



Engineering
& Design

NY State Thruway (Toll road)

Erie Canal
Historical Marker

Port Byron Travel Plaza

Mobil

Port Byron Service Area: Water Main Replacement

Preliminary Engineering Report

May 16, 2025

Prepared for:

NYS Thruway Authority
Architectural Design Bureau
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Albany, New York 12209

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1. INTRODUCTION

The Port Byron Service Area includes a travel plaza, fuel islands with a kiosk, and a fuel station building. Supporting site infrastructure consists of asphalt-paved parking areas, propane tanks, a trash enclosure, and a wastewater treatment plant (WWTP).

Originally rehabilitated in 1992 by McDonald's Corporation, the travel plaza houses several fast-food establishments—including McDonald's, Boston Pizza, Edy's Ice Cream, and Fresh Fudge—along with a newsstand/gift shop, a travel information center, and public restrooms. The facility is served by both domestic water and fire suppression systems.

In 2022 the existing facility was demolished, and a new facility was building by _____.

1.1. Purpose of the Project

The proposed water main improvements involve connecting the Port Byron Service Area to the Town of Montezuma's 8-inch municipal water system along NYS Route 31 using a new 8-inch high-density polyethylene (HDPE) water main. The existing water supply connection to the 8-inch water main located along the south side of I-90 will be cut, capped, and abandoned in place. All existing internal water lines serving the domestic and fire protection systems for the travel plaza, gas station, and wastewater treatment plant (WWTP) will remain in service and continue to be utilized.

1.2. Project Location

The Port Byron Service Area is located at milepost 310.2 on the eastbound lane of the New York State Thruway (Interstate 90) in Cayuga County.

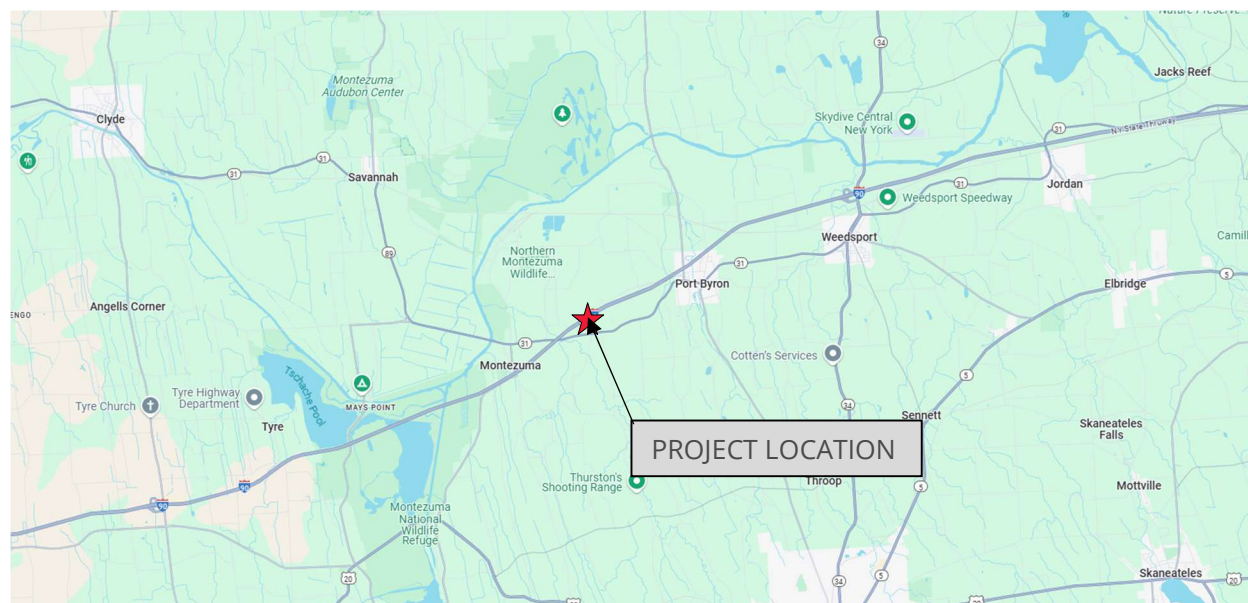


Figure 1 Google maps 2025

2. EXISTING CONDITIONS

2.1. Existing Water Service

The water is supplied by the Cayuga County Water and Sewer Authority (CCWSA), directly north of the travel plaza, a combined 8-inch domestic and fire suppression water service connects to the municipal 8-inch water main via a tapping sleeve and valve (TS&V). From the TS&V, a fire hydrant is installed, and the CCWSA's 8-inch service line runs along the eastern face of the travel plaza, where it connects to a 6-inch line via a tee fitting located southeast of the building.

At this tee, the 8-inch line splits and is reduced to a 6-inch diameter, with both the east and west extensions terminating at fire hydrants.

2.2. Subsurface Conditions

Soil conditions at the project site were evaluated through a site-specific subsurface investigation. The findings of this investigation are summarized below.

On December 28, 2017, Ravi Engineers & Land Surveyors, P.C. (Ravi) conducted a geotechnical engineering study for the proposed project. The investigation included two soil borings (designated FHX-1 and FHX-2) located at the intersection of the employee entrance access road and NYS Route 31. The borings were performed by Earth Dimensions, Inc. using rotary drilling equipment.

In addition to the two new borings, Ravi also reviewed the logs of five previous test borings (B-1 through B-5), which were conducted by Empire Soils Investigations on October 23 and 24, 1991, during the design phase of the travel plaza building.

The soil characteristics observed in borings FHX-1 and FHX-2, completed at the intersection of the employee access road and NYS Route 31, are summarized in Table 2.1 below.

Table 2.1 – Soil Properties						
Test Boring Number	Approximate Depth Range (FT)	Approximate Soil Total Unit Weight (PCF)	Approximate Soil Internal Friction Angle (degrees)	Approximate Soil Cohesion (PSF)	Groundwater Depth (FT)	Bedrock Depth (FT)
FHX-1	0-8	120	30	0	Not Encountered	Not Encountered
	8-10	130	35	0		
	10-16	140	40	0		
FHX-2	0-6	120	30	0	10	Not Encountered
	6-12	130	35	0		
	12-16	140	40	0		

In general, the geotechnical engineering investigation report provided the following recommendations:

- Excavation Safety: Slope or properly support the sides of all excavations in accordance with applicable safety regulations.

- Excavation Conditions: Conduct all excavation work in dry conditions. Implement dewatering measures as necessary to allow proper preparation of the excavation bottom and ensure the effective placement and compaction of bedding and backfill materials.
- Subgrade Protection: Keep subgrades free of standing water, limit exposure to construction traffic, minimize the duration of exposure, and prevent freezing.
- Load-Bearing Backfill: Use durable, inorganic materials meeting the following gradation: 100% passing a 6-inch sieve, at least 90% passing a 3-inch sieve, and a minimum of 20% passing the No. 4 sieve. The plasticity index should not exceed 15.
- Compaction Requirements: Compact load bearing backfill to at least 95% of the maximum dry density as determined by ASTM D1557. A lower compaction standard may be acceptable for non-load-bearing areas.

The full Geotechnical Engineering Investigation Report, dated January 17, 2017, is included as Report Appendix B – Geotechnical Engineering Report.

2.2.1. Groundwater Conditions

As detailed in Table 2.1 – Soil Properties above, the first test boring (FHX-1) did not encounter groundwater, while groundwater was found at a depth of ten (10) feet below finish grade in the second test boring (FHX-2). The proposed water main will be installed with a minimum cover of 5 feet. Given this, the trench excavation for the water main will not extend to the ten-foot depth where groundwater was observed, ensuring that the pipe bedding material remains above the groundwater level.

The proposed master meter vault will be equipped with a 4-inch polyvinyl chloride (PVC) drain, which will daylight into a maintained grassed area. This drain is designed to remove any groundwater that may enter the structure

2.3. Topographic Survey

On November 7, 2017, Ravi Engineers & Land Surveyors, P.C. conducted field work for a topographic and utility survey of the project site. Additional Survey information was gathered by CED on May 2, 2025. The electronic digital survey data was utilized by CED to develop the base plans for the engineering drawings.

2.4. Floodplain Information

Identified within the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps, Panels #360104 and #36011C0220E for Cayuga County, the project site is located within Zone X, which is an area determined to be outside the 0.2% annual chance floodplain (also known as the "100-year floodplain").



Figure 2.0: FEMA Flood Insurance Rate Maps, Panels #360104 and #36011C0220E

2.5. Environmental Review

2.5.1. Wetlands

According to the U.S. Fish and Wildlife Service's National Wetlands Inventory (NWI) mapper, there are no U.S. Army Corps of Engineers (USACE) jurisdictional wetlands located within or immediately adjacent to the project site.

According to the New York State Department of Environmental Conservation (NYSDEC) Environmental Resource Mapper, portions of the Service Area fall within a NYS-regulated wetland check zone. As indicated on the NYSDEC website, mapped wetland boundaries are approximate, and the check zone represents an area surrounding the mapped wetland where wetlands may potentially be present.

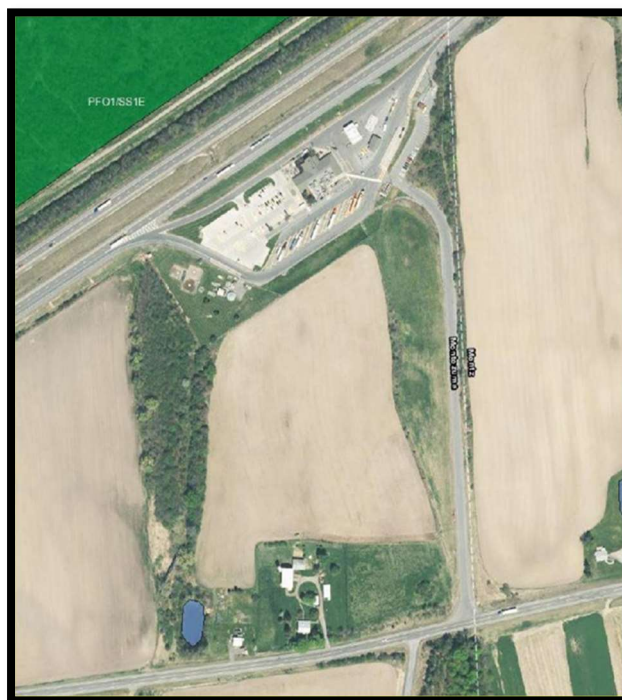


Figure 2.1: U.S. Fish and Wildlife Service Wetlands Inventory

However, the area within the check zone at the project site is already developed and includes Interstate 90 and the existing travel plaza, both of which feature significant impervious surfaces such as buildings, parking lots, and roadways. Therefore, the presence of jurisdictional wetlands in this area is unlikely. Furthermore, the proposed improvements are located at the outer edge of the check zone and are limited to the installation of water main piping within existing asphalt-paved areas.

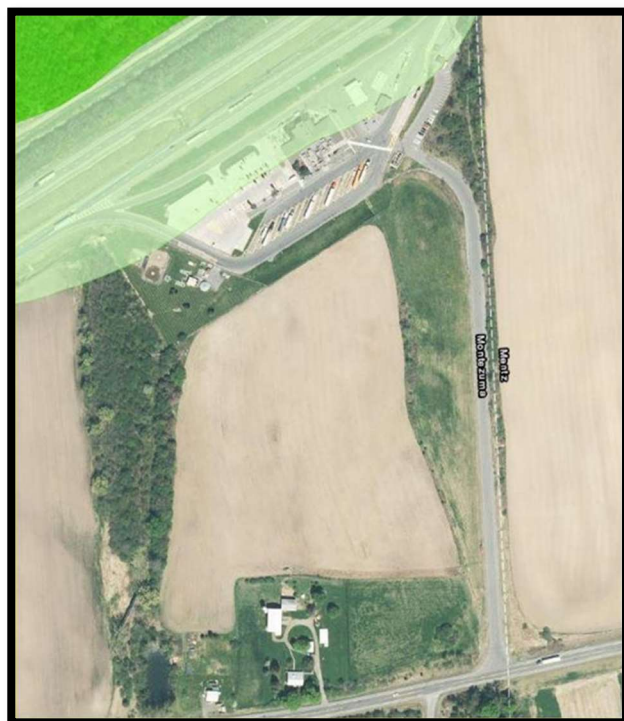
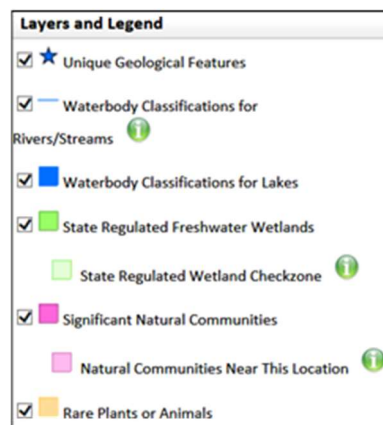


Figure 2.2: NYSDEC Environmental Resource Map



2.5.2. Historical and Cultural Review

According to the New York State Historic Preservation Office (SHPO) Cultural Resource Information System (CRIS), the project site is not located within an archaeologically sensitive area. The following archaeological surveys have been conducted in the vicinity, as identified on the CRIS mapping system:

- Report of the Stage IA/B Cultural Resource Investigation for the Fiber Optic Cable Project from I-90 Interchange at Canastota to the Western New York/Pennsylvania Border (2 Volumes) (Survey No. 98SR50203)
- Cultural Resources Management Report Phase IB Cultural Resource Reconnaissance Survey for the Proposed Joint Water System Improvements Project, Towns of Mentz and Montezuma, Village of Port Byron, Cayuga County, New York (Survey No. 14SR63057)



Figure 2.3: Cultural Resource Information System (CRIS) Map



3. PROPOSED IMPROVEMENTS

3.1. Overview

The proposed water main improvements involve connecting the Port Byron Service Area to the Town of Montezuma's 8-inch municipal water main located along NYS Route 31 using an 8-inch high-density polyethylene (HDPE) water main. The Cayuga County Water and Sewer Authority (CCWSA) supply the water.

The existing connection to the 8-inch water main along the south side of I-90 will be cut, capped, and abandoned in place. The internal water lines that currently serve the domestic and fire protection systems for the travel plaza, gas station, and wastewater treatment plant (WWTP) will remain in service and continue to be utilized.

3.2. Basis of Design

Based on hydraulic modeling calculations of the NYS Route 31 water main design prepared by Barton & Loguidice in 2015, CED conducted preliminary sizing calculations for the proposed water main extension from the NYS Route 31 municipal system to the Port Byron Service Area. The results indicate that an 8-inch HDPE water main is adequate to meet both the domestic and fire suppression demands of the travel plaza.

3.3. Service Connection

During the 2016 installation of the 8-inch municipal water main along the south side of NYS Route 31, a stub connection was constructed to accommodate a future extension to the Port Byron Service Area. This stub consists of an 8" x 8" x 6" tee, a 6-inch gate valve, and a blind flange. It is located within the Town of Montezuma, on the west side of the employee entrance access road across NYS Route 31, between a fire hydrant and an HDPE-to-PVC coupling.

However, the existing 8" x 8" x 6" tee is not adequately sized to serve as the connection point for the proposed combined fire protection and domestic water service.

This connection will require replacing the existing 8" x 8" x 6" tee with an 8" x 8" x 8" tee. From the new tee, the 8-inch HDPE water main will be "jack and bored" or directionally drilled beneath NYS Route 31. Excavation of directional drilling and receiving pits on both sides of the roadway will be required, and temporary closure of the NYS Route 31 road shoulder is anticipated. After crossing NYS Route 31, the water main will run along the west side of the Authority's employee access road.

A new precast concrete master meter vault will be installed along the employee access road, near its intersection with NYS Route 31. The vault will be equipped with a fire-series water meter featuring an integral strainer, remote registration system, combination air valve, and external bypass piping with isolation valves.

The new 8-inch water line will connect to the existing 8-inch water main that runs north-south beneath the asphalt-paved parking spaces along the east side of the travel plaza.

Construction of the new water main will involve a coordinated sequence of connections and shutdowns, strategically planned to minimize disruption to the existing water distribution system

and operations at the Port Byron Service Area. The new water main will be installed, pressure tested to 150 psi, and disinfected prior to any tie-in with the existing system. All work will be performed in accordance with AWWA C600 (Pipeline Construction and Pressure Testing), AWWA C651 (Disinfection of Water Mains), and applicable requirements of the Cayuga County Department of Health. No modifications will be made within the travel plaza's existing mechanical room as part of this project.

3.3.1. Disinfection

Connecting to the municipal water system along NYS Route 31 is expected to eliminate the need for re-chlorination, as the system is looped and experiences higher water turnover, which helps maintain adequate free residual chlorine levels.

3.4. Permitting

Permitting from the New York State Department of Transportation (NYSDOT), the Cayuga County Water and Sewer Authority (CCWSA), and the Cayuga County Department of Health (CCDOH) is anticipated for the proposed improvements. Expected permits may include, but are not limited to, the following:

- NYSDOT Highway Work Permit for Utility Work (Form PERM-32): Required for utility installations or modifications within the NYSDOT right-of-way.
- CCWSA and CCDOH Application for Approval of Plans for Public Water Supply Improvement (Form DOH-348): Required for the proposed extension of the public water supply system.

For additional information on anticipated project permits, refer to Report Appendix C – Regulatory Permits.

4. OPINION OF PROBABLE COST

Based on the design of the new water main along the facility access road, new water meter vault, our opinion of probable construction costs is summarized below.

Description	Unit	No. of Units	Cost /Unit	Cost
Mobilization	Lump Sum	1	\$25,000	\$25,000
Sitework/Earthwork	Lump Sum	1	\$60,000	\$60,000
Utility/ Water Main	Linear Foot	1800 LF	\$300	\$540,000
Water Meter Vault	Each	1	\$90,000	\$90,000
Hydrants	Each	3	\$5,500	\$16,500
Valves	Each	6	\$3,200	\$19,200
Road Crossing	Linear Foot	80 LF	\$1000	\$80,000
Water Main Connection	Each	2	\$20,000	\$40,000
Sub Total				\$870,000
Contingency (Rounded)	20%			\$174,800
Overhead & Profit (Rounded)	10%			\$104,500
Total				\$1,150,000

5. PROJECT SCHEDULE

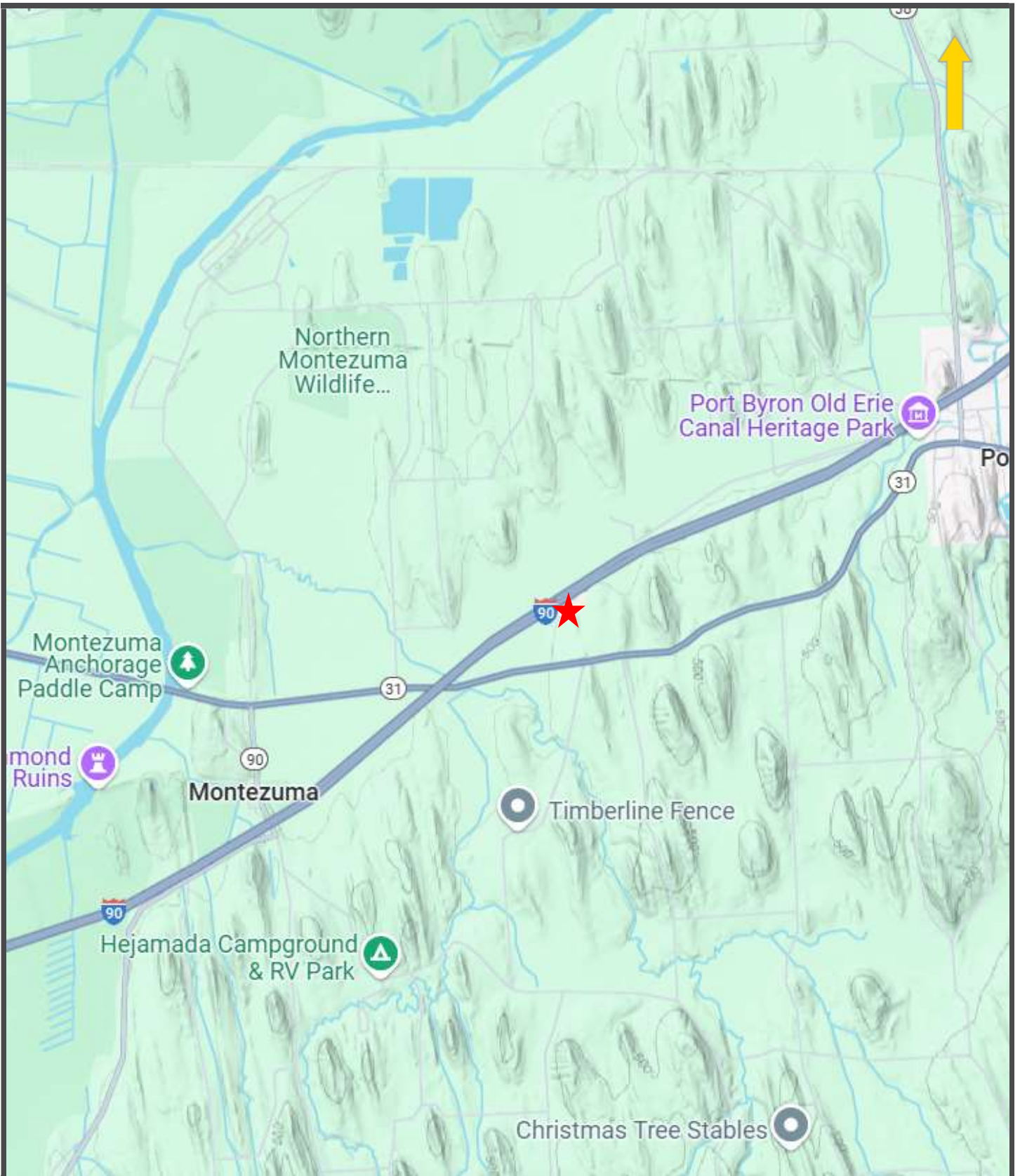
NYS Thruway Authority: D214975 Port Byron Water Main Replacement



The proposed construction schedule (above) is based on the anticipated Bid Letting date of October 1, 2025. The Milestones are as follows:

- Milestone 1: Bid Letting
- Milestone 2: Contract Award
- Milestone 3: Mobilization
- Milestone 4: Final Completion

Appendix A: Location Map(s)



Appendix B: Geotechnical Report

January 17, 2018

Beardsley Architects + Engineers
5789 Widewaters Parkway
Dewitt, New York 13214

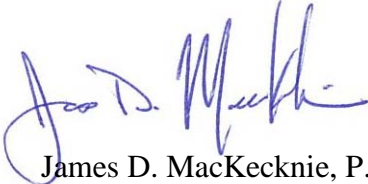
Attention: Thomas Ascienzo

Subject: Geotechnical Engineering Investigation
Proposed New Water Main
Port Byron Service Area
New York State Thruway

Mr. Ascienzo,

Ravi Engineering & Land Surveying, P.C. is pleased to submit the Geotechnical Report for the above referenced project. If you require additional information please contact us at (585) 223-3660. Thank you.

Respectfully submitted,
RAVI ENGINEERING & LAND SURVEYING, P.C.



James D. MacKecknie, P.G.
Project Manager

Attachment: Geotechnical Engineering Investigation Report

REPORT
GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED NEW WATER MAIN
PORT BYRON SERVICE AREA
NEW YORK STATE THRUWAY

For
Beardsley Architects + Engineers

January 2018

January 17, 2018

Beardsley Architects + Engineers
5789 Widewaters Parkway
Dewitt, New York 13214

Attention: Carmen Lapine

Subject: Geotechnical Engineering Investigation
Proposed New Water Main
Port Byron Service Area
New York State Thruway

Readers:

This report presents the results of a geotechnical engineering investigation for the project identified above. Information regarding the proposed construction was provided to us by Beardsley Architects + Engineers.

RECENT SUBSURFACE EXPLORATIONS AND LABORATORY TEST RESULTS

Recent subsurface explorations for this investigation consisted of two test borings. The borings are identified as FHX-1 and FHX-2.

The borings were performed by Earth Dimensions, Inc., using rotary drilling equipment, on 12/28/17. Each boring was advanced to a depth of 16 feet below the ground surface.

On-site inspection was provided by Ravi Engineering & Land Surveying, P.C.

A location plan and the logs of the borings are presented in attached Appendix A.

Latitudinal and longitudinal coordinates, as well as the ground surface elevation at the boring location, are provided on the log of each boring.

The moisture content of each sample was determined, and these are provided on the boring logs.

It should be noted that short-term observations may not be representative of actual groundwater levels, and that groundwater levels will vary with factors including location, time, precipitation, season, and site activities.

PREVIOUS SUBSURFACE EXPLORATIONS

The logs of five previous test borings were provided to us by Beardsley Architects + Engineers. These borings were identified as B-1 through B-5.

The borings were performed by Empire Soils Investigations, Inc., for a proposed restaurant at the service area, on 10/23/91 and 10/24/91. Borings B-1 through B-4 were each advanced to a depth of 15 feet below the ground surface, and boring B-5 was advanced to a depth of 6 feet below the ground surface.

A location plan and the logs of the borings are presented in attached Appendix B.

DESIGN AND CONSTRUCTION

Entry and Receiving Pits for Trenchless Crossing

It is understood that an entry pit and a receiving pit, for a trenchless crossing, will be required at or very near the locations of borings FHX-1 and FHX-2.

Estimated soil properties, for the design of these pits, are presented in attached Table 1.

Excavation

Excavation should be performed in accordance with all applicable local, state, and federal requirements. The sides of all excavations should be sloped or supported as required by safety regulations. Existing structures, utilities, and other property should be protected.

With regard to the current OSHA regulations, Type C soil should be assumed. This would apply to adequately dewatered soil.

To minimize subgrade disturbance, excavation should be performed with increasing care as subgrade levels are approached.

Construction Dewatering

All work should be performed in the dry. The dewatering should be sufficient to permit suitable preparation of the excavation bottom, as well as the placement and compaction of bedding and backfill materials.

The contractor should be prepared to dewater as necessary, and should choose and employ an appropriate type of dewatering system. Any dewatering system should be operated in such a way that disturbance or removal of the subgrade soil does not occur.

Subgrade Preparation

It is cautioned that the soils at this site contain fine-grained material, and that they will be sensitive to disturbance. Subgrades should be kept free of water, subjected to a minimum amount of construction traffic, exposed no longer than necessary, and not permitted to freeze.

Subgrades should be carefully prepared and thoroughly examined by qualified personnel. Subgrades should also be tamped using vibratory equipment, to the greatest extent possible without loosening or softening the subgrade soils.

No new fill should be placed over material that is loose, soft, wet, frozen, organic, or otherwise unsuitable with respect to the design recommendations.

Bedding and Backfill

Bedding and backfill should satisfy the requirements of the project designers and the pipe provider/manufacturer.

As a minimum requirement, any load-bearing backfill should consist of durable and inorganic material. It should have 100 percent finer than 6 inches, at least 90 percent finer than 3 inches, and at least 20 percent finer than the Number 4 sieve. The plasticity index should be less than 15. As noted above, more stringent requirements may be imposed by others.

It appears that much of the inorganic on-site soil may satisfy the material requirements for backfill. It should be noted, however, that more select materials can generally be placed and compacted with less difficulty.

As a minimum requirement, all load-bearing backfill should be compacted to at least 95 percent of the maximum dry density determined by ASTM D 1557. In non-load-bearing areas, a lesser degree of compaction may be appropriate.

CLOSING COMMENTS AND RECOMMENDATIONS

Professional services for this investigation were performed in accordance with generally accepted geotechnical engineering practices, exclusively for the subject project. No warranty, expressed or implied, is made.

Subsurface conditions are inferred from the logs of subsurface explorations. Conditions between, beyond, and below these explorations are likely to vary. It should also be noted that subsurface conditions are often described on the basis of visual examinations of recovered samples, that these visual descriptions may not always agree well with descriptions made on the basis of laboratory tests, and that the distinction between fill and naturally-deposited soil can not always be readily determined on the basis of recovered samples. If subsurface conditions are subsequently revealed that appear to be significantly different or less favorable than those described, we should be given the opportunity to revise the statements in this report.

Beardsley, 1/17/18

Contractors should visit the site, review this report and the related boring logs, and evaluate potential construction difficulties on the basis of their own knowledge and experience.

It is recommended that qualified personnel be retained to review the geotechnical portions of the contract drawings and specifications, and to provide monitoring services during construction.


It has been a pleasure assisting you with this investigation. If you have questions or comments regarding this report, please contact the undersigned.

Yours truly,

RAVI ENGINEERING & LAND SURVEYING, P.C.



Nagappa Ravindra, P.E.
President



Ray M. Teeter, P.E.
Geotechnical Engineer

Attachments: Table 1 – Estimated Soil Properties for Design of Entry and Receiving Pits
 Appendix A – Location Plan and Logs of Recent Test Borings
 Appendix B – Location Plan and Logs of Previous Test Borings

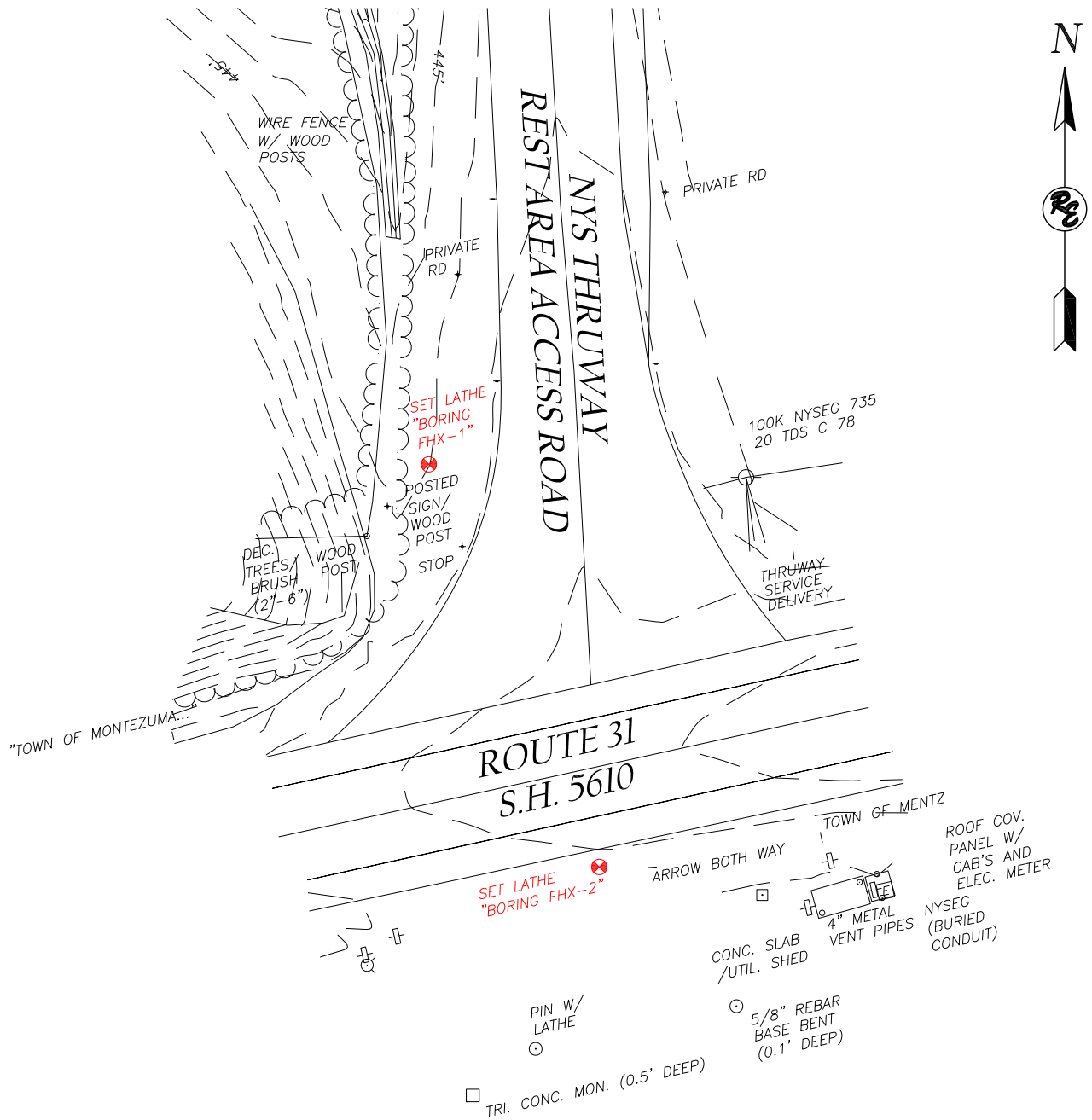
Table 1
Estimated Soil Properties for Design of Entry and Receiving Pits
Proposed New Water Main
Port Byron Service Area
New York State Thruway

<u>Test Boring Number</u>	<u>Approx Depth Range (feet)</u>	<u>Approx Soil Total Unit Weight (pcf)</u>	<u>Approx Soil Internal Friction Angle (degrees)</u>	<u>Approx Soil Cohesion (psf)</u>
FHX-1	0-8	120	30	0
FHX-1	8-10	130	35	0
FHX-1	10-16	140	40	0
FHX-2	0-6	120	30	0
FHX-2	6-12	130	35	0
FHX-2	12-16	140	40	0

Note: The soil unit weights presented above are total (moist) unit weights. Buoyant (submerged) unit weights should be used where appropriate. Appropriate safety factors should be applied to all failure modes. See the accompanying report and boring logs for additional information.

Appendix A

Location Plan and Logs of Recent Test Borings



LEGEND

 BORING LOCATION AND NUMBER

RAVI ENGINEERING & LAND SURVEYING, P.C.

2110 South Clinton Avenue, Suite 1
Rochester, New York 14618

TL: (585) 223-3660 FX: (585) 697-1764

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FIGURE #1 : BORING LOCATION PLAN
FOR:
WATER MAIN REHABILITATION
PORT BYRON REST STOP
MAINLINE THRUWAY - EASTBOUND

LOCATED IN
TOWN OF MONTEZUMA, COUNTY OF CAYUGA, NEW YORK

Proj.# 60-16-070E

Scale : 1"=40'

Date : Jan. 2018

Drawn By : JPN

SM 282 E 12/02

PSN _____ BORNUM FHX-1
DIVISION Syracuse
COUNTY Cayuga
PIN S52979
ROUTE Thruway Mainline
MILEPOST 310.2
PROJECT Reconstruction of the Port Byron Service Area Water Main



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-X
LINE Mainline
STA _____
OFFSET ft
SURF. ELEV. 445.954, NAD83,
DEPTH TO WATER No Water

COORDINATES (Lat) 43.019793°N (Long) 76.669032°W
DATE START 12/28/2017 DATE FINISH 12/28/2017

AUGER 2 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING lb HAMMER FALL-CASING in
CASING O. D. in I. D. in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18				
			6	12	18	24				
	0.0	1	10	18	13	13	10.4%	24		0.0-1.8' Dark brown to brown (CLAYEY-SILT) fill with trace to little gravel, little clay, trace to little sand and organic matter, hard, massive soil structure, (ML-CL). M - LPL
		2	12	21	20	13	11.7%	24		1.8-2.0' Dark brown (SANDY-SILT) fill with trace to little gravel, little sand, trace clay, compact, massive soil structure, (ML). M - LPL
		3	6	4	5	5	17.4%	16		Same as 1.8-2.0' M - LPL
	5.0	4	2	4	7	6	16.8%	18		6.0-6.5' Same as 1.8-2.0' M - LPL
		5	6	9	16	21	17.8%	24		6.5-7.5' Brown (SAND-SILT-CLAY) with trace gravel, little sand and clay, stiff, massive soil structure, (SC). M - LPL
		6	18	36	76	71	10.5%	22		7.5-8.0' Brown to olive brown (SILTY-SAND) with little silt, compact, weakly thinly bedded to massive soil structure, (SM). M-W - NPL
	10.0	7	26	50	72	100/5	9.3%	23		Same as 7.5-8.0' M - LPL
		8	18	32	42	49	10.6%	24		10.0-11.0' Same as 7.5-8.0' M - LPL
										11.0-12.0' Brown (SAND-SILT-CLAY) with little to some gravel and flat sided stone fragments, occasional cobble, little sand and clay, hard, massive soil structure, (ML-CL). M - LPL
	15.0									Same as 11.0-12.0' M - LPL

BOTTOM OF HOLE AT 16.00 ft

Note: Advanced bore hole with 2 1/4" ID x 6" OD hollow stem auger casing with continuous split spoon sampling to end of boring at 16.0 feet.

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
28-Dec-17	13:45	16.00	16.00	No Water	No	No

The subsurface information shown here was obtained for design and estimate purposes. It is made available so that users may have access to the same information available to the State. It is presented in good faith. By the nature of the exploration process, the information represents only a small fraction of the total volume of the material at the site. Interpolation between data samples may not be indicative of the actual material encountered.

DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR David Glover
BIN _____
STRUCTURE NAME Port Byron Service Area

CONTRACT D214307 CONTRACTOR Earth Dimensions, Inc.

SHEET 1 OF 1 HOLE FH-X

TWY-CAN SUBSURF EXPLORATION 14K17_FHX-1&FHX-2.GPJ TWYSE1TMP_L_V05.GDT 1/16/18

SM 282 E 12/02

PSN BORNUM FHX-2
DIVISION Syracuse
COUNTY Cayuga
PIN S52979
ROUTE Thruway Mainline
MILEPOST 310.2
PROJECT Reconstruction of the Port Byron Service Area Water Main



NEW YORK STATE THRUWAY AUTHORITY
NEW YORK STATE CANAL CORPORATION
SUBSURFACE EXPLORATION LOG



HOLE FH-X
LINE Mainline
STA
OFFSET ft
SURF. ELEV. 447.642, NAD83,
DEPTH TO WATER 10.0

COORDINATES (Lat) 43.019523°N (Long) 76.668876°W
DATE START 12/28/2017 DATE FINISH 12/28/2017

AUGER 2 1/4" I.D. HOLLOW STEM FLIGHT AUGER WT OF HAMMER-CASING lb HAMMER FALL-CASING in
CASING O. D. in I. D. in WT OF HAMMER-SAMPLER 140 lb HAMMER FALL-SAMPLER 30 in
SAMPLER O. D. 2 in I. D. 1-3/8 in HAMMER TYPE Safety

CASING BLOWS/ft	DEPTH (ft.) BELOW SURFACE	SAMPLE NO.	BLOWS ON SAMPLER (in.)				MOIST. CONT. (%)	Soil Recovery (in.)	Rock Recovery (ft.)	DESCRIPTION OF SOIL AND ROCK
			0	6	12	18				
			6	12	18	24				
	0.0	1	19	16	21	14	12.0%	20		0.0-1.4' Dark brown (SILTY-SAND) fill with little to some M - NPL gravel, little silt, trace to little organic matter, dense, massive soil structure, (SM).
		2	22	15	11	12	14.9%	6		1.4-2.0' Brown (CLAYEY-SILT) with little gravel, little to M - LPL some clay, trace to little sand, stiff to very stiff, massive soil structure, (ML-CL).
	5.0	3	4	6	7	11	14.1%	14		2.0-4.0' Brown (CLAYEY-SILT) with little gravel, little to some clay, trace to little sand, stiff to very stiff, massive soil structure, (ML-CL).
		4	7	9	13	26	15.9%	14		6.0-7.0' Same as 2.0-4.0' M-W - NPL 7.0-8.0' Brown (SILTY-SAND) with trace gravel, little to some silt, dense, massive soil structure, (SM).
	10.0	5	11	21	28	24	11.8%	14		Same as 7.0-8.0' M-W - NPL
		6	24	17	20	19	17.0%	22		Light brown (SILTY-SAND) with trace to little silt, dense, W-S - NPL weakly thinly bedded to massive soil structure, (SM).
		7	100/5				15.3%	3		Brown (SILTY-CLAY) with little gravel occasional cobble M - PL trace sand, hard, massive soil structure, (CL).
	15.0	8	46	47	98	64	8.4%	20		Grayish brown (SILTY-SAND) with little to some gravel M - NPL and flat sided stone fragments, some silt, trace clay, very dense, massive soil structure, (SM).

BOTTOM OF HOLE AT 16.00 ft

Note: Advanced bore hole with 2 1/4" ID x 6" OD hollow stem auger casing with continuous split spoon sampling to end of boring at 16.0 feet.

DATE	TIME	DEPTH (ft.)			ARTESIAN HEAD HEIGHT ABOVE GROUND	FILLED WITH WATER AT END OF DAY
		HOLE	CASING	WATER		
28-Dec-17	10:30	10.00	10.00	10.00	No	No
28-Dec-17	11:30	16.00	16.00	No Water	No	No

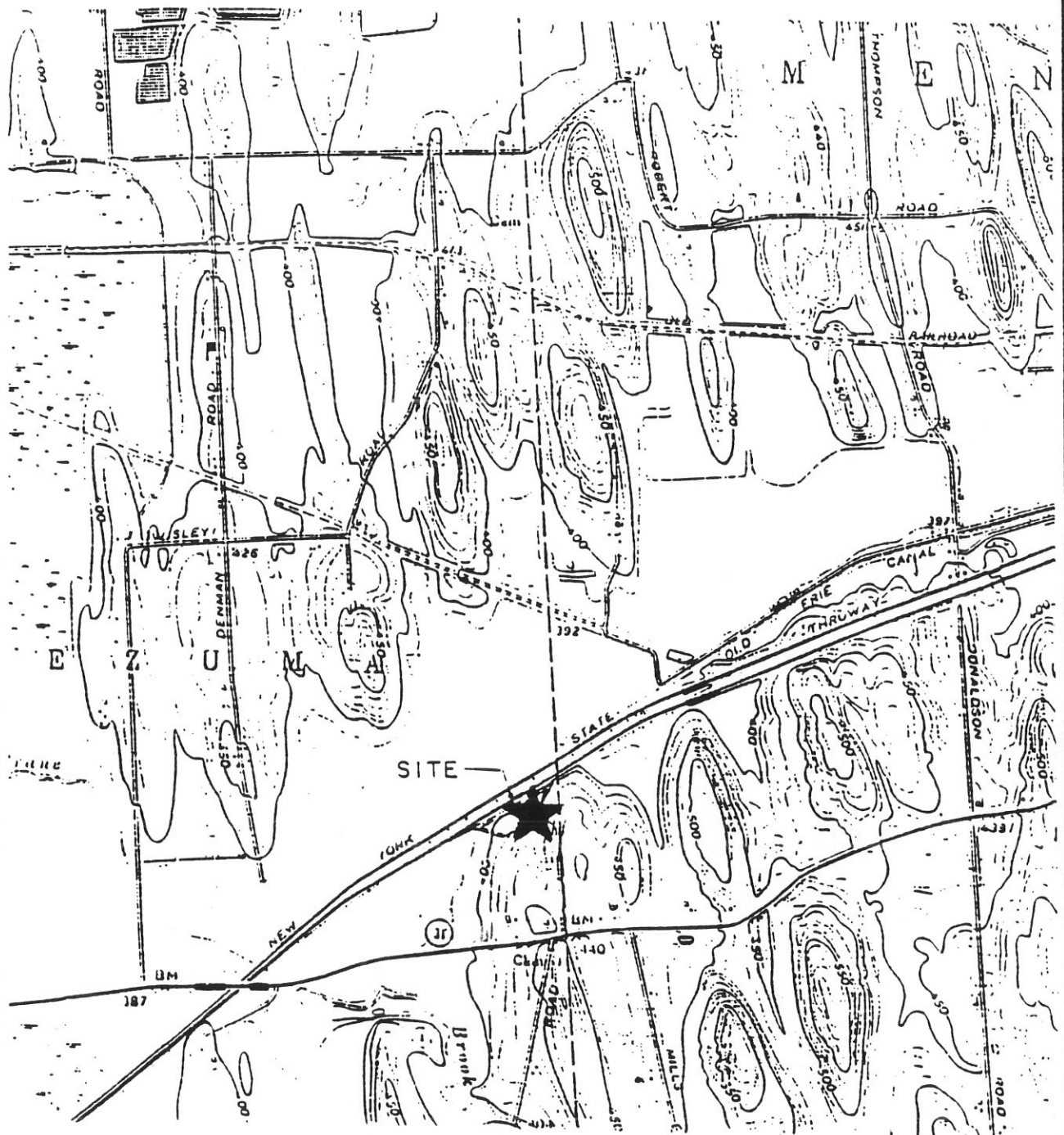
The subsurface information shown here was obtained for design and estimate purposes. It is made available so that users may have access to the same information available to the State. It is presented in good faith. By the nature of the exploration process, the information represents only a small fraction of the total volume of the material at the site. Interpolation between data samples may not be indicative of the actual material encountered.

DRILL RIG OPERATOR Philip Bence
SOIL & ROCK DESCRIPTION Kyle Shearing
INSPECTOR David Glover
BIN
STRUCTURE NAME Port Byron Service Area

CONTRACT D214307 CONTRACTOR Earth Dimensions, Inc. SHEET 1 OF 1 HOLE FH-X

TWY-CAN SUBSURF EXPLORATION 14K17_FHX-1&FHX-2.GPJ TWYSE1TMP_L_V05.GDT 1/16/18

Location Plan and Logs of Previous Test Borings



EMPIRE
 SOILS INVESTIGATIONS, INC.

CONSULTING GEOTECHNICAL
 ENGINEERS & GEOLOGISTS

SITE LOCATION MAP
 PROPOSED McDONALD'S REST.
 N.Y.S. THRUWAY
 PORT BYRON SERVICE AREA

SCALE: 1" = 2000'

DATE: OCT, 1991

DRAWN BY: JVM

PROJ. NO.: GTA-91-192

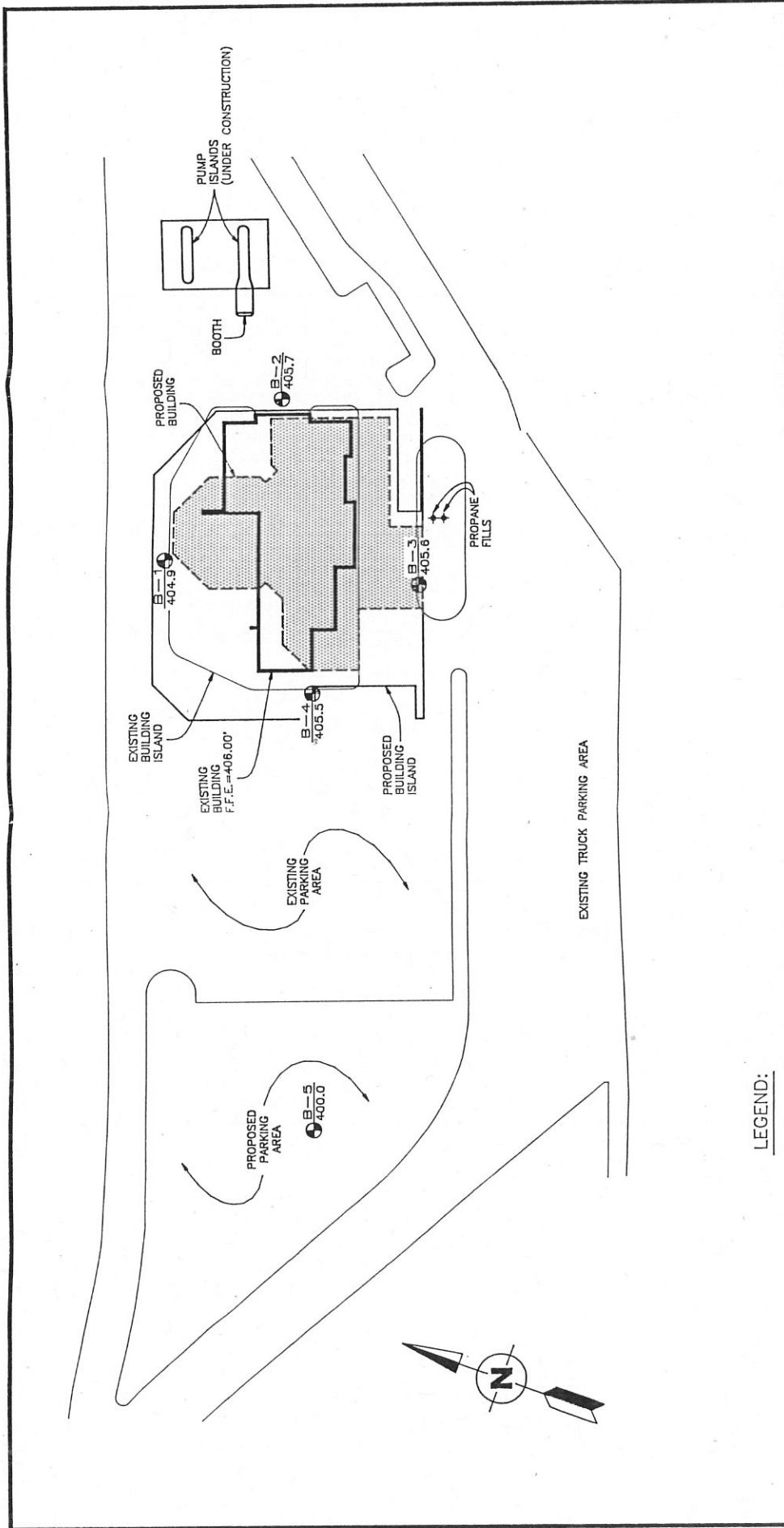
DWG. FILE: GA91192

REV'D BY:

N.P.P.

DRAWING NO.:

1



LEGEND:

● B-1 404.9 — BORING LOCATION AND GROUND SURFACE ELEVATION

NOTES:

- PLAN BASED ON DRAWING PREPARED BY C.T. MALE ASSOCIATES, P.C., TITLED "TOPOGRAPHIC SURVEY—N.Y.S. THRUWAY AUTHORITY, PORT BYRON SERVICE AREA", DATED JULY 16, 1991.
- BENCHMARK: F.F.E. ON WEST SIDE OF EXISTING BUILDING.



CONSULTING GEOTECHNICAL
ENGINEERS & GEOLOGISTS

SCALE: 1" = 60'
DATE: OCT. 1991
DRAWN BY: J.V.M.
PROJ. NO.: 104-91-192
DWG. FILE: G491192
REV'D BY: A.P.P.
DRAWING NO.: 2

BORING LOCATION PLAN
PROPOSED McDONALD'S REST.
N.Y.S. THRUWAY
PORT BYRON SERVICE AREA

DATE	<div style="display: inline-block; text-align: center;"> <h1 style="margin: 0;">EMPIRE</h1> <p style="margin: 0;">SOILS INVESTIGATIONS INC.</p> </div> <div style="display: inline-block; vertical-align: middle; padding-left: 10px;"> <h2 style="margin: 0;">SUBSURFACE LOG</h2> </div>	HOLE NO. <u>B-175</u>
STARTED <u>5-1-86</u>		SURF. ELEV. <u>325.6</u>
FINISHED <u>5-1-86</u>		G. W. DEPTH <u>See Note #1</u>
SHEET <u>1</u> OF <u>1</u>		

Project _____ LOCATION _____

DEPTH-FT.	SAMPLES	SAMPLE NO	BLOWS ON SAMPLER					BLOW ON CASING C	SOIL OR ROCK CLASSIFICATION	NOTES
			0	6	12	18-	N			
0		1	2	2	3	5	10		TOPSOIL 3"	NOTE #1 G.W. at 2.0' completion G.W. at 2.2' 24 hrs. after completion
							15		Brown SILT, some Sand, trace clay (Moist - Loose)	
							50/5'		Gray SHALE, medium hard weathered, thin bedded some fractures	
5										Run #1, 2.5' - 5.0' 95% Recovery 50% RQD
	1	2	3	4	5	6	7	8	9	10

TABLE I

	Split Spoon Sample
	Shelby Tube Sample
	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"	Coarse Grained (Granular)
Cobble	3" - 12"	
Gravel - Coarse	3" - 3/4"	
- Fine	3/4" - #4	
Sand - Coarse	#4 - #10	
- Medium	#10 - #40	Fine Grained
- Fine	#40 - #200	
Silt-Non Plastic (Granular)	<#200	
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 accord 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	> 51	Stiff	16 - 25
		Hard	> 26

(Large particles in the soils will often significantly influence the blows per foot recorded during the Penetration Test.)

TABLE V

Varved	- Horizontal uniform layers or seams of soil(s).
Layer	- Soil deposit more than 6" thick.
Seam	- Soil deposit less than 6" thick.
Parting	- Soil deposit less than 1/8" thick.
Laminated	- Irregular, horizontal and angled seams and partings of soil(s).

TABLE VI

Rock Classification Terms		Meaning
Term		
Hardness	Soft Medium Hard Hard Very Hard	Scratched by fingernail Scratched easily by penknife Scratched with difficulty by penknife Cannot be scratched by penknife
Weathering	Very Weathered Weathered Sound	Judged from the relative amounts of disintegration iron staining, core recovery, clay seams, etc.
Bedding	Laminated Thin bedded Bedded Thick bedded Massive	Natural breaks in Rock Layers (<1") (1" - 4") (4" - 12") (12" - 36") (>36")

(Fracturing refers to natural breaks in the rock oriented at some angle to the rock layers.)

HOLE NO. B-1
SURF. ELEV. 404.9
C. W. DEPTH See Notes

LOCATION N.Y.S. Thruway Service Area
Port Byron, NY

DEPTH-FT	SAMPLES	SAMPLE NO	BLOWS ON SAMPLER				Rec.	SOIL OR ROCK CLASSIFICATION	NOTES
			0 6	6 12	12 18	N			
0								ASPHALT	
		1	19	12	10	22	1.0'	FILL: Gray CRUSHED STONE (Damp)	11" 2.4'
		2	8	8	9	17	1.6'	FILL; Brown SILT, Some fine-coarse Sand, little gravel (Damp)	
5		3	3	3	5	8	1.4'	FILL: Brown fine-coarse SAND & SILT, trace gravel, organics (Moist)	
		4	5	7	10	17	1.7'	Red SILT, Some fine Sand (Moist-Firm)	8.0'
10		5	6	7	6	13	1.8'	Greenish Brown SILT, trace fine sand (Damp to Moist-Firm)	
		6	5	6	6	12	1.5'		
15			20					Boring Terminated @ 15.0'	Petroleum odor in Sample S-6
									No water encountered during or at completion of sampling.
									After augers removed, boring caved to 6.2'

METHOD OF INVESTIGATION 2 1/2" ID Hollow Stem Augers

STARTED 10/24/91
FINISHED 10/24/91
SHEET 1 OF 1

EMPIRE
SOILS INVESTIGATIONS INC.

HOLE NO. B-2
SURF. ELEV. 405.7
C. W. DEPTH See Notes

LOCATION N.Y.S. Thruway Service Area
Port Byron, NY

DEPTH-FT	SAMPLE NO	BLOWS ON SAMPLER					Rec.	SOIL OR ROCK CLASSIFICATION	NOTES
		0	6	12	18	N			
		6	12	18	N				
0								ASPHALT	6"
	1	10	15	9	24	1.2'		FILL: Gray CRUSHED STONE, little fine sand (Damp)	1.6'
	2	6	8	11	19	1.6'		FILL: Green/Red SILT, Some fine-coarse Sand, trace fine-coarse gravel (Damp)	
5	3	6	8	10	18	1.3'		FILL: Brown SILT, little fine sand (Damp)	5.0'
	4	11	17	20	37	1.6'		Gray-Brown SILT, trace fine sand	
	5	11	14	21	35	1.6'		(Damp-Firm to Compact)	
10		18						becomes Reddish Brown w/rock fragments	
	6	7	9	7	16	1.6'		becomes Gray Brown	Petroleum odor noted in Sample S-6
15		10						Boring Terminated @ 15.0'	

N = No. blows to drive 2 " spoon 12 " with 140 lb. pin wt. falling 30 " per blow. CLASSIFICATION Visual by Driller
C = No. blows to drive _____ " casing _____ " with _____ lb. weight falling _____ " per blow. & Engineering Technician (JVM)
METHOD OF INVESTIGATION 2 1/4" ID Hollow Stem Augers

STARTED 10/23/91
FINISHED 10/23/91
SHEET 1 OF 1



HOLE NO. B-3
SURF. ELEV. 405.6
G. W. DEPTH See Notes

LOCATION N.Y.S. Thruway Service Area
Port Byron, NY

[illegible]

C = No blows to drive _____ casing _____ with _____ lb weight falling _____ "per blow.
2 1/2" ID Hollow Stem Augers

METHOD OF INVESTIGATION

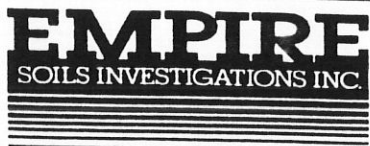
CLASSIFICATION Visual by Driller
& Engineering Technician (JVM)

DATE

STARTED 10/24/91

FINISHED 10/24/91

SHEET 1 OF 1



SUBSURFACE LOG

HOLE NO. B-4

SURF. ELEV. 405.5

C. W. DEPTH See Notes

PROJECT Proposed McDonald's Restaurant
ESI #ATA-91-192LOCATION N.Y.S. Thruway Service Area
Port Byron, NY

DEPTH-FT	SAMPLE NO	BLOWS ON SAMPLER					Rec.	SOIL OR ROCK CLASSIFICATION	NOTES
		0	6	12	18	N			
0								ASPHALT 6"	
1	1	10	7	6	13	1.1'		FILL: Brown CRUSHED STONE, little sand (Damp) 0.9'	
2	2	5	4	5	9	1.6'		FILL: Brown SILT, trace fine sand (Damp) 3.2'	
3	3	18	19	19	38	1.5'		Grayish Brown SILT, trace fine sand	
4	4	31	50	52	102	1.4'		(Damp-Compact to Very Compact)	
5	5	25	23	27	50	1.1'			
6	6	11	19	21	40	1.4'		becomes Red w/rock fragments	
7									
8									
9									
10									
11									
12									
13									
14									
15								Boring Terminated @ 15.0'	
16									
17									
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50									

N = No. blows to drive 2" spoon 12" with 140 lb pin wt. falling 30" per blow.

C = No. blows to drive casing with lb. weight falling " per blow.

METHOD OF INVESTIGATION 2 1/2" ID Hollow Stem Augers

CLASSIFICATION Visual by Driller (R)
& Engineering Technician (JVM)

No water encountered during or at completion of sampling.

After augers removed, boring caved to 4.8'.

STARTED 10/24/91
FINISHED 10/24/91
SHEET 1 OF 1

EMPIRE

SOILS INVESTIGATIONS INC.

SUBSURFACE LOG

HOLE NO. B-5
SURF. ELEV. 400.0
C. W. DEPTH See Notes

PROJECT Proposed McDonald's Restaurant
ESI #ATA-91-192

LOCATION N.Y.S. Thruway Service Area
Port Byron, NY

[illegible]

N = No. blows to drive 2 " spoon 12 " with 140 lb. pin wt. falling 30 " per blow. CLASSIFICATION Visual by Driller (F
C = No. blows to drive " casing " with lb. weight falling " per blow. & Engineering Technician (JVM)
METHOD OF INVESTIGATION 2 1/2" ID Hollow Stem Augers

Appendix C: Regulatory Permits

NEW YORK STATE DEPARTMENT OF HEALTH
Bureau of Water Supply Protection

**Application for Approval of Plans for
Public Water Supply Improvement**

Applicant	Location of works (C,V,T)	County	Water District (specific area served)
Type of ownership <input type="checkbox"/> Municipal <input type="checkbox"/> Commercial <input type="checkbox"/> Private – Other <input type="checkbox"/> Authority <input type="checkbox"/> Interstate <input type="checkbox"/> Industrial <input type="checkbox"/> Water Works Corp. <input type="checkbox"/> Private – Institutional <input type="checkbox"/> Federal <input type="checkbox"/> International <input type="checkbox"/> <input type="checkbox"/> Board of Education <input type="checkbox"/> State <input type="checkbox"/> Native American Reservation			
<input type="checkbox"/> Modifications to existing system. If checked, provide PWS ID # NY _____			
New System. If checked, provide capacity development (viability) analysis*			
If this project involves a new system, new water district, or a district extension provide boundary description location details in digital format on CD or Floppy Disk. If digital boundary location details are not available provide a text description. <input type="checkbox"/> Digital GIS Data Provided <input type="checkbox"/> Digital CAD Data Provided <input type="checkbox"/> Other Digital Data Provided <input type="checkbox"/> Text Description Provided <input type="checkbox"/> N/A			
Funding Source <input type="checkbox"/> Private <input type="checkbox"/> DWSRF** <input type="checkbox"/> Federal <input type="checkbox"/> Other _____ If DWSRF is checked, provide DWSRF # _____			
Estimated Project Cost Source \$ _____ Treatment \$ _____ Storage \$ _____ Distribution \$ _____ Pumping \$ _____ Engineering \$ _____ Legal/Permitting \$ _____ Total \$ _____			
Type of Project <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Source <input type="checkbox"/> Transmission </div> <div> <input type="checkbox"/> Corrosion Control <input type="checkbox"/> Pumping Unit <input type="checkbox"/> Chlorination </div> <div> <input type="checkbox"/> U.V. Light Disinfection <input type="checkbox"/> Fluoridation <input type="checkbox"/> Other Treatment </div> <div> <input type="checkbox"/> Distribution <input type="checkbox"/> Storage <input type="checkbox"/> Other </div> </div> Project Description: _____ _____			
Population Total population of Service area _____ % population actually served _____ % population served affected by project _____			
Latest total consumption data (in MGD) Avg. day _____ Year _____ Max. day _____ Year _____ Peak hr. _____ Year _____		14. NYS Professional Licensed Engineer Stamp & Signature *** <div style="border: 1px solid black; height: 100px; width: 100%;"></div>	
Name of design engineer _____ Address _____ Telephone No. _____ E-Mail _____ Fax No. _____			
Name and title of applicant or designated representative _____ Address _____ <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div>_____</div> <div>_____/_____/_____ Signature of applicant Date</div> </div>			
<p>NOTE: All applications must be accompanied by 3 sets of plans, 3 sets of specifications and an engineer's report describing the project in detail. The project must first be discussed with the appropriate city, county, district or regional public health engineer. Signature by a designated representative <i>must</i> be accompanied by a letter of authorization.</p> <p>* Additional information regarding capacity development may be found at: http://www.health.state.ny.us/nysdoh/water/main.htm</p> <p>**Current DWSRF project listings may be found at: http://www.health.state.ny.us/nysdoh/water/main.htm</p> <p>***By affixing the stamp and signature the Design Engineer agrees that the plans and specifications have been prepared in accordance with the most recent version of the recommended standards for water works and in accordance with the NYS Sanitary Code.</p>			



Form PERM 32 (December 2015)
Highway Work Permit Application for Utility
Work Instructions and Form

INSTRUCTIONS FOR COMPLETING THE APPLICATION

FRONT OF APPLICATION

Three (3) copies of the entire application, work plans and all other supporting documents must be submitted. At the time of application, certain information relative to fees and deposits may be contingent upon determinations to be made by the Department. In such cases, the information may be left blank and remittance withheld until a determination is made.

Please complete the following:

- Permittee name, address, phone and email address. Provide joint applicant contact information, if appropriate. If there are additional applicants, attach contact information on a separate sheet.
- Name and phone number(s) of emergency contact person.
- If permit is to be returned to someone other than the applicant, complete this section.
- If the guarantee deposit or bond is to be returned to someone other than applicant, complete this section.
- Estimate the cost of work being performed in the state highway right-of-way and provide this figure.
- Indicate anticipated duration of work to be performed with starting date and ending date.
- Indicate the form of insurance coverage to be provided.
- Give a brief description of the work that is proposed to be done under this permit.
- Indicate whether any overhead and/or underground work (5 foot or greater depth) is included in the proposed work.
- Plans and specifications should accompany this application for any work that involves construction within the state highway right-of-way. Place a check mark on the lines for plans and specifications if they are attached to this application.
- Location of the project should be identified by State Route, highway reference marker(s), and the municipality and county in which work area is located.
- In regard to State Environmental Quality Review (SEQR), indicate the type of action, the name of the Lead Agency, and what date the final determination was made, if available.
- Signature of applicant and date.
- Signature of second applicant, if any, and date.

BACK OF APPLICATION

- Check type of work that will be performed.
- In the appropriate column, indicate total amount of permit fees
- Indicate Utility Charge Account Number if applicable
- Indicate type of performance security provided (bond, deposit, letter of credit), if required.
- Indicate check number of deposit or bond number.

RESPONSIBILITIES OF PERMITTEE PURSUANT TO UTILITY HIGHWAY WORK PERMITS

NOTE: FAILURE TO OBTAIN A PERMIT OR FAILURE TO COMPLY WITH THE TERMS OF A PERMIT MAY RESULT IN THE DEPARTMENT HALTING THE ACTIVITY FOR WHICH A PERMIT IS REQUIRED UNTIL ADEQUATE CORRECTIONS HAVE BEEN MADE.

1. LIMITATIONS ON USE: The specific site identified in this Highway Work Permit, and only that site identified, will be available for use by Permittee only for the purpose stated in this Permit and only on the date(s) and for the duration designated in this permit. This Permit does not authorize any infringement of federal, state or local laws or regulations, is limited to the extent of the authority of NYSDOT and is transferable and assignable only with the written consent of the Commissioner of Transportation. The Commissioner reserves the right to modify fees and to revoke or annul the Permit at any time, at his/her discretion without a hearing or the necessity of showing cause.

2. CONDITIONS OF USE: NYSDOT makes no affirmation that the state-owned site used for the work has been designed, constructed, or maintained for the purpose of the conduct of the work. The Permittee assumes full responsibility for planning and conducting a safe and orderly project that does not expose workers or the public to any unreasonable hazards and that involves a minimal disruption of the normal uses of the state and local highway systems. **It shall be the sole obligation of the Permittee to determine whether the site is suitable for the purpose of safely conducting the work.** The Permittee assumes all responsibility for assuring that the use of the highway/property conforms to applicable requirements of law, including, but not limited to those set forth herein.

Permittee agrees to assure compliance with New York Labor Law, industrial regulations, and OSHA regulations, and to assure the safety of all workers who will be engaged to do the permitted work.

3. INSURANCE COVERAGE: Permittee must have the insurance that is required for the type and extent of the work being performed.

Permittee agrees to maintain liability insurance in full force and effect throughout the term of the highway work permit. Expiration of, or lack of, liability insurance automatically terminates the permit.

To comply with this requirement, an applicant must furnish the Department with one of the following:

- A completed **Certificate of Insurance** evidencing the required types and limits of insurance coverage, with New York State Department of Transportation named as an additional insured on the commercial general liability policy. An industry standard **ACORD 25** form with an **ACORD 855** Addendum is acceptable evidence of the required coverage. Certificate Holder should be indicated as New York State Department of Transportation, with the address of the issuing office.
- A fully executed **Undertaking Agreement** may be provided by Municipalities, Public Utilities, Transportation Corporations, Public Service Corporations or Railroads, as an alternative to providing proof of commercial general liability the insurance.

See PERM 32 Submission Package Requirements on page 4 for more detailed guidance on insurance coverage.

4. COMPENSATION AND DISABILITY INSURANCE COVERAGE: Permittee is required to have compensation insurance and disability coverage as noted in the provisions of the Worker's Compensation Law and Acts amendatory thereof for the entire period of the permit, or the permit will be invalid. Applicant must provide proof of coverage (Form C-105.2, U-26.3 or SI-12 for Worker's Compensation, and DB-120.1 or DB-155 for Disability Benefits), or provide proof of exemption from this requirement (Form CE-200).

5. INDEMNIFICATION: Permittee agrees that, in addition to any protection afforded to NYSDOT under any available insurance, NYSDOT shall not be liable for any damage or injury to the Permittee, its agents, employees, or to any other person, or to any property, occurring on the site or in any way associated with Permittee's activities or operations; whether undertaken by Permittee's own forces or by contractor or other agents working on Permittee's behalf. To the fullest extent permitted by law, the Permittee agrees to defend, indemnify and hold harmless the State of New York, NYSDOT and their agents from and against all claims, damages, losses and expenses, including but not limited to attorneys' fees, arising out of any claim, including but not limited to claims for personal injuries, property damage or wrongful death and/or environmental claims, in any way associated with the Permittee's activities or operations, no matter how caused.

6. NOTIFICATION: The following should be notified at the appropriate time as shown below:

- Commissioner of Transportation, through the NYSDOT regional office, one week prior to commencing work.
- Area gas distributors, 72 hours prior to any blasting.
- Utility companies with facilities in work areas, before starting work (in accordance with Industrial Code 53).
- Permission from utility company must be obtained before commencing work affecting the utilities' facilities.
- NYSDOT regional signal maintenance shop, 3 days prior to starting work (traffic signal work).
- NYSDOT regional office, at conclusion of work, and return original copy of permit to Resident Engineer.

NOTIFICATION FOR ANNUAL MAINTENANCE PERMITS: (1) Except in emergencies, the applicant will notify the regional director and resident engineer in writing, at least 72 hours before work is started. This notice will contain a complete description of the work to be done, including sketches where essential. (2) In emergencies, telephone notice will be immediately given the resident engineer, and the full requirements outlined above will be met as soon as possible, and not later than the first working day following the emergency notice.

7. SITE CARE AND RESTORATION: A bond, deposit (bank cashier's check), or a Letter of Credit, in an amount designated by the Department of Transportation, may be required before a permit is issued, in order to guarantee restoration of the site to its original condition. A fully executed Undertaking Agreement may be accepted as an alternative security, where applicable. If the Department is obliged to restore the site to its original condition, the costs to the Department will be deducted from the amount of the permittee's deposit at the conclusion of the work. Costs in excess of the bond/deposit on file will be billed directly to the permittee. If permittee posts a Letter of Credit, the Department may elect to have a contractor restore the site, and issue a draft drawn against the Letter of Credit as payment.

- Anyone working within state highway right-of-way must wear **high visibility apparel** and **hard hat** meeting ANSI Class 2 requirements.
- No unnecessary obstruction is to be left on the pavement or the state highway right-of-way, or in such a position as to block warning signs during non-working hours.
- No work shall be done to obstruct drainage or divert creeks, water courses or sluices onto the state highway right-of-way.
- All false work must be removed and all excavations must be filled in and restored to the satisfaction of the Regional Maintenance Engineer.

8. COSTS INCURRED BY ISSUANCE OF THIS PERMIT: All costs beyond the limits of any liability insurance, surety deposits, etc. are the responsibility of the permittee. The State shall be held free of any costs incurred by the issuance of this permit, direct or indirect.

9. SUBMITTING WORK PLANS: The applicant will submit three (3) copies of work plans and/or maps as required by the Department. This shall include (but not be limited to) such details as: measurements of driveways with relation to nearest property corner; location of existing and proposed poles, guide rail, signal equipment, trees or drainage structures; positions of guys supporting poles; a schedule of the number of poles and feet of excavation necessary for completion of work on the State right-of-way. A description of the proposed method of construction will be included.

- Plan work with future adjustments in mind, as any relocation, replacement or removal of the installation authorized by this permit and made necessary by future highway maintenance, reconstruction or new construction, will be the responsibility of the permittee.
- The permittee must coordinate the work with any State construction being conducted.

10. TRAFFIC MAINTENANCE: A plan detailing how the permittee intends to maintain and protect traffic shall be submitted with work plans. Traffic shall be maintained on the highway in a safe manner during working and non-working hours until construction is completed. The permittee is responsible for traffic protection and maintenance, including adequate use of signs, barriers, and flag persons during working and non-working hours until construction is completed. All sketches will be stamped with "MAINTENANCE OF TRAFFIC SHALL BE IN CONFORMANCE WITH THE NATIONAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

11. COST OF INSPECTION AND SUPERVISION: Prior to issuance of the Highway Work Permit, the permittee may be required to sign an INSPECTION PAYMENT AGREEMENT FOR HIGHWAY WORK PERMITS (FORM PERM 50) agreeing to the payment of construction inspection charges, based on the number of work days involved.

12. SCOPE:

- **Areas Covered:** Permits issued are for highways, bridges and culverts over which the New York State Department of Transportation has jurisdiction. (Local governments issue permits for highways under their jurisdiction.) Work locations must be approved by the Department.
- **Maintenance:** Unless noted otherwise, applicant shall be fully responsible for the maintenance of all items installed and/or altered as shown on the approved permit plans and documents. Property owners having access to a state highway shall be fully responsible for the maintenance of their driveway in accordance with POLICY AND STANDARDS FOR ENTRANCES TO STATE HIGHWAYS.
- **Work Commencement:** The Permittee shall have a copy of the permit available at the site during the construction period. Work should start within 30 days from validation date of permit or said permit may be revoked.

13. REPORTING ACCIDENTS: Permittee is required to report any accidents that occur during the course of the permit work to their insurance company, and to provide the Department with a copy of any such report.

14. COMPLETION OF PROJECT: Upon completion of the work within the State highway right-of-way authorized by the work permit, the person and his or its successors in interest shall be responsible for the maintenance and repair of such work or portion of such work as set forth within the Terms and Conditions of the Highway Work Permit.

15. USE AND OCCUPANCY: A Use & Occupancy agreement may be a requirement of this permit. If required, Applicant agrees to enter into a Use & Occupancy agreement with the department, and to pay all fees associated with ongoing occupancy of state right-of-way, and all other conditions required under the Use & Occupancy agreement.

PERM 32 Submission Package Requirements

Submit three (3) copies of the final submission package: Submission package must include the entire PERM 32 with all work plans and supporting documents, including the following (check all that apply):

<input type="checkbox"/>	Stamped Final Plans – Submit in PDF file format on CD, with three (3) paper copies (1" = 50'), or as requested
<input type="checkbox"/>	ACORD 25 - Certificate of Insurance, with NYSDOT named as Additional Insured (See line 3 below).
<input type="checkbox"/>	ACORD 855 - New York Construction Certificate of Liability Insurance Addendum (See line 3 below).
<input type="checkbox"/>	PERM 1, 2, 6 or 16 - Undertaking Agreement, if applicable (See line 4 below).
<input type="checkbox"/>	PERM 36 - Attachment to Highway Work Permit – Consultant Inspection, if applicable
<input type="checkbox"/>	PERM 44 - Surety Bond – Performance bond in Applicant's name, or deposit (Bank cashier's check required)
<input type="checkbox"/>	PERM 50 – Inspection/Supervision Payment Agreement, if applicable
<input type="checkbox"/>	Proof of Worker's Compensation Insurance (Form C-105.2, U-26.3 or SI-12), or proof of exemption (Form CE-200)
<input type="checkbox"/>	Proof of Disability Benefits Coverage (Form DB-120.1 or DB-155), or proof of exemption (Form CE-200)
<input type="checkbox"/>	Permit Fees
<input type="checkbox"/>	Other (specify):

Insurance Requirements

- 1) In most cases, Permittee must provide proof of **Commercial General Liability** insurance coverage with limits of liability not less than **\$1,000,000** per claim/occurrence, unless any of the following circumstances exist, in which case the limits of liability shall not be less than **\$5,000,000** per claim/occurrence:
 - (a) The estimated value of permitted work in state right-of-way is \$250,000 or more (see line 5 below);
 - (b) The permitted work requires or includes the construction, alteration or maintenance of underground features at any depth five feet or more below grade;
 - (c) The permitted work requires or includes the construction, alteration or maintenance of overhead features that include, but are not limited to, traffic signals, overhead sign structures, retaining walls or other grade separation structures.
- 2) Exceptions to the above liability limits include: (a) Annual maintenance permits require limits of liability not less than \$5,000,000 per claim/occurrence; (b) Permits for vegetation control activities require limits of liability not less than \$1,000,000 per claim/occurrence; (c) Residential driveway permits require limits of liability not less than \$500,000 per claim/occurrence; and (d) Adopt-a-Highway permits are exempt.
- 3) **ACORD 25** with **ACORD 855** (New York Construction Addendum) shall be submitted as an acceptable proof of liability coverage. New York State Department of Transportation should be named as Additional Insured and as the Certificate Holder at the address of the issuing office.
- 4) Municipalities, public utilities, public authorities and railroads may elect to provide a fully executed **Undertaking Agreement** as a substitute for providing proof of insurance coverage, or any other financial security otherwise required.
- 5) When the estimated cost of work being performed in the right-of-way equals or exceeds \$250,000, Permittee must additionally provide proof of a **Protective Liability (OCP)** insurance policy with a minimum liability limit of \$1,000,000 per occurrence, with New York State Department of Transportation as Named Insured.

Permittee agrees to maintain liability insurance in full force and effect throughout the term of the highway work permit. Expiration of, or lack of, liability insurance coverage automatically terminates the permit.

For more information on insurance requirements, go to: www.dot.ny.gov/permits-insurance

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION
HIGHWAY WORK PERMIT APPLICATION FOR UTILITY WORK

Application is hereby made for a highway work permit:

Name _____

Address _____

City _____ State _____ Zip _____

Applicant Phone (____) _____

Applicant Email Address _____

Emergency Contact _____

Emergency Phone (____) _____

RETURN PERMIT TO: (if different from Permittee)

Name _____

Address _____

City _____ State _____ Zip _____

DESCRIPTION OF PROPOSED WORK:

For Joint application, name and address of Applicant 2 below:

Name _____

Address _____

City _____ State _____ Zip _____

Applicant 2 Phone (____) _____

Applicant 2 Email Address _____

RETURN DEPOSIT/BOND TO: (if different from Permittee)

Name _____

Address _____

City _____ State _____ Zip _____

Estimated cost of work being performed in highway right-of-way: \$ _____

Anticipated duration of work: From _____ to _____ (applies to the operations indicated on the reverse side)

WILL OVERHEAD OR UNDERGROUND (5'+) OPERATIONS BE INVOLVED IN THE PROPOSED WORK? YES ____ NO ____

ATTACHED: Plans _____ Specifications _____

LOCATION: State Route: _____ Located Between Reference Markers _____ and _____

City/Town/Village of _____ County of _____

SEQR REVIEW (select one)

[] Type II [] Type I [] Unlisted LEAD AGENCY: _____ DATE OF DETERMINATION: _____

Insurance (check one): _____ General Liability Insurance _____ Undertaking

NOTE: PERMIT IS ISSUED CONTINGENT UPON ALL LOCAL REQUIREMENTS BEING SATISFIED

ACKNOWLEDGMENT: ON BEHALF OF THE APPLICANT, I HEREBY REQUEST A HIGHWAY WORK PERMIT, AND DO ACKNOWLEDGE AND AGREE TO THE RESPONSIBILITIES OF PERMITTEE AND THE OTHER OBLIGATIONS SET FORTH IN THIS PERMIT AND WARRANT COMPLIANCE THEREWITH.

Applicant Signature _____

Date _____

Applicant 2 Signature _____

Date _____

Approval recommended by Resident Engineer _____	Res No _____ Date _____
Approved by Regional Traffic Engineer _____	Reg No _____ Date _____

Operational Type and Description			PERMIT FEES				
			Base Fee	QTY	Unit Rate	Sub Total	Total Fees
ORIGINAL INSTALLATION			Number of feet/poles				
	1a1	Underground - excavation, tunneling, boring, installing, etc.	32		.32/foot		
	1a2	Underground - Commercial subsurface connection	32		.32/foot		
	1a3	Underground - Residential subsurface connection	32		.32/foot		
	1b1	Overhead - Erecting poles, towers	63		2.50/unit		
	1b2	Overhead - Running new lines	63				
	1b3	Overhead - Commercial service connection	19				
	1b4	Overhead - Residential service connection	19				
	1c1	Installation on bridge or culvert	63				
	1c2	Installation on bridge or culvert requiring structural changes	625				
MAINTENANCE			Number of regions/counties				
	2a	Maintenance, single job	32				
	2b1	Annual maintenance per region			2500		
	2b2	Annual maintenance per county			625		
	2c	Repair of water or sewer lines	32				
	2d	DOT requested maintenance	N/C				
AFTER ORIGINAL CONSTRUCTION			Number of regions/counties				
	3a1	Annual – includes overhead connections – per region			2500		
	3a2	Annual – includes overhead connections – per county			625		
	3b	DOT requested relocation	N/C				
	3c	Commercial subsurface service connection	32				
	3d	Commercial overhead service connection	19				
	3e	Residential subsurface service connection	32				
	3f	Residential overhead service connection	19				
MISCELLANEOUS UTILITY WORK							
	4	Miscellaneous (describe below)	32				

UTILITY CHARGE ACCOUNT NUMBER: _____ WORK ORDER/REF NO: _____

PERFORMANCE SECURITY (Select One): Guarantee Deposit – Cash [] Performance Bond [] Letter of Credit []

Guarantee Deposit Amount: _____

Guarantee Deposit Check Number or Bond Number: _____

(To be completed by NYSDOT issuing office)	
Project Identification Number _____	Highway Work Permit No. _____
State Highway (SH) Number _____	Record ID Number _____

Appendix D: Engineering Drawings

Engineering Drawings will be provided under a separate cover.



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