STATE OF NEW YORK
OFFICE OF GENERAL SERVICES
DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242

ADDENDUM NO. 4 TO PROJECT NO. 44508

CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK, ELECTRIC WORK
REPLACE OBSERVATION TOWER-BLDG. #68
CLINTON CORRECTIONAL FACILITY
ROUTE 374, COOK STREET
DANNEMORA, NEW YORK 12929-2000

October 09, 2013

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

SPECIFICATIONS

1. SECTION 003132 GEOTECHNICAL DATA – Updated; complete geotechnical report added.

2. SECTION 071416 COLD FLUID APPLIED WATERPROOFING – Added.

DRAWINGS

1. Drawing L-101: Updated; utilized legible file.

2. Drawing AD-101: Updated; utilized legible file.

3. Drawing P-001: Remove General Note #8.

END OF ADDENDUM

James Dirolf, P.E.
Director of Design

DOCUMENT 003132

GEOTECHNICAL DATA

The subsurface logs included in this Document were made on the dates indicated on the individual logs.

The observed water levels and/or conditions noted on the subsurface logs are as recorded at the time of exploration. These water levels and/or conditions may vary considerably with time, according to the prevailing climate, rainfall, or other factors and are otherwise dependent on the duration of and method used in the explorations program.

Sound engineering judgment was exercised in preparing the subsurface logs. This information was prepared and is intended for State design and estimate purposes only. Its presentation is for the purpose of providing intended users with access to the same information available to the State. These subsurface logs are presented in good faith and are not intended as a substitute for personal investigation, independent interpretations, or judgment of the bidders.

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: CD3491-01-13

Client: ATL Engineering

Boring Location: See Boring Location Plan

Project: Subsurface Investigation
CF Proposed Tower
Dannemora, New York

Proposed Tower

Start Date: 1/29/2013 Finish Date: 1/29/2013

Boring No.: B-1 Sheet 1 of 2

Coordinates
Northing
Easting

Sampler Hammer
Weight: 140 lbs.
Fall: 30 in.
Hammer Type: Automatic

Ground Elev.:

Boring Advance By: 4 1/4" Auger

Groundwater Observations

Date	Time	Depth	Casing
1/29/2013	PM	*12.2'	30'
1/29/2013	PM	*12.2'	CAVED

Borehole caved at 19 feet. *May be affected by water utilized during rock coring.

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - coarse; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	Recovery (Inches)
	AUGERS	1	0.0	2.0	SS	39 31 19 16	0.3	4" ASPHALT	16
1								Brown cmf SAND; little mf GRAVEL; little SILT (wet, non-plastic) FILL	
2		2	2.0	4.0	SS	6 6 5 3		Similar Soil (wet, non-plastic) FILL	10
3									
4		3	4.0	6.0	SS	4 4 3 4		No Recovery FILL	0
5									
6							6.0		
		4	6.0	8.0	SS	4 5 5 4		Brown cmf SAND; and cmf GRAVEL; little SILT; trace CINDER (saturated, non-plastic) FILL w = 11.2%	10
7									
8		5	8.0	10.0	SS	4 5 5 6		Brown cmf SAND; and mf GRAVEL; little SILT; trace CINDER (saturated, non-plastic) FILL w = 9.8%	12
9									
10		6	10.0	12.0	SS	4 3 1 6		Dark Brown cmf SAND; and mf GRAVEL; some SILT; trace BRICK Fragments; trace WOOD (saturated, non-plastic) FILL w = 18.4%	10
11									
12		7	12.0	14.0	SS	13 11 42 15		Brown cm f GRAVEL; and cmf SAND; little SILT (saturated, non-plastic) FILL w = 8.3%	10
13							14.0		
14		8	14.0	16.0	SS	2 2 4 4		Dark Brown SILT; little ORGANICS; trace f SAND (wet, non-plastic) w = 168.6% Organic Content = 19.8%	18
15									
16		9	16.0	18.0	SS	7 50/2"	16.5	Similar Soil (wet, non-plastic)	6
17									
18		10	18.0	20.0	SS	12 12 17 31		Brown mf GRAVEL; and cmf SAND; trace SILT (saturated, non-plastic) w = 10.3%	12
19									
20								Cobbles and Boulders encountered from 16.5 to 32 feet	
21									
22									
23									
24									
25									

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: Brad Perry; Tyler Weston

Inspector:

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: B-1 Report No.: CD3491-01-13 Sheet 2 of 2

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
		11	25.0	27.0	SS	12 18 20 20		Grey cmf SAND; some mf GRAVEL; little SILT (saturated, non-plastic) w = 17.9%	8
26									
27									
28									
29									
30		12	30.0	30.2	SS	50/2"	30.2	Rock Fragment	1
31			30.2	35.0	NX	RUN 1			34
32	NX CORE							Grey Granite and Gneiss	
33								34" or 57% Recovery	
34								0 Pieces (0")- 100% Chips and Fragments	
35								0 Pieces longer than 4" (0") - RQD=0%	
			35.0	40.0	NX	RUN 2		Grey Granite and Gneiss	51
36								51" or 85% Recovery	
37								2 Pieces (26")- 45% Chips and Fragments	
38								2 Pieces longer than 4" (26")- RQD=43%	
39									
40							40.0	Boring terminated at 40 feet.	
41									
42								Notes:	
43								1. Borehole backfilled with on-site soils.	
44									
45									
46									
47									
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ATL-LOG1 CD3491 ATL ENGINEERING- DANNEMORA.GPJ LOG-WELL.GDT 3/1/13

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: CD3491-01-13

Client: ATL Engineering

Boring Location: See Boring Location Plan

Project: Subsurface Investigation

Bathroom Facility

CF Proposed Tower

Dannemora, New York

Start Date: 1/30/2013 Finish Date: 1/30/2013

Boring No.: B-2 Sheet 1 of 2

Groundwater Observations

Date	Time	Depth	Casing
1/30/2013	AM	17.4'	18'
1/30/2013	AM	18.3'	20'
1/30/2013	AM	17.5'	25'
1/30/2013	AM	DRY	CAVED

Borehole caved at 15 feet.

Coordinates

Northing

Easting

Sampler Hammer

Weight: 140 lbs.

Fall: 30 in.

Hammer Type: Automatic

Ground Elev.:

Boring Advance By: 4 1/4" Auger

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - coarse; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	Recovery (Inches)
	AUGERS	1	0.0	2.0	SS	14 12 15 6	1.0	12" TOPSOIL and ORGANIC MATERIAL	16
1								Dark Brown cm f SAND; little SILT; trace f GRAVEL (moist, non-plastic) FILL	
2		2	2.0	4.0	SS	5 5 4 6		Brown cmf SAND; little mf GRAVEL; little SILT (moist, non-plastic) FILL	10
3							4.0		
4		3	4.0	6.0	SS	10 8 8 9		Brown mf GRAVEL; some cmf SAND; trace SILT; trace BRICK Fragments (moist, non-plastic) FILL	6
5									
6		4	6.0	8.0	SS	50/5"		Cobble Fragments FILL	1
7								Boulder encountered from 6.3 to 8.5 feet	
8		5	8.0	10.0	SS	50/3"		No Recovery FILL	0
9							10.0		
10		6	10.0	12.0	SS	11 29 7 4			10
11							12.0	Brown cmf SAND; some SILT; little mf GRAVEL (moist, non-plastic) FILL	
12		7	12.0	14.0	SS	4 2 2 1			1
13							14.0	Dark Brown mf GRAVEL; some cmf SAND; trace SILT (moist, non-plastic) FILL	
14		8	14.0	16.0	SS	2 1 1 1		Black SILT; some f SAND; little ORGANICS (wet, non-plastic) w = 126.7%	12
15									
16		9	16.0	18.0	SS	WH 4 50/3"		Similar Soil (wet, non-plastic)	12
17									
18		10	18.0	20.0	SS	8 7 25 50/4"	19.0		8
19								Brown mf GRAVEL; and cmf SAND; trace SILT (saturated, non-plastic) ROCK Fragments	
20		11	20.0	22.0	SS	9 19 13 16		Brown mf GRAVEL; some cmf SAND; trace SILT (saturated, non-plastic) ROCK Fragments	10
21								Boulders encountered from 22.5 to 24.5 feet	
22									
23									
24									
25									

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: Brad Perry; Tyler Weston

Inspector:

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: B-2 Report No.: CD3491-01-13 Sheet 2 of 2

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
		12	25.0	27.0	SS	37 22 26 29		Reddish-Brown cmf SAND; and mf GRAVEL; little SILT (wet, non-plastic)	18
							27.0	Boring terminated at 27 feet.	

Notes:

1. Borehole backfilled with on-site soils.

SUBSURFACE INVESTIGATION
AND
GEOTECHNICAL EVALUATION

44508 CLINTON CF PROPOSED TOWER
DANNEMORA, CLINTON COUNTY,
NEW YORK

NYSOGS DESIGN AND CONSTRUCTION GROUP
NYSOGS TERM CONTRACT NO. D0S6085

PREPARED FOR: **NYSOGS Design and Construction Group**
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Albany, New York 12242

PREPARED BY: **ATL Engineering, PC**
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ATL Engineering Report No. AE080E-01-01-13

March 11, 2013

TABLE OF CONTENTS

SECTION NUMBER		PAGE
1.0	INTRODUCTION	1
2.0	PROJECT DESCRIPTION	1
3.0	SITE SURFACE CONDITIONS	2
4.0	SUBSURFACE INVESTIGATION & SAMPLING METHODOLOGY	2
5.0	SITE SUBSURFACE CONDITIONS	2
	5.1 Soil Borings	
	5.2 Subsurface Utility Investigation	
	5.3 Groundwater	
6.0	LABORATORY ANALYSES	4
7.0	GEOTECHNICAL ENGINEERING DISCUSSION	4
	7.1 Proposed Guard Tower and Bathroom Facility Foundations	
	7.2 Frost Protection	
	7.3 Seismic	
	7.4 General	
8.0	GEOTECHNICAL RECOMMENDATIONS	7
	8.1 Site Preparation	
	8.2 Guard Tower and Bathroom Facility Foundations	
	8.3 Dewatering	
	8.4 Backfill and Compaction Requirements	
	8.5 Testing and Inspection	
9.0	SUMMARY	9

APPENDICES

A. Site Location Plan
B. Boring Location Plan
C. Subsurface Investigation Logs
D. Particle Size Distribution Curves

SUBSURFACE INVESTIGATION
AND
GEOTECHNICAL EVALUATION

44508 CLINTON CF PROPOSED TOWER
DANNEMORA, CLINTON COUNTY,
NEW YORK

NYSOGS DESIGN AND CONSTRUCTION GROUP
NYSOGS TERM CONTRACT NO. D0S6085

1.0 INTRODUCTION

At the request of Mr. Michael Mitchell, representing NYSOGS Design and Construction Group (NYSOGS), and in accordance with our proposal (ATL Engineering No. AE998-33X-12-12, dated January 7, 2013) Atlantic Testing Laboratories, Limited (ATL) performed a subsurface investigation and geotechnical evaluation for the referenced project. The subsurface investigation was performed between the dates of January 29 and 30, 2013.

The purpose of the investigation was to ascertain the general subsurface soil and groundwater conditions at the site, to evaluate the engineering significance of these findings, and to provide recommendations related to the design and construction of foundations for the proposed guard tower and bathroom facility.

The proposed project site is located at Clinton Correctional Facility on Cook Street in Dannemora, New York. The project coordinates are N 44°43'26" latitude and W 73°43'21" longitude. A **Site Location Plan** is included in **Appendix A**. All dimensions and elevations referenced in this report are in units of feet, unless otherwise noted.

2.0 PROJECT DESCRIPTION

The existing guard tower at the site has reportedly experienced settlement. The proposed project will consist of the demolition of the existing guard tower, and constructing an approximate 25 foot tall, steel lattice framed guard tower with 10 foot by 10 foot column spacing (4 columns) and an observation enclosure mounted to the top of the frame. Total vertical loads for the guard tower are estimated at 20 kips per column, with downward wind loads, uplift wind loads, and seismic loads (downward and uplift) of approximately 7-kips, 8-kips, and 6-kips, respectively. The project also consists of constructing a bathroom facility with a crawl space supported on a continuous spread foundation, masonry bearing walls, and a concrete slab-on-deck supported by steel framing. Total vertical service loads for the bathroom facility are estimated at 2000 pounds per linear foot. Lateral loading information has not been provided at this time.

3.0 SITE SURFACE CONDITIONS

The site is reportedly underlain by approximately 15 to 20 feet of fill previously placed at the site. The means and methods of the fill placement are not known. The proposed project site is currently partially grass covered with an asphalt driveway. The current site topography is relatively flat at the proposed building areas, and slopes steeply downward at the south end of the project site.

Rock outcrops and exposed rock ledges were visible at the northern section of the yard area. Based on the surrounding site topography, it appears the area of the existing yard may have been cut and filled during construction of the facility. Former structures may also have been located in the area of the proposed construction throughout the facility's history.

4.0 SUBSURFACE INVESTIGATION & SAMPLING METHODOLOGY

The general boring locations were selected by representatives of NYSOGS. The specific boring locations were selected based on the results of a subsurface utility investigation performed by Subsurface Utility Imaging, LLC. A **Boring Location Plan** is included in **Appendix B**.

The borings were advanced utilizing 4¼-inch inside diameter hollow stem augers. Soil sampling and standard penetration testing was performed utilizing a 2-inch outside diameter split spoon sampler in accordance with ASTM D 1586. Soil sampling was generally performed continuously to a depth of 22 feet below the surface, and at 5-foot intervals thereafter to boring termination at a depth of 27 feet in boring B-2 and to the surface of bedrock at a depth of approximately 30 feet in boring B-1. Bedrock encountered in boring B-1 was cored to a depth of 10 feet utilizing a double tube, NX core barrel.

The soil samples were visually classified in the laboratory by an engineering technician in general accordance with the Burmister Soil Classification Systems. The split spoon sampler does not recover material larger than 1⅜-inch in nominal dimension; therefore, the soil classifications may not be representative of the entire soil matrix. The visual classifications and the standard penetration test results are presented on the **Subsurface Investigation Logs** included in **Appendix C**.

The boreholes were backfilled with on-site soils, bentonite, sand, and grout upon completion. It is important that the backfilled borings be monitored for settlement or subsidence. This will be the responsibility of NYSOGS. ATL assumes no liability for loss or damage resulting from borehole settlement.

5.0 SITE SUBSURFACE CONDITIONS

The following description of subsurface conditions is based on the subsurface soil, bedrock, and groundwater conditions encountered during this subsurface investigation. Actual subsurface conditions may vary across the site in both the horizontal and vertical dimensions. Detailed subsurface descriptions are provided on the Subsurface Investigation Logs. The topsoil and asphalt thicknesses provided on the Subsurface Investigation Logs should not be utilized to determine quantities. Based on our conversations with facility personnel, cobbles, boulders, and bedrock have reportedly been encountered in shallow excavations performed for various projects at the facility.

5.1 Soil Borings

5.1.1 Proposed Guard Tower (Boring B-1)

Boring B-1 generally encountered a 4-inch layer of asphalt pavement at the surface, underlain by a heterogeneous mixture of loose (N values 4 to 10) to very compact (N values greater than 50) fill material consisting of gravelly sand and sandy gravel with varying portions of silt that extended to a depth of approximately 14 feet below the surface. Deleterious fill material consisting of cinder and wood was encountered in the boring from 6 to 14 feet below the surface. Underlying the fill material, medium stiff (N values 4 to 8) sandy silt with organic material was encountered that extended to a depth of approximately 16.5 feet. The sandy silt was underlain by a heterogeneous mixture of medium compact (N values 10 to 30) to compact (N values 30 to 50) sandy gravel and gravelly sand with varying portions of silt that extended to auger refusal at a depth of approximately 30 feet. Two 5-foot rock cores were taken at depths of approximately 30 and 35 feet. The recovered bedrock cores consisted of Granite and Gneiss with core recoveries of 57% and 85%, and RQD values of 0% and 43%, respectively. Cobbles and boulders were encountered at depths ranging from approximately 16.5 to 32 feet beneath the surface.

5.1.2 Proposed Bathroom Facility (Borings B-2)

Boring B-2 encountered a 12-inch surficial layer of topsoil and organic material, underlain by loose (N values 4 to 10) fill material consisting of silty sand with varying portions of gravel that extended to a depth of approximately 4 feet below the surface. Underlying the silty sand fill material, medium compact (N values 10 to 30) fill material consisting of sandy gravel with silt was encountered that extended to a depth of approximately 10 feet. Brick fragments were encountered from 4 to 6 feet beneath the surface, and cobble fragments and boulders were encountered from a depth of 6 to 10 feet. Underlying the sandy gravel fill, fill material consisting of compact (N values 30 to 50) silty sand with gravel was encountered that extended to a depth of approximately 12 feet. The compact silty sand was underlain by loose fill material consisting of sandy gravel with silt that extended to a depth of 14 feet. Underlying the loose sandy gravel, soft (N values 2 to 4) to stiff (N values 8 to 15) sandy silt with organic material was encountered that extended to a depth of approximately 19 feet. The sandy silt was underlain by compact sandy gravel with varying portions of silt that extended to boring termination at a depth of 27 feet beneath the surface. Boulders were encountered at depths ranging from 22.5 to 24.5 feet beneath the surface.

The organic material encountered at a depth of approximately 14 feet in both borings may be an indication of the original ground surface prior to fill placement.

5.2 Subsurface Utility Investigation

A subsurface utility investigation was performed at the site utilizing radio frequency and ground penetrating radar methods to clear utilities at the soil boring locations. The investigation identified the presence of several subsurface anomalies in the area of the borings. The general location of the anomalies and the area investigated are depicted on the Boring Location Plan included in Appendix B.

5.3 Groundwater

Groundwater measurements were performed during the subsurface investigation through cased and open boreholes. The soil samples were also classified for coloration and relative moisture conditions.

Based on groundwater measurements and soil moisture content, freestanding groundwater was encountered at depths ranging from approximately 12.2 to 17.5 below the surface of the borings at the time of the subsurface investigation. Since the borings were backfilled upon completion of advancement, groundwater levels recorded during borehole advancement may not have had sufficient time to stabilize.

Perched groundwater may be encountered in the fill material at higher elevations, particularly during wetter periods of the year. It is anticipated that perched groundwater encountered during shallow excavations can be controlled by pumping from sumps installed around the perimeter of the excavations.

Fluctuations in water levels may occur due to seasonal and climatic variations, changes in surface runoff patterns, construction activity, and subsequent development of the site along with other interrelated factors.

6.0 LABORATORY ANALYSES

Select soil samples were submitted to ATL's geotechnical laboratory for physical analyses. Water Content Determination of Soil (ASTM D 2216) was performed on eight soil samples. The test results are located on the subsurface investigation logs included in Appendix C.

A Particle Size Analysis without Hydrometer (ASTM D 422) was performed on two soil samples. The **Particle Size Distribution Curves** are included in **Appendix D**.

Percent Organics of Soil (ASTM D 2974) was performed on one soil sample encountered in boring B-1 at a depth of 14 to 16 feet below the surface. The organic content of the sample was 19.8%.

7.0 GEOTECHNICAL ENGINEERING DISCUSSION

The Geotechnical Engineering Discussion is based on information provided by NYSOGS and the subsurface conditions outlined in this report.

7.1 Proposed Guard Tower and Bathroom Facility Foundations

Based on the subsurface information obtained during this investigation, the observed tower settlement may be due to settlement of the fill material and/or degradation of the underlying organic materials encountered in the soil borings at the site. The soil boring data indicates the fill material is variable in consistency and was likely not placed in a controlled manner. Based on our evaluation, the fill and organic soils are not suitable for the use of shallow foundations to support the proposed guard tower and bathroom facility. To prevent excessive settlement of the proposed structures, the fill and organic materials must be removed and replaced with properly compacted structural fill material or a deep foundation

system should be utilized to support the structures on the underlying native soil or bedrock below the fill and organics.

Since the fill and organics extend to depths ranging from approximately 16.5 to 19 feet below the surface at the boring locations, removal and replacement of the fill would require a relatively large excavation and/or shoring due to the loose, granular nature and groundwater conditions encountered in the fill. Additionally, adjacent structures may require underpinning if the excavations to remove the fill and organics extend within the zone of influence of existing footings.

Deep foundation systems consisting of driven, augercast, and helical piles were considered for the project; however, it is felt that their installation would be difficult due to the potential presence of cobbles, boulders, and old foundations systems.

Based on the subsurface conditions, it is recommended that the guard tower and bathroom facility be supported on a deep foundation system consisting of micro-piles to provide adequate support of the structures. Micro-piles are typically advanced using air-rotary, percussion drilling methods that can penetrate cobbles, boulders, and fill materials with fewer difficulties than other installation methods. Micro-piles are typically less than 12 inches in diameter and installed by advancing a steel casing to the surface of bedrock, drilling a rock socket below the casing bottom, then installing a center steel reinforcing bar and grout to the surface.

Micro-piles would derive their axial capacity through bond resistance between the grout and underlying Granite and Gneiss bedrock which was encountered at a depth of approximately 30 feet below the surface. The permanent steel casing should extend a minimum of 1 to 2 feet into the bedrock and the bond zone should extend a minimum of 5 feet below the casing. Grout should have a minimum 28-day compressive strength of 4000 psi. Based on the rock core data, an ultimate grout-to-ground bond of 28 ksf is recommended for preliminary design purposes.

For preliminary estimation purposes, a 7-inch diameter micro-pile (5.5-inch diameter rock socket) would have an allowable axial capacity of approximately 40 tons per pile. Individual micro-pile spacing (center to center) should be greater than 3 times the piles largest cross sectional dimension and not less than 30 inches. The pile spacing should be measured center to center at the cut off elevation.

The connection of the foundation system from the micro-piles to the structures for transfer of compressive, uplift, and lateral loads should be determined by the project structural engineer. The final micro-pile size, reinforcement, and number required at each structure will be determined once the final compressive, uplift and lateral loads, along with the foundation configuration and layout are determined.

The means and methods of the micro-pile installations should be the responsibility of the contractor. The contractor should prepare a bored-in-pile installation plan and submit it to the engineer and owner. The installation of the micro-piles should be continually monitored by a geotechnical engineer familiar with the subsurface conditions present at the site and the micro-pile procedures utilized by the contractor. It is recommended that at least one static pile load test be performed for each micro-pile type utilized at the project site.

Cobbles, boulders, groundwater, and old foundations may be encountered above the bedrock during micro-pile installations. Several subsurface anomalies were identified in the area of the borings during the subsurface utility survey that should be investigated further prior to the foundation installations.

7.2 Frost Protection

Foundation elements requiring frost protection must be founded a minimum of 5 feet below final exterior grade to provide adequate frost protection.

7.3 Seismic

Based on the field standard penetration test results, the seismic site classification for the project site has been determined to be D. The adjusted maximum considered earthquake spectral response acceleration for short periods, (S_{MS}) is 0.686g and at 1-second period, (S_{M1}) is 0.293g as determined from the Building Code of New York State 2010. Seismic exposure should be considered in the design of the structures.

7.4 General

The on-site soils are moderately moisture sensitive and frost susceptible. Construction traffic should be limited on exposed subgrades, especially during wetter periods of the year. Building subgrades should be sloped or crowned to prevent surface run-off and perched groundwater from ponding on the subgrades.

The soil parameters presented in the following table may be used for the following backfill materials.

Table of Soil Properties

Soil Property	On-site Sand and Gravel	Granular Fill
Angle of Internal Friction (°)	30	32
Active Earth Coefficient (K_a)*	0.33	0.31
At Rest Earth Coefficient (K_o)*	0.50	0.47
Passive Earth Coefficient (K_p)*	3.00	3.25
Ultimate Coefficient of Sliding Friction	0.38	0.44
Wet Unit Weight (pcf)	130-140	135-145

*The Rankine earth pressure coefficients are for level backfill placed in a fully drained condition.

8.0 GEOTECHNICAL RECOMMENDATIONS

The following recommendations are presented as the minimum requirements for the design, planning, and construction of the foundation system. The concepts and geotechnical engineering considerations presented in the preceding sections must be considered in project design and construction.

8.1. Site Preparation

8.1.1. In planning excavations adjacent to existing structures and utilities, care must be taken to locate and maintain their stability. The project should be designed to minimize disturbance to existing structures and utilities.

8.1.2. Site work should be scheduled during the drier portions of the year to avoid possible delays and additional costs associated with construction during the wet seasons.

8.1.3. Site surface grading must be designed to convey surface water away from the building and pavement structures.

8.1.4. The contractor must follow excavation safety practices as mandated by 29 CFR Part 1926 (OSHA) and by applicable state regulations.

8.2 Guard Tower and Bathroom Facility Foundations

8.2.1 The structures should be supported on a deep foundation system consisting of micro-piles to provide adequate compressive, uplift, and lateral support.

8.2.2 Micro-piles supported in the Granite and Gneiss bedrock encountered at a depth of approximately 30 feet below the surface may be designed for preliminary purposes using an ultimate grout-to-ground bond strength of 28 ksf. Refer to the Geotechnical Engineering Discussion for more specific design recommendations.

8.3 Dewatering

8.3.1 It will be the contractor's responsibility to maintain adequate water control at all times. Project specifications should clearly indicate that standing water, and/or saturated, unstable soil conditions will not be tolerated in areas to receive foundations or utilities. The project specifications should state that the contractor will not be reimbursed for extras related to the control of water.

8.3.2 All dewatering activities must comply with New York State Department of Environmental Conservation (NYSDEC) storm water discharge requirements for construction.

8.4 Backfill and Compaction Requirements

8.4.1 The on-site soils, excluding deleterious organics and oversize material (particles larger than 4 inches in diameter), may be used for general site fill and exterior foundation backfill, provided the soil is placed and compacted in accordance with Geotechnical Recommendations 8.4.4 and 8.4.5, and the soil is properly moisture conditioned. Granular Fill should be utilized for interior foundation backfill.

8.4.2 **Granular Fill** should consist of a clean, screened, crushed, or bank-run gravel conforming to the following gradation:

Sieve Size	Percent Passing
4”	100
¼”	35-65
#200	0-10

8.4.3 **Engineered Structural Fill** should consist of a screened, crushed gravel or crushed ledge rock conforming to the following gradation:

Sieve Size	Percent Passing
3”	100
1”	80 - 95
½”	45 - 75
#4	30 - 60
#40	10 - 40
#200	0 - 7

8.4.4 All fill and backfill should be placed and compacted in lifts not exceeding eight inches in loose thickness, at a moisture content of ± 2% of the Optimum Moisture Content, and to densities in excess of 95%, as determined by ASTM D1557, or as directed by the Geotechnical Engineer.

8.4.5 Compaction should be performed with vibratory rollers unless there is concern for damage to adjacent structures or underground utilities.

8.5 Testing and Inspection

8.5.1 Subgrade preparation and foundation installations must be continuously observed by an experienced Geotechnical Engineer, and/or their representative, familiar with the subsurface conditions and analysis described in this report. The engineer will be required to assess any unusual conditions and to ensure that adequate bearing capacities and proper foundation installation requirements are achieved.

8.5.2 All backfilling, placement of fill, compaction of in-situ soils, and concrete construction should be inspected by an Independent Testing Laboratory, which conforms to ASTM E-329, “The Standard Practice for use in the Evaluation of Testing and Inspection Agencies as Used in Construction”. It should be the Independent Testing Laboratory's responsibility to monitor construction practices to determine if they are in accordance with the project documents.

8.5.3 The final foundation plans and project specifications should be reviewed by our office to ensure that there has not been a misinterpretation of this report.

9.0 SUMMARY

The subsurface investigation logs and this report in its entirety should be provided to the contractors for information and interpretation. The subsurface investigation logs may not be representative of the entire site subsurface conditions, but only what was encountered at the individual test locations at the time of the investigation. The subsurface soil and groundwater conditions may be different from those described on the subsurface investigation logs and summarized in this report.

This report was prepared to present the findings of our subsurface investigation and engineering evaluation, and to outline concepts to be utilized in foundation design and construction. These concepts may require alterations to meet the specific design and economic considerations for this project.

Prepared by:

Aaron D. Woods, IE
Engineer

Reviewed by:

Brian T. Barnes, PE
Senior Engineer

ADW/BTB/adw

APPENDIX A

SITE LOCATION PLAN

Site Location Map	Drawn by: ADW	Scale: Not to scale	Project No.: CD3491	Date: March 2013

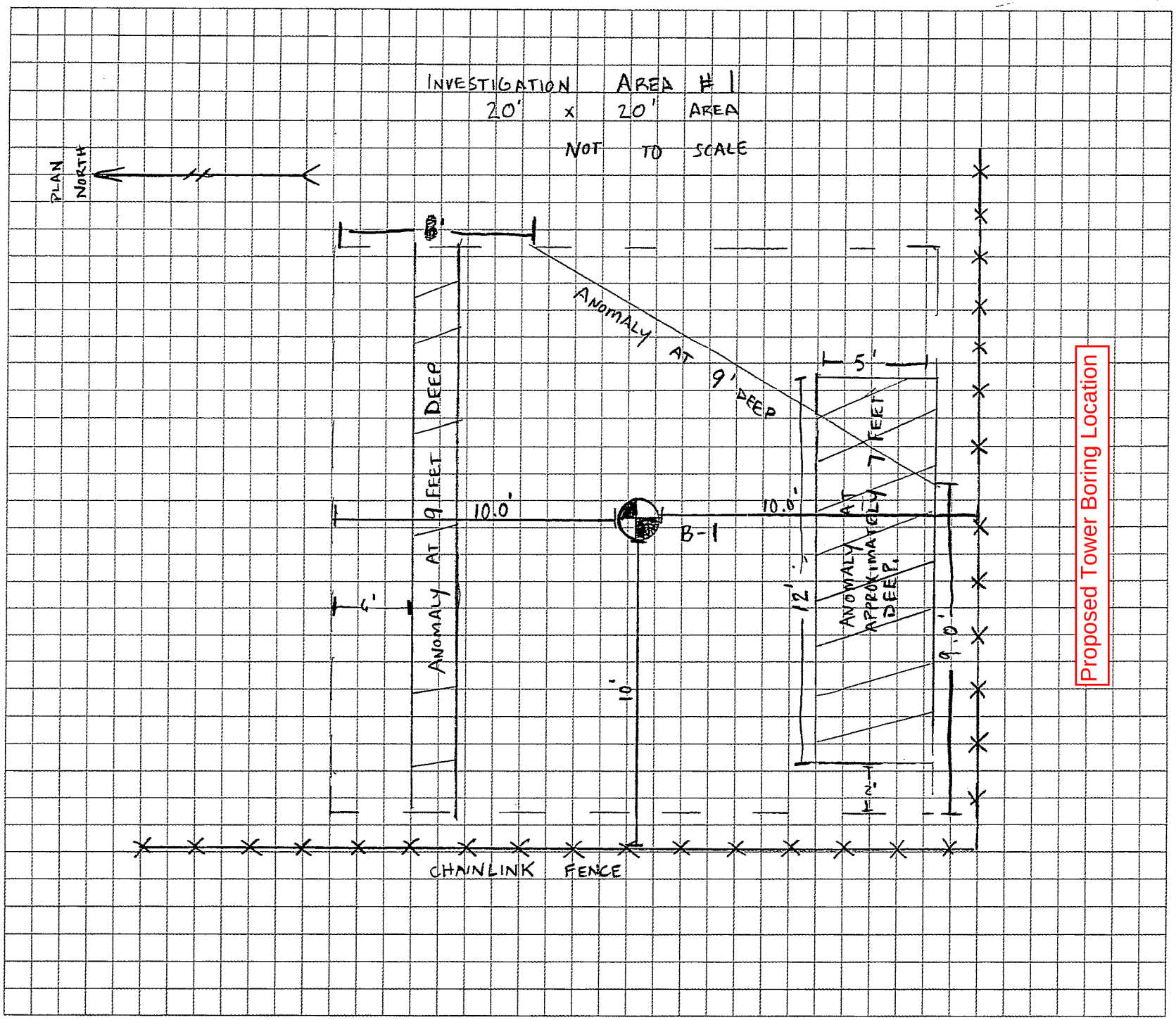
44508 Clinton CF Proposed Tower
Dannemora, Clinton County, New York

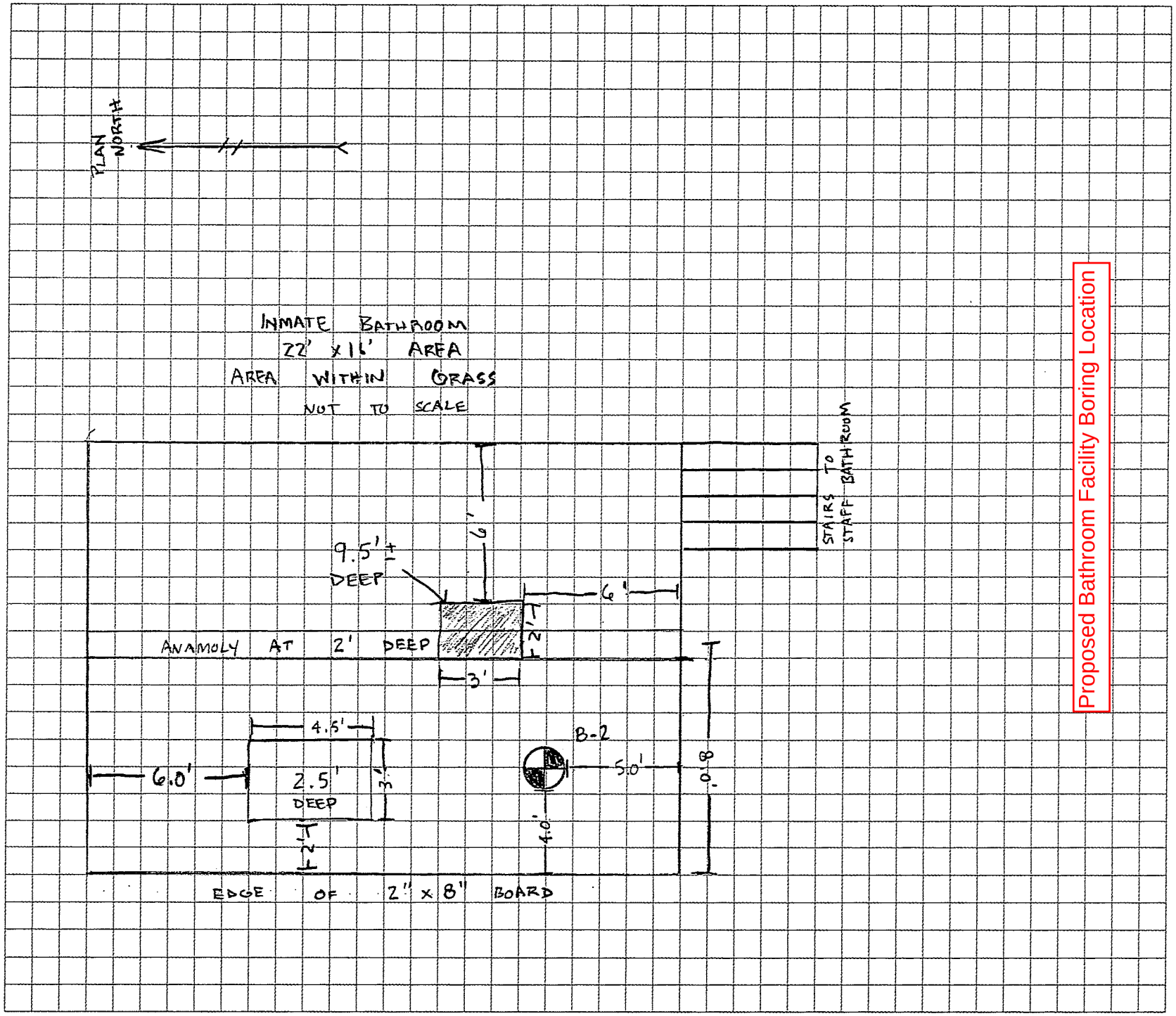
***ATLANTIC TESTING LABORATORIES*, Limited**

Albany, NY	Binghamton, NY	Canton, NY	Elmira, NY	Plattsburgh, NY
Poughkeepsie, NY	Syracuse, NY	Rochester, NY	Utica, NY	Watertown, NY

APPENDIX B

BORING LOCATION PLAN


INVESTIGATION AREA # 1
20' x 20' AREA
NOT TO SCALE
PLAN NORTH
5'
ANOMALY AT 9' DEEP
ANOMALY AT 9 FEET DEEP
10.0'
10.0'
B-1
6'
10'
5'
7 FEET
ANOMALY AT APPROXIMATELY 7 FEET DEEP.
12'
9.0'
2'
CHAINLINK FENCE
Proposed Tower Boring Location



Proposed Bathroom Facility Boring Location

APPENDIX C

SUBSURFACE INVESTIGATION LOGS

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: CD3491-01-13

Client: ATL Engineering

Boring Location: See Boring Location Plan

Project: Subsurface Investigation
CF Proposed Tower
Dannemora, New York

Proposed Tower

Start Date: 1/29/2013 Finish Date: 1/29/2013

Boring No.: B-1 Sheet 1 of 2

Coordinates
Northing
Easting

Sampler Hammer
Weight: 140 lbs.
Fall: 30 in.
Hammer Type: Automatic

Ground Elev.:

Boring Advance By: 4 1/4" Auger

Groundwater Observations

Date	Time	Depth	Casing
1/29/2013	PM	*12.2'	30'
1/29/2013	PM	*12.2'	CAVED

Borehole caved at 19 feet. *May be affected by water utilized during rock coring.

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - coarse; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	Recovery (Inches)
	AUGERS	1	0.0	2.0	SS	39 31 19 16	0.3	4" ASPHALT	16
1								Brown cmf SAND; little mf GRAVEL; little SILT (wet, non-plastic) FILL	
2		2	2.0	4.0	SS	6 6 5 3		Similar Soil (wet, non-plastic) FILL	10
3									
4		3	4.0	6.0	SS	4 4 3 4		No Recovery FILL	0
5									
6							6.0		
		4	6.0	8.0	SS	4 5 5 4		Brown cmf SAND; and cmf GRAVEL; little SILT; trace CINDER (saturated, non-plastic) FILL w = 11.2%	10
7									
8		5	8.0	10.0	SS	4 5 5 6		Brown cmf SAND; and mf GRAVEL; little SILT; trace CINDER (saturated, non-plastic) FILL w = 9.8%	12
9									
10		6	10.0	12.0	SS	4 3 1 6		Dark Brown cmf SAND; and mf GRAVEL; some SILT; trace BRICK Fragments; trace WOOD (saturated, non-plastic) FILL w = 18.4%	10
11									
12		7	12.0	14.0	SS	13 11 42 15		Brown cm f GRAVEL; and cmf SAND; little SILT (saturated, non-plastic) FILL w = 8.3%	10
13							14.0		
14		8	14.0	16.0	SS	2 2 4 4		Dark Brown SILT; little ORGANICS; trace f SAND (wet, non-plastic) w = 168.6% Organic Content = 19.8%	18
15									
16		9	16.0	18.0	SS	7 50/2"	16.5	Similar Soil (wet, non-plastic)	6
17									
18		10	18.0	20.0	SS	12 12 17 31		Brown mf GRAVEL; and cmf SAND; trace SILT (saturated, non-plastic) w = 10.3%	12
19									
20								Cobbles and Boulders encountered from 16.5 to 32 feet	
21									
22									
23									
24									
25									

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: Brad Perry; Tyler Weston

Inspector:

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: B-1 Report No.: CD3491-01-13 Sheet 2 of 2

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
		11	25.0	27.0	SS	12 18 20 20		Grey cmf SAND; some mf GRAVEL; little SILT (saturated, non-plastic) w = 17.9%	8
26									
27									
28									
29									
30		12	30.0	30.2	SS	50/2"	30.2	Rock Fragment	1
31			30.2	35.0	NX	RUN 1			34
32	NX CORE							Grey Granite and Gneiss	
33								34" or 57% Recovery	
34								0 Pieces (0")- 100% Chips and Fragments	
35								0 Pieces longer than 4" (0") - RQD=0%	
			35.0	40.0	NX	RUN 2		Grey Granite and Gneiss	51
36								51" or 85% Recovery	
37								2 Pieces (26")- 45% Chips and Fragments	
38								2 Pieces longer than 4" (26")- RQD=43%	
39									
40							40.0	Boring terminated at 40 feet.	
41									
42								Notes:	
43								1. Borehole backfilled with on-site soils.	
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									
56									
57									
58									
59									
60									
61									
62									

ATL-LOG1 CD3491 ATL ENGINEERING- DANNEMORA.GPJ LOG-WELL.GDT 3/1/13

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: CD3491-01-13

Client: ATL Engineering

Boring Location: See Boring Location Plan

Project: Subsurface Investigation

Bathroom Facility

CF Proposed Tower

Dannemora, New York

Start Date: 1/30/2013 Finish Date: 1/30/2013

Boring No.: B-2 Sheet 1 of 2

Groundwater Observations

Date	Time	Depth	Casing
1/30/2013	AM	17.4'	18'
1/30/2013	AM	18.3'	20'
1/30/2013	AM	17.5'	25'
1/30/2013	AM	DRY	CAVED

Borehole caved at 15 feet.

Coordinates

Northing

Easting

Sampler Hammer

Weight: 140 lbs.

Fall: 30 in.

Hammer Type: Automatic

Ground Elev.:

Boring Advance By: 4 1/4" Auger

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - coarse; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	Recovery (Inches)
	AUGERS	1	0.0	2.0	SS	14 12 15 6	1.0	12" TOPSOIL and ORGANIC MATERIAL	16
1								Dark Brown cm f SAND; little SILT; trace f GRAVEL (moist, non-plastic) FILL	
2		2	2.0	4.0	SS	5 5 4 6		Brown cmf SAND; little mf GRAVEL; little SILT (moist, non-plastic) FILL	10
3							4.0		
4		3	4.0	6.0	SS	10 8 8 9		Brown mf GRAVEL; some cmf SAND; trace SILT; trace BRICK Fragments (moist, non-plastic) FILL	6
5									
6		4	6.0	8.0	SS	50/5"		Cobble Fragments FILL	1
7								Boulder encountered from 6.3 to 8.5 feet	
8		5	8.0	10.0	SS	50/3"		No Recovery FILL	0
9							10.0		
10		6	10.0	12.0	SS	11 29 7 4			10
11							12.0	Brown cmf SAND; some SILT; little mf GRAVEL (moist, non-plastic) FILL	
12		7	12.0	14.0	SS	4 2 2 1			1
13							14.0	Dark Brown mf GRAVEL; some cmf SAND; trace SILT (moist, non-plastic) FILL	
14		8	14.0	16.0	SS	2 1 1 1		Black SILT; some f SAND; little ORGANICS (wet, non-plastic) w = 126.7%	12
15									
16		9	16.0	18.0	SS	WH 4 50/3"		Similar Soil (wet, non-plastic)	12
17									
18		10	18.0	20.0	SS	8 7 25 50/4"	19.0		8
19								Brown mf GRAVEL; and cmf SAND; trace SILT (saturated, non-plastic) ROCK Fragments	
20		11	20.0	22.0	SS	9 19 13 16		Brown mf GRAVEL; some cmf SAND; trace SILT (saturated, non-plastic) ROCK Fragments	10
21								Boulders encountered from 22.5 to 24.5 feet	
22									
23									
24									
25									

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: Brad Perry; Tyler Weston

Inspector:

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: B-2 Report No.: CD3491-01-13 Sheet 2 of 2

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
		12	25.0	27.0	SS	37 22 26 29		Reddish-Brown cmf SAND; and mf GRAVEL; little SILT (wet, non-plastic)	18
							27.0	Boring terminated at 27 feet.	

Notes:

1. Borehole backfilled with on-site soils.

APPENDIX D

PARTICLE SIZE DISTRIBUTION CURVES

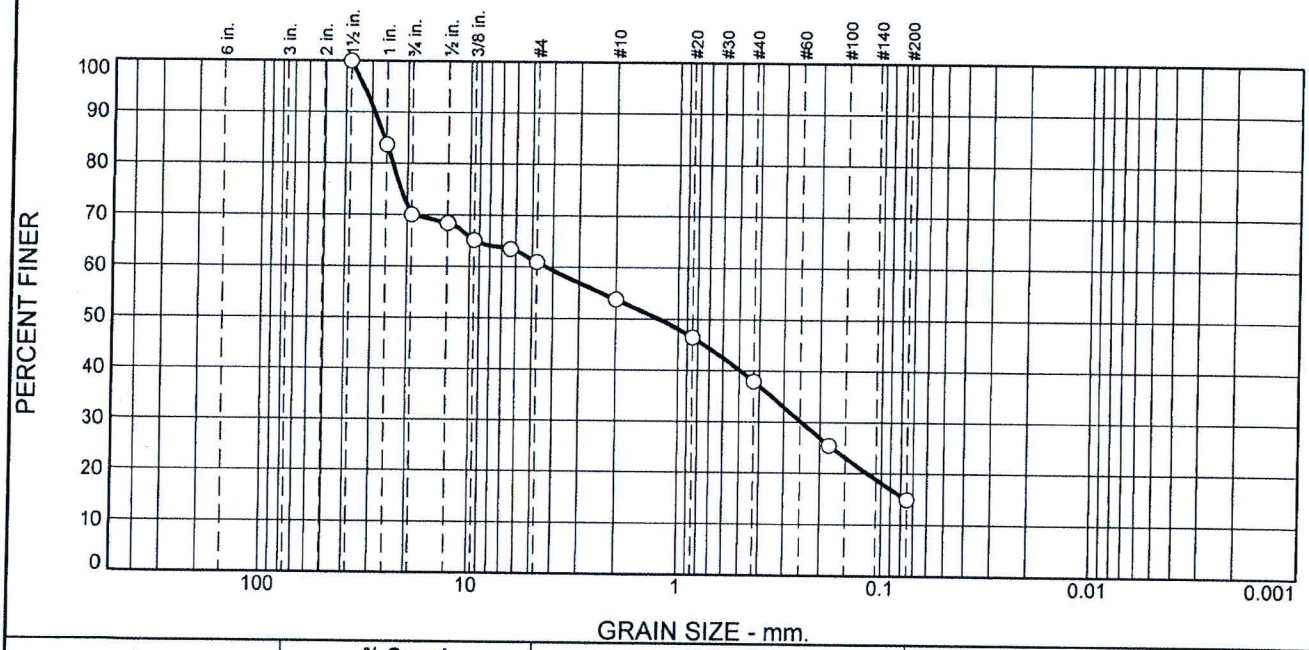
Particle Size Distribution Report

Project: Clinton CF, Proposed Tower, Dannemora, New York **Report No.:** CD3491SL-01-02-13

Client: ATL Engineering, PC **Date:** 2/15/13

Sample No: B-1; S-4 **Source of Sample:** Boring Sample

Location: **Elev./Depth:** 6.0 - 8.0'



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	30	9	7	16	23	15	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	OUT OF SPEC. (X)
1-1/2"	100		
1"	84		
3/4"	70		
1/2"	68		
3/8"	65		
1/4"	63		
#4	61		
#10	54		
#20	46		
#40	38		
#80	25		
#200	15		

* (no specification provided)

Soil Description

Brown cmf SAND; and cmf GRAVEL; little SILT

Atterberg Limits

PL= -- LL= -- PI= --

Coefficients

D_{85}= 26.1197 D_{60}= 4.2756 D_{50}= 1.2412
D_{30}= 0.2471 D_{15}= 0.0756 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Moisture content 11.2%

Figure

ATLANTIC TESTING LABORATORIES, LIMITED

Reviewed by: Date: 08 March 13

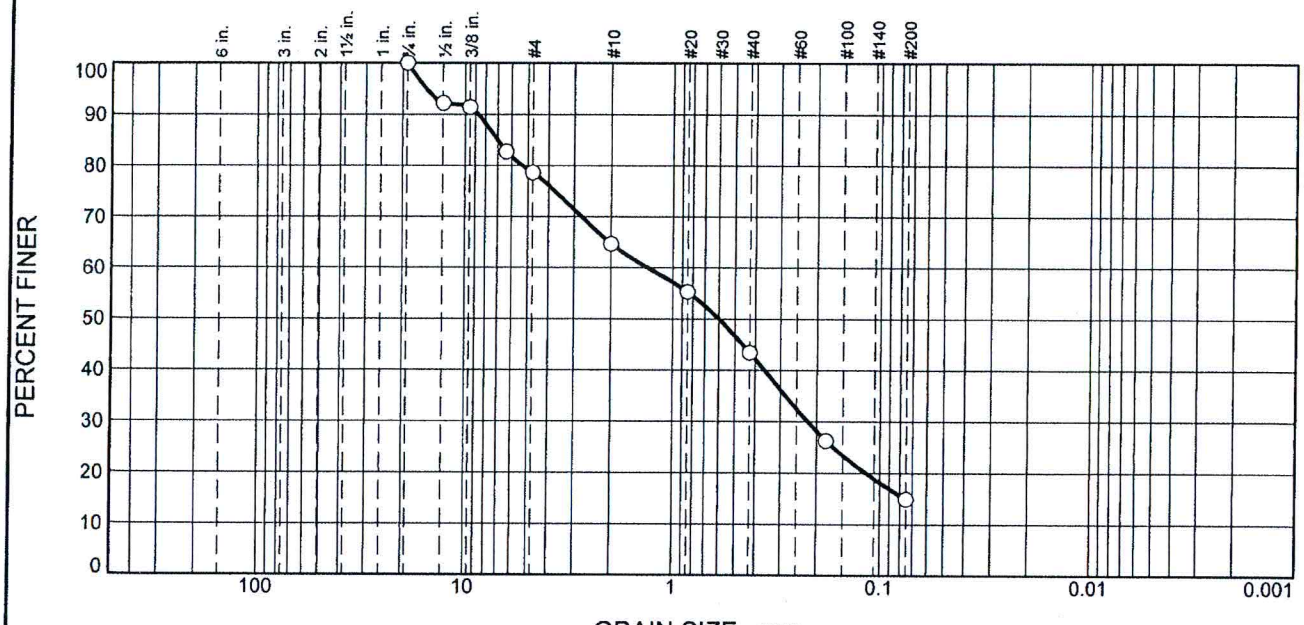
Particle Size Distribution Report

Project: Clinton CF, Proposed Tower, Dannemora, New York **Report No.:** CD3491SL-02-02-13

Client: ATL Engineering, PC **Date:** 2/15/13

Sample No: B-1; S-11 **Source of Sample:** Boring Sample

Location: **Elev./Depth:** 25.0 - 27.0'



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	21	14	22	28	15	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	OUT OF SPEC. (X)
3/4"	100		
1/2"	92		
3/8"	91		
1/4"	83		
#4	79		
#10	65		
#20	55		
#40	43		
#80	26		
#200	15		

* (no specification provided)

Soil Description

Grey cmf SAND; some mf GRAVEL; little SILT

Atterberg Limits

PL= -- LL= -- PI= --

Coefficients

D_{85}= 7.0173 D_{60}= 1.3217 D_{50}= 0.6011
D_{30}= 0.2205 D_{15}= 0.0754 D_{10}=
C_u= C_c=

Classification

USCS= SM AASHTO=

Remarks

Moisture content 17.9%

Figure

ATLANTIC TESTING LABORATORIES, LIMITED

Reviewed by: Date: 08 March 13

SECTION 071416

COLD FLUID-APPLIED WATERPROOFING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Cold-applied, emulsified-asphalt waterproofing.

1.2 SUBMITTALS

A. Product Data: For each type of product.

1.3 FIELD CONDITIONS

A. Weather Limitations: Proceed with application only when existing and forecasted weather conditions permit waterproofing to be performed according to manufacturers' written instructions.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Source Limitations: Obtain primary waterproofing materials and primers from single source from single manufacturer. Provide auxiliary materials recommended in writing by manufacturer of primary materials.

2.2 COLD-APPLIED, EMULSIFIED-ASPHALT WATERPROOFING

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
1. BASF Construction Chemicals - Building Systems; Sonneborn Brand Products.
2. Euclid Chemical Company (The); an RPM company.
3. Meadows, W. R., Inc.

B. Trowel Coats: ASTM D 1227, Type II, Class 1.

C. Brush and Spray Coats: ASTM D 1227, Type III, Class 1.

2.3 AUXILIARY MATERIALS

A. General: Furnish auxiliary materials recommended in writing by waterproofing manufacturer for intended use and compatible with bituminous waterproofing.

B. Emulsified-Asphalt Primer: ASTM D 1227, Type III, Class 1, except diluted with water as recommended in writing by manufacturer.

C. Asphalt-Coated Glass Fabric: ASTM D 1668, Type I.

D. Patching Compound: Epoxy or latex-modified repair mortar of type recommended in writing by waterproofing manufacturer.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions with Applicator present, for compliance with requirements for surface smoothness, surface moisture, and other conditions affecting performance of bituminous waterproofing work.

B. Proceed with application only after substrate construction and penetrating work have been completed and unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Mask or otherwise protect adjoining exposed surfaces from being stained, spotted, or coated with waterproofing. Prevent waterproofing materials from entering and clogging weep holes and drains.

B. Clean substrates of projections and substances detrimental to the waterproofing work; fill voids, seal joints, and remove bond breakers if any, as recommended in writing by prime material manufacturer.

C. Apply patching compound to patch and fill tie holes, honeycombs, reveals, and other imperfections.

3.3 APPLICATION, GENERAL

A. Comply with manufacturer's written instructions for waterproofing application, cure time between coats, and drying time before backfilling unless more stringent requirements are indicated.

1. Apply waterproofing to provide continuous plane of protection.
2. Apply additional coats if recommended in writing by manufacturer or to achieve a smooth surface and uninterrupted coverage.

B. Where waterproofing footings and foundation walls, apply from finished-grade line to top of footing; extend over top of footing and down a minimum of 6 inches (150 mm) over outside face of footing.

1. Extend waterproofing 12 inches (300 mm) onto intersecting walls and footings, but do not extend onto surfaces exposed to view when Project is completed.

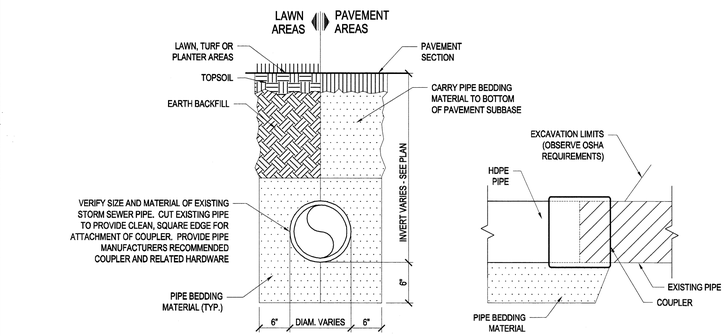
2. Install flashings and corner protection stripping at internal and external corners, changes in plane, construction joints, cracks, and where shown as "reinforced," by embedding an 8-inch- (200-mm-) wide strip of asphalt-coated glass fabric in a heavy coat of waterproofing. Waterproofing coat for embedding fabric is in addition to other coats required.

3.4 COLD-APPLIED, EMULSIFIED-ASPHALT WATERPROOFING

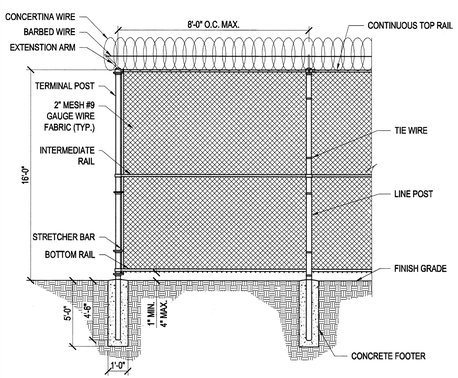
A. Concrete Foundations: Apply two brush or spray coats at not less than 1.5 gal./100 sq. ft. (0.6 L/sq. m) for first coat and 1 gal./100 sq. ft. (0.4 L/sq. m) for second coat or one trowel coat at not less than 4 gal./100 sq. ft. (1.6 L/sq. m).

3.5 CLEANING

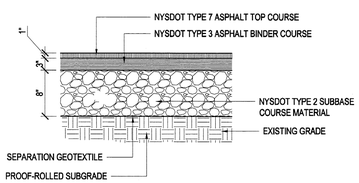
A. Clean spillage and soiling from adjacent construction using cleaning agents and procedures recommended in writing by manufacturer of affected construction.



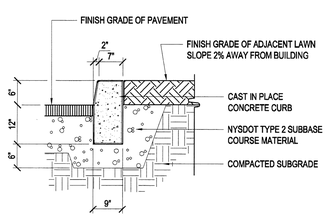
5 PIPE BEDDING DETAIL
SCALE: NOT TO SCALE



4 CHAIN LINK FENCE DETAIL
SCALE: 3/16"=1'-0"



3 ASPHALT PAVEMENT RESTORATION
SCALE: NOT TO SCALE



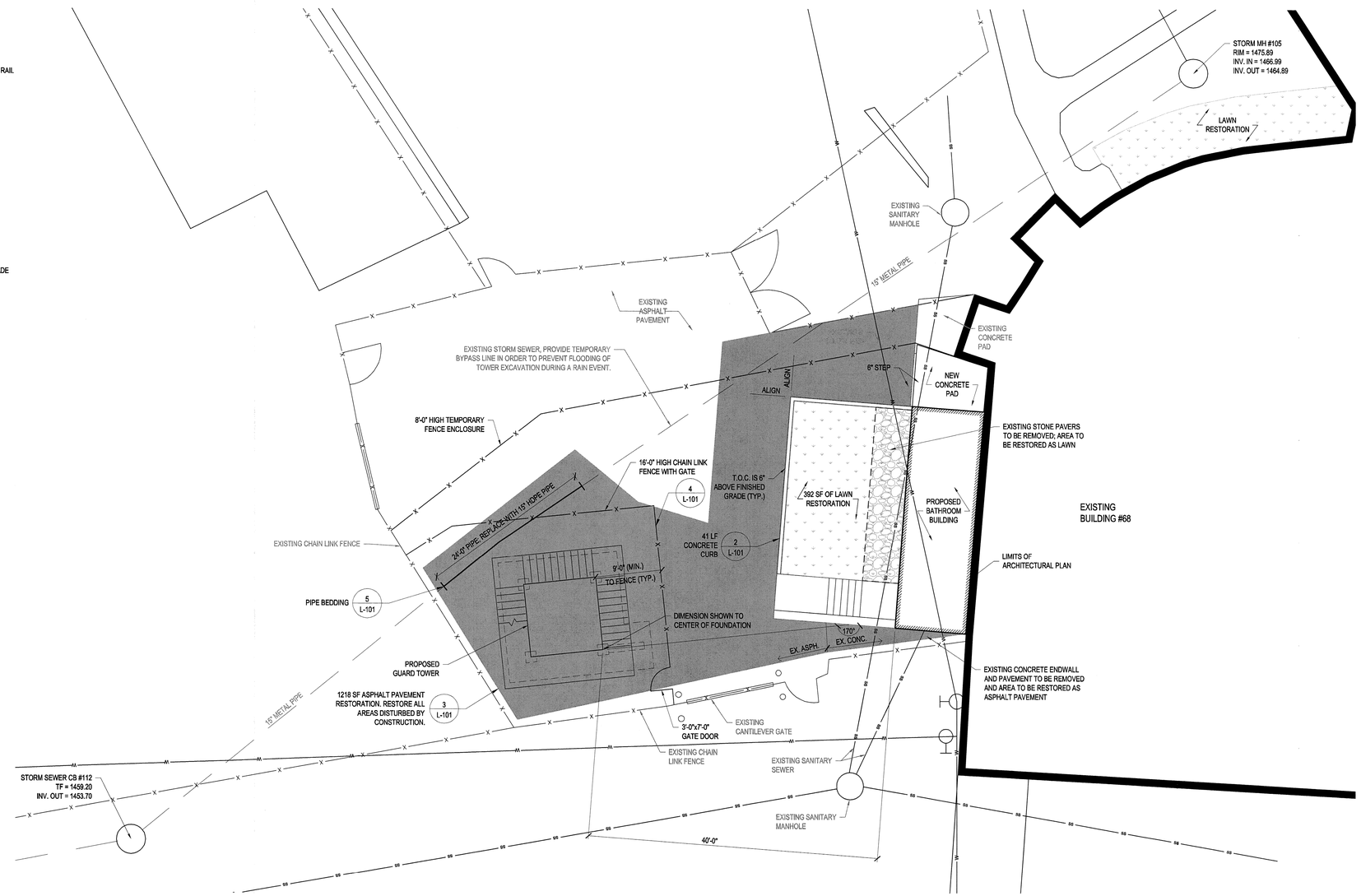
2 CONCRETE CURB
SCALE: NOT TO SCALE

SITE LEGEND

- AREA OF LAWN TO BE RESTORED
- EXISTING STONE PAVERS TO BE REMOVED
- EXISTING PAVEMENT TO BE REMOVED AND RESTORED TO ASPAHLT
- EXISTING CHAIN LINK FENCING
- TEMPORARY FENCE ENCLOSURE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- WATER MAIN

GENERAL NOTES:

1. UNDERGROUND UTILITIES ARE SHOWN FROM OWNER-PROVIDED SURVEY. EXACT LOCATION OF UTILITIES MAY DIFFER FROM THE LOCATION SHOWN, AND ADDITIONAL UTILITIES MAY EXIST. CONTRACTOR SHALL PROVIDE A UTILITY LOCATOR SERVICE TO VERIFY THE PRESENCE AND EXACT LOCATION OF ALL UTILITIES WITHIN THE AREA OF WORK PRIOR TO COMMENCING ANY EXCAVATION WORK PURSUANT TO THIS CONTRACT.
2. PROVIDE ALL REMOVALS INCIDENTAL TO AND NECESSARY TO PROVIDE THE WORK OF THIS CONTRACT. REMOVE EXISTING FEATURES IN THEIR ENTIRETY UNLESS OTHERWISE INDICATED.
3. PROTECT FROM DAMAGE ALL EXISTING PHYSICAL FEATURES NOT INDICATED OR REQUIRED TO BE REMOVED FOR THE WORK. PROTECT FROM DAMAGE ALL PHYSICAL FEATURES ON THE SITE THAT LIE OUTSIDE THE GRADING LIMIT LINE.
4. RESTORE TO THEIR ORIGINAL CONDITION ALL EXISTING PHYSICAL FEATURES DAMAGED BY THE UNAUTHORIZED ACT OR OMISSION OF THE CONTRACTOR. ORIGINAL CONDITION SHALL MEAN THE CONDITION IN WHICH THE FEATURE WAS FOUND AT THE START OF THE WORK.
5. PROVIDE SMOOTH TRANSITION TO EXISTING GRADES.
6. FINE GRADE, TOPSOIL, SEED AND MULCH ALL AREAS DISTURBED BY THE WORK OF THIS CONTRACT AND NOT SPECIFIED TO BE COVERED BY BUILDINGS, PAVEMENTS, OR OTHER FINISHED SURFACE. RESTORE ALL EXISTING CONSTRUCTION TO ORIGINAL CONDITION, UNLESS SHOWN OR DIRECTED OTHERWISE.



1 SITE PLAN
SCALE: 1"=8'-0"

NYS OFFICE OF GENERAL SERVICES
Serving New York
ANDREW M. CUOMO
Governor
ROANN M. DESTITO
Commissioner

CONSULTANT

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
Fax: 315-455-9667
www.cscos.com

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

REGISTERED ARCHITECT
ALLEN RICHARD WOODBURY
037795
STATE OF NEW YORK

CONTRACT:
CONSTRUCTION

TITLE:
CLINTON CORRECTIONAL FACILTY
REPLACE OBSERVATION TOWER
BUILDING NO. 68

LOCATION:
ROUTE 374, 1156 COOK STREET
DANNEMORA, NY 12929-2000

CLIENT:
DOCCS

MARK	DATE	DESCRIPTION
	7/24/2013	BID DOCUMENT

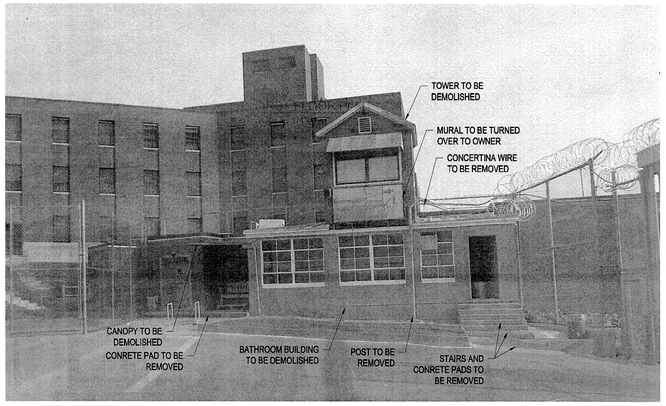
PROJECT NUMBER:	44508 – C
DESIGNED BY:	M.D. EDELSTEIN
DRAWN BY:	M.D. EDELSTEIN
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
SITE PLAN AND DETAILS

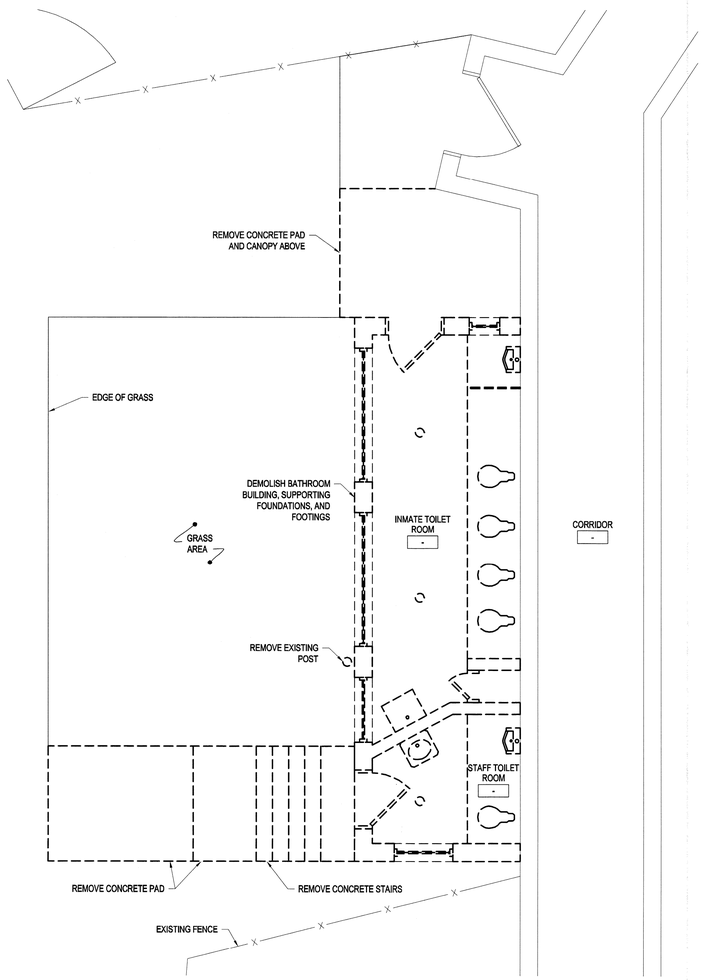
DRAWING NUMBER:
L-101

SHEET 3 OF 20

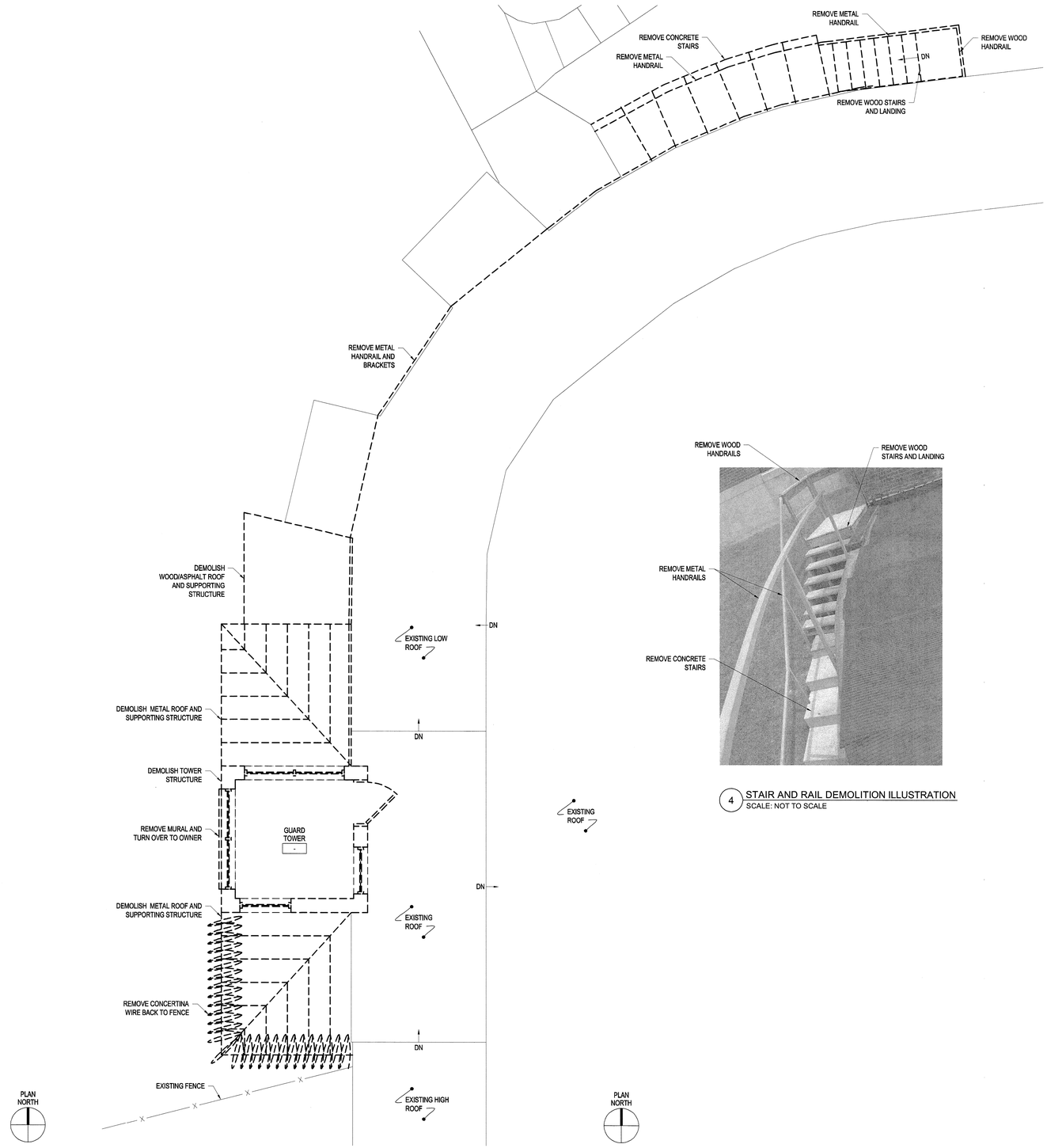
36x24 PLOT SHEET
Jul 23,2013 – 4:31pm
..f:\Project\190 – NYSOGS\190429042 – ClintonCFlower\Design\CADD\Sheet Files\190429042 _L-101.dwg



1 BUILDING DEMOLITION OVERVIEW
SCALE: NOT TO SCALE



2 FIRST FLOOR PLAN
SCALE: 1/4"=1'-0"



3 SECOND FLOOR AND ROOF PLAN
SCALE: 1/4"=1'-0"

4 STAIR AND RAIL DEMOLITION ILLUSTRATION
SCALE: NOT TO SCALE

NYS OFFICE OF GENERAL SERVICES
Serving New York
ANDREW M. CUOMO
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Commissioner

CONSULTANT

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WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS 'A' MISDEMEANOR.

REGISTERED ARCHITECT GLENN RICHARD WOODBURY 027795 STATE OF NEW YORK

CONTRACT:
CONSTRUCTION

TITLE:
CLINTON CORRECTIONAL FACILTY
REPLACE OBSERVATION TOWER
BUILDING NO. 68

LOCATION:
ROUTE 374, 1156 COOK STREET
DANNEMORA, NY 12929-2000

CLIENT:
DOCCS

MARK	DATE	DESCRIPTION
	7/24/2013	BID DOCUMENT

PROJECT NUMBER:	44508 – C
DESIGNED BY:	M.E. BARNES
DRAWN BY:	M.E BARNES
FIELD CHECK:	
APPROVED:	

SHEET TITLE:
DEMOLITION PLANS

DRAWING NUMBER:
AD-101

SHEET 9 OF 20

Jul 23,2013 – 4:35pm
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36x24 PLOT SHEET