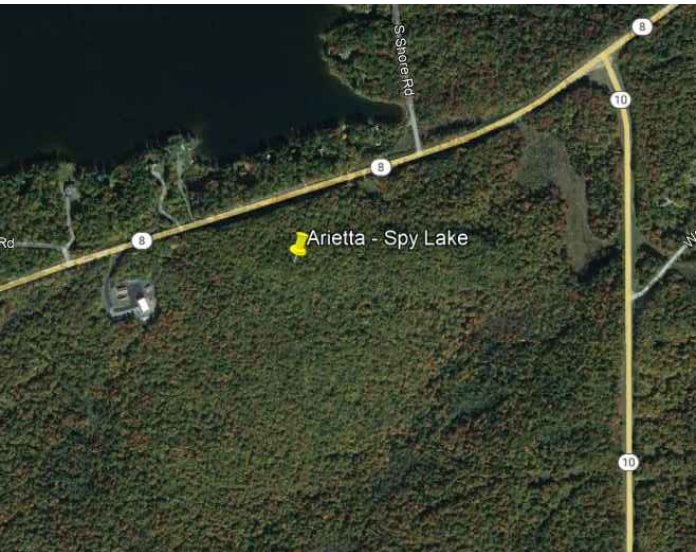




CONTRACT DRAWINGS  
FOR THE CONSTRUCTION OF

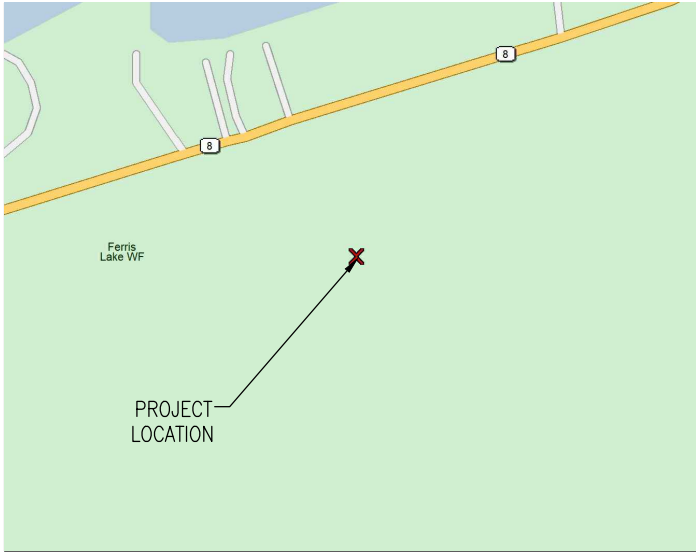
HAMILTON COUNTY  
EMERGENCY COMMUNICATIONS PROJECT  
SITE NAME: ARIETTA - SPY LAKE

984 STATE ROUTE 8,  
PISECO, NY 12139



AERIAL MAP

DIRECTIONS TO SITE: (FROM SYRACUSE) TAKE I-90 EAST TO EXIT 31. TURN RIGHT ONTO TRENTON ROAD AND FOLLOW TO SR8/SR12. TAKE EXIT FOR SR8 AND FOLLOW TO A LEFT ONTO SR8/COLD BROOK STREET. FOLLOW FOR 35.4 MILES TO SITE ON RIGHT.



VICINITY MAP

PROJECT INFORMATION

LANDLORD NAME:

SPY LAKE CORPORATION

PROJECT OWNER:

HAMILTON COUNTY

SITE NAME:

ARIETTA - SPY LAKE

E911 SITE ADDRESS:

984 STATE ROUTE 8  
PISECO, NY 12139

TAX MAP #:

127.000-1-1.11

LATITUDE:

N43° 23' 31.08"

LONGITUDE:

W 74° 33' 07.62"

AREA OF DISTURBANCE:

0.88 ACRES

GROUND ELEVATION:

1801± AMSL

ZONING JURISDICTION:

TOWN OF ARIETTA

COUNTY:

HAMILTON

TYPE OF SITE:

PROPOSED SELF SUPPORT

TOWER HEIGHT:

130'-0" AGL

PROPOSED USE:

EMERGENCY COMMUNICATIONS FACILITY

PROJECT DIRECTORY

APPLICANT:

HAMILTON COUNTY

CONTACT:

JILL DUNHAM

PHONE:

(518) 548-6223

CIVIL ENGINEERING FIRM:

C&S ENGINEERS INC.  
499 COL. EILEEN COLLINS BLVD.  
SYRACUSE, NY 13212

CONTACT:

ERIC N. KENNA P.E.

PHONE:

(315) 455-2000

POWER COMPANY:

NATIONAL GRID

PHONE:

(800) 867-5222

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE; NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

Dig Safely New York

Call 811

before you dig

DIG | SAFELY

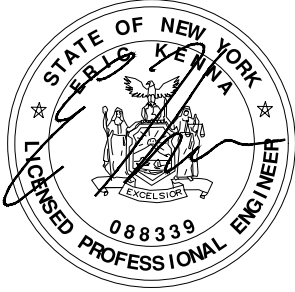
PHONE #: 1-800-962-7962 OR 811

WEBSITE: [HTTP://WWW.DIGSAFELYNEWYORK.COM](http://WWW.DIGSAFELYNEWYORK.COM)

DRAWING LIST			
SHEET NO.	SHEET NAME	REV	DATE
GENERAL			
G-001	TITLE SHEET	1	8-2-24
G-002	GENERAL NOTES	0	3-8-24
CIVIL			
C-100	PROPERTY PLAN	1	3-12-24
C-101	OVERALL SITE PLAN	1	3-12-24
C-102	GRADING PLAN	0	3-8-24
C-103	GRADING PLAN	1	3-12-24
C-104	GRADING PLAN	2	8-2-24
C-105	COMPOUND PLAN	2	8-2-24
C-106	TREE SURVEY PLAN	1	3-12-24
C-201	TOWER ELEVATION	1	8-2-24
C-501	EQUIPMENT SHELTER DETAILS	0	3-8-24
C-502	SHELTER FOUNDATION DETAILS	0	3-8-24
C-503	FOUNDATION DETAILS	0	3-8-24
C-504	ICE BRIDGE DETAILS	0	3-8-24
C-505	WAVEGUIDE/ CABLE DETAILS	0	3-8-24
C-506	FENCE DETAILS	0	3-8-24
C-507	SITE DETAILS	0	3-8-24
C508	PROPANE TANK DETAILS	0	3-8-24
C-509	SIGN DETAILS ON SPECIFICATIONS	0	3-8-24
ELECTRICAL			
E-101	GROUNDING PLAN AND NOTES	1	3-12-24
E-501	ELECTRICAL DETAILS	0	3-8-24
E-502	ELECTRICAL DETAILS	0	3-8-24
E-503	ELECTRICAL DETAILS	0	3-8-24
E-504	GROUNDING DETAILS	0	3-8-24
E-505	GROUNDING DETAILS	0	3-8-24
E-506	GROUNDING SCHEMATIC	0	3-8-24

C&S PROJECT: F75.004.001

MARCH 2024



TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF THE PLANS AND SPECIFICATIONS FOR THIS PROJECT ARE IN COMPLIANCE WITH THE NEW YORK STATE ENERGY CONSERVATION CONSTRUCTION CODE AND THE BUILDING CODE OF NEW YORK STATE

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW

G-001

Aug 02, 2024 - 10:44am  
F:\Project\Y75 - Hamilton County\F7504001 - 911 Interop. Comm. Project\CAD\Arietta Spy Lake\Civil Drawings\Sheet Files\General\F7504001\_G-002.dwg

C	1		2		3		4	
	<p>1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.</p> <p>2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION". PAINTED SURFACES SHALL BE TOUCHED UP.</p> <p>3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.</p> <p>4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.</p> <p>5. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS.</p> <p>6. ALL METAL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123. ALL SHOP WELDED MEMBERS SHALL BE GALVANIZED AFTER WELDING.</p>						<p>AGL ABOVE GRADE LEVEL (E) EXISTING MIN MINIMUM N.T.S. NOT TO SCALE REF REFERENCE RF RADIO FREQUENCY T.B.D. TO BE DETERMINED T.B.R. TO BE RESOLVED TYP TYPICAL REQ REQUIRED AWG AMERICAN WIRE GAUGE MGB MASTER GROUND BUS BCW BARE COPPER WIRE GEN GENERATOR IGR INTERIOR GROUND RING (HALO) RBS RADIO BASE STATION TGB TOWER GROUND BAR EGB EXTERIOR GROUND BAR</p>	
	C1 STRUCTURAL STEEL NOTES						A3 ABBREVIATIONS	
B	NTS						NTS	
	<p>1. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.</p> <p>2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING &amp; EXCAVATION.</p> <p>3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.</p> <p>4. ALL TREES, RUBBISH, STUMPS, DEBRIS, STICKS, STONES, OTHER REFUSE, AND GRUBBING SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.</p> <p>5. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, OWNER AND/OR LOCAL UTILITIES.</p> <p>6. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION.</p> <p>7. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE EQUIPMENT AND TOWER AREAS.</p> <p>8. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.</p> <p>9. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.</p> <p>10. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.</p> <p>11. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.</p>				<p>1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.</p> <p>2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,500 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE.</p> <p>3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.</p> <p>4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:</p> <p>CONCRETE CAST AGAINST EARTH.....3 IN. CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER 2" #5 AND SMALLER &amp; WWF 1½"</p> <p>CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND: SLAB AND WALL ¾" BEAMS AND COLUMNS 1½"</p> <p>5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.</p> <p>6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.</p>		<p>1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR - GENERAL CONTRACTOR (CONSTRUCTION) OWNER - COUNTY OF HAMILTON</p> <p>2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF THE OWNERS REPRESENTATIVE.</p> <p>3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.</p> <p>4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.</p> <p>5. SOME DRAWINGS PROVIDED HERE ARE NOT TO SCALE AND ARE INTENDED TO SHOW OUTLINE ONLY.</p> <p>6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.</p> <p>7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.</p> <p>8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE OWNERS REPRESENTATIVE.</p> <p>9. CONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, GROUNDING CABLES AS SHOWN ON THE POWER AND GROUNDING SCHEMATIC.</p> <p>10. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.</p> <p>11. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.</p> <p>12. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.</p>	
	A1 SITE WORK GENERAL NOTES		A2 CONCRETE AND REINFORCING STEEL NOTES		A3 GENERAL NOTES			
A	NTS							
	1		2		3		4	



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

GENERAL  
NOTES

G-002



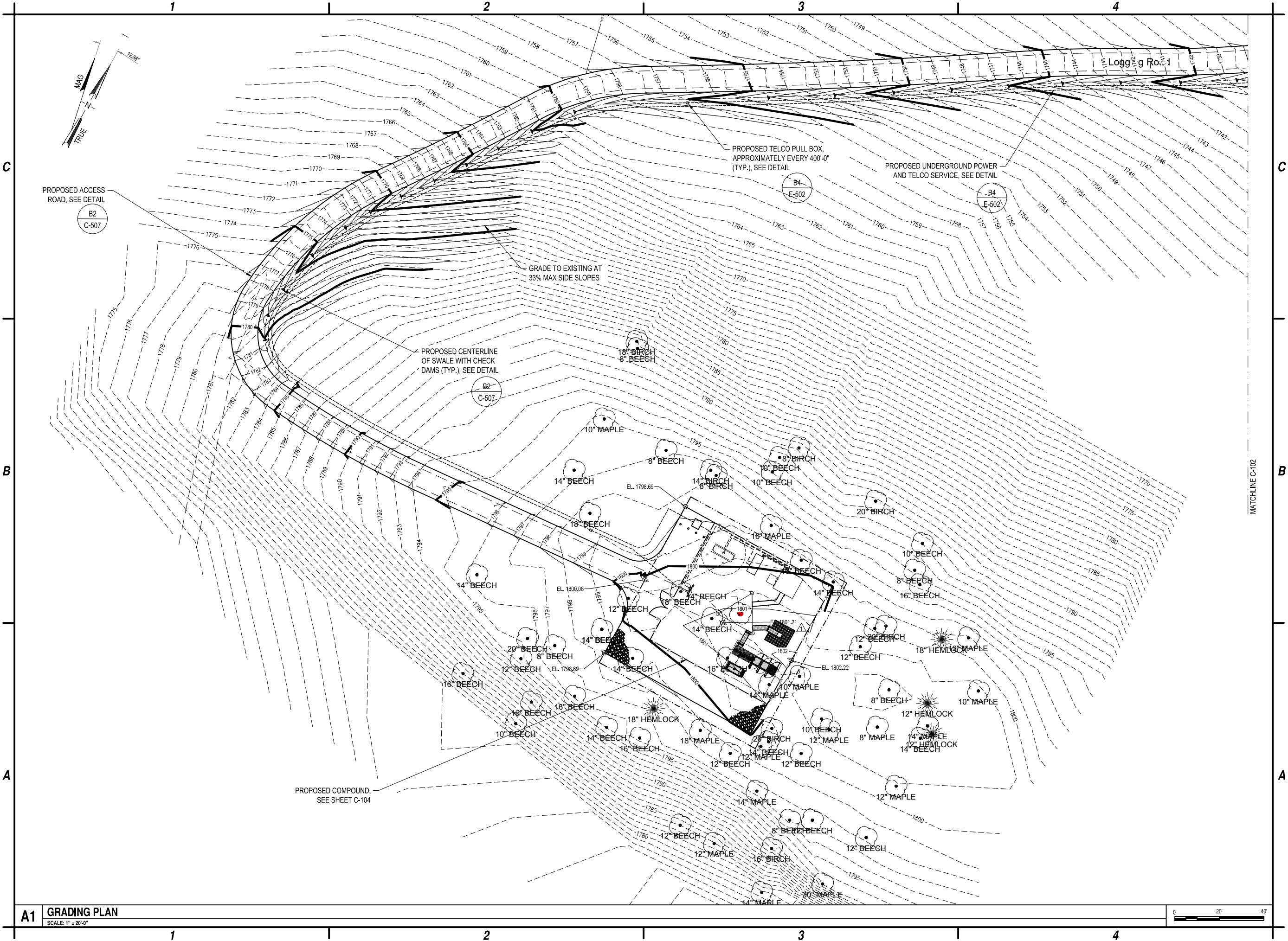




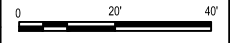




Aug 02, 2024 - 10:44am  
F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CAD\Arietta Spy Lake\Civil Drawings\Sheet Files\Y7504001\_C-103.dwg



**A1 GRADING PLAN**  
SCALE: 1" = 20'-0"



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



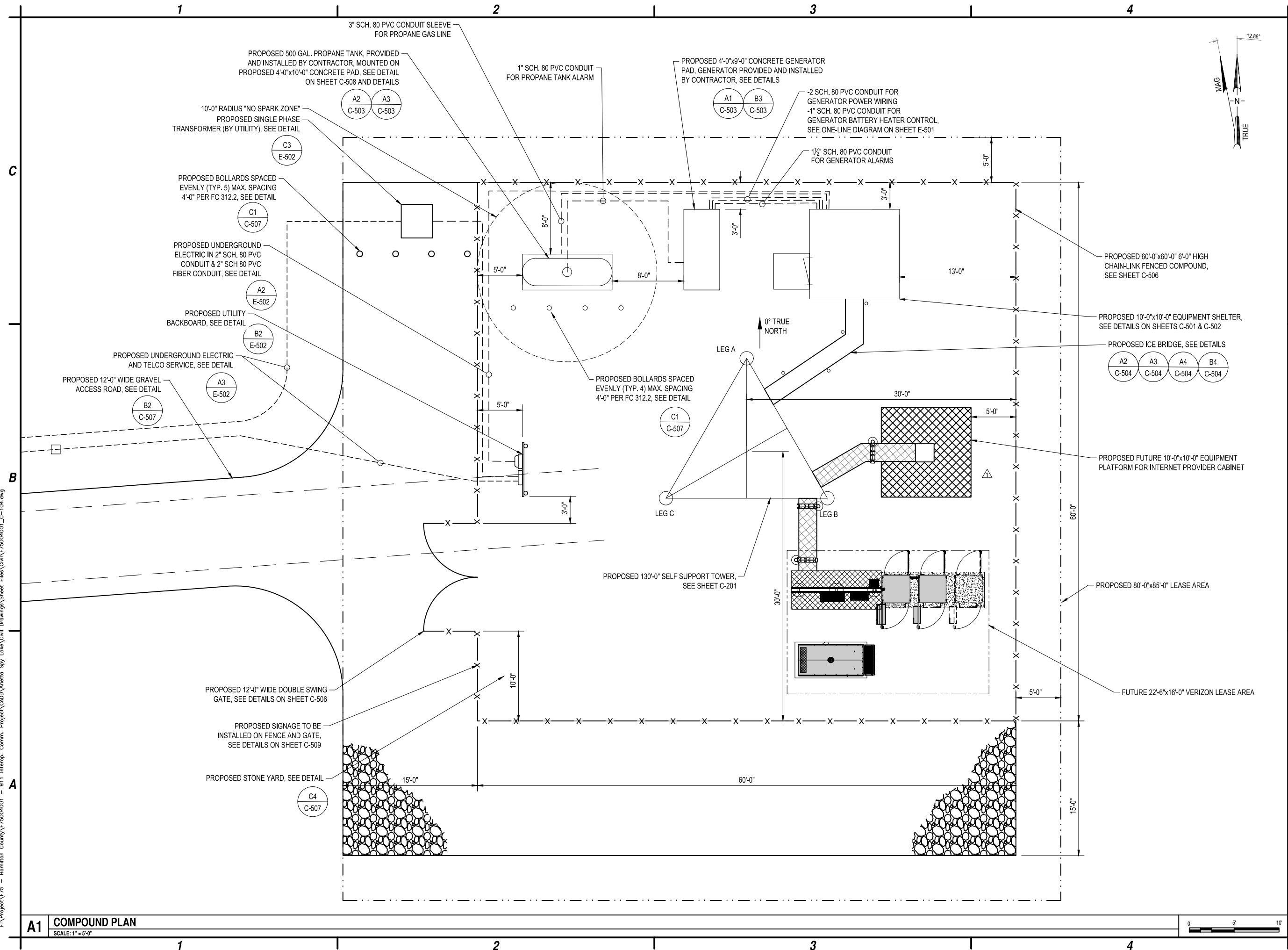
**HAMILTON COUNTY**  
**SITE NAME: ARIETTA - SPY LAKE**  
**984 STATE ROUTE 8**  
**PISECO, NY 12139**

1	3-12-24	COMPOUND LAYOUT
0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

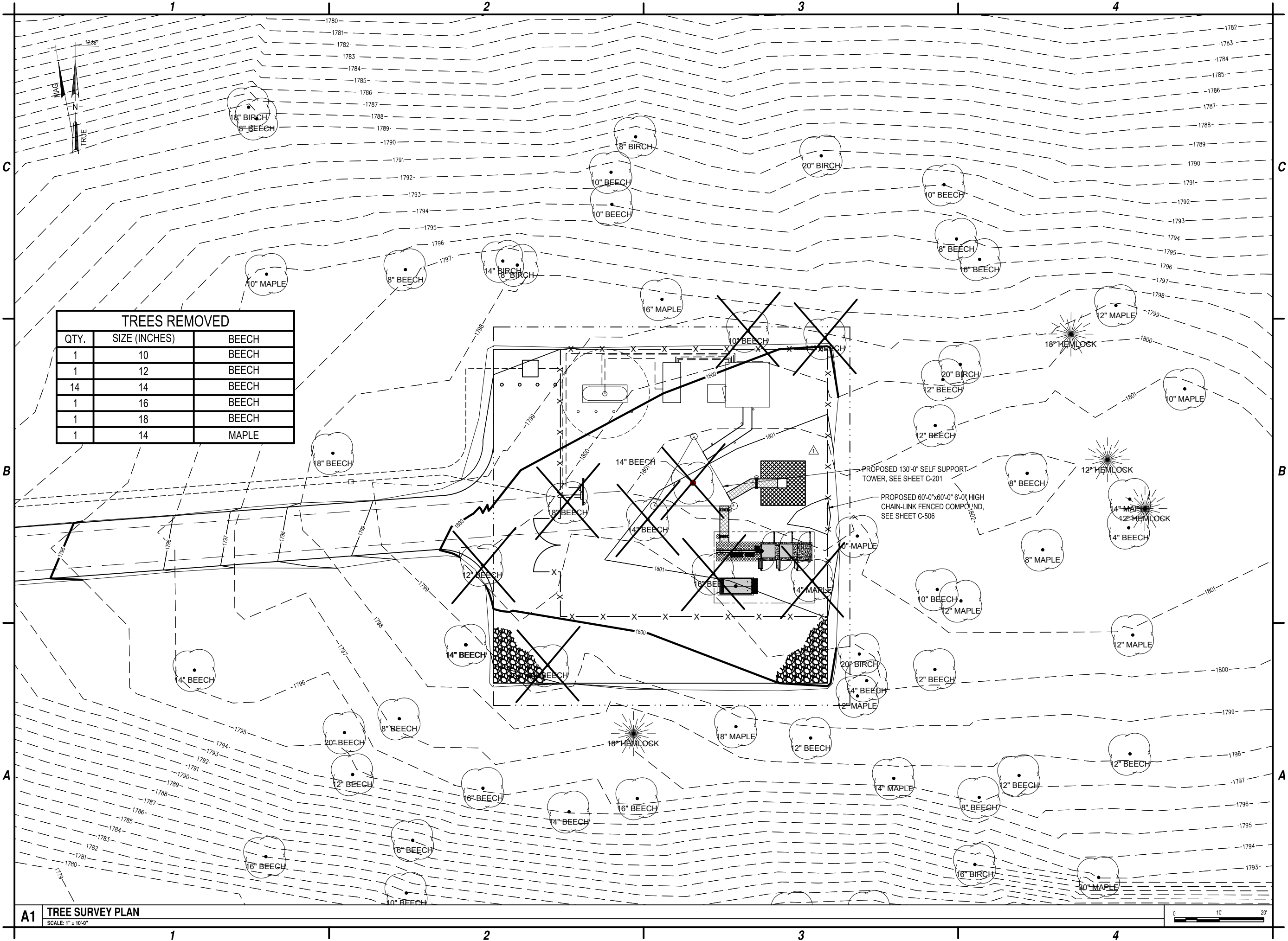
**GRADING PLAN**

**C-103**





Aug 02, 2024 - 10:44am - Hamilton County\F75004001 - 911 Interop. Comm. Project\CDP\Arietta Spy Lake\Civil Drawings\Sheet Files\F75004001\_C-105.dwg



TREES REMOVED		
QTY.	SIZE (INCHES)	BEECH
1	10	BEECH
1	12	BEECH
14	14	BEECH
1	16	BEECH
1	18	BEECH
1	14	MAPLE



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

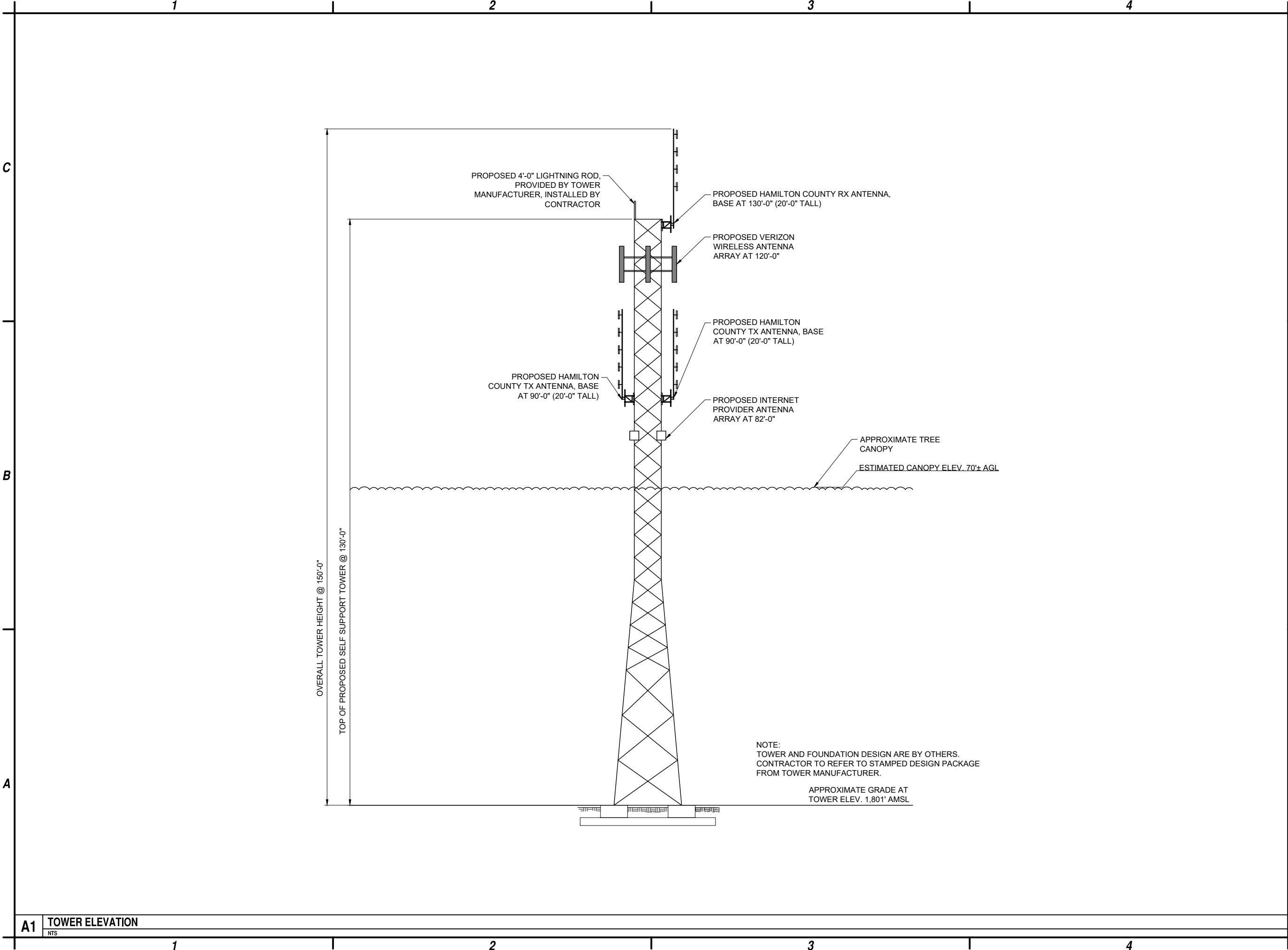
MARK	DATE	DESCRIPTION
2	8-2-24	TOWER ELEVATION
1	3-12-24	COMPOUND LAYOUT
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

TREE  
SURVEY PLAN

C-105



Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-201.DWG



**A1** TOWER ELEVATION

NTS



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



**HAMILTON COUNTY**  
**SITE NAME: ARIETTA - SPY LAKE**  
**984 STATE ROUTE 8**  
**PISECO, NY 12139**

1	8-2-24	TOWER ELEVATION
0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION

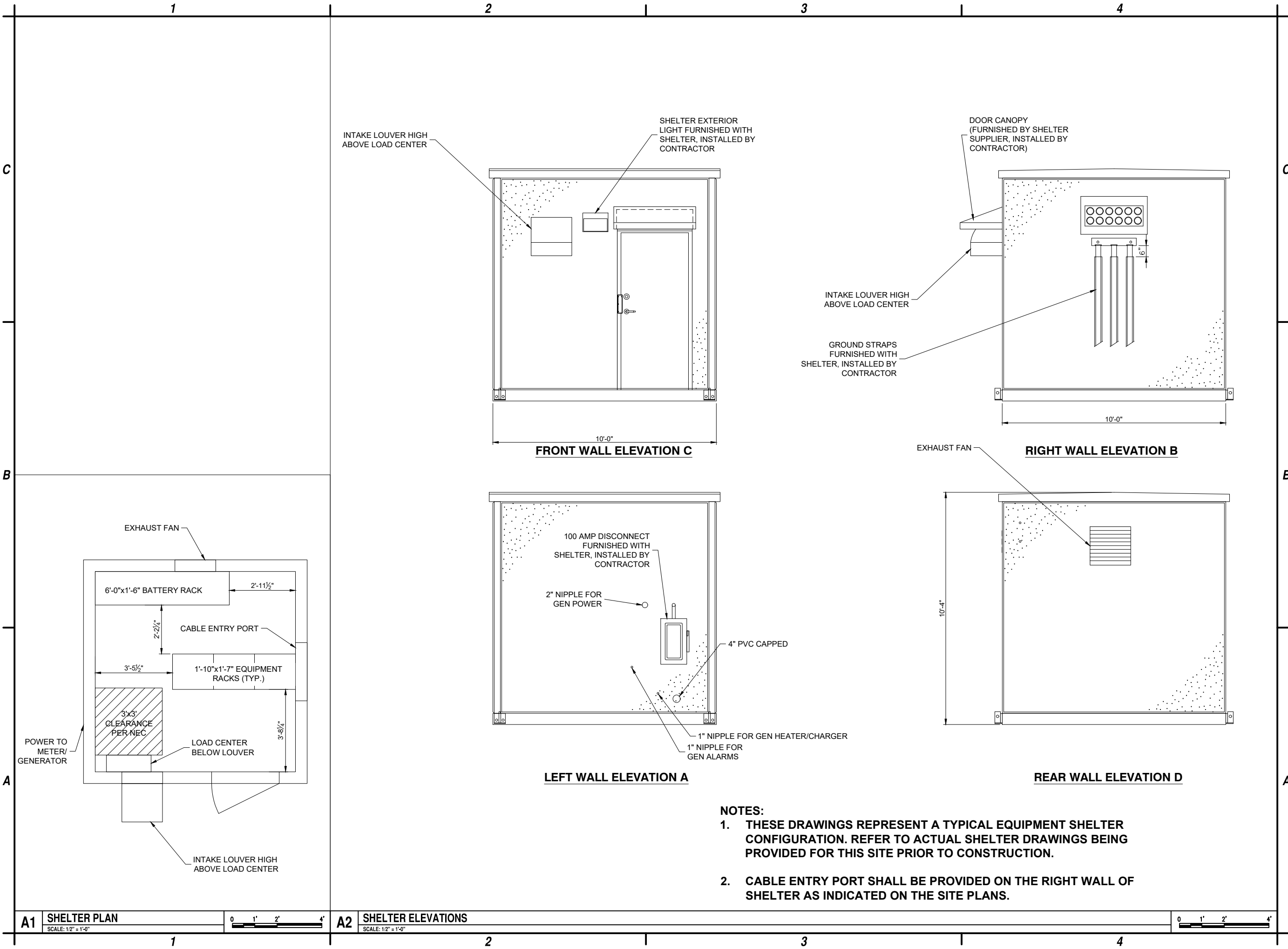
REVISIONS	
PROJECT NO:	F75.001.001
DATE:	MARCH 2024
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	E.N. KENNA, P.E.
CHECKED BY:	E.N. KENNA, P.E.

NO ALTERATION PERMITTED HEREON  
EXCEPT AS PROVIDED UNDER SECTION  
7209 SUBDIVISION 2 OF THE NEW YORK  
EDUCATION LAW

**TOWER  
ELEVATION**

**C-201**

Aug 02, 2024 - 10:45am F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CAD\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-501.dwg



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

EQUIPMENT  
SHELTER  
DETAILS

C-501

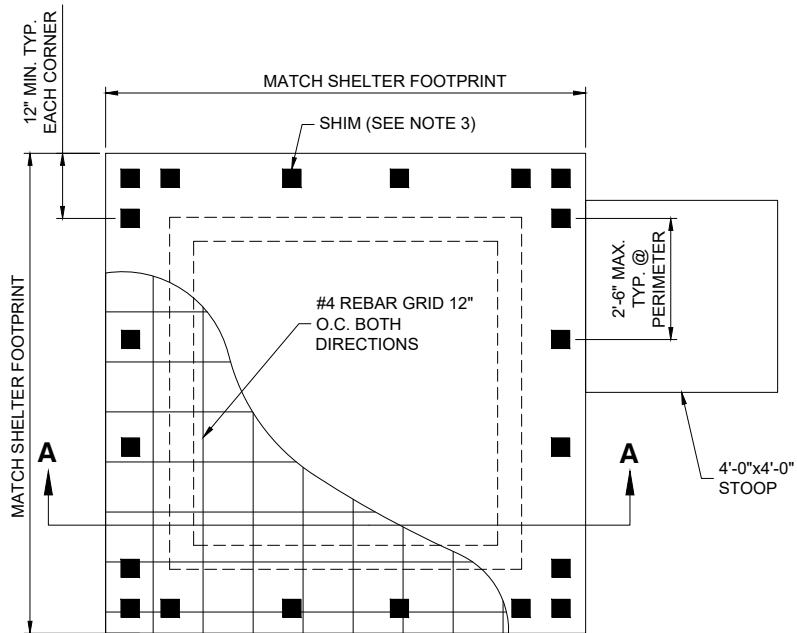


Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\Arietta Spy Lake\Civil Drawings\Sheet Files\F7504001\_C-502.dwg

C

B

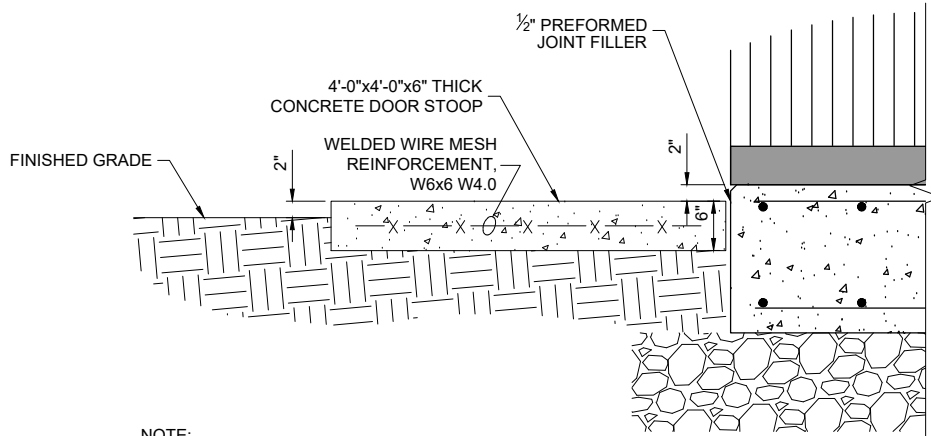
A



**SHELTER FOUNDATION NOTES:**

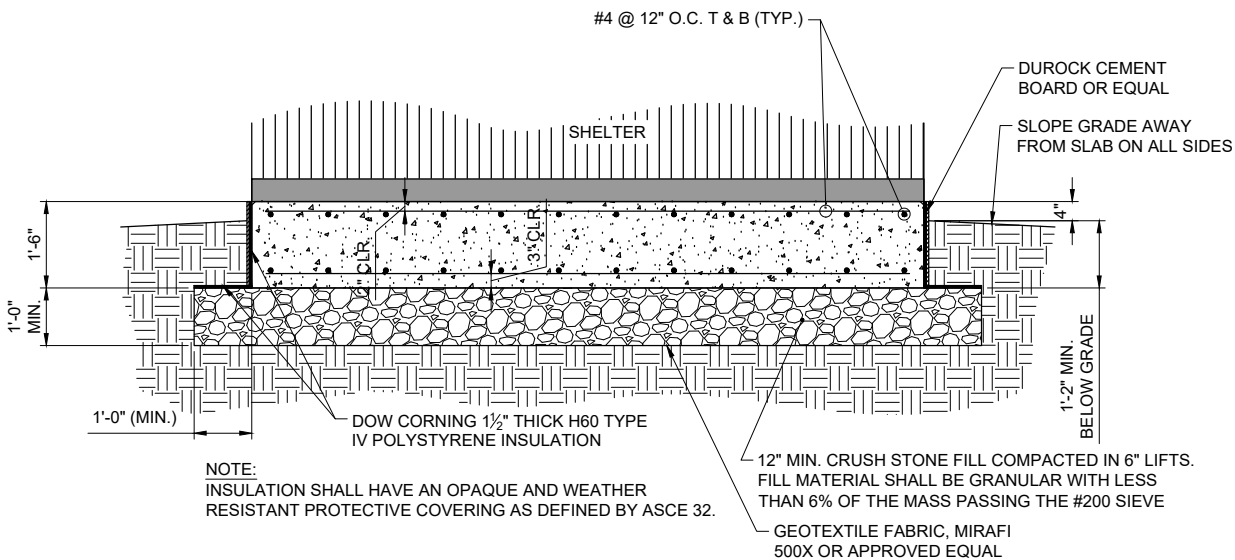
1. FOUNDATION SURFACE SHALL BE LEVEL TO WITHIN  $\pm \frac{1}{8}$ " PER 10 LINEAR FEET IN ANY DIRECTION.
2. FOUNDATION SHALL BE SQUARE TO WITHIN  $\pm \frac{1}{4}$ ".
3. SHELTER MUST BE SHIMMED TO LEVEL ABOVE IRREGULARITIES IN SLAB AND BUILDING FLOOR SYSTEM. SHIM HARDNESS NOT LESS THAN 60 DUROMETER OR COMPRESSIVE STRENGTH 9,000 PSI MIN. SHIMS NOT LESS THAN 3" SQUARE, THICKNESS AS REQUIRED.
4. PROVIDE PROPER DRAINAGE AWAY FROM FOUNDATION AT GRADE.
5. SLAB REINFORCEMENT TO BE LOCATED IN UPPER THIRD OF SLAB.
6. REFER TO SHELTER DRAWINGS FOR ADDITIONAL INFORMATION.

**A1 SHELTER FOUNDATION PLAN VIEW**  
NTS



NOTE:  
ALIGN CENTER OF STOOP WITH  
CENTER OF SHELTER DOOR

**B3 DOOR STOOP DETAIL**  
NTS



NOTE:  
INSULATION SHALL HAVE AN OPAQUE AND WEATHER  
RESISTANT PROTECTIVE COVERING AS DEFINED BY ASCE 32.

**A3 SHELTER FOUNDATION SECTION A-A**  
NTS



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



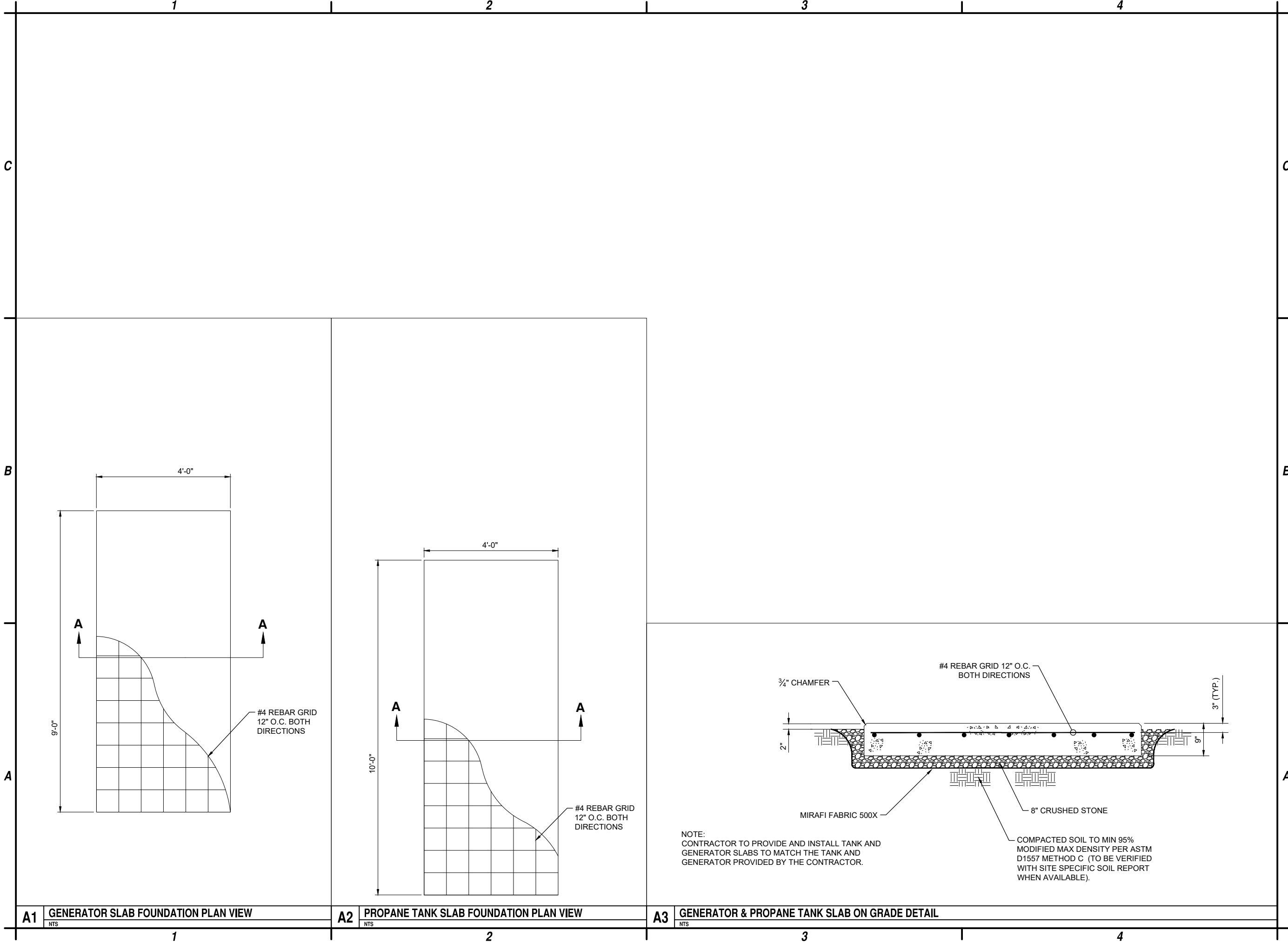
**HAMILTON COUNTY**  
**SITE NAME: ARIETTA - SPY LAKE**  
**984 STATE ROUTE 8**  
**PISECO, NY 12139**

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**SHELTER  
FOUNDATION  
DETAILS**

**C-502**

Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\F7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\F7504001\_C-503.dwg



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

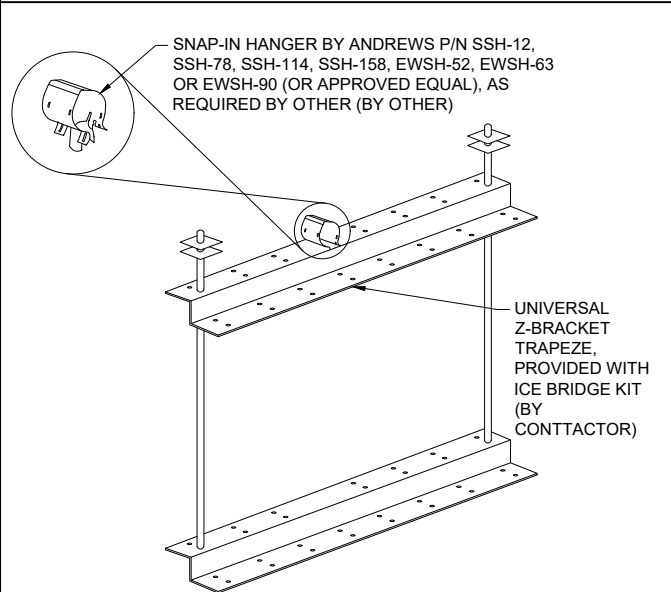
0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

FOUNDATION  
DETAILS

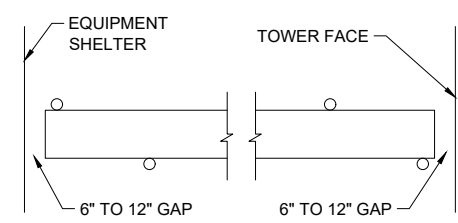
C-503



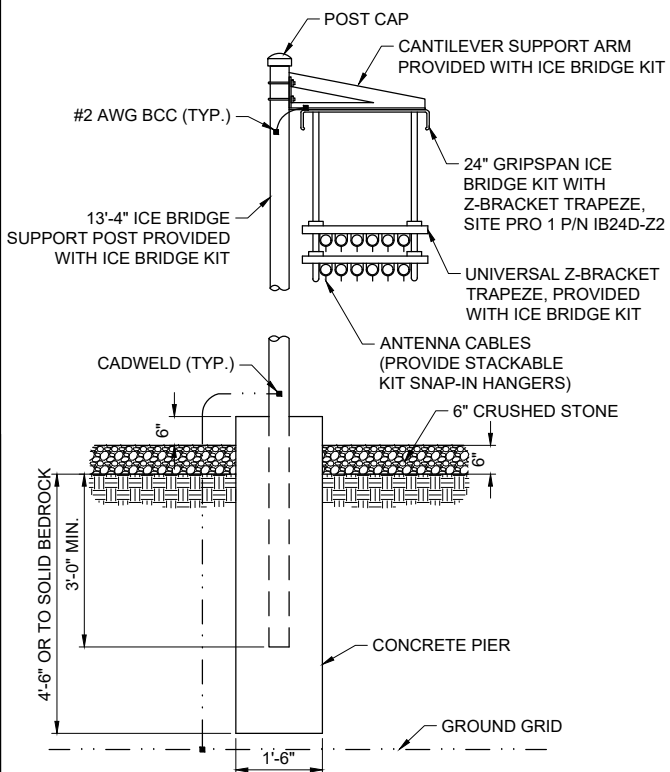
Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\Arietta Spy Lake\Civil Drawings\Sheet Files\F7504001\_C-504.DWG  
Project: CAD\Arietta Spy Lake\Civil Drawings\Sheet Files\F7504001\_C-504.DWG  
911 Interop. Comm. Project



**A1** TRAPEZE KIT DETAIL  
NOT TO SCALE

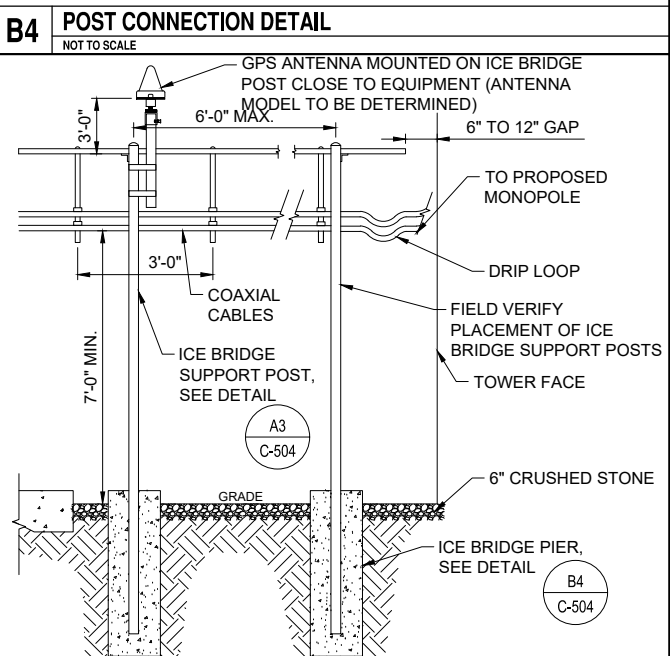
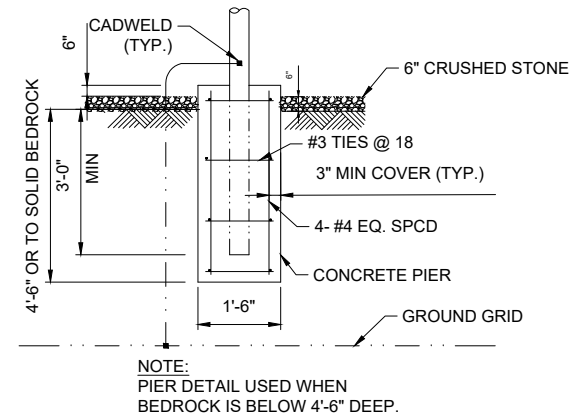


**A2** ICE BRIDGE PLAN VIEW  
NOT TO SCALE



- NOTES:**
1. USE SITE PRO 1 PARTS OR APPROVED EQUAL.
  2. SUPPORT POSTS SHALL BE STAGGERED ON BOTH SIDES OF ICE BRIDGE SPACED NO MORE THAN 6'-0\"/>
  3. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0\"/>

**A3** ICE BRIDGE PIER DETAIL  
NOT TO SCALE



**A4** ICE SHIELD - ICE BRIDGE ELEVATION  
NOT TO SCALE



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



**HAMILTON COUNTY**  
**SITE NAME: ARIETTA - SPY LAKE**  
**984 STATE ROUTE 8**  
**PISECO, NY 12139**

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**ICE BRIDGE DETAILS**

**C-504**

Aug 02, 2024 - 10:45am F:\Project\Y75 - Hamilton County\F7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-505.dwg

C	1		2		3		4					
	C1	NOT USED NTS	C2	NOT USED NTS	C3	NOT USED NTS	C4	NOT USED NTS				
B												
	B1	NOT USED NTS	B2	NOT USED NTS	B3	NOT USED NTS	B4	NOT USED NTS				
A	<div><div><div>EXISTING TOWER GIRT OR DIAGONAL</div><div>J-HOOKS WITH LOCK WASHERS AND NUTS</div><div>SUPPORT LADDER RUNGS AT 36" O.C. MAX.</div></div><table><tr><th>SITE PRO 1 P/N</th><th>DESCRIPTION</th></tr><tr><td>WCL9</td><td>COAX SUPPORT LADDER, 20 FT LONG</td></tr></table><div>NOTES: 1. LADDER ATTACHES TO TOWER GIRTS OR DIAGONALS WITH INCLUDED J-BOLTS AND BACKING PLATES. 2. LADDER BASE KIT INCLUDES SPLICES FOR ATTACHING THE FIRST LADDER SECTION. 3. CABLE LADDER FURNISHED BY TOWER SUPPLIER, INSTALLED BY CONTRACTOR.</div></div>		SITE PRO 1 P/N	DESCRIPTION	WCL9	COAX SUPPORT LADDER, 20 FT LONG	<div><div><div>L 2x2x¼" CABLE LADDER</div><div>½"Ø J-BOLT</div><div>½"Ø J-BOLT</div><div>TOWER HORIZONTAL OR DIAGONAL MEMBER</div><div>¼"x2" LADDER ATTACHMENT BRACKET</div><div>L 2x2x⅜"x1½" LONG STANDOFF BRACKET WITH ½" DIA. BOLT</div></div><div>NOTE: FIELD DRILL ⅞"Ø IN ANGLE AS REQUIRED.</div></div>		<div><div><div>2'-4½"</div><div>CABLE LADDER FURNISHED BY TOWER SUPPLIER, INSTALLED BY CONTRACTOR</div><div>SEE DETAILS A1 C-505 A2 C-505</div><div>3'-0"</div><div>ε RUNG</div><div>TOWER BRACING (TYP)</div><div>TOWER LEG</div><div>ε RUNG</div><div>LADDER RUNG</div></div><div>NOTE: SUPPORT LADDER FROM TOWER MEMBERS AT 10'-0" O.C. (MAX)</div></div>			
	SITE PRO 1 P/N	DESCRIPTION										
	WCL9	COAX SUPPORT LADDER, 20 FT LONG										
A1	WAVEGUIDE/CABLE LADDER SUPPORT NTS	A2	WAVEGUIDE/CABLE LADDER ATTACHMENT NTS	A3	WAVEGUIDE/CABLE LADDER NTS	A4	NOT USED NTS					
	1		2		3		4					



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

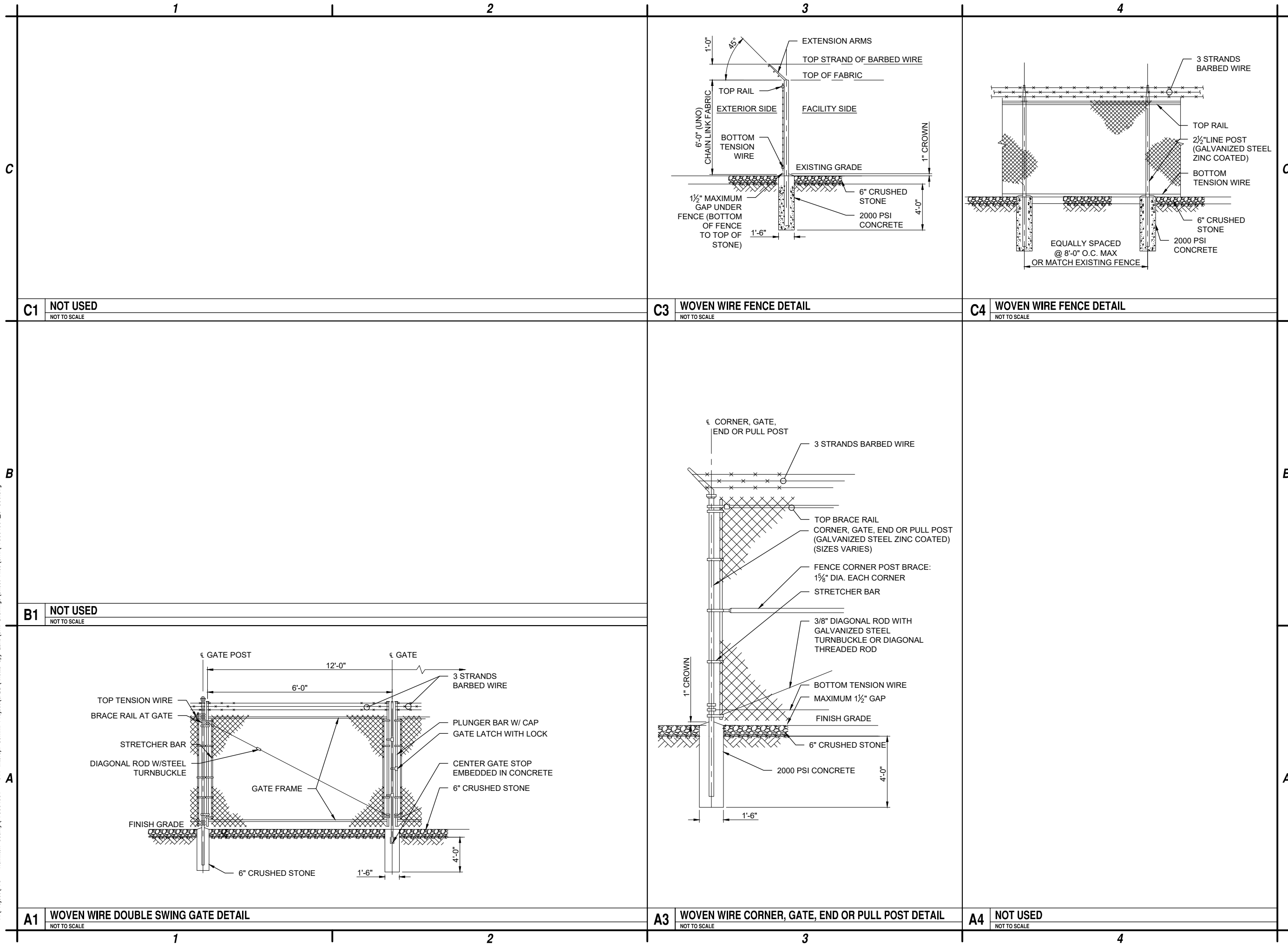
MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

WAVEGUIDE/ CABLE  
DETAILS

C-505



Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Y7504001\_C-506.dwg



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



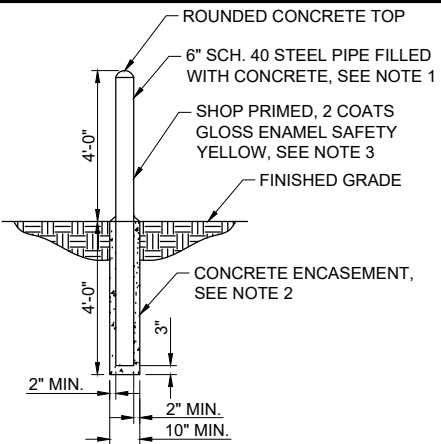
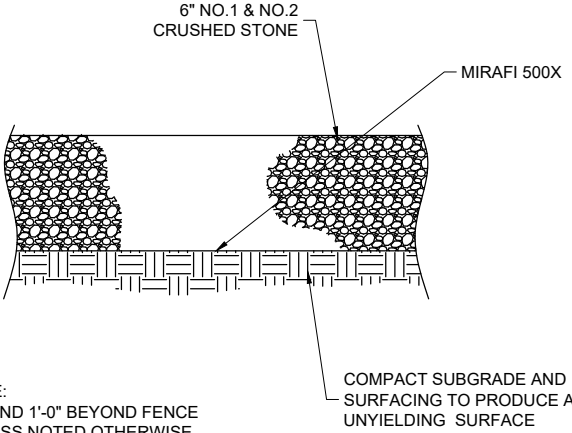
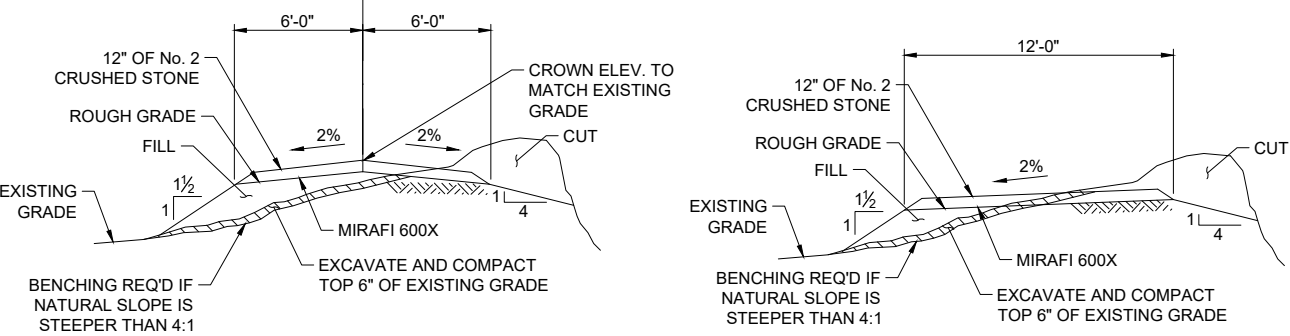
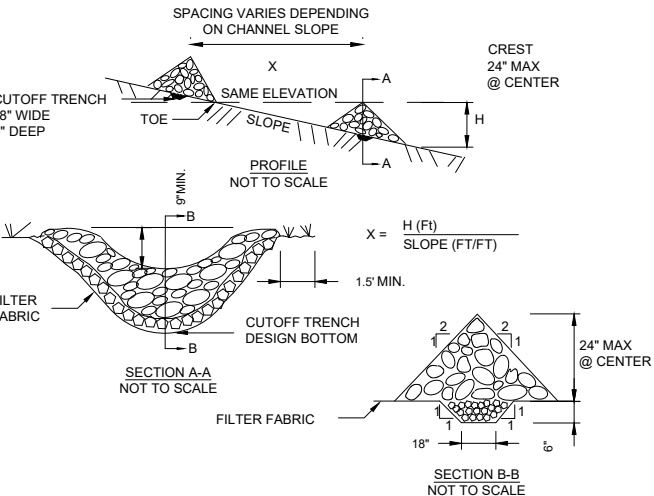
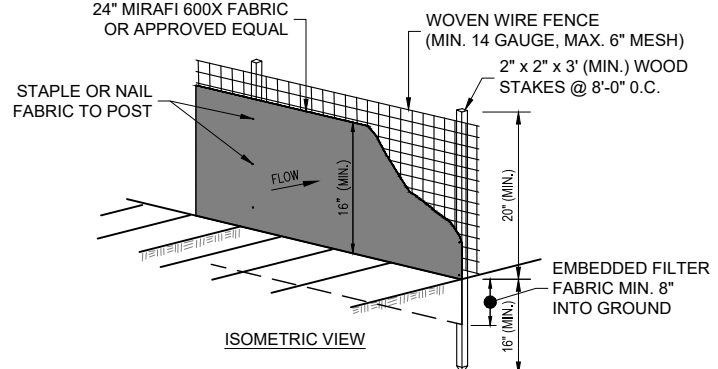
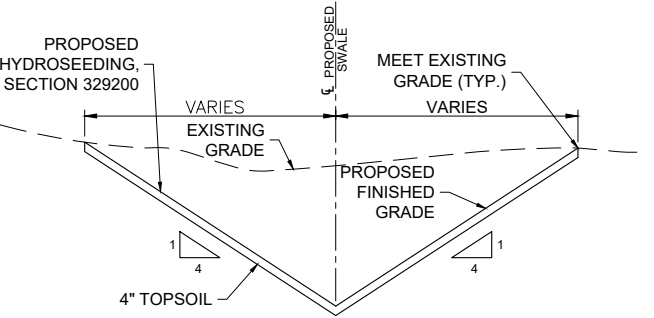
HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

FENCE  
DETAILS

C-506

Aug 02, 2024 - 10:45am  
F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\Y7504001\_C-507.dwg

1		2		3		4		
C	<div><p>NOTES:</p><ol style="list-style-type: none"><li>PIPE SHALL BE SCHEDULE 40 BLACK STEEL PIPE CONFORMING TO ASTM A120.</li><li>CONTRACTOR SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI AND SHALL CONFORM TO CLASS A CONCRETE AS SPECIFIED IN SECTION 501 OF THE NYSDOT STANDARD SPECIFICATIONS.</li><li>PRIMER SHALL BE A ZINC YELLOW-IRON OXIDE-BASE PAINT CONFORMING TO FEDERAL SPECIFICATION TT-P-57, TYPE II. TOPCOATS SHALL BE A HIGH GLOSS ALKYD ENAMEL PAINT CONFORMING TO FEDERAL SPECIFICATION TT-E-489.</li></ol></div>			C3 NOT USED			<div><p>NOTE: EXTEND 1'-0" BEYOND FENCE UNLESS NOTED OTHERWISE.</p></div>	
	C1 PROTECTIVE BOLLARD DETAIL			C3 NOT USED			C4 STONE YARD	
	NTS			NTS			NTS	
B	<div><p>NOTE: REMOVE ANY SOFT SOILS EXCAVATED DURING INSTALLATION OF ACCESS ROAD.</p></div>			B4 CHECK DAM DETAIL			<div><p>NOTE: REMOVE ANY SOFT SOILS EXCAVATED DURING INSTALLATION OF ACCESS ROAD.</p></div>	
	B2 ACCESS ROAD DETAIL			B4 CHECK DAM DETAIL				
	NTS			NTS				
A	<div><p>ISOMETRIC VIEW</p></div>			A4 TYPICAL SWALE DETAIL			<div><p>NOTE: REMOVE ANY SOFT SOILS EXCAVATED DURING INSTALLATION OF ACCESS ROAD.</p></div>	
	A2 SILT FENCE DETAIL			A4 TYPICAL SWALE DETAIL				
	NTS			NTS				
A1 NOT USED		A2 SILT FENCE DETAIL		A4 TYPICAL SWALE DETAIL				
NTS		NTS		NTS				
1		2		3		4		



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

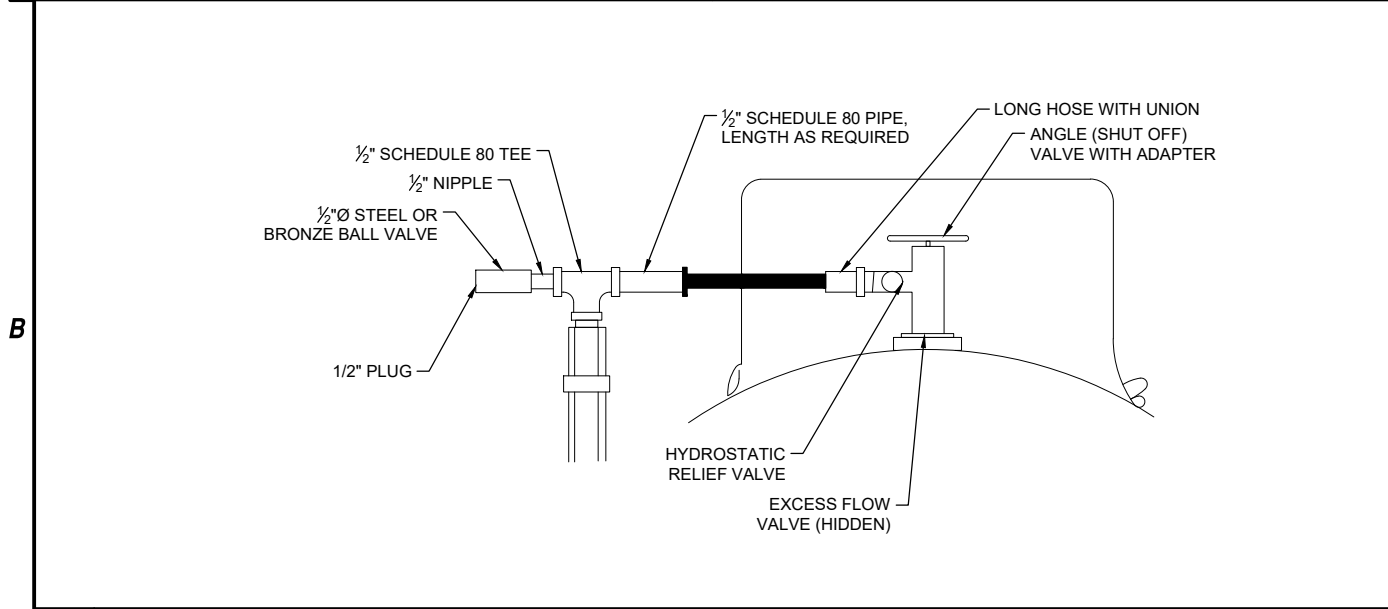
SITE DETAILS

C-507

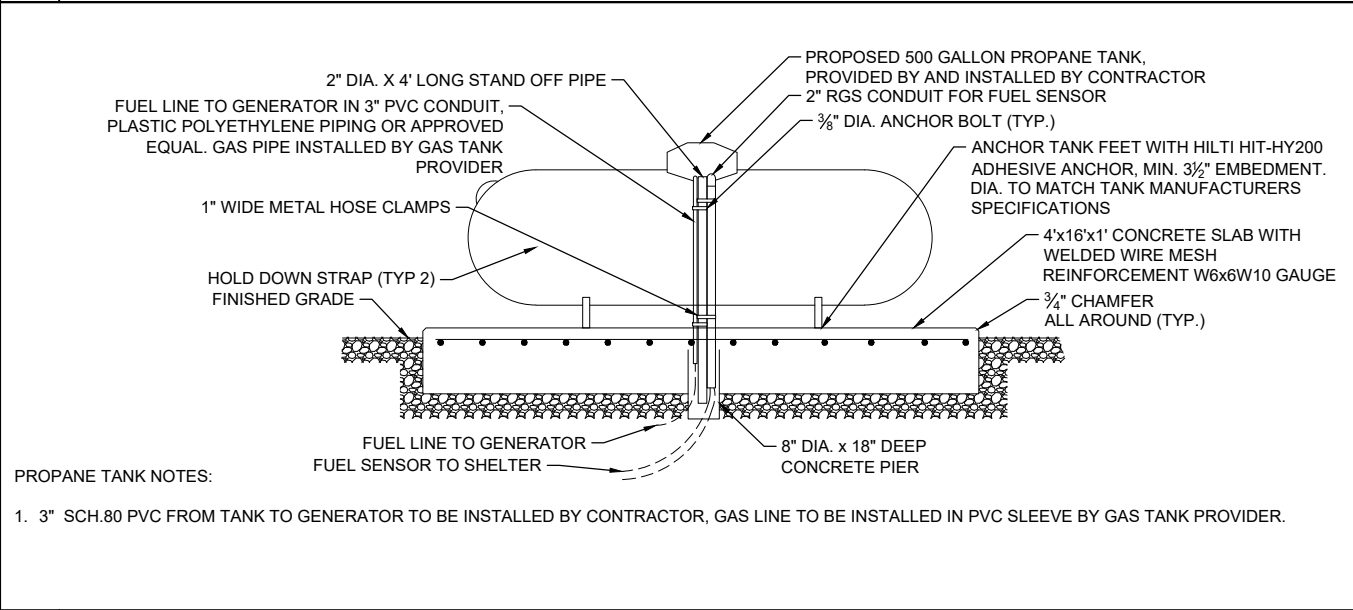


Aug 02, 2024 - 10:46am  
F:\Project\Y75 - Hamilton County\F7504001 - 911 Interop. Comm. Project\CAD\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-508.dwg

	1	2	3	4
C				
C1	NOT USED NOT TO SCALE	C2 NOT USED NOT TO SCALE	C3 NOT USED NOT TO SCALE	C4 NOT USED NOT TO SCALE



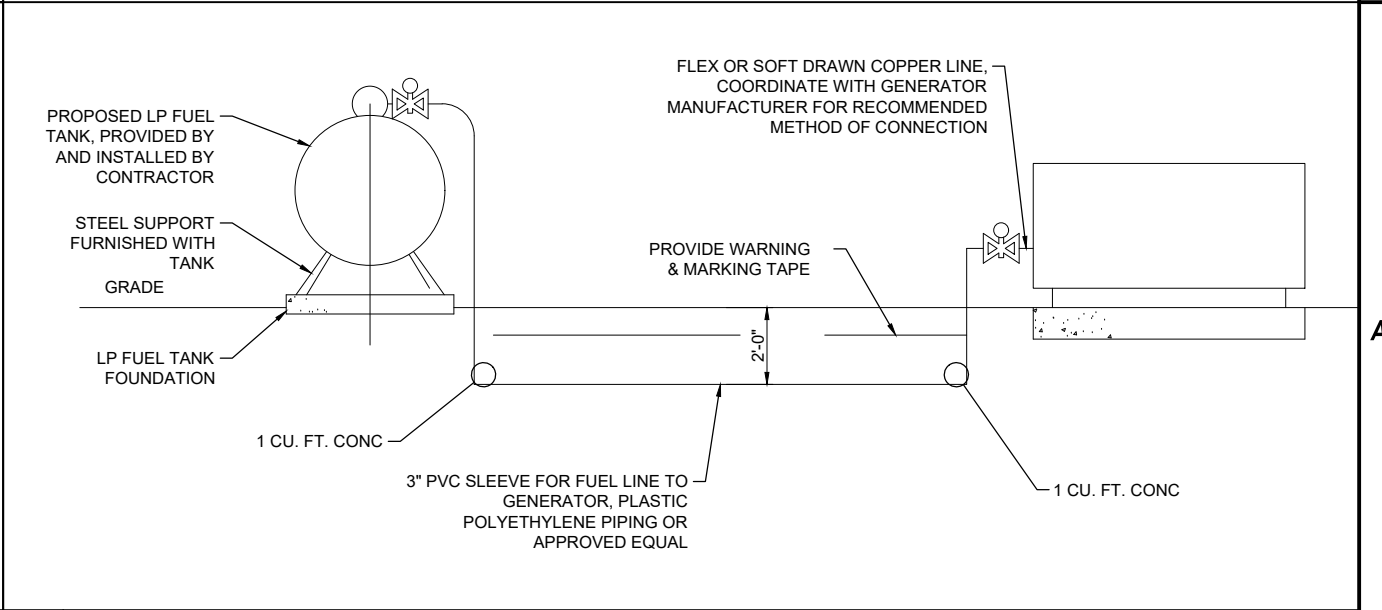
B1 PROPANE TANK VALVE ATTACHMENT DETAIL  
NOT TO SCALE



A1 PROPANE TANK ELEVATION (TANK INSTALLATION)  
NOT TO SCALE

**NOTE:**

1. CONTRACTOR TO PROVIDE TANK LEVEL SENSOR. (ASENTRIA MODEL 5000-052 R3D ROCHESTER JUNIOR DIAL PERCENTAGE 5% TO 95%)



A3 PROPANE TANK ELEVATION (TANK INSTALLATION)  
NOT TO SCALE



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

PROPANE TANK  
DETAILS

C-508

Aug 02, 2024 - 10:46am - Hamilton County\F7504001 - 911 Interop. Comm. Project\CDP\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-509.dwg  
F:\Project\F75 - Hamilton County\F7504001 - 911 Interop. Comm. Project\CDP\Arietta Spy Lake\Civil Drawings\Sheet Files\Civil\F7504001\_C-509.dwg




1. NO TRESPASSING SIGN:
- A. THIS SIGN SHOULD BE MADE OF 8½"x11" 60-MIL THICK WHITE PLASTIC.
- B. THIS SIGN SHOULD BE PLACED ON THE PERIMETER FENCE AT THE GATE LOCATION AND ON ALL THREE REMAINING FENCE LINES, FOR A TOTAL OF FOUR (4) SIGNS.
- C. THE SIGN SHALL READ: "NO TRESPASSING, THIS AREA IS UNDER 24 HOURS LIVE/RECORDED VIDEO SURVEILLANCE, VIOLATORS WILL BE PROSECUTED."
2. DANGER NO SMOKING SIGN:
- A. THIS SIGN SHOULD BE MADE OF 8½"x11" 60-MIL THICK WHITE PLASTIC. LETTERING AND COLORING SHALL BE PER OSHA 1910.145: REGULATION OF ACCIDENT PREVENTION SIGNS AND TAGS.
- B. THIS SIGN SHALL BE POSTED ON INSIDE OF FENCE FACING TOWARD THE SITE.
- C. THE SIGN SHALL READ: "DANGER SMOKING PROHIBITED WITHIN 25 FEET OF FILLING OPERATIONS POINT OF TRANSFER"
3. CAUTION NO SPARK SIGN:
- C. THIS SIGN SHOULD BE MADE OF 8½"x11" 60-MIL THICK WHITE PLASTIC.
- D. THE SIGN SHALL READ: "CAUTION/NO SPARK WITHIN 10 FEET FROM PROPANE TANK"
- E. ONE (1) SIGN SHALL BE FACING OUT AWAY FROM THE SITE AND ONE (1) FACING SITE ON INSIDE OF FENCE

**B4 SIGN NOTES**  
NTS

1. ALL SIGNS SHOULD BE UV-RESISTANT FOR OUTDOOR USE.
2. ALL SIGNS SHOULD HAVE A MINIMUM 5-YEAR GUARANTEE WITHOUT SHOWING ANY SIGNS OF DEGRADATION.
3. ALL SIGNS SHALL HAVE WEATHER PROOF PRESSURE SENSITIVE ADHESIVE BACKING FOR MOUNTING PURPOSES.
4. ALL SIGNS SHALL BE PROVIDED PER THE REQUIREMENTS CONTAINED IN THIS DRAWING PACKAGE.
5. ALL SIGN TO HAVE LETTERS PAINTED, PRINTED OR ENGRAVED. NO STICKERS.
6. COLOR UNLESS NOTED OTHERWISE: BLACK LETTERING ON WHITE BACKGROUND. EXCEPTION: RED LETTERING FOR "DANGER" AND "CAUTION" SIGNS.
7. CONTRACTOR MUST VERIFY ALL SITE SIGNAGE WITH CONSTRUCTION PROJECT MANAGER PRIOR TO ORDERING ANY SIGNS.



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

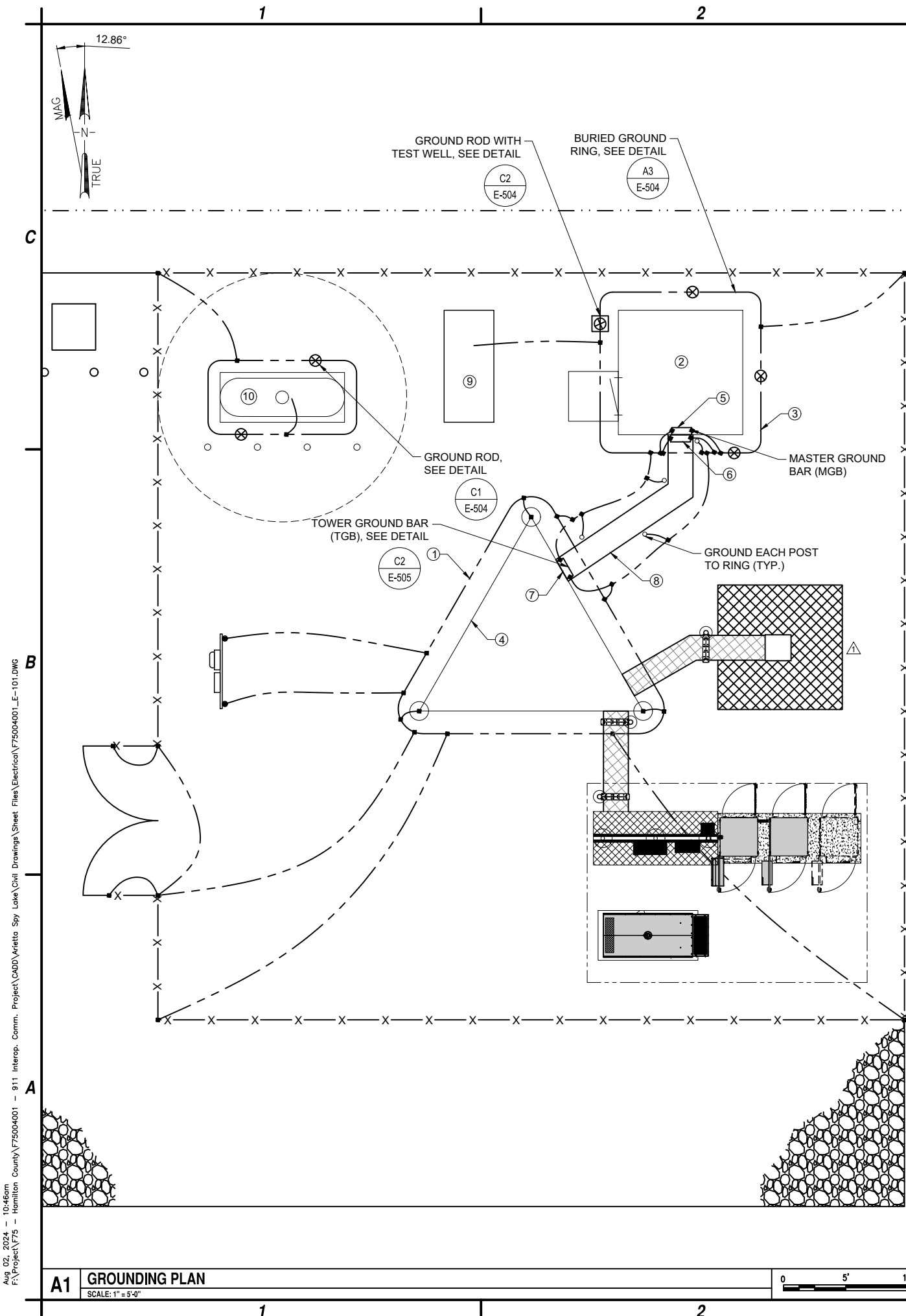


HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

**SIGN DETAILS AND SPECIFICATIONS**

**C-509**



**CODED DRAWING NOTES:**

1. #2 SOLID TINNED BCC. BURIED TOWER GROUND RING AT 30" BELOW FINISHED GRADE OR 6" BELOW FROST LINE TO BE INSTALLED OUTSIDE OF TOWER FOUNDATION FOOTPRINT.
2. INTERIOR PERIMETER GROUND BUS AND MAIN GROUND BAR BY SHELTER MANUFACTURER. CABLES AND TERMINATIONS BY THIS CONTRACT
3. #2 SOLID TINNED BCC BURIED EXTERIOR GROUND RING AT 4'-6" BELOW FINISHED GRADE OR 6" BELOW FROST LINE
4. PROPOSED TOWER
5. MASTER GROUND BAR (MGB) (BY SHELTER MANUFACTURER)
6. EXTERIOR GROUND BUS BAR (EGB) (BY SHELTER MANUFACTURER)
7. TOWER GROUND BAR (TGB)
8. ICE BRIDGE. BOND EACH SECTION AND SUPPORT POST
9. PROPOSED GENERATOR ON CONCRETE PAD
10. PROPOSED PROPANE TANK ON CONCRETE PAD









ABBREVIATIONS:

AWG	AMERICAN WIRE GAUGE
BCC	BARE COPPER CABLE
EGB	EXTERNAL GROUND BAR
IPGB	INTERIOR PERIMETER GROUND BUS
MGB	MASTER GROUND BAR
TGB	TOWER GROUND BAR

## GROUNDING NOTES

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS. THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING OF GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT.
4. METAL CONDUIT AND TRAYS SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE AND UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
6. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
7. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED. ALL BENDS SHALL BE MADE WITH 12" RADIUS OR LARGER.
8. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE AND EXTERIOR.
9. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS. EXCEPT FOR GROUND BAR CONNECTION FROM MGB TO OUTSIDE. EXTERIOR GROUND SHALL ALL BE CADWELD CONNECTIONS.
10. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
11. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
12. ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
13. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
14. BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
15. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER) 600V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET OR DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
16. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO THE EQUIPMENT.
17. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED. BACK TO BACK CONNECTIONS ON OPPOSITE SIDES OF THE GROUND BUS ARE PERMITTED.
18. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

LEGEND:

- EXOTHERMIC WELD CONNECTION
  - COMPRESSION CONNECTION
  -  METER SOCKET BY CONTRACTOR  
 METER BY UTILITY COMPANY
  - GROUNDING WIRE, #2 BCC U.N.O.
  -  CODED DRAWING NOTE
  -  MGB - MASTER GROUND BAR
  -  EGB - EXTERNAL GROUND BAR
  -  TGB - TOWER GROUND BAR
  -   $\frac{5}{8}$ "x8'-0" COPPER CLAD GROUND ROD
  -   $\frac{5}{8}$ "x8'-0" COPPER CLAD GROUND ROD WITH ACCESS TEST WELL

1	3-12-24	COMPOUND LAYOUT
0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION

**SITE NAME: ARIETTA - SPY LAKE**  
**984 STATE ROUTE 8**  
**PISECO, NY 12139**

REVISIONS	
PROJECT NO:	F75.001.001
DATE:	MARCH 2024
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	E.N. KENNA, P.E.
CHECKED BY:	E.N. KENNA, P.E.

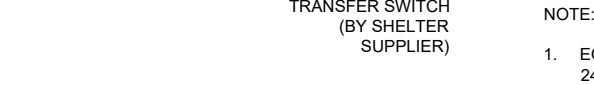
NO ALTERATION PERMITTED HEREON  
EXCEPT AS PROVIDED UNDER SECTION  
7209 SUBDIVISION 2 OF THE NEW YORK  
EDUCATION LAW

## GROUNDING PLAN AND NOTES

**E-101**



24. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

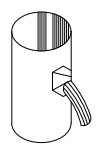
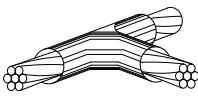
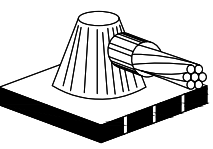
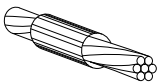
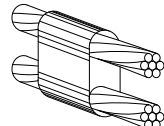
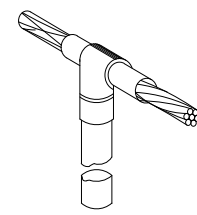
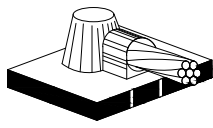
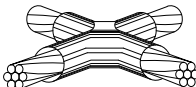
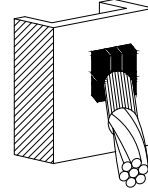
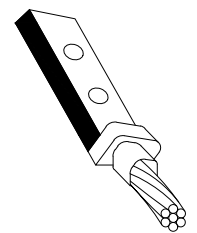
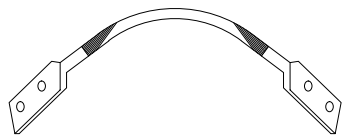
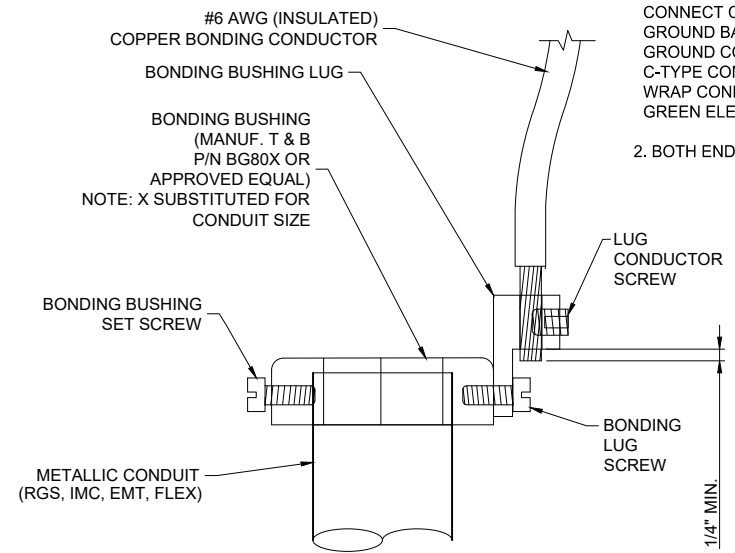


- NOTES:**
- 1. ALARM/SIGNAL CONDUCTORS SHALL BE IN SEPARATE CONDUIT FROM POWER CONDUCTORS.**
  - 2. COORDINATE AND VERIFY CABLE AND CONNECTION REQUIREMENTS FOR GENERATOR ALARMS WITH GENERATOR MANUFACTURER.**
  - 3. ALL ALARM CONTACTS TO BE "CLOSED" IN NORMAL CONDITION AND "OPEN" IN ALARM CONDITION.**





Aug 02, 2024 - 10:46am F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Electrical\Y7504001\_E-503.dwg

		1	2	3	4
C	<div><div><p>TYPE VS</p></div><div><p>TYPE TA</p></div><div><p>TYPE HS</p></div><div><p>TYPE SS</p></div><div><p>TYPE PT</p></div></div> <div>NOTE: ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.</div> <div><div><p>TYPE CT</p></div><div><p>TYPE HS</p></div><div><p>TYPE XA</p></div><div><p>TYPE VS</p></div><div><p>TYPE YA-2</p></div><div><p>TYPE 2-YA-2</p></div></div>				
	C4 NOT USED NTS				
B1 EXOTHERMIC WELD DETAILS NTS		B4 NOT USED NTS			
A	<div><div><p>#6 AWG (INSULATED) COPPER BONDING CONDUCTOR</p><p>BONDING BUSHING LUG</p><p>BONDING BUSHING (MANUF. T &amp; B P/N BG80X OR APPROVED EQUAL) NOTE: X SUBSTITUTED FOR CONDUIT SIZE</p><p>BONDING BUSHING SET SCREW</p><p>METALLIC CONDUIT (RGS, IMC, EMT, FLEX)</p><p>LUG CONDUCTOR SCREW</p><p>BONDING LUG SCREW</p><p>1/4" MIN.</p></div><div>NOTE: 1. IF WITHIN 18 INCHES OF A GROUND BAR, CONNECT CONDUIT BOND CONDUCTOR TO GROUND BAR. OTHERWISE, CONNECT TO MAIN GROUND CONDUCTOR EXITING CONDUIT VIA C-TYPE COMPRESSION CONNECTION. WRAP CONNECTION POINT WITH UL LISTED GREEN ELECTRICAL TAPE 2. BOTH ENDS OF CONDUIT TO BE GROUNDED.</div><div>DIRECTIONS: 1. MOUNT BONDING BUSHING ONTO CONDUIT 2. TIGHTEN BOND BUSHING SET SCREW 3. INSERT COPPER CONDUCTOR INTO LUG 4. TIGHTEN LUG CONDUCTOR SCREW 5. TIGHTEN BONDING LUG SCREW</div><div>NOTE: BONDING BUSHING, SET SCREW, LUG, LUG SCREW, COND. LUG SCREW, SHOWN AS COMPLETE UNIT.</div></div>				
	A1 NOT USED NTS	A2 CONDUIT BOND/GROUND BUSHING DETAIL NTS	A4 NOT USED NTS		
		1	2	3	4



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

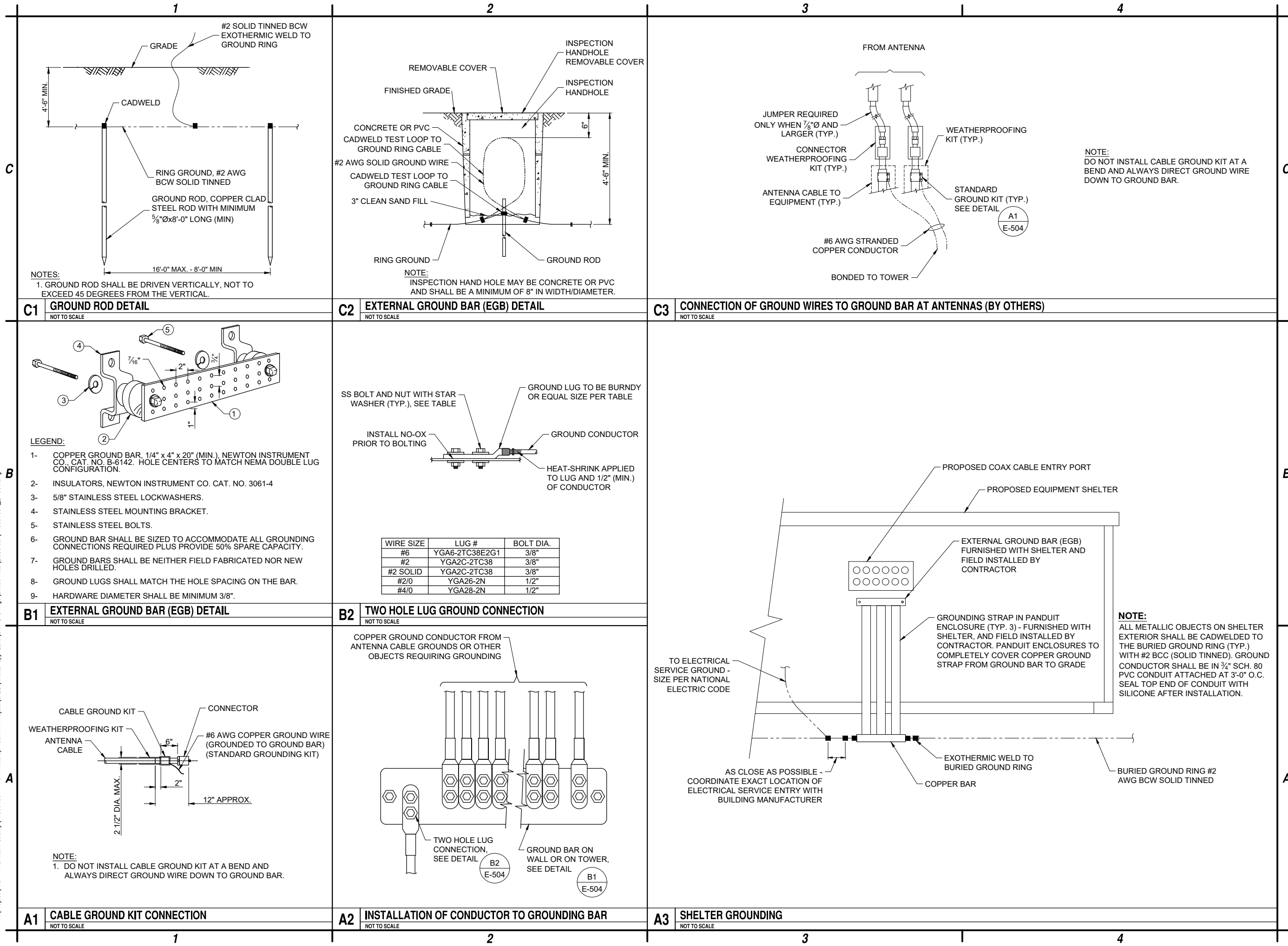
MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

ELECTRICAL  
DETAILS

E-503



Aug 02, 2024 - 10:46am  
F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Electrical\Y7504001\_E-504.dwg



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



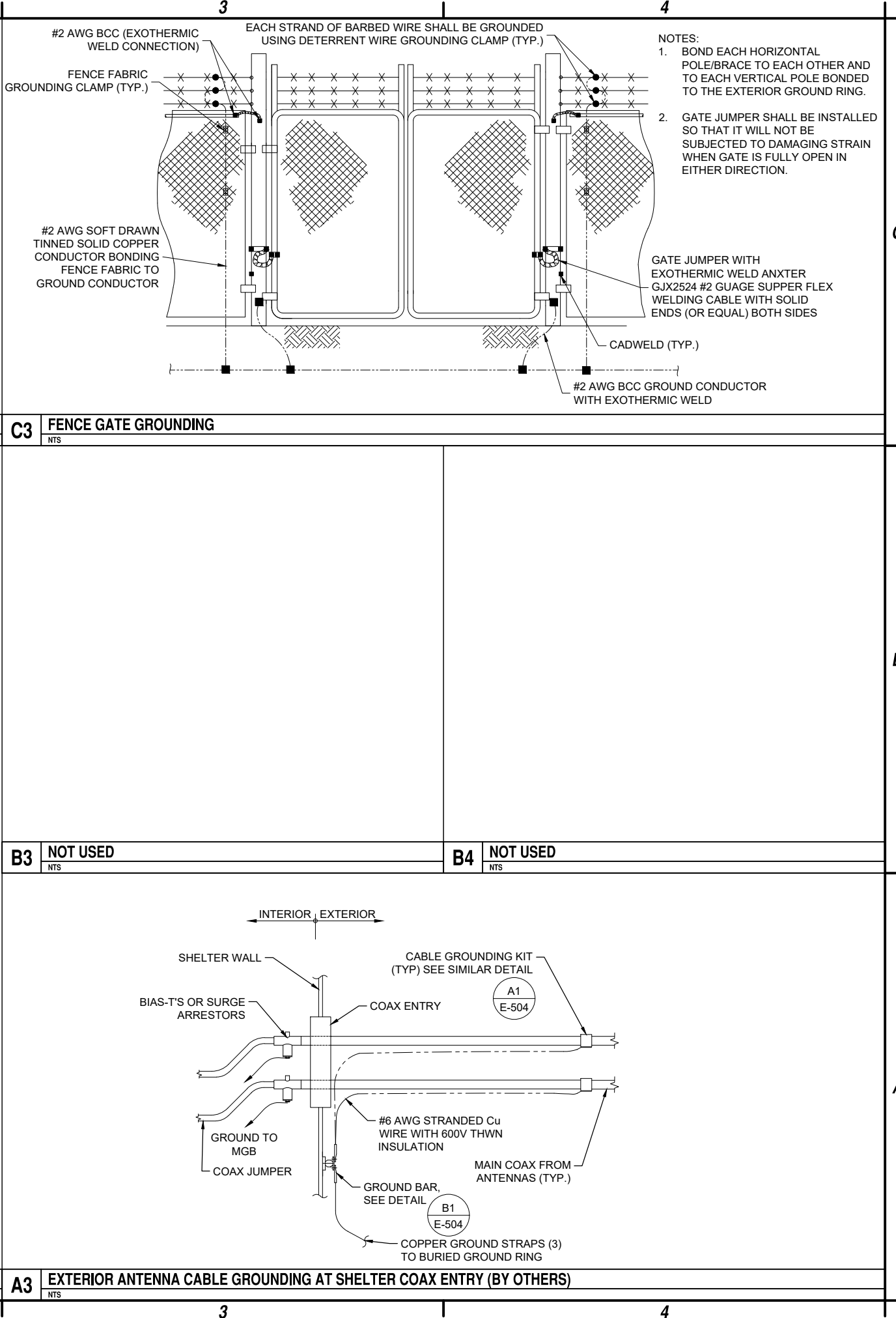
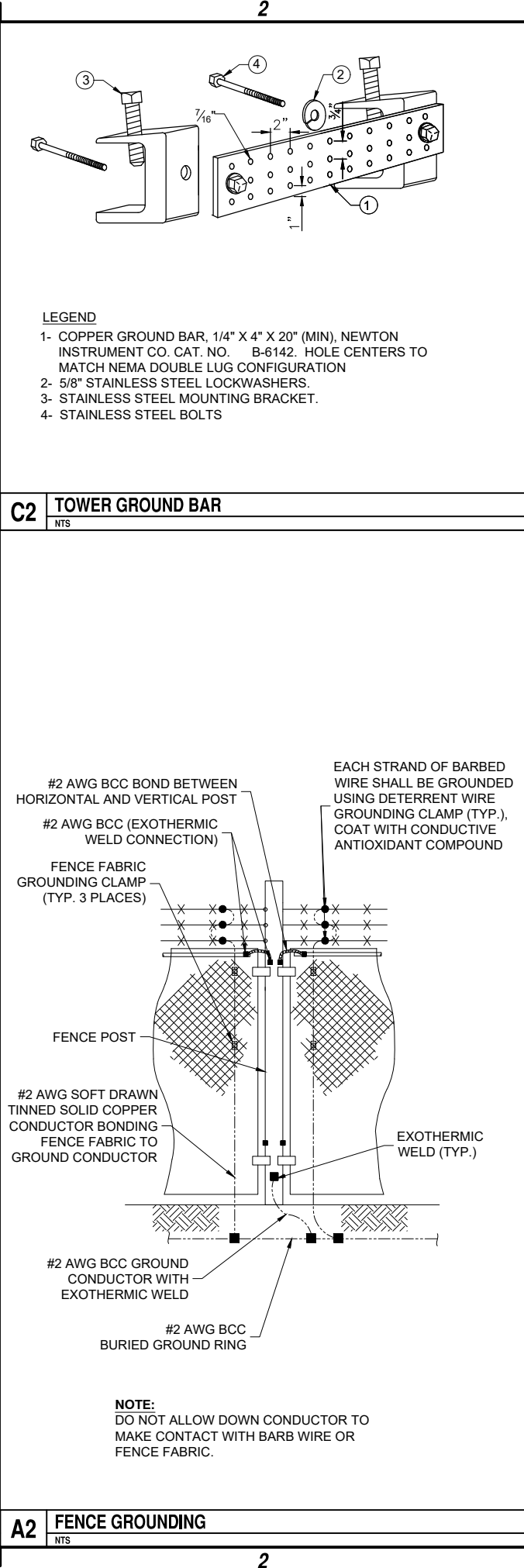
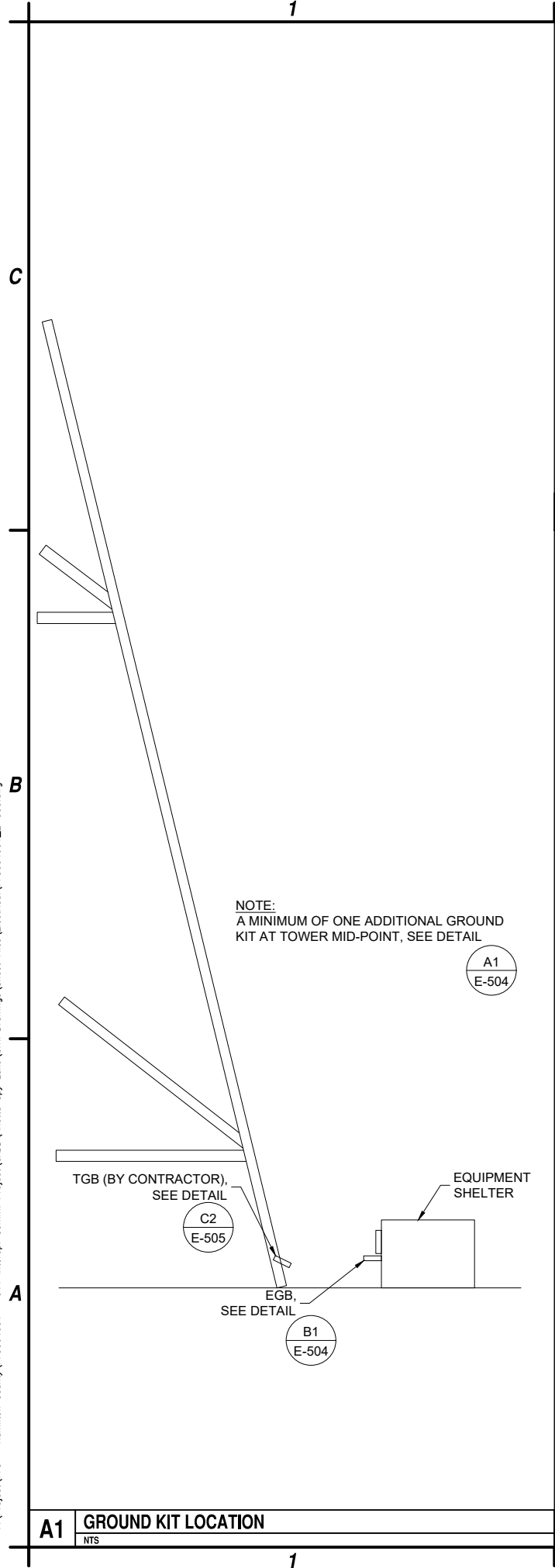
HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

0	3-8-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

GROUNDING  
DETAILS

E-504

Aug 02, 2024 - 10:46am F:\Project\Y75 - Hamilton County\Y7504001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Electrical\Y7504001\_E-505.dwg



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



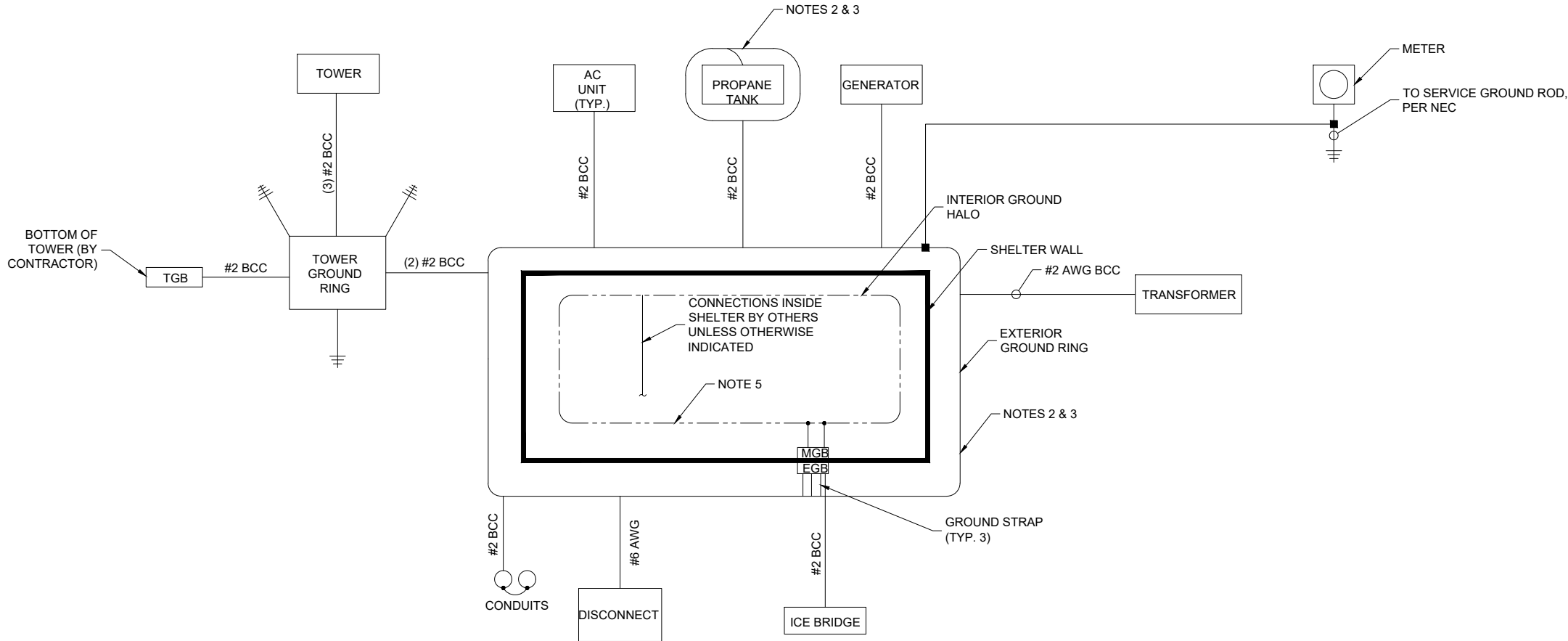
HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

GROUNDING  
DETAILS

E-505

Aug 02, 2024 - 10:46am F:\Project\Y75 - Hamilton County\Y75004001 - 911 Interop. Comm. Project\CADD\Arietta Spy Lake\Civil Drawings\Sheet Files\Electrical\Y75004001\_E-506.dwg



- NOTES:
1. BOND ANTENNA GROUNDING KIT CABLE TO TOWER.
  2. #2 (SOLID TINNED) BCC BURIED GROUND RING.
  3. FOR GROUNDING CONNECTION AND DETAILS, SEE SHEETS E-101, E-503, E-504 & E-505.
  4. INSTALL GROUND RODS AT LOCATIONS AS SHOWN ON GROUNDING PLAN.
  5. INTERIOR GROUND RING FOR EQUIPMENT BY SHELTER MANUFACTURER.



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



HAMILTON COUNTY  
SITE NAME: ARIETTA - SPY LAKE  
984 STATE ROUTE 8  
PISECO, NY 12139

MARK	DATE	DESCRIPTION
0	3-8-24	ISSUED FOR PERMITTING
REVISIONS		
PROJECT NO: F75.001.001		
DATE: MARCH 2024		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

GROUNDING  
SCHEMATIC

E-506