTED BY SHUMAKER CONSULTING ENGINEERING AND LAND SURVEYING D.P.C RECEIVED BY GZA ON MAY 25, 2019

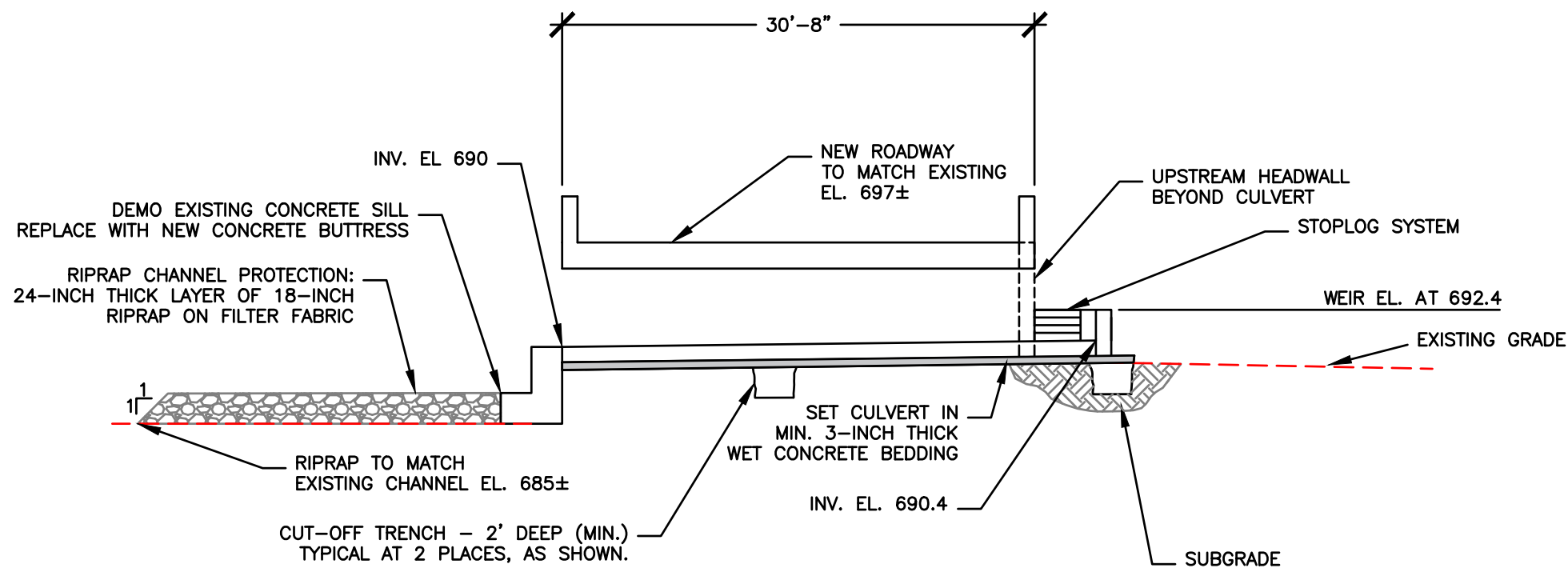
## LEGEND

- 690 --- EXISTING CONTOURS
- 690 — PROPOSED CONTOURS
- PROPOSED CULVERT STRUCTURE
- [Pattern] LIMITS OF OVERTOPPING PROTECTION
- EDGE OF WATER

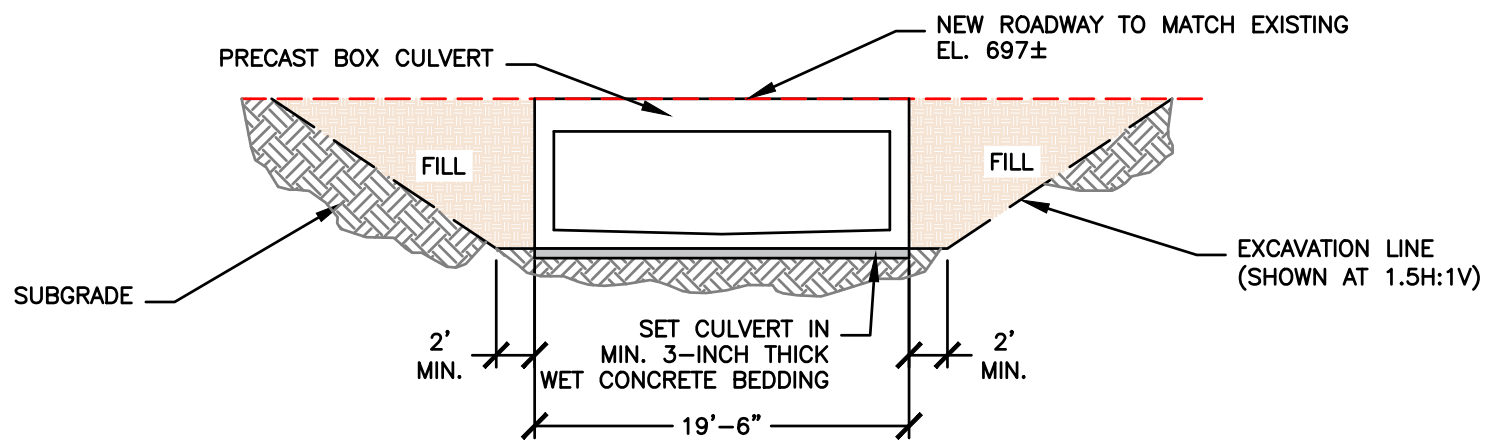


NO.		ISSUE/DESCRIPTION	BY	DATE
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CONCEPTUAL DESIGN REHABILITATION OF LITTLE LAKE ERIE (DEC # 134-4786) TOWN OF TUSTEN, SULLIVAN COUNTY, NY				
PROPOSED CONDITIONS PLAN				
PREPARED BY:  <b>GZA</b> GeoEnvironmental of NY Engineers and Scientists www.gza.com		PREPARED FOR: SHUMAKER CONSULTING ENGINEERING AND LAND SURVEYING D.P.C		
PROJ MGR: HF	REVIEWED BY: HF	CHECKED BY: CSA	DWG	
DESIGNED BY: AJC	DRAWN BY: AJC	SCALE: AS NOTED	1	
DATE: JULY 2019	PROJECT NO. 12.0076808.00	REVISION NO. 0	SHEET NO. 1 OF 2	

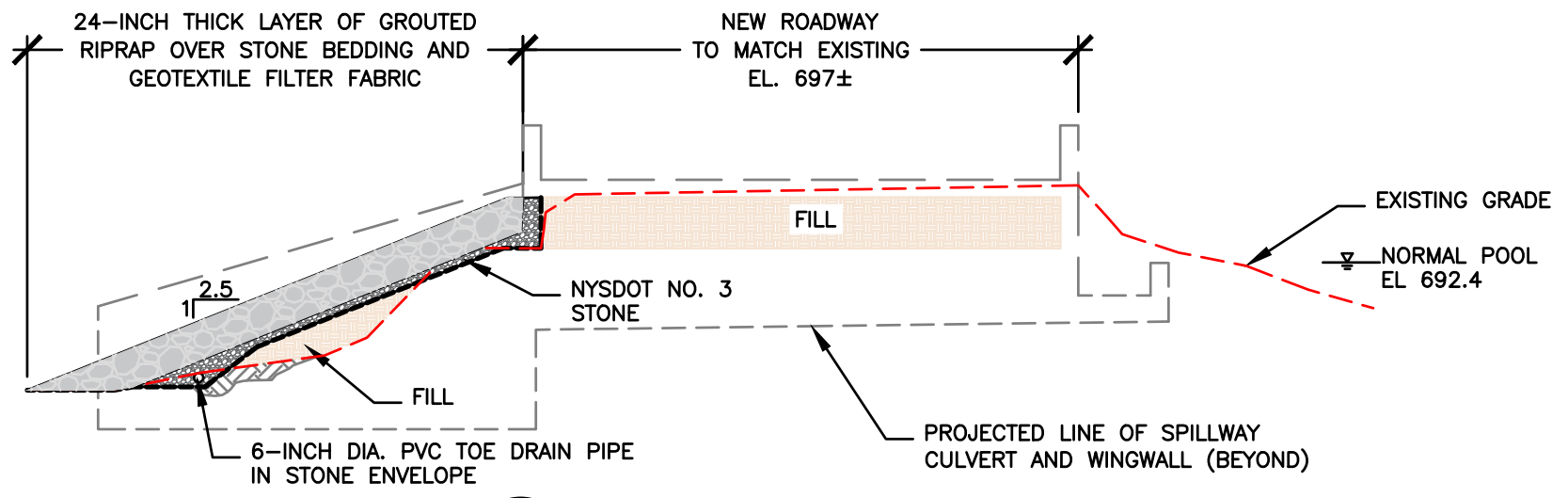
©2016 - GZA GeoEnvironmental, Inc. GZA-C: Users\anthony.colazaretta\appdata\local\temp\AcPublish\_23956\Little Lake Erie.dwg [DWG2] July 11, 2019 - 12:02pm anthony.colazaretta



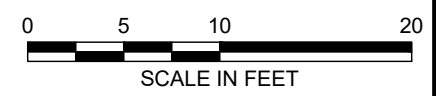
**A** CULVERT SECTION



**C** CULVERT SECTION



**B** EMBANKMENT SECTION




- GENERAL NOTES**
1. TOPO AND FEATURES BASED ON SURVEY CONDUCTED BY SHUMAKER CONSULTING ENGINEERING AND LAND SURVEYING D.P.C RECEIVED BY GZA ON MAY 25, 2019.
  2. MEASUREMENTS OF EXISTING CULVERTS ARE BASED ON REPORT TITLED "TOWNSHIP BRIDGE 17 MAIN STREET OVER THE OUTLET OF LITTLE LAKE ERIE: CULVERT CONDITION ASSESSMENT", PREPARED BY FOIT-ALBERT ASSOCIATES ARCHITECTURE, ENGINEERING AND SURVEYING, P.C., DATED NOVEMBER 21, 2017.

NO.		ISSUE/DESCRIPTION	BY	DATE
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CONCEPTUAL DESIGN REHABILITATION OF LITTLE LAKE ERIE (DEC # 134-4786) TOWN OF TUSTEN, SULLIVAN COUNTY, NY				
SECTIONS				
PREPARED BY: <b>GZA</b> GeoEnvironmental of NY Engineers and Scientists www.gza.com		PREPARED FOR: SHUMAKER CONSULTING ENGINEERING AND LAND SURVEYING D.P.C		
PROJ MGR: HF	REVIEWED BY: HF	CHECKED BY: CSA	DWG	
DESIGNED BY: AJC	DRAWN BY: AJC	SCALE: AS NOTED	2	
DATE: JULY 2019	PROJECT NO. 12.0076808.00	REVISION NO. 0	SHEET NO. 2 OF 2	

# APPENDIX

## B



Town of Tusten Dam  
Main Street  
Narrowsburg, NY 12764

Inquiry Number: 5614188.3  
April 08, 2019

## Certified Sanborn® Map Report



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## Certified Sanborn® Map Report

04/08/19

**Site Name:**

Town of Tusten Dam  
Main Street  
Narrowsburg, NY 12764  
EDR Inquiry # 5614188.3

**Client Name:**

Shumaker Consulting Engineering  
409 Court Street  
Utica, NY 13502  
Contact: Jorel Spain



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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

### Certified Sanborn Results:

**Certification #** 1835-4B7D-8A54

**PO #** 17209

**Project** Tusten Dam

### UNMAPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

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- ☒ University Publications of America
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**Town of Tusten Dam**

Main Street

Narrowsburg, NY 12764

Inquiry Number: 05614188.2r

April 08, 2019

# The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

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***Thank you for your business.***  
Please contact EDR at 1-800-352-0050  
with any questions or comments.

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## EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

### **TARGET PROPERTY INFORMATION**

#### **ADDRESS**

MAIN STREET  
NARROWSBURG, NY 12764

#### **COORDINATES**

Latitude (North):	41.6062380 - 41° 36' 22.45"
Longitude (West):	75.0619640 - 75° 3' 43.07"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	494836.6
UTM Y (Meters):	4605847.5
Elevation:	691 ft. above sea level

### **USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY**

Target Property Map:	5939697 NARROWSBURG, NY
Version Date:	2013

### **AERIAL PHOTOGRAPHY IN THIS REPORT**

Portions of Photo from:	20150523
Source:	USDA

# MAPPED SITES SUMMARY

Target Property Address:  
MAIN STREET  
NARROWSBURG, NY 12764

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
<a href="#">A1</a>	US POST OFFICE	MAIN STREET	NY LTANKS, NY Spills		TP
<a href="#">Reg</a>	CORTESE LANDFILL	SOUTH OF ROUTE 97	NPL, SEMS, US ENG CONTROLS, US INST CONTROL, ROD,..	Same	1763, 0.334, SW
<a href="#">A2</a>	NARROWSBURG CENTRAL	6 ERIE ST	NY UST, RCRA NonGen / NLR, FINDS, ECHO	Higher	13, 0.002, ENE
<a href="#">A3</a>	THE NARROWSBURG SCHO	7 ERIE AVENUE	NY AST	Higher	13, 0.002, ENE
<a href="#">A4</a>	DIRLAM BROS. LUMBER	20 OAK STREET	NY UST, NY AST	Higher	167, 0.032, West
<a href="#">5</a>	HECTARS RESIDENCE	10 GROVE STREET	NY LTANKS	Higher	320, 0.061, East
<a href="#">6</a>	ST FRANCIS XAVIER CH	ROUTE #52	NY UST	Lower	1059, 0.201, North
<a href="#">7</a>	CORTESE SLF	RD #2	NY SWF/LF	Higher	1762, 0.334, South
<a href="#">8</a>	THOMAS RESIDENCE	76 BRIDGE STREET	NY LTANKS	Higher	1938, 0.367, East

## EXECUTIVE SUMMARY

### **TARGET PROPERTY SEARCH RESULTS**

The target property was identified in the following records. For more information on this property see page 8 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
US POST OFFICE MAIN STREET NARROWSBURG, NY	NY LTANKS Site ID: 109735 Spill Number/Closed Date: 9314026 / 1994-10-24  NY Spills Site ID: 109710 Spill Number/Closed Date: 0311900 / 2004-02-04	N/A

### **DATABASES WITH NO MAPPED SITES**

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

### **STANDARD ENVIRONMENTAL RECORDS**

#### ***Federal NPL site list***

Proposed NPL..... Proposed National Priority List Sites  
NPL LIENS..... Federal Superfund Liens

#### ***Federal Delisted NPL site list***

Delisted NPL..... National Priority List Deletions

#### ***Federal CERCLIS list***

FEDERAL FACILITY..... Federal Facility Site Information listing

#### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

#### ***Federal RCRA CORRACTS facilities list***

CORRACTS..... Corrective Action Report

#### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF..... RCRA - Treatment, Storage and Disposal

#### ***Federal RCRA generators list***

RCRA-LQG..... RCRA - Large Quantity Generators

## EXECUTIVE SUMMARY

RCRA-SQG..... RCRA - Small Quantity Generators  
RCRA-CESQG..... RCRA - Conditionally Exempt Small Quantity Generator

### ***Federal institutional controls / engineering controls registries***

LUCIS..... Land Use Control Information System

### ***Federal ERNS list***

ERNS..... Emergency Response Notification System

### ***State- and tribal - equivalent NPL***

PA SHWS..... Hazardous Sites Cleanup Act Site List

### ***State- and tribal - equivalent CERCLIS***

NY SHWS..... Inactive Hazardous Waste Disposal Sites in New York State

### ***State and tribal landfill and/or solid waste disposal site lists***

PA SWF/LF..... Operating Facilities

### ***State and tribal leaking storage tank lists***

INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land  
NY HIST LTANKS..... Listing of Leaking Storage Tanks

### ***State and tribal registered storage tank lists***

FEMA UST..... Underground Storage Tank Listing  
PA UST..... Listing of Pennsylvania Regulated Underground Storage Tanks  
NY CBS UST..... Chemical Bulk Storage Database  
NY MOSF UST..... Major Oil Storage Facilities Database  
NY CBS..... Chemical Bulk Storage Site Listing  
NY MOSF..... Major Oil Storage Facility Site Listing  
PA AST..... Listing of Pennsylvania Regulated Aboveground Storage Tanks  
NY CBS AST..... Chemical Bulk Storage Database  
NY MOSF AST..... Major Oil Storage Facilities Database  
INDIAN UST..... Underground Storage Tanks on Indian Land  
NY TANKS..... Storage Tank Facility Listing

### ***State and tribal institutional control / engineering control registries***

NY RES DECL..... Restrictive Declarations Listing  
NY ENG CONTROLS..... Registry of Engineering Controls  
PA ENG CONTROLS..... Engineering Controls Site Listing  
NY INST CONTROL..... Registry of Institutional Controls  
PA INST CONTROL..... Institutional Controls Site Listing

### ***State and tribal voluntary cleanup sites***

NY VCP..... Voluntary Cleanup Agreements  
INDIAN VCP..... Voluntary Cleanup Priority Listing  
PA VCP..... Voluntary Cleanup Program Listing

## EXECUTIVE SUMMARY

### ***State and tribal Brownfields sites***

NY BROWNFIELDS..... Brownfields Site List  
PA BROWNFIELDS..... Brownfields Sites  
NY ERP..... Environmental Restoration Program Listing

### **ADDITIONAL ENVIRONMENTAL RECORDS**

#### ***Local Brownfield lists***

US BROWNFIELDS..... A Listing of Brownfields Sites

#### ***Local Lists of Landfill / Solid Waste Disposal Sites***

NY SWTIRE..... Registered Waste Tire Storage & Facility List  
NY SWRCY..... Registered Recycling Facility List  
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands  
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations  
ODI..... Open Dump Inventory  
IHS OPEN DUMPS..... Open Dumps on Indian Land

#### ***Local Lists of Hazardous waste / Contaminated Sites***

US HIST CDL..... Delisted National Clandestine Laboratory Register  
NY DEL SHWS..... Delisted Registry Sites  
US CDL..... National Clandestine Laboratory Register  
NY PFAS..... PFAS Contamination Site Location Listing

#### ***Local Lists of Registered Storage Tanks***

NY HIST UST..... Historical Petroleum Bulk Storage Database  
NY HIST AST..... Historical Petroleum Bulk Storage Database  
PA ARCHIVE AST..... Archived Aboveground Storage Tank Sites

#### ***Local Land Records***

NY LIENS..... Spill Liens Information  
LIENS 2..... CERCLA Lien Information

#### ***Records of Emergency Release Reports***

HMIRS..... Hazardous Materials Information Reporting System  
NY Hist Spills..... SPILLS Database  
NY SPILLS 90..... SPILLS 90 data from FirstSearch  
NY SPILLS 80..... SPILLS 80 data from FirstSearch

#### ***Other Ascertainable Records***

FUDS..... Formerly Used Defense Sites  
DOD..... Department of Defense Sites  
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing  
US FIN ASSUR..... Financial Assurance Information  
EPA WATCH LIST..... EPA WATCH LIST

## EXECUTIVE SUMMARY

2020 COR ACTION.....	2020 Corrective Action Program List
TSCA.....	Toxic Substances Control Act
TRIS.....	Toxic Chemical Release Inventory System
SSTS.....	Section 7 Tracking Systems
RMP.....	Risk Management Plans
RAATS.....	RCRA Administrative Action Tracking System
PADS.....	PCB Activity Database System
ICIS.....	Integrated Compliance Information System
FTTS.....	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS.....	Material Licensing Tracking System
COAL ASH DOE.....	Steam-Electric Plant Operation Data
COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER.....	PCB Transformer Registration Database
RADINFO.....	Radiation Information Database
HIST FTTS.....	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS.....	Incident and Accident Data
CONSENT.....	Superfund (CERCLA) Consent Decrees
INDIAN RESERV.....	Indian Reservations
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
UMTRA.....	Uranium Mill Tailings Sites
LEAD SMELTERS.....	Lead Smelter Sites
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
US MINES.....	Mines Master Index File
ABANDONED MINES.....	Abandoned Mines
DOCKET HWC.....	Hazardous Waste Compliance Docket Listing
UXO.....	Unexploded Ordnance Sites
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
NY AIRS.....	Air Emissions Data
PA AIRS.....	Permit and Emissions Inventory Data
NY COAL ASH.....	Coal Ash Disposal Site Listing
NY DRYCLEANERS.....	Registered Drycleaners
PA DRYCLEANERS.....	Drycleaner Facility Locations
NY E DESIGNATION.....	E DESIGNATION SITE LISTING
NY Financial Assurance.....	Financial Assurance Information Listing
NY HSWDS.....	Hazardous Substance Waste Disposal Site Inventory
NY MANIFEST.....	Facility and Manifest Data
PA MANIFEST.....	Manifest Information
NY SPDES.....	State Pollutant Discharge Elimination System
PA NPDES.....	NPDES Permit Listing
NY VAPOR REOPENED.....	Vapor Intrusion Legacy Site List
NY UIC.....	Underground Injection Control Wells
PA UIC.....	Underground Injection Wells
NY COOLING TOWERS.....	Registered Cooling Towers

### **EDR HIGH RISK HISTORICAL RECORDS**

#### ***EDR Exclusive Records***

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations
EDR Hist Cleaner.....	EDR Exclusive Historical Cleaners

### **EDR RECOVERED GOVERNMENT ARCHIVES**

#### ***Exclusive Recovered Govt. Archives***

NY RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
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## EXECUTIVE SUMMARY

PA RGA HWS..... Recovered Government Archive State Hazardous Waste Facilities List  
NY RGA LF..... Recovered Government Archive Solid Waste Facilities List  
PA RGA LF..... Recovered Government Archive Solid Waste Facilities List

### SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

### STANDARD ENVIRONMENTAL RECORDS

#### ***Federal NPL site list***

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>CORTESE LANDFILL</i></b> Cerclis ID:: 201867 EPA Id: NYD980528475	<b><i>SOUTH OF ROUTE 97</i></b>	<b><i>SW 1/4 - 1/2 (0.334 mi.)</i></b>	<b><i>0</i></b>	<b><i>10</i></b>

#### ***Federal CERCLIS list***

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 02/06/2019 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b><i>CORTESE LANDFILL</i></b>	<b><i>SOUTH OF ROUTE 97</i></b>	<b><i>SW 1/4 - 1/2 (0.334 mi.)</i></b>	<b><i>0</i></b>	<b><i>10</i></b>

## EXECUTIVE SUMMARY

Site ID: 0201867  
EPA Id: NYD980528475

### ***Federal institutional controls / engineering controls registries***

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 01/31/2019 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CORTESE LANDFILL</b> EPA ID:: NYD980528475 EPA ID:: NYD980528475	<b>SOUTH OF ROUTE 97</b>	<b>SW 1/4 - 1/2 (0.334 mi.)</b>	<b>0</b>	<b>10</b>

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 01/31/2019 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CORTESE LANDFILL</b> EPA ID:: NYD980528475	<b>SOUTH OF ROUTE 97</b>	<b>SW 1/4 - 1/2 (0.334 mi.)</b>	<b>0</b>	<b>10</b>

### ***State and tribal landfill and/or solid waste disposal site lists***

NY SWF/LF: The Solid Waste Facilities/Landfill Sites records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. The data come from the list.

A review of the NY SWF/LF list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 NY SWF/LF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
CORTESE SLF	RD #2	S 1/4 - 1/2 (0.334 mi.)	7	46

### ***State and tribal leaking storage tank lists***

NY LTANKS: Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills

A review of the NY LTANKS list, as provided by EDR, and dated 11/12/2018 has revealed that there are

## EXECUTIVE SUMMARY

2 NY LTANKS sites within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
HECTARS RESIDENCE Site ID: 111021 Spill Number/Closed Date: 9405776 / 1994-10-13	10 GROVE STREET	E 0 - 1/8 (0.061 mi.)	5	43
THOMAS RESIDENCE Site ID: 264972 Spill Number/Closed Date: 0313792 / 2004-06-21	76 BRIDGE STREET	E 1/4 - 1/2 (0.367 mi.)	8	47

### ***State and tribal registered storage tank lists***

NY UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database

A review of the NY UST list, as provided by EDR, has revealed that there are 3 NY UST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NARROWSBURG CENTRAL</b> Database: UST, Date of Government Version: 02/11/2019	<b>6 ERIE ST</b>	<b>ENE 0 - 1/8 (0.002 mi.)</b>	<b>A2</b>	<b>30</b>
<b>DIRLAM BROS. LUMBER</b> Database: UST, Date of Government Version: 02/11/2019	<b>20 OAK STREET</b>	<b>W 0 - 1/8 (0.032 mi.)</b>	<b>A4</b>	<b>37</b>
<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
ST FRANCIS XAVIER CH Database: UST, Date of Government Version: 02/11/2019	ROUTE #52	N 1/8 - 1/4 (0.201 mi.)	6	44

NY AST: The Aboveground Storage Tank database contains registered ASTs. The data come from the Department of Environmental Conservation's Petroleum Bulk Storage (PBS) Database.

A review of the NY AST list, as provided by EDR, has revealed that there are 2 NY AST sites within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
THE NARROWSBURG SCHO Database: AST, Date of Government Version: 02/11/2019 Facility Id: 3-012467	7 ERIE AVENUE	ENE 0 - 1/8 (0.002 mi.)	A3	35
<b>DIRLAM BROS. LUMBER</b> Database: AST, Date of Government Version: 02/11/2019 Facility Id: 3-600277	<b>20 OAK STREET</b>	<b>W 0 - 1/8 (0.032 mi.)</b>	<b>A4</b>	<b>37</b>

## EXECUTIVE SUMMARY

### ADDITIONAL ENVIRONMENTAL RECORDS

#### ***Other Ascertainable Records***

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there is 1 RCRA NonGen / NLR site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>NARROWSBURG CENTRAL</b> EPA ID:: NYD011234960	<b>6 ERIE ST</b>	<b>ENE 0 - 1/8 (0.002 mi.)</b>	<b>A2</b>	<b>30</b>

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

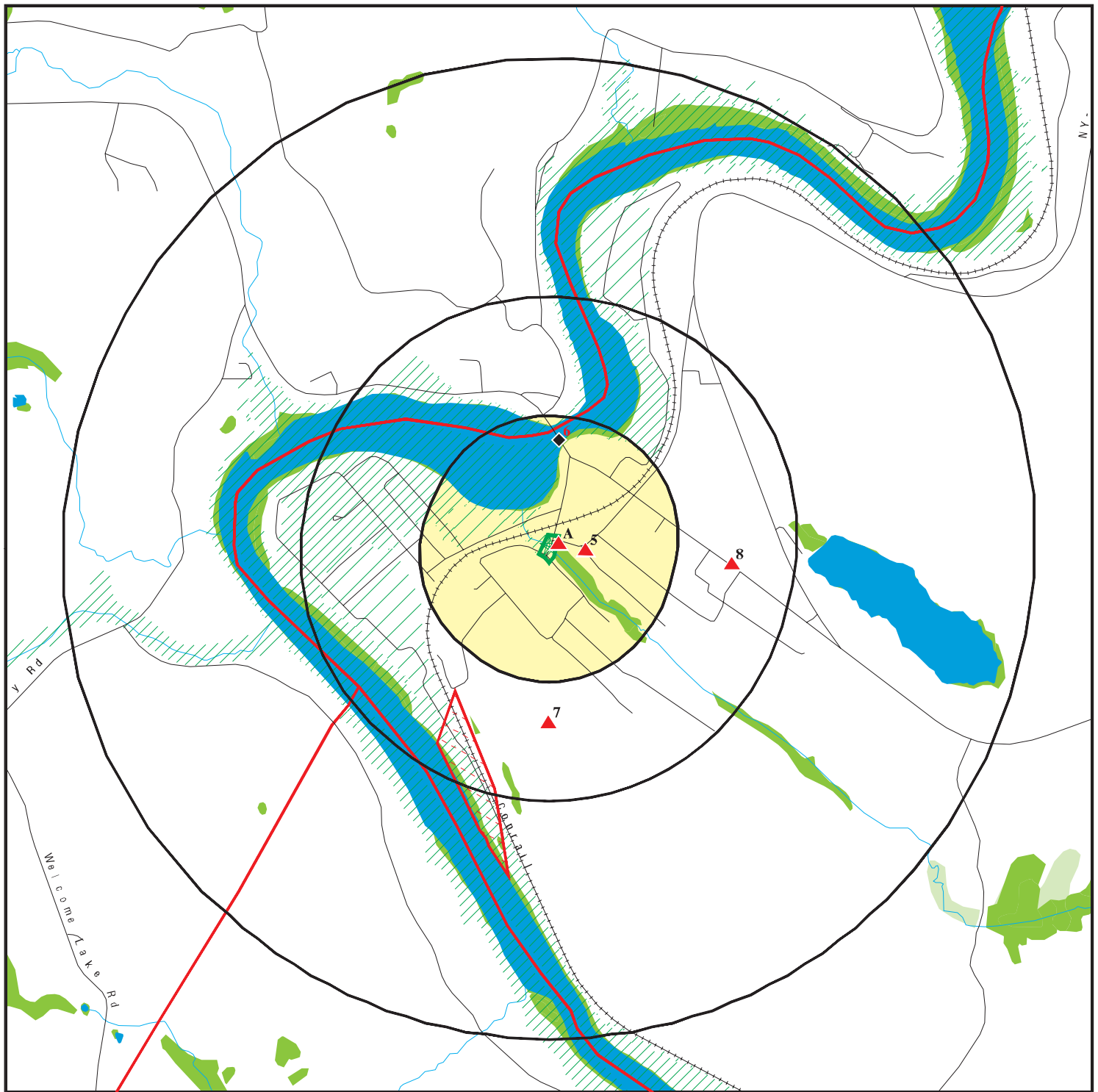
A review of the ROD list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
<b>CORTESE LANDFILL</b> EPA ID:: NYD980528475	<b>SOUTH OF ROUTE 97</b>	<b>SW 1/4 - 1/2 (0.334 mi.)</b>	<b>0</b>	<b>10</b>

## EXECUTIVE SUMMARY

There were no unmapped sites in this report.

# OVERVIEW MAP - 05614188.2R



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- County Boundary
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Town of Tusten Dam  
 ADDRESS: Main Street  
 Narrowsburg NY 12764  
 LAT/LONG: 41.606238 / 75.061964

CLIENT: Shumaker Consulting Engineering  
 CONTACT: Jorel Spain  
 INQUIRY #: 05614188.2r  
 DATE: April 08, 2019 10:50 am

A map of Highland Park, New York, showing a network of streets and water bodies. The map is bounded by a thick black line. Streets shown include 2nd Ave, 5th St, Main St, Erie Ave, School St, Grove St, Hickory Ln, Cullen Rd, Oak St, and Engleman Ln. A large blue area at the top represents a lake or reservoir, with a red line indicating a boundary or path. A green polygon is drawn on the map, enclosing a small area near the intersection of Main St and 5th St. Several red triangles are marked on the map, with labels A4, A1, A, and S. A black square with a white 'X' is located near the intersection of Main St and Erie Ave. The text 'HIGHLAND PHYSICIANS LTD' is visible near the intersection of Main St and Erie Ave. The map also shows a yellow area, possibly a park or undeveloped land, and a green area, possibly a forest or wetland. The map is oriented with North at the top.

- 
- A number line representing distance in miles. The line starts at 0 and ends at  $\frac{1}{4}$  Miles. There are tick marks at  $0$ ,  $\frac{1}{16}$ ,  $\frac{1}{8}$ , and  $\frac{1}{4}$ . The segment from  $0$  to  $\frac{1}{16}$  is shaded yellow. The segment from  $\frac{1}{16}$  to  $\frac{1}{8}$  is shaded black. The segment from  $\frac{1}{8}$  to  $\frac{1}{4}$  is shaded yellow.

SITE NAME: Town of Tusten Dam  
ADDRESS: Main Street  
Narrowsburg NY 12764  
LAT/LONG: 41.606238 / 75.061964

CLIENT: Shumaker Consulting Engineering  
CONTACT: Jorel Spain  
INQUIRY #: 05614188.2r  
DATE: April 08, 2019 10:51 am

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<b>STANDARD ENVIRONMENTAL RECORDS</b>								
<b><i>Federal NPL site list</i></b>								
NPL	1.000		0	0	1	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<b><i>Federal Delisted NPL site list</i></b>								
Delisted NPL	1.000		0	0	0	0	NR	0
<b><i>Federal CERCLIS list</i></b>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	1	NR	NR	1
<b><i>Federal CERCLIS NFRAP site list</i></b>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA CORRACTS facilities list</i></b>								
CORRACTS	1.000		0	0	0	0	NR	0
<b><i>Federal RCRA non-CORRACTS TSD facilities list</i></b>								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
<b><i>Federal RCRA generators list</i></b>								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
<b><i>Federal institutional controls / engineering controls registries</i></b>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	1	NR	NR	1
US INST CONTROL	0.500		0	0	1	NR	NR	1
<b><i>Federal ERNS list</i></b>								
ERNS	TP		NR	NR	NR	NR	NR	0
<b><i>State- and tribal - equivalent NPL</i></b>								
PA SHWS	1.000		0	0	0	0	NR	0
<b><i>State- and tribal - equivalent CERCLIS</i></b>								
NY SHWS	1.000		0	0	0	0	NR	0
<b><i>State and tribal landfill and/or solid waste disposal site lists</i></b>								
NY SWF/LF	0.500		0	0	1	NR	NR	1
PA SWF/LF	0.500		0	0	0	NR	NR	0
<b><i>State and tribal leaking storage tank lists</i></b>								
INDIAN LUST	0.500		0	0	0	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY LTANKS	0.500	1	1	0	1	NR	NR	3
NY HIST LTANKS	0.500		0	0	0	NR	NR	0
<b>State and tribal registered storage tank lists</b>								
FEMA UST	0.250		0	0	NR	NR	NR	0
NY UST	0.250		2	1	NR	NR	NR	3
PA UST	0.250		0	0	NR	NR	NR	0
NY CBS UST	0.250		0	0	NR	NR	NR	0
NY MOSF UST	0.500		0	0	0	NR	NR	0
NY CBS	0.250		0	0	NR	NR	NR	0
NY MOSF	0.500		0	0	0	NR	NR	0
NY AST	0.250		2	0	NR	NR	NR	2
PA AST	0.250		0	0	NR	NR	NR	0
NY CBS AST	0.250		0	0	NR	NR	NR	0
NY MOSF AST	0.500		0	0	0	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
NY TANKS	0.250		0	0	NR	NR	NR	0
<b>State and tribal institutional control / engineering control registries</b>								
NY RES DECL	0.125		0	NR	NR	NR	NR	0
NY ENG CONTROLS	0.500		0	0	0	NR	NR	0
PA ENG CONTROLS	0.500		0	0	0	NR	NR	0
NY INST CONTROL	0.500		0	0	0	NR	NR	0
PA INST CONTROL	0.500		0	0	0	NR	NR	0
<b>State and tribal voluntary cleanup sites</b>								
NY VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
PA VCP	0.500		0	0	0	NR	NR	0
<b>State and tribal Brownfields sites</b>								
NY BROWNFIELDS	0.500		0	0	0	NR	NR	0
PA BROWNFIELDS	0.500		0	0	0	NR	NR	0
NY ERP	0.500		0	0	0	NR	NR	0
<b>ADDITIONAL ENVIRONMENTAL RECORDS</b>								
<b>Local Brownfield lists</b>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Landfill / Solid Waste Disposal Sites</b>								
NY SWTIRE	0.500		0	0	0	NR	NR	0
NY SWRCY	0.500		0	0	0	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Hazardous waste / Contaminated Sites</b>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
NY DEL SHWS	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
NY PFAS	0.500		0	0	0	NR	NR	0
<b>Local Lists of Registered Storage Tanks</b>								
NY HIST UST	0.250		0	0	NR	NR	NR	0
NY HIST AST	TP		NR	NR	NR	NR	NR	0
PA ARCHIVE AST	TP		NR	NR	NR	NR	NR	0
<b>Local Land Records</b>								
NY LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
<b>Records of Emergency Release Reports</b>								
HMIRS	TP		NR	NR	NR	NR	NR	0
NY Spills	0.125	1	0	NR	NR	NR	NR	1
NY Hist Spills	0.125		0	NR	NR	NR	NR	0
NY SPILLS 90	0.125		0	NR	NR	NR	NR	0
NY SPILLS 80	0.125		0	NR	NR	NR	NR	0
<b>Other Ascertainable Records</b>								
RCRA NonGen / NLR	0.250		1	0	NR	NR	NR	1
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	1	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0

## MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
NY AIRS	TP		NR	NR	NR	NR	NR	0
PA AIRS	TP		NR	NR	NR	NR	NR	0
NY COAL ASH	0.500		0	0	0	NR	NR	0
NY DRYCLEANERS	0.250		0	0	NR	NR	NR	0
PA DRYCLEANERS	0.250		0	0	NR	NR	NR	0
NY E DESIGNATION	0.125		0	NR	NR	NR	NR	0
NY Financial Assurance	TP		NR	NR	NR	NR	NR	0
NY HSWDS	0.500		0	0	0	NR	NR	0
NY MANIFEST	0.250		0	0	NR	NR	NR	0
PA MANIFEST	0.250		0	0	NR	NR	NR	0
NY SPDES	TP		NR	NR	NR	NR	NR	0
PA NPDES	TP		NR	NR	NR	NR	NR	0
NY VAPOR REOPENED	0.500		0	0	0	NR	NR	0
NY UIC	TP		NR	NR	NR	NR	NR	0
PA UIC	TP		NR	NR	NR	NR	NR	0
NY COOLING TOWERS	TP		NR	NR	NR	NR	NR	0

### EDR HIGH RISK HISTORICAL RECORDS

#### ***EDR Exclusive Records***

EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0

### EDR RECOVERED GOVERNMENT ARCHIVES

#### ***Exclusive Recovered Govt. Archives***

NY RGA HWS	TP		NR	NR	NR	NR	NR	0
PA RGA HWS	TP		NR	NR	NR	NR	NR	0
NY RGA LF	TP		NR	NR	NR	NR	NR	0
PA RGA LF	TP		NR	NR	NR	NR	NR	0

- Totals --		2	6	1	7	0	0	16
-------------	--	---	---	---	---	---	---	----

#### NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**A1**  
**Target**  
**Property**

**US POST OFFICE**  
**MAIN STREET**  
**NARROWSBURG, NY**

**NY LTANKS**  
**NY Spills**

**S100878958**  
**N/A**

**Site 1 of 4 in cluster A**

**Actual:**  
**691 ft.**

**LTANKS:**

Spill Number/Closed Date: 9314026 / 1994-10-24  
Facility ID: 9314026  
Site ID: 109735  
Spill Date: 1994-03-01  
Spill Cause: Tank Test Failure  
Spill Source: Institutional, Educational, Gov., Other  
Spill Class: C3  
Cleanup Ceased: 1994-10-24  
SWIS: 5300  
Investigator: WXWADSWO  
Referred To: Not reported  
Reported to Dept: 1994-03-01  
CID: Not reported  
Water Affected: Not reported  
Spill Notifier: Tank Tester  
Last Inspection: Not reported  
Recommended Penalty: False  
Meets Standard: False  
UST Involvement: False  
Remediation Phase: 0  
Date Entered In Computer: 1994-03-09  
Spill Record Last Update: 1994-10-24  
Spiller Name: Not reported  
Spiller Company: Not reported  
Spiller Address: Not reported  
Spiller County: 001  
Spiller Contact: Not reported  
Spiller Phone: Not reported  
Spiller Extention: Not reported  
DEC Region: 3  
DER Facility ID: 282191  
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead\_DEC Field was  
WADSWORTH 09/27/95: This is additional information about material  
spilled from the translation of the old spill file: TANK TEST."

**Remarks:**

"EIR RECOMMEND PRODUCT REMOVAL VACUTEST"

**All TTF:**

Facility ID: 9314026  
Spill Number: 9314026  
Spill Tank Test: 1542458  
Site ID: 109735  
Tank Number: Not reported  
Tank Size: 0  
Material: 0001  
EPA UST: Not reported  
UST: Not reported  
Cause: Not reported  
Source: Not reported  
Test Method: 00  
Test Method 2: Unknown  
Leak Rate: .00  
Gross Fail: Not reported  
Modified By: Spills

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US POST OFFICE (Continued)**

**S100878958**

Last Modified Date: Not reported

All Materials:

Site ID: 109735  
Operable Unit ID: 992416  
Operable Unit: 01  
Material ID: 389371  
Material Code: 0001A  
Material Name: #2 fuel oil  
Case No.: Not reported  
Material FA: Petroleum  
Quantity: .00  
Units: Not reported  
Recovered: .00  
Oxygenate: Not reported

SPILLS:

Spill Number/Closed Date: 0311900 / 2004-02-04  
Facility ID: 0311900  
Facility Type: ER  
DER Facility ID: 282191  
Site ID: 109710  
DEC Region: 3  
Spill Cause: Other  
Spill Class: C3  
SWIS: 5300  
Spill Date: 2003-04-25  
Investigator: DVWEHRFR  
Referred To: Not reported  
Reported to Dept: 2004-01-23  
CID: 444  
Water Affected: Not reported  
Spill Source: Commercial/Industrial  
Spill Notifier: Other  
Cleanup Ceased: Not reported  
Cleanup Meets Std: True  
Last Inspection: Not reported  
Recommended Penalty: False  
UST Trust: False  
Remediation Phase: 0  
Date Entered In Computer: 2004-01-23  
Spill Record Last Update: 2004-02-04  
Spiller Name: AL TEETSEL  
Spiller Company: FLEET BANK  
Spiller Address: MAIN STREET  
Spiller Company: 001  
Contact Name: DENNIS ROSS  
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead\_DEC Field was WEHRFRITZ 550 32 FO UST REMOVED ON 4-25-03 NO VISIBLE STRUCTURE DEFECTS CONTAM SOIL WAN NOT DETECTED WITH PID COMPOSITESAMPLE TAKEN OF SIDEWALLS AND EXCAVATION BOTTOM RESULTS INDICATE COMPLIANCE WITH TAGM RSCO"  
Remarks: " TANK REMOVAL NOT LEAKING, SOIL SAMPLES WERE TAKEN, LAB ANNYLIS SHOWING A FEW COMPOUNDS DETECTED BUT WERE BELOW TAGM, "

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**US POST OFFICE (Continued)**

**S100878958**

All Materials:

Site ID: 109710  
Operable Unit ID: 879476  
Operable Unit: 01  
Material ID: 497140  
Material Code: 0001A  
Material Name: #2 fuel oil  
Case No.: Not reported  
Material FA: Petroleum  
Quantity: .00  
Units: L  
Recovered: .00  
Oxygenate: Not reported

**NPL  
Region  
SW  
1/4-1/2  
1763 ft.**

**CORTESE LANDFILL  
SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764**

**NPL  
SEMS  
US ENG CONTROLS  
US INST CONTROL  
ROD  
PRP**

**1000403810  
NYD980528475**

NPL:

EPA ID: NYD980528475  
Cerclis ID: 201867  
EPA Region: 2  
Federal: N  
Final Date: 1986-06-10 00:00:00  
Site Score: 32.109999999999999  
Latitude: 41.600560999999999  
Longitude: -75.064999999999998

Category Details:

NPL Status: Currently on the Final NPL  
Category Description: Depth To Aquifer-> 25 And <= 50 Feet  
Category Value: 40

NPL Status: Currently on the Final NPL  
Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile  
Category Value: 10

Site Details:

Site Name: CORTESE LANDFILL  
Site Status: Final  
Site Zip: 12764  
Site City: VIL OF NARROWSBURG  
Site State: NY  
Federal Site: No  
Site County: SULLIVAN  
EPA Region: 02  
Date Proposed: 10/15/84  
Date Deleted: Not reported  
Date Finalized: 06/10/86

Substance Details:

NPL Status: Currently on the Final NPL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Substance ID:	Not reported
Substance:	Not reported
CAS #:	Not reported
Pathway:	Not reported
Scoring:	Not reported
NPL Status:	Currently on the Final NPL
Substance ID:	D004
Substance:	ARSENIC
CAS #:	7440-38-2
Pathway:	GROUND WATER PATHWAY
Scoring:	4
NPL Status:	Currently on the Final NPL
Substance ID:	D004
Substance:	ARSENIC
CAS #:	7440-38-2
Pathway:	SURFACE WATER PATHWAY
Scoring:	3
NPL Status:	Currently on the Final NPL
Substance ID:	U019
Substance:	BENZENE
CAS #:	71-43-2
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U019
Substance:	BENZENE
CAS #:	71-43-2
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U188
Substance:	PHENOL
CAS #:	108-95-2
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U220
Substance:	TOLUENE
CAS #:	108-88-3
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U220
Substance:	TOLUENE
CAS #:	108-88-3
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U228

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Substance: TRICHLOROETHYLENE (TCE)  
CAS #: 79-01-6  
Pathway: SURFACE WATER PATHWAY  
Scoring: 2

NPL Status: Currently on the Final NPL  
Substance ID: U239  
Substance: XYLENE  
CAS #: 1330-20-7  
Pathway: GROUND WATER PATHWAY  
Scoring: 2

NPL Status: Currently on the Final NPL  
Substance ID: U239  
Substance: XYLENE  
CAS #: 1330-20-7  
Pathway: SURFACE WATER PATHWAY  
Scoring: 2

Summary Details:

Conditions at proposal October 15, 1984): The Cortese Landfill covers approximately 17 acres in the Delaware River floodplain in the Village of Narrowsburg, Town of Tusten, Sullivan County, New York. The former operator of the landfill is the John Cortese Construction Corp. The company owns a portion of the property. The town owns the rest. The landfill received municipal wastes from the Town of Tusten at a rate of 3,000 cubic yards per year from 1972 to 1982. In addition, significant quantities of industrial wastes were buried at the landfill. The State has documented the release of organic chemicals and metals to surface water and ground water at or near the site. The nearest known water supply 800 feet to the northwest) is the auxiliary well for the Narrowsburg water supply. To date, no significant impacts on water supplies have been detected. The State initiated a lawsuit under CERCLA against several parties in Federal District Court in August 1983. Status June 10, 1986): In April 1985, the State signed a Consent Order with SCA Services, Inc., which had transported wastes to the site. The Consent Order requires SCA to undertake a remedial investigation/feasibility study RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work began in the summer of 1985. The RI is scheduled to be completed in September 1986.

Site Status Details:

NPL Status: Final  
Proposed Date: 10/15/1984  
Final Date: 06/10/1986  
Deleted Date: Not reported

Narratives Details:

NPL Name: CORTESE LANDFILL  
City: VIL OF NARROWSBURG  
State: NY

SEMS:

Site ID: 0201867  
EPA ID: NYD980528475

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Cong District: 19  
FIPS Code: 36105  
Latitude: 41.600561  
Longitude: -075.065000  
FF: N  
NPL: Currently on the Final NPL  
Non NPL Status: Not reported

**SEMS Detail:**

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: SI  
Action Name: SI  
SEQ: 1  
Start Date: 1984-08-01 05:00:00  
Finish Date: 9/1/1984 5:00:00 AM  
Qual: H  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: MA  
Action Name: ST COOP  
SEQ: 1  
Start Date: 1991-09-17 04:00:00  
Finish Date: 9/26/2008 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: DS  
Action Name: DISCVRY  
SEQ: 1  
Start Date: 1975-01-01 05:00:00  
Finish Date: 1/1/1975 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

NPL: F  
FF: N  
OU: 00  
Action Code: NF  
Action Name: NPL FINL  
SEQ: 1  
Start Date: 1986-06-10 04:00:00  
Finish Date: 6/10/1986 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: CR  
Action Name: CI  
SEQ: 1  
Start Date: 1990-09-28 04:00:00  
Finish Date: 9/30/1994 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: RS  
Action Name: RV ASSESS  
SEQ: 1  
Start Date: 1990-04-05 04:00:00  
Finish Date: 9/5/1990 4:00:00 AM  
Qual: S  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 01  
Action Code: RO  
Action Name: ROD  
SEQ: 1  
Start Date: 1994-09-30 04:00:00  
Finish Date: 9/30/1994 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: CM  
Action Name: PCOR  
SEQ: 1  
Start Date: 2013-09-25 05:00:00  
Finish Date: 9/25/2013 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: FE  
Action Name: 5 YEAR  
SEQ: 4  
Start Date: 2016-09-09 05:00:00  
Finish Date: 9/9/2016 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 04  
Action Code: RO  
Action Name: ROD  
SEQ: 2  
Start Date: 2010-10-05 04:00:00  
Finish Date: 10/5/2010 4:00:00 AM  
Qual: R  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: FE  
Action Name: 5 YEAR  
SEQ: 3  
Start Date: 2011-02-03 05:00:00  
Finish Date: 7/11/2011 5:00:00 AM  
Qual: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Current Action Lead: EPA Perf  
  
Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: FE  
Action Name: 5 YEAR  
SEQ: 2  
Start Date: 2006-07-19 04:00:00  
Finish Date: 8/18/2006 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: TA  
Action Name: TECH ASSIST  
SEQ: 1  
Start Date: 2006-06-28 04:00:00  
Finish Date: 9/22/2009 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: FE  
Action Name: 5 YEAR  
SEQ: 1  
Start Date: 2001-08-21 04:00:00  
Finish Date: 8/21/2001 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: NP  
Action Name: PROPOSED  
SEQ: 1

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Start Date: 1984-10-15 05:00:00  
Finish Date: 10/15/1984 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: RS  
Action Name: RV ASSESS  
SEQ: 2  
Start Date: 1992-11-17 05:00:00  
Finish Date: 12/1/1992 5:00:00 AM  
Qual: S  
Current Action Lead: EPA Perf

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 01  
Action Code: CO  
Action Name: RI/FS  
SEQ: 1  
Start Date: 1985-04-11 06:00:00  
Finish Date: 9/28/1990 4:00:00 AM  
Qual: H  
Current Action Lead: St Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 02  
Action Code: BE  
Action Name: PRP RD  
SEQ: 2  
Start Date: 1995-09-28 04:00:00  
Finish Date: 5/16/1997 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 03

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Action Code: BF  
Action Name: PRP RA  
SEQ: 3  
Start Date: 2012-09-21 05:00:00  
Finish Date: 11/7/2013 5:00:00 AM  
Qual: IR  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 01  
Action Code: BF  
Action Name: PRP RA  
SEQ: 1  
Start Date: 1996-08-08 04:00:00  
Finish Date: 9/30/1997 4:00:00 AM  
Qual: FR  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 01  
Action Code: BD  
Action Name: PRP RI/FS  
SEQ: 1  
Start Date: 1990-09-28 04:00:00  
Finish Date: 9/30/1994 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 01  
Action Code: AR  
Action Name: ADMIN REC  
SEQ: 1  
Start Date: 1994-08-01 04:00:00  
Finish Date: Not reported  
Qual: E  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

NPL: F  
FF: N  
OU: 01  
Action Code: BE  
Action Name: PRP RD  
SEQ: 1  
Start Date: 1995-09-28 04:00:00  
Finish Date: 8/8/1996 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 03  
Action Code: TS  
Action Name: TRTSTUDY  
SEQ: 2  
Start Date: 2007-05-29 04:00:00  
Finish Date: 2/26/2010 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 04  
Action Code: BF  
Action Name: PRP RA  
SEQ: 4  
Start Date: 2011-12-22 05:00:00  
Finish Date: Not reported  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 04  
Action Code: BE  
Action Name: PRP RD  
SEQ: 4  
Start Date: 2010-11-12 05:00:00  
Finish Date: 12/22/2011 5:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 04  
Action Code: NK  
Action Name: PRP FS  
SEQ: 1  
Start Date: 2010-05-03 05:00:00  
Finish Date: 10/5/2010 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 03  
Action Code: TS  
Action Name: TRTSTUDY  
SEQ: 1  
Start Date: 2003-07-30 04:00:00  
Finish Date: 9/1/2005 4:00:00 AM  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 03  
Action Code: ME  
Action Name: PRP LR  
SEQ: 1  
Start Date: 2013-11-07 05:00:00  
Finish Date: Not reported  
Qual: Not reported  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 02  
Action Code: BF  
Action Name: PRP RA  
SEQ: 2  
Start Date: 1997-05-16 04:00:00  
Finish Date: 10/15/1998 4:00:00 AM  
Qual: FR

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: BB  
Action Name: PRP RV  
SEQ: 1  
Start Date: 1995-01-30 05:00:00  
Finish Date: 1/30/1996 5:00:00 AM  
Qual: S  
Current Action Lead: EPA Ovrsght

Region: 02  
Site ID: 0201867  
EPA ID: NYD980528475  
Site Name: CORTESE LANDFILL  
NPL: F  
FF: N  
OU: 00  
Action Code: PA  
Action Name: PA  
SEQ: 1  
Start Date: 1984-08-01 05:00:00  
Finish Date: 9/1/1984 5:00:00 AM  
Qual: L  
Current Action Lead: St Perf

**US ENG CONTROLS:**

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764

EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Actual Date: 10/30/2010  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Aeration  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Air Stripping  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Clarification  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Discharge  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Extraction  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Filtration  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Flocculation  
Contact Name: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Monitoring  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Operations & Maintenance (O&M)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Reinjection  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Soil  
Engineering Control: Cap  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Solid Waste  
Engineering Control: Cap  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Contaminated Media : Solid Waste  
Engineering Control: Disposal  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Solid Waste  
Engineering Control: Operations & Maintenance (O&M)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: RECORD OF DECISION  
Action Completion date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Solid Waste  
Engineering Control: Treatment, (N.O.S.)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: Air Sparging: Ozone Enhancement  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: Flocculation  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: In-Situ Chemical Oxidation (ISCO)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: Monitoring  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: Operations & Maintenance (O&M)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Engineering Control: Vapor Extraction  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 002  
Action Name: RECORD OF DECISION  
Action Completion date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Soil  
Engineering Control: Soil Vapor Extraction (in-situ)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Air Sparging: Ozone Enhancement  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Flocculation  
Contact Name: Not reported  
Contact Phone and Ext: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: In-Situ Chemical Oxidation (ISCO)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Monitoring  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Natural Attenuation  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Operations & Maintenance (O&M)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Groundwater  
Engineering Control: Vapor Extraction  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

Action ID: 001  
Action Name: ROD Amendment  
Action Completion date: 10/05/2010  
Operable Unit: 01  
Contaminated Media : Soil

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Engineering Control: Soil Vapor Extraction (in-situ)  
Contact Name: Not reported  
Contact Phone and Ext: Not reported  
Event Code Description: Not reported

**US INST CONTROL:**

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Action Name: RECORD OF DECISION  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764  
EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Inst. Control: Deed Notices  
Actual Date: 09/30/1994  
Comple. Date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Contact Name : Not reported  
Contact Phone and Ext : Not reported  
Event Code Description: Not reported

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Action Name: RECORD OF DECISION  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764  
EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Inst. Control: Groundwater use/well drilling regulation  
Actual Date: 09/30/1994  
Comple. Date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Groundwater  
Contact Name : Not reported  
Contact Phone and Ext : Not reported  
Event Code Description: Not reported

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Action Name: RECORD OF DECISION  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764  
EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Inst. Control: Deed Notices  
Actual Date: 09/30/1994  
Comple. Date: 09/30/1994  
Operable Unit: 01  
Contaminated Media : Soil

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Contact Name : Not reported  
Contact Phone and Ext :Not reported  
Event Code Description:Not reported

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Action Name: RECORD OF DECISION  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764

EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Inst. Control: Institutional Controls, (N.O.S.)  
Actual Date: 10/30/2010  
Compleat. Date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Contact Name : Not reported  
Contact Phone and Ext :Not reported  
Event Code Description:Not reported

EPA ID: NYD980528475  
Site ID: 0201867  
Name: CORTESE LANDFILL  
Action Name: RECORD OF DECISION  
Address: SOUTH OF ROUTE 97  
VIL OF NARROWSBURG, NY 12764

EPA Region: 02  
County: SULLIVAN  
Event Code: Not reported  
Inst. Control: Water Supply Use Restriction  
Actual Date: 10/30/2010  
Compleat. Date: 10/05/2010  
Operable Unit: 04  
Contaminated Media : Groundwater  
Contact Name : Not reported  
Contact Phone and Ext :Not reported  
Event Code Description:Not reported

**ROD:**

EPA ID: NYD980528475  
RG: 2  
Site ID: 201867  
Name: CORTESE LANDFILL  
Action: GOVT ESD  
Operable Unit Number: SOURCE CONTROL  
SEQ ID: 1  
Action Completion: 2013-09-25 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

EPA ID: NYD980528475  
RG: 2  
Site ID: 201867  
Name: CORTESE LANDFILL  
Action: GOVT ROD Amendment for PRP Remedy

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

Operable Unit Number: DRUMS  
SEQ ID: 1  
Action Completion: 2010-10-05 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

EPA ID: NYD980528475  
RG: 2  
Site ID: 201867  
Name: CORTESE LANDFILL  
Action: GOVT ROD for PRP Remedy  
Operable Unit Number: DRUMS  
SEQ ID: 1  
Action Completion: 1994-09-30 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

EPA ID: NYD980528475  
RG: 2  
Site ID: 201867  
Name: CORTESE LANDFILL  
Action: GOVT ROD for PRP Remedy  
Operable Unit Number: SOURCE CONTROL  
SEQ ID: 2  
Action Completion: 2010-10-05 00:00:00  
NPL Status: Final  
Non NPL Status: Not reported

**PRP:**

PRP Name: ACHROVURE UNIONCAMP CORP.  
ALLIED SIGNAL  
ALLIEDSIGNAL, INC.  
BENDIX CORP  
CARLSON INK  
CELLU-CRAFT, INC.  
CELLU-CRAFT, INC.  
CONSOLIDATED EDISON CO. OF NY INC.  
CONSOLIDATED EDISON CO. OF NY INC.  
CONSOLIDATED EDISON CO. OF NY INC.  
CONTINENTAL CAN COMPANY  
CORTESE CONSTRUCTION CORP.  
CUSTOM CHEMICAL CO INC  
CUSTOM CHEMICAL CO INC  
DELEET MERCHANDISING  
DIAMOND SHAMROCK CORPORATION  
DIAMOND SHAMROCK CORPORATION  
DIAMOND SHAMROCK CORPORATION  
DURO TEST DV, C/O TCA HOLDINGS  
E. I. DU PONT DE NEMOURS AND COMPANY  
E. I. DU PONT DE NEMOURS AND COMPANY  
E. I. DU PONT DE NEMOURS AND COMPANY  
EVONIK DEGUSSA CORP  
FALSTROM CO.  
FALSTROM CO.  
FIELDS PLASTIC & CHEM INC  
FLEXIBAR CORPORATION  
FLEXIBAR CORPORATION

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE LANDFILL (Continued)**

**1000403810**

GANES CHEMICAL WORKS, INC.  
GANES CHEMICAL WORKS, INC.  
GUARD ALL CHEMICAL CO., INC.  
HALOCARBON PRODUCTS CORP.  
HALOCARBON PRODUCTS CORP.  
HENKEL CORP.  
I.C.I AMERICAS INC.  
I.C.I AMERICAS INC.  
ICI AMERICAS, INC.  
INMONT CORPORATION  
INMONT CORPORATION  
INX PRINTING INK CORP.  
KAY FRIES CHEMICALS, INC.  
KAY FRIES CHEMICALS, INC.  
KEUFFEL & ESSER CO.  
KEUFFEL & ESSER CO.  
MARISOL INC.  
MARISOL INC.  
NATIONAL STARCH & CHEMICAL CO.  
NATIONAL STARCH & CHEMICAL CO.  
NICHOLAS SANITATION  
NICHOLAS SANITATION  
OCCIDENTAL CHEMICAL CORPORATION  
OKONITE CO.  
OKONITE CO.  
ONEIDA PACKAGING PRODUCTS  
ONEIDA PACKAGING PRODUCTS  
PACQUET ONEIDA, INC.  
R & R SANITATION SERVICE  
RADIAC RESEARCH CORP.  
RADIAC RESEARCH CORP.  
RHONE POULENC INC.

[Click this hyperlink](#) while viewing on your computer to access  
12 additional PRP: record(s) in the EDR Site Report.

**A2**  
**ENE**  
**< 1/8**  
**0.002 mi.**  
**13 ft.**

**NARROWSBURG CENTRAL SCHOOL**  
**6 ERIE ST**  
**NARROWSBURG, NY 12764**

**Site 2 of 4 in cluster A**

**NY UST**  
**RCRA NonGen / NLR**  
**FINDS**  
**ECHO**  
**1000368336**  
**NYD011234960**

**Relative:**  
**Higher**  
**Actual:**  
**693 ft.**

UST:  
Id/Status: 3-012467 / Active  
Program Type: PBS  
Region: STATE  
DEC Region: 3  
Expiration Date: 08/06/2020  
UTM X: 495141.51105  
UTM Y: 4606170.97262  
Site Type: Apartment Building/Office Building  
  
Affiliation Records:  
Site Id: 31421  
Affiliation Type: Mail Contact  
Company Name: NARO BUILDING LLC  
Contact Type: Not reported  
Contact Name: BRENDAN WEIDEN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NARROWSBURG CENTRAL SCHOOL (Continued)**

**1000368336**

Address1: 30 ESSEX PLACE  
Address2: Not reported  
City: BRONXVILLE  
State: NY  
Zip Code: 10708  
Country Code: 001  
Phone: (646) 942-3702  
EMail: WEIDEN@JBB.COM  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

Site Id: 31421  
Affiliation Type: Facility Operator  
Company Name: THE NARROWSBURG SCHOOL REDEV. PROJECT  
Contact Type: Not reported  
Contact Name: SEAN HARRINGTON  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 001  
Phone: (845) 252-3126 1300  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

Site Id: 31421  
Affiliation Type: Emergency Contact  
Company Name: COUNTY OF SULLIVAN INDUSTRIAL DEV. AGENCY  
Contact Type: Not reported  
Contact Name: SEAN HARRINGTON  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 999  
Phone: (845) 754-6822 1300  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

Site Id: 31421  
Affiliation Type: Facility Owner  
Company Name: COUNTY OF SULLIVAN INDUSTRIAL DEV. AGENCY  
Contact Type: MEMBER, NARO BUILDING LLC  
Contact Name: BRENDAN WEIDEN  
Address1: 1 CABLEVISION CENTER  
Address2: Not reported  
City: FERNDAL  
State: NY  
Zip Code: 12734  
Country Code: 001

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NARROWSBURG CENTRAL SCHOOL (Continued)**

**1000368336**

Phone: 000000000000000  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

**Tank Info:**

Tank Number: 001  
Tank ID: 83642  
Tank Status: In Service  
Material Name: In Service  
Capacity Gallons: 10000  
Install Date: 07/10/2002  
Date Tank Closed: Not reported  
Registered: True  
Tank Location: Underground  
Tank Type: Equivalent technology  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017

**Equipment Records:**

G04 - Tank Secondary Containment - Double-Walled (Underground)  
C02 - Pipe Location - Underground/On-ground  
F04 - Pipe External Protection - Fiberglass  
J02 - Dispenser - Suction Dispenser  
B04 - Tank External Protection - Fiberglass  
D08 - Pipe Type - Equivalent Technology  
E00 - Piping Secondary Containment - None  
I02 - Overfill - High Level Alarm  
L09 - Piping Leak Detection - Exempt Suction Piping  
A00 - Tank Internal Protection - None  
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring  
I03 - Overfill - Automatic Shut-Off  
K00 - Spill Prevention - None

Tank Number: 1  
Tank ID: 67831  
Tank Status: Closed - Removed  
Material Name: Closed - Removed  
Capacity Gallons: 10000  
Install Date: 08/01/1978  
Date Tank Closed: 07/10/2002  
Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NARROWSBURG CENTRAL SCHOOL (Continued)**

**1000368336**

Tightness Test Method: 20  
Date Test: 08/01/1997  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: TRANSLAT  
Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None  
C00 - Pipe Location - No Piping  
F00 - Pipe External Protection - None  
A00 - Tank Internal Protection - None  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
G00 - Tank Secondary Containment - None  
D10 - Pipe Type - Copper

RCRA NonGen / NLR:

Date form received by agency: 01/01/2007  
Facility name: NARROWSBURG CENTRAL SCHOOL  
Facility address: 6 ERIE ST  
NARROWSBURG, NY 12764  
EPA ID: NYD011234960  
Mailing address: ERIE ST  
NARROWSBURG, NY 12764  
Contact: Not reported  
Contact address: ERIE ST  
NARROWSBURG, NY 12764  
Contact country: US  
Contact telephone: Not reported  
Contact email: Not reported  
EPA Region: 02  
Classification: Non-Generator  
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name: NARROWSBURG SCHOOL DIST  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, WY 99999  
Owner/operator country: US  
Owner/operator telephone: 212-555-1212  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported  
Legal status: District  
Owner/Operator Type: Operator  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Owner/operator name: NARROWSBURG SCHOOL DIST  
Owner/operator address: NOT REQUIRED  
NOT REQUIRED, WY 99999  
Owner/operator country: US  
Owner/operator telephone: 212-555-1212  
Owner/operator email: Not reported  
Owner/operator fax: Not reported  
Owner/operator extension: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NARROWSBURG CENTRAL SCHOOL (Continued)**

**1000368336**

Legal status: District  
Owner/Operator Type: Owner  
Owner/Op start date: Not reported  
Owner/Op end date: Not reported

Handler Activities Summary:

U.S. importer of hazardous waste: No  
Mixed waste (haz. and radioactive): No  
Recycler of hazardous waste: No  
Transporter of hazardous waste: No  
Treater, storer or disposer of HW: No  
Underground injection activity: No  
On-site burner exemption: No  
Furnace exemption: No  
Used oil fuel burner: No  
Used oil processor: No  
User oil refiner: No  
Used oil fuel marketer to burner: No  
Used oil Specification marketer: No  
Used oil transfer facility: No  
Used oil transporter: No

Historical Generators:

Date form received by agency: 01/01/2006  
Site name: NARROWSBURG CENTRAL SCHOOL  
Classification: Not a generator, verified

Date form received by agency: 03/30/1995  
Site name: NARROWSBURG CENTRAL SCHOOL  
Classification: Unverified

. Waste code: NONE  
. Waste name: None

Date form received by agency: 10/25/1989  
Site name: NARROWSBURG CENTRAL SCHOOL  
Classification: Small Quantity Generator

. Waste code: NONE  
. Waste name: None

Violation Status: No violations found

FINDS:

Registry ID: 110064186438

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**NARROWSBURG CENTRAL SCHOOL (Continued)**

**1000368336**

[Click this hyperlink](#) while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

**ECHO:**

Envid: 1000368336  
Registry ID: 110064186438  
DFR URL: <http://echo.epa.gov/detailed-facility-report?fid=110064186438>

**A3  
ENE  
< 1/8  
0.002 mi.  
13 ft.**

**THE NARROWSBURG SCHOOL REDEV. PROJECT  
7 ERIE AVENUE  
NARROWSBURG, NY 12764**

**NY AST A100412125  
N/A**

**Site 3 of 4 in cluster A**

**Relative:  
Higher  
Actual:  
693 ft.**

**AST:**

Region: STATE  
DEC Region: 3  
Site Status: Active  
Facility Id: 3-012467  
Program Type: PBS  
UTM X: 495141.51105  
UTM Y: 4606170.97262  
Expiration Date: 08/06/2020  
Site Type: Apartment Building/Office Building

**Affiliation Records:**

Site Id: 31421  
Affiliation Type: Mail Contact  
Company Name: NARO BUILDING LLC  
Contact Type: Not reported  
Contact Name: BRENDAN WEIDEN  
Address1: 30 ESSEX PLACE  
Address2: Not reported  
City: BRONXVILLE  
State: NY  
Zip Code: 10708  
Country Code: 001  
Phone: (646) 942-3702  
EMail: WEIDEN@JBB.COM  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

Site Id: 31421  
Affiliation Type: Facility Operator  
Company Name: THE NARROWSBURG SCHOOL REDEV. PROJECT  
Contact Type: Not reported  
Contact Name: SEAN HARRINGTON  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 001  
Phone: (845) 252-3126 1300  
EMail: Not reported  
Fax Number: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE NARROWSBURG SCHOOL REDEV. PROJECT (Continued)**

**A100412125**

Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06  
  
Site Id: 31421  
Affiliation Type: Emergency Contact  
Company Name: COUNTY OF SULLIVAN INDUSTRIAL DEV. AGENCY  
Contact Type: Not reported  
Contact Name: SEAN HARRINGTON  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 999  
Phone: (845) 754-6822 1300  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

Site Id: 31421  
Affiliation Type: Facility Owner  
Company Name: COUNTY OF SULLIVAN INDUSTRIAL DEV. AGENCY  
Contact Type: MEMBER, NARO BUILDING LLC  
Contact Name: BRENDAN WEIDEN  
Address1: 1 CABLEVISION CENTER  
Address2: Not reported  
City: FERNDALE  
State: NY  
Zip Code: 12734  
Country Code: 001  
Phone: 0000000000000000  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2015-08-06

**Tank Info:**

Tank Number: 002  
Tank Id: 256261

**Equipment Records:**

J00 - Dispenser - None  
B00 - Tank External Protection - None  
C00 - Pipe Location - No Piping  
F00 - Pipe External Protection - None  
L00 - Piping Leak Detection - None  
D00 - Pipe Type - No Piping  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
E00 - Piping Secondary Containment - None  
G09 - Tank Secondary Containment - Modified Double-Walled  
(Aboveground)  
K00 - Spill Prevention - None  
A00 - Tank Internal Protection - None  
Tank Location: Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THE NARROWSBURG SCHOOL REDEV. PROJECT (Continued)**

**A100412125**

above grade or tank pad, allowing visual inspection.  
Tank Type: Steel/Carbon Steel/Iron  
Tank Status: In Service  
Pipe Model: Not reported  
Install Date: 07/10/2002  
Capacity Gallons: 50  
Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Date Tank Closed: Not reported  
Register: True  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017  
Material Name: #2 fuel oil (on-site consumption)

**A4**  
**West**  
**< 1/8**  
**0.032 mi.**  
**167 ft.**

**DIRLAM BROS. LUMBER CO, INC.**  
**20 OAK STREET**  
**NARROWSBURG, NY 12764**

**NY UST** **U004122212**  
**NY AST** **N/A**

**Site 4 of 4 in cluster A**

**Relative:**  
**Higher**

UST:  
Id/Status: 3-600277 / Unregulated/Closed  
Program Type: PBS  
Region: STATE  
DEC Region: 3  
Expiration Date: N/A  
UTM X: 494695.08562  
UTM Y: 4606056.07424  
Site Type: Other Wholesale/Retail Sales

**Actual:**  
**702 ft.**

Affiliation Records:  
Site Id: 33898  
Affiliation Type: Mail Contact  
Company Name: DIRLAM BROS. LUMBER CO., INC.  
Contact Type: Not reported  
Contact Name: ROD BRANNING  
Address1: 20 OAK STREET  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (845) 252-3955  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

Site Id: 33898  
Affiliation Type: Facility Operator  
Company Name: NARROWSBURG LUMBER CO.  
Contact Type: Not reported  
Contact Name: ROD BRANNING  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NY

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DIRLAM BROS. LUMBER CO, INC. (Continued)**

**U004122212**

Zip Code: Not reported  
Country Code: 001  
Phone: (845) 252-3955  
EMail: Not reported  
Fax Number: Not reported  
Modified By: RDBENDEL  
Date Last Modified: 2006-11-10

Site Id: 33898  
Affiliation Type: Emergency Contact  
Company Name: ROGER DIRLAM  
Contact Type: Not reported  
Contact Name: ROD BRANNING  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 999  
Phone: (570) 729-7156  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

Site Id: 33898  
Affiliation Type: Facility Owner  
Company Name: ROGER DIRLAM  
Contact Type: BOOKKEEPER  
Contact Name: COLLEEN DIRLAM  
Address1: 20 OAK STREET  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (570) 253-3540  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

**Tank Info:**

Tank Number: 001  
Tank ID: 77775  
Tank Status: Closed - Removed  
Material Name: Closed - Removed  
Capacity Gallons: 1000  
Install Date: 12/01/1988  
Date Tank Closed: 01/16/2007  
Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0009  
Common Name of Substance: Gasoline

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DIRLAM BROS. LUMBER CO, INC. (Continued)**

**U004122212**

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017

Equipment Records:

D01 - Pipe Type - Steel/Carbon Steel/Iron  
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring  
A00 - Tank Internal Protection - None  
F00 - Pipe External Protection - None  
B02 - Tank External Protection - Original Sacrificial Anode  
G04 - Tank Secondary Containment - Double-Walled (Underground)  
I00 - Overfill - None  
J02 - Dispenser - Suction Dispenser  
C02 - Pipe Location - Underground/On-ground

Tank Number: 002  
Tank ID: 77776  
Tank Status: Closed - Removed  
Material Name: Closed - Removed  
Capacity Gallons: 1000  
Install Date: 12/01/1988  
Date Tank Closed: 01/16/2007  
Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0008  
Common Name of Substance: Diesel

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017

Equipment Records:

G04 - Tank Secondary Containment - Double-Walled (Underground)  
B02 - Tank External Protection - Original Sacrificial Anode  
F00 - Pipe External Protection - None  
C02 - Pipe Location - Underground/On-ground  
J02 - Dispenser - Suction Dispenser  
A00 - Tank Internal Protection - None  
D01 - Pipe Type - Steel/Carbon Steel/Iron  
H01 - Tank Leak Detection - Interstitial - Electronic Monitoring  
I00 - Overfill - None

Tank Number: 005  
Tank ID: 77779  
Tank Status: In Service  
Material Name: In Service  
Capacity Gallons: 1000  
Install Date: 08/19/2002  
Date Tank Closed: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DIRLAM BROS. LUMBER CO, INC. (Continued)**

**U004122212**

Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None  
F00 - Pipe External Protection - None  
C02 - Pipe Location - Underground/On-ground  
G00 - Tank Secondary Containment - None  
J02 - Dispenser - Suction Dispenser  
A00 - Tank Internal Protection - None  
D01 - Pipe Type - Steel/Carbon Steel/Iron  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
L09 - Piping Leak Detection - Exempt Suction Piping

AST:

Region: STATE  
DEC Region: 3  
Site Status: Unregulated/Closed  
Facility Id: 3-600277  
Program Type: PBS  
UTM X: 494695.08562  
UTM Y: 4606056.07424  
Expiration Date: N/A  
Site Type: Other Wholesale/Retail Sales

Affiliation Records:

Site Id: 33898  
Affiliation Type: Mail Contact  
Company Name: DIRLAM BROS. LUMBER CO., INC.  
Contact Type: Not reported  
Contact Name: ROD BRANNING  
Address1: 20 OAK STREET  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (845) 252-3955  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

Site Id: 33898  
Affiliation Type: Facility Operator  
Company Name: NARROWSBURG LUMBER CO.  
Contact Type: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DIRLAM BROS. LUMBER CO, INC. (Continued)**

**U004122212**

Contact Name: ROD BRANNING  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NY  
Zip Code: Not reported  
Country Code: 001  
Phone: (845) 252-3955  
EMail: Not reported  
Fax Number: Not reported  
Modified By: RDBENDEL  
Date Last Modified: 2006-11-10

Site Id: 33898  
Affiliation Type: Emergency Contact  
Company Name: ROGER DIRLAM  
Contact Type: Not reported  
Contact Name: ROD BRANNING  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 999  
Phone: (570) 729-7156  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

Site Id: 33898  
Affiliation Type: Facility Owner  
Company Name: ROGER DIRLAM  
Contact Type: BOOKKEEPER  
Contact Name: COLLEEN DIRLAM  
Address1: 20 OAK STREET  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (570) 253-3540  
EMail: Not reported  
Fax Number: Not reported  
Modified By: BHYUKOWE  
Date Last Modified: 2008-04-01

**Tank Info:**

Tank Number: 003  
Tank Id: 77777  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

**Equipment Records:**

G00 - Tank Secondary Containment - None

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**DIRLAM BROS. LUMBER CO, INC. (Continued)**

**U004122212**

J02 - Dispenser - Suction Dispenser  
B00 - Tank External Protection - None  
F00 - Pipe External Protection - None  
C01 - Pipe Location - Aboveground  
A00 - Tank Internal Protection - None  
D01 - Pipe Type - Steel/Carbon Steel/Iron  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
L09 - Piping Leak Detection - Exempt Suction Piping  
Tank Location: Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated above grade or tank pad, allowing visual inspection.  
Tank Type: Steel/Carbon Steel/Iron  
Tank Status: In Service  
Pipe Model: Not reported  
Install Date: 08/19/2002  
Capacity Gallons: 275  
Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Date Tank Closed: Not reported  
Register: True  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017  
Material Name: #2 fuel oil (on-site consumption)

Tank Number: 004  
Tank Id: 77778  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

**Equipment Records:**

D01 - Pipe Type - Steel/Carbon Steel/Iron  
A00 - Tank Internal Protection - None  
G00 - Tank Secondary Containment - None  
J02 - Dispenser - Suction Dispenser  
F00 - Pipe External Protection - None  
B00 - Tank External Protection - None  
C01 - Pipe Location - Aboveground  
L09 - Piping Leak Detection - Exempt Suction Piping  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
Tank Location: Aboveground - on saddles, legs, racks, etc.... Tank bottom is elevated above grade or tank pad, allowing visual inspection.  
Tank Type: Steel/Carbon Steel/Iron  
Tank Status: In Service  
Pipe Model: Not reported  
Install Date: 08/19/2002  
Capacity Gallons: 275  
Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Date Tank Closed: Not reported  
Register: True  
Modified By: BHYUKOWE  
Last Modified: 04/14/2017  
Material Name: #2 fuel oil (on-site consumption)

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

5  
East  
< 1/8  
0.061 mi.  
320 ft.

**HECTARS RESIDENCE**  
**10 GROVE STREET**  
**NARROWSBURG, NY**

NY LTANKS

**S101340276**  
**N/A**

**Relative:**  
**Higher**

**Actual:**  
**723 ft.**

**LTANKS:**

Spill Number/Closed Date: 9405776 / 1994-10-13  
Facility ID: 9405776  
Site ID: 111021  
Spill Date: 1994-07-28  
Spill Cause: Tank Failure  
Spill Source: Private Dwelling  
Spill Class: C3  
Cleanup Ceased: 1994-10-13  
SWIS: 5300  
Investigator: DVWEHRFR  
Referred To: Not reported  
Reported to Dept: 1994-07-28  
CID: Not reported  
Water Affected: Not reported  
Spill Notifier: Other  
Last Inspection: Not reported  
Recommended Penalty: False  
Meets Standard: False  
UST Involvement: False  
Remediation Phase: 0  
Date Entered In Computer: 1994-07-29  
Spill Record Last Update: 1994-10-13  
Spiller Name: Not reported  
Spiller Company: WALTER STEVENS (OWNER)  
Spiller Address: 123 TURREL LANE  
Spiller County: 001  
Spiller Contact: Not reported  
Spiller Phone: Not reported  
Spiller Extension: Not reported  
DEC Region: 3  
DER Facility ID: 97155  
DEC Memo: "Prior to Sept, 2004 data translation this spill Lead\_DEC Field was WEHRFRITZ 09/27/95: This is additional information about material spilled from the translation of the old spill file: STRONG ODOR."

**Remarks:**

"FOUND OIL STAINED SOIL NEAR TWO FUEL TANKS CALLER SAID NO REPAIRS NEEDED NO LEAK NOW SPILL MAY HAVE BEEN FROM OLD TANK THAT IS REPLACED"  
Not reported

**All Materials:**

Site ID: 111021  
Operable Unit ID: 1000086  
Operable Unit: 01  
Material ID: 382361  
Material Code: 0066A  
Material Name: unknown petroleum  
Case No.: Not reported  
Material FA: Petroleum  
Quantity: .00  
Units: Not reported  
Recovered: .00  
Oxygenate: Not reported

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**6**  
**North**  
**1/8-1/4**  
**0.201 mi.**  
**1059 ft.**

**ST FRANCIS XAVIER CHURCH**  
**ROUTE #52**  
**NARROWSBURG, NY 12764**

**NY UST**    **U001842760**  
**N/A**

**Relative:**  
**Lower**

UST:

**Actual:**  
**659 ft.**

Id/Status: 3-137081 / Unregulated/Closed  
Program Type: PBS  
Region: STATE  
DEC Region: 3  
Expiration Date: N/A  
UTM X: 494868.95003  
UTM Y: 4606423.65492  
Site Type: Other

Affiliation Records:

Site Id: 32101  
Affiliation Type: Facility Owner  
Company Name: ST. FRANCIS XAVIER PARISH  
Contact Type: Not reported  
Contact Name: Not reported  
Address1: RT. 52  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (914) 252-6681  
EMail: Not reported  
Fax Number: Not reported  
Modified By: TRANSLAT  
Date Last Modified: 2004-03-04

Site Id: 32101  
Affiliation Type: Mail Contact  
Company Name: ST. FRANCIS XAVIER PARISH  
Contact Type: Not reported  
Contact Name: Not reported  
Address1: RT. 52  
Address2: Not reported  
City: NARROWSBURG  
State: NY  
Zip Code: 12764  
Country Code: 001  
Phone: (914) 252-6681  
EMail: Not reported  
Fax Number: Not reported  
Modified By: TRANSLAT  
Date Last Modified: 2004-03-04

Site Id: 32101  
Affiliation Type: Facility Operator  
Company Name: ST FRANCIS XAVIER CHURCH  
Contact Type: Not reported  
Contact Name: ST FRANCIS XAVIER CHURCH  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST FRANCIS XAVIER CHURCH (Continued)**

**U001842760**

Zip Code: Not reported  
Country Code: 001  
Phone: (914) 252-6681  
EMail: Not reported  
Fax Number: Not reported  
Modified By: TRANSLAT  
Date Last Modified: 2004-03-04

Site Id: 32101  
Affiliation Type: Emergency Contact  
Company Name: ST. FRANCIS XAVIER PARISH  
Contact Type: Not reported  
Contact Name: FR. ANTHONY MCGUIRE  
Address1: Not reported  
Address2: Not reported  
City: Not reported  
State: NN  
Zip Code: Not reported  
Country Code: 001  
Phone: (914) 252-6681  
EMail: Not reported  
Fax Number: Not reported  
Modified By: TRANSLAT  
Date Last Modified: 2004-03-04

**Tank Info:**

Tank Number: 1  
Tank ID: 70067  
Tank Status: Tank Converted to Non-Regulated Use  
Material Name: Tank Converted to Non-Regulated Use  
Capacity Gallons: 1000  
Install Date: 12/01/1959  
Date Tank Closed: 08/01/1996  
Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: TRANSLAT  
Last Modified: 04/14/2017

**Equipment Records:**

D00 - Pipe Type - No Piping  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
G00 - Tank Secondary Containment - None  
J02 - Dispenser - Suction Dispenser  
F00 - Pipe External Protection - None  
B00 - Tank External Protection - None  
C00 - Pipe Location - No Piping  
A00 - Tank Internal Protection - None

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**ST FRANCIS XAVIER CHURCH (Continued)**

**U001842760**

Tank Number: 2  
Tank ID: 81074  
Tank Status: Tank Converted to Non-Regulated Use  
Material Name: Tank Converted to Non-Regulated Use  
Capacity Gallons: 1000  
Install Date: 12/01/1959  
Date Tank Closed: 08/01/1996  
Registered: True  
Tank Location: Underground  
Tank Type: Steel/carbon steel  
Material Code: 0001  
Common Name of Substance: #2 Fuel Oil (On-Site Consumption)

Tightness Test Method: NN  
Date Test: Not reported  
Next Test Date: Not reported  
Pipe Model: Not reported  
Modified By: TRANSLAT  
Last Modified: 04/14/2017

Equipment Records:

B00 - Tank External Protection - None  
C00 - Pipe Location - No Piping  
F00 - Pipe External Protection - None  
D00 - Pipe Type - No Piping  
G00 - Tank Secondary Containment - None  
J02 - Dispenser - Suction Dispenser  
H00 - Tank Leak Detection - None  
I00 - Overfill - None  
A00 - Tank Internal Protection - None

7  
South  
1/4-1/2  
0.334 mi.  
1762 ft.

**CORTESE SLF**  
**RD #2**  
**NARROWSBURG, NY 00000**

**NY SWF/LF S103592489**  
**N/A**

**Relative:**  
**Higher**

SWF/LF:  
Flag: INACTIVE  
Region Code: 3  
Phone Number: Not reported  
Owner Name: JOHN CORTESE CONST CORP  
Owner Type: Private  
Owner Address: RD #2  
Owner Addr2: Not reported  
Owner City,St,Zip: NARROWSBURG, NY 12764  
Owner Email: Not reported  
Owner Phone: Not reported  
Contact Name: Not reported  
Contact Address: Not reported  
Contact Addr2: Not reported  
Contact City,St,Zip: Not reported  
Contact Email: Not reported  
Contact Phone: Not reported  
Activity Desc: Landfill - MSW - permit  
Activity Number: [53S05]  
Active: No  
East Coordinate: 494832

**Actual:**  
**987 ft.**

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**CORTESE SLF (Continued)**

**S103592489**

North Coordinate: 4605472  
Accuracy Code: Not reported  
Regulatory Status: None  
Waste Type: Not reported  
Authorization #: 0  
Authorization Date: Not reported  
Expiration Date: Not reported  
Operator Name: JOHN CORTESE CONST CORP  
Operator Type: Not reported  
Last Date: Not reported

**8**  
**East**  
**1/4-1/2**  
**0.367 mi.**  
**1938 ft.**

**THOMAS RESIDENCE**  
**76 BRIDGE STREET**  
**NARROWSBURG, NY**

**NY LTANKS** **S106702399**  
**N/A**

**Relative:**  
**Higher**  
**Actual:**  
**791 ft.**

**LTANKS:**

Spill Number/Closed Date: 0313792 / 2004-06-21  
Facility ID: 0313792  
Site ID: 264972  
Spill Date: 2004-03-17  
Spill Cause: Tank Failure  
Spill Source: Private Dwelling  
Spill Class: C3  
Cleanup Ceased: Not reported  
SWIS: 5300  
Investigator: DVWEHRFR  
Referred To: Not reported  
Reported to Dept: 2004-03-17  
CID: 444  
Water Affected: Not reported  
Spill Notifier: Other  
Last Inspection: Not reported  
Recommended Penalty: False  
Meets Standard: True  
UST Involvement: False  
Remediation Phase: 0  
Date Entered In Computer: 2004-03-17  
Spill Record Last Update: 2004-06-22  
Spiller Name: Not reported  
Spiller Company: LENARD THOMAS  
Spiller Address: 76 BRIDGE STREET  
Spiller County: 001  
Spiller Contact: ANTHONY KOENIG  
Spiller Phone: (845) 794-0136  
Spiller Extension: Not reported  
DEC Region: 3  
DER Facility ID: 215910  
DEC Memo:

Remarks:

"Prior to Sept, 2004 data translation this spill Lead\_DEC Field was WEHRFRITZ 03/17/2004 D. WEHRFRITZ SITE INSPECTION CONFIRM PROBLEM. OIL FOUND RUNNING OUT OF DRAIN PIPE BEHIND HOUSE. 550 #2 FO UST IN FRONT OF THE HOUSE WAS LEAKING. OWNER HIRED S&M TO REMOVE TANK AND CONTAMINATION. CLOSURE REPORT RECEIVED 4/23/04"  
"CALLER SATETS HE WAS CHECKING OUT PROPERTY TO BUY WHEN HE SAW WATER AND PULLED BACK SOIL AND OIL SEEPED UP FROM GROUND: "

All Materials:

Map ID  
Direction  
Distance  
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number  
EPA ID Number

**THOMAS RESIDENCE (Continued)**

**S106702399**

Site ID: 264972  
Operable Unit ID: 880865  
Operable Unit: 01  
Material ID: 495383  
Material Code: 0001A  
Material Name: #2 fuel oil  
Case No.: Not reported  
Material FA: Petroleum  
Quantity: .00  
Units: L  
Recovered: .00  
Oxygenate: Not reported

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

**Number of Days to Update:** Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

### **STANDARD ENVIRONMENTAL RECORDS**

#### ***Federal NPL site list***

##### **NPL: National Priority List**

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: N/A
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/05/2019
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

##### **NPL Site Boundaries**

###### **Sources:**

EPA's Environmental Photographic Interpretation Center (EPIC)  
Telephone: 202-564-7333

EPA Region 1  
Telephone 617-918-1143

EPA Region 6  
Telephone: 214-655-6659

EPA Region 3  
Telephone 215-814-5418

EPA Region 7  
Telephone: 913-551-7247

EPA Region 4  
Telephone 404-562-8033

EPA Region 8  
Telephone: 303-312-6774

EPA Region 5  
Telephone 312-886-6686

EPA Region 9  
Telephone: 415-947-4246

EPA Region 10  
Telephone 206-553-8665

##### **Proposed NPL: Proposed National Priority List Sites**

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: N/A
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 04/05/2019
Number of Days to Update: 18	Next Scheduled EDR Contact: 07/15/2019
	Data Release Frequency: Quarterly

##### **NPL LIENS: Federal Superfund Liens**

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991  
Date Data Arrived at EDR: 02/02/1994  
Date Made Active in Reports: 03/30/1994  
Number of Days to Update: 56

Source: EPA  
Telephone: 202-564-4267  
Last EDR Contact: 08/15/2011  
Next Scheduled EDR Contact: 11/28/2011  
Data Release Frequency: No Update Planned

### ***Federal Delisted NPL site list***

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/14/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 18

Source: EPA  
Telephone: N/A  
Last EDR Contact: 04/05/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

### ***Federal CERCLIS list***

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016  
Date Data Arrived at EDR: 01/05/2017  
Date Made Active in Reports: 04/07/2017  
Number of Days to Update: 92

Source: Environmental Protection Agency  
Telephone: 703-603-8704  
Last EDR Contact: 04/05/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 02/06/2019  
Date Data Arrived at EDR: 02/15/2019  
Date Made Active in Reports: 03/15/2019  
Number of Days to Update: 28

Source: EPA  
Telephone: 800-424-9346  
Last EDR Contact: 03/14/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Quarterly

### ***Federal CERCLIS NFRAP site list***

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 02/06/2019	Source: EPA
Date Data Arrived at EDR: 02/15/2019	Telephone: 800-424-9346
Date Made Active in Reports: 03/15/2019	Last EDR Contact: 03/14/2019
Number of Days to Update: 28	Next Scheduled EDR Contact: 04/29/2019
	Data Release Frequency: Quarterly

### ***Federal RCRA CORRACTS facilities list***

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018	Source: EPA
Date Data Arrived at EDR: 03/28/2018	Telephone: 800-424-9346
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

### ***Federal RCRA non-CORRACTS TSD facilities list***

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (212) 637-3660
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

### ***Federal RCRA generators list***

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (212) 637-3660
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (212) 637-3660
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

### RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (212) 637-3660
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

### ***Federal institutional controls / engineering controls registries***

#### LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 10/17/2018	Source: Department of the Navy
Date Data Arrived at EDR: 10/25/2018	Telephone: 843-820-7326
Date Made Active in Reports: 12/07/2018	Last EDR Contact: 02/07/2019
Number of Days to Update: 43	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Varies

#### US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 06/10/2019
	Data Release Frequency: Varies

#### US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 703-603-0695
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 02/04/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 06/10/2019
	Data Release Frequency: Varies

# GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

## ***Federal ERNS list***

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/04/2019  
Date Data Arrived at EDR: 02/08/2019  
Date Made Active in Reports: 03/08/2019  
Number of Days to Update: 28

Source: National Response Center, United States Coast Guard  
Telephone: 202-267-2180  
Last EDR Contact: 03/26/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Quarterly

## ***State- and tribal - equivalent NPL***

PA SHWS: Hazardous Sites Cleanup Act Site List

The Hazardous Sites Cleanup Act Site List includes sites listed on PA Priority List, sites delisted from PA Priority List, Interim Response Completed sites, and Sites Being Studied or Response Being Planned.

Date of Government Version: 01/15/2019  
Date Data Arrived at EDR: 01/16/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 75

Source: Department Environmental Protection  
Telephone: 717-783-7816  
Last EDR Contact: 01/16/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Quarterly

## ***State- and tribal - equivalent CERCLIS***

NY SHWS: Inactive Hazardous Waste Disposal Sites in New York State

Referred to as the State Superfund Program, the Inactive Hazardous Waste Disposal Site Remedial Program is the cleanup program for inactive hazardous waste sites and now includes hazardous substance sites

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/19/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-9622  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Annually

## ***State and tribal landfill and/or solid waste disposal site lists***

NY SWF/LF: Facility Register

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 01/04/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 41

Source: Department of Environmental Conservation  
Telephone: 518-457-2051  
Last EDR Contact: 04/01/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

PA SWF/LF: Operating Facilities

The listing includes Municipal Waste Landfills, Construction/Demolition Waste Landfills and Waste-to-Energy Facilities.

Date of Government Version: 02/20/2019  
Date Data Arrived at EDR: 02/22/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 38

Source: Department of Environmental Protection  
Telephone: 717-787-7564  
Last EDR Contact: 02/20/2019  
Next Scheduled EDR Contact: 06/03/2019  
Data Release Frequency: Semi-Annually

## ***State and tribal leaking storage tank lists***

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land

Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018	Source: EPA, Region 5
Date Data Arrived at EDR: 05/18/2018	Telephone: 312-886-7439
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/18/2018	Telephone: 415-972-3372
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018	Source: EPA Region 8
Date Data Arrived at EDR: 05/18/2018	Telephone: 303-312-6271
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018	Source: EPA Region 4
Date Data Arrived at EDR: 05/18/2018	Telephone: 404-562-8677
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/05/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018	Source: EPA Region 7
Date Data Arrived at EDR: 05/18/2018	Telephone: 913-551-7003
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018	Source: EPA Region 10
Date Data Arrived at EDR: 05/18/2018	Telephone: 206-553-2857
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land

A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018	Source: EPA Region 1
Date Data Arrived at EDR: 05/18/2018	Telephone: 617-918-1313
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018	Source: EPA Region 6
Date Data Arrived at EDR: 05/18/2018	Telephone: 214-665-6597
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 03/07/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### NY LTANKS: Spills Information Database

Leaking Storage Tank Incident Reports. These records contain an inventory of reported leaking storage tank incidents reported from 4/1/86 through the most recent update. They can be either leaking underground storage tanks or leaking aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills.

Date of Government Version: 11/12/2018	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/14/2018	Telephone: 518-402-9549
Date Made Active in Reports: 12/20/2018	Last EDR Contact: 02/13/2019
Number of Days to Update: 36	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Varies

### NY HIST LTANKS: Listing of Leaking Storage Tanks

A listing of leaking underground and aboveground storage tanks. The causes of the incidents are tank test failures, tank failures or tank overfills. In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY LTANKS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/08/2005	Telephone: 518-402-9549
Date Made Active in Reports: 07/14/2005	Last EDR Contact: 07/07/2005
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### **State and tribal registered storage tank lists**

#### FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017	Source: FEMA
Date Data Arrived at EDR: 05/30/2017	Telephone: 202-646-5797
Date Made Active in Reports: 10/13/2017	Last EDR Contact: 03/25/2019
Number of Days to Update: 136	Next Scheduled EDR Contact: 04/22/2019
	Data Release Frequency: Varies

#### NY UST: Petroleum Bulk Storage (PBS) Database

Facilities that have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons.

Date of Government Version: 02/11/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/11/2019	Telephone: 518-402-9549
Date Made Active in Reports: 02/14/2019	Last EDR Contact: 03/27/2019
Number of Days to Update: 3	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: No Update Planned

#### PA UST: Listing of Pennsylvania Regulated Underground Storage Tanks

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 12/03/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 12/12/2018	Telephone: 717-772-5599
Date Made Active in Reports: 02/07/2019	Last EDR Contact: 03/14/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY CBS UST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in underground tanks of any size

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 02/20/2002  
Date Made Active in Reports: 03/22/2002  
Number of Days to Update: 30

Source: NYSDEC  
Telephone: 518-402-9549  
Last EDR Contact: 10/24/2005  
Next Scheduled EDR Contact: 01/23/2006  
Data Release Frequency: No Update Planned

### NY MOSF UST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 02/20/2002  
Date Made Active in Reports: 03/22/2002  
Number of Days to Update: 30

Source: NYSDEC  
Telephone: 518-402-9549  
Last EDR Contact: 07/25/2005  
Next Scheduled EDR Contact: 10/24/2005  
Data Release Frequency: No Update Planned

### NY CBS: Chemical Bulk Storage Site Listing

These facilities store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size

Date of Government Version: 02/11/2019  
Date Data Arrived at EDR: 02/11/2019  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 2

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 03/27/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Quarterly

### NY MOSF: Major Oil Storage Facility Site Listing

These facilities may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 02/11/2019  
Date Data Arrived at EDR: 02/11/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 3

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 03/27/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Quarterly

### NY AST: Petroleum Bulk Storage

Registered Aboveground Storage Tanks.

Date of Government Version: 02/11/2019  
Date Data Arrived at EDR: 02/11/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 3

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 03/27/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: No Update Planned

### PA AST: Listing of Pennsylvania Regulated Aboveground Storage Tanks

Registered Aboveground Storage Tanks.

Date of Government Version: 12/03/2018  
Date Data Arrived at EDR: 12/12/2018  
Date Made Active in Reports: 02/07/2019  
Number of Days to Update: 57

Source: Department of Environmental Protection  
Telephone: 717-772-5599  
Last EDR Contact: 03/14/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: Varies

### NY CBS AST: Chemical Bulk Storage Database

Facilities that store regulated hazardous substances in aboveground tanks with capacities of 185 gallons or greater, and/or in underground tanks of any size.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 02/20/2002  
Date Made Active in Reports: 03/22/2002  
Number of Days to Update: 30

Source: NYSDEC  
Telephone: 518-402-9549  
Last EDR Contact: 07/25/2005  
Next Scheduled EDR Contact: 10/24/2005  
Data Release Frequency: No Update Planned

### NY MOSF AST: Major Oil Storage Facilities Database

Facilities that may be onshore facilities or vessels, with petroleum storage capacities of 400,000 gallons or greater.

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 02/20/2002  
Date Made Active in Reports: 03/22/2002  
Number of Days to Update: 30

Source: NYSDEC  
Telephone: 518-402-9549  
Last EDR Contact: 07/25/2005  
Next Scheduled EDR Contact: 10/24/2005  
Data Release Frequency: No Update Planned

### INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 9  
Telephone: 415-972-3368  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 4  
Telephone: 404-562-9424  
Last EDR Contact: 03/05/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 8  
Telephone: 303-312-6137  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 5  
Telephone: 312-886-6136  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/24/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 7  
Telephone: 913-551-7003  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 6  
Telephone: 214-665-7591  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA, Region 1  
Telephone: 617-918-1313  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018  
Date Data Arrived at EDR: 05/18/2018  
Date Made Active in Reports: 07/20/2018  
Number of Days to Update: 63

Source: EPA Region 10  
Telephone: 206-553-2857  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### NY TANKS: Storage Tank Facility Listing

This database contains records of facilities that are or have been regulated under Bulk Storage Program. Tank information for these facilities may not be releasable by the state agency.

Date of Government Version: 02/11/2019  
Date Data Arrived at EDR: 02/11/2019  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 2

Source: Department of Environmental Conservation  
Telephone: 518-402-9543  
Last EDR Contact: 03/27/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Quarterly

### ***State and tribal institutional control / engineering control registries***

#### NY RES DECL: Restrictive Declarations Listing

A restrictive declaration is a covenant running with the land which binds the present and future owners of the property. As a condition of certain special permits, the City Planning Commission may require an applicant to sign and record a restrictive declaration that places specified conditions on the future use and development of the property. Certain restrictive declarations are indicated by a D on zoning maps.

Date of Government Version: 11/18/2010  
Date Data Arrived at EDR: 06/30/2014  
Date Made Active in Reports: 07/21/2014  
Number of Days to Update: 21

Source: NYC Department of City Planning  
Telephone: 212-720-3401  
Last EDR Contact: 03/22/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY ENV RES DECL: Environmental Restrictive Declarations

The Environmental Restrictive Declarations (ERD) listed were recorded in connection with a zoning action against the noted Tax Blocks and Tax Lots, or portion thereof, and are available in the property records on file at the Office of the City Register for Bronx, Kings, New York and Queens counties or at the Richmond County Clerk's office. They contain environmental requirements with respect to hazardous materials, air quality and/or noise in accordance with Section 11-15 of this Resolution.

Date of Government Version: 10/17/2018	Source: New York City Department of City Planning
Date Data Arrived at EDR: 12/19/2018	Telephone: 212-720-3300
Date Made Active in Reports: 02/14/2019	Last EDR Contact: 03/19/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: Varies

### NY ENG CONTROLS: Registry of Engineering Controls

Environmental Remediation sites that have engineering controls in place.

Date of Government Version: 11/12/2018	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/14/2018	Telephone: 518-402-9553
Date Made Active in Reports: 12/19/2018	Last EDR Contact: 02/13/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Quarterly

### PA ENG CONTROLS: Engineering Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/15/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/16/2008	Telephone: 717-783-9470
Date Made Active in Reports: 06/12/2008	Last EDR Contact: 01/15/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/29/2019
	Data Release Frequency: No Update Planned

### NY INST CONTROL: Registry of Institutional Controls

Environmental Remediation sites that have institutional controls in place.

Date of Government Version: 11/12/2018	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 11/14/2018	Telephone: 518-402-9553
Date Made Active in Reports: 12/19/2018	Last EDR Contact: 02/13/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Quarterly

### PA INST CONTROL: Institutional Controls Site Listing

Under the Land Recycling Act (Act 2) persons who perform a site cleanup using the site-specific standard or the special industrial area standard may use engineering or institutional controls as part of the response action. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/15/2008	Source: Department of Environmental Protection
Date Data Arrived at EDR: 05/16/2008	Telephone: 717-783-9470
Date Made Active in Reports: 06/12/2008	Last EDR Contact: 01/15/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/29/2019
	Data Release Frequency: No Update Planned

### ***State and tribal voluntary cleanup sites***

### NY VCP NYC: Voluntary Cleanup Program Listing NYC

New York City voluntary cleanup program sites.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/14/2018  
Date Data Arrived at EDR: 12/19/2018  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 56

Source: New York City Office of Environmental Protection  
Telephone: 212-788-8841  
Last EDR Contact: 03/18/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Varies

### NY VCP: Voluntary Cleanup Agreements

New York established its Voluntary Cleanup Program (VCP) to address the environmental, legal and financial barriers that often hinder the redevelopment and reuse of contaminated properties. The Voluntary Cleanup Program was developed to enhance private sector cleanup of brownfields by enabling parties to remediate sites using private rather than public funds and to reduce the development pressures on "greenfield" sites.

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/19/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-9711  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Semi-Annually

### PA VCP: Voluntary Cleanup Program Sites

The VCP listings included Completed Sites, Sites in Progress and Act 2 Non-Use Aquifer Determinations Sites. Formerly known as the Act 2, the Land Recycling Program encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites.

Date of Government Version: 01/08/2019  
Date Data Arrived at EDR: 01/10/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 81

Source: Department of Environmental Protection  
Telephone: 717-783-2388  
Last EDR Contact: 01/10/2019  
Next Scheduled EDR Contact: 04/22/2019  
Data Release Frequency: Quarterly

### INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015  
Date Data Arrived at EDR: 09/29/2015  
Date Made Active in Reports: 02/18/2016  
Number of Days to Update: 142

Source: EPA, Region 1  
Telephone: 617-918-1102  
Last EDR Contact: 03/25/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Varies

### INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008  
Date Data Arrived at EDR: 04/22/2008  
Date Made Active in Reports: 05/19/2008  
Number of Days to Update: 27

Source: EPA, Region 7  
Telephone: 913-551-7365  
Last EDR Contact: 04/20/2009  
Next Scheduled EDR Contact: 07/20/2009  
Data Release Frequency: Varies

### **State and tribal Brownfields sites**

#### NY BROWNFIELDS: Brownfields Site List

A Brownfield is any real property where redevelopment or re-use may be complicated by the presence or potential presence of a hazardous waste, petroleum, pollutant, or contaminant.

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/19/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-9764  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Semi-Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PA BROWNFIELDS: Brownfields Sites

Brownfields are generally defined as abandoned or underused industrial or commercial properties where redevelopment is complicated by actual or perceived environmental contamination. Brownfields vary in size, location, age and past use. They can range from a small, abandoned corner gas station to a large, multi-acre former manufacturing plant that has been closed for years.

Date of Government Version: 10/16/2018  
Date Data Arrived at EDR: 10/17/2018  
Date Made Active in Reports: 11/28/2018  
Number of Days to Update: 42

Source: Department of Environmental Protection  
Telephone: 717-783-1566  
Last EDR Contact: 01/16/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Quarterly

### NY ERP: Environmental Restoration Program Listing

In an effort to spur the cleanup and redevelopment of brownfields, New Yorkers approved a \$200 million Environmental Restoration or Brownfields Fund as part of the \$1.75 billion Clean Water/Clean Air Bond Act of 1996 (1996 Bond Act). Enhancements to the program were enacted on October 7, 2003. Under the Environmental Restoration Program, the State provides grants to municipalities to reimburse up to 90 percent of on-site eligible costs and 100% of off-site eligible costs for site investigation and remediation activities. Once remediated, the property may then be reused for commercial, industrial, residential or public use.

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/19/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-9622  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Quarterly

## **ADDITIONAL ENVIRONMENTAL RECORDS**

### ***Local Brownfield lists***

#### US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018  
Date Data Arrived at EDR: 12/18/2018  
Date Made Active in Reports: 01/11/2019  
Number of Days to Update: 24

Source: Environmental Protection Agency  
Telephone: 202-566-2777  
Last EDR Contact: 03/19/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Semi-Annually

### ***Local Lists of Landfill / Solid Waste Disposal Sites***

#### NY SWRCY: Registered Recycling Facility List

A listing of recycling facilities.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 01/04/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 41

Source: Department of Environmental Conservation  
Telephone: 518-402-8705  
Last EDR Contact: 04/01/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

#### NY SWTIRE: Registered Waste Tire Storage & Facility List

A listing of facilities registered to accept waste tires.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/27/2018  
Date Data Arrived at EDR: 04/06/2018  
Date Made Active in Reports: 06/08/2018  
Number of Days to Update: 63

Source: Department of Environmental Conservation  
Telephone: 518-402-8694  
Last EDR Contact: 03/11/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: No Update Planned

### INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998  
Date Data Arrived at EDR: 12/03/2007  
Date Made Active in Reports: 01/24/2008  
Number of Days to Update: 52

Source: Environmental Protection Agency  
Telephone: 703-308-8245  
Last EDR Contact: 01/29/2019  
Next Scheduled EDR Contact: 05/13/2019  
Data Release Frequency: Varies

### DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009  
Date Data Arrived at EDR: 05/07/2009  
Date Made Active in Reports: 09/21/2009  
Number of Days to Update: 137

Source: EPA, Region 9  
Telephone: 415-947-4219  
Last EDR Contact: 01/17/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: No Update Planned

### ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985  
Date Data Arrived at EDR: 08/09/2004  
Date Made Active in Reports: 09/17/2004  
Number of Days to Update: 39

Source: Environmental Protection Agency  
Telephone: 800-424-9346  
Last EDR Contact: 06/09/2004  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014  
Date Data Arrived at EDR: 08/06/2014  
Date Made Active in Reports: 01/29/2015  
Number of Days to Update: 176

Source: Department of Health & Human Services, Indian Health Service  
Telephone: 301-443-1452  
Last EDR Contact: 02/01/2019  
Next Scheduled EDR Contact: 05/13/2019  
Data Release Frequency: Varies

### **Local Lists of Hazardous waste / Contaminated Sites**

#### US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 09/21/2018  
Date Data Arrived at EDR: 09/21/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 49

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 02/21/2019  
Next Scheduled EDR Contact: 06/10/2019  
Data Release Frequency: No Update Planned

#### NY DEL SHWS: Delisted Registry Sites

A database listing of sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/19/2018  
Number of Days to Update: 35

Source: Department of Environmental Conservation  
Telephone: 518-402-9622  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Quarterly

### US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 09/21/2018  
Date Data Arrived at EDR: 09/21/2018  
Date Made Active in Reports: 11/09/2018  
Number of Days to Update: 49

Source: Drug Enforcement Administration  
Telephone: 202-307-1000  
Last EDR Contact: 02/21/2019  
Next Scheduled EDR Contact: 06/10/2019  
Data Release Frequency: Quarterly

### NY PFAS: PFAS Contamination Site Location Listing

DEC surveyed select businesses, fire departments, fire training centers, bulk storage facilities, airports, and Department of Defense (DoD) facilities. The responses to the survey have helped to determine if these entities used or stored materials containing PFOA/PFOS including AFFF and dispersants used in Teflon coating operations. The results of this survey will be updated periodically as additional responses are received..

Date of Government Version: 09/01/2016  
Date Data Arrived at EDR: 02/08/2019  
Date Made Active in Reports: 03/22/2019  
Number of Days to Update: 42

Source: Department of Environmental Conservation  
Telephone: 518-402-9020  
Last EDR Contact: 02/08/2019  
Next Scheduled EDR Contact: 04/22/2019  
Data Release Frequency: Varies

### **Local Lists of Registered Storage Tanks**

#### NY SUFFOLK CO TANKS: Storage Tank Database

Facilities that have no tank information

Date of Government Version: 06/28/2018  
Date Data Arrived at EDR: 02/05/2019  
Date Made Active in Reports: 03/08/2019  
Number of Days to Update: 31

Source: Department of Health Services  
Telephone: 631-854-2516  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/13/2019  
Data Release Frequency: Varies

#### NY HIST UST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capacities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. It is no longer updated due to the sensitive nature of the information involved. See UST for more current data.

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 06/02/2006  
Date Made Active in Reports: 07/20/2006  
Number of Days to Update: 48

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: Varies

#### NY HIST AST: Historical Petroleum Bulk Storage Database

These facilities have petroleum storage capabilities in excess of 1,100 gallons and less than 400,000 gallons. This database contains detailed information per site. No longer updated due to the sensitive nature of the information involved. See AST for more current data.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2002  
Date Data Arrived at EDR: 06/02/2006  
Date Made Active in Reports: 07/20/2006  
Number of Days to Update: 48

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 10/23/2006  
Next Scheduled EDR Contact: 01/22/2007  
Data Release Frequency: No Update Planned

### PA ARCHIVE AST: Archived Aboveground Storage Tank Sites

The list includes aboveground tanks with a capacity greater than 21,000 gallons that were removed from the DEP's Storage Tank Information database because of the Department's policy on sensitive information. The list also may include tanks that are removed or permanently closed.

Date of Government Version: 12/03/2018  
Date Data Arrived at EDR: 12/13/2018  
Date Made Active in Reports: 02/07/2019  
Number of Days to Update: 56

Source: Department of Environmental Protection  
Telephone: 717-772-5599  
Last EDR Contact: 03/14/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: Varies

### Local Land Records

#### NY LIENS: Spill Liens Information

Lien information from the Oil Spill Fund.

Date of Government Version: 02/04/2019  
Date Data Arrived at EDR: 02/07/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 7

Source: Office of the State Comptroller  
Telephone: 518-474-9034  
Last EDR Contact: 02/04/2019  
Next Scheduled EDR Contact: 05/20/2019  
Data Release Frequency: Quarterly

#### LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/14/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 202-564-6023  
Last EDR Contact: 03/14/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Semi-Annually

### Records of Emergency Release Reports

#### HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/08/2019  
Date Data Arrived at EDR: 02/08/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 41

Source: U.S. Department of Transportation  
Telephone: 202-366-4555  
Last EDR Contact: 03/26/2019  
Next Scheduled EDR Contact: 07/08/2019  
Data Release Frequency: Quarterly

#### NY SPILLS: Spills Information Database

Data collected on spills reported to NYSDEC as required by one or more of the following: Article 12 of the Navigation Law, 6 NYCRR Section 613.8 (from PBS regs), or 6 NYCRR Section 595.2 (from CBS regs). It includes spills active as of April 1, 1986, as well as spills occurring since this date.

Date of Government Version: 11/12/2018  
Date Data Arrived at EDR: 11/14/2018  
Date Made Active in Reports: 12/20/2018  
Number of Days to Update: 36

Source: Department of Environmental Conservation  
Telephone: 518-402-9549  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY HIST SPILLS: SPILLS Database

This database contains records of chemical and petroleum spill incidents. Under State law, petroleum and hazardous chemical spills that can impact the waters of the state must be reported by the spiller (and, in some cases, by anyone who has knowledge of the spills). In 2002, the Department of Environmental Conservation stopped providing updates to its original Spills Information Database. This database includes fields that are no longer available from the NYDEC as of January 1, 2002. Current information may be found in the NY SPILLS database. Department of Environmental Conservation.

Date of Government Version: 01/01/2002	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/08/2005	Telephone: 518-402-9549
Date Made Active in Reports: 07/14/2005	Last EDR Contact: 07/07/2005
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### NY SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 12/14/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/12/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 40	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### NY SPILLS 80: SPILLS80 data from FirstSearch

Spills 80 includes those spill and release records available from FirstSearch databases prior to 1990. Typically, they may include chemical, oil and/or hazardous substance spills recorded before 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 80.

Date of Government Version: 11/02/2010	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 03/07/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 63	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

### Other Ascertainable Records

#### RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/28/2018	Telephone: (212) 637-3660
Date Made Active in Reports: 06/22/2018	Last EDR Contact: 03/27/2019
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

#### FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015	Source: U.S. Army Corps of Engineers
Date Data Arrived at EDR: 07/08/2015	Telephone: 202-528-4285
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 04/03/2019
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005	Source: USGS
Date Data Arrived at EDR: 11/10/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/11/2019
Number of Days to Update: 62	Next Scheduled EDR Contact: 04/22/2019
	Data Release Frequency: Semi-Annually

### FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005	Source: U.S. Geological Survey
Date Data Arrived at EDR: 02/06/2006	Telephone: 888-275-8747
Date Made Active in Reports: 01/11/2007	Last EDR Contact: 01/11/2019
Number of Days to Update: 339	Next Scheduled EDR Contact: 04/22/2019
	Data Release Frequency: N/A

### SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/03/2017	Telephone: 615-532-8599
Date Made Active in Reports: 04/07/2017	Last EDR Contact: 02/15/2019
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/27/2019
	Data Release Frequency: Varies

### US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/31/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/04/2019	Telephone: 202-566-1917
Date Made Active in Reports: 03/08/2019	Last EDR Contact: 03/26/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 07/08/2019
	Data Release Frequency: Quarterly

### EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 02/08/2019
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### 2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 02/08/2019
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Varies

### TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 06/21/2017	Telephone: 202-260-5521
Date Made Active in Reports: 01/05/2018	Last EDR Contact: 03/22/2019
Number of Days to Update: 198	Next Scheduled EDR Contact: 07/01/2019
	Data Release Frequency: Every 4 Years

### TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016	Source: EPA
Date Data Arrived at EDR: 01/10/2018	Telephone: 202-566-0250
Date Made Active in Reports: 01/12/2018	Last EDR Contact: 02/20/2019
Number of Days to Update: 2	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Annually

### SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009	Source: EPA
Date Data Arrived at EDR: 12/10/2010	Telephone: 202-564-4203
Date Made Active in Reports: 02/25/2011	Last EDR Contact: 03/25/2019
Number of Days to Update: 77	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Annually

### ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/11/2019	Source: EPA
Date Data Arrived at EDR: 03/14/2019	Telephone: 703-416-0223
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 03/14/2019
Number of Days to Update: 18	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Annually

### RMP: Risk Management Plans

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 02/14/2019	Telephone: 202-564-8600
Date Made Active in Reports: 03/21/2019	Last EDR Contact: 01/22/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Varies

### RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

### PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 08/13/2018	Source: EPA
Date Data Arrived at EDR: 10/04/2018	Telephone: 202-564-6023
Date Made Active in Reports: 11/09/2018	Last EDR Contact: 03/14/2019
Number of Days to Update: 36	Next Scheduled EDR Contact: 05/20/2019
	Data Release Frequency: Quarterly

### PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/14/2018	Source: EPA
Date Data Arrived at EDR: 10/11/2018	Telephone: 202-566-0500
Date Made Active in Reports: 12/07/2018	Last EDR Contact: 01/11/2019
Number of Days to Update: 57	Next Scheduled EDR Contact: 04/22/2019
	Data Release Frequency: Annually

### ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 01/07/2019
Number of Days to Update: 79	Next Scheduled EDR Contact: 04/22/2019
	Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances  
Telephone: 202-566-1667  
Last EDR Contact: 08/18/2017  
Next Scheduled EDR Contact: 12/04/2017  
Data Release Frequency: Quarterly

### FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009  
Date Data Arrived at EDR: 04/16/2009  
Date Made Active in Reports: 05/11/2009  
Number of Days to Update: 25

Source: EPA  
Telephone: 202-566-1667  
Last EDR Contact: 08/18/2017  
Next Scheduled EDR Contact: 12/04/2017  
Data Release Frequency: Quarterly

### MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016  
Date Data Arrived at EDR: 09/08/2016  
Date Made Active in Reports: 10/21/2016  
Number of Days to Update: 43

Source: Nuclear Regulatory Commission  
Telephone: 301-415-7169  
Last EDR Contact: 01/22/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Quarterly

### COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005  
Date Data Arrived at EDR: 08/07/2009  
Date Made Active in Reports: 10/22/2009  
Number of Days to Update: 76

Source: Department of Energy  
Telephone: 202-586-8719  
Last EDR Contact: 03/07/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: Varies

### COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014  
Date Data Arrived at EDR: 09/10/2014  
Date Made Active in Reports: 10/20/2014  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: N/A  
Last EDR Contact: 03/05/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: Varies

### PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017  
Date Data Arrived at EDR: 11/30/2017  
Date Made Active in Reports: 12/15/2017  
Number of Days to Update: 15

Source: Environmental Protection Agency  
Telephone: 202-566-0517  
Last EDR Contact: 01/25/2019  
Next Scheduled EDR Contact: 05/06/2019  
Data Release Frequency: Varies

### RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/02/2019  
Date Data Arrived at EDR: 01/03/2019  
Date Made Active in Reports: 03/15/2019  
Number of Days to Update: 71

Source: Environmental Protection Agency  
Telephone: 202-343-9775  
Last EDR Contact: 04/02/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

### HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2007  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

### HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006  
Date Data Arrived at EDR: 03/01/2007  
Date Made Active in Reports: 04/10/2007  
Number of Days to Update: 40

Source: Environmental Protection Agency  
Telephone: 202-564-2501  
Last EDR Contact: 12/17/2008  
Next Scheduled EDR Contact: 03/17/2008  
Data Release Frequency: No Update Planned

### DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018  
Date Data Arrived at EDR: 01/29/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 51

Source: Department of Transportation, Office of Pipeline Safety  
Telephone: 202-366-4595  
Last EDR Contact: 01/29/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Quarterly

### CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 02/11/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 38

Source: Department of Justice, Consent Decree Library  
Telephone: Varies  
Last EDR Contact: 04/05/2019  
Next Scheduled EDR Contact: 07/22/2019  
Data Release Frequency: Varies

### BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015  
Date Data Arrived at EDR: 02/22/2017  
Date Made Active in Reports: 09/28/2017  
Number of Days to Update: 218

Source: EPA/NTIS  
Telephone: 800-424-9346  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 06/03/2019  
Data Release Frequency: Biennially

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014  
Date Data Arrived at EDR: 07/14/2015  
Date Made Active in Reports: 01/10/2017  
Number of Days to Update: 546

Source: USGS  
Telephone: 202-208-3710  
Last EDR Contact: 01/07/2019  
Next Scheduled EDR Contact: 04/22/2019  
Data Release Frequency: Semi-Annually

### FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Energy  
Telephone: 202-586-3559  
Last EDR Contact: 01/31/2019  
Next Scheduled EDR Contact: 05/20/2019  
Data Release Frequency: Varies

### UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017  
Date Data Arrived at EDR: 10/11/2017  
Date Made Active in Reports: 11/03/2017  
Number of Days to Update: 23

Source: Department of Energy  
Telephone: 505-845-0011  
Last EDR Contact: 02/22/2019  
Next Scheduled EDR Contact: 06/03/2019  
Data Release Frequency: Varies

### LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/11/2019  
Date Data Arrived at EDR: 03/14/2019  
Date Made Active in Reports: 03/21/2019  
Number of Days to Update: 7

Source: Environmental Protection Agency  
Telephone: 703-603-8787  
Last EDR Contact: 04/05/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Varies

### LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001  
Date Data Arrived at EDR: 10/27/2010  
Date Made Active in Reports: 12/02/2010  
Number of Days to Update: 36

Source: American Journal of Public Health  
Telephone: 703-305-6451  
Last EDR Contact: 12/02/2009  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

### US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016  
Date Data Arrived at EDR: 10/26/2016  
Date Made Active in Reports: 02/03/2017  
Number of Days to Update: 100

Source: EPA  
Telephone: 202-564-2496  
Last EDR Contact: 09/26/2017  
Next Scheduled EDR Contact: 01/08/2018  
Data Release Frequency: Annually

### US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018  
Date Data Arrived at EDR: 02/27/2019  
Date Made Active in Reports: 04/01/2019  
Number of Days to Update: 33

Source: Department of Labor, Mine Safety and Health Administration  
Telephone: 303-231-5959  
Last EDR Contact: 02/27/2019  
Next Scheduled EDR Contact: 06/10/2019  
Data Release Frequency: Semi-Annually

### US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005  
Date Data Arrived at EDR: 02/29/2008  
Date Made Active in Reports: 04/18/2008  
Number of Days to Update: 49

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/01/2019  
Next Scheduled EDR Contact: 06/10/2019  
Data Release Frequency: Varies

### US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011  
Date Data Arrived at EDR: 06/08/2011  
Date Made Active in Reports: 09/13/2011  
Number of Days to Update: 97

Source: USGS  
Telephone: 703-648-7709  
Last EDR Contact: 03/01/2019  
Next Scheduled EDR Contact: 06/10/2019  
Data Release Frequency: Varies

### ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018  
Date Data Arrived at EDR: 09/11/2018  
Date Made Active in Reports: 09/14/2018  
Number of Days to Update: 3

Source: Department of Interior  
Telephone: 202-208-2609  
Last EDR Contact: 03/21/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019	Source: EPA
Date Data Arrived at EDR: 03/05/2019	Telephone: (212) 637-3000
Date Made Active in Reports: 03/15/2019	Last EDR Contact: 03/05/2019
Number of Days to Update: 10	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Quarterly

### ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/03/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: 202-564-2280
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 03/05/2019
Number of Days to Update: 27	Next Scheduled EDR Contact: 06/17/2019
	Data Release Frequency: Quarterly

### UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017	Source: Department of Defense
Date Data Arrived at EDR: 01/17/2019	Telephone: 703-704-1564
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 01/14/2019
Number of Days to Update: 74	Next Scheduled EDR Contact: 04/29/2019
	Data Release Frequency: Varies

### DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/26/2018	Telephone: 202-564-0527
Date Made Active in Reports: 10/05/2018	Last EDR Contact: 03/01/2019
Number of Days to Update: 71	Next Scheduled EDR Contact: 06/10/2019
	Data Release Frequency: Varies

### FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019	Source: EPA
Date Data Arrived at EDR: 02/21/2019	Telephone: 800-385-6164
Date Made Active in Reports: 04/01/2019	Last EDR Contact: 02/21/2019
Number of Days to Update: 39	Next Scheduled EDR Contact: 06/03/2019
	Data Release Frequency: Quarterly

### NY AIRS: Air Emissions Data

Point source emissions inventory data.

Date of Government Version: 01/22/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/01/2019	Telephone: 518-402-8452
Date Made Active in Reports: 02/14/2019	Last EDR Contact: 01/22/2019
Number of Days to Update: 13	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: Annually

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PA AIRS: Permit and Emissions Inventory Data Permit and emissions inventory data.

Date of Government Version: 12/17/2018  
Date Data Arrived at EDR: 12/19/2018  
Date Made Active in Reports: 02/06/2019  
Number of Days to Update: 49

Source: Department of Environmental Protection  
Telephone: 717-787-9702  
Last EDR Contact: 03/20/2019  
Next Scheduled EDR Contact: 04/01/2019  
Data Release Frequency: Annually

### NY COAL ASH: Coal Ash Disposal Site Listing A listing of coal ash disposal site locations.

Date of Government Version: 12/31/2018  
Date Data Arrived at EDR: 01/04/2019  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 40

Source: Department of Environmental Conservation  
Telephone: 518-402-8660  
Last EDR Contact: 04/01/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

### NY DRYCLEANERS: Registered Drycleaners A listing of all registered drycleaning facilities.

Date of Government Version: 03/07/2018  
Date Data Arrived at EDR: 03/30/2018  
Date Made Active in Reports: 06/05/2018  
Number of Days to Update: 67

Source: Department of Environmental Conservation  
Telephone: 518-402-8403  
Last EDR Contact: 03/11/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: Annually

### PA DRYCLEANERS: Drycleaner Facility Locations A listing of drycleaner facility locations.

Date of Government Version: 12/17/2018  
Date Data Arrived at EDR: 12/19/2018  
Date Made Active in Reports: 02/06/2019  
Number of Days to Update: 49

Source: Department of Environmental Protection  
Telephone: 717-787-9702  
Last EDR Contact: 03/20/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Quarterly

### NY E DESIGNATION: E DESIGNATION SITE LISTING

The (E (Environmental)) designation would ensure that sampling and remediation take place on the subject properties, and would avoid any significant impacts related to hazardous materials at these locations. The (E) designations would require that the fee owner of the sites conduct a testing and sampling protocol, and remediation where appropriate, to the satisfaction of the NYCDEP before the issuance of a building permit by the Department of Buildings pursuant to the provisions of Section 11-15 of the Zoning Resolution (Environmental Requirements). The (E) designations also include a mandatory construction-related health and safety plan which must be approved by NYCDEP.

Date of Government Version: 10/31/2018  
Date Data Arrived at EDR: 12/19/2018  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 56

Source: New York City Department of City Planning  
Telephone: 718-595-6658  
Last EDR Contact: 03/19/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Semi-Annually

### NY Financial Assurance 1: Financial Assurance Information Listing Financial assurance information.

Date of Government Version: 01/15/2019  
Date Data Arrived at EDR: 01/17/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 28

Source: Department of Environmental Conservation  
Telephone: 518-402-8660  
Last EDR Contact: 04/01/2019  
Next Scheduled EDR Contact: 07/15/2019  
Data Release Frequency: Quarterly

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/29/2017	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 04/06/2018	Telephone: 518-402-8712
Date Made Active in Reports: 06/05/2018	Last EDR Contact: 03/11/2019
Number of Days to Update: 60	Next Scheduled EDR Contact: 06/24/2019
	Data Release Frequency: Varies

### NY HSWDS: Hazardous Substance Waste Disposal Site Inventory

The list includes any known or suspected hazardous substance waste disposal sites. Also included are sites delisted from the Registry of Inactive Hazardous Waste Disposal Sites and non-Registry sites that U.S. EPA Preliminary Assessment (PA) reports or Site Investigation (SI) reports were prepared. Hazardous Substance Waste Disposal Sites are eligible to be Superfund sites now that the New York State Superfund has been refinanced and changed. This means that the study inventory has served its purpose and will no longer be maintained as a separate entity. The last version of the study inventory is frozen in time. The sites on the study will not automatically be made Superfund sites, rather each site will be further evaluated for listing on the Registry. So overtime they will be added to the registry or not.

Date of Government Version: 01/01/2003	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 10/20/2006	Telephone: 518-402-9564
Date Made Active in Reports: 11/30/2006	Last EDR Contact: 05/26/2009
Number of Days to Update: 41	Next Scheduled EDR Contact: 08/24/2009
	Data Release Frequency: No Update Planned

### NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 01/30/2019	Telephone: 518-402-8651
Date Made Active in Reports: 02/14/2019	Last EDR Contact: 01/30/2019
Number of Days to Update: 15	Next Scheduled EDR Contact: 05/11/2019
	Data Release Frequency: Quarterly

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017	Source: Department of Environmental Protection
Date Data Arrived at EDR: 10/23/2018	Telephone: 717-783-8990
Date Made Active in Reports: 11/27/2018	Last EDR Contact: 01/11/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 04/29/2019
	Data Release Frequency: Annually

### NY SPDES: State Pollutant Discharge Elimination System

New York State has a state program which has been approved by the United States Environmental Protection Agency for the control of wastewater and stormwater discharges in accordance with the Clean Water Act. Under New York State law the program is known as the State Pollutant Discharge Elimination System (SPDES) and is broader in scope than that required by the Clean Water Act in that it controls point source discharges to groundwaters as well as surface waters.

Date of Government Version: 01/30/2019	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 02/07/2019	Telephone: 518-402-8233
Date Made Active in Reports: 02/14/2019	Last EDR Contact: 01/22/2019
Number of Days to Update: 7	Next Scheduled EDR Contact: 05/06/2019
	Data Release Frequency: No Update Planned

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### PA NPDES: NPDES Permit Listing

A listing of facilities with an NPDES permit.

Date of Government Version: 12/07/2018  
Date Data Arrived at EDR: 12/07/2018  
Date Made Active in Reports: 02/06/2019  
Number of Days to Update: 61

Source: Department of Environmental Protection  
Telephone: 717-787-9642  
Last EDR Contact: 03/06/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: Varies

### NY VAPOR REOPENED: Vapor Intrusion Legacy Site List

New York is currently re-evaluating previous assumptions and decisions regarding the potential for soil vapor intrusion exposures at sites. As a result, all past, current, and future contaminated sites will be evaluated to determine whether these sites have the potential for exposures related to soil vapor intrusion.

Date of Government Version: 01/01/2018  
Date Data Arrived at EDR: 02/15/2018  
Date Made Active in Reports: 03/27/2018  
Number of Days to Update: 40

Source: Department of Environmental Conservation  
Telephone: 518-402-9814  
Last EDR Contact: 02/13/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: Varies

### NY UIC: Underground Injection Control Wells

A listing of enhanced oil recovery underground injection wells.

Date of Government Version: 12/03/2018  
Date Data Arrived at EDR: 12/06/2018  
Date Made Active in Reports: 12/20/2018  
Number of Days to Update: 14

Source: Department of Environmental Conservation  
Telephone: 518-402-8056  
Last EDR Contact: 03/06/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: Quarterly

### PA UIC: Underground Injection Wells

A listing of underground injection well locations.

Date of Government Version: 12/17/2018  
Date Data Arrived at EDR: 12/19/2018  
Date Made Active in Reports: 02/06/2019  
Number of Days to Update: 49

Source: Department of Environmental Protection  
Telephone: 717-783-7209  
Last EDR Contact: 03/20/2019  
Next Scheduled EDR Contact: 07/01/2019  
Data Release Frequency: Quarterly

### NY COOLING TOWERS: Registered Cooling Towers

This data includes the location of cooling towers registered with New York State. The data is self-reported by owners/property managers of cooling towers in service in New York State. In August 2015, the New York State Department of Health released emergency regulations requiring the owners of cooling towers to register them with New York State.

Date of Government Version: 01/08/2019  
Date Data Arrived at EDR: 01/16/2019  
Date Made Active in Reports: 02/13/2019  
Number of Days to Update: 28

Source: Department of Health  
Telephone: 518-402-7650  
Last EDR Contact: 01/16/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Varies

## EDR HIGH RISK HISTORICAL RECORDS

### ***EDR Exclusive Records***

#### EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: No Update Planned

### EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

### EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A  
Date Data Arrived at EDR: N/A  
Date Made Active in Reports: N/A  
Number of Days to Update: N/A

Source: EDR, Inc.  
Telephone: N/A  
Last EDR Contact: N/A  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## EDR RECOVERED GOVERNMENT ARCHIVES

### ***Exclusive Recovered Govt. Archives***

#### NY RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: Department of Environmental Conservation  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

#### PA RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department Environmental Protection in Pennsylvania.

Date of Government Version: N/A  
Date Data Arrived at EDR: 07/01/2013  
Date Made Active in Reports: 12/30/2013  
Number of Days to Update: 182

Source: Department Environmental Protection  
Telephone: N/A  
Last EDR Contact: 06/01/2012  
Next Scheduled EDR Contact: N/A  
Data Release Frequency: Varies

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environmental Conservation in New York.

Date of Government Version: N/A	Source: Department of Environmental Conservation
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/10/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 193	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

### PA RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department Environmental Protection in Pennsylvania.

Date of Government Version: N/A	Source: Department Environmental Protection
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/10/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 193	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

## COUNTY RECORDS

### CORTLAND COUNTY:

#### NY AST - CORTLAND: Cortland County Storage Tank Listing

A listing of aboveground storage tank sites located in Cortland County.

Date of Government Version: 11/16/2018	Source: Cortland County Health Department
Date Data Arrived at EDR: 11/16/2018	Telephone: 607-753-5035
Date Made Active in Reports: 12/18/2018	Last EDR Contact: 01/28/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/11/2019
	Data Release Frequency: Quarterly

#### NY UST - CORTLAND: Cortland County Storage Tank Listing

A listing of underground storage tank sites located in Cortland County.

Date of Government Version: 11/16/2018	Source: Cortland County Health Department
Date Data Arrived at EDR: 11/16/2018	Telephone: 607-753-5035
Date Made Active in Reports: 12/18/2018	Last EDR Contact: 01/28/2019
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/11/2019
	Data Release Frequency: Quarterly

### NASSAU COUNTY:

#### NY AST - NASSAU: Registered Tank Database

A listing of aboveground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017	Source: Nassau County Health Department
Date Data Arrived at EDR: 01/11/2017	Telephone: 516-571-3314
Date Made Active in Reports: 02/15/2017	Last EDR Contact: 01/28/2019
Number of Days to Update: 35	Next Scheduled EDR Contact: 05/11/2019
	Data Release Frequency: No Update Planned

#### NY AST NCFM: Storage Tank Database

A listing of aboveground storage tank sites located in Nassau County.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 02/15/2011  
Date Data Arrived at EDR: 02/23/2011  
Date Made Active in Reports: 03/29/2011  
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal  
Telephone: 516-572-1000  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Varies

### NY TANKS NASSAU: Registered Tank Database in Nassau County

A listing of facilities in Nassau County with storage tanks.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 02/15/2017  
Number of Days to Update: 35

Source: Nassau County Department of Health  
Telephone: 516-227-9691  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Varies

### NY UST - NASSAU: Registered Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 01/09/2017  
Date Data Arrived at EDR: 01/11/2017  
Date Made Active in Reports: 02/15/2017  
Number of Days to Update: 35

Source: Nassau County Health Department  
Telephone: 516-571-3314  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: No Update Planned

### NY UST NCFM: Storage Tank Database

A listing of underground storage tank sites located in Nassau County.

Date of Government Version: 02/15/2011  
Date Data Arrived at EDR: 02/23/2011  
Date Made Active in Reports: 03/29/2011  
Number of Days to Update: 34

Source: Nassau County Office of the Fire Marshal  
Telephone: 516-572-1000  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Varies

## ROCKLAND COUNTY:

### NY AST - ROCKLAND: Petroleum Bulk Storage Database

A listing of aboveground storage tank sites located in Rockland County. Rockland County's Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017  
Date Data Arrived at EDR: 03/17/2017  
Date Made Active in Reports: 09/22/2017  
Number of Days to Update: 189

Source: Rockland County Health Department  
Telephone: 914-364-2605  
Last EDR Contact: 03/04/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: No Update Planned

### NY UST - ROCKLAND: Petroleum Bulk Storage Database

A listing of underground storage tank sites located in Rockland County. Rockland County's Petroleum Bulk Storage (PBS) program is no longer in service. All related operations/duties are now wholly overseen by the New York State Dept. of Environmental Conservation (NYSDEC).

Date of Government Version: 02/02/2017  
Date Data Arrived at EDR: 03/17/2017  
Date Made Active in Reports: 09/22/2017  
Number of Days to Update: 189

Source: Rockland County Health Department  
Telephone: 914-364-2605  
Last EDR Contact: 03/04/2019  
Next Scheduled EDR Contact: 06/17/2019  
Data Release Frequency: No Update Planned

## SUFFOLK COUNTY:

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### NY AST - SUFFOLK: Storage Tank Database

A listing of aboveground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018  
Date Data Arrived at EDR: 12/06/2018  
Date Made Active in Reports: 02/07/2019  
Number of Days to Update: 63

Source: Suffolk County Department of Health Services  
Telephone: 631-854-2521  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: No Update Planned

### NY UST - SUFFOLK: Storage Tank Database

A listing of underground storage tank sites located in Suffolk County.

Date of Government Version: 06/28/2018  
Date Data Arrived at EDR: 12/06/2018  
Date Made Active in Reports: 02/07/2019  
Number of Days to Update: 63

Source: Suffolk County Department of Health Services  
Telephone: 631-854-2521  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: No Update Planned

### WESTCHESTER COUNTY:

#### NY AST - WESTCHESTER: Listing of Storage Tanks

A listing of aboveground storage tank sites located in Westchester County.

Date of Government Version: 01/02/2019  
Date Data Arrived at EDR: 02/08/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 6

Source: Westchester County Department of Health  
Telephone: 914-813-5161  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Semi-Annually

#### NY UST - WESTCHESTER: Listing of Storage Tanks

A listing of underground storage tank sites located in Westchester County.

Date of Government Version: 01/02/2019  
Date Data Arrived at EDR: 02/08/2019  
Date Made Active in Reports: 02/14/2019  
Number of Days to Update: 6

Source: Westchester County Department of Health  
Telephone: 914-813-5161  
Last EDR Contact: 01/28/2019  
Next Scheduled EDR Contact: 05/11/2019  
Data Release Frequency: Semi-Annually

### OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

#### CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019  
Date Data Arrived at EDR: 02/12/2019  
Date Made Active in Reports: 03/04/2019  
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection  
Telephone: 860-424-3375  
Last EDR Contact: 02/12/2019  
Next Scheduled EDR Contact: 05/27/2019  
Data Release Frequency: No Update Planned

#### NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 07/13/2018  
Date Made Active in Reports: 08/01/2018  
Number of Days to Update: 19

Source: Department of Environmental Protection  
Telephone: N/A  
Last EDR Contact: 01/07/2019  
Next Scheduled EDR Contact: 04/22/2019  
Data Release Frequency: Annually

### PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 10/23/2018  
Date Made Active in Reports: 11/27/2018  
Number of Days to Update: 35

Source: Department of Environmental Protection  
Telephone: 717-783-8990  
Last EDR Contact: 01/11/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Annually

### RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 02/23/2018  
Date Made Active in Reports: 04/09/2018  
Number of Days to Update: 45

Source: Department of Environmental Management  
Telephone: 401-222-2797  
Last EDR Contact: 02/19/2019  
Next Scheduled EDR Contact: 06/03/2019  
Data Release Frequency: Annually

### VT MANIFEST: Hazardous Waste Manifest Data

Hazardous waste manifest information.

Date of Government Version: 01/16/2019  
Date Data Arrived at EDR: 01/17/2019  
Date Made Active in Reports: 02/19/2019  
Number of Days to Update: 33

Source: Department of Environmental Conservation  
Telephone: 802-241-3443  
Last EDR Contact: 01/14/2019  
Next Scheduled EDR Contact: 04/29/2019  
Data Release Frequency: Annually

### WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2017  
Date Data Arrived at EDR: 06/15/2018  
Date Made Active in Reports: 07/09/2018  
Number of Days to Update: 24

Source: Department of Natural Resources  
Telephone: N/A  
Last EDR Contact: 03/11/2019  
Next Scheduled EDR Contact: 06/24/2019  
Data Release Frequency: Annually

### Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

### Electric Power Transmission Line Data

Source: PennWell Corporation

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**Sensitive Receptors:** There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

### AHA Hospitals:

Source: American Hospital Association, Inc.  
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

## GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

### Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

### Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

### Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

### Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

### Daycare Centers: Day Care Providers

Source: Department of Health

Telephone: 212-676-2444

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **STREET AND ADDRESS INFORMATION**

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## **GEOCHECK<sup>®</sup> - PHYSICAL SETTING SOURCE ADDENDUM**

### **TARGET PROPERTY ADDRESS**

TOWN OF TUSTEN DAM  
MAIN STREET  
NARROWSBURG, NY 12764

### **TARGET PROPERTY COORDINATES**

Latitude (North):	41.606238 - 41° 36' 22.46"
Longitude (West):	75.061964 - 75° 3' 43.07"
Universal Transverse Mercator:	Zone 18
UTM X (Meters):	494836.6
UTM Y (Meters):	4605847.5
Elevation:	691 ft. above sea level

### **USGS TOPOGRAPHIC MAP**

Target Property Map:	5939697 NARROWSBURG, NY
Version Date:	2013

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

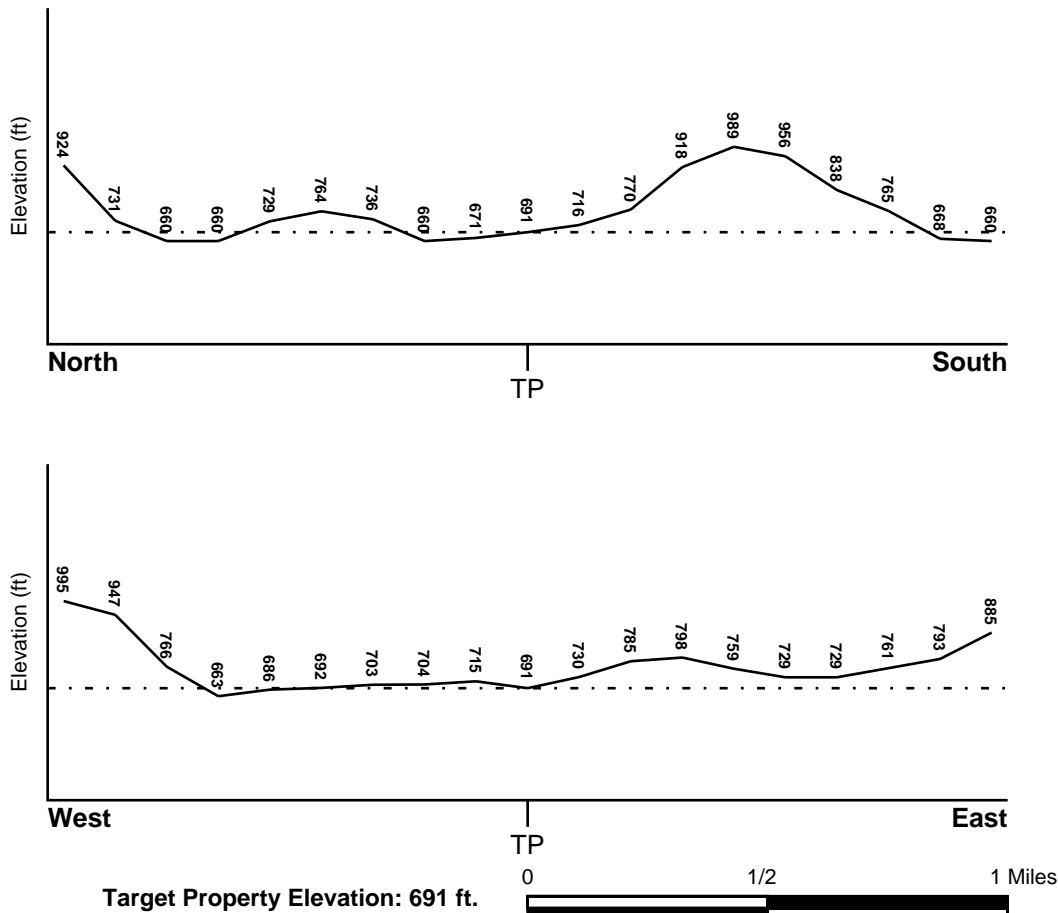
### TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

### TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General NW

### SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

### FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
42103C0035C	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
42103C0030C	FEMA FIRM Flood data

### NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
NARROWSBURG	YES - refer to the Overview Map and Detail Map

### HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

#### ***Site-Specific Hydrogeological Data\*:***

Search Radius:	1.25 miles
Status:	Not found

### AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

## **GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY**

### **GROUNDWATER FLOW VELOCITY INFORMATION**

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

### **GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY**

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

#### **ROCK STRATIGRAPHIC UNIT**

Era: Paleozoic  
System: Devonian  
Series: Upper Devonian  
Code: D3c *(decoded above as Era, System & Series)*

#### **GEOLOGIC AGE IDENTIFICATION**

Category: Continental Deposits

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### **DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY**

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: ARNOT

Soil Surface Texture: very stony - silt loam

Hydrologic Group: Class C/D - Drained/undrained hydrology class of soils that can be drained and classified.

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: LOW

Depth to Bedrock Min: > 10 inches

Depth to Bedrock Max: > 20 inches

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Permeability Rate (in/hr)	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	6 inches	very stony - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 2.00 Min: 0.60	Max: 6.00 Min: 3.60
2	6 inches	17 inches	very channery - silt loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 2.00 Min: 0.60	Max: 6.00 Min: 3.60
3	17 inches	21 inches	unweathered bedrock	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

### OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: channery - silt loam  
unweathered bedrock  
very channery - silt loam  
gravelly - silt loam

Surficial Soil Types: channery - silt loam  
unweathered bedrock  
very channery - silt loam  
gravelly - silt loam

Shallow Soil Types: silt loam

Deeper Soil Types: channery - loam  
very channery - loam  
very gravelly - sand

### LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

## GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

### WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

### **FEDERAL USGS WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A1	USGS40000845594	0 - 1/8 Mile NNE
3	USGS40000845500	1/4 - 1/2 Mile SW
B4	USGS40000845575	1/4 - 1/2 Mile West
B5	USGS40000845576	1/4 - 1/2 Mile West
6	USGS40000845491	1/4 - 1/2 Mile SW
B7	USGS40000845560	1/4 - 1/2 Mile West
10	USGS40000845720	1/2 - 1 Mile NNE
11	USGS40001035689	1/2 - 1 Mile WNW
12	USGS40000845423	1/2 - 1 Mile SE

### **FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION**

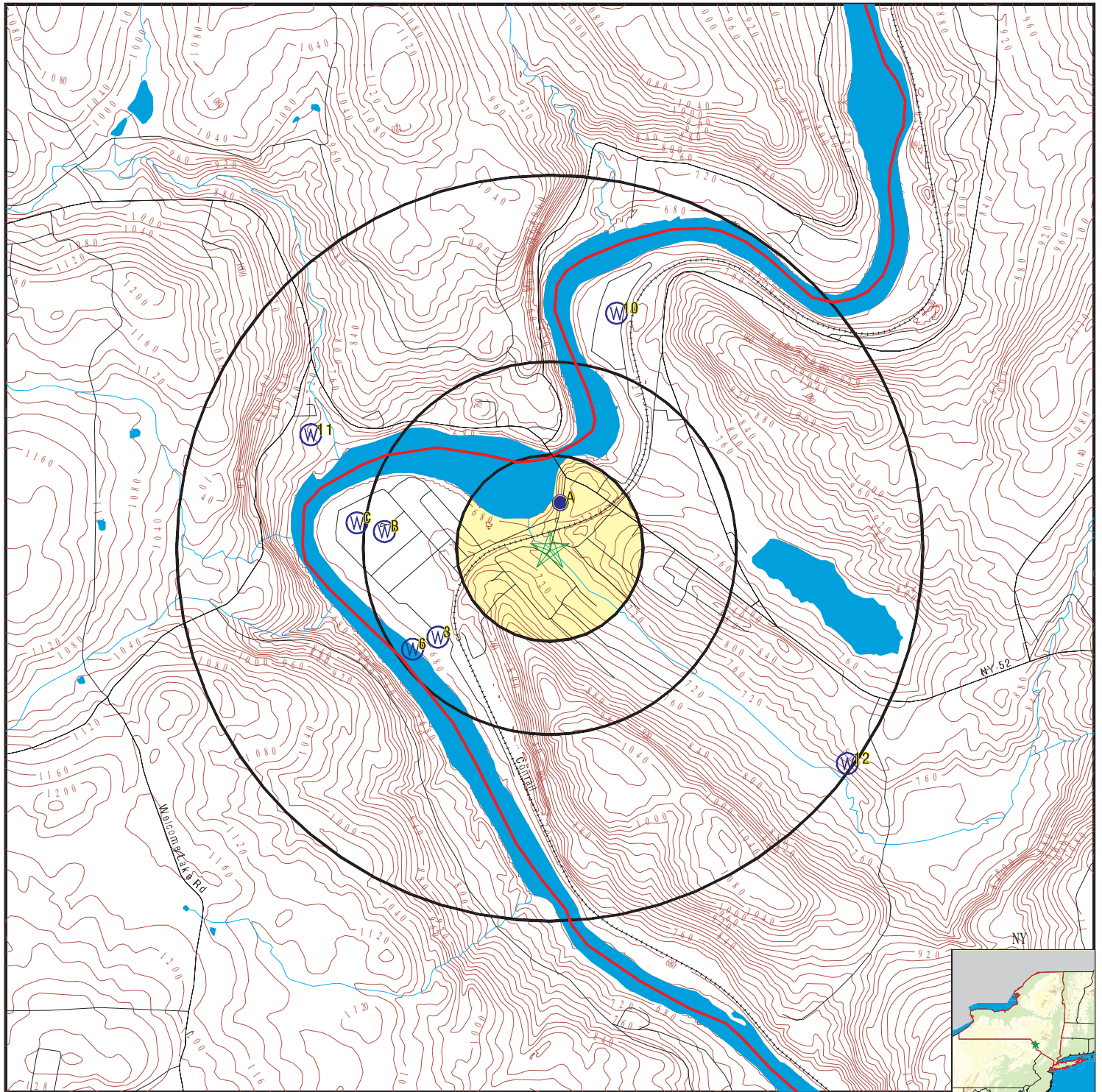
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
A2	NY0015284	1/8 - 1/4 Mile North

Note: PWS System location is not always the same as well location.

### **STATE DATABASE WELL INFORMATION**

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
C8	NYWS004297	1/2 - 1 Mile West
C9	NYWS004296	1/2 - 1 Mile West

# PHYSICAL SETTING SOURCE MAP - 05614188.2r



- County Boundary
- Major Roads
- Contour Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

0 1/4 1/2 1 Miles

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Town of Tusten Dam  
 ADDRESS: Main Street  
 Narrowsburg NY 12764  
 LAT/LONG: 41.606238 / 75.061964

CLIENT: Shumaker Consulting Engineering  
 CONTACT: Jorel Spain  
 INQUIRY #: 05614188.2r  
 DATE: April 08, 2019 10:52 am

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**A1**  
**NNE**  
**0 - 1/8 Mile**  
**Higher**

**FED USGS USGS40000845594**

Organization ID: USGS-NY  
Monitor Location: SV 526  
Description: Not Reported  
Drainage Area: Not Reported  
Contrib Drainage Area: Not Reported  
Aquifer: Not Reported  
Aquifer Type: Not Reported  
Well Depth: Not Reported  
Well Hole Depth: Not Reported

Organization Name: USGS New York Water Science Center  
Type: Well  
HUC: 02040101  
Drainage Area Units: Not Reported  
Contrib Drainage Area Unts: Not Reported  
Formation Type: Not Reported  
Construction Date: Not Reported  
Well Depth Units: Not Reported  
Well Hole Depth Units: Not Reported

**A2**  
**North**  
**1/8 - 1/4 Mile**  
**Higher**

**FRDS PWS NY0015284**

PWS ID: NY0015284  
PWS name: WOLFES FREDDIE  
PWS address: RD #2, ROUTE 97  
PWS state: NY  
PWS ID: NY0015284  
Date system activated: Not Reported  
Retail population: 00000050  
System address: Not Reported  
System city: NARROWSBURG  
System zip: 12764

PWS type: System Owner/Responsible Party  
PWS address: WOLFES PIONEER MOTEL,INC  
PWS city: NARROWSBURG  
PWS zip: 12764  
Activity status: Active  
Date system deactivated: Not Reported  
System name: WOLFES PIONEER  
System address: ROUTE 97, RD 2 BOX 588  
System state: NY

County FIPS: 052

City served: COCHECTON (T)

Latitude: 413630

Longitude: 0750343

**3**  
**SW**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS USGS40000845500**

Organization ID: USGS-NY  
Monitor Location: SV 884  
Description: Not Reported  
Drainage Area: Not Reported  
Contrib Drainage Area: Not Reported  
Aquifer: Not Reported  
Aquifer Type: Not Reported  
Well Depth: 60  
Well Hole Depth: Not Reported

Organization Name: USGS New York Water Science Center  
Type: Well  
HUC: 02040101  
Drainage Area Units: Not Reported  
Contrib Drainage Area Unts: Not Reported  
Formation Type: Holocene Alluvium  
Construction Date: Not Reported  
Well Depth Units: ft  
Well Hole Depth Units: Not Reported

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**B4**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40000845575**

Organization ID: USGS-NY  
Monitor Location: SV 552  
Description: Not Reported  
Drainage Area: Not Reported  
Contrib Drainage Area: Not Reported  
Aquifer: Not Reported  
Aquifer Type: Not Reported  
Well Depth: 39  
Well Hole Depth: Not Reported

Organization Name: USGS New York Water Science Center  
Type: Well  
HUC: Not Reported  
Drainage Area Units: Not Reported  
Contrib Drainage Area Units: Not Reported  
Formation Type: Sand and Gravel  
Construction Date: Not Reported  
Well Depth Units: ft  
Well Hole Depth Units: Not Reported

**B5**  
**West**  
**1/4 - 1/2 Mile**  
**Higher**

**FED USGS USGS40000845576**

Organization ID: USGS-NY  
Monitor Location: SV 553  
Description: Not Reported  
Drainage Area: Not Reported  
Contrib Drainage Area: Not Reported  
Aquifer: Not Reported  
Aquifer Type: Not Reported  
Well Depth: Not Reported  
Well Hole Depth: Not Reported

Organization Name: USGS New York Water Science Center  
Type: Well  
HUC: Not Reported  
Drainage Area Units: Not Reported  
Contrib Drainage Area Units: Not Reported  
Formation Type: Java-West Falls Formation  
Construction Date: Not Reported  
Well Depth Units: Not Reported  
Well Hole Depth Units: Not Reported

**6**  
**SW**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS USGS40000845491**

Organization ID: USGS-NY  
Monitor Location: SV 57  
Description: Not Reported  
Drainage Area: Not Reported  
Contrib Drainage Area: Not Reported  
Aquifer: Sand and gravel aquifers (glaciated regions)  
Formation Type: Sand and Gravel  
Construction Date: 1947  
Well Depth Units: ft  
Well Hole Depth Units: Not Reported

Organization Name: USGS New York Water Science Center  
Type: Well  
HUC: 02040101  
Drainage Area Units: Not Reported  
Contrib Drainage Area Units: Not Reported  
Aquifer Type: Not Reported  
Well Depth: 57  
Well Hole Depth: Not Reported

Ground water levels, Number of Measurements: 1  
Feet below surface: 20.00  
Note: Not Reported

Level reading date: 1956-01-01  
Feet to sea level: Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID  
Direction  
Distance  
Elevation

Database EDR ID Number

**B7**  
**West**  
**1/4 - 1/2 Mile**  
**Lower**

**FED USGS USGS40000845560**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	SV 58	Type:	Well
Description:	Not Reported	HUC:	02040101
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Sand and gravel aquifers (glaciated regions)		
Formation Type:	Sand and Gravel	Aquifer Type:	Not Reported
Construction Date:	1956	Well Depth:	41
Well Depth Units:	ft	Well Hole Depth:	Not Reported
Well Hole Depth Units:	Not Reported		

Ground water levels,Number of Measurements:	1	Level reading date:	1956-01-01
Feet below surface:	24.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**C8**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**NY WELLS NYWS004297**

Well ID:	NY5203338	Well Name:	WELL-NEW
System ID:	002	System Name:	NARROWSBURG
Type:	WL	Status:	A
Agency:	BIRNEY, SCOTT		

**C9**  
**West**  
**1/2 - 1 Mile**  
**Lower**

**NY WELLS NYWS004296**

Well ID:	NY5203338	Well Name:	WELL-OLD (INACTIVE)
System ID:	001	System Name:	NARROWSBURG
Type:	WL	Status:	A
Agency:	BIRNEY, SCOTT		

**10**  
**NNE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000845720**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	SV 359	Type:	Well
Description:	Not Reported	HUC:	02040101
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Units:	Not Reported
Aquifer:	Not Reported	Formation Type:	Devonian, Upper
Aquifer Type:	Not Reported	Construction Date:	1949
Well Depth:	200	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

## GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Ground water levels,Number of Measurements:	1	Level reading date:	1956-01-01
Feet below surface:	70.00	Feet to sea level:	Not Reported
Note:	Not Reported		

**11**  
**WNW**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40001035689**

Organization ID:	USGS-PA		
Organization Name:	USGS Pennsylvania Water Science Center		
Monitor Location:	WN 10	Type:	Well
Description:	Not Reported	HUC:	02040101
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Catskill Formation
Aquifer Type:	Not Reported	Construction Date:	19500101
Well Depth:	276	Well Depth Units:	ft
Well Hole Depth:	276	Well Hole Depth Units:	ft

Ground water levels,Number of Measurements:	1	Level reading date:	1957-11-05
Feet below surface:	Not Reported	Feet to sea level:	Not Reported
Note:	The site was flowing, but the head could not be measured without additional equipment.		

**12**  
**SE**  
**1/2 - 1 Mile**  
**Higher**

**FED USGS USGS40000845423**

Organization ID:	USGS-NY	Organization Name:	USGS New York Water Science Center
Monitor Location:	SV 360	Type:	Well
Description:	Not Reported	HUC:	02040101
Drainage Area:	Not Reported	Drainage Area Units:	Not Reported
Contrib Drainage Area:	Not Reported	Contrib Drainage Area Unts:	Not Reported
Aquifer:	Not Reported	Formation Type:	Devonian, Upper
Aquifer Type:	Not Reported	Construction Date:	1943
Well Depth:	165	Well Depth Units:	ft
Well Hole Depth:	Not Reported	Well Hole Depth Units:	Not Reported

Ground water levels,Number of Measurements:	1	Level reading date:	1956-01-01
Feet below surface:	90.00	Feet to sea level:	Not Reported
Note:	Not Reported		

# GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

## RADON

### AREA RADON INFORMATION

State Database: NY Radon

#### Radon Test Results

County	Town	Num Tests	Avg Result	Geo Mean	Max Result
SULLIVAN	BETHEL	16	4.26	1.62	38
SULLIVAN	CALLICOON	18	2.96	2.04	13.7
SULLIVAN	COCHECTON	1	1	1	1
SULLIVAN	DELAWARE	3	10.4	5.85	17.9
SULLIVAN	FALLSBURG	28	3	2.25	11.2
SULLIVAN	FORESTBURGH	2	0.9	0.88	1.1
SULLIVAN	FREMONT	9	4.23	3.28	8.2
SULLIVAN	HIGHLAND	8	2.45	1.88	7.6
SULLIVAN	LIBERTY	37	3.96	1.74	28.7
SULLIVAN	LUMBERLAND	4	1.93	1.69	2.9
SULLIVAN	MAMAKATING	22	4.11	2.59	22.4
SULLIVAN	NEVERSINK	7	1.71	1.3	4.4
SULLIVAN	ROCKLAND	22	7.33	3.63	46
SULLIVAN	THOMPSON	47	2.82	1.65	20.8
SULLIVAN	TUSTEN	5	2.18	1.91	4.2

Federal EPA Radon Zone for SULLIVAN County: 1

Note: Zone 1 indoor average level > 4 pCi/L.  
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.  
: Zone 3 indoor average level < 2 pCi/L.

#### Federal Area Radon Information for SULLIVAN COUNTY, NY

Number of sites tested: 24

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area	0.900 pCi/L	95%	5%	0%
Basement	2.720 pCi/L	62%	38%	0%

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## **TOPOGRAPHIC INFORMATION**

### USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

### Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

## **HYDROLOGIC INFORMATION**

**Flood Zone Data:** This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

**NWI:** National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

### State Wetlands Data: Freshwater Wetlands

Source: Department of Environmental Conservation

Telephone: 518-402-8961

## **HYDROGEOLOGIC INFORMATION**

### AQUIFLOW<sup>R</sup> Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

## **GEOLOGIC INFORMATION**

### Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

### STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

### SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

# PHYSICAL SETTING SOURCE RECORDS SEARCHED

## LOCAL / REGIONAL WATER AGENCY RECORDS

### FEDERAL WATER WELLS

#### PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

#### PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

#### USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

### STATE RECORDS

#### New York Public Water Wells

Source: New York Department of Health

Telephone: 518-458-6731

## OTHER STATE DATABASE INFORMATION

#### Oil and Gas Well Database

Source: Department of Environmental Conservation

Telephone: 518-402-8072

These files contain records, in the database, of wells that have been drilled.

### RADON

#### State Database: NY Radon

Source: Department of Health

Telephone: 518-402-7556

Radon Test Results

#### Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

#### EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

### OTHER

#### Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

#### Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

## PHYSICAL SETTING SOURCE RECORDS SEARCHED

### STREET AND ADDRESS INFORMATION

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**Town of Tusten Dam**

Main Street

Narrowsburg, NY 12764

Inquiry Number: 5614188.8

April 08, 2019

## The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor  
Shelton, CT 06484  
Toll Free: 800.352.0050  
[www.edrnet.com](http://www.edrnet.com)

## EDR Aerial Photo Decade Package

04/08/19

**Site Name:**

Town of Tusten Dam  
Main Street  
Narrowsburg, NY 12764  
EDR Inquiry # 5614188.8

**Client Name:**

Shumaker Consulting Engineering  
409 Court Street  
Utica, NY 13502  
Contact: Jorel Spain



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

### Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
1999	1"=750'	Flight Date: April 24, 1999	USGS
1992	1"=500'	Acquisition Date: April 14, 1992	USGS/DOQQ
1987	1"=750'	Flight Date: July 29, 1987	USGS
1981	1"=500'	Flight Date: April 21, 1981	USDA
1973	1"=500'	Flight Date: April 15, 1973	USGS
1969	1"=500'	Flight Date: October 09, 1969	USDA
1966	1"=750'	Flight Date: May 03, 1966	USGS
1959	1"=500'	Flight Date: May 04, 1959	USDA
1939	1"=500'	Flight Date: April 22, 1939	USDA

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INQUIRY #: 5614188.8

YEAR: 2017

— = 500'





INQUIRY #: 5614188.8

YEAR: 2010

1" = 500'





INQUIRY #: 5614188.8

YEAR: 2006

— = 500'





INQUIRY #: 5614188.8

YEAR: 1999

— = 750'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 5614188.8

YEAR: 1992

— = 500'





INQUIRY #: 5614188.8

YEAR: 1987

— = 750'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 5614188.8

YEAR: 1981

— = 500'





INQUIRY #: 5614188.8

YEAR: 1973

— = 500'





INQUIRY #: 5614188.8

YEAR: 1969

— = 500'





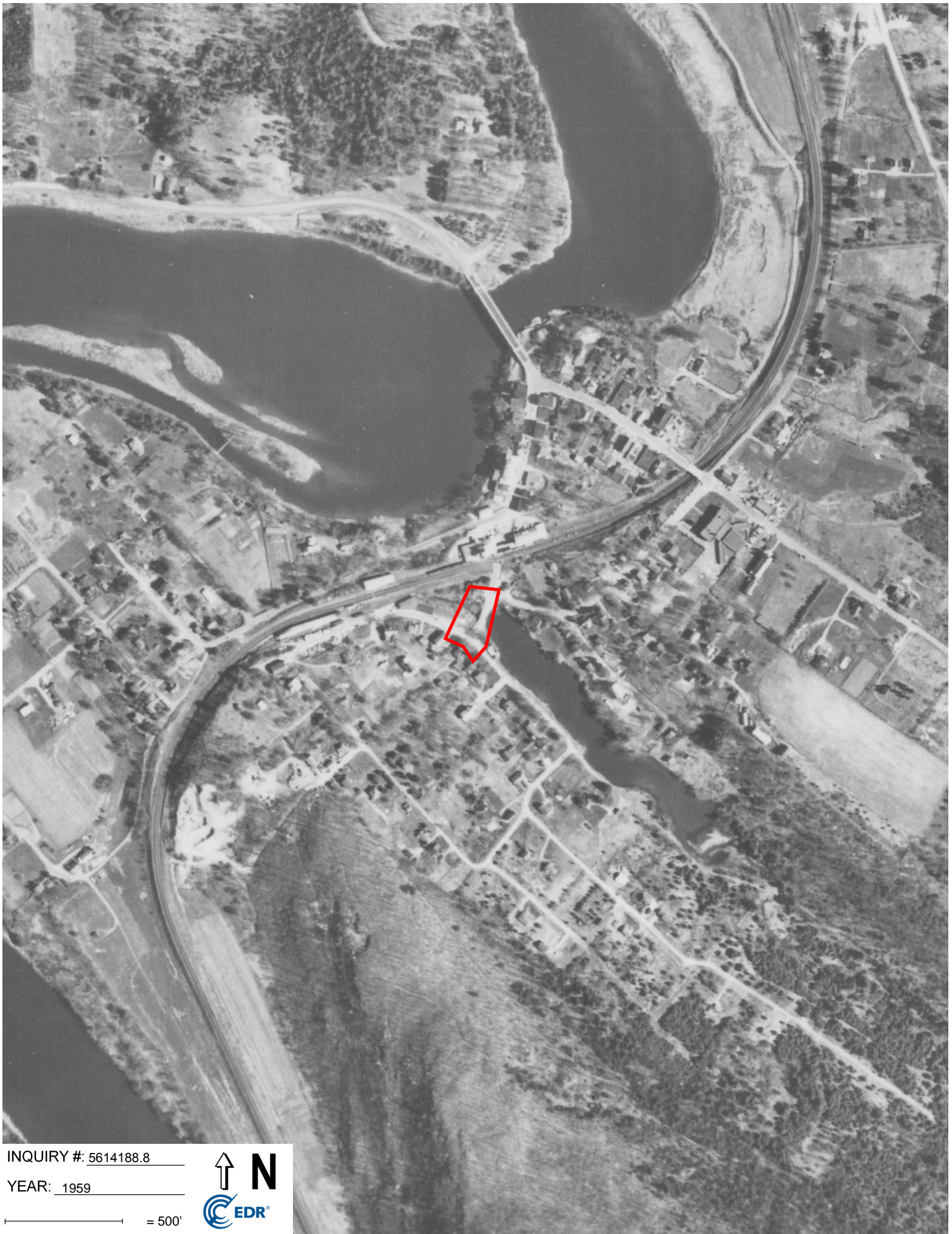
INQUIRY #: 5614188.8

YEAR: 1966

— = 750'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.

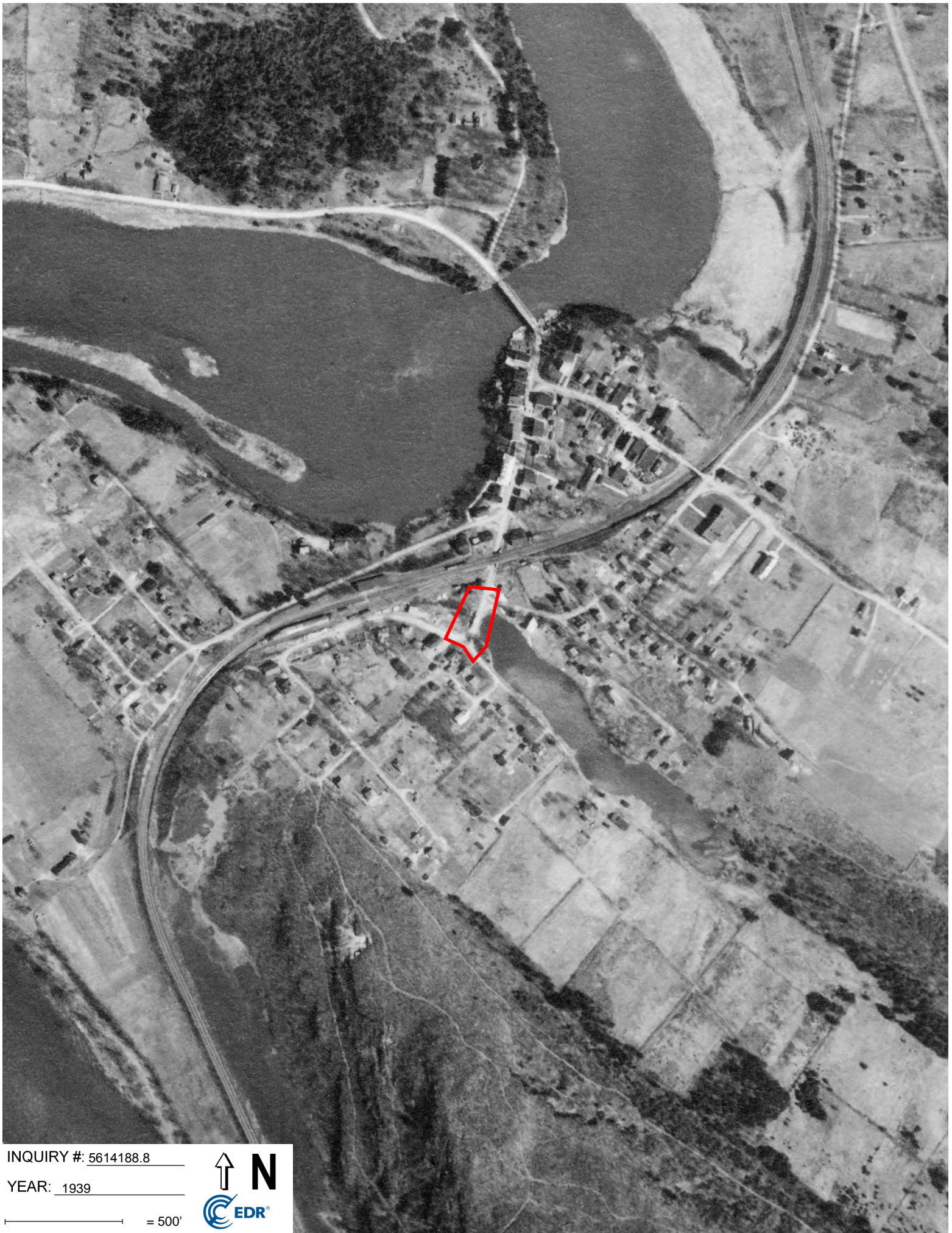


INQUIRY #: 5614188.8

YEAR: 1959

— = 500'





INQUIRY #: 5614188.8

YEAR: 1939

— = 500'



## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program

625 Broadway, Fifth Floor, Albany, NY 12233-4757

P: (518) 402-8935 | F: (518) 402-8925

[www.dec.ny.gov](http://www.dec.ny.gov)

June 24, 2019

Mallory Smith  
Shumaker Engineering Consulting & Land Surveying DPC  
143 Court St  
Binghamton, NY 13901

Re: Main St over Little Lake Erie Outlet Culvert Replacement  
County: Sullivan    Town/City: Tusten

Dear Ms. Smith:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

Enclosed is a report of rare or state-listed animals and plants, and significant natural communities that our database indicates occur in the vicinity of the project site.

For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our database. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

Our database is continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 3 Office, Division of Environmental Permits at [dep.r3@dec.ny.gov](mailto:dep.r3@dec.ny.gov), (845) 256-3054.

Sincerely,



Heidi Krahling  
Environmental Review Specialist  
New York Natural Heritage Program



**The following state-listed animals have been documented  
in the vicinity of the project site.**

The following list includes animals that are listed by NYS as Endangered, Threatened, or Special Concern; and/or that are federally listed or are candidates for federal listing.

**For information about any permit considerations for the project, please contact the NYSDEC Region 3 Office, Department of Environmental Permits, at [dep.r3@dec.ny.gov](mailto:dep.r3@dec.ny.gov), (845) 256-3054.**

**The following species has been documented at two locations within 0.75 miles of the project site.**

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	FEDERAL LISTING
<b>Birds</b>			
<b>Bald Eagle</b> <i>Breeding</i>	<i>Haliaeetus leucocephalus</i>	Threatened	12255

**The following species has been documented within 1 mile of the project site. Individual animals may travel 1.5 miles from documented locations.**

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	FEDERAL LISTING
<b>Reptiles</b>			
<b>Timber Rattlesnake</b>	<i>Crotalus horridus</i>	Threatened	6657

This report only includes records from the NY Natural Heritage database.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the listed animals in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org), and from NYSDEC at [www.dec.ny.gov/animals/7494.html](http://www.dec.ny.gov/animals/7494.html).



**The following rare animals and significant natural communities  
have been documented at the project site, or in its vicinity.**

We recommend that potential impacts of the proposed project on these species or communities be addressed as part of any environmental assessment or review conducted as part of the planning, permitting and approval process, such as reviews conducted under SEQR. Field surveys of the project site may be necessary to determine the status of a species at the site, particularly for sites that are currently undeveloped and may still contain suitable habitat. Final requirements of the project to avoid, minimize, or mitigate potential impacts are determined by the lead permitting agency or the government body approving the project.

**The following animals, while not listed by New York State as Endangered or Threatened, are rare in New York and are of conservation concern.**

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS	
<b>Fish</b>				
<b>Swallowtail Shiner</b>	<i>Notropis procne</i>	Unlisted	Imperiled in NYS	
<b>Documented within 275 yards northwest of the project site.</b> in the Delaware River at Narrowsburg, 2005-08-01. The fish was caught in a river near an island in an urban area.				
<b>Dragonflies and Damselflies</b>				
<b>Rapids Clubtail</b>	<i>Phanogomphus quadricolor</i>	Unlisted	Vulnerable in NYS	
1994-06-13				4080
<b>Green-faced Clubtail</b>	<i>Hylogomphus viridifrons</i>	Unlisted	Critically Imperiled in NYS	
2015-06-04				6761
<b>Spine-crowned Clubtail</b>	<i>Hylogomphus abbreviatus</i>	Unlisted	Critically Imperiled in NYS	
2015-06-11				9921
<b>Cobra Clubtail</b>	<i>Gomphurus vastus</i>	Unlisted	Critically Imperiled in NYS	
2015-06-04				14501
<b>Delaware River Clubtail</b>	<i>Gomphurus septima delawarensis</i>	Special Concern	Critically Imperiled in NYS and Globally Rare	
2015-06-04				12082

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
<b>Freshwater Mussels</b>			
<b>Alewife Floater</b>	<i>Anodonta imbecilis</i>	Unlisted	Critically Imperiled in NYS
Documented in the Upper Delaware River and so could occur at or near the project site. 2002-09-16.			

11121

**The following natural community is considered significant from a statewide perspective by the NY Natural Heritage Program. By meeting specific, documented criteria, the NY Natural Heritage Program considers this community occurrence to have high ecological and conservation value.**

COMMON NAME	SCIENTIFIC NAME	NY STATE LISTING	HERITAGE CONSERVATION STATUS
<b>Upland/Terrestrial Communities</b>			
<b>Floodplain Grassland</b>			Uncommon Community Type
Documented within 0.2 mile northwest of the project site. This is a small floodplain grassland on three small islands in the Upper Delaware River near Narrowsburg, NY.			

14389

This report only includes records from the NY Natural Heritage database. For most sites, comprehensive field surveys have not been conducted, and we cannot provide a definitive statement as to the presence or absence of all rare or state-listed species. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other sources may be required to fully assess impacts on biological resources.

If any rare plants or animals are documented during site visits, we request that information on the observations be provided to the New York Natural Heritage Program so that we may update our database.

Information about many of the rare animals and plants in New York, including habitat, biology, identification, conservation, and management, are available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org), from NatureServe Explorer at [www.natureserve.org/explorer](http://www.natureserve.org/explorer), and from USDA's Plants Database at <http://plants.usda.gov/index.html> (for plants).

Information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at [www.guides.nynhp.org](http://www.guides.nynhp.org). For descriptions of all community types, go to [www.dec.ny.gov/animals/97703.html](http://www.dec.ny.gov/animals/97703.html) for Ecological Communities of New York State.



## Parks, Recreation and Historic Preservation

**ANDREW M. CUOMO**  
Governor

**ERIK KULLESEID**  
Acting Commissioner

May 24, 2019

Ms. Mary Santangelo  
Environmental Specialist 2  
NYSDOT, Main Office  
Office of Environment  
50 Wolf Road, POD 4-1  
Albany, NY 12232

Re: DOT  
2018 Bridge NY Program, Evaluation of 61 Culverts Statewide for S/NRHP Eligibility  
19PR03346

Dear Ms. Santangelo:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the submitted documentation in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6NYCRR Part 617).

We have reviewed the project submission received on May 14, 2019. The OPRHP concurs with DOT's recommendations that the 61 culverts listed on the spreadsheet entitled "National Register Eligibility Recommendations with Supporting Information (Non-Bundled Culverts)" do not meet the National Register criteria and, therefore, are not NR eligible.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above. If you have any questions, I can be reached at (518) 268-2168.

Sincerely,

A handwritten signature in black ink that reads "Kathleen A. Howe".

Kathleen A. Howe  
Survey and Evaluation Coordinator  
[kathy.howe@parks.ny.gov](mailto:kathy.howe@parks.ny.gov)

via e-mail only



May 13, 2019

Mr. Michael Lynch  
Division Director  
New York State Division for Historic Preservation  
Peebles Island State Park  
P.O. Box 189  
Waterford, New York 12188-0189

RE: ***Evaluation of Culverts for S/NRHP Eligibility***  
2018 Bridge NY Program  
Statewide

Dear Mr. Lynch:

The New York State Department of Transportation (NYSDOT) is administering the 2018 Bridge NY program, which makes funding available for local governments to rehabilitate and replace bridges and culverts statewide. The program includes seventy-nine (79) 100% state-funded culvert repair and replacement projects, including twenty-six (26) bundled projects to be designed by the NYSDOT, and fifty-three (53) projects to be designed by the local sponsors. The Bridge NY culvert projects constitute undertakings subject to review under Section 14.09 of the New York State Preservation Act of 1980, pursuant to 9NYCRR Part 428.

For consistency in the approach for evaluating potential historic structures, the NYSDOT Environmental Science Bureau (ESB) conducted an initial statewide review to identify culverts over fifty years old that require evaluation for State / National Register eligibility. The local sponsors provided information on the culvert locations, approximate year of construction, description of the design type, and photograph. The NYSDOT checked the Cultural Resource Information System (CRIS) for previous evaluations and/or eligibility determinations of the Bridge NY culverts, and potential locations within a known or potential historic district. None of the Bridge NY culverts were previously determined eligible, and none are located within an eligible or listed historic district.

The NYSDOT identified sixty-one (61) culverts that require evaluation for State/National Register eligibility, thirty-nine (39) of which are non-bundled and twenty-two (22) bundled. The ESB evaluated these culverts using guidelines adapted from the 2002 Historic Bridge Inventory (2002 HBI) and the *Program Comment for Common Post-1945 Concrete and Steel Bridges*, issued by the Advisory Council on Historic Preservation in 2012. Many bridges and culverts built during the mid-20<sup>th</sup> century, after 1935 and especially since 1946, are strictly utilitarian and lacking in distinctive engineering or architectural qualities. Structures of this period represent common standardized types, widely represented by extant examples throughout the state. Common structure types represented in the Bridge NY culverts include:

- Concrete slab structure type
  - Concrete slabs
  - Concrete slabs (Timber Composite)

- Reinforced and pre-stressed concrete beam structure type
  - Pre-stressed concrete box beams
- Steel multi-beam structure type
  - Steel rolled multi-beams
  - Steel rolled multi-beams (Jack Arch)
  - Steel rolled multi-beams (Timber Composite)
- Culverts
  - Concrete box culverts
  - Concrete pipe culverts
  - Steel pipe culverts

Two stone arch culverts are the only examples of uncommon structure types included in the Bridge NY program. Both structures are recommended Not Eligible for the National Register due to integrity issues (see Attachment 1). Fifty-nine (59) culverts are recommended Not Eligible as examples of common structure types that lack distinctive engineering or architectural qualities. This group includes two common structure types subject to individual evaluation due to special considerations, a steel rolled multi-beam (Jack Arch) associated with a concrete sluice and steel sluice gate, and a concrete slab structure with a stone parapet (Attachment 1). Representative photographs of common structure types are provided in Attachment 2, and supporting information for eligibility recommendations is summarized in Attachment 3.

At this time, we respectfully request the written concurrence of the SHPO with the eligibility recommendations for the enclosed lists of culverts. Any further coordination for individual undertakings, as needed in accordance with Section 14.09, will be carried out by the Regional Cultural Resource Coordinators.

If you have any questions or require additional information, please contact Mary Santangelo at [Mary.Santangelo@dot.ny.gov](mailto:Mary.Santangelo@dot.ny.gov) or (518) 457-0153.

Sincerely,



Terence C. Smith  
Director, Environmental Science Bureau

TS/vr/ms

Encl: Attachment 1: Individual Evaluations (Non-bundled and Bundled)

Attachment 2: Representative Photos of Common Structure Types – Culverts Not Eligible for the National Register

Attachment 3: National Register Eligibility Recommendations with Supporting Information (Non-bundled and Bundled)

cc: Regional Cultural Resource Coordinators

**Region 5**

5763.00 Mountain Road over Johnson Creek, Town of Royalton, Niagara County

This culvert is a stone masonry arch structure, constructed ca. 1900. The culvert consists of a stone barrel vault which has been modified and lengthened by a metal pipe extension. The integrity of this structure is diminished by the loss of original stone material on the spandrel walls, concrete headwalls and fill that cover portions of the stone arch.

The culvert is recommended **Not Eligible** for the State / National Registers of Historic Places.



**Region 9**

9754.85 Main Street over Little Lake Erie Outlet, Town of Tusten, Sullivan County

This structure is a concrete jack arch culvert, built ca. 1940. The culvert is a common structure type associated with a concrete sluiceway and manual steel sluice gate controlling the water elevation in Little Lake Erie, a small reservoir originally used to supply water for the Erie Railroad's steam engines. The mid-20<sup>th</sup> century culvert has no historical association with the railroad, which reached Narrowsburg in 1848. The sluice gate controlling flow into the sluiceway consists of a steel plate that slides vertically along steel side angles, and operates manually via a pull chain attached to the top of the steel slide plate. The utilitarian design of the culvert, sluiceway, and sluice gate is lacking in distinctive engineering or architectural qualities.

The culvert is recommended **Not Eligible** for the State / National Registers of Historic Places.



**Region 8**

8762.34 Mountainview Avenue over Sparkill Creek, Town of Orangetown, Rockland County

This structure is a concrete slab culvert with a stone masonry parapet, constructed in the early to mid-20th century. Concrete slab structures of this period represent a common standardized type. The culvert is not within a known or potential historic district, and has no known historical association. Within the context of structure type, there are similar examples of bridges (concrete slab with stone masonry parapet) determined not eligible for the National Register by the Historic Bridge Inventory.

The culvert is recommended **Not Eligible** for the State / National Registers of Historic Places.



**Region 9**

9754.86 Main Street/NY Route 7 over Glenwood Creek, City of Oneonta, Otsego County

This stone arch culvert, built ca. 1900, is a representative example of stone masonry arch construction typical of the period between the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. While the voussoir stones in the arch are intact, the integrity of this structure is diminished by the loss of original stone in the spandrel wall. Rubble fill suggests the spandrel wall may be failing or damaged.

The culvert is recommended **Not Eligible** for the State / National Registers of Historic Places.



## Representative Photos of Common Structure Types - Culverts Not Eligible for the National Register

### Concrete slab structure



Dutchess, West Main Street - unnamed tributary to Swamp River.  
ca. 1920

### Concrete slab (Timber Composite)



Town road - Mill Road (Coram-Yaphank Rd) over Carmans River, Town of Brookhaven, Suffolk County.  
ca. 1940.

### Prestressed-concrete box beam



Creek Road over Cowaselon Creek, Town of Smithfield, Madison County.  
1957.

Representative Photos of Common Structure Types - Culverts Not Eligible for the National Register

**Steel rolled multi-beam**



Caughdenoy Road CR49 over Youngs Creek, Town of Clay, Onondaga County.  
1965.

**Steel rolled multi-beam (Jack Arch)**



Peekskill Hollow Road over Peekskill Hollow Creek, Town of Kent, Putnam County.  
1925.

**Steel rolled multi-beam (Timber Composite)**



Dewey Lane over Hiller Brook, Town of Pawling, Dutchess.  
Mid-20<sup>th</sup> century.

Representative Photos of Common Structure Types - Culverts Not Eligible for the National Register

**Concrete box culvert**



Lower Road (CR12) over Trib to Wallkill River, Town of Wawayanda, Orange County.  
1935.

**Steel pipe culvert**



North Tower Road CR 502 over Trib to Trout Brook, Town of Solon, Cortland County.  
Mid-20<sup>th</sup> Century.

# National Register Eligibility Recommendations with Supporting Information (Non-Bundled Culverts)

PIN	Municipality	County	Feature carried	Feature crossed	Year Built	Material and Design Type	Reason	Eligibility Recommendation
5763.00	Town of Royalton	Niagara	Mountain Road	Johnson Creek	ca. 1900	Stone Masonry Arch	The integrity of this structure is diminished by the loss of original stone material on the spandrel walls, concrete headwalls and fill that cover portions of the stone arch.	Not Eligible
9754.85	Town of Tusten	Sullivan	Main Street	Little Lake Erie Outlet	ca. 1940	Steel rolled multi-beam (Jack Arch)	The culvert is a common structure type associated with a concrete sluiceway and manual steel sluice gate. The design of the culvert, sluiceway, and sluice gate are utilitarian and lacking in distinctive engineering or architectural qualities.	Not Eligible
1761.06	Town of North Hudson	Essex	Essex County Route 6 - Tracy Road	Ash Craft Brook	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
1761.07	Town of Bolton	Warren	CR 11 Horicon Avenue	Finkle Brook	1924	Concrete slab	Post-standardization period, lacking distinction	Not Eligible
1761.09	Town of Ticonderoga	Essex	Veteran's Road	Five Mile Creek	Early 20 <sup>th</sup> Century	Steel rolled multi-beam (Jack Arch)	Common structure type standardized around 1920, lacking distinction	Not Eligible
1761.10	Town of East Greenbush	Rensselaer	Morner Rd	Mill Creek	ca. 1930's	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking distinction	Not Eligible
1761.11	Town of East Greenbush	Rensselaer	Mannix Rd	Mill Creek	Mid-20 <sup>th</sup> Century	Concrete box culvert	Common structure type standardized 1908, lacking distinction	Not Eligible
1761.13	Town of Charlton	Saratoga	Peaceable Street	Trib. of the Mourning Kill	1936	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking distinction	Not Eligible
1761.14	City of Rensselaer	Rensselaer	Partition St	Quackenderry Creek	Early 20 <sup>th</sup> Century	Concrete slab	Common structure type standardized 1908, lacking distinction	Not Eligible
1761.15	Town of Milton	Saratoga	CR59 (Middle Line Rd)	Gordon Creek Trib.	1935	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
1761.17	City of Cohoes	Albany	James Street	Eagles Nest Creek	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible

# National Register Eligibility Recommendations with Supporting Information (Non-Bundled Culverts)

PIN	Municipality	County	Feature carried	Feature crossed	Year Built	Material and Design Type	Reason	Eligibility Recommendation
2754.59	Town of Arietta	Hamilton	County Route 24, Old Piseco Road	Oxbow Lake Outlet	ca. 1928	Steel rolled multi-beam	Post-standardization period, lacking distinction	Not Eligible
2754.61	City of Amsterdam	Montgomery	Florida Avenue	South Chuctanunda Creek Trib.	Early 20 <sup>th</sup> century	Concrete box culvert	Common structure type standardized 1908, lacking distinction	Not Eligible
3756.62	Town of Lodi	Seneca	CR 136 Lodi Point Road	Trib. to Seneca Lake	Early 20 <sup>th</sup> century	Concrete slab	Common structure type standardized 1908, lacking distinction	Not Eligible
3756.64	Town of Clay	Onondaga	Caughdenoy Road CR49	Youngs Creek	1965	Steel rolled multi-beam	Post-standardization period, lacking distinction	Not Eligible
3756.66	Town of Danby	Tompkins	Bruce Hill Road	Buttermilk Creek	1960	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
3756.66	Town of Danby	Tompkins	West Jersey Hill Road	Buttermilk Creek	1950's	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
3756.66	Town of Danby	Tompkins	Gunderman Road	Buttermilk Creek	1960	Steel rolled multi-beam	Post-standardization period, lacking distinction	Not Eligible
3756.67	Town of Solon	Cortland	North Tower Road (C.R. 502)	Trib. to Trout Brook	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
4BNY.31	Town of Henrietta	Monroe	Calkins Road	Red Creek Trib.	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
4BNY.34	Town of Livonia	Livingston	CR 39-Livonia Center Rd	Kinney Creek	ca.1960	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
4BNY.35	Town of Naples	Ontario	County Road 36	Honeoye Inlet	1955	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
4BNY.36	Town of Naples	Ontario	County Road 36	Honeoye Inlet	1955	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
4BNY.38	Town of Perinton	Monroe	Ayralt Road	Irondequoit Creek Trib.	1966	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible
4BNY.39	Village of Dansville	Livingston	Seward Street and Clay Street	Bradner Creek	Early 20 <sup>th</sup> century	Steel rolled multi-beam	Common structure type standardized 1908, lacking distinction	Not Eligible
5762.99	Town of Wheatfield	Niagara	Lockport Road	Cayuga Creek	1954	Steel pipe culvert	Common structure type standardized around mid-20 <sup>th</sup> century, lacking distinction	Not Eligible

National Register Eligibility Recommendations with Supporting Information (Non-Bundled Culverts)

PIN	Municipality	County	Feature carried	Feature crossed	Year Built	Material and Design Type	Reason	Eligibility Recommendation
5763.01	Town of New Albion	Cattaraugus	County Road 5	Unnamed Branch Little Valley Creek	1965	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
5763.01	Town of New Albion	Cattaraugus	County Road 5	Little Valley Creek	1965	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
5763.02	Town of Royalton	Niagara	Griswold Street	Trib. to Jeddo Creek	ca. 1930, widened 1950	Steel rolled multi-beam (Jack Arch)	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
5763.03	Town of Jamestown	Chautauqua	Steele Street	Storm Drain	1949, 1984	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
7753.84	Town of Worth	Jefferson	CR 189	Clora Creek	1932	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
8762.23	Town of Pawling	Dutchess	Dewey Lane	Hiller Brook	Mid-20 <sup>th</sup> century	Steel rolled multi-beam (Timber Composite)	Common structure type standardized 1908, lateral wood deck with longitudinal steel I-Beams, lacking distinction	Not Eligible
8762.24	Village of Pawling	Dutchess	West Main Street	Unnamed Trib. Swamp River	ca. 1920	Concrete slab	Post-standardization period, lacking distinction	Not Eligible
8762.25	Towns of Clarkstown and Orangetown	Rockland	Townline Road	Brook	Mid-20 <sup>th</sup> century	Concrete box culvert	Common structure type standardized 1908, lacking distinction	Not Eligible
8762.26	Village of Chestnut Ridge	Rockland	Hungry Hollow Road	Brook	Early 20 <sup>th</sup> Century	Concrete slab	Common structure type standardized 1908, lacking distinction	Not Eligible
8762.27	Village of Chestnut Ridge	Rockland	Pine Brook Road	Pine Brook	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
9754.82	Town of Middleburgh	Schoharie	Huntersland Road (CR 21)	Lawton Hollow Creek	1956	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
9754.83	Town of Middleburgh	Schoharie	Huntersland Road (CR 21)	Cotton Hill Creek	1956	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking distinction	Not Eligible
x762.48	Town of Brookhaven	Suffolk	Town road - Mill Road (Coram-Yaphank Rd)	Carmans River	ca. 1940	Concrete slab (Timber Composite)	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible

National Register Eligibility Recommendations with Supporting Information (Bundled Culverts)

PIN	Municipality	County	Feature Carried	Feature crossed	Year Built	Material and Design Type	Reason	Eligibility Recommendation
8762.34	Town of Orangetown	Rockland	Mountainview Avenue	Sparkill Creek	Early to Mid-20 <sup>th</sup> century	Concrete slab	Common structure type, similar to concrete slab bridges with stone parapets determined not eligible for the National Register by the Historic Bridge Inventory.	Not Eligible
9754.86	City of Oneonta	Otsego	Main Street/NY Route 7	Glenwood Creek	ca. 1900	Stone Masonry Arch	The integrity of this structure is diminished by the loss of original stone in the spandrel wall. Rubble fill suggests the spandrel wall is failing or damaged.	Not Eligible
1761.05	Town of Cambridge	Washington	Stump Church Rd.	Fly Creek	Early 20 <sup>th</sup> century	Steel rolled multi-beam	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
1761.26	Town of Edinburg	Saratoga	Military Road	Sand Creek	1960	Steel rolled multi-beam	Post-standardization period, lacking distinction	Not Eligible
1761.27	Town of Halfmoon	Saratoga	South Main Street	Unnamed Trib. to the Hudson River	Mid-20 <sup>th</sup> century	Concrete slab	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
1761.28	Town of Greenwich	Washington	Ferguson Road	Whittaker Brook	Mid-20 <sup>th</sup> century	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
1761.29	Town of Greenwich	Washington	Christie Road	Whittaker Brook (Cossayuna Creek)	Mid-20 <sup>th</sup> century	Steel rolled multi-beam	Common structure type standardized 1908, lacking distinction	Not Eligible
2754.58	City of Rome	Oneida	Dewey Road	Trib. to Wheeler Creek	Early 20 <sup>th</sup> century	Concrete slab	Common structure type standardized 1908, lacking distinction	Not Eligible
2754.60	Town of Smithfield	Madison	Creek Road	Cowaselon Creek	1957	Prestressed-concrete box beam	Common structure type, standardized around mid-20th century, lacking distinction	Not Eligible
2754.60	Town of Hamilton	Madison	Larkin Road	Trib. to Sangerfield River	1948	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
2754.60	Town of Lebanon	Madison	River Road	Kingsley Brook	1936	Concrete slab	Post-standardization period, lacking distinction	Not Eligible
2754.60	Town of Lenox	Madison	North Main Street Road	Trib. of Cowaselon Creek	1968	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible

# National Register Eligibility Recommendations with Supporting Information (Bundled Culverts)

PIN	Municipality	County	Feature Carried	Feature crossed	Year Built	Material and Design Type	Reason	Eligibility Recommendation
3756.61	Towns of Dryden and Groton	Tompkins	CR107, Peruville Road	Owasco Inlet	1957	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
3756.61	Towns of Danby and Caroline	Tompkins	CR119, Coddington Road	Six-Mile Creek Tributary	1950	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
3756.61	Town of Lansing	Tompkins	CR186, Conlon Road	Salmon Creek Trib.	1960	Steel pipe culvert	Common structure type standardized around mid-20th century, lacking distinction	Not Eligible
3756.61	Town of Ithaca	Tompkins	CR110, Ellis Hollow Road	Six-Mile Creek Tributary	Mid-20 <sup>th</sup> century	Concrete box culvert	Common structure type standardized 1908, lacking distinction	Not Eligible
3756.61	Town of Caroline	Tompkins	CR115, Valley Road	Six-Mile Creek Trib.	1955	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
6755.27	Town of Chemung	Chemung	CR 3 Wyncoop Creek Rd	Wyncoop Creek Trib.	ca.1920	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking distinction	Not Eligible
8762.32	Town of Wawayanda	Orange	Lower Road (CR12)	Trib. to Wallkill River	1935	Concrete box culvert	Post-standardization period, lacking distinction	Not Eligible
8762.33	Village of Wesley Hills	Rockland	Wesley Chapel Road	Willow Tree Brook	1940	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking distinction	Not Eligible
8762.35	Town of Rochester	Ulster	Samsonville Road	Trib. to Mombaccus Creek	Early 20 <sup>th</sup> century	Concrete slab	Common structure type standardized 1908, lacking distinction	Not Eligible
8815.12	Town of Kent	Putnam	Peekskill Hollow Road	Peekskill Hollow Creek	1925	Steel rolled multi-beam (Jack Arch)	Post-standardization period, lacking individual distinction	Not Eligible

# NPL Site Narrative for Cortese Landfill

## CORTESE LANDFILL

### Village of Narrowsburg, New York

**Conditions at proposal (October 15, 1984):** The Cortese Landfill covers approximately 17 acres in the Delaware River floodplain in the Village of Narrowsburg, Town of Tusten, Sullivan County, New York. The former operator of the landfill is the John Cortese Construction Corp. The company owns a portion of the property. The town owns the rest.

The landfill received municipal wastes from the Town of Tusten at a rate of 3,000 cubic yards per year from 1972 to 1982. In addition, significant quantities of industrial wastes were buried at the landfill.

The State has documented the release of organic chemicals and metals to surface water and ground water at or near the site. The nearest known water supply (800 feet to the northwest) is the auxiliary well for the Narrowsburg water supply. To date, no significant impacts on water supplies have been detected.

The State initiated a lawsuit under CERCLA against several parties in Federal District Court in August 1983.

**Status (June 10, 1986):** In April 1985, the State signed a Consent Order with SCA Services, Inc., which had transported wastes to the site. The Consent Order requires SCA to undertake a remedial investigation/feasibility study (RI/FS) to determine the type and extent of contamination at the site and identify alternatives for remedial action. The work began in the summer of 1985. The RI is scheduled to be completed in September 1986.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.



# CORTESE LANDFILL VIL OF NARROWSBURG, NY

## Cleanup Activities

### On this page:

- [Background](#)
- [What Has Been Done to Clean Up the Site?](#)
- [What Is the Current Site Status?](#)

### On related pages:

- [Operable Units](#)
- [Cleanup Progress](#)

## Background

The 5-acre Cortese Landfill site was operated from 1970 to 1981 by the John Cortese Construction Company, receiving ,primarily, municipal wastes. Industrial wastes, including waste solvents, paint thinners, paint sludges, and waste oils, were disposed of at the landfill in 1973. Records indicated that an estimated 5,000 to 8,000 drums were buried on the site at that time. In the early 1980s, the New York State Department of Environmental Conservation found volatile organic chemicals (VOCs) and heavy metals in the ground water and surface water. A municipal water supply well is located about 1,500 feet from the site. Although it was not contaminated, the well was taken out of service in the early 1990s as a precautionary measure. It was brought back in service in the late 1990s as a supplemental public supply well to augment a newly installed supply well. Routine water-quality sampling has continued to show that this well is unaffected by the landfill. The former operator of the landfill and the Town of Tusten each own part of the property. Approximately 550 people live within 1 mile of the site. Six homes are located about 400 feet away from the landfill. The Delaware River, classified by the National Park Service as a Wild and Scenic River, is located 450 feet from the landfill and is used for fishing and recreational activities.

The site was listed on the National Priorities List in 1986.

Site Responsibility: This site is being addressed through federal, state, and potentially responsible party actions.

## What Has Been Done to Clean Up the Site?

The site is being addressed in a single long-term remedial phase to clean up the entire site.

In 1985, the State of New York signed an Administrative Order on Consent with a potentially responsible party (PRP), SCA Services, Inc., which had transported wastes to the site. The lead for the site was transferred from the State to EPA in 1990 and a new Administrative Order on Consent was signed with SCA. This new order required SCA to undertake a remedial investigation and feasibility study (RI/FS) to determine the nature and extent of the contamination at and emanating from the site and to identify and evaluate remedial alternatives. Based upon the results of the RI/FS, a Record of Decision (ROD), finalized in September 1994, identified drum removal, capping of the landfill, and ground water extraction and treatment as the selected remedy.

Consent Decree negotiations between EPA and a group of twenty-eight PRPs to carry out the design and implementation of the remedy selected in the ROD were successfully completed in September 1995; the Consent Decree was entered in U.S. District Court (approved by the Judge) in May 1996. An Administrative Order on Consent was entered into with the Town of Tusten in 1995 for the Town to conduct a removal action. The Town of Tusten subsequently excavated and disposed of off-site, contaminated soil from two small septage lagoons south of the landfill and constructed a storm water management system around the landfill to reduce leachate production. During this effort, 300 drums filled with hazardous liquids, solids, and sludges were removed from an area adjacent to the septage lagoons. The drum removal component of the remedy, which was performed in 1996, resulted in the excavation and removal of more than 5,000 drums, three tractor trailer loads of hazardous sludge, and 50 dump trucks of contaminated soil. The construction of the cap component of the remedy was completed in October 1998.

A downgradient groundwater perimeter study was completed in 2001. Soil cores were collected from beneath the landfill mass in 2004. In scoping the design of the ground water extraction and treatment system component of the 1994 ROD remedy, it was determined that there were logistical problems associated with space constraints related to equipment and infrastructure which would need to share the same space as the landfill cap, the pre-existing municipal wastewater treatment facility, and the restored wetlands. There were also difficulties related to transmitting treated effluent from the envisioned groundwater treatment system either beneath the railroad embankment to the Delaware River or to ground water. In response to these concerns, and after the completion of the construction of the cap, the PRPs evaluated whether alternative remedial approaches for addressing the ground water would be more appropriate than the full-scale groundwater extraction-and-treatment system contemplated in the 1994 ROD. These efforts took the form of investigations, studies, and bench- and field-scale pilot testing, with EPA oversight. Early in this reassessment process, it became increasingly clear that there were additional, previously-unidentified source areas of chlorinated and non-chlorinated VOC nonaqueous phase liquid (NAPL) contamination in soils beneath the above-mentioned former drum-disposal areas. The results of a subsequent 2001 shallow groundwater hot-spot investigation conducted along the downgradient perimeter of the landfill confirmed the potential presence of these source areas. A subsequent source-area investigation performed in 2004 clearly revealed the location of the primary, previously-undocumented source area. Characterization of the horizontal and vertical extent of this source area was conducted in 2007. The 1994 ROD estimated that capping the landfill, in combination with ground water extraction and treatment at the landfill and downgradient natural attenuation, would result in achieving

the ground water cleanup goals in fourteen years. However, with the newly identified presence of a large NAPL source area, the cleanup time-frame estimate for that ground water remedy is now estimated to be 150 years. For this reason, new remedial alternatives were assessed in an updated FS. Based upon the findings of the updated FS, a ROD was signed in October 2010. To address the new source area, the ROD called for air sparging the source areas to remove VOCs (injecting air directly into the contaminated liquid waste and surrounding groundwater to volatilize VOCs), soil vapor extraction (SVE) to collect and treat, as necessary, the vapors as a result of the air sparging, a final phase of air sparging/SVE where amendment/additions are introduced, and eventual application of in-situ chemical oxidation, if necessary, after a stabilization period. The ROD also included an amendment to the approach to address the ground water at the site, replacing the extraction and treatment system with natural attenuation of the ground water contamination. An Administrative Order on Consent for the remedial design of the source-area remedy was entered into by EPA and the PRP Group in July 2011.

Construction of the remedy was performed from December 2012 to September 2013.

Five-year reviews are undertaken at sites to ensure that implemented remedies protect public health and the environment and that they function as intended by site decision documents. EPA issued five-year review reports in August 2001, August 2006, July 2011, and September 2016. The September 2016 five-year review concluded that the implemented actions at the site protect human health and the environment. The five-year review also concluded that, currently, there are no exposure pathways that could result in unacceptable risks and none are expected as long as the site use does not change and the engineered and access controls that are currently in place continue to be properly operated, monitored, and maintained. EPA will conduct another five-year review on or before September 2021.

## **What Is the Current Site Status?**

Based upon the results of downgradient groundwater samples, it appears that the air sparging/SVE system has reduced the VOCs to the point where natural attenuation will likely be effective. The air sparging/SVE system was taken offline in October 2017. If monitoring data indicate that the performance standards have been met, natural attenuation will be performed. Groundwater sampling was conducted May 2018, July 2018, and October 2018; the results look favorable. The next sampling will be performed in April 2019.

OCTOBER 17, 2019

On Site					
Name/Address	Distance	Topography	Database	Determination	Description/Rationale
US Post Office  Main Street	On Site	On Site	LTANKS NY Spills		<b>LTANKS No. 9314026</b> -Reported: 3/1/94 -Closed: 10/24/94 -Cleanup: False -Little info "EIR recommend product removal vacutest." And "This is additional information about material spilled from the translation of the old spill file: TANK TEST"  <b>NY Spills No. 0311900</b> -Reported: 1/23/04 -Closed: 2/4/04 -Cleanup: True -Tank removed, no visible leak. Soil samples taken. Lab analysis showed any compounds detected were far below target levels. PID Composite samples showed targets are complied with

Adjoining Properties					
Name/Address	Distance	Topography	Database	Determination	Description/Rationale
Narrowsburg Central School 6 Erie Street	13 ft. ENE	Higher	NY UST RCRA NonGen/NLR FINDS ECHO NY AST	Non REC (no associated spills or violations)	<b>NY UST</b> 001: in service, #2 fuel oil, 10,000 gallons 1: closed/removed, #2 fuel oil, 10,000 gallons  <b>RCRA NonGEN/NLR</b> No violations found  <b>NY AST</b> 002: in service, # 2 fuel oil, 50 gallons
Dirlam Bros Lumber Co, INC	167 ft. W	Higher	NY UST NY AST	Non REC (no associated spills or violations)	<b>NY UST</b> 001: closed/removed, gasoline, 1,000 gallons 002: closed/removed, diesel, 1,000 gallons 005: in service, #2 fuel oil, 1,000 gallons  <b>NY AST</b> 003: in service, #2 fuel oil, 275 gallons 004: in service, #2 fuel oil, 275 gallons



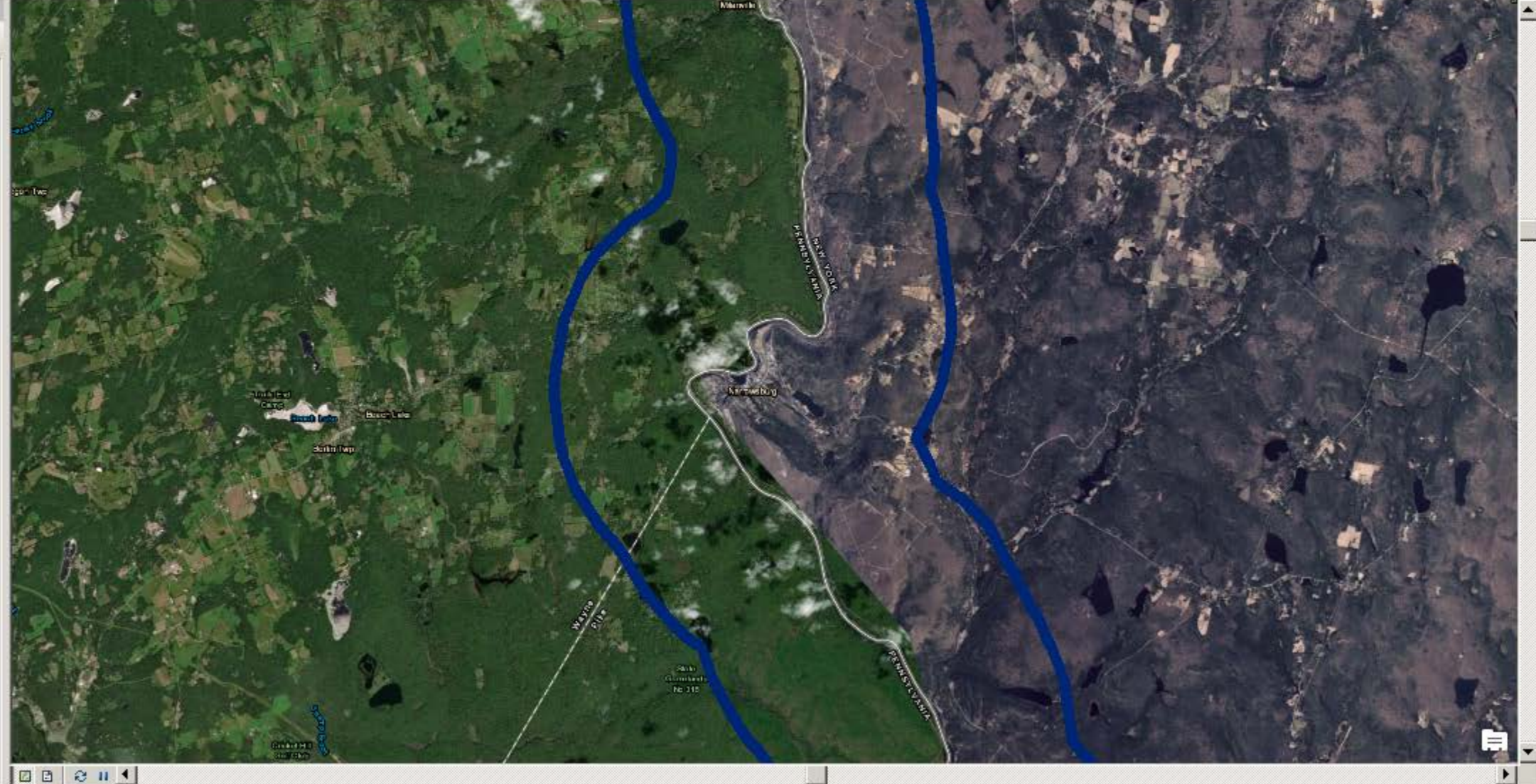
Non-Adjoining Properties					
Name/Address	Distance	Topography	Database	Determination	Description/Rationale
Hectars Residence 10 Grove Street	320 ft. E	Higher	NY LTANKS	REC? (no sufficient evidence from DEC to show the spill was remediated, higher elevation)	<b>LTANKS No. 9405776</b> -Reported: 7/28/94 -Closed: 10/13/94 -Cleanup: false -Oil stained soil found near two fuel tanks. Caller said leak was likely from an old tank as two fuel tanks had been recently replaced.
St. Francis Xavier Church Route #52	1059 ft. N	Lower	NY UST	Non REC (no violations or spills)	1: "tank converted to non-regulated use", #2 fuel oil, 1,000 gallons 2: "tank converted to non-regulated use", #2 fuel oil, 1,000 gallons
Cortese SLF Rd #2	0.334 mi (1762 ft) S	Higher	NY SLF	Non REC (remediated)	Inactive SWF Landfill(see below)
Cortese Landfill South of Route 97	1763 ft (1/4-1/2) SW	Not listed	NPL SEMS US ENG CONTROLS US INST CONTROLS ROD PRP	Non REC (remediated)	-Site is on the Final NPL (as of 2013)  -Site received waste from 1972-1982 including industrial waste - Documented release of organic chemicals and metals to surface water and ground water "at or near the site". No significant impacts to water <i>supply</i> have been detected "to date" (report not dated). -Substances: arsenic, benzene, phenol, toluene, TCE, Xylene -Most recent ROD amendment in 2010 by US ENG Controls: vapor extraction to address groundwater contamination, soil vapor extraction in situ to address soil contamination  -From a supplemental DOC obtained from superfund website for Cortese Landfill: "The September 2016 five-year review concluded that the implemented actions at the site protect human health and the environment. The five-year review also concluded that, currently, there are no exposure pathways that could result in unacceptable risks and none are expected as long as the site use does not change and the

					engineered and access controls that are currently in place continue to be properly operated, monitored, and maintained. EPA will conduct another five-year review on or before September 2021.”
Thomas Residence 78 Bridge Street	0.367 mi. E	Higher	NY LTANKS	Non REC (remediated status)	<b>LTANKS No. 033792</b> -Reported: 3/17/04 -Closed: 6/21/04 -Cleanup: True -Potential property buyer saw pulled back soil and oil seeping up from the ground. Oil confirmed running out of a drain behind a house. UST in front of house leaking. Tank removed.



**Layers**

- ☒ ssa\_national
- ☐ NWI Wetlands
- ☐ NYSDEC Wetlands
- ☒ Basemap
  - ☒ Boundaries and Places
  - ☐ Transportation
  - ☒ Imagery
  - ☐ Basemap
  - ☐ Basemap



# Smart Growth Screening Tool

PIN 9754.85

Prepared By: Shumaker Consulting Eng & Land Surveying, DPC

## Smart Growth Screening Tool (STEP 1)

**NYSDOT & Local Sponsors** – Fill out the Smart Growth Screening Tool until the directions indicate to **STOP** for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to [Smart Growth Guidance](#) document.

Title of Proposed Project: Main St. over Little Lake Erie Outlet - BridgeNY 2018

Location of Project: Hamlet of Narrowsburg, Town of Tusten, Sullivan County

Brief Description: Replace large (14 ft) culvert with larger structure (19ft) using a precast concrete box culvert; scope includes dam analysis and permitting; temporary on-site detour structure, ROW acquisition of permanent easements, and utility relocations.

### A. Infrastructure:

#### Addresses SG Law criterion a. –

(To advance projects for the use, maintenance or improvement of existing infrastructure)

1. Does this project use, maintain, or improve existing infrastructure?

Yes ☒

No ☐

N/A ☐

**Explain:** (use this space to expand on your answers above – the form has no limitations on the length of your narrative)

This project proposes to maintain this segment of Main Street between Erie Ave. and Depot St./Lake St. in the Hamlet of Narrowsburg by replacing the existing culvert.

#### Maintenance Projects Only

a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in **NYSDOT PDM Exhibit 7-1 and described in 7-4:**

<https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm>

➡ Shoulder rehabilitation and/or repair;

# Smart Growth Screening Tool

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- ➔ Upgrade sign(s) and/or traffic signals;
- ➔ Park & ride lot rehabilitation;
- ➔ 1R projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.

b. For all other maintenance projects, **STOP here**. Attach this document to the programmatic [Smart Growth Impact Statement and signed Attestation](#) for Maintenance projects.

For all other projects (**other than maintenance**), continue with screening tool.

## B. Sustainability:

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NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- ➔ Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
- ➔ Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- ➔ Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.

For more information on the Department's Sustainability strategy, refer to Appendix 1 of the Smart Growth Guidance and the NYSDOT web site, [www.dot.ny.gov/programs/greenlites/sustainability](http://www.dot.ny.gov/programs/greenlites/sustainability)

(Addresses SG Law criterion j : to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)

1. Will this project promote sustainability by strengthening existing communities?

Yes ☐      No ☐      N/A ☒

2. Will the project reduce greenhouse gas emissions?

Yes ☐      No ☐      N/A ☒

**Explain:** (use this space to expand on your answers above)

# Smart Growth Screening Tool

The project will preserve the existing community by maintaining this segment of Main Street, which is the only access to a residential area. It will not cause any changes to traffic volumes, traffic patterns, or modal choices.

## C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.

(Addresses SG Law criteria b and c: to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)

1. Is this project located in a developed area?

Yes ☒ No ☐ N/A ☐

2. Is the project located in a municipal center?

Yes ☐ No ☒ N/A ☐

3. Will this project foster downtown revitalization?

Yes ☐ No ☐ N/A ☒

4. Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?

Yes ☐ No ☐ N/A ☒

**Explain:** (use this space to expand on your answers above)

The limited scope of this project will not have any long-term impact on these criteria by fostering or inhibiting development. The culvert is located on the only access route to a residential area that includes a building supply company and water/sewer plant. Temporary construction impacts on local traffic will be investigated during design. Traffic will be maintained via temporary on-site detour structure.

## D. Mixed Use Compact Development:

# Smart Growth Screening Tool

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce.

(Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income groups; to ensure predictability in building and land use codes.)

1. Will this project foster mixed land uses?

Yes ☐ No ☐ N/A ☒

2. Will the project foster brownfield redevelopment?

Yes ☐ No ☐ N/A ☒

3. Will this project foster enhancement of beauty in public spaces?

Yes ☐ No ☐ N/A ☒

4. Will the project foster a diversity of housing in proximity to places of employment and/or recreation?

Yes ☐ No ☐ N/A ☒

5. Will the project foster a diversity of housing in proximity to places of commercial development and/or compact development?

Yes ☐ No ☐ N/A ☒

6. Will this project foster integration of all income groups and/or age groups?

Yes ☐ No ☐ N/A ☒

7. Will the project ensure predictability in land use codes?

Yes ☐ No ☐ N/A ☒

8. Will the project ensure predictability in building codes?

Yes ☐ No ☐ N/A ☒

**Explain:** (use this space to expand on your answers above)

The limited scope of this project will not have any impact on these criteria.

# Smart Growth Screening Tool

## E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.

(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1. Will this project provide public transit?

Yes ☐ No ☐ N/A ☒

2. Will this project enable reduced automobile dependency?

Yes ☐ No ☐ N/A ☒

3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?

Yes ☐ No ☐ N/A ☒

(Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

**Explain:** (use this space to expand on your answers above)

The limited scope of this project will not have any impact on these criteria.

## F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.

(Addresses SG Law criteria g and h: to coordinate between state and local government and inter-municipal and regional planning; to participate in community based planning and collaboration.)

1. Has there been participation in community-based planning and collaboration on the project?

# Smart Growth Screening Tool

Yes ☐ No ☐ N/A ☒

2. Is the project consistent with local plans?

Yes ☐ No ☐ N/A ☒

3. Is the project consistent with county, regional, and state plans?

Yes ☐ No ☐ N/A ☒

4. Has there been coordination between inter-municipal/regional planning and state planning on the project?

Yes ☐ No ☐ N/A ☒

**Explain:** (use this space to expand on your answers above)

The limited scope of this project, and the nature of its function as the only access into and out of the residential area, does not lend itself to wide planning coordination. The Town of Tusten simply wishes to maintain this critical roadway link by restoring the condition of the culvert.

## G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.

(Addresses SG Law criterion d :To protect, preserve and enhance the State's resources, including agricultural land, forests surface and ground water, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)

1. Will the project protect, preserve, and/or enhance agricultural land and/or forests?

Yes ☐ No ☐ N/A ☒

2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?

Yes ☐ No ☐ N/A ☒

3. Will the project protect, preserve, and/or enhance air quality?

Yes ☐ No ☐ N/A ☒

4. Will the project protect, preserve, and/or enhance recreation and/or open space?

Yes ☐ No ☐ N/A ☒

5. Will the project protect, preserve, and/or enhance scenic areas?

## Smart Growth Screening Tool

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Yes ☐ No ☐ N/A ☒

6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?

Yes ☐ No ☐ N/A ☒

**Explain:** (use this space to expand on your answers above)

The limited scope of this project will not have any impact on these criteria.

# Smart Growth Screening Tool

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## Smart Growth Impact Statement (STEP 2)

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**NYSDOT:** Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.

**Local Sponsors:** The local sponsors are **not** responsible for completing a Smart Growth Impact Statement. Proceed to **Step 3**.

---

### Smart Growth Impact Statement

**PIN:**

**Project Name:**

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:

- ➡
- ➡
- ➡
- ➡
- ➡
- ➡

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development. The project will not contribute to the unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.

# Smart Growth Screening Tool

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## Review & Attestation Instructions (STEP 3)

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**Local Sponsors:** Once the Smart Growth Screening Tool is completed, the next step is to submit the project certification statement (**Section A**) to Responsible Local Official for signature. After signing the document, the completed Screening Tool and Certification statement should be sent to NYSDOT for review as noted below.

**NYSDOT:** For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed (**Section B.2**). For locally administered projects, the sponsor's submission and certification statement is reviewed by NYSDOT staff, the appropriate box (**Section B.1**) is checked, and the attestation is signed (Section B.2).

### A. CERTIFICATION (LOCAL PROJECT)

*I HEREBY CERTIFY, to the best of my knowledge, all of the above to be true and correct.*

Preparer of this document:

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

J\_\_\_\_\_  
Printed Name

Responsible Local Official (for local projects):

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

\_\_\_\_\_  
Printed Name

# Smart Growth Screening Tool

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## B. ATTESTATION (NYSDOT)

### 1. I HEREBY:

☐ Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act

☐ Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):

(Attach additional sheets as needed)

☐ do not concur with the above certification, thereby deeming this project ineligible to be a recipient of State funding or a subrecipient of Federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.

2. **NOW THEREFORE**, pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director,  
Regional Planning & Programming Manager (or official designee):

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Signature

---

Date

---

Title

---

Printed Name

# APPENDIX

C

# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
Binghamton, NY 13901-3528  
607-798-8081

SCE: Alec Thompson  
Main St and Erie Ave  
Town of Tusten  
Sunny

File Name : Tusten1 ErieMain  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 1

## Groups Printed- Unshifted - Heavy Vehicles

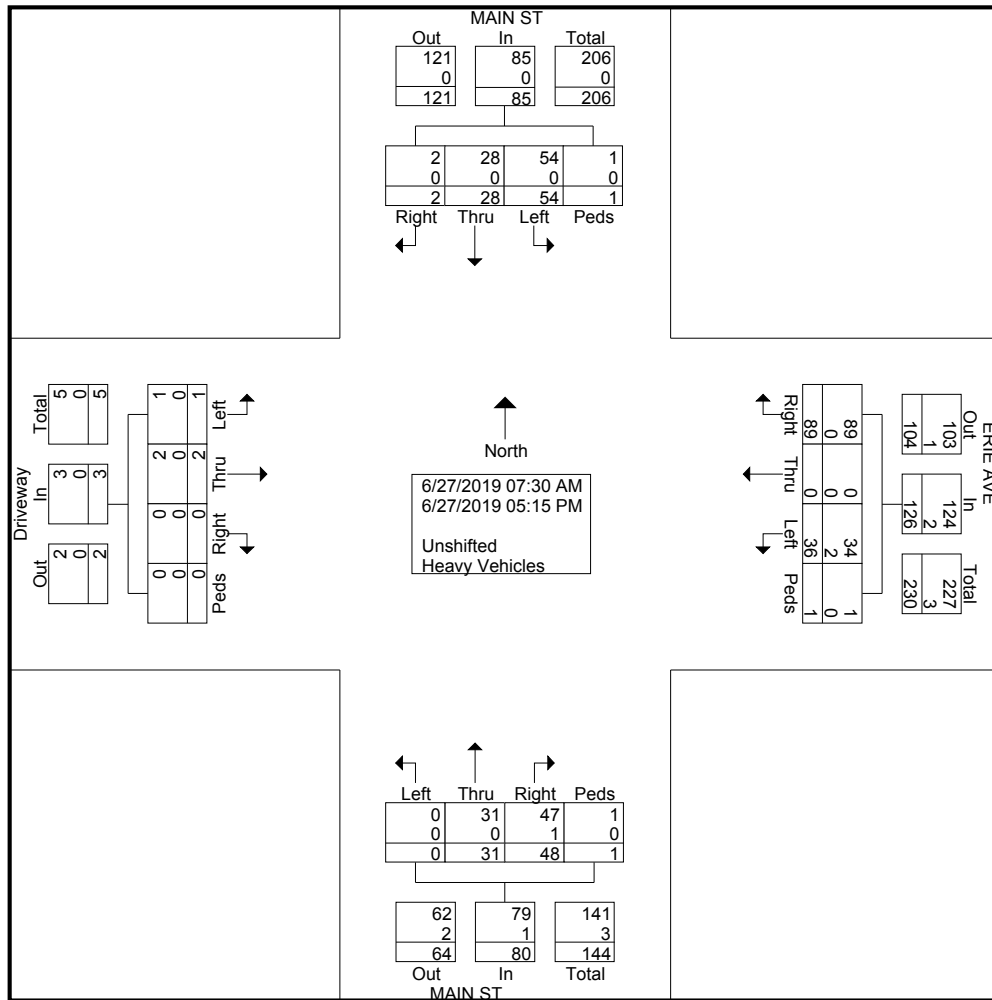
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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
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08:15 AM	0	3	5	0	8	2	0	1	0	3	2	1	0	0	3	0	0	0	0	0	14
08:30 AM	0	0	2	0	2	4	0	1	0	5	6	0	0	0	6	0	0	0	0	0	13
08:45 AM	0	1	4	0	5	5	0	1	0	6	3	0	0	0	3	0	0	0	0	0	14
Total	0	6	14	0	20	15	0	4	0	19	12	2	0	0	14	0	1	0	0	1	54
09:00 AM	0	0	1	0	1	4	0	4	0	8	5	0	0	0	5	0	0	0	0	0	14
09:15 AM	0	1	2	0	3	5	0	2	0	7	3	2	0	0	5	0	1	0	0	1	16
*** BREAK ***																					
Total	0	1	3	0	4	9	0	6	0	15	8	2	0	0	10	0	1	0	0	1	30
*** BREAK ***																					
03:00 PM	0	6	2	0	8	7	0	2	0	9	4	3	0	0	7	0	0	0	0	0	24
03:15 PM	0	1	6	0	7	3	0	3	1	7	1	2	0	0	3	0	0	0	0	0	17
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03:45 PM	0	6	2	0	8	4	0	2	0	6	5	3	0	0	8	0	0	0	0	0	22
Total	0	14	14	0	28	22	0	8	1	31	12	10	0	1	23	0	0	0	0	0	82
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04:15 PM	1	2	5	0	8	13	0	3	0	16	1	0	0	0	1	0	0	0	0	0	25
04:30 PM	1	0	11	0	12	5	0	2	0	7	4	7	0	0	11	0	0	0	0	0	30
04:45 PM	0	1	4	0	5	7	0	3	0	10	3	3	0	0	6	0	0	0	0	0	21
Total	2	5	20	0	27	32	0	11	0	43	10	11	0	0	21	0	0	0	0	0	91
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Grand Total	2	28	54	1	85	89	0	36	1	126	48	31	0	1	80	0	2	1	0	3	294
Apprch %	2.4	32.9	63.5	1.2		70.6	0	28.6	0.8		60	38.8	0	1.2		0	66.7	33.3	0		
Total %	0.7	9.5	18.4	0.3	28.9	30.3	0	12.2	0.3	42.9	16.3	10.5	0	0.3	27.2	0	0.7	0.3	0	1	
Unshifted	2	28	54	1	85	89	0	34	1	124	47	31	0	1	79	0	2	1	0	3	291
% Unshifted	100	100	100	100	100	100	0	94.4	100	98.4	97.9	100	0	100	98.8	0	100	100	0	100	99
Heavy Vehicles	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	3
% Heavy Vehicles	0	0	0	0	0	0	0	5.6	0	1.6	2.1	0	0	0	1.2	0	0	0	0	0	1

# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
Binghamton, NY 13901-3528  
607-798-8081

SCE: Alec Thompson  
Main St and Erie Ave  
Town of Tusten  
Sunny

File Name : Tusten1 ErieMain  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 2



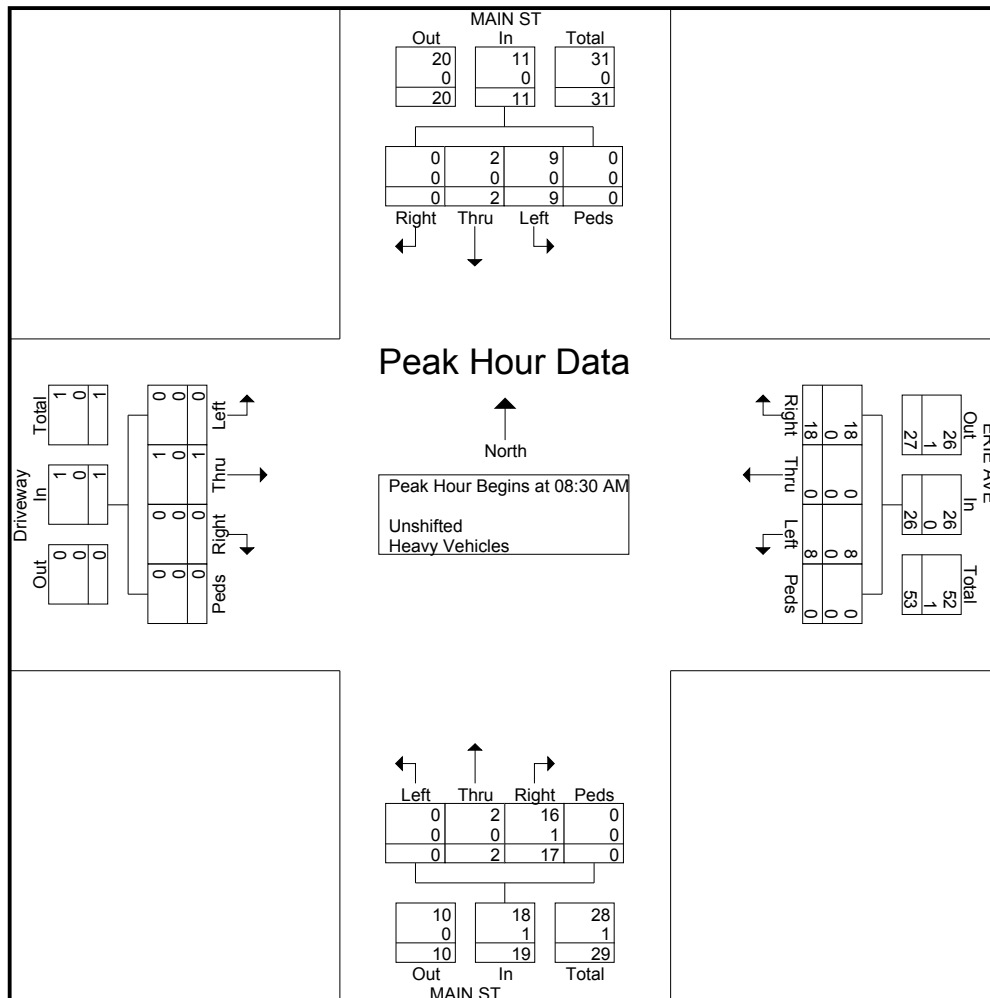
# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
Binghamton, NY 13901-3528  
607-798-8081

SCE: Alec Thompson  
Main St and Erie Ave  
Town of Tusten  
Sunny

File Name : Tusten1 ErieMain  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 3

	MAIN ST From North					ERIE AVE From East					MAIN ST From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 12:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:30 AM																					
08:30 AM	0	0	2	0	2	4	0	1	0	5	6	0	0	0	6	0	0	0	0	0	13
08:45 AM	0	1	4	0	5	5	0	1	0	6	3	0	0	0	3	0	0	0	0	0	14
09:00 AM	0	0	1	0	1	4	0	4	0	8	5	0	0	0	5	0	0	0	0	0	14
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% App. Total	0	18.2	81.8	0		69.2	0	30.8	0		89.5	10.5	0	0		0	100	0	0		
PHF	.000	.500	.563	.000	.550	.900	.000	.500	.000	.813	.708	.250	.000	.000	.792	.000	.250	.000	.000	.250	.891
Unshifted	0	2	9	0	11	18	0	8	0	26	16	2	0	0	18	0	1	0	0	1	56
% Unshifted											1	0	0	0	1	0	0	0	0	0	1
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	5.9	0	0	0	5.3	0	0	0	0	0	1.8
% Heavy Vehicles																					



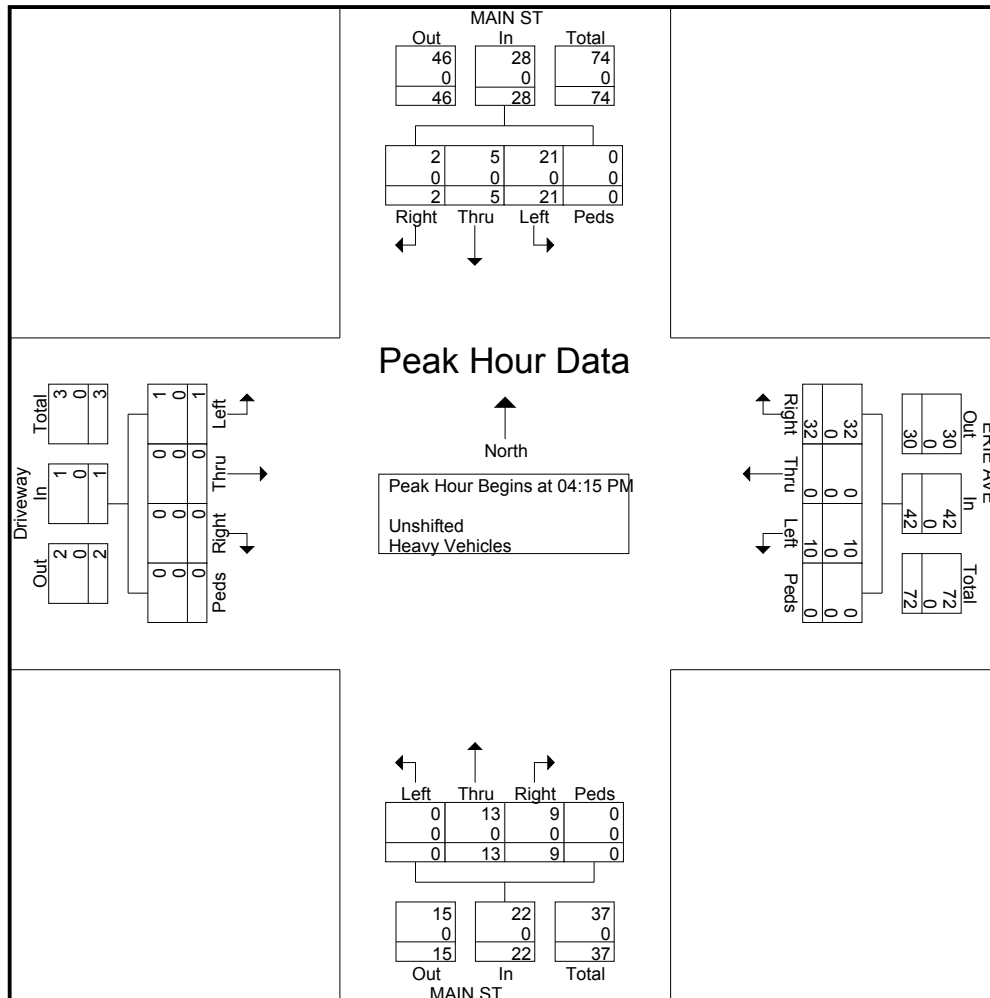
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Binghamton, NY 13901-3528  
607-798-8081

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Town of Tusten  
Sunny

File Name : Tusten1 ErieMain  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 4

	MAIN ST From North					ERIE AVE From East					MAIN ST From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:15 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	2	5	0	8	13	0	3	0	16	1	0	0	0	1	0	0	0	0	0	25
04:30 PM	1	0	11	0	12	5	0	2	0	7	4	7	0	0	11	0	0	0	0	0	30
04:45 PM	0	1	4	0	5	7	0	3	0	10	3	3	0	0	6	0	0	0	0	0	21
05:00 PM	0	2	1	0	3	7	0	2	0	9	1	3	0	0	4	0	0	1	0	1	17
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% App. Total	7.1	17.9	75	0		76.2	0	23.8	0		40.9	59.1	0	0		0	0	100	0		
PHF	.500	.625	.477	.000	.583	.615	.000	.833	.000	.656	.563	.464	.000	.000	.500	.000	.000	.250	.000	.250	.775
Unshifted	2	5	21	0	28	32	0	10	0	42	9	13	0	0	22	0	0	1	0	1	93
% Unshifted																					
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
Binghamton, NY 13901-3528  
607-798-8081

SCE: Jacob Marrone  
Main St/Depot St/Lake St  
Town of Tusten  
Sunny

File Name : Not Named 1  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 1

## Groups Printed- Unshifted - Bank 1

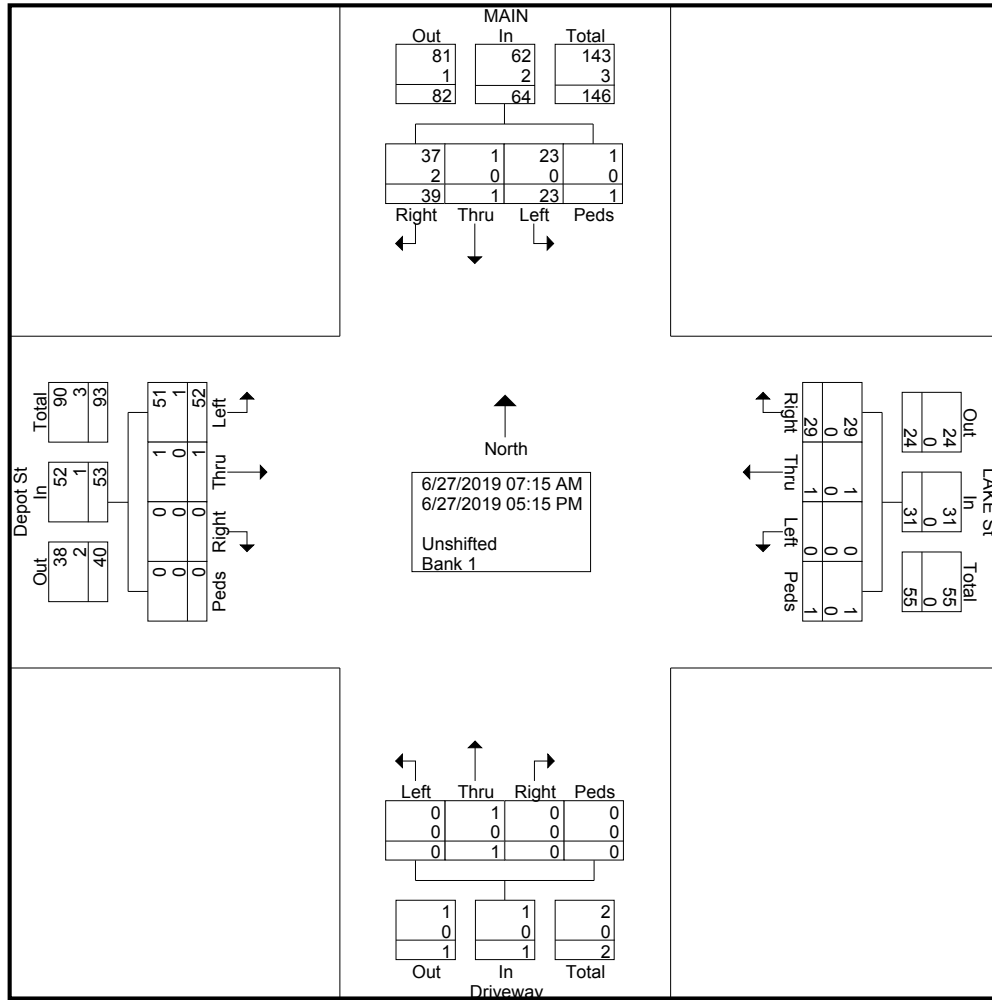
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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
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09:15 AM	2	0	0	0	2	1	0	0	0	1	0	0	0	0	0	0	0	3	0	3	6
*** BREAK ***																					
Total	6	0	0	0	6	2	0	0	0	2	0	0	0	0	0	0	0	8	0	8	16
*** BREAK ***																					
03:00 PM	4	1	3	0	8	1	0	0	0	1	0	1	0	0	1	0	0	5	0	5	15
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Total	11	1	10	1	23	5	1	0	1	7	0	1	0	0	1	0	0	16	0	16	47
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Total	6	0	8	0	14	9	0	0	0	9	0	0	0	0	0	0	1	11	0	12	35
05:00 PM	2	0	2	0	4	1	0	0	0	1	0	0	0	0	0	0	0	3	0	3	8
*** BREAK ***																					
Grand Total	39	1	23	1	64	29	1	0	1	31	0	1	0	0	1	0	1	52	0	53	149
Apprch %	60.9	1.6	35.9	1.6		93.5	3.2	0	3.2		0	100	0	0		0	1.9	98.1	0		
Total %	26.2	0.7	15.4	0.7	43	19.5	0.7	0	0.7	20.8	0	0.7	0	0	0.7	0	0.7	34.9	0	35.6	
Unshifted	37	1	23	1	62	29	1	0	1	31	0	1	0	0	1	0	1	51	0	52	146
% Unshifted	94.9	100	100	100	96.9	100	100	0	100	100	0	100	0	0	100	0	100	98.1	0	98.1	98
Bank 1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
% Bank 1	5.1	0	0	0	3.1	0	0	0	0	0	0	0	0	0	0	0	0	1.9	0	1.9	2

# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
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Main St/Depot St/Lake St  
Town of Tusten  
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File Name : Not Named 1  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 2



# Shumaker Consulting Engineering & Land Surveying, D.P.C.

143 Court Street  
Binghamton, NY 13901-3528  
607-798-8081

SCE: Jacob Marrone  
Main St/Depot St/Lake St  
Town of Tusten  
Sunny

File Name : Not Named 1  
Site Code : 00000000  
Start Date : 6/27/2019  
Page No : 3

	MAIN From North					LAKE St From East					Driveway From South					Depot St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:15 AM																					
08:15 AM	2	0	2	0	4	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	7
08:30 AM	1	0	0	0	1	4	0	0	0	4	0	0	0	0	0	0	0	2	0	2	7
08:45 AM	2	0	0	0	2	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	5
09:00 AM	4	0	0	0	4	1	0	0	0	1	0	0	0	0	0	0	0	5	0	5	10
Total Volume	9	0	2	0	11	9	0	0	0	9	0	0	0	0	0	0	0	9	0	9	29
% App. Total	81.8	0	18.2	0		100	0	0	0		0	0	0	0		0	0	100	0		
PHF	.563	.000	.250	.000	.688	.563	.000	.000	.000	.563	.000	.000	.000	.000	.000	.000	.000	.450	.000	.450	.725
Unshifted	8	0	2	0	10	9	0	0	0	9	0	0	0	0	0	0	0	8	0	8	27
% Unshifted																					
Bank 1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
% Bank 1	11.1	0	0	0	9.1	0	0	0	0	0	0	0	0	0	0	0	0	11.1	0	11.1	6.9

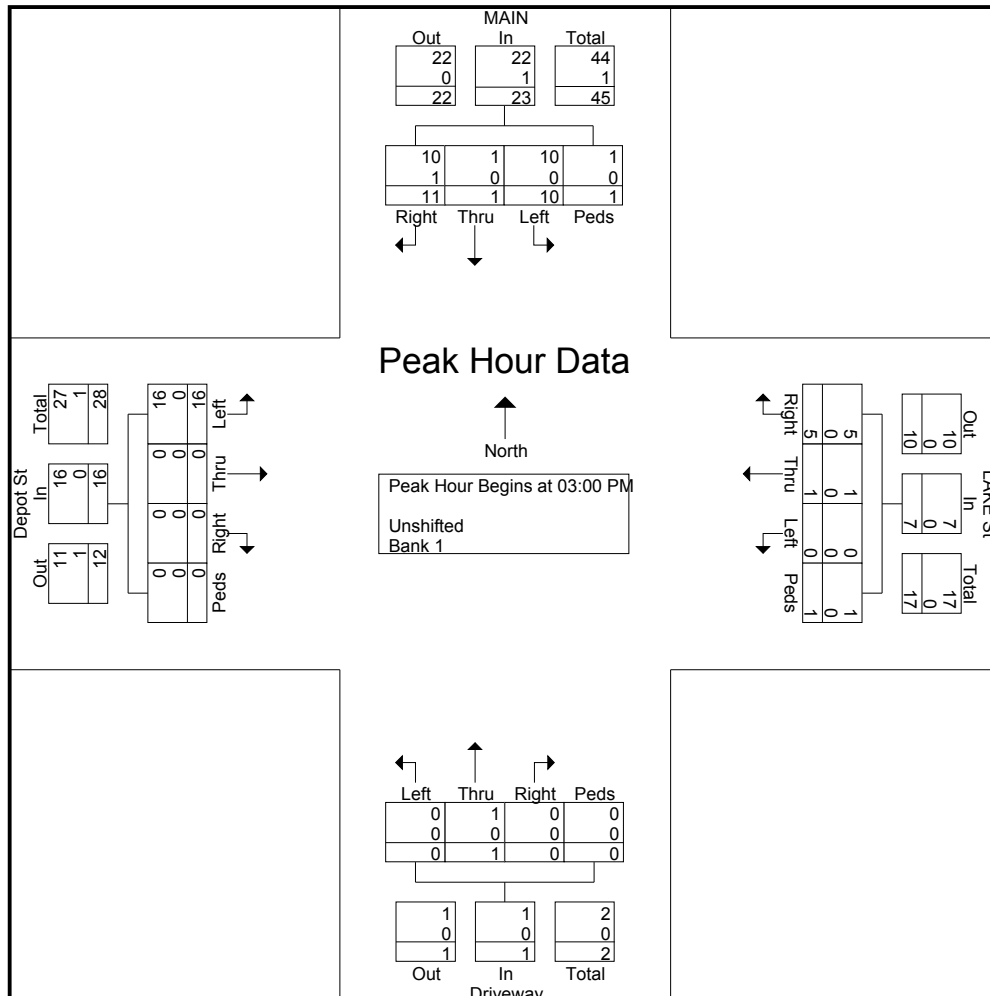
# Shumaker Consulting Engineering & Land Surveying, D.P.C.

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	MAIN From North					LAKE St From East					Driveway From South					Depot St From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:15 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	4	1	3	0	8	1	0	0	0	1	0	1	0	0	1	0	0	5	0	5	15
03:15 PM	2	0	2	1	5	0	1	0	0	1	0	0	0	0	0	0	0	3	0	3	9
03:30 PM	2	0	0	0	2	1	0	0	1	2	0	0	0	0	0	0	0	3	0	3	7
03:45 PM	3	0	5	0	8	3	0	0	0	3	0	0	0	0	0	0	0	5	0	5	16
Total Volume	11	1	10	1	23	5	1	0	1	7	0	1	0	0	1	0	0	16	0	16	47
% App. Total	47.8	4.3	43.5	4.3		71.4	14.3	0	14.3		0	100	0	0		0	0	100	0		
PHF	.688	.250	.500	.250	.719	.417	.250	.000	.250	.583	.000	.250	.000	.000	.250	.000	.000	.800	.000	.800	.734
Unshifted	10	1	10	1	22	5	1	0	1	7	0	1	0	0	1	0	0	16	0	16	46
% Unshifted																					
Bank 1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Bank 1	9.1	0	0	0	4.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2.1



[Case](#) [Drivers/Vehicles](#) [Boxes](#) [MV-104S](#) [MV-104D](#) [Location](#) [Injury Grid](#) [Notes](#)

[Case](#) [\[top\]](#)

**Forms:**

**Accident Date/Time:** 11/28/2017 17:49**Accident County:** SULL  
**LocalCode:** 8PSC357N81N4**NCIC:** 05200**Ammended Report:** N  
**Veh Damage Amount Yes:** X  
**Num Vehicles:** 1 **Num Injured:** 0 **Num Killed:** 0

[Drivers/Vehicles](#) [\[top\]](#)

**Drivers (total:1)**

<b>Driver #:</b> 1 <b>License Num/State:</b> 262452239/NY <b>Name:</b> EDGERTON, BRIAN C <b>Address:</b> 54 HERITAGE PKWY, SCOTIA, NY 123020000 <b>DOB:</b> 06/24/1977 <b>Sex:</b> 1 <b>Violations:</b>
---

**Vehicles**

<b>Vehicle:</b> 1 <i>Registrant Info</i> <b>Name:</b> PENSKE TRUCK LEASING CO, <b>Address:</b> 4000 CLINE AVE , EAST CHICAGO, IN 46312 <b>Sex:</b> C <b>DOB:</b> // <b>Passenger Count:</b> 1 <b>Public Property Damage:</b> N <b>HazMat Code:</b> <b>HazMat Release:</b> <b>Towed By:</b> PRESTIGE <b>Towed To:</b> PRESTIGE <b>Plate:</b> IN-2433381 <b>Body Type:</b> DELV <b>VIN:</b> 1FVHC5DV8GHHB5040 <b>Year/Make:</b> 2016/FRHT
--

[Boxes](#) [\[top\]](#)

**Ped/Bicyclist Location:** -  
**Ped/Bicyclist Action:** -  
**Traffic Control:** NONE  
**Light Cond.:** DARK-ROAD LIGHTED  
**Roadway Character:** STRAIGHT/ GRADE  
**Roadway Surf. Cond:** DRY  
**Weather Cond:** CLOUDY  
**First Event:** 19  
**Location of First Event :** 1

<i>Vehicle: 1</i> <b>First Contributing Factor:</b> USING ON BOARD NAVIGATION DEVICE <b>Second Contributing Factor:</b> - <b>Direction of Travel:</b> NORTH <b>Pre-Accident Action:</b> GOING STRAIGHT AHEAD <b>Second Event:</b> -
--

**Collision Manner:** 9

[MV-104S](#) [\[top\]](#)

No MV-104S Found for this Accident

[MV-104D](#) [\[top\]](#)

No MV-104D Found for this Accident.

[Location](#) [\[top\]](#)

**Accident County:** SULL  
**Municipality Name:** TUSTEN, TOWN OF  
**On Street/Route:** MAIN STREET  
**At Intersecting Street/Route:**  
**Offset Feet:** 160  
**Offset Direction:** North  
**Nearest Intersect Street/Route/Point:** erie avenue

**Reference Marker:**  
**Rep Latitude/Longitude:** /

[Injury Grid](#) [\[top\]](#)

Vehicle ID	Seat	Safety Equip	Ejected	Age	Sex	Inj Loc	Inj Type	Emo Status	Taken By	Taken To	Name	DATE Death
01	1	4	1	40	1	-	-	-			EDGERTON, BRIAN C	

[Notes](#) [\[top\]](#)

Operator one (1) stated he was following his GPS and he did not see the height limit sign for the bridge. He started under and when he struck the bridge he attempted to back out which caused more damage to the truck. No damage was detected on the bridge, railroad was contacted to inspect same.

**Officer Name:** ANTHONY F DOSSANTOS **Officer Rank:** DEPUTY  
**Badge Number:** 405 **Precinct:** Station: NCIC: 05200  
**Reviewing Officer:** STARNER, BLAKE **Review Date/Time:** 12/01/2017 / 12:32



# APPENDIX

D

# APPENDIX

E

**Town Bridge 17**  
**Main Street over the Outlet of Little Lake Erie**  
**NARROWSBURG, NEW YORK**



**CULVERT CONDITION ASSESSMENT**

**INSPECTION DATE: November 21, 2017**

**TOWN OF TUSTEN**  
**HIGHWAY DEPARTMENT**  
**Narrowsburg, New York**  
**County of Sullivan**

**REPORT PREPARED BY:**



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# **CULVERT CONDITION ASSESSMENT**

## **NARROWSBURG CULVERT**

### **(TOWN BRIDGE 17)**

### **TOWN OF TUSTEN**

### **COUNTY OF SULLIVAN**

#### **GENERAL**

On Tuesday, November 21, 2017, representatives of Foit-Albert Associates performed a Culvert Condition Assessment on Town Bridge 17 that carries Main Street (TH 44) over the Outlet of Little Lake Erie in the Town of Tusten, New York. Town Bridge 17 is also referred to as the Narrowsburg Culvert and the Tusten Culvert. Messrs. Leigh J. Martin, P.E. and Team Leader and Todd Day, Assistant Team Leader, of Foit-Albert Associates met with Tusten Town Board members at the culvert site to discuss the parameters of the culvert condition assessment and to inspect and evaluate the current condition of the components of the culvert in order to render a structural opinion of the culvert integrity and serviceability. Background information was provided pertaining to the history of the culvert and the rationale for the condition assessment was briefly discussed.

Although the Narrowsburg Culvert is noted and referenced to in documentation as Town Bridge 17, the NYSDOT defines the structure as a culvert and not a bridge due to the overall span length being less than 20-feet. There are no design plans or as-built construction documents available for the culvert that would provide design or structural information. Thus, the structural assessment of the culvert components and the overall structural integrity of the culvert were based solely upon condition evaluations of the elements that were visible and exposed to view. There were no attempts made to advance exposure of structural framing components beyond the magnitude of exposure already present in those components due to deterioration.

#### **BACKGROUND**

The culvert consists of single multiple-girder jack arch structure that spans between reinforced concrete abutments. To maintain consistency in the assessment and simply identification of the various culvert components, the direction of orientation for the culvert will be defined in this report as north. In accordance with standard NYSDOT orientation and structure convention, the south side of the culvert will be identified and referenced to as the begin abutment and the north side of the culvert will be defined as the end abutment. Following that NYSDOT structure convention, the west end of the culvert will be defined as the left side and the east end of the

culvert will be defined as the right side. Further clarifying, the right (east) side of the culvert is on the inlet side of the culvert and the left (west) side is the outlet end of the culvert.

The absence of design and/or as-built plans for the Narrowsburg Culvert limits an assignment of the year of culvert construction to an estimate. It is likely that the structure was constructed in the mid-Twentieth Century (between 1940 and 1950), which is based upon the type of structure and the era during which that type of construction was a popular choice for the design of short-span culverts and bridges.

### **CULVERT DIMENSIONS**

The culvert consists of a jack-arch multiple-girder structure that provides a waterway opening of approximately 10'-11". There are eleven rolled steel girders in the culvert cross-section that appear to be from original culvert construction and the girders are spaced at approximately 2'-7". The out-to-out culvert width is approximately 30'-8" and the original two-lane roadway width provided on the culvert was approximately 24'-0" between 10" wide concrete curbs. The culvert has a concrete fascia on both the left and right sides and there are concrete parapet extensions above the culvert fascias on both sides. The inside-to-inside dimension (parapet face-to-face) is approximately 29'-3". There was a safety sidewalk along the left side of the bridge roadway. The available roadway width was reduced in the past with the placement of concrete safety barrier shapes along the inside of both parapets that extend out into both approach roadways. It is assumed that the concrete barriers were placed to channel live load (traffic load) away from the deteriorated left and right sides of the culvert. The deterioration on the left and right sides of the culvert and the need for the roadway width reduction will be addressed later in the report. The roadway width provided between the concrete safety barriers is now approximately 20-feet and the culvert has one-lane bridge warning signs in place and visible on both approaches.

The absence of design or as-built plans for the culvert prevents identification of the rolled steel girders used in the jack arch construction. While the bottom flanges of the girders are exposed, the depth of the steel beams cannot be determined without removal of the jack arch concrete and complete exposure of the girders. Without a depth of girder, the correct beam size used in the construction of the culvert cannot be determined exactly. The lack of plans also prevents an identification of the jack arch deck slab thickness and the reinforcing bar size and spacing in the slab that spans between the girders. The jack arch was constructed using corrugated steel arch forms between the girders and the formed arch provides a 7" concrete arch between the girders.

The begin portion of the culvert has a 3'-3" wide concrete sluiceway that extends from the right (inlet) side of the culvert to the left (outlet) side. The sluiceway has concrete sidewalls and a concrete slab that extends between the sidewalls. The concrete sluiceway and sluice gate behind the begin abutment serves as a control for the water elevation maintained in Little Lake Erie. The sluice gate consists of a steel plate that slides vertically along steel side angles. The gate is located

on the right (upstream) end of the sluiceway and the manual chain-operated guides and control for the gate are attached to the right fascia of the culvert. Access to the manual control is from the sidewalk area on the culvert. It is apparent from inspection of the culvert and sluiceway construction that the sluiceway controlling the water elevation in Little Lake Erie was part of the original construction of the culvert.

## **SUBSTRUCTURE COMPONENTS**

The eleven steel jack arch girders of the culvert are seated on reinforced concrete abutments on the begin and end of the culvert opening. The girders sit on the abutment seat on both ends of the span and the girder ends are embedded in concrete fill placed on the seats. Embedment of the girder ends in concrete is a detail that is typical in jack arch girder construction. The concrete fill on the seats is flush with the face of the abutments and the girder bearing area on which the girders sit is not exposed on either abutment. Embedment of the girder ends in the concrete fill prevents an identification and assessment of the bearing type under the girders.

## **CULVERT INVERT**

The invert of the culvert is a concrete slab that was likely placed after original culvert construction. The concrete slab appears newer in vintage than the culvert components but only slightly. The slab extends from the right (inlet) side of the culvert to the left (outlet) side and the surface of the slab is sloped from right to left within the culvert. On the day of inspection, there was active flow through the culvert that ranged from 4" to 8" and flow was not impeded through the culvert. The concrete slab was placed from the face of the begin abutment to the face of the end abutment. The surface of the slab is uneven in spots along the length and width of the culvert and the surface texture is poor due to isolated and localized surface deterioration and honeycombing. The slab surface has isolated cracks that extend the entire span length but no vertical or lateral displacement is apparent between crack edges. The disparity in surface profile appears to be an as-built condition. The concrete invert slab appears to be in the original constructed position within the culvert. The localized deteriorated and uneven surface profile of the slab is mud filled in spots and waterborne debris (leaves and tree branches) has collected and accumulated in the uneven slab surfaces on the right (inlet) side of the culvert along the begin and end of the culvert span. The waterborne debris is not wedged firmly in place and can be easily displaced by hand. In general, the concrete invert slab has localized deterioration but remains solid in place and remains functioning as a fixed sloped waterway surface within the culvert. There is no undermining apparent along the bottom of the culvert invert slab along the right (inlet) side of the culvert.

## **CULVERT WATERWAY OPENING**

With the exception of waterborne debris (leaves, mud and tree branches) along the right (inlet) side of the culvert and within the culvert, there does not appear to be any obstruction to the

waterway opening provided by the culvert opening. It is apparent that the invert slab was placed within the culvert opening after original construction and that the slab placement reduced the waterway opening within the culvert. The surface of the invert slab is very uneven in spots within the culvert, but the irregularities in the surface profile appears to be an as-built condition and has no significance in the obstructing or affecting flow of water through the culvert. There is no evidence of any waterway problems associated with or attributable to the reduction of the waterway opening by the invert slab placement and the collection of waterborne debris within the culvert is not considered extreme, out of the ordinary or detrimental to the culvert functioning as intended. The left (outlet) side of the culvert is approximately 11-feet above the channel bottom to the left (downstream) of the culvert. While the channel has dense vegetation growth that lines both banks up the culvert face, it is unlikely that the channel waterway opening on the left (downstream) side of the culvert will ever cause a problem to outflow from the culvert.

### **BEGIN ABUTMENT STEM**

It is apparent from inspection that the left (outlet) side of the begin abutment stem was stabilized in the past with the addition of a concrete facing along the left end of the abutment and left (outlet) end of the sluiceway. The concrete facing remains in place but there is a horizontal crack at mid height that is spalled along the outside half.

The begin abutment stem is deteriorated along the entire exposed face. The right (inlet) side of the abutment stem is cracked and spalled for a five-foot distance from the right face of the culvert. The deteriorated concrete is located 6" to 8" above the concrete invert slab and spall depth reaches 8" at the worst location. The face of the abutment stem has surface spalls that reach a depth 2" to 3" and extend across the entire width of the abutment in a 6" high horizontal strip immediately above the concrete invert slab. However, no reinforcing is exposed in the deepest spalls. The abutment face adjacent to the spalls has surface spalls that reach depth of 1" to 2" and there is evidence of honeycombing along the lower portion of the abutment stem face. Cracked concrete above the spalls sounds delaminated but there is no sign of stains from corroded reinforcing along the cracks.

The begin abutment stem has two vertical cracks that extend up from the concrete invert slab to the bridge seat. The two cracks are located approximately 10-feet in from the right (inlet) side and 10-feet in from the left side of the culvert. Cracks show no lateral displacement but crack edges are rounded, worn and spalled for the full height of the stem. The lower portions of both cracks have spalls that reach a depth of 2" and width of 6" in a 1-foot height above the invert slab surface.

The edge of the bridge seat is cracked and spalled across most of the abutment width. Spall depth is in a 2" to 4" high horizontal strip along the right side and middle of the abutment stem and there is active efflorescence staining that is caked on the stem face below the seat. Efflorescence has rust stains and concrete sounds delaminated in spots along the edge of seat.

The bridge seat under the left (outlet) side of the abutment stem is cracked and spalled adjacent to the concrete facing added to the left end of the stem. The spalls are in the original stem face below the bridge seat and spall depth reaches 5" in the worst area that is located along the vertical joint between the original stem face and concrete facing. Original stem face is cracked adjacent to the joint and cracked concrete sounds delaminated. The spalled concrete along the bridge seat occurs in a 6" width horizontal strip that extends approximately 4-feet along the seat from the vertical joint in the concrete facing. Spalled concrete sounds delaminated and crumbles easily under impact but no displacement is apparent in the girders seated above the spalled area.

#### **END ABUTMENT STEM**

The end abutment stem is deteriorated along the entire exposed face along the bottom and the right (inlet) and left (outlet) sides. The bottom of the end abutment stem is cracked along a 4-foot distance from the inlet and the cracked concrete is displaced and separated along the bottom corner. Cracked sections of concrete can be easily displaced by hand and there is no evidence of reinforcing in the voids of the concrete. Old steel railroad rail piles were driven in the past along the right (inlet) side of the end abutment to stabilize the side of the culvert and piles remain in place and functioning as intended. The face of the abutment stem has surface spalls that reach a depth 2" to 3" and extend across the entire width of the abutment in a 6" high horizontal strip immediately above the concrete invert slab. However, no reinforcing is exposed in the deepest spalls. The abutment face adjacent to the spalls has surface spalls that reach depth of 1" to 2" and map pattern cracks along the lower portion of the abutment stem face. Cracked concrete above the spalls sounds delaminated but there is no staining from corroded reinforcing apparent along the cracks.

The edge of the bridge seat is cracked or spalled across most of the abutment width. Spall depth is in a 1" to 2" high horizontal strip and there is active efflorescence staining that is caked on the stem face below the seat. Efflorescence has rust stains and concrete sounds delaminated in spots along the edge of seat. The bridge seat under the left (outlet) side of the abutment stem is cracked and spalled in a 3" high horizontal strip for a 2-foot distance along the stem face from the left end of the stem. The stem face on the left side has surface spalls and old honeycombing that reaches a depth of 2" in spots and extends down to the mid height of the exposed stem face. No reinforcing is exposed in the surface spalls and there is no corrosion stains in or below the spalls.

#### **CONCRETE SLUICeway AND SLUICE GATE**

The sluiceway on the begin portion of the culvert has a concrete slab that extends between concrete sidewalls. The bottom of the concrete slab has cracks on the right (inlet) and left (outlet) sides that extend longitudinally from sidewall to sidewall. No vertical displacement is apparent between cracked concrete edges but cracks have efflorescence staining that is caked in spots with short but well-developed stalactite formations along the cracks. No spalls are apparent

along the cracks and the concrete surface of the slab still appears sound. The begin sidewall has a horizontal crack that extends for most of the sluiceway width. No lateral displacement is apparent in the crack and no spalling is apparent. The end sidewall has isolated cracks but no spalling, efflorescence staining or deterioration along the cracks. Concrete on the begin and end sidewalls appears in sound condition.

The sluice gate controlling flow into the sluiceway is located on the right (upstream) end of the sluiceway and consists of a steel plate that slides vertically along steel side angles. The sluice gate operates manually via a pull chain attached to the top of the steel slide plate. The steel plate, steel side angles and steel link-chain are all corroded but section loss to the components is minimal. However, concrete along the side angles is map pattern cracked and sounds hollow in spots. Links of the steel chain appear to be frozen in place by corrosion and the manually-operated sluice gate does not appear to be a functioning control for the sluiceway. Access to the manual control is from the sidewalk area on the culvert.

#### **JACK ARCH GIRDERS AND DECK**

As noted previously, the culvert has eleven rolled steel girders in the roadway cross-section. The absence of design drawings or as-built construction plans prevents an exact identification of the rolled steel girders used in the cross-section. Any determination of the girder size will be solely an assumption without a localized removal on the arch concrete and exposure of the girder to ascertain the depth. Using the standard NYSDOT format and nomenclature for identification of the girders in the culvert cross-section, the left fascia (outside) girder on the left (outlet) side of the culvert is identified as Girder G-1. With eleven girders in the cross-section, the right fascia (outside) girder on the inlet side of the culvert is identified as Girder G-11.

Typical of jack arch construction, the bottom flanges of the girders are exposed below the bottom of the arch concrete. The exposed bottom flanges on the two outside girders on the left (outlet) side and right (inlet) side of the culvert, Left Fascia Girder G-1 and Interior Girder G-2 on the left and Interior Girder G-10 and Right Fascia Girder G-11 on the right, are deteriorated from corrosion along most the span length. All four girders are severely deteriorated with section loss in the portion of the girders at and near mid span. There are portions of the bottom flanges on the four noted girders that are wafer thin and lengths of the flanges that have from 75% to 100% section loss due to corrosion. It should be reiterated that the severe section loss to the bottom flanges of the four noted girders occurs at or in close proximity to the mid span of the girders. As mentioned previously, the reduction of the roadway width on the culvert via the placement of concrete safety barriers in the past was likely in response to the severe deterioration that has occurred in the girder bottom flanges on Girders G-1, G-2, G-10 and G-11. No sag or displacement is apparent in those girders despite the severe section loss to the bottom flanges.

The exposed bottom flanges on Interior Girders G-3 through G-9 are corroded for most of the span length. However, section loss to the bottom flanges on those girders is only in the 5% to

10% range at mid span and in the 5% range away from mid span. Flange edges and the bottom surfaces of the bottom flanges have localized delaminations in isolated locations but section loss is only in the 5% to 10% range. The bottom flange profile and thickness are still well defined on those seven girders and no sag or displacement is apparent in the girders. Girder webs are not exposed along the bottom of the jack arch concrete.

Corrugated steel arch forms in place between the girders are in various stages of corrosion and deterioration. The corrugated forms in the fascia bays between Girders G-1 and G-2 on the left side and Girders G-10 and G-11 on the right side are missing in several areas and the arch concrete is exposed. Arch concrete where exposed has isolated hairline cracks and spalling along the bottom edges above the girder flanges. However, cracks show no signs of corrosion and concrete arch corrugations remain well-defined for most of the span length. The corrugated arch forms remain in place in general in the bays between Interior Girders G-3 through G-9 and the arch concrete appears sound.

#### **ASSESSMENT OF CULVERT CONDITION AND RECOMMENDATION**

It should be noted that a structural analysis that provides an estimation of the load capacity of the culvert cannot be undertaken without a determination made of the girder size and the jack arch deck reinforcing size and spacing used in the culvert roadway cross-section. Since no plans exist for the structure, a localized removal of the concrete jack arch would be a requirement to establish the girder depth used for the culvert construction. The localized removal of the jack arch concrete could be undertaken in a location that does not affect the structural capacity of the culvert or the composite action of the girder and jack arch concrete. Recent studies of jack arch construction have introduced analysis that allows the girders to be analyzed with the jack arch concrete working in composite action with the girders. The determination of the jack arch deck reinforcing size and spacing would be established by removal of the deck concrete in an isolated location on the culvert. It is possible for an estimation of the jack arch deck reinforcing based upon the standard of the day, but the approach would carry a disclaimer noting the estimate used in determining those details. Furthermore, the steel type and grade should be verified to facilitate use of the exact steel properties in lieu of estimated and/or assumed values in analysis. Without the knowledge of critical structural properties, such as the girder size, steel type, reinforcing size, grade and spacing, the load capacity of the existing culvert cannot be established with any degree of certainty.

Without considerable and extensive work to determine the dimensional and structural properties of the existing culvert components, it is our recommendation that the existing roadway width on the culvert be reduced even further than that currently provided by the concrete safety barriers on both sides of the roadway. The current roadway provides a lane-and-a-half roadway width for vehicular traffic using the bridge. As noted above, the deterioration in the steel girders along the outside portions of the jack arch culvert construction reduced the load carrying capacity of the structure and the roadway reduction provided an immediate solution to the problem. The

reduction was a logical and valid response to the culvert condition without an exact calculated determination that involves intensive localized destructive testing as noted above. While the interior girders away from the left and right sides of the culvert have bottom flange section loss, the magnitude of deterioration is far less than the fascia girders. Regardless, it is apparent that the outside portions of the culvert have undergone section loss to the critical steel girder flanges and thus the safe load carrying capacity of the culvert has been reduced.

The amount of that reduction in the load carrying capacity in the culvert cannot be accurately determined at this point without further investigation and exposure of the steel girders in the jack arch deck section of the culvert. Thus, it is in the best err on the side of caution and assume that the jack arch girders in the outer portions of the culvert have continued to be compromised by corrosion and section loss. In response to that possibility, it is recommended that the roadway width on the culvert be reduced even further to a roadway width of one travel lane or approximately 16-feet. The difference in width between a normal roadway lane width of approximately 12'-0" and the recommended 16-foot width is to provide space for snow storage in front of the barriers instead of behind the barriers and over the deteriorated segment of the culvert.

The recommended reduction of the roadway width on the culvert to one travel lane can be easily achieved by moving the existing concrete safety barriers in closer to the center of the culvert. The approaches to the culvert roadway are already posted for a one-lane bridge, so the transition to the reduced roadway width should not pose a significant transitional problem to the traveling public. By reducing the roadway width such that vehicular traffic utilizes only the center portion of the culvert, the safe load carrying capacity of the structure will not become an issue until the corrosion and section loss in the steel girder flanges approaches that of the girders in the outside portions of the culvert. It should be reiterated that the condition of the exposed bottom flanges of the girders on the interior of the culvert that have minimal section loss as well as the absence of notable deterioration in the original jack arch concrete between the interior girders provides a level of confidence in the ability of the center portion of the culvert to perform as well as it did at the time of original construction. While an exact determination of the time frame before that situation becomes a concern is not predictable without further field work and associated analysis as noted above, it is our opinion that the middle portion of the culvert is still structurally sound and will still provide service to the public in the current condition for an estimated two to three years.

With respect to performing temporary repairs to restore the structural capacity of the existing deteriorated jack arch girders along the outside portions of the culvert or the installation of temporary supports under the deteriorated jack arch girders, we do not envision a need for repairs or supplemental support if the existing roadway on the culvert is reduced to one travel lane within the middle of the culvert roadway. Informal discussions have led us to believe that culvert replacement is an item on the current agenda that will be implemented in two or three years. It is our opinion that expending funds at this time to address localized deterioration in the

outer portions of the culvert to rehabilitate the structure and extend service life is not a feasible or practical approach considering the time frame anticipated before culvert replacement. As noted above, the exposed bottom flanges on the girders in the interior portion of the culvert display far less deterioration and loss of section than those girders in the outside portion of the culvert. Furthermore, the condition of the jack arch deck in the bays between the interior girders remains in good condition with only minor deterioration. It is our opinion that restricting vehicular traffic to a single travel lane over the segment of the culvert that visibly has been minimally affected by age and deterioration is a more practical solution to the culvert condition when considering the time frame envisioned before replacement. It is also our opinion that any future funds encumbered for the culvert be dedicated to culvert replacement rather than culvert rehabilitation.

Please call if there are any questions to the statements noted within this report or if additional information is required.

Sincerely,

**Foit-Albert Associates**  
Architecture, Engineering and Surveying, P.C.

A handwritten signature in black ink, appearing to read "Leigh J. Martin", with a long horizontal flourish extending to the right.

Leigh J. Martin, P.E.  
Project Engineer/Team Leader

## **Culvert Condition Photographs**



**Photo 1**

**Begin Approach to Culvert.  
Note barricades placed  
over the left and right  
sides of the culvert to  
reduce roadway width and  
"One-Lane Bridge" posting.**



**Photo 2**

**End Approach to Culvert.  
Note barricades placed  
over the left and right  
sides of the culvert to  
reduce roadway width and  
"One-Lane Bridge" posting.**



**Photo 3**

**Waterway channel on left  
(downstream) side of  
culvert.**



**Photo 4**

**Waterway along right  
(upstream) side of channel.  
Aspect of Little Lake Erie.**



Photo 5

Right Elevation of culvert from end right bank. Note manually-operated control gate for sluice.



Photo 6

Begin Abutment from end right.



Photo 7

Begin Abutment from left side.

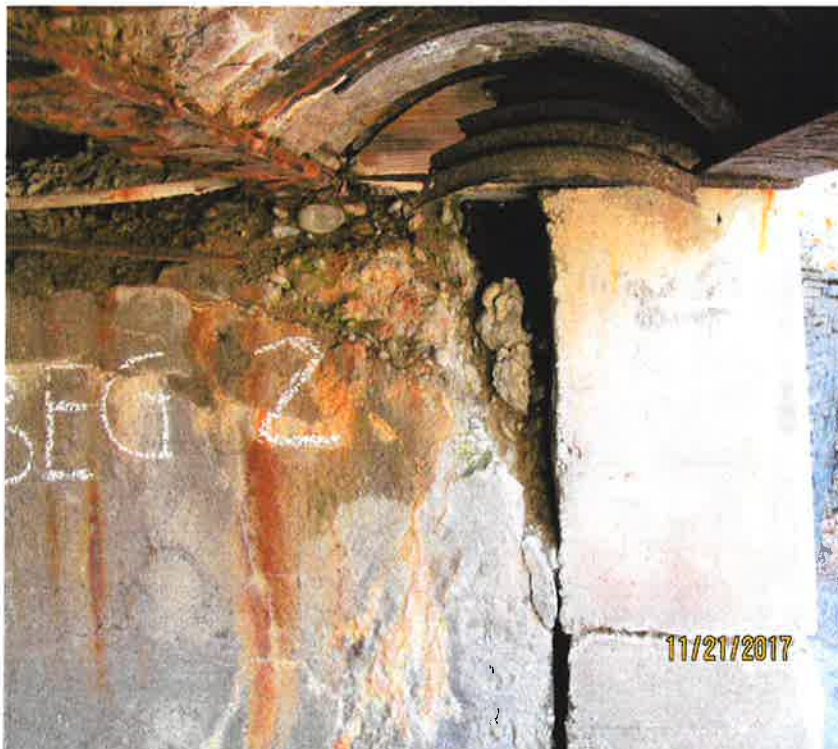


Photo 8

Girder seat on begin Abutment along the left side of culvert.



Photo 9

Begin Abutment Stem  
along middle of culvert.



Photo 10

Begin Abutment Stem  
along right side of  
culvert.



Photo 11

Culvert waterway opening  
from the right (upstream)  
side.



Photo 12

End Abutment along the  
left side of the culvert.



Photo 13

End Abutment along the  
right side of the culvert.



Photo 14

End Abutment Stem along  
the right side of culvert.

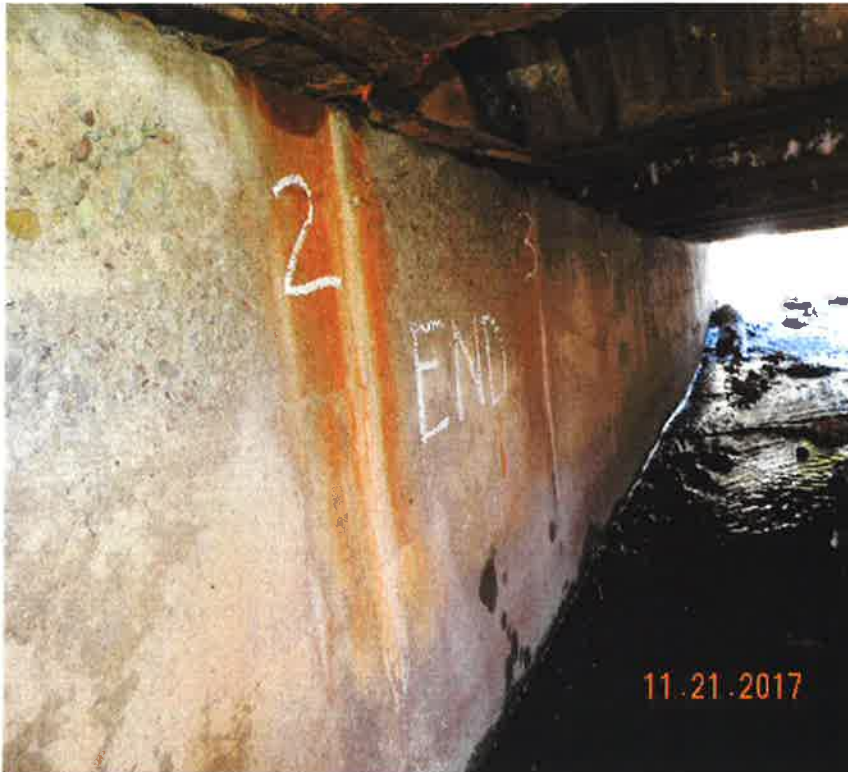


Photo 15

End Abutment Stem on the  
left side.



Photo 16

Spillway along left  
(downstream) side of  
culvert.



Photo 17

Bottom flange of Girder G-1  
at mid span of culvert.

11/21/2017

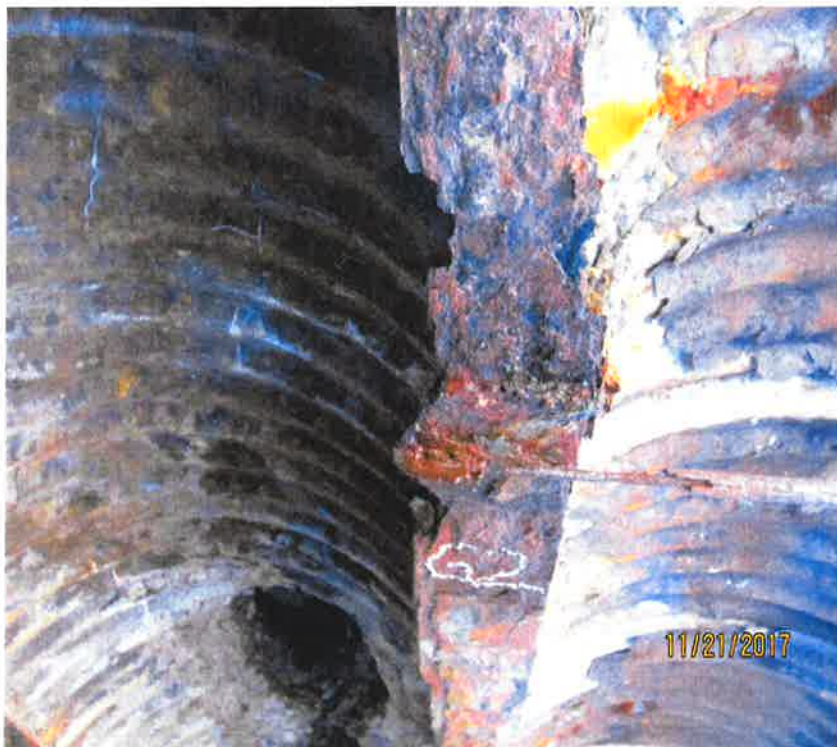


Photo 18

Bottom flange of Girder G-2  
at mid span of culvert.

11/21/2017



Photo 19

Bottom flange of Girder G-9 at mid span of culvert.



Photo 20

Bottom flange of Girder G-11 at mid span of culvert.



Photo 21

Typical jack arch deck condition along bottom flanges of girders in culvert.



Photo 22

Jack arch at end of culvert span. Typical jack arch concrete condition.



**Photo 23**

**Right (upstream) side of  
culvert adjacent to sluice gate.**



**Photo 24**

**Sluice gate on right (upstream)  
side of culvert and entrance  
into sluiceway.**

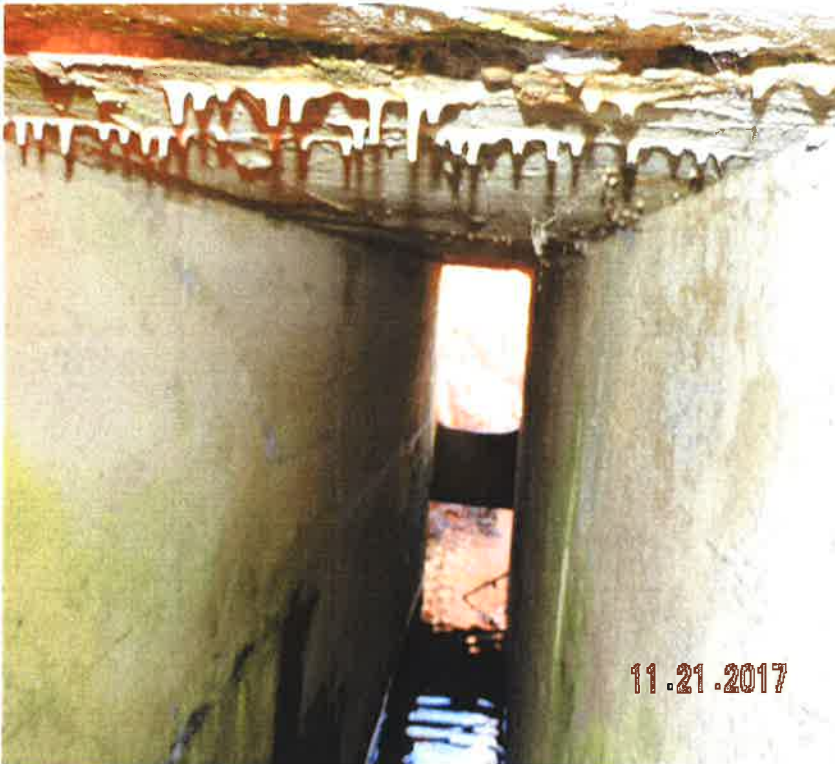


Photo 25

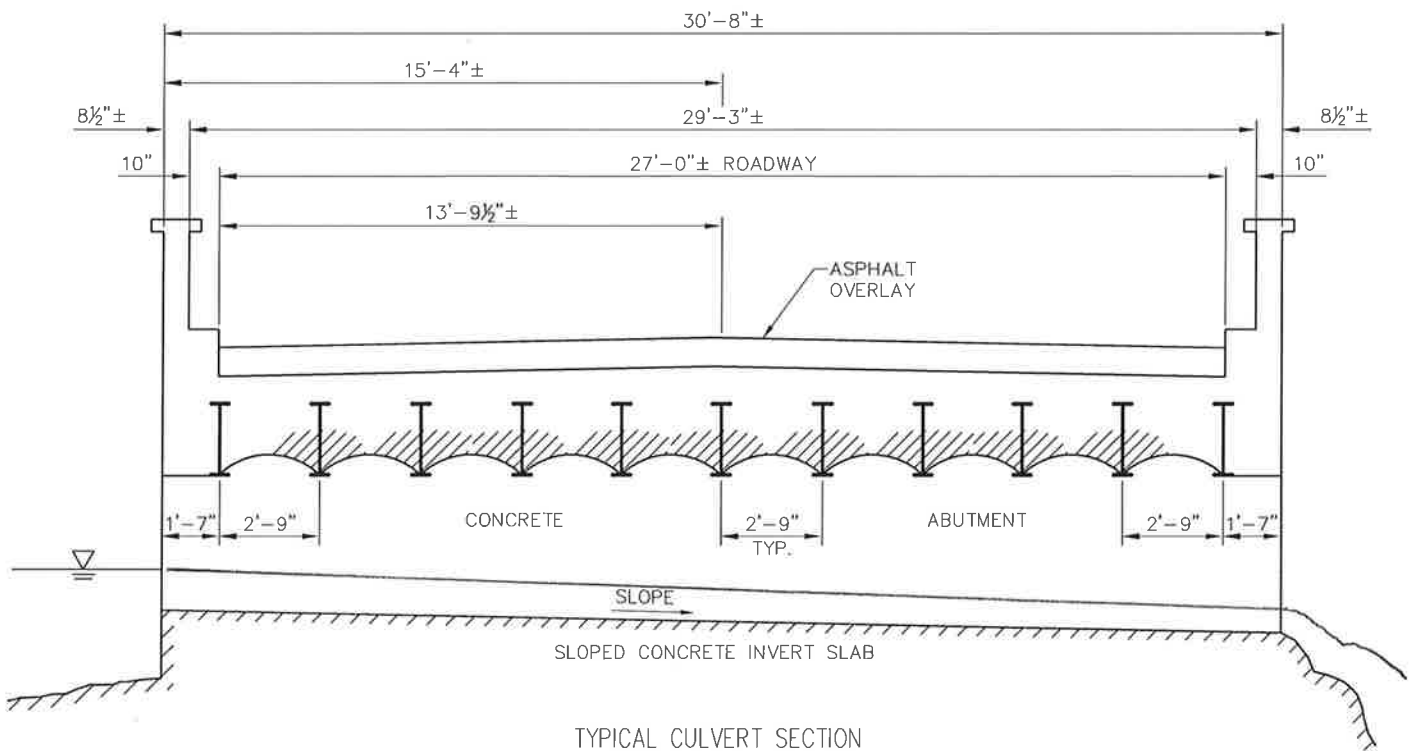
Sluiceway on begin (south)  
side of culvert.



Photo 26

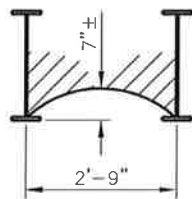
Sluice gate on right (upstream)  
side of culvert at entrance into  
sluiceway.

## **Culvert Cross-Section Sketch**



TYPICAL CULVERT SECTION  
AT BEGIN ABUTMENT  
(LOOKING SOUTH)

ABUTMENT HEIGHT  
VARIES - MIN. 3'-8"



GIRDER  
BOTTOM FLG. - 6 1/2"  
SPAN - CLEAR 10'-10"  
2'-9" SPACING

TUSTEN (NARROWSBURG) CULVERT  
CULVERT CONDITION ASSESSMENT

# APPENDIX

F

N/A

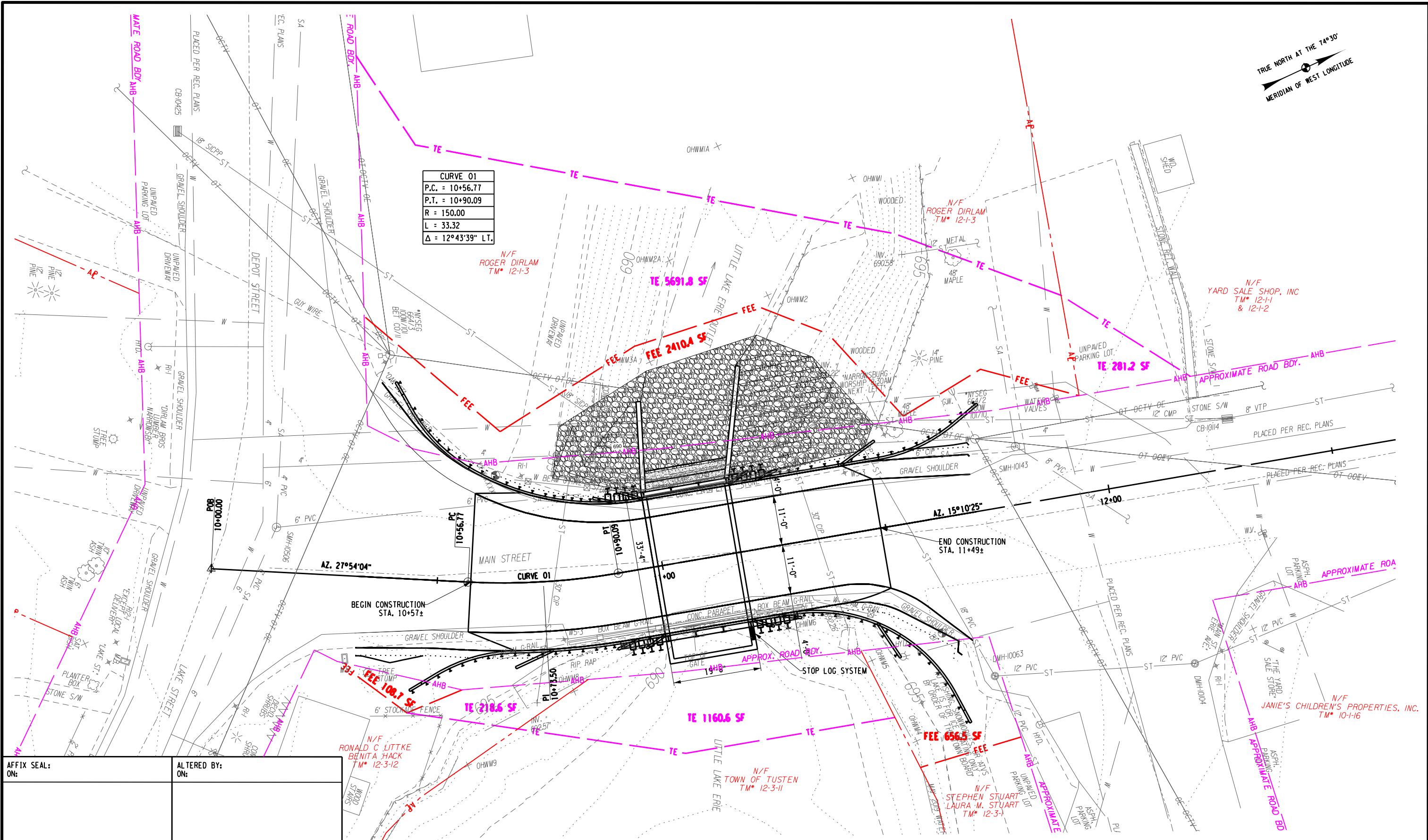
# APPENDIX

G


N/A

# APPENDIX

H



AFFIX SEAL: ON: ALTERED BY: ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	MAIN STREET OVER LITTLE LAKE ERIE		PIN 9754.85	BRIDGES	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED		CONTRACT NUMBER
	PROPOSED CULVERT REHABILITATION					ROW PLAN	DRAWING NO. ROW SHEET NO.	
	TOWN OF TUSTEN (NARROWSBURG)							
	NEW YORK							
	COUNTY: SULLIVAN	REGION: 9						
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.						 NEW YORK STATE OF OPPORTUNITY.		Department of Transportation

# APPENDIX

I

**WMA ENGINEERING DPC|DBA**  
**EMPIRE  TECHNICAL**  
**ENGINEERING SERVICES**

April 11, 2019

Shumaker Consulting Engineering & Land Surveying, D.P.C.  
143 Court Street  
Binghamton, NY 13901

Attn: Joseph Bayer, P.E.

Re: Geotechnical Evaluation  
Proposed Culvert Rehabilitation  
Main Street over Little Lake Erie Outlet  
Narrowsburg, New York  
Empire Project No.: WA-19-005

Dear Mr. Bayer:

This report presents the results of a geotechnical evaluation performed by Empire Geotechnical Engineering Services (Empire) for the referenced project. The evaluation included an investigation of the site's subsurface by means of conventional test borings, and an engineering analysis of the conditions encountered as such relate to the planned improvements. Herein is a summary of the methods and findings of the investigation, together with recommendations for design and construction of new foundations and associated earthwork.

Shumaker Consulting Engineering & Land Surveying retained Empire to complete this work, which was done in general accordance with the scope of services outlined in fee proposal PA-19-058 dated February 28, 2019.

## 1.0 PROJECT AND SITE DESCRIPTION

The project site is located on Main Street in the town of Tusten (nominally Narrowsburg), Sullivan County, New York, just south of the intersection with Erie Avenue. There, a large culvert carries Main Street over the outlet of Little Lake Erie; the outlet empties into the Delaware River about 500 feet downstream (to the northwest). Topography in the site locale (outside the river valley) is rather hilly (refer to Figure 1).

The existing culvert is set into an earthen (embankment) dam that impounds Little Lake Erie, and thereby also functions as the service spillway for the dam. Information furnished for our use indicates the roadway is carried by a jack arch structure that spans between reinforced concrete abutments, providing a waterway

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Ballston Spa, NY 12020

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☐ **ROCHESTER OFFICE**

535 Summit Point Drive  
Henrietta, NY 14467  
Phone: (585) 359-2730  
Fax: (585) 359-9668

opening of nearly 11 feet. The culvert includes a sloped concrete invert slab, and its total length along the direction of flow is about 30 feet. The culvert exhibits significant deterioration in places, and no design plans or as-built construction documents are known to exist.

As we understand it, either repair or total replacement of the culvert are being considered. It is assumed that should replacement be the chosen option, the configuration of the new structure would be similar to that of the old, and would include a full invert or slab foundation. We understand that whatever remedial work that occurs will adhere to AASHTO LRFD Bridge Design Specifications.

A topographic site plan by others furnished for our use indicates the road surface over the culvert is at an elevation of approximately 696 to 697 feet. The roadway is about seven to eight feet above the lake bed on its upstream side, and about 12 to 13 feet above the streambed on its downstream side. Normal water surface elevation in the lake appears to be about 693 feet.

## **2.0 METHOD OF INVESTIGATION**

### Test Borings

Subsurface conditions at the site were investigated through the completion of two test borings, designated as B-1 and B-2, at the approximate locations depicted on the subsurface investigation plan (Figure 2). The test locations were selected by Shumaker and were established in the field through taped measurements from existing site features (within the limitations of access and existing underground/overhead utilities).

The test borings were completed on March 18 and 19, 2019 by Empire's affiliated drilling and materials testing company, SJB Services, Inc., using a Central Mine Equipment (CME) model 550X ATV-mounted drill rig equipped with hollow-stem augers. As the boreholes were advanced, overburden soils were sampled in accordance with ASTM D1586 – Standard Method for Penetration Test and Split-Barrel Sampling of Soils. Split spoon samples and standard penetration tests (SPTs) were taken on a continuous basis to a depth of 12 feet, and at standard five foot intervals thereafter to the borehole termination depths. The boreholes were thus advanced to total depths of 48.7 to 50.0 feet below the existing ground surface (bgs).

Representative portions of the recovered soil samples were transported to SJB/Empire's office, whereupon a geotechnical engineer prepared individual subsurface logs based on visual/manual classification of the recovered soil samples and review of the driller's field notes. The samples were described based on estimation of the grain size distribution, and characteristics such as color, relative density or consistency, moisture condition, etc. The subsurface logs are presented in Attachment A of this report, together with a summary sheet and key which explains the terms and symbols used in their preparation.

### Laboratory Testing

Selected soil samples were submitted for geotechnical laboratory testing to confirm the visual classifications and to determine quantitative soil index properties. The laboratory testing was performed in general accordance with the following standard methods:

- Natural moisture content by ASTM D2216 – Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- Grain size by ASTM C136 – Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
- Hydrometer by ASTM D422 – Standard Test Method for Particle-Size Analysis of Soils
- Atterberg limits by ASTM D4318 – Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils

Laboratory test results are presented in Attachment B.

### **3.0 SUBSURFACE CONDITIONS**

The individual subsurface logs should be referenced for the conditions encountered at each test boring location. A summary of these conditions by stratum is provided below.

#### Surface and Fill Materials

The boreholes revealed fill or reworked soils to depths of about six to eight feet. The fill consisted generally of loose to firm sands or sands and gravels with lesser amounts of silt (along with relatively minor amounts of foreign matter such as slag), and likely represents abutment backfill, dam/roadway embankment material, or some combination thereof. The depth of fill as indicated on the test boring logs should be considered approximate. No distinct surface material (such as topsoil or pavement) was noted at either borehole location.

#### Indigenous Soils

Underlying the fill were native soils which for the most part consisted of interlayered silts, sands and gravels in varying proportion. The relative density of the native soils as indicated by measured SPT N-values was generally loose to firm. At borehole B-1, however, compact glacial till deposits prevailed below the depth of 35 feet.

#### Bedrock

Bedrock was not encountered within the depths explored. For information purposes, the Geologic Map of New York – Lower Hudson Sheet (New York State Education Department, 1970) indicates bedrock beneath the project area consists of sandstone and shale of the Honesdale formation.

#### Groundwater Conditions

Based on water level measurements in the boreholes and the recovery of wet soil samples,

it appears that groundwater at borehole B-1 was just a few feet below ground surface and very nearly at lake level at the time of investigation, as what might be expected given the proximity of B-1 to the lakeshore. Groundwater at borehole B-2 appears to be somewhat deeper, at a depth of perhaps 10 feet or more below ground surface, this more closely correlating with the streambed elevation on the downstream side of the outlet which borehole B-2 was nearer to. It should be understood that time sufficient for groundwater to enter the augers and achieve a static level likely did not elapse prior to the measurements being taken.

In addition to groundwater at depth, perched or trapped water may also be present at times nearer the ground surface, particularly during seasonally wet periods and following heavy or extended periods of precipitation. It should be expected that groundwater conditions, and the extent of any perched water, will vary with seasonal fluctuations in precipitation and runoff (and with water levels in the lake).

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

### **4.1 General**

#### Foundations

In our estimation, the native sands and silts encountered in the range of anticipated foundation depths (say roughly 10 to 15 feet below existing road grade, or about elev. 681 to 686 feet) are adequate for support of modest bearing pressures. While material of substantially greater bearing capacity appears to exist directly below this on the north side of the culvert (as evidenced by borehole B-1), such compact material was not encountered on the south side of the culvert within the depths explored.

#### Groundwater

Groundwater should be expected at or near the water level in Little Lake Erie, although water levels may diminish somewhat with distance through the embankment. Accordingly, dewatering should be planned for excavations extending below these depths. It should be possible to complete the dewatering with standard sump and pump methods provided excavations are sufficiently isolated from the lake and outlet. Groundwater related impacts on construction may be lessened if site development is planned during seasonally dry periods.

### **4.2 Spread/Mat Foundation Design**

It appears a spread/mat foundation will be a suitable means of support for a new culvert structure. Where the foundation is seated on native granular soils below the streambed, the following design parameters may be assumed pursuant to the AASHTO LRFD Bridge Design Specifications:

- Nominal Soil Bearing Resistance ( $q_n$ ) – 7.9 kips per square foot (ksf)
- Bearing Resistance Factor at Strength Limit State ( $\phi_b$ ) – 0.45
- Factored Soil Bearing Resistance ( $q_R$ ), where ( $q_R = q_n \times \phi_b$ ) – 3.5 ksf

The factored strength bearing resistance as given above notwithstanding, we recommend that actual foundation pressure not exceed 2.5 ksf in order to limit anticipated foundation settlement to 1 inch or less.

New foundation bearing grades should be comprised of undisturbed native soils, prepared as described in section 4.6 herein. The foundations should have a minimum width of four feet, and a minimum four feet of cover should be provided for frost protection. Scour protection should be provided as appropriate; foundations should be designed, detailed and constructed in a way that maintains the integrity of the supporting soils.

Any water which enters foundation excavations should be promptly removed, together with any softened bearing grade materials. All final bearing grades should be firm, stable, and free of any loose soil, mud, water or frost.

### 4.3 Headwall/Wingwall Design

Earth-retaining structures should be designed to resist the lateral pressures generated by the earth backfill and any temporary or permanent surcharge loads. Walls which are braced prior to backfilling should be designed based on “at-rest” earth pressures. If the walls are unbraced and free to deflect as backfill is placed, then “active” earth pressures would apply. The following design parameters may be assumed for design of new abutments, headwalls and/or wingwalls, along with any temporary excavation support (e.g., sheetpile, soldier pile wall, tiebacks, etc.) that may be required.

- Coefficient of At-Rest Lateral Earth Pressure - 0.53
- Coefficient of Active Lateral Earth Pressure - 0.36
- Coefficient of Passive Lateral Earth Pressure - 2.77
- Angle of Internal Friction - 28 degrees
- Moist Unit Weight - 120 pcf
- Lateral Coefficient for Surcharge Loads - 0.50
- Coefficient of sliding friction (mass concrete on soil) – 0.35

The recommended design parameters assume that abutments or wingwalls are backfilled with a suitable granular fill as described in Attachment C, and that the backfill remains permanently well-drained. Water must not be allowed to collect against the wall, unless the wall is designed for the additional hydrostatic pressure. Drainage system recommendations are provided in the following section.

#### **4.4 Headwall/Wingwall Drainage**

Earth-retaining foundation walls should be constructed with foundation drains to intercept any groundwater that may tend to collect against the walls. The drainage system should be properly designed, installed and maintained for long term performance. The design should include such features as clean-outs to properly maintain the system. The drain system should extend to the bottom of the exposed section of wall on the opposite side, and should drain or daylight to a positive gravity outlet as appropriate.

The foundation drainage system should include a drainage/separation geotextile (e.g., Mirafi 160N or suitable equivalent) installed around drainage stone, which surrounds a slotted underdrain pipe. The drainage stone should be sized in accordance with the pipe slotting or perforations. A crushed aggregate conforming to NYSDOT standard specifications section 703-02, size designation no. 1 (½-inch washed gravel or stone) is generally acceptable for slotted underdrain pipe. The foundation drainage stone and surrounding geotextile along the wall should extend above the drainpipe a minimum of one to two feet.

A pervious granular backfill, or a suitable geosynthetic drainage composite (Miradrain 5000 or equivalent) should be placed against the wall, above the drainage system, to allow infiltration to the system. Concrete sand which meets the minimum requirements of NYSDOT standard specifications section 703-07 (100 percent passing the ⅜-inch sieve, with no more than three percent passing a No. 200 sieve), is generally acceptable as pervious granular backfill. Structural fill is also acceptable provided it is well graded to prevent infiltration of the adjacent soils and has a permeability of  $1 \times 10^{-3}$  cm/sec or greater when placed and compacted.

The pervious granular backfill against the wall should be a nominal two feet in width and should extend up to the bottom of the subbase stone layer beneath pavement areas. It should extend up to about one to two feet below the finished grade in landscape areas, where it may be capped off with the foundation backfill material otherwise in use. Backfill outside the drainage system should consist of structural fill or suitable granular fill.

#### **4.5 Seismic Design Considerations**

In our estimation, the site meets the criteria for seismic Site Class “D”, as defined in the AASHTO LRFD Bridge Design Specifications. The peak ground acceleration coefficient (PGA), the short period spectral acceleration coefficient ( $S_s$ ), and the long period spectral acceleration coefficient ( $S_1$ ), normalized for reference Site Class “B”, were determined using figures 3.10.2.1-1, 3.10.2.1-2, and 3.10.2.1-3 in the AASHTO specifications, which represent values with a seven percent probability of exceedance in 75 years (approximately 1000-year return period). At the project site, these values were determined as follows:

- $PGA = 0.055g$
- $S_s = 0.120g$
- $S_l = 0.035g$

For design purposes, these mapped coefficient values must be modified for the conditions at the project site using the following site factors, which are dependent on the Site Class and the mapped coefficient values of  $PGA$ ,  $S_s$ , and  $S_l$ .

- $F_{pga} = 1.6$
- $F_a = 1.6$
- $F_v = 2.4$

The resulting five-percent-damped-design response accelerations are as follows:

- $A_s = PGA \times F_{pga} = 0.088g$
- $S_{DS} = S_s \times F_a = 0.192g$
- $S_{DI} = S_l \times F_v = 0.084g$

## 4.6 Site Preparation and Construction

### Construction Dewatering

Excavations for foundation construction are expected to encounter groundwater at or near the water surface elevations in the lake and outlet. The amount of water encountered will depend on the specific excavation location, depth, permeability of soils, and prevailing groundwater conditions at the time of construction. The means and methods of dewatering should be established prior to excavation. Foundation subgrades will likely become unstable if not adequately dewatered during construction.

Groundwater should be maintained below the excavation bottom. It is anticipated that conventional sump and pump methods will be sufficient to control and remove water in excavations such that construction proceeds in the dry, provided the work area is adequately isolated from the lake and outlet (e.g., with the use of cofferdams or by-pass channels). It may be useful to provide a base of clean crushed stone in excavations to provide a stable working base and to serve as a dewatering medium. Surface water drainage and groundwater dewatering plans should of course include implementation of measures to control erosion, sedimentation and the migration of soil fines as appropriate.

### Excavation for Foundation Construction

Excavation for construction of spread foundations should be performed using a method which limits disturbance to the subgrade soils, such as a backhoe equipped with a smooth blade bucket. All existing fill should be removed from beneath proposed foundation bearing grades, along with any organics or otherwise unsuitable soils that may be found. Any existing foundations and/or structures which are present at the locations of new structures should also be removed.

Subgrades should be carefully inspected during construction to verify that foundations are constructed on suitable materials. Native soil bearing grades should be observed and evaluated by the geotechnical engineer prior to foundation construction, or where over-excavation is required, before placement of structural fill. We recommend that any structural fill beneath foundations consist of erosion resistant material, such as cementitious flowable fill. Consideration may also be given to placing a lean concrete mud mat ( $f'_c \geq 1,000$  psi) over the excavation subgrades (once a suitable subgrade is established) to protect them and to establish a suitable working surface for foundation construction.

All bearing grades for foundation construction should be protected from precipitation and surface water. Water should not be allowed to accumulate in excavations and the bearing grades should not be allowed to freeze, either prior to or after construction of foundations. Any water which enters foundation excavations should be promptly removed, together with any softened bearing grade materials. All final bearing grades should be firm, stable, and free of any loose soil, mud, water or frost.

Abutment structure excavations should be backfilled as soon as possible and prior to construction of the superstructure. It is recommended that bridge foundation excavations beneath new roadway areas be backfilled with a structural fill or suitable granular fill material. Material specification and placement guidelines for imported granular fill materials are provided in Attachment C.

#### Excavation Safety

All excavations should be performed in accordance with federal Occupational Safety and Health Administration (OSHA) standards, along with state and local codes, as applicable. The contractor is solely responsible for all aspects of excavation safety.

## 5.0 CLOSING REMARKS

This report was prepared to assist in planning for design and construction of improvements to the culvert carrying Main Street over the outlet of Little Lake Erie in Narrowsburg, New York. The report has been prepared for the exclusive use of Shumaker Engineering and other members of the design team for specific application to this site and project only.

The recommendations were prepared based on Empire's understanding of the project, as described herein, and through the application of generally accepted soils and foundation engineering practices. No other warranties, expressed or implied, are made by the conclusions, opinions, recommendations or services provided.

Empire should be informed of any changes to the planned construction so that it may be determined whether or not modification of the report is warranted. Empire should also review final plans and specifications to verify that the recommendations were properly interpreted and applied. Important information regarding the use and interpretation of this report is presented in Attachment D.

Respectfully,

*WMA Engineering, DPC/dba*

**Empire Geotechnical Engineering Services**



John S. Hutchison, P.E.  
Geotechnical Engineer

encl.: Figures and Attachments A thru D

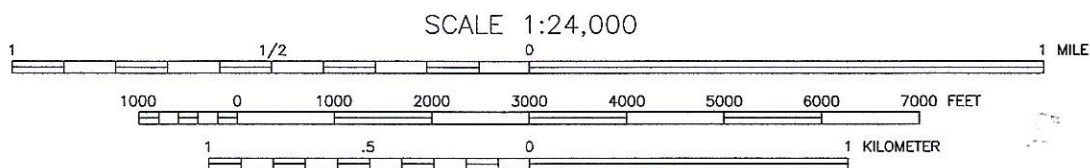
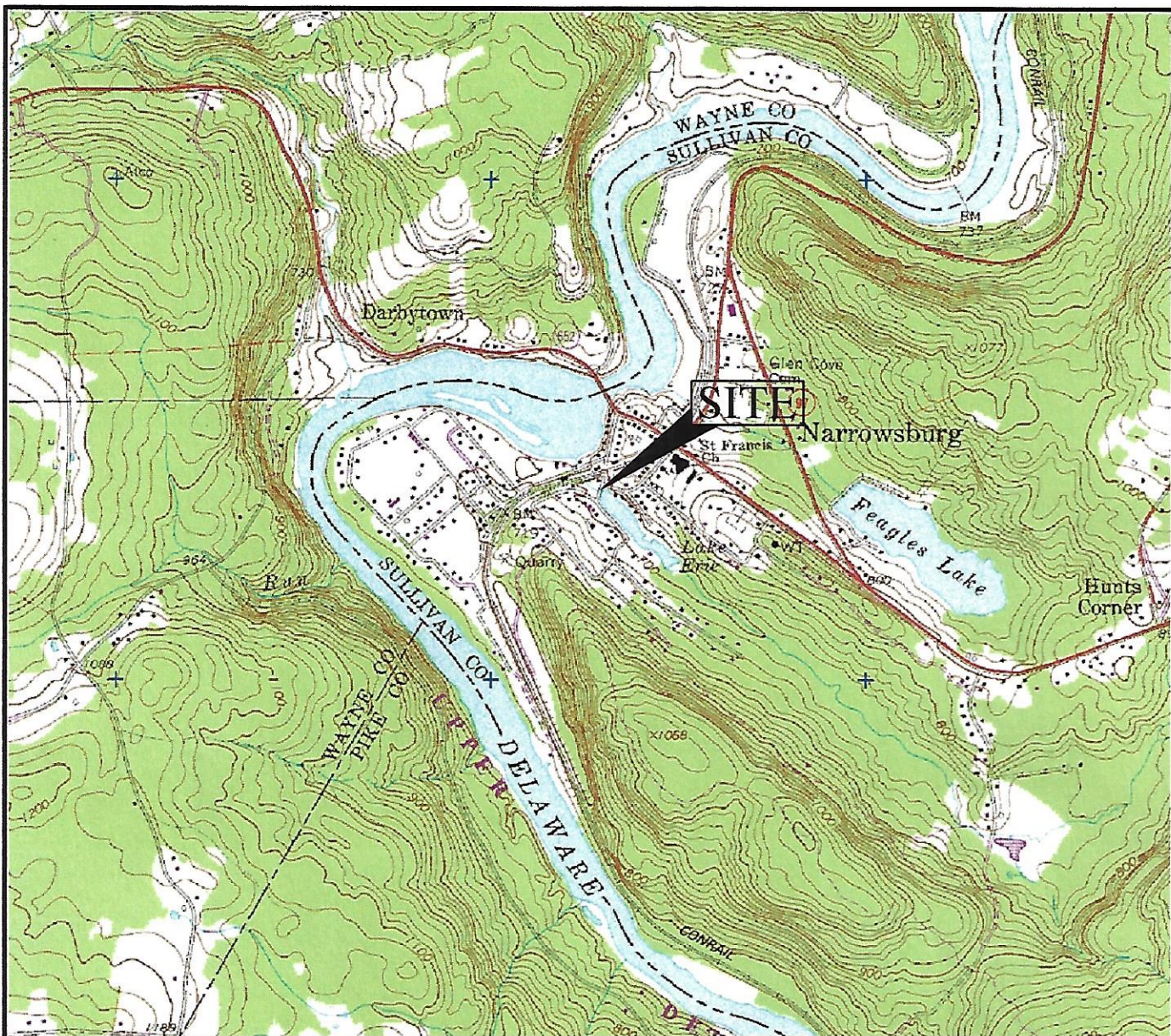
cc: Hamid Fallah, P.E. - GZA



## **Figures**

*Site Location Map*

*Subsurface Investigation Plan*



CONTOUR INTERVAL 20 FEET  
DATUM IS MEAN SEA LEVEL



SOURCE: NARROWSBURG, NY-PA  
USGS 7.5' QUADRANGLE (1995).

**WMA ENGINEERING DPC|DBA**  
**EMPIRE *GEO* TECHNICAL**  
**ENGINEERING SERVICES**

SITE LOCATION MAP

PROPOSED CULVERT REHABILITATION  
MAIN STREET  
NARROWSBURG, NEW YORK

SCALE:  
AS SHOWN

DATE:  
4/19

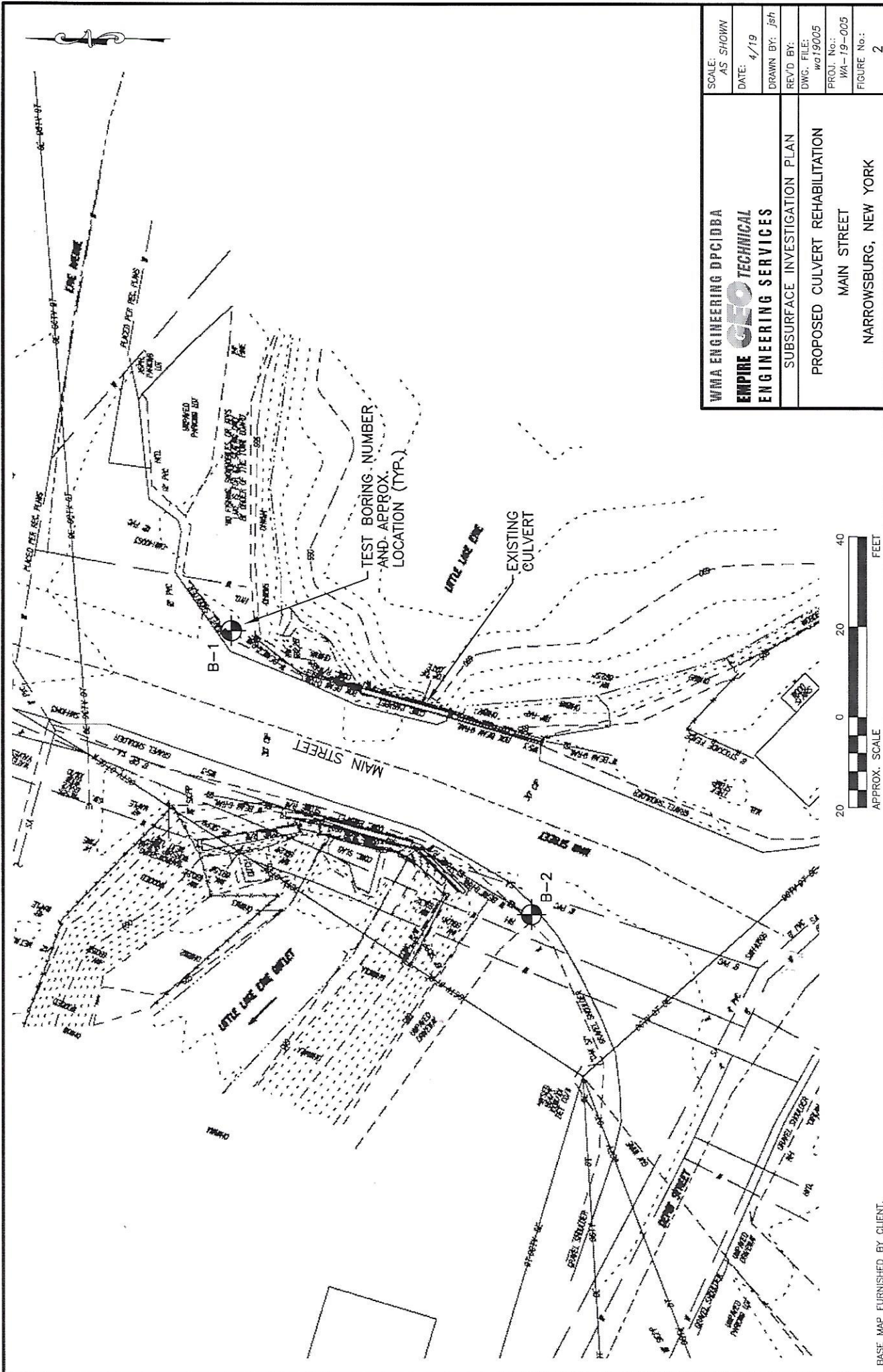
DRAWN BY: jsh

REV'D BY:

DWG. FILE:  
wa19005

PROJ. No.:  
WA-19-005

FIGURE No.:  
1



**ATTACHMENT A**

*Subsurface Logs and Key*

DATE: \_\_\_\_\_  
 START 3/19/2019  
 FINISH 3/19/2019  
 SHEET 1 OF 2

**SJB SERVICES, INC.**  
**SUBSURFACE LOG**



PROJ. NO. WA-19-005  
 HOLE NO. B-1  
 SURF. ELEV. +/- 696'  
 G.W. DEPTH See notes

PROJECT: Proposed Culvert Rehabilitation

LOCATION: Main Street over Little Lake Erie Outlet  
Narrowsburg, New York

DEPTH (ft.)	SAMPLE NO.	BLOWS ON SAMPLER					REC. (ft.)	SOIL OR ROCK CLASSIFICATION	NOTES
		0/6	6/12	12/18	18/24	N			
	1	5	5	6	7	11	1.0	Fill: Brown f-m SAND, little coarse sand, gravel, silt (Moist - Firm)	Borehole performed on north side of culvert/dam spillway, off east shoulder of Main St.
	2	5	4	3	2	7	1.0	- grades trace silt (Very Moist to Wet - Loose)	
5	3	3	3	2	1	5	1.1	Dk. Brown f-m SAND, little silt, slightly organic (Moist - Loose)	
	4	3	2	1	1	3	1.7	- similar, w/ little slag noted (Wet - Very Loose)	
	5	4	2	1	1	3	1.5	Brown f-m SAND, some Silt, trace gravel (Wet - Very Loose)	
10	6	1	1	1	1	2	1.0	Brown f. SAND, trace coarser sand, silt (Wet - Very Loose)	
15	7	5	9	10	12	19	2.0	Glacial Till: Brown f. SAND, some Silt, w/ some embedded coarser sands, gravel (Moist - Firm)	
20	8	9	10	11	14	21	2.0	Reddish-Brown varved SILT, some Clay, trace sand (Wet - Firm/Stiff)	
25	9	5	10	10	18	20	2.0	Reddish-Brown f-c SAND & GRAVEL, some Silt (Wet - Firm)	
30	10	10	16	16	18	32	2.0	- grades f-c SAND, some Silt (Very Moist to Wet - Compact)	
35	11	17	14	50/3	-	-	1.0	Glacial Till: Reddish-Brown/Gray SILT & f. SAND w/ some embedded coarser sands, gravel, rock frags. (Moist - Very Compact)	
40									

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFICATION: Visual by

DRILLER: S. Wolkiewicz

DRILL RIG TYPE: CME-550X

Geotechnical Engineer

METHOD OF INVESTIGATION 4-1/4" hollow stem augers, AW rods

- All recovered samples will be retained for approximately sixty (60) days, at which time the samples will be discarded unless directed otherwise -

- All recovered samples will be retained for approximately sixty (60) days, at which time the samples will be discarded unless directed otherwise -

DATE: \_\_\_\_\_  
 START 3/18/2019  
 FINISH 3/19/2019  
 SHEET 1 OF 2

**SJB SERVICES, INC.**  
**SUBSURFACE LOG**



PROJ. NO. WA-19-005  
 HOLE NO. B-2  
 SURF. ELEV. +/- 696'  
 G.W. DEPTH See notes

PROJECT: Proposed Culvert Rehabilitation

LOCATION: Main Street over Little Lake Erie Outlet  
Narrowsburg, New York

DEPTH (ft.)	SAMPLE NO.	BLOWS ON SAMPLER					REC. (ft.)	SOIL OR ROCK CLASSIFICATION	NOTES
		0/6	6/12	12/18	18/24	N			
	1	3	12	14	17	26	0.6	Fill: Reddish-Brown f-c SAND & GRAVEL, little silt, slag (Moist - Firm)	Borehole performed on south side of culvert/dam spillway, off west shoulder of Main St.
	2	12	4	5	6	9	0.8	Reddish-Brown f-m SAND, little gravel, silt (Moist - Loose)	
5	3	16	14	12	11	26	0.8	Gray GRAVEL & SAND, trace silt (Damp - Firm)	
								6'	
	4	18	11	3	3	14	0.5	Brown f-c SAND, some Gravel, silt (Moist - Firm)	
								8'	
	5	8	3	3	3	6	1.0	Brown SILT & f-m SAND, trace gravel, clay (Moist to Very Moist - Loose)	
10	6	5	5	7	9	12	0.0	- no recovery	
								+/- 14'	
15	7	10	11	10	13	21	2.0	Brown f-m SAND, some Gravel, trace silt (Wet - Firm)	
20	8	4	3	4	4	7	1.5	Reddish-Brown f-m SAND, trace gravel, silt (Wet - Loose)	
25	9	2	3	4	4	7	1.8	Reddish-Brown f-m SAND, trace silt (Saturated - Loose)	
								+/- 29'	
30	10	4	5	6	7	11	2.0	Reddish-Brown SILT, some Clay, little sand (Wet - Firm/Medium)	
								+/- 34'	
35	11	7	10	10	11	20	2.0	Reddish-Brown SILT & v.f. SAND (Wet - Firm)	
40									

N = NO. BLOWS TO DRIVE 2-INCH SPOON 12-INCHES WITH A 140 LB. PIN WT. FALLING 30-INCHES PER BLOW

CLASSIFICATION: Visual by

DRILLER: S. Wolkiewicz

DRILL RIG TYPE: CME-550X

Geotechnical Engineer

METHOD OF INVESTIGATION 4-1/4" hollow stem augers, AW rods

- All recovered samples will be retained for approximately sixty (60) days, at which time the samples will be discarded unless directed otherwise -



## GENERAL INFORMATION & KEY TO SUBSURFACE LOGS

The Subsurface Logs attached to this report present the observations and mechanical data collected by the driller at the site, supplemented by classification of the material removed from the borings as determined through visual identification by technicians in the laboratory. It is cautioned that the materials removed from the borings represent only a fraction of the total volume of the deposits at the site and may not necessarily be representative of the subsurface conditions between adjacent borings or between the sampled intervals. The data presented on the Subsurface Logs together with the recovered samples provide a basis for evaluating the character of the subsurface conditions relative to the project. The evaluation must consider all the recorded details and their significance relative to each other. Often analyses of standard boring data indicate the need for additional testing or sampling procedures to more accurately evaluate the subsurface conditions. Any evaluation of the contents of this report and recovered samples must be performed by qualified professionals. The following information defines some of the procedures and terms used on the Subsurface Logs to describe the conditions encountered, consistent with the numbered identifiers shown on the Key opposite this page.

1. The figures in the Depth column define the scale of the Subsurface Log.
2. The Samples column shows, graphically, the depth range from which a sample was recovered. See Table I for descriptions of the symbols used to represent the various types of samples.
3. The Sample No. is used for identification on sample containers and/or Laboratory Test Reports.
4. Blows on Sampler - shows the results of the "Penetration Test", recording the number of blows required to drive a split spoon sampler into the soil. The number of blows required for each six inches is recorded. The first 6 inches of penetration is considered a seating drive. The number of blows required for the second and third 6 inches of penetration is termed the penetration resistance, N. The outside diameter of the sampler, hammer weight and length of drop are noted at the bottom of the Subsurface Log.
5. Blows on Casing - Shows the number of blows required to advance the casing a distance of 12 inches. The casing size, hammer weight, and length of drop are noted at the bottom of the Subsurface Log. If the casing is advanced by means other than driving, the method of advancement will be indicated in the Notes column or under the Method of Investigation at the bottom of the Subsurface Log. Alternatively, sample recovery may be shown in this column, or other data consistent with the column heading.
6. All recovered soil samples are reviewed in the laboratory by an engineering technician, geologist or geotechnical engineer, unless noted otherwise. Visual descriptions are made on the basis of a combination of the driller's field descriptions and noted observations together with the sample as received in the laboratory. The method of visual classification is based primarily on the Unified Soil Classification System (ASTM D 2487) with regard to the particle size and plasticity (See Table No. II), and the Unified Soil Classification System group symbols for the soil types are sometimes included with the soil classification. Additionally, the relative portion, by weight, of two or more soil types is described for granular soils in accordance with "Suggested Methods of Test for Identification of Soils" by D.M. Burmister, ASTM Special Technical Publication 479, June 1970. (See Table No. III). Description of the relative soil density or consistency is based upon the penetration records as defined in Table No. IV. The description of the soil moisture is based upon the relative wetness of the soil as recovered and is described as dry, moist, wet and saturated. Water introduced into the boring either naturally or during drilling may have affected the moisture condition of the recovered sample. Special terms are used as required to describe soil deposition in greater detail; several such terms are listed in Table V. When sampling gravelly soils with a standard two inch diameter split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter. The presence of boulders and large gravel is sometimes, but not necessarily, detected by an evaluation of the casing and sampler blows or through the "action" of the drill rig as reported by the driller.
7. Rock description is based on review of the recovered rock core and the driller's notes. Frequently used rock classification terms are included in Table VI.
8. The stratification lines represent the approximate boundary between soil types and the transition may be gradual. Solid stratification lines delineate apparent changes in soil type, based upon review of recovered soil samples and the driller's notes. Dashed lines convey a lesser degree of certainty with respect to either a change in soil type or where such change may occur.
9. Miscellaneous observations and procedures noted by the driller are shown in this column, including water level observations. It is important to realize the reliability of the water level observations depends upon the soil type (water does not readily stabilize in a hole through fine grained soils), and that any drill water used to advance the boring may have influenced the observations. The ground water level will fluctuate seasonally, typically. One or more perched or trapped water levels may exist in the ground seasonally. All the available readings should be evaluated. If definite conclusions cannot be made, it is often prudent to examine the conditions more thoroughly through test pit excavations or groundwater observation wells.
10. The length of core run is defined as the length of penetration of the core barrel. Core recovery is the length of core recovered divided by the core run. The RQD (Rock Quality Designation) is the total length of pieces of NX core exceeding 4 inches divided by the core run. The size core barrel used is also noted in the Method of Investigation at the bottom of the Subsurface Log.

DATE

STARTED 7/29/09

FINISHED 7/30/09

SHEET 1 OF 1



# SJB SERVICES, INC. SUBSURFACE LOG

PROJ. No. AE-09-099

HOLE No. B-1

SURF. ELEV. 325.6

G.W. DEPTH see notes

PROJECT \_\_\_\_\_ LOCATION \_\_\_\_\_

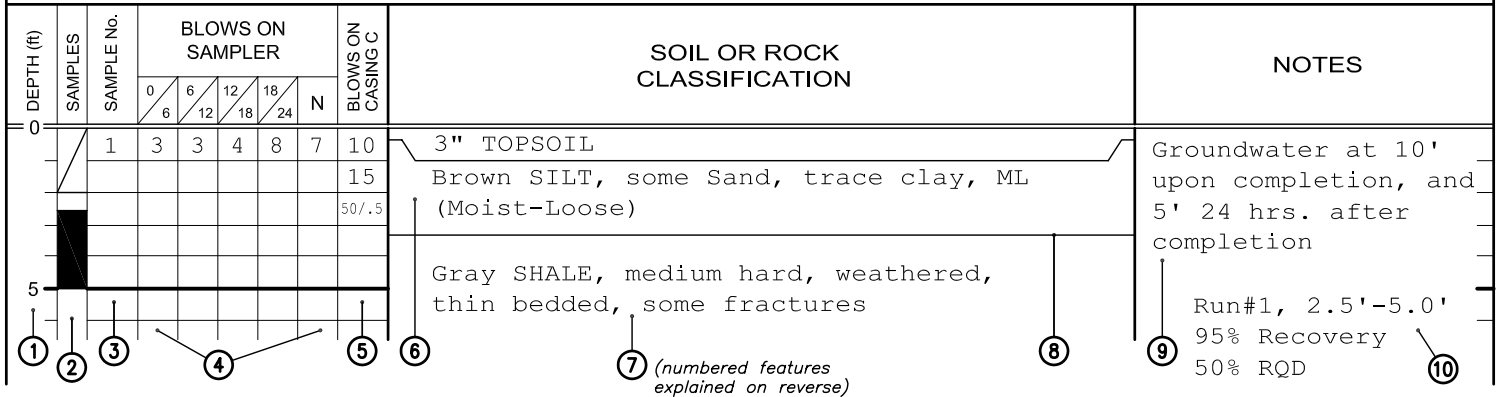


TABLE I

	Split Spoon Sample
	Shelby Tube Sample
	Geoprobe Macro-Core
	Auger or Test Pit Sample
	Rock Core

TABLE II

Identification of soil type is made on basis of an estimate of particle sizes, and in the case of fine grained soils also on basis of plasticity.		
Soil Type	Soil Particle Size	
Boulder	>12"	
Cobble	3" - 12"	
Gravel - Coarse	3" - 3/4"	Coarse Grained (Granular)
- Fine	3/4" - #4	
Sand - Coarse	#4 - #10	
- Medium	#10 - #40	
- Fine	#40 - #200	
Silt - Non Plastic (Granular)	<#200	Cohesive
Clay - Plastic (Cohesive)		

TABLE III

The following terms are used in classifying soils consisting of mixtures of two or more soil types. The estimate is based on weight of total sample.

Term	Percent of Total Sample
"and"	35 - 50
"some"	20 - 35
"little"	10 - 20
"trace"	less than 10

(When sampling gravelly soils with a standard split spoon, the true percentage of gravel is often not recovered due to the relatively small sampler diameter.)

TABLE IV

The relative compactness or consistency is described in accordance with the following terms:

Granular Soils		Cohesive Soils	
Term	Blows per Foot, N	Term	Blows per Foot, N
Loose	<11	Very Soft	<3
Firm	11 - 30	Soft	3 - 5
Compact	31 - 50	Medium	6 - 15
Very Compact	>50	Stiff	16 - 25
		Hard	>25

(Large particles in the soils will often significantly influence the blows per foot recorded during the penetration test)

TABLE V

<b>Varved</b>	Horizontal uniform layers or seams of soil(s).
<b>Layer</b>	Soil deposit more than 6" thick.
<b>Seam</b>	Soil deposit less than 6" thick.
<b>Parting</b>	Soil deposit less than 1/8" thick.
<b>Laminated</b>	Irregular, horizontal and angled seams and partings of soil(s).

TABLE VI

Rock Classification Term	Meaning	Rock Classification Term	Meaning
Hardness	- Soft - Medium Hard - Hard - Very Hard	Bedding	- Laminated (<1") - Thin Bedded (1" - 4") - Bedded (4" - 12") - Thick Bedded (12" - 36") - Massive (>36")
Weathering	- Very Weathered - Weathered - Sound		Natural breaks in Rock Layers
	Judged from the relative amounts of disintegration, iron staining, core recovery, clay seams, etc.		(Fracturing refers to natural breaks in the rock oriented at some angle to the rock layers)

**ATTACHMENT B**

*Laboratory Test Results*

# Laboratory Test Report

Project: Proposed Culvert Rehabilitation  
Main Street over Little Lake Erie Outlet  
Narrowsburg, New York

Client: Shumaker Consulting Engineering & Land Surveying, D.P.C.

Date: April 5, 2019

Project No.: WA-19-005

Report No.: LTR-1

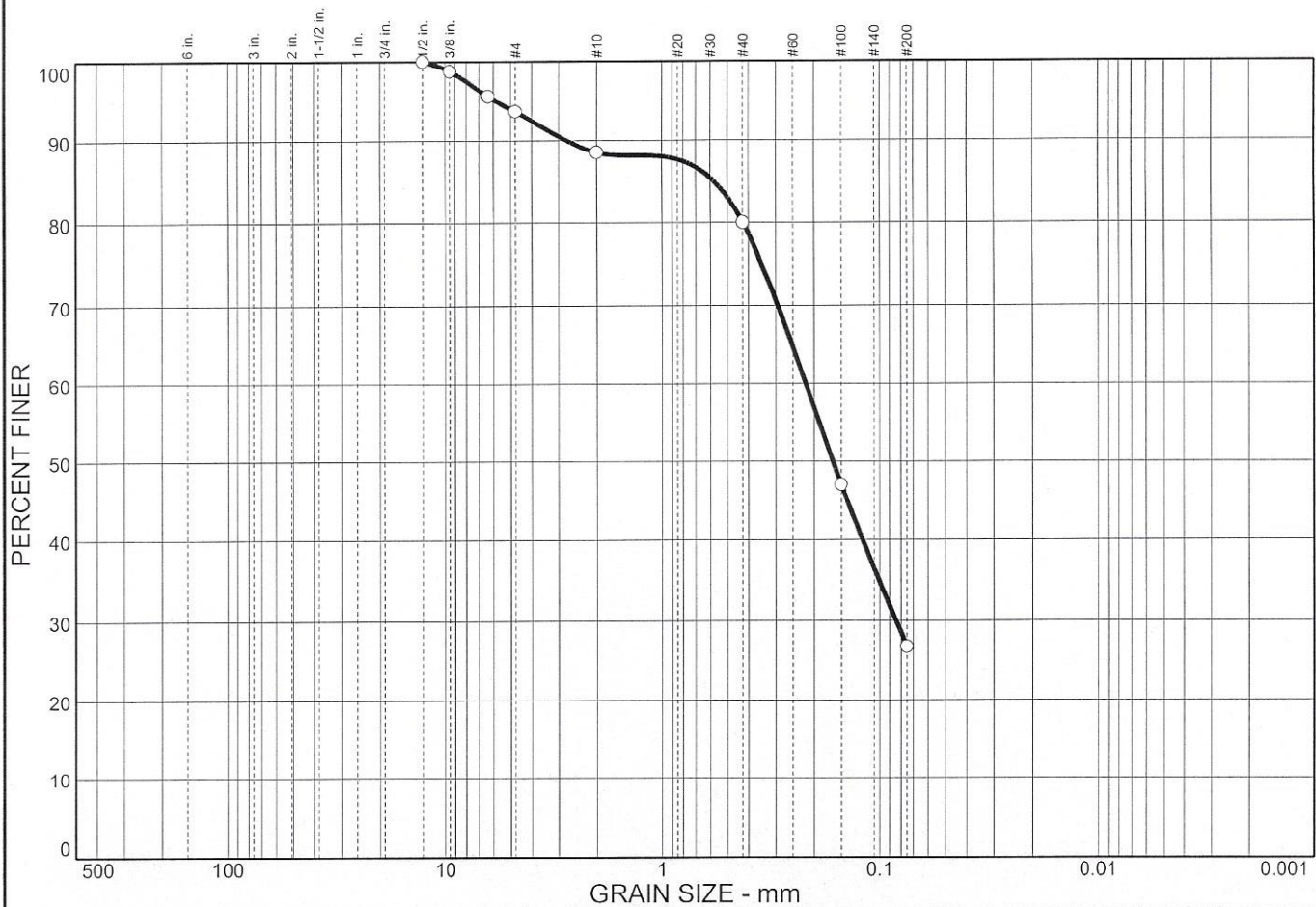
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## ASTM D2216 - Laboratory Determination of Water (Moisture) Content of Soil and Rock

Sample Identification	Natural Moisture Content, %
B-1, S-5, 8'-10'	18.9
B-1, S-8, 20'-22'	27.2
B-2, S-5, 8'-10'	25.1
B-2, S-7, 15'-17'	14.7
B-2, S-10, 30'-32'	22.4

# Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	6.3	66.9	26.8	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.8		
1/4 in.	95.6		
#4	93.7		
#10	88.5		
#40	80.0		
#100	47.0		
#200	26.8		

\* (no specification provided)

**Soil Description**  
Brown Silt and Sand, Trace Gravel

**Atterberg Limits**  
 PL=      LL=      PI=

**Coefficients**  
 D<sub>85</sub>= 0.580      D<sub>60</sub>= 0.219      D<sub>50</sub>= 0.164  
 D<sub>30</sub>= 0.0843      D<sub>15</sub>=      D<sub>10</sub>=  
 C<sub>u</sub>=      C<sub>c</sub>=

**Classification**  
 USCS=      AASHTO=

**Remarks**

Sample No.: 9-008  
Location: B1, S5

Source of Sample:

Date: 4-3-2019  
Elev./Depth: 8-10'

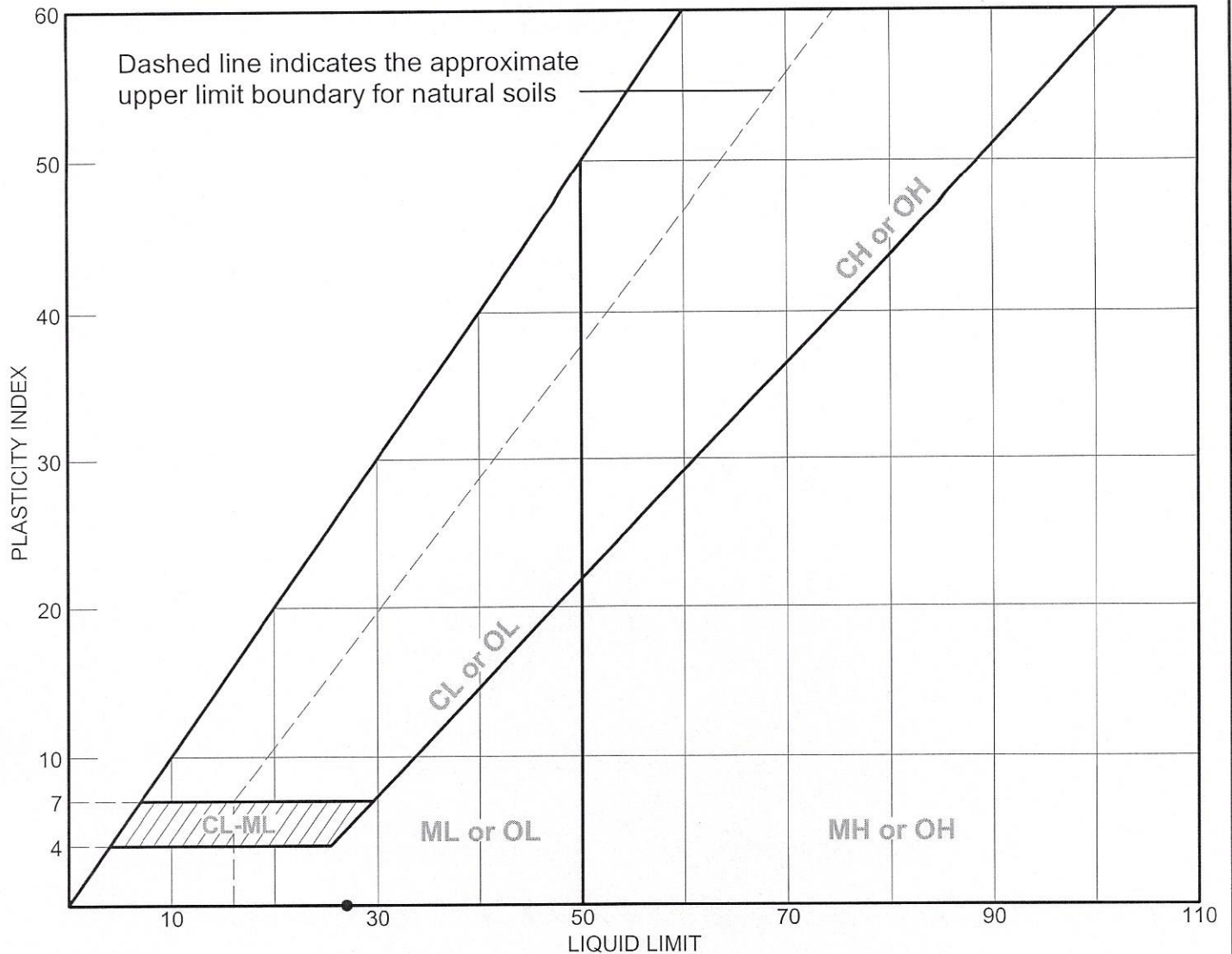
**SJB  
SERVICES, INC.**

Client: Shumaker Engineering  
Project: Proposed Culvert, Main St. Tusten, NY

Project No: WA-18-005

Plate

# LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-1	9-009	20-22'	27.2	NP	27	NP	

LIQUID AND PLASTIC LIMITS TEST REPORT

**SJB**  
**SERVICES, INC.**

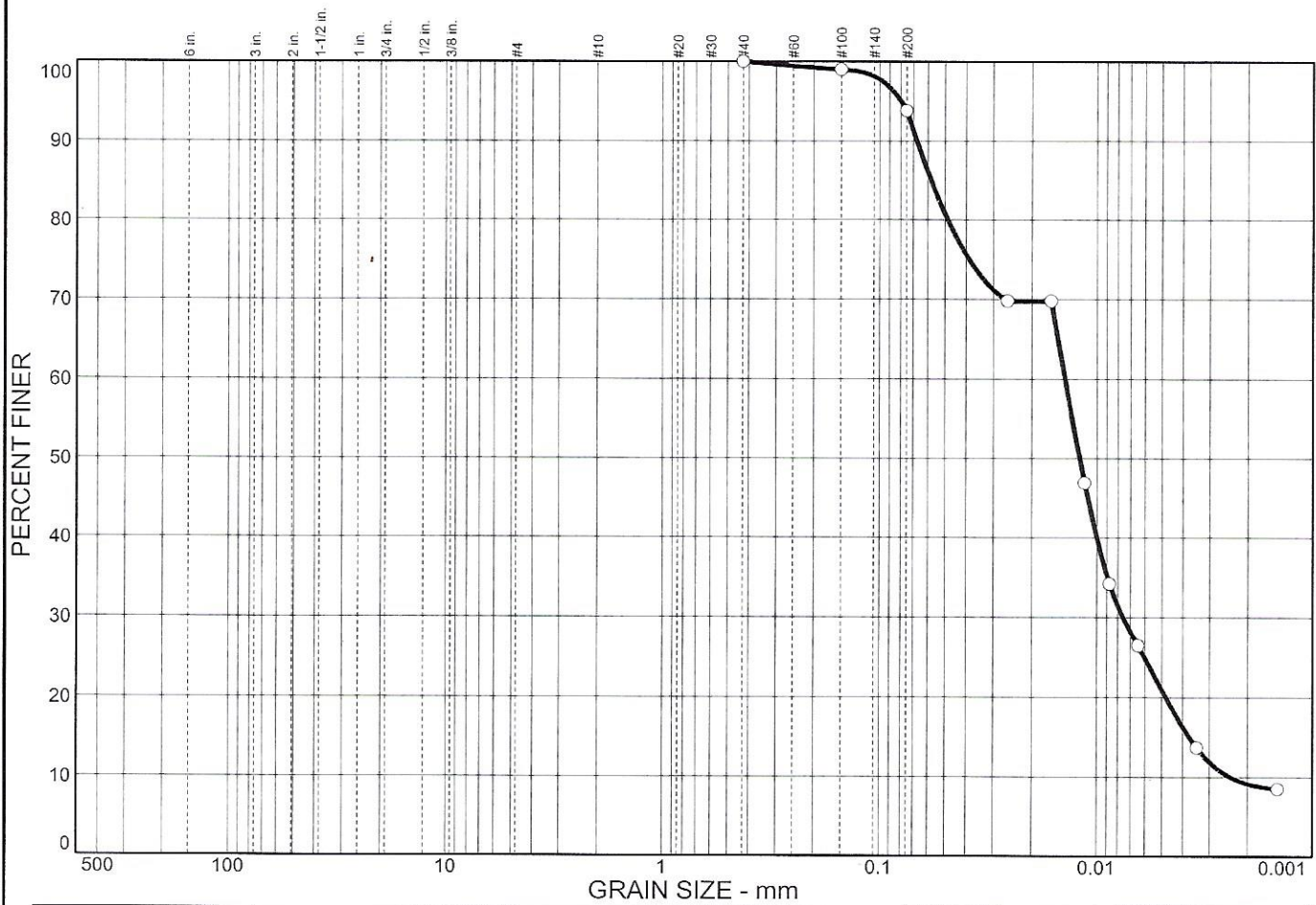
**Client:** Shumaker Engineering

**Project:** Proposed Culvert, Main St. Tusten, NY

**Project No.:** WA-18-005

**Plate**

# Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	6.2	72.9	20.9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#40	100.0		
#100	99.0		
#200	93.8		

\* (no specification provided)

## Soil Description

Brown Silt and Sand

## Atterberg Limits

PL= NP

LL= 27

PI= NP

## Coefficients

D<sub>85</sub>= 0.0581

D<sub>60</sub>= 0.0141

D<sub>50</sub>= 0.0120

D<sub>30</sub>= 0.0076

D<sub>15</sub>= 0.0037

D<sub>10</sub>= 0.0024

C<sub>u</sub>= 5.87

C<sub>c</sub>= 1.70

## Classification

USCS=

AASHTO=

## Remarks

Sample No.: 9-009  
Location: B1, S8

Source of Sample:

Date: 4-15-2019  
Elev./Depth: 20-22'

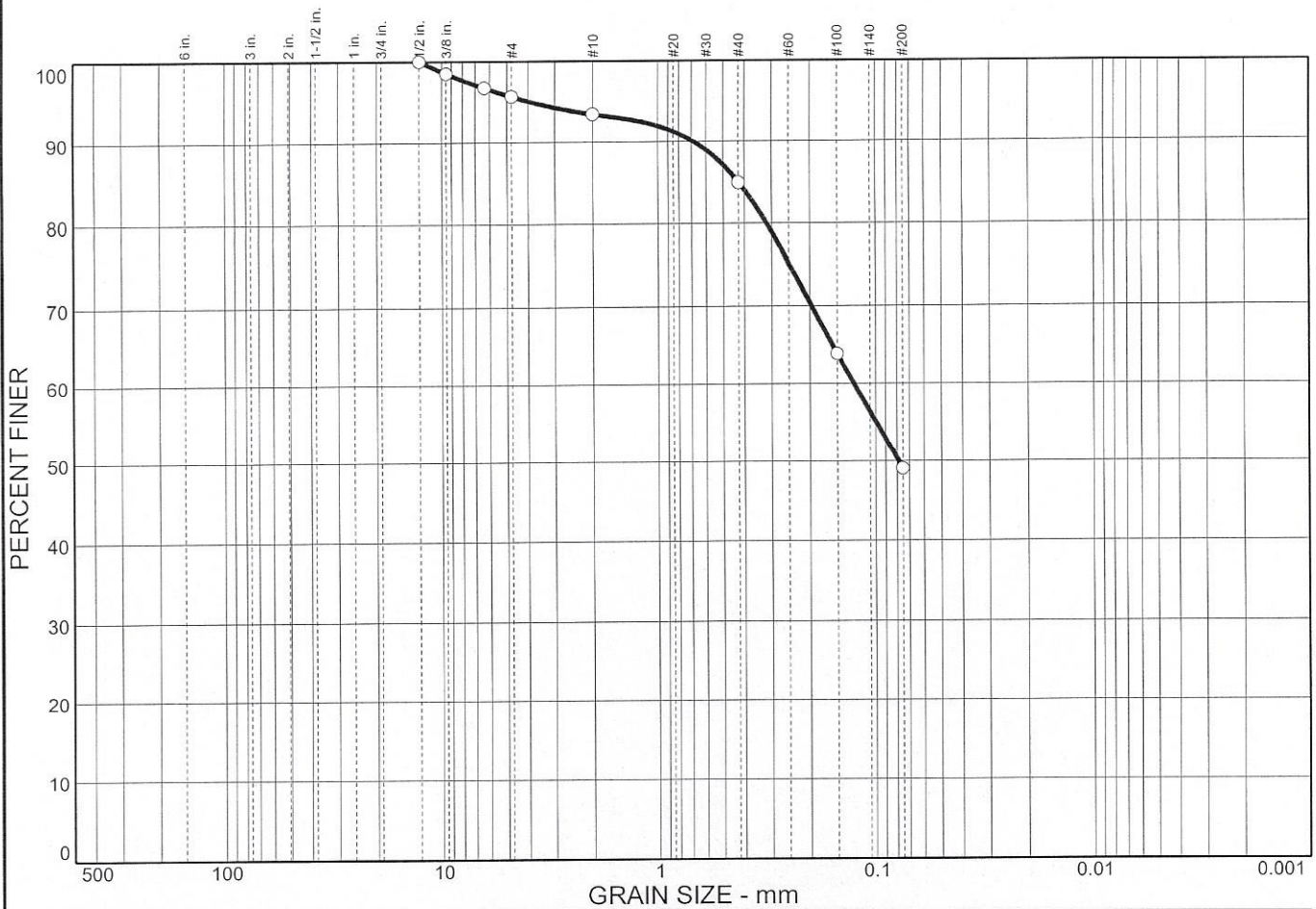
**SJB**  
**SERVICES, INC.**

Client: Shumaker Engineering  
Project: Proposed Culvert, Main St. Tusten, NY

Project No: WA-19-005

Plate

# Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	4.4	46.6	49.0	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1/2 in.	100.0		
3/8 in.	98.5		
1/4 in.	96.7		
#4	95.6		
#10	93.4		
#40	84.9		
#100	63.9		
#200	49.0		

\* (no specification provided)

**Soil Description**  
 Brown Silt and Sand, Trace Gravel

**Atterberg Limits**  
 PL=      LL=      PI=

**Coefficients**  
 D<sub>85</sub>= 0.428      D<sub>60</sub>= 0.126      D<sub>50</sub>= 0.0786  
 D<sub>30</sub>=      D<sub>15</sub>=      D<sub>10</sub>=  
 C<sub>u</sub>=      C<sub>c</sub>=

**Classification**  
 USCS=      AASHTO=

**Remarks**

Sample No.: 9-010  
Location: B2, S5

Source of Sample:

Date: 4-3-2019  
Elev./Depth: 8-10'

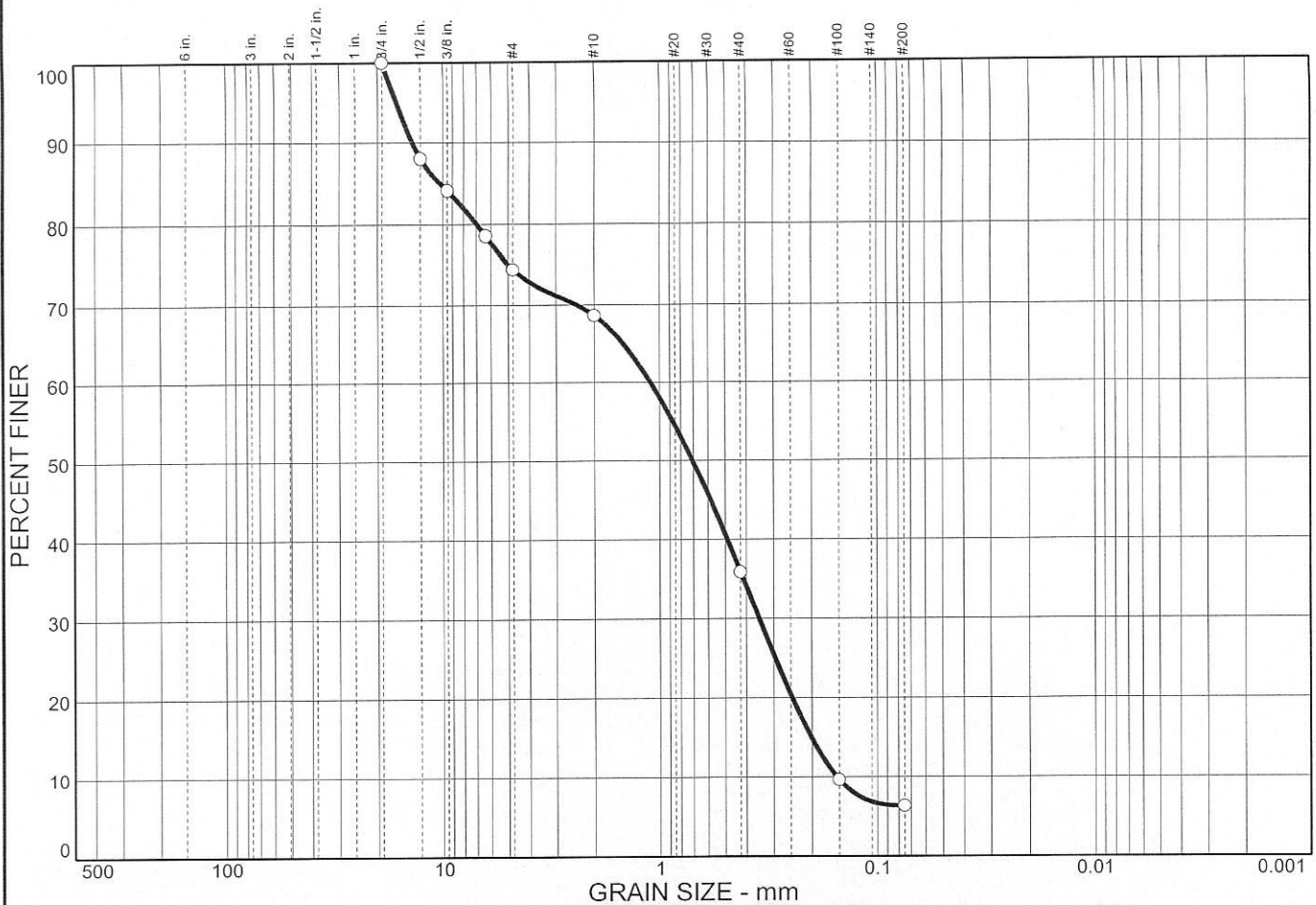
**SJB**  
**SERVICES, INC.**

Client: Shumaker Engineering  
Project: Proposed Culvert, Main St. Tusten, NY

Project No: WA-18-005

Plate

# Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	25.4	68.3	6.3	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
3/4 in.	100.0		
1/2 in.	88.0		
3/8 in.	84.1		
1/4 in.	78.6		
#4	74.6		
#10	68.6		
#40	35.9		
#100	9.6		
#200	6.3		

\* (no specification provided)

**Soil Description**  
 Brown Sand and Gravel

**Atterberg Limits**  
 PL=      LL=      PI=

**Coefficients**  
 D<sub>85</sub>= 10.3      D<sub>60</sub>= 1.11      D<sub>50</sub>= 0.709  
 D<sub>30</sub>= 0.349      D<sub>15</sub>= 0.202      D<sub>10</sub>= 0.154  
 C<sub>u</sub>= 7.17      C<sub>c</sub>= 0.71

**Classification**  
 USCS=      AASHTO=

**Remarks**

Sample No.: 9-011  
Location: B2, S7

Source of Sample:

Date: 4-3-2019  
Elev./Depth: 15-17'

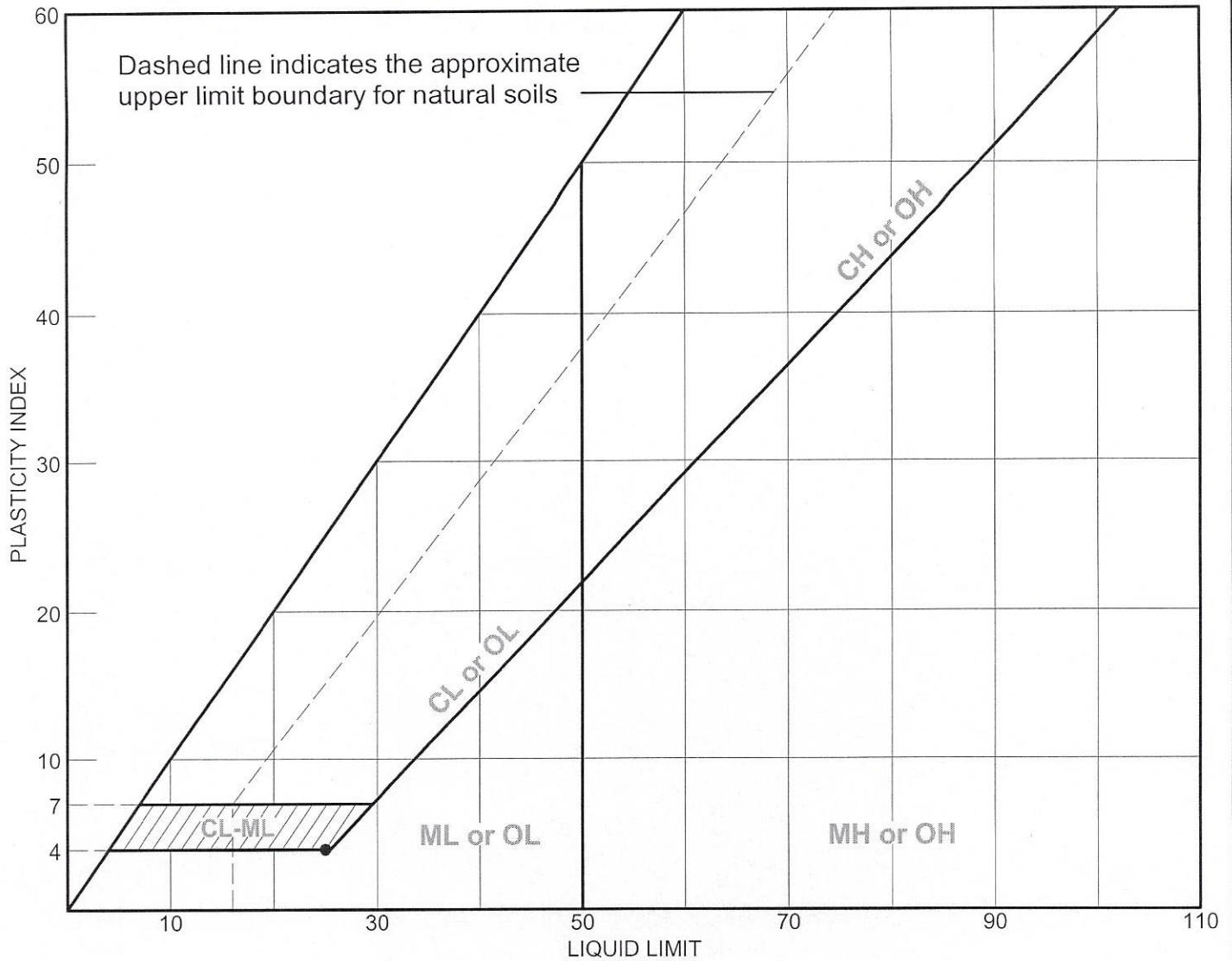
**SJB**  
**SERVICES, INC.**

Client: Shumaker Engineering  
Project: Proposed Culvert, Main St. Tusten, NY

Project No: WA-18-005

Plate

# LIQUID AND PLASTIC LIMITS TEST REPORT



## SOIL DATA

SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
•	B-2	9-012	30-32'	22.4	21	25	4	

LIQUID AND PLASTIC LIMITS TEST REPORT

**SJB**  
**SERVICES, INC.**

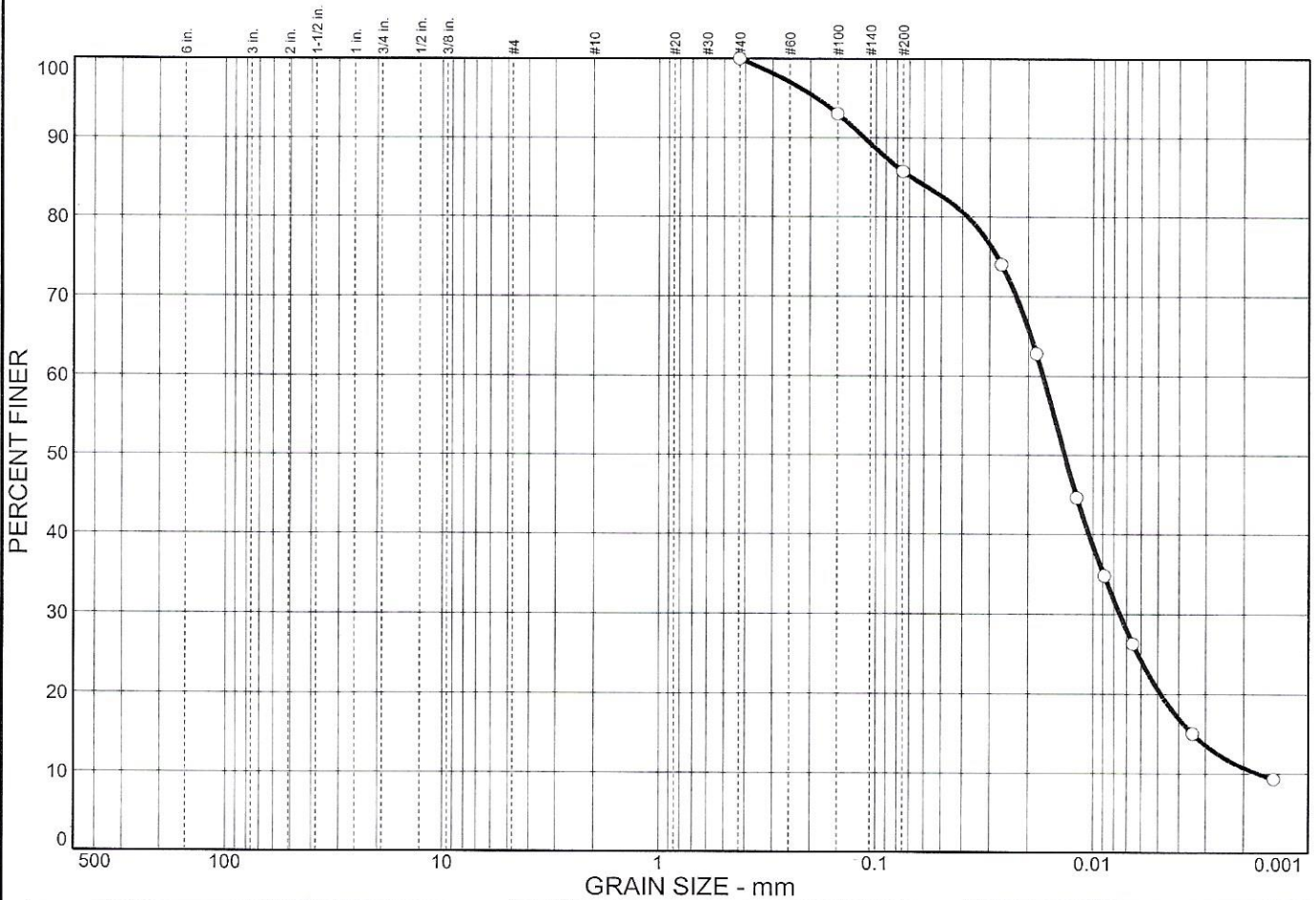
**Client:** Shumaker Engineering

**Project:** Proposed Culvert, Main St. Tusten, NY

**Project No.:** WA-18-005

**Plate**

# Particle Size Distribution Report



% COBBLES	% GRAVEL	% SAND	% SILT	% CLAY
0.0	0.0	14.3	65.2	20.5

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#40	100.0		
#100	93.0		
#200	85.7		

\* (no specification provided)

**Soil Description**

**Atterberg Limits**  
 PL= 21      LL= 25      PI= 4

**Coefficients**  
 D<sub>85</sub>= 0.0689      D<sub>60</sub>= 0.0171      D<sub>50</sub>= 0.0136  
 D<sub>30</sub>= 0.0075      D<sub>15</sub>= 0.0035      D<sub>10</sub>= 0.0017  
 C<sub>u</sub>= 9.96      C<sub>c</sub>= 1.93

**Classification**  
 USCS=      AASHTO=

**Remarks**

Sample No.: 9-012  
Location: B2, S10

Source of Sample:

Date: 4-15-2019  
Elev./Depth: 30-32'

**SJB**  
**SERVICES, INC.**

Client: Shumaker Engineering  
Project: Proposed Culvert, Main St. Tusten, NY

Project No: WA-19-005

Plate

## **ATTACHMENT C**

*General Fill Material and Earthwork Recommendations*

## ATTACHMENT C

### GENERAL FILL MATERIAL AND EARTHWORK RECOMMENDATIONS

#### I. Material Recommendations

##### A. Structural Fill

Structural Fill should consist of processed sand and gravel or crusher run stone, free of clay, organics and friable or deleterious particles. As a minimum, the material should meet the requirements of NYS Department of Transportation Standard Specifications, Item 733.0402 or 733.0404 – Type 2 or 4 Subbase, with the following general gradation limits.

<u>Sieve Size Distribution</u>	<u>Percent Finer by Weight</u>
2 inch	100
¾ inch	25-65
No. 40	5-40
No. 200	0-10

##### B. Suitable Granular Fill

Suitable soil material, classified as GW, GP, GM, SW, SP and SM soils using the Unified Soil Classification System (ASTM D-2487) and having no more than 85- percent material by weight passing the No. 40 sieve, no more than 20- percent material by weight passing the No. 200 sieve and which is generally free of particles greater than 6 inches, will be acceptable as Suitable Granular Fill. It should also be free of topsoil, asphalt, concrete rubble, wood, debris, clay and other deleterious materials. Suitable Granular Fill should be used as foundation backfill.

#### II. Placement and Compaction Requirements

All controlled fill placed beneath foundations, and all foundation backfill should be compacted to a minimum 95 percent of the maximum dry density as determined by the modified Proctor test (ASTM D1557). During placement, individual fill layers should not exceed a loose lift thickness of 6 to 9 inches, and lift thickness should be limited as necessary to ensure that adequate compaction is achieved with the compaction equipment in use.

Fill should have a moisture content within two percent of the optimum moisture content prior to compaction. Subgrades should be properly drained and protected from moisture and frost. Placement of fill on frozen subgrades is not acceptable. It is recommended that all fill placement and compaction be monitored and tested by a

representative of the engineer.

### III. Quality Assurance Testing

The following minimum laboratory and field quality assurance testing frequencies are recommended to verify fill material quality, and to ensure satisfactory placement and compaction of the fill. These minimum frequencies are based on generally uniform material properties and placement conditions. Should material properties vary or conditions at the time of placement vary (e.g., moisture content, placement and compaction, procedures or equipment, etc.) Then more frequent testing would be recommended. Any additional testing which may be necessary should be determined by qualified geotechnical personnel, based on evaluation of the actual fill material and construction conditions.

#### A. Laboratory Testing of Material Properties

- Moisture content (ASTM D-2216) - 1 test per 4000 cubic yards or no less than 2 tests per each material type.
- Grain size analysis (ASTM D-422) - 1 test per 4000 cubic yards or no less than 2 tests per each material type.
- Liquid and plastic limits (ASTM D-4318) - 1 test per 4000 cubic yards or no less than 2 tests per each material type. Liquid and plastic limit testing would generally be necessary only if deemed appropriate based on material composition (e.g., clayey or silty soils).
- Modified Proctor moisture-density relationship (ASTM D-1557) - 1 test per 4000 cubic yards or no less than 1 test per each material type. A maximum/minimum density relationship (ASTM D-4253 and ASTM D-4254) may be an appropriate substitute for ASTM D-1557 depending on material gradation.

#### B. Field In-Place Moisture/Density Testing (ASTM D-3017 and ASTM D-2922)

- Backfilling along trenches and foundation walls - 1 test per 50 lineal feet per lift.
- Backfilling isolated excavations (e.g., column foundations, manholes, etc.) - 1 test per lift.

**ATTACHMENT D**

*Information Regarding Geotechnical Report*

## GEOTECHNICAL REPORT LIMITATIONS

WMA Engineering DPC / DBA Empire Geotechnical Engineering Services (Empire) has endeavored to meet the generally accepted standard of care for the services completed, and in doing so is obliged to advise the geotechnical report user of our report limitations. Empire believes that providing information about the report preparation and limitations is essential to help the user reduce geotechnical-related delays, cost over-runs, and other problems that can develop during the design and construction process. Empire would be pleased to answer any questions regarding the following limitations and use of our report to assist the user in assessing risks and planning for site development and construction.

**PROJECT SPECIFIC FACTORS:** The conclusions and recommendations provided in our geotechnical report were prepared based on project specific factors described in the report, such as size, loading, and intended use of structures; general configuration of structures, roadways, and parking lots; existing and proposed site grading; and any other pertinent project information. Changes to the project details may alter the factors considered in development of the report conclusions and recommendations. *Accordingly, Empire cannot accept responsibility for problems which may develop if we are not consulted regarding any changes to the project specific factors that were assumed during the report preparation.*

**SUBSURFACE CONDITIONS:** The site exploration investigated subsurface conditions only at discrete test locations. Empire has used judgement to infer subsurface conditions between the discrete test locations, and on this basis the conclusions and recommendations in our geotechnical report were developed. It should be understood that the overall subsurface conditions inferred by Empire may vary from those revealed during construction, and these variations may impact on the assumptions made in developing the report conclusions and recommendations. *For this reason, Empire should be retained during construction to confirm that conditions are as expected, and to refine our conclusions and recommendations in the event that conditions are encountered that were not disclosed during the site exploration program.*

**USE OF GEOTECHNICAL REPORT:** Unless indicated otherwise, our geotechnical report has been prepared for the use of our client for specific application to the site and project conditions described in the report. *Without consulting with Empire, our geotechnical report should not be applied by any party to other sites or for any uses other than those originally intended.*

**CHANGES IN SITE CONDITIONS:** Surface and subsurface conditions are subject to change at a project site subsequent to preparation of the geotechnical report. Changes may include, but are not limited to, floods, earthquakes, groundwater fluctuations, and construction activities at the site and/or adjoining properties. *Empire should be informed of any such changes to determine if additional investigative and/or evaluation work is warranted.*

**MISINTERPRETATION OF REPORT:** The conclusions and recommendations contained in our geotechnical report are subject to misinterpretation. *To limit this possibility, Empire should review project plans and specifications relative to geotechnical issues to confirm that the recommendations contained in our report have been properly interpreted and applied.*

Subsurface exploration logs and other report data are also subject to misinterpretation by others if they are separated from the geotechnical report. This often occurs when copies of logs are given to contractors during the bid preparation process. *To minimize the potential for misinterpretation, the subsurface logs should not be separated from our geotechnical report and the use of excerpted or incomplete portions of the report should be avoided.*

**OTHER LIMITATIONS:** Geotechnical engineering is less exact than other design disciplines, as it is based partly on judgement and opinion. For this reason, our geotechnical report may include clauses that identify the limits of Empire's responsibility, or that may describe other limitations specific to a project. These clauses are intended to help all parties recognize their responsibilities and to assist them in assessing risks and decision making. Empire would be pleased to discuss these clauses and to answer any questions that may arise.

# APPENDIX

J

## Tusten Culvert/Little Lake Erie Dam Existing Hydrologic and Hydraulic Conditions Summary

### Hydrology

Inflow hydrographs to the dam were developed using the Soil Conservation Service (SCS) Unit hydrograph method imbedded in the HydroCAD version 10.00-24 software. "CN" values were estimated from review of land use, aerial photography and Sullivan County Soil Mapping. Predominant soil types consist of Hydrologic Group C and D soils intermixed with smaller amounts of type B soils for the inflow areas upstream of the dam. Land cover primarily consists of heavily wooded areas and open fields along with several upstream lakes and ponds.

The 24 hour precipitation values for all recurrence interval storm events were obtained from NOAA Atlas 14 precipitation data for the project vicinity. Recurrence interval storms investigated included the 1,2,5,10,25,50 and 100-year storms. It is noted that the 100-year (1% annual chance) flood is considered the Spillway Design Flood (SDF) for an existing small, low "A" hazard dam.

The total drainage area entering the dam is 1,880 acres or 2.94 square miles (see attached Drainage Area Map). The drainage network was broken into 6 subareas, five stream routing reaches and four upstream storage areas to more accurately estimate the composite inflow hydrographs into Little Lake Erie. Lag time's (Tlag) for the inflow hydrographs were computed utilizing travel time methodology from NCRS TR-55 procedures, with  $T_{lag} = 0.6 \times T_c$  (time of concentration).

### Spillway Hydraulics

Little Lake Erie reservoir routing was performed assuming normal summer pool conditions (elevation 692.4±). Stage-storage relationships were developed from 2' contour data (from Sullivan County GIS LiDAR mapping) supplemented with aerial photos. A stage-discharge rating curve for the primary spillway configuration was developed by hydraulic routines imbedded within the HydroCAD program. The primary spillway was modeled as a box culvert with an effective waterway opening of 10.7' wide by 2.4' high. Two supplementary 30" CIP pipes located to the left and right of the primary spillway (looking downstream) were also included in the reservoir routings. It is noted that the inlet inverts of the 30" CIP pipes are essentially the same as the primary spillway (the right is about 2 inches lower and the left 2 inches higher). The peak inflows, outflows and reservoir stages for selected routed storm events assuming **free flow conditions** are presented in Table B below.

As can be observed from Table B, the water surface elevation exceeds the lowest top (elevation 697.0) of Little Lake Erie dam crest (the roadway over the dam) beginning at the 5-year return interval storm assuming downstream free flow conditions which implies a severely inadequate spillway capacity. Normally under such conditions, conventional spillway capacity improvements would be investigated to safely pass the SDF or the 100-year flood. However based on detailed downstream survey, a downstream hydraulic control does exist that will preclude traditional spillway capacity improvements. The downstream hydraulic control is located approximately 200' downstream of the Little Lake Erie dam and consists of an 8'X8' arch underneath a tall railroad embankment. Note the top of railroad embankment is (elevation 716.0) is

approximately 19' higher than the crest elevation of Little Erie Dam. To assess the hydraulic impact of the downstream railroad embankment and arch culvert on the Little Lake Erie Dam, SCE used the hydrodynamic flow modeling routine of the HydroCAD model to route outflows from Little Lake Erie Dam through the downstream railroad embankment and arch culvert. The HydroCAD results of this condition are shown in Table A. As can be observed from Table A, the backwater influence from the railroad starts to control the Little Lake Erie spillway capacity beginning at approximately the 10-year event. It is noted that the routing results for larger storms (>25-year recurrence interval) becomes unstable (outflow exceeds inflow) due to the large submergence depth (at Little Lake Erie) caused by the railroad embankment.

**TABLE A (Node 5P)**

Dam Capacity w/ RR Backwater			
Event	Inflow	Outflow	Elevation
	(cfs)	(cfs)	(feet)
1-yr	65	53	693.54
2-yr	155	146	694.59
5-yr	415	326	697.33
10-yr	705	609	698.45
25-yr	1,165	2,657	701.15
50-yr	1,545	4,740	704.22
100-yr	1,928	7,035	706.95

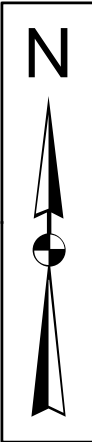
**TABLE B (Node 5P)**

Dam Capacity w/o RR Backwater			
Event	Inflow	Outflow	Elevation
	(cfs)	(cfs)	(feet)
1-yr	65	53	693.54
2-yr	155	146	694.59
5-yr	415	326	697.33
10-yr	705	674	698.09
25-yr	1,165	1,153	698.57
50-yr	1,545	1,534	698.88
100-yr	1,928	1,917	699.15

## **Conclusions**

From the results of the hydrologic and hydraulic analysis summarized above, traditional spillway capacity improvements (enlarging spillways etc.) are not recommended as the downstream railroad embankment begins to control outflows at approximately the 10-year recurrence interval. Proposed dam improvements should rather focus on downstream armoring to prevent downstream slope erosion during overtopping events where the Little Lake Erie dam crest is not totally submerged from downstream backwater (between a 5 and 10-year recurrence interval).

SCE also investigated the influence of the two 30" CIP pipes on the overall spillway capacity of the dam by comparing outflows and reservoir stages with and without the pipes in place. The results of this analysis showed that there was virtually no difference in outflows and associated reservoir stages with or without the pipes. Since both pipes have inverts near the normal pool elevation and actively engage flows even during routine rainfall events, it is our recommendation that the pipes be removed or plugged to avoid erosion on the downstream embankment.



**Legend**

Tusten\_RailRoads

Tusten\_Streets

LittleLakeErie\_FlowPath

BuddenhagenRoad

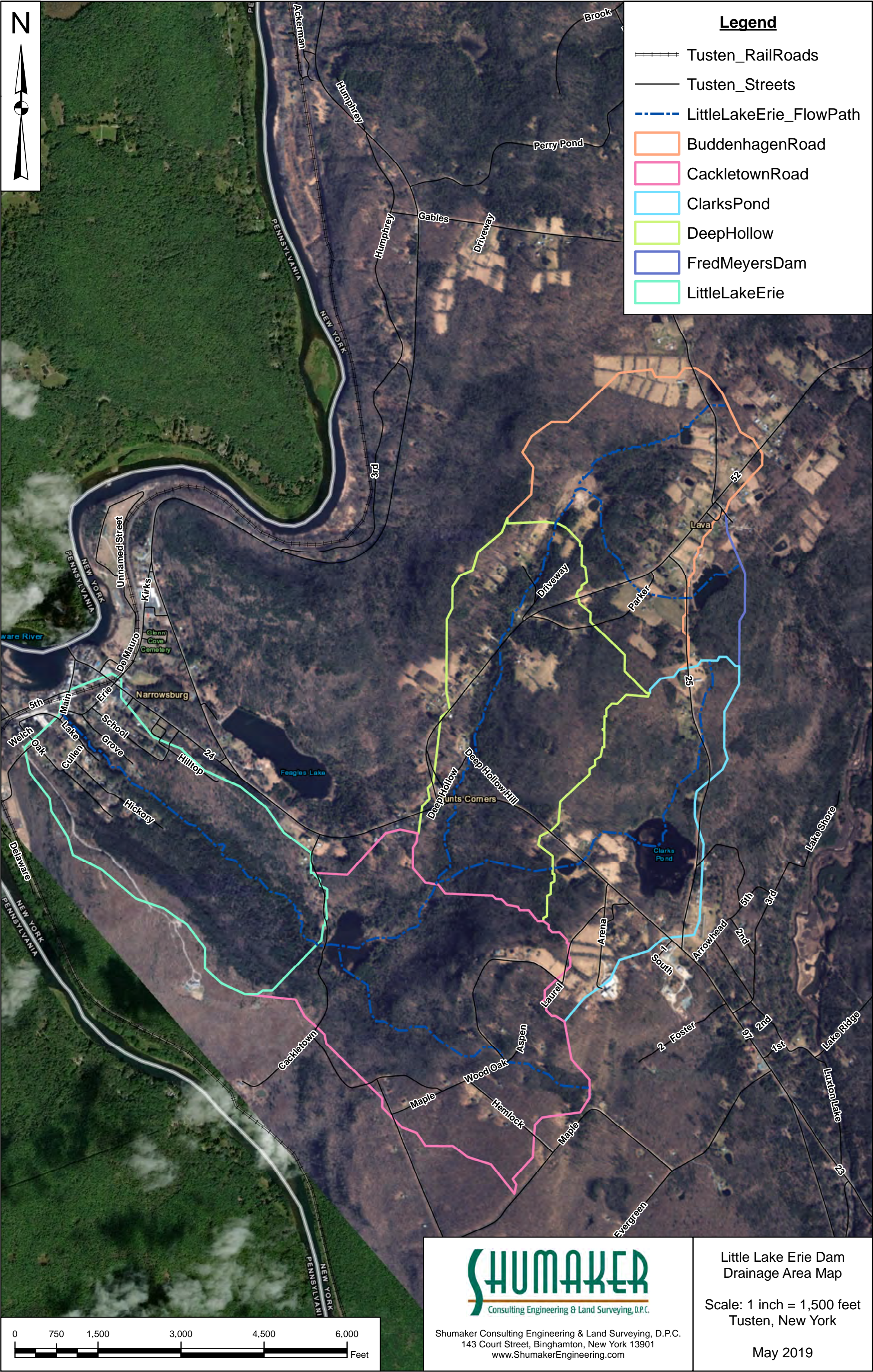
CackletownRoad

ClarksPond

DeepHollow

FredMeyersDam

LittleLakeErie

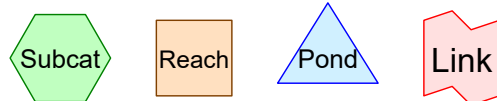
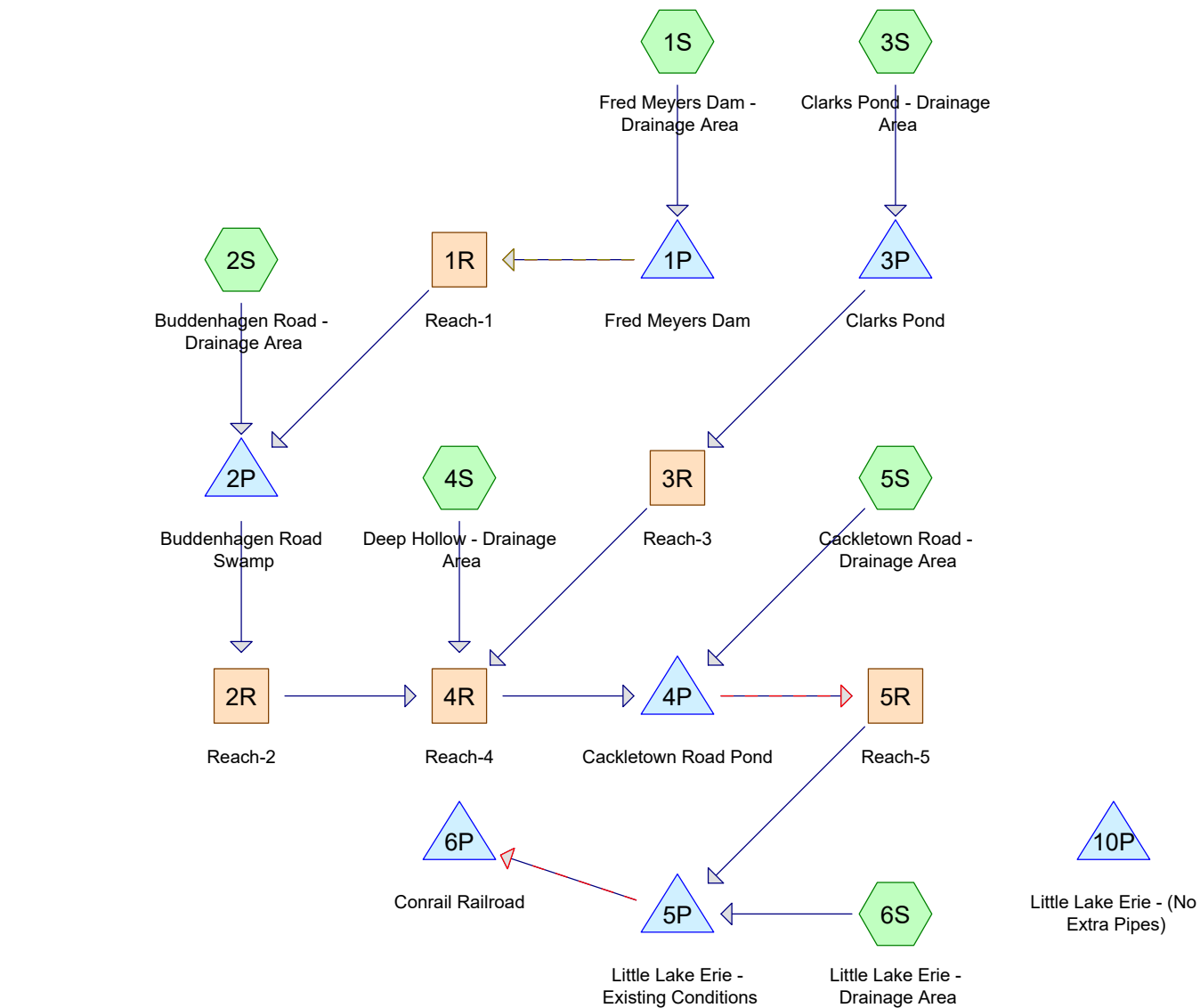


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Little Lake Erie Dam  
Drainage Area Map

Scale: 1 inch = 1,500 feet  
Tusten, New York

May 2019



### Routing Diagram for Little Lake Erie - Existing Conditions (03292019)

Prepared by {enter your company name here}, Printed 5/22/2019  
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