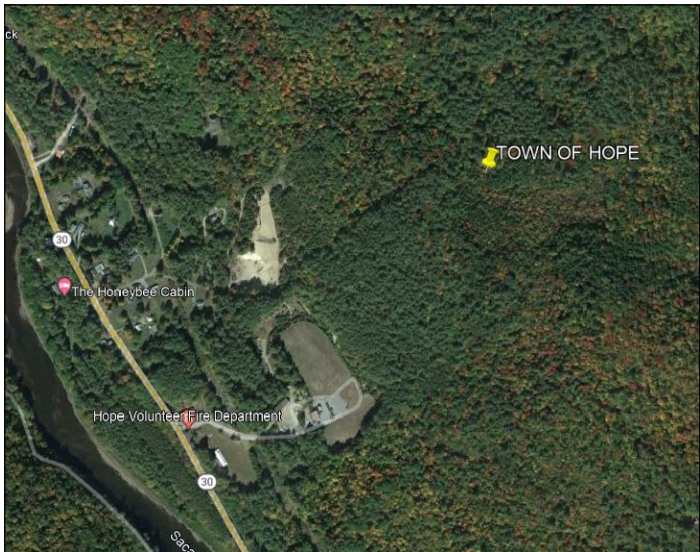




CONTRACT DRAWINGS  
FOR THE CONSTRUCTION OF

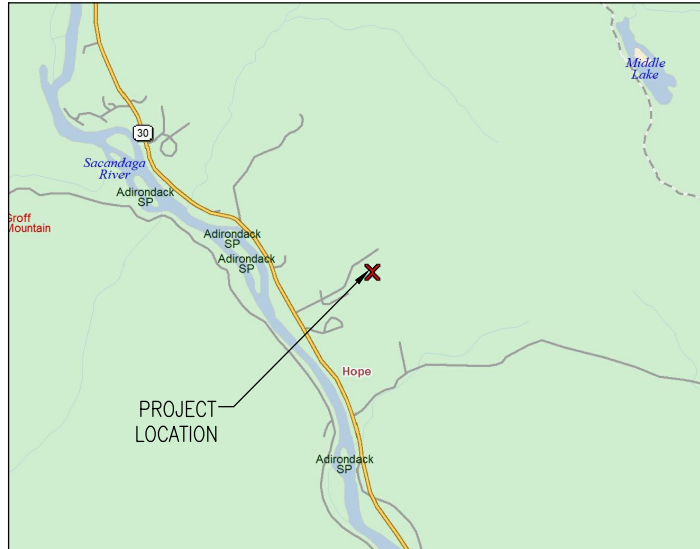
HAMILTON COUNTY  
EMERGENCY COMMUNICATIONS PROJECT  
SITE NAME: TOWN OF HOPE

STATE ROUTE 30  
HOPE FALLS, NY



AERIAL MAP

DIRECTIONS TO SITE: (FROM SYRACUSE) TAKE I-90 EAST TO EXIT 27. TURN RIGHT ONTO SR30 AND FOLLOW TO A RIGHT ONTO DUMP ROAD NEXT TO THE FIRE DEPARTMENT.




VICINITY MAP



PROJECT INFORMATION	
LANDLORD NAME:	TOWN OF HOPE
PROJECT OWNER:	HAMILTON COUNTY
SITE NAME:	TOWN OF HOPE
E911 SITE ADDRESS:	STATE ROUTE 30 HOPE FALLS, NY
TAX MAP #:	147.016-1-16
LATITUDE:	N 43° 18' 45.0"
LONGITUDE:	W 74° 14' 21.0"
AREA OF DISTURBANCE:	1.9 ACRES
GROUND ELEVATION:	1050.49± AMSL
ZONING JURISDICTION:	TOWN OF HOPE
COUNTY:	HAMILTON
TYPE OF SITE:	PROPOSED SELF SUPPORT
TOWER HEIGHT:	150'-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

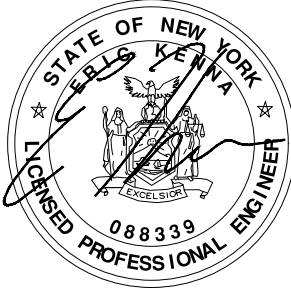
PHONE #: 1-800-962-7962 OR 811

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

DRAWING LIST			
SHEET NO.	SHEET NAME	REV	DATE
GENERAL			
G-001	TITLE SHEET	1	5-29-24
G-002	GENERAL NOTES	1	5-29-24
CIVIL			
C-100	PROPERTY PLAN	1	5-29-24
C-100A	OVERALL AERIAL PLAN	1	5-29-24
C-101	OVERALLL SITE PLAN	1	5-29-24
C-102	GRADING PLAN	1	5-29-24
C-103	GRADING PLAN	1	5-29-24
C-104	GRADING PLAN	1	5-29-24
C-105	GRADING PLAN	1	5-29-24
C-106	COMPOUND PLAN	1	5-29-24
C-107	TREE SURVEY PLAN	1	5-29-24
C-201	TOWER ELEVATION	2	8-2-24
C-501	EQUIPMENT SHELTER DETAILS	1	5-29-24
C-502	SHELTER FOUNDATION DETAILS	1	5-29-24
C-503	FOUNDATION DETAILS	1	5-29-24
C-504	ICE BRIDGE DETAILS	1	5-29-24
C-505	WAVEGUIDE/ CABLE DETAILS	1	5-29-24
C-506	FENCE DETAILS	1	5-29-24
C-507	SITE DETAILS	1	5-29-24
C-508	PROPANE TANK DETAILS	1	5-29-24
C-509	SIGN DETAILS ON SPECIFICATIONS	1	5-29-24
ELECTRICAL			
E-101	GROUNDING PLAN AND NOTES	1	5-29-24
E-501	ELECTRICAL DETAILS	1	5-29-24
E-502	ELECTRICAL DETAILS	1	5-29-24
E-503	ELECTRICAL DETAILS	1	5-29-24
E-504	GROUNDING DETAILS	1	5-29-24
E-505	GROUNDING DETAILS	1	5-29-24
E-506	GROUNDING SCHEMATIC	1	5-29-24

C&S PROJECT: F75.004.001

FEBRUARY 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

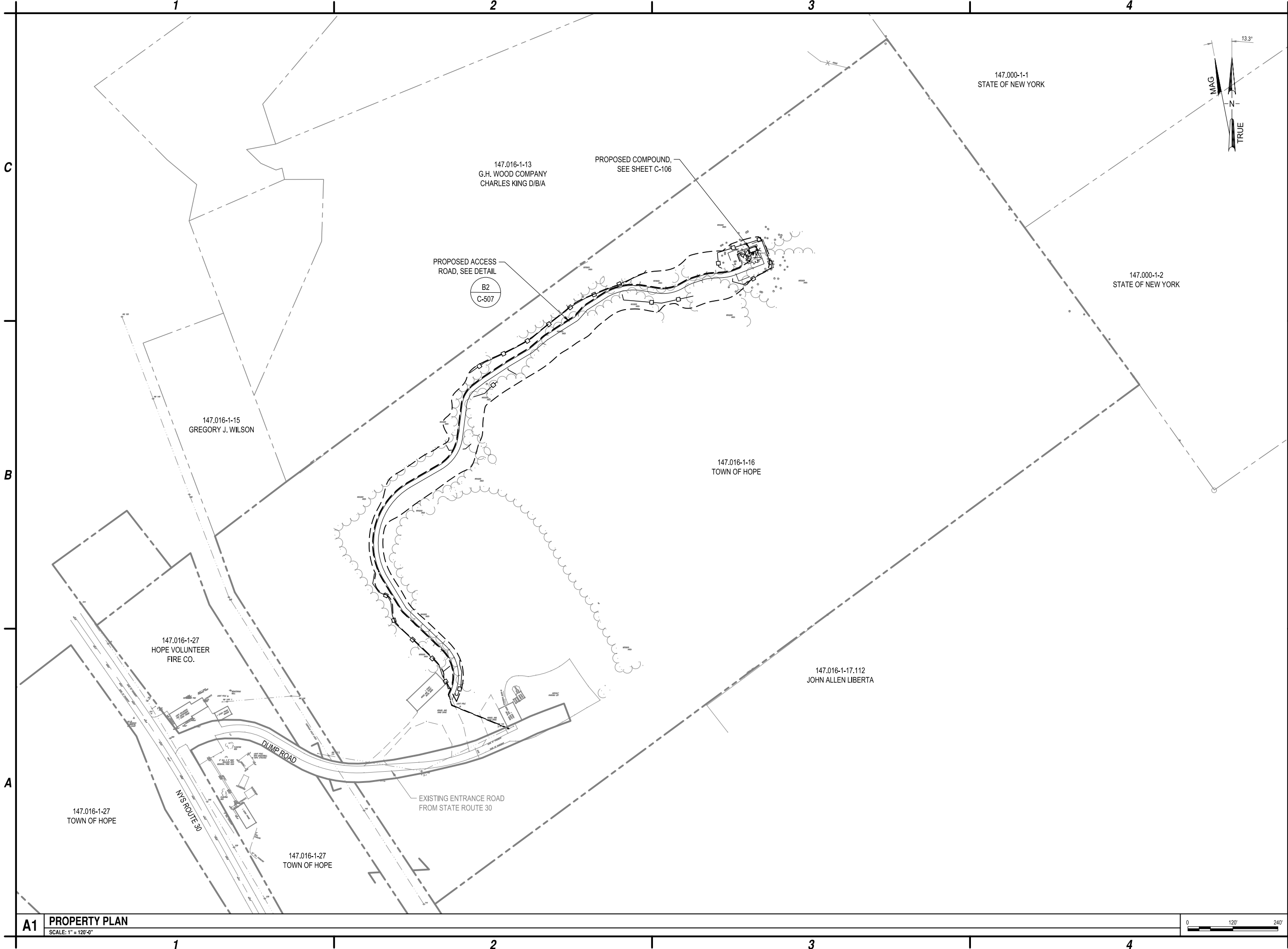
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G-001

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C	1	2		3	4
	1. ALL STEEL WORK SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND IN ACCORDANCE WITH ASTM A36 UNLESS OTHERWISE NOTED.				
	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.				
C	3. BOLTED CONNECTIONS SHALL BE ASTM A325 BEARING TYPE (3/4"Ø) CONNECTIONS AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.				
	4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.				
	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.				
C	6. ALL METAL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123. ALL SHOP WELDED MEMBERS SHALL BE GALVANIZED AFTER WELDING.				
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Syracuse, New York 13212  
Phone: 315-455-2000  
Fax: 315-455-9667  
www.cscos.com



HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION

PROJECT NO: F75.001.001	
DATE: NOVEMBER 2023	
DRAWN BY: M. BUCKINGHAM	
DESIGNED BY: E.N. KENNA, P.E.	
CHECKED BY: E.N. KENNA, P.E.	

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PROPERTY  
PLAN

C-100



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**HAMILTON COUNTY**  
**SITE NAME: TOWN OF HOPE**  
**STATE ROUTE 30**  
**HOPE FALLS, NY**

MARK	DATE	DESCRIPTION
1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING

REVISIONS	
PROJECT NO:	F75.001.001
DATE:	NOVEMBER 2023
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	E.N. KENNA, P.E.
CHECKED BY:	E.N. KENNA, P.E.

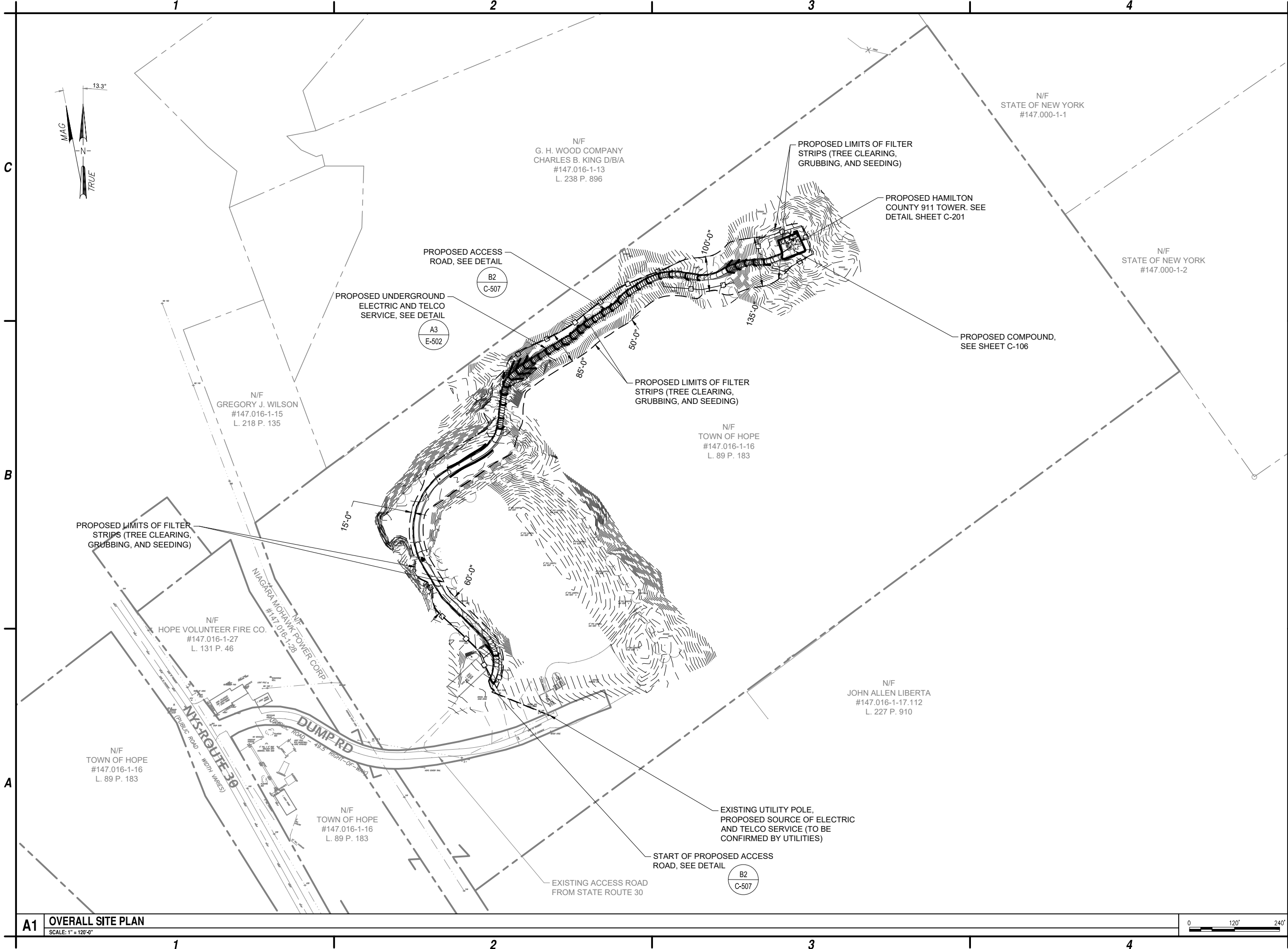
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EDUCATION LAW

**OVERALL  
AERIAL PLAN**

**C-100A**



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**A1 OVERALL SITE PLAN**  
SCALE: 1" = 120'-0"



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**HAMILTON COUNTY**  
**SITE NAME: TOWN OF HOPE**  
**STATE ROUTE 30**  
**HOPE FALLS, NY**

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
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NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

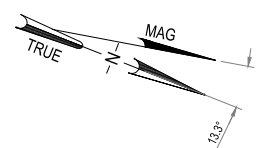
**OVERALL  
SITE PLAN**

**C-101**



1. IN AREAS WHERE SOIL DISTURBANCE ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, SOIL STABILIZATION MEASURES SHALL BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN FOURTEEN DAYS (SEVEN DAYS IF OPEN DISTRIBUTED AREA EXCEEDS 5 ACRES, OR THREE DAYS IF BETWEEN NOVEMBER 15TH AND APRIL 1ST).

3. ALL FILTER STRIPS WITHIN PHYSICALLY DISTURBED AREAS FROM GRADING ACTIVITIES ONLY ARE TO RECEIVE SOIL RESTORATION AT THE END OF CONSTRUCTION IN ACCORDANCE TO NYSDEC'S DEEP-RIPPING AND DE-COMPACTION. ALL OTHER FILTER STRIP AREAS TO BE MAINTAINED IN THEIR NATURAL STATE AND PROTECTED FROM DISTURBANCE



MATCHLINE C-103

# A



**HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY**

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
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**C-102**

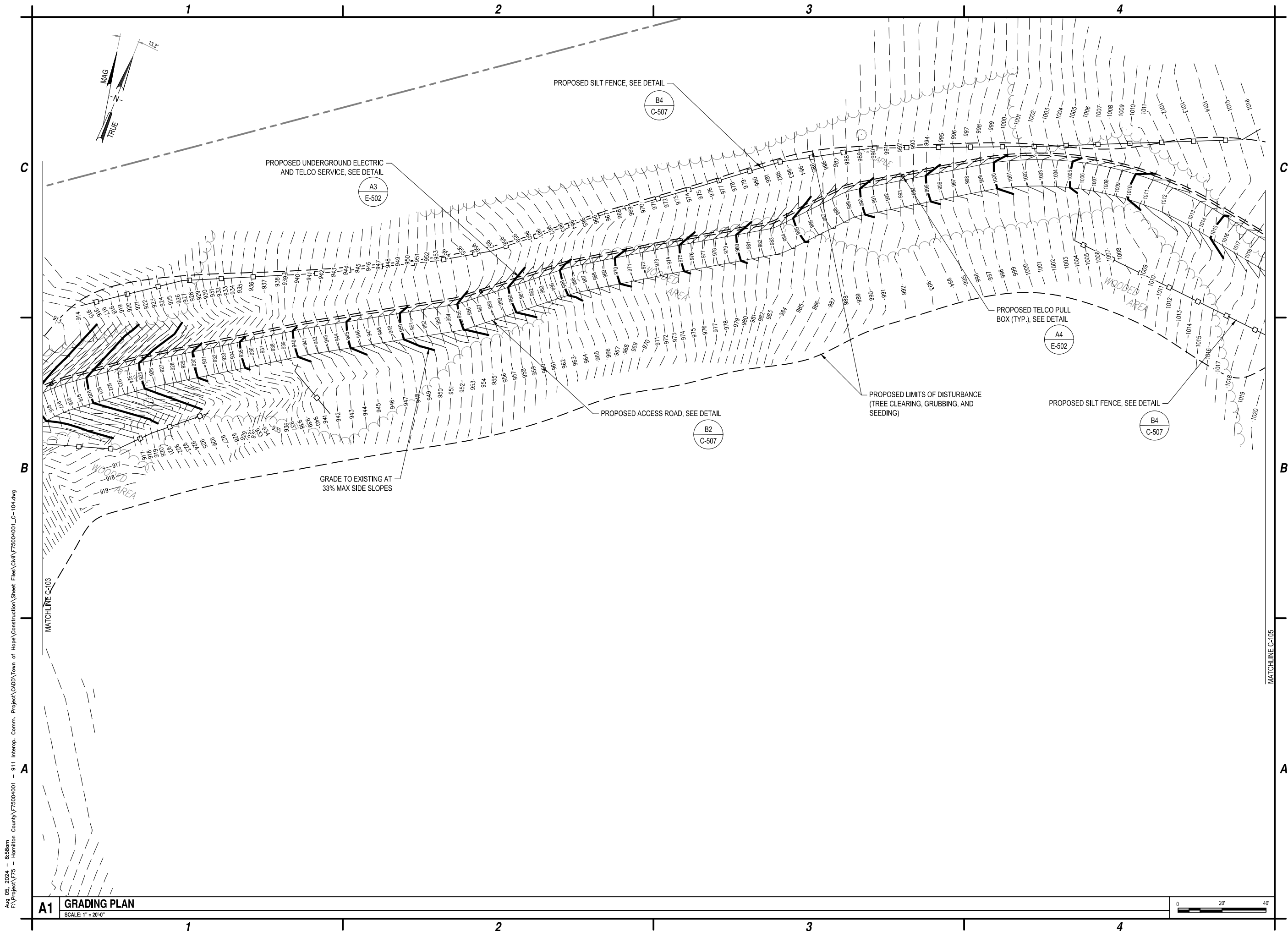
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**HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY**

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION

PROJECT NO:	F75.001.001
DATE:	NOVEMBER 2023
DRAWN BY:	M. BUCKINGHAM
DESIGNED BY:	E.N. KENNA, P.E.
CHECKED BY:	E.N. KENNA, P.E.

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## GRADING PLAN

**C-104**

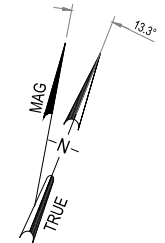
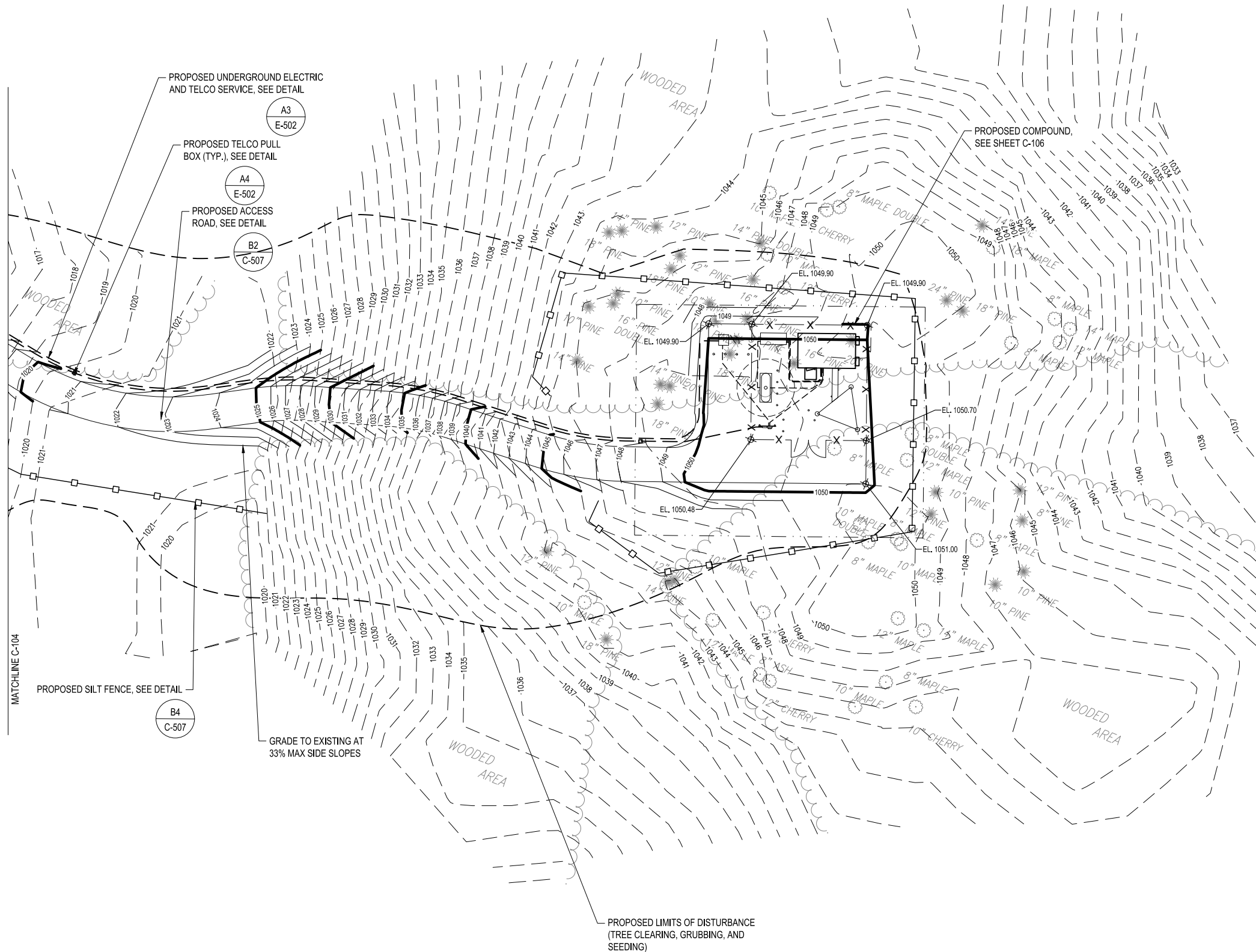


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A1

GRADING PLAN

SCALE: 1" = 20'-0"



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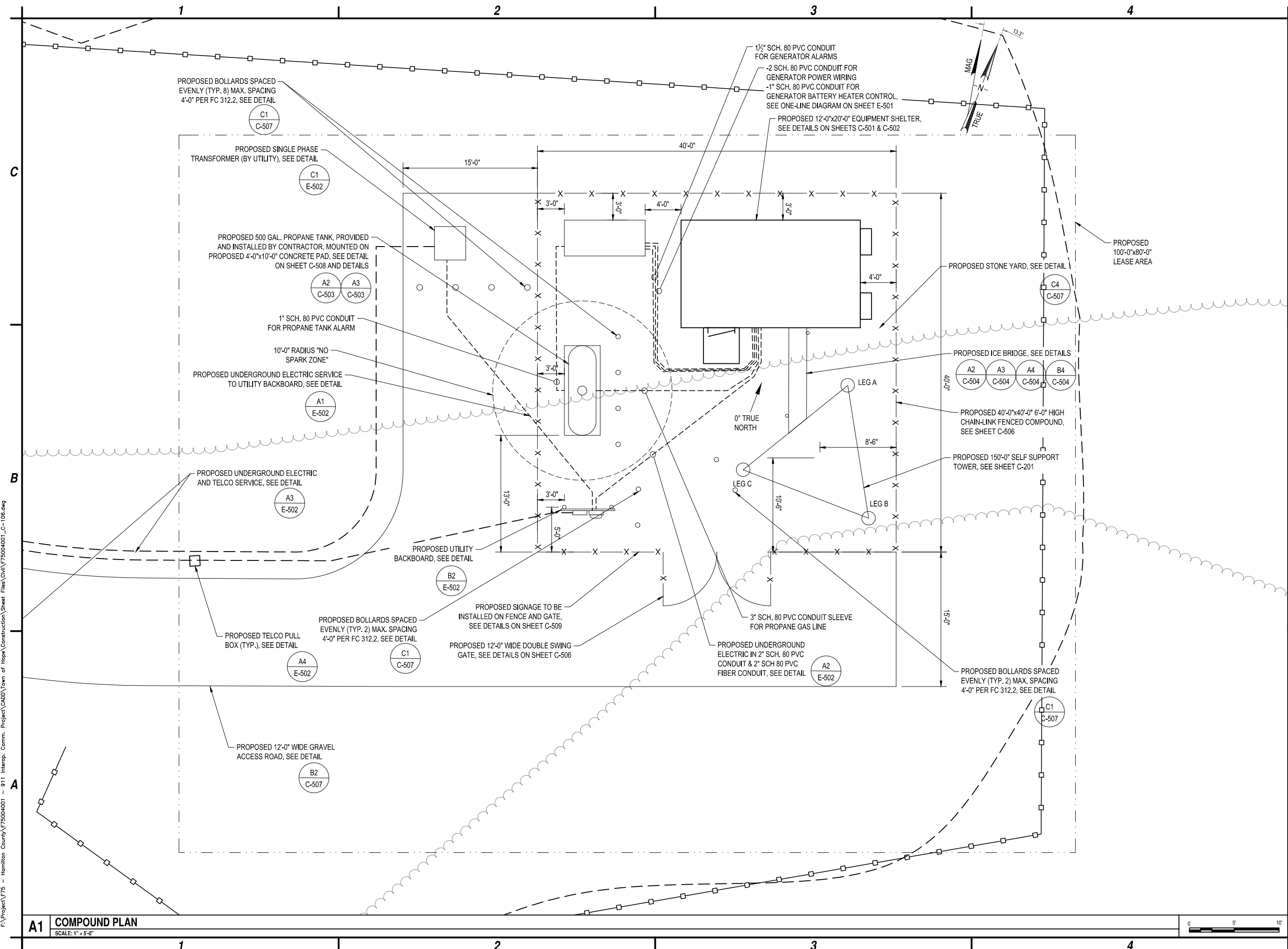
HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
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GRADING PLAN

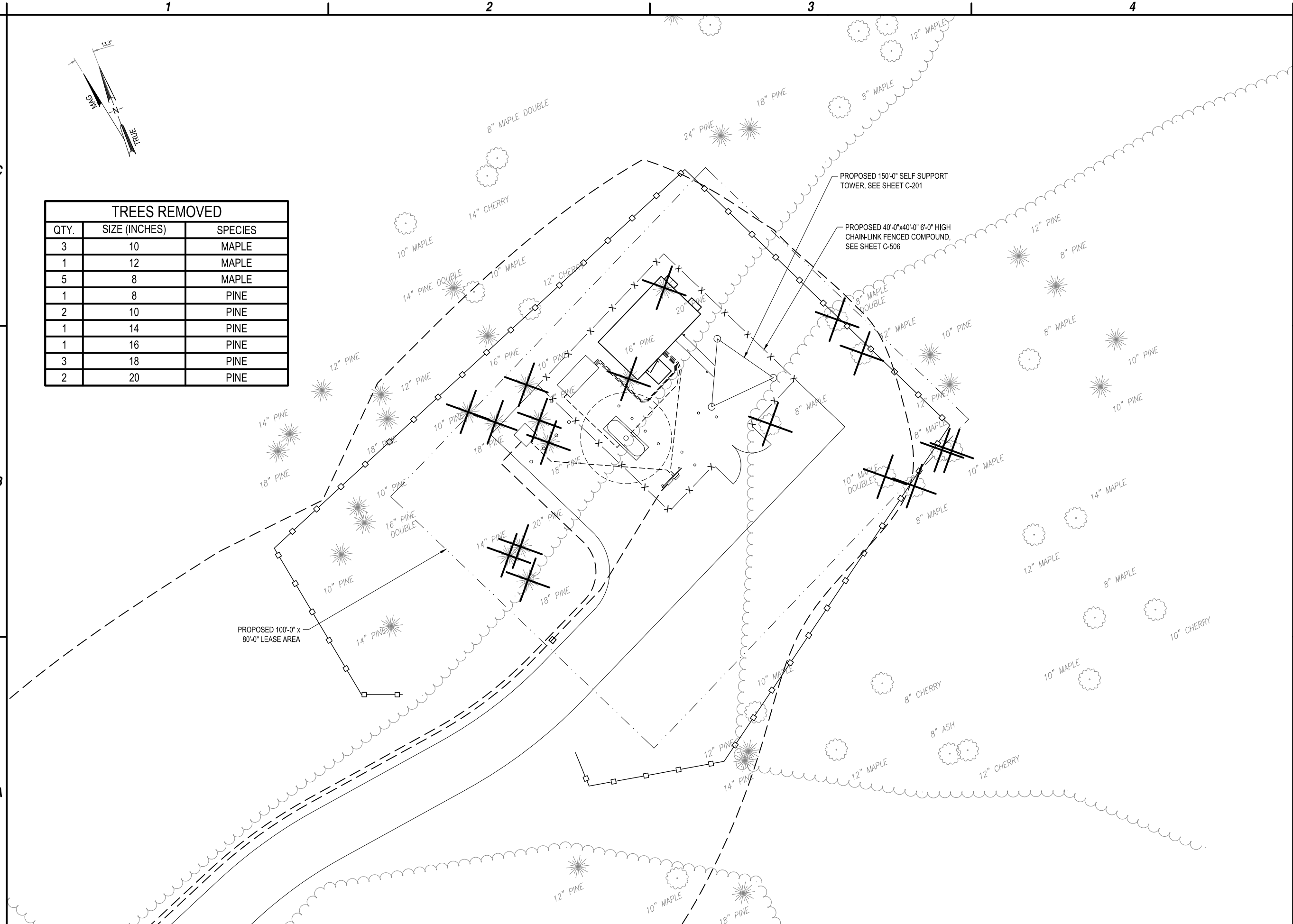
C-105







TREES REMOVED		
QTY.	SIZE (INCHES)	SPECIES
3	10	MAPLE
1	12	MAPLE
5	8	MAPLE
1	8	PINE
2	10	PINE
1	14	PINE
1	16	PINE
3	18	PINE
2	20	PINE



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**HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY**

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO:		F75.001.001
DATE:		NOVEMBER 2023
DRAWN BY:		M. BUCKINGHAM
DESIGNED BY:		E.N. KENNA, P.E.
CHECKED BY:		E.N. KENNA, P.E.

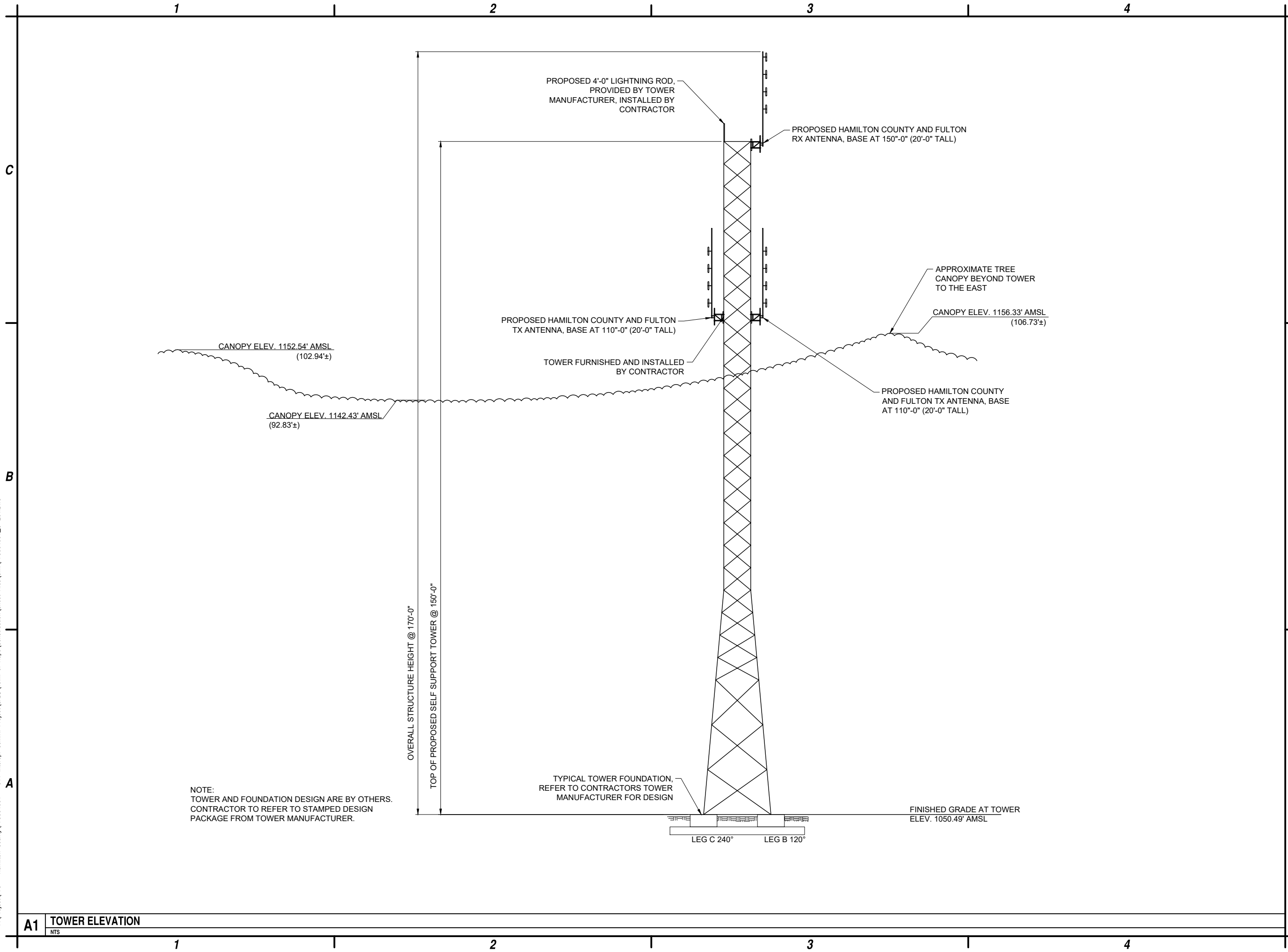
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## TREE SURVEY PLAN

**C-107**



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A1 TOWER ELEVATION  
NTS



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HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

MARK	DATE	DESCRIPTION
2	8-2-24	TOWER ELEVATION
1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING

REVISIONS

PROJECT NO: F75.001.001

DATE: NOVEMBER 2023

DRAWN BY: M. BUCKINGHAM

DESIGNED BY: E.N. KENNA, P.E.

CHECKED BY: E.N. KENNA, P.E.

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EDUCATION LAW

TOWER  
ELEVATION

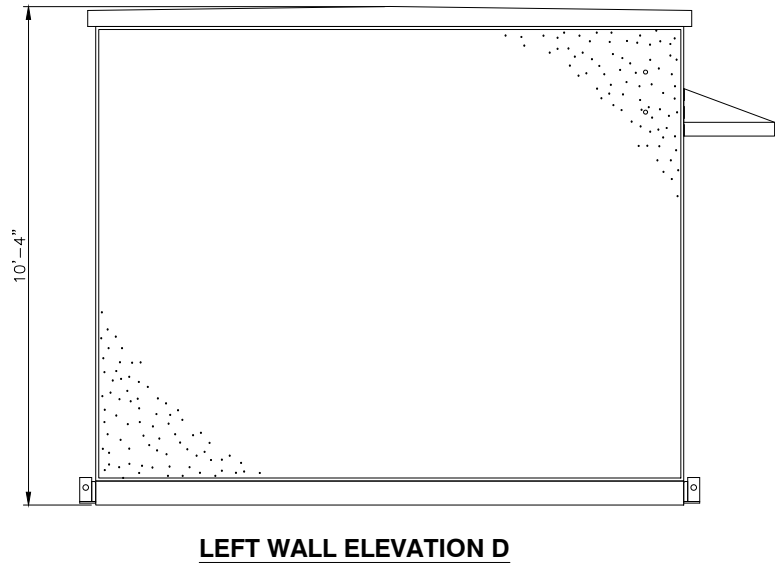
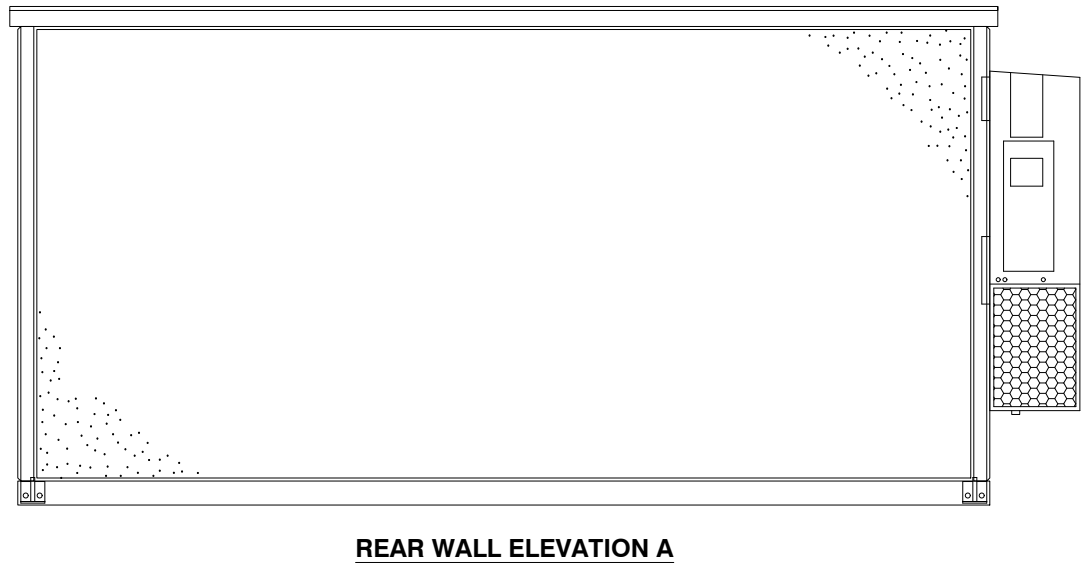
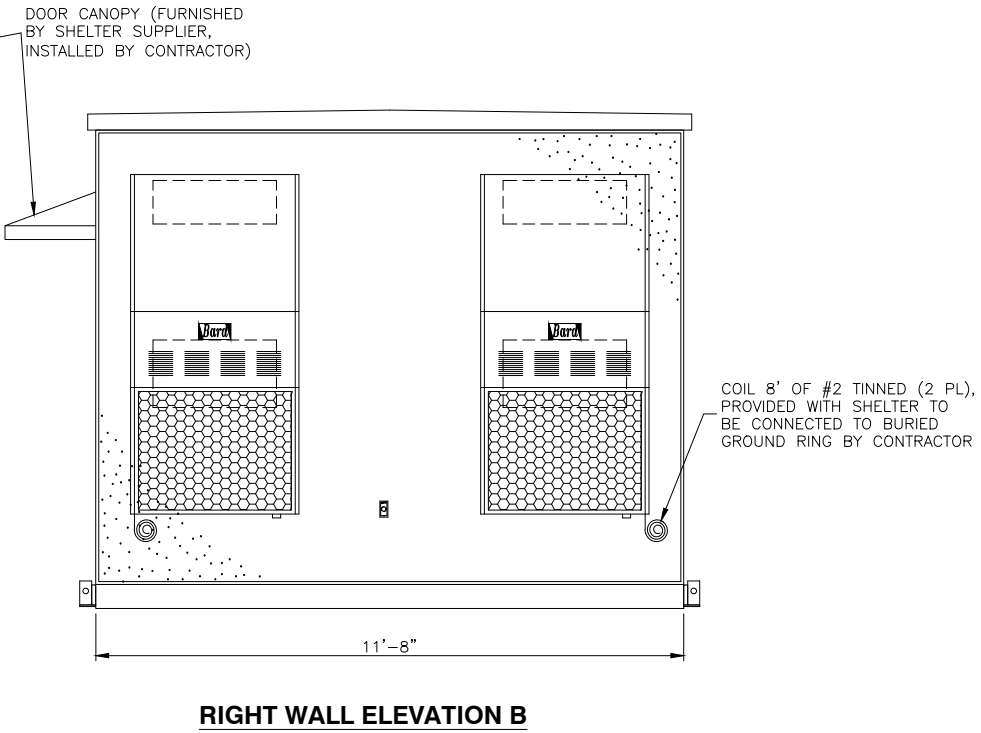
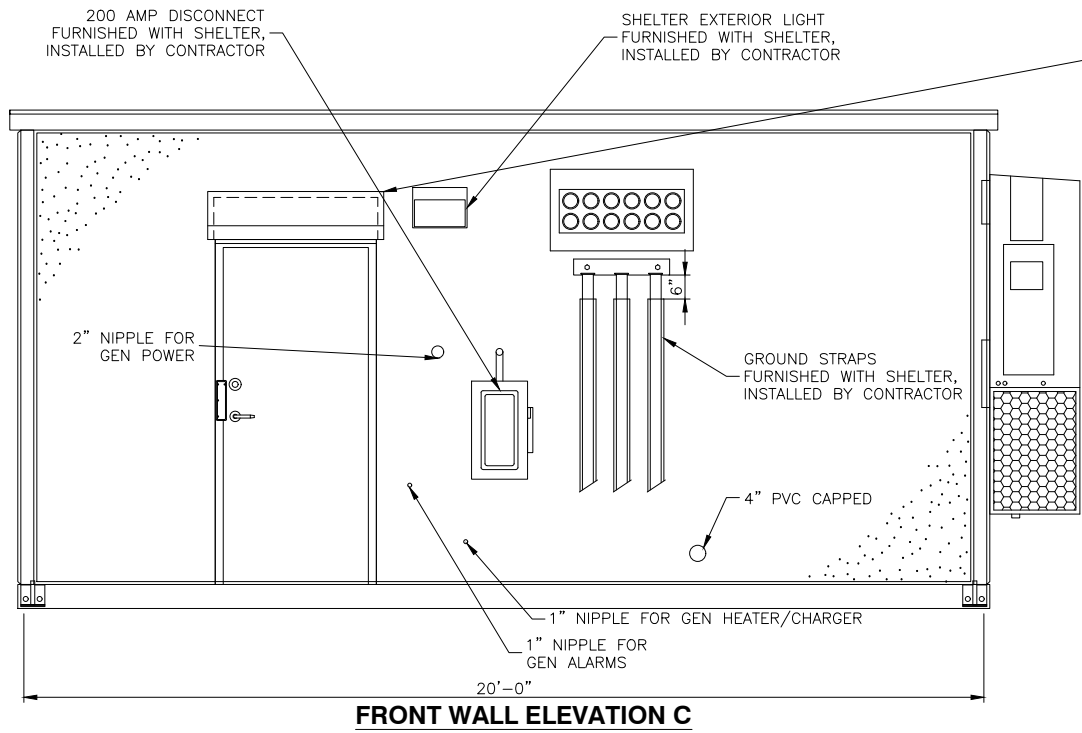
C-201

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C

B

A



**NOTES:**

1. THESE DRAWINGS REPRESENT A TYPICAL EQUIPMENT SHELTER CONFIGURATION. REFER TO ACTUAL SHELTER DRAWINGS BEING PROVIDED FOR THIS SITE PRIOR TO CONSTRUCTION.
2. CABLE ENTRY PORT SHALL BE PROVIDED ON THE RIGHT WALL OF SHELTER AS INDICATED ON THE SITE PLANS.



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**HAMILTON COUNTY**  
**SITE NAME: TOWN OF HOPE**  
**STATE ROUTE 30**  
**HOPE FALLS, NY**

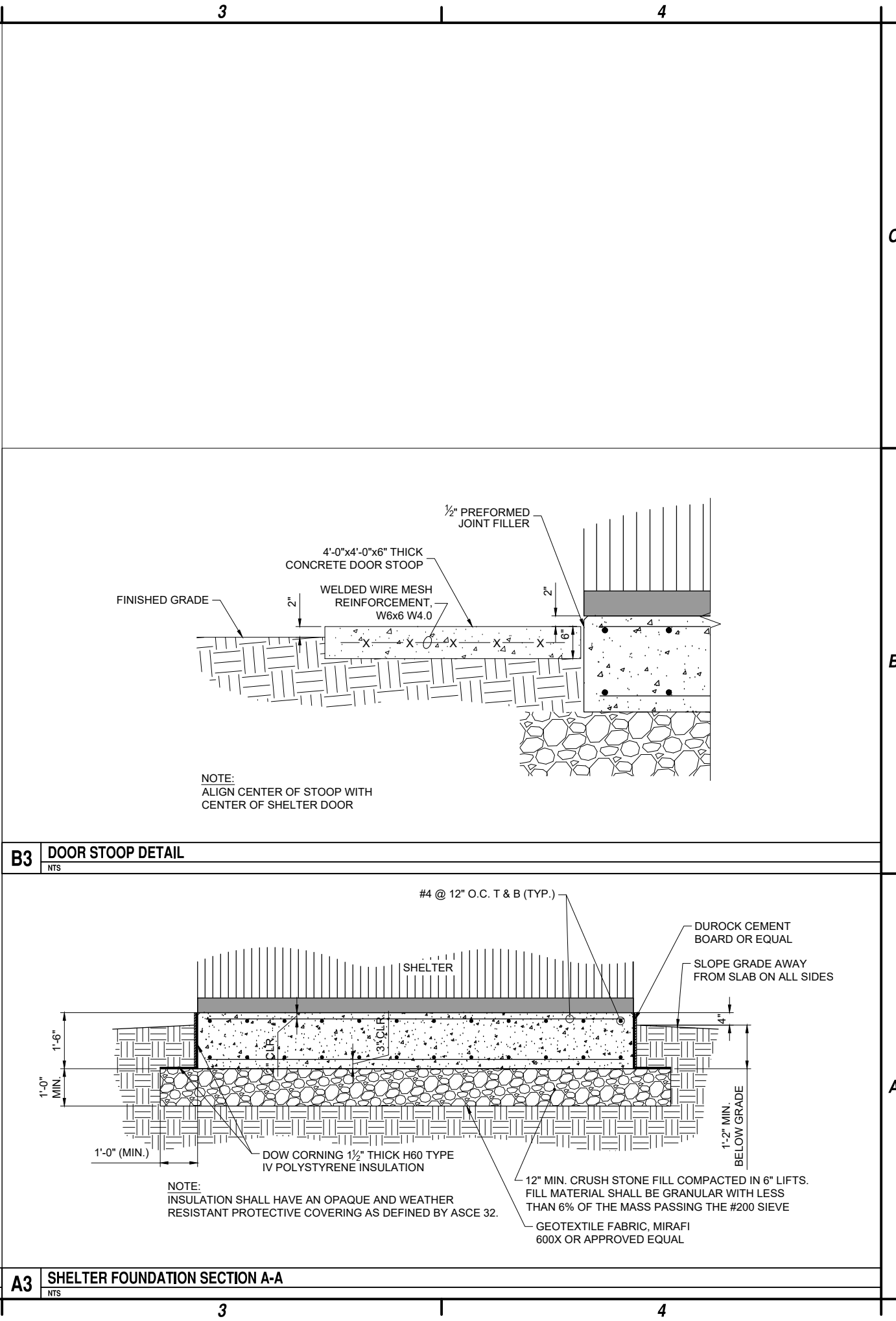
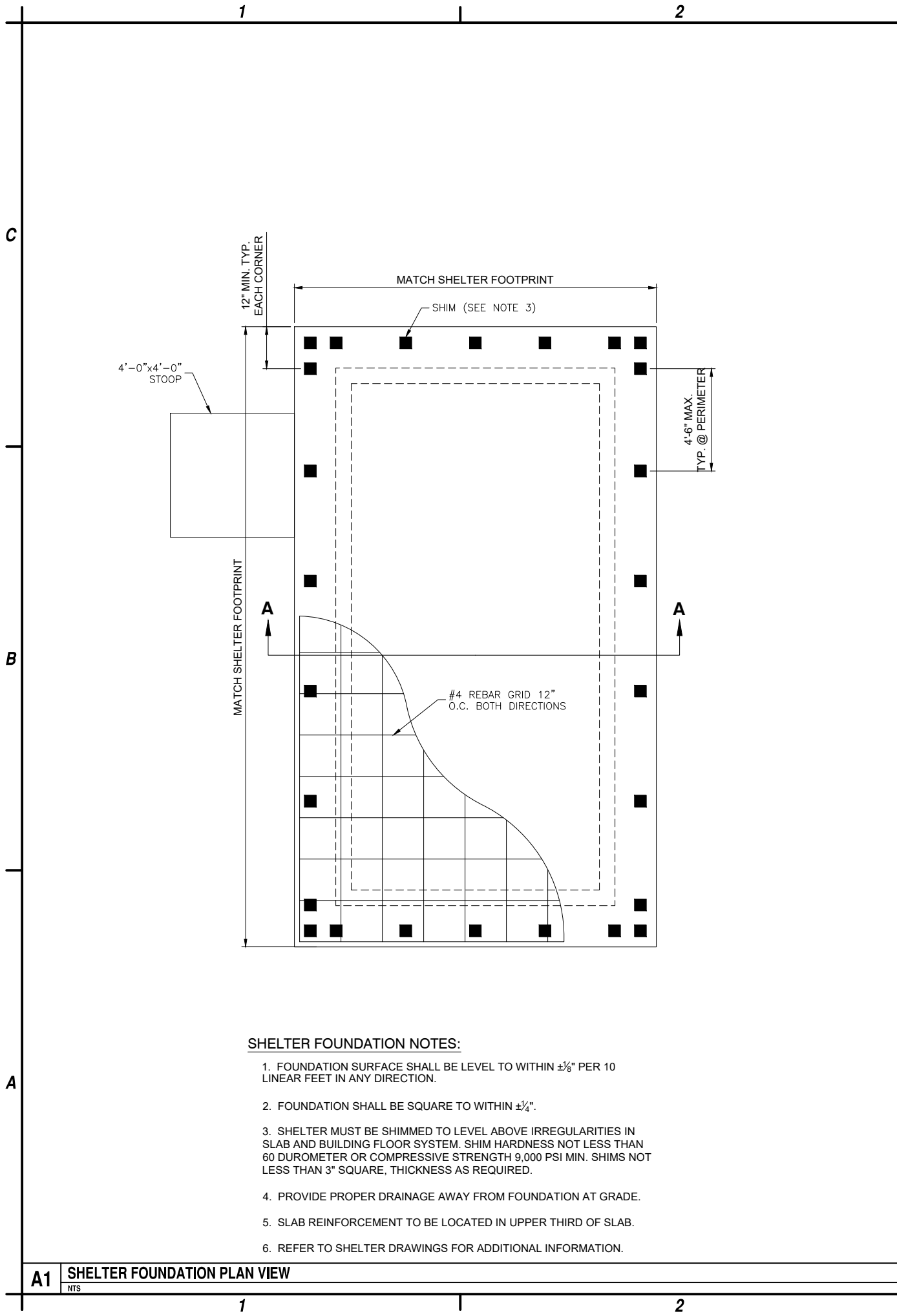
1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
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**EQUIPMENT  
SHELTER  
DETAILS**

**C-501**

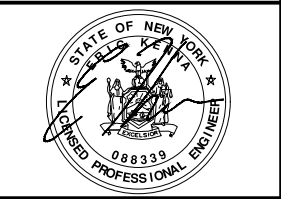


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**C&S**  
COMPANIES

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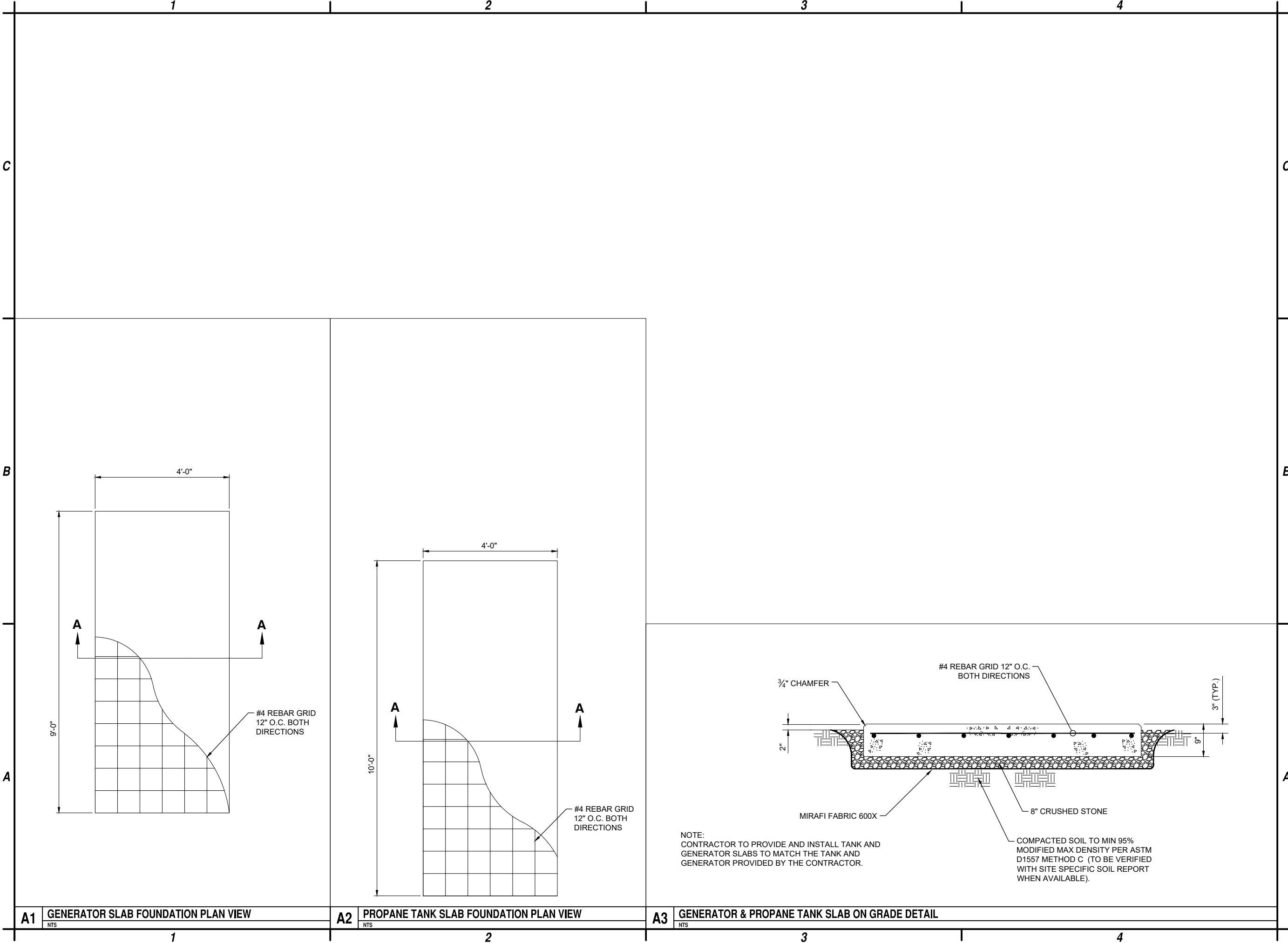
**HAMILTON COUNTY**  
**SITE NAME: TOWN OF HOPE**  
**STATE ROUTE 30**  
**HOPE FALLS, NY**

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
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**SHELTER**  
**FOUNDATION**  
**DETAILS**

**C-502**

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HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

1	5-29-24	SWPPP
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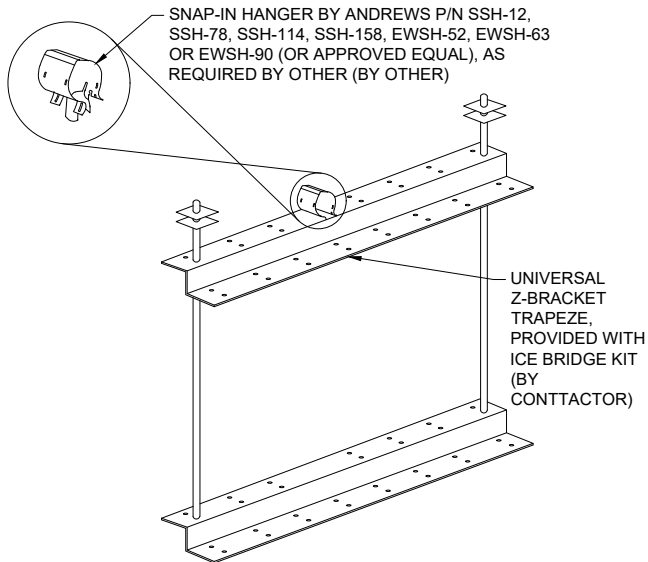
FOUNDATION  
DETAILS

C-503

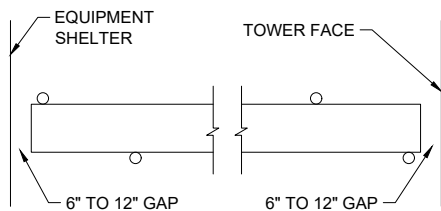


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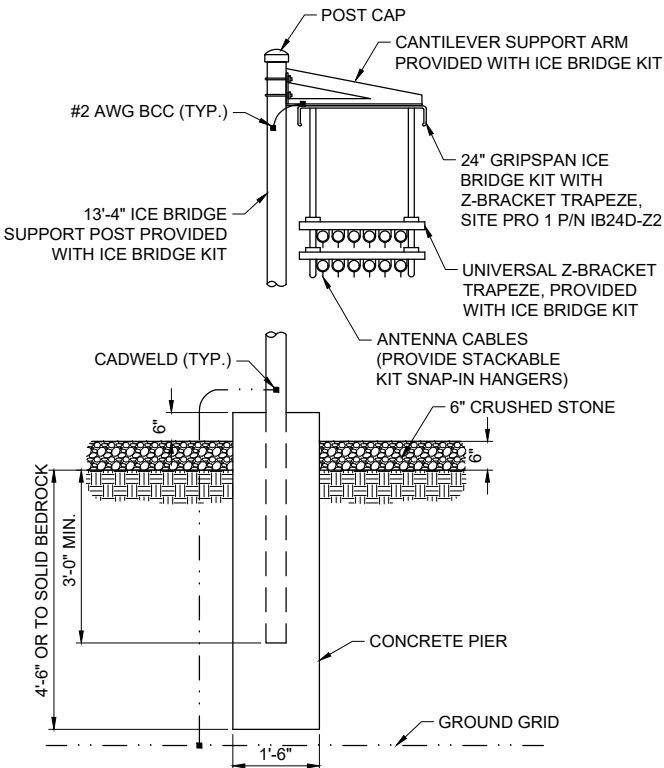
**A1** TRAPEZE KIT DETAIL  
NOT TO SCALE



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

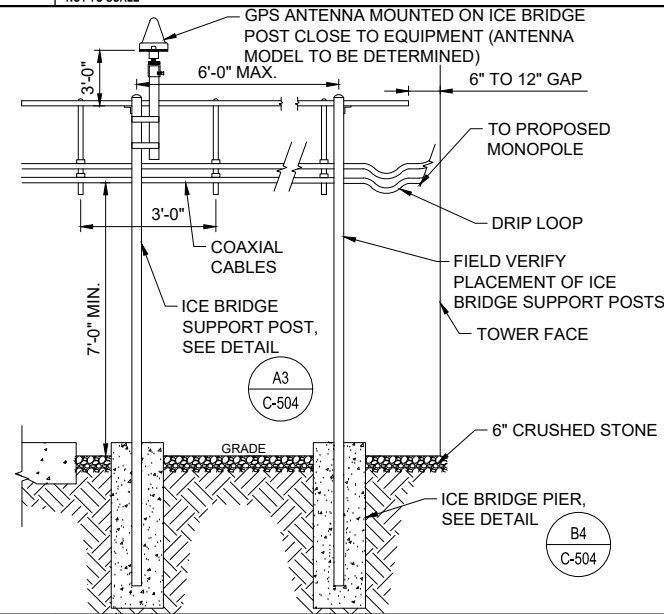


**A3** ICE BRIDGE PIER DETAIL  
NOT TO SCALE

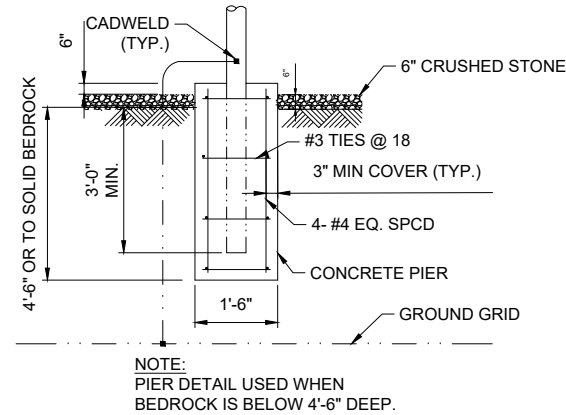


- NOTES:
1. USE SITE PRO 1 PARTS OR APPROVED EQUAL.
  2. SUPPORT POSTS SHALL BE STAGGERED ON BOTH SIDES OF ICE BRIDGE SPACED NO MORE THAN 6'-0" BETWEEN POSTS.
  3. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0" OF A SUPPORT POST.

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



**B4** POST CONNECTION DETAIL  
NOT TO SCALE



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HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
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ICE BRIDGE  
DETAILS

C-504

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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 ⅝"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 A2 C-505 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						



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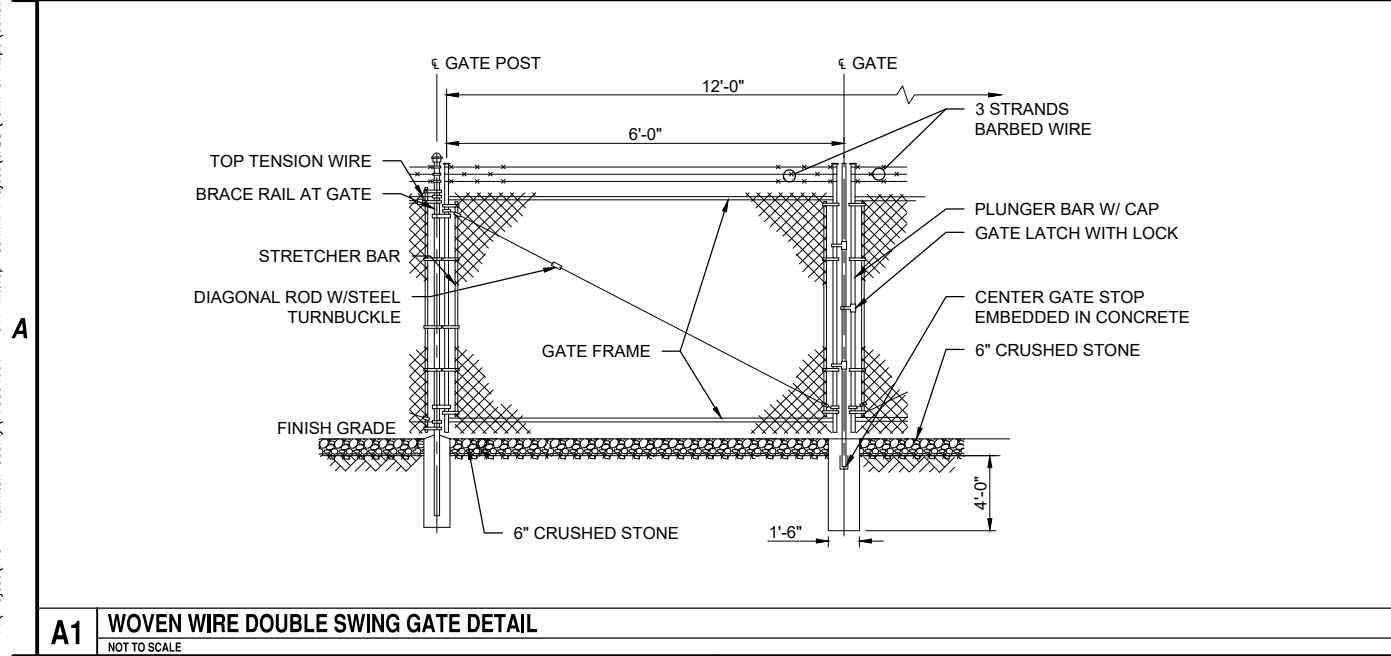
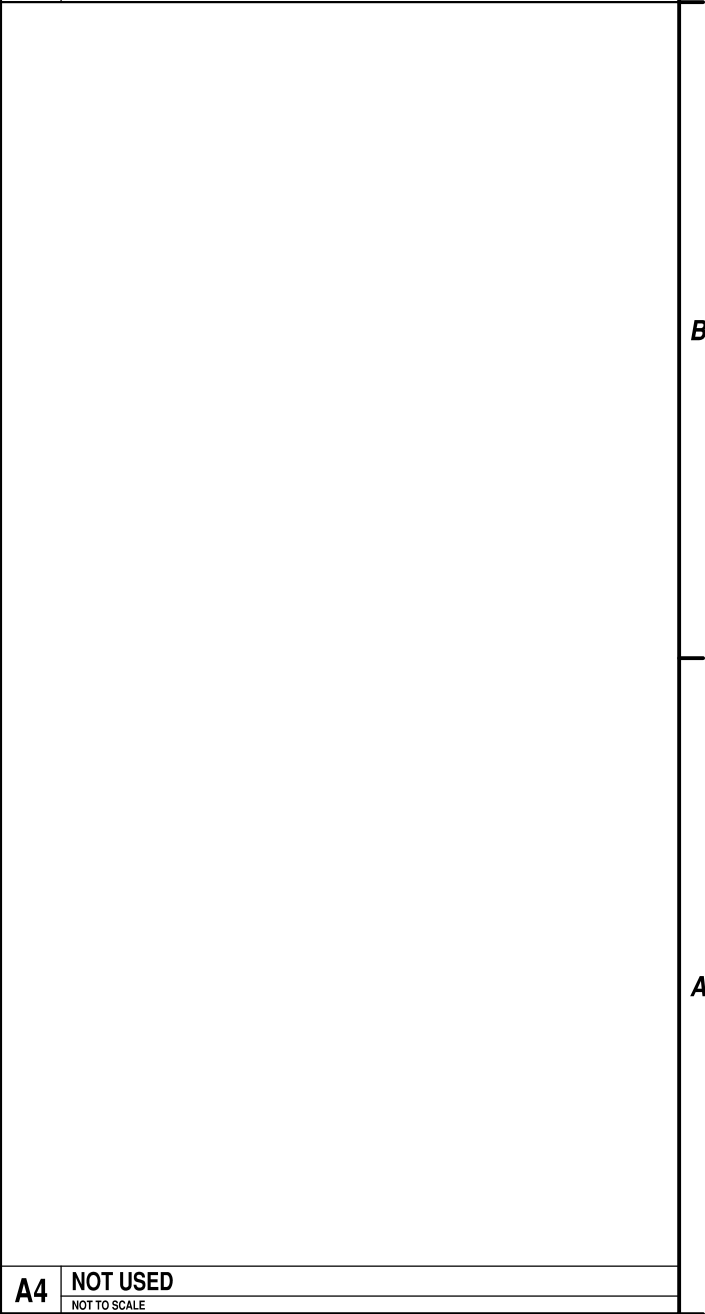
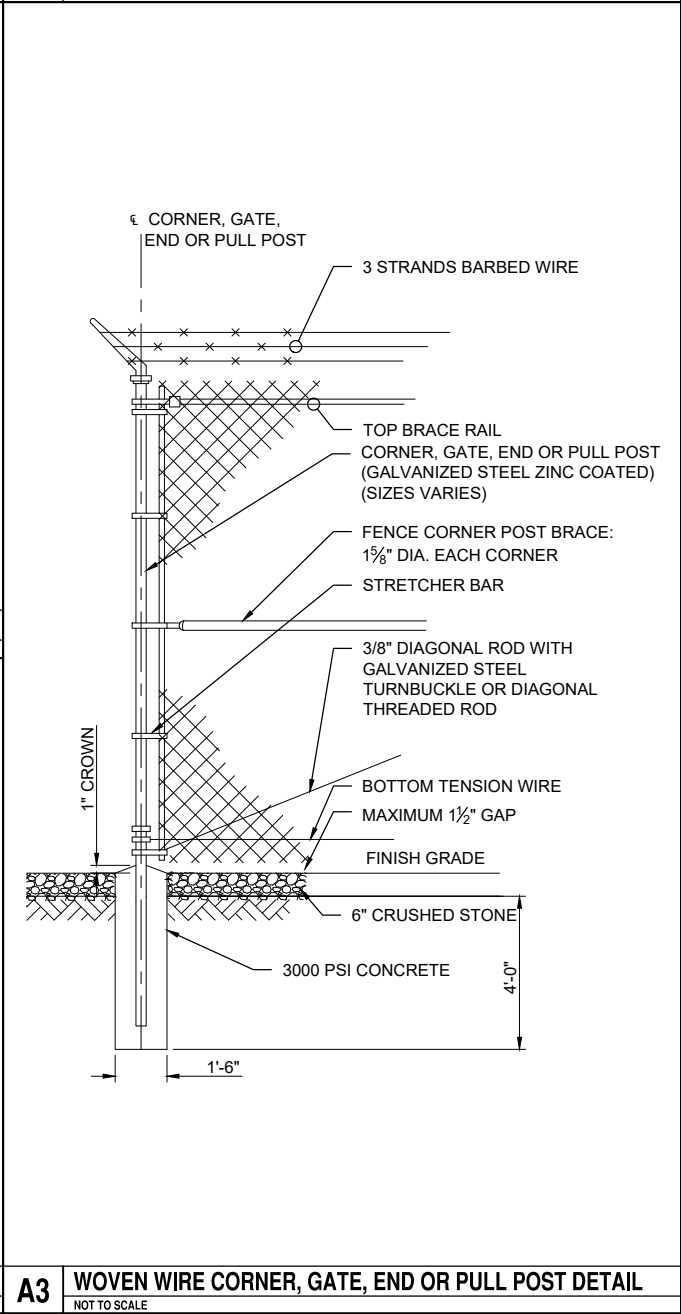
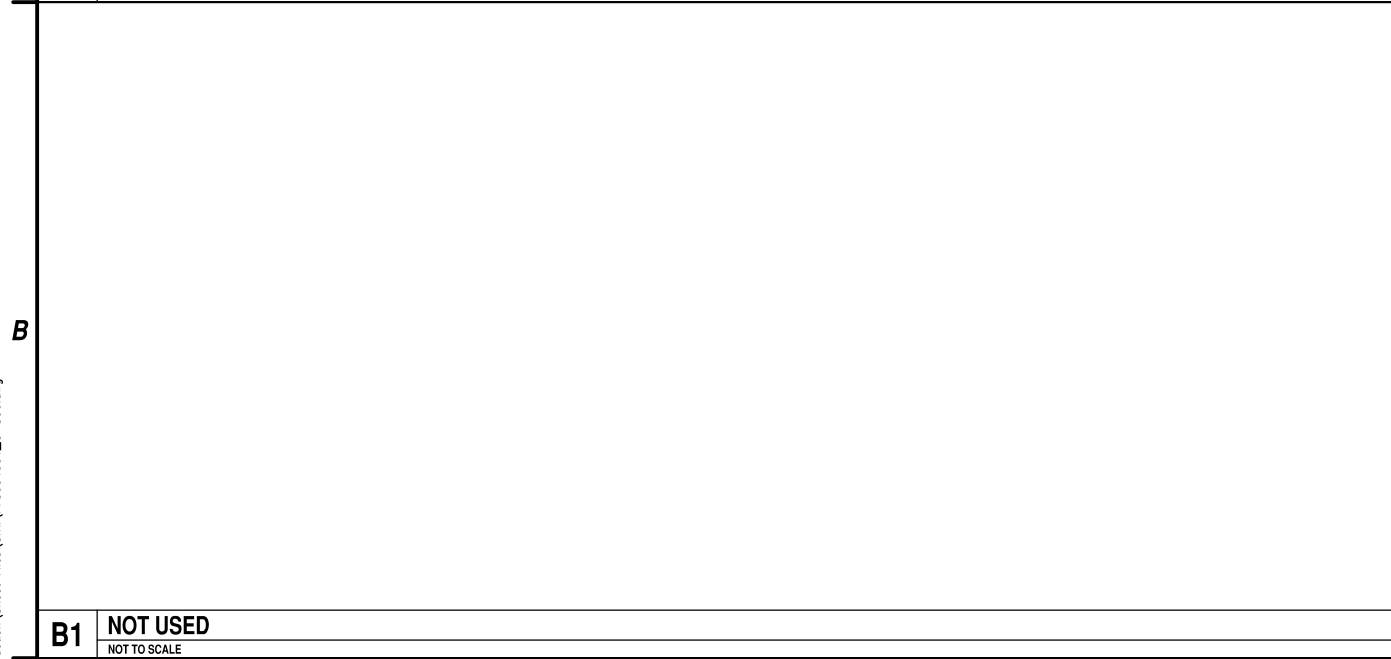
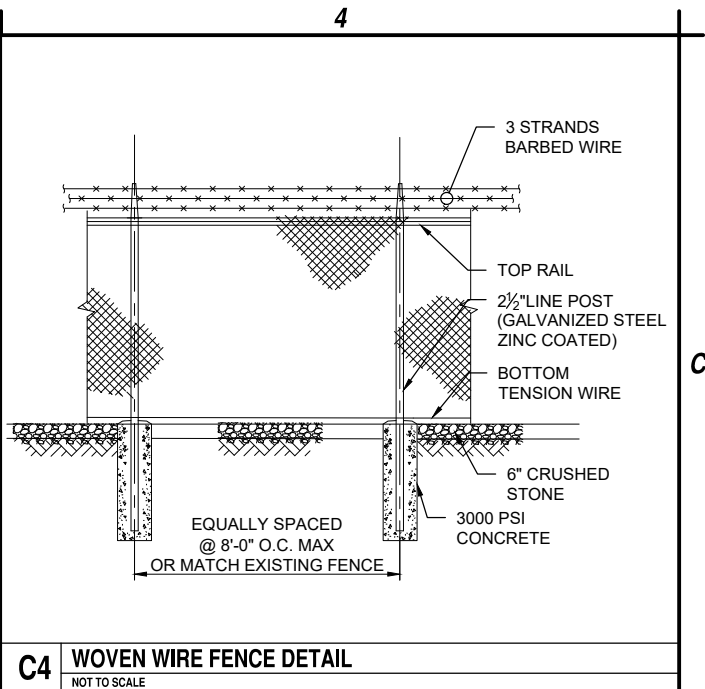
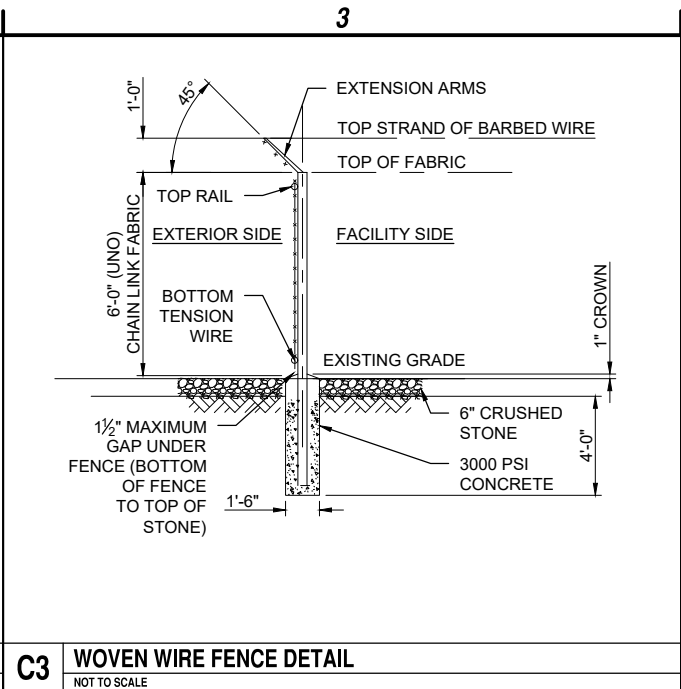
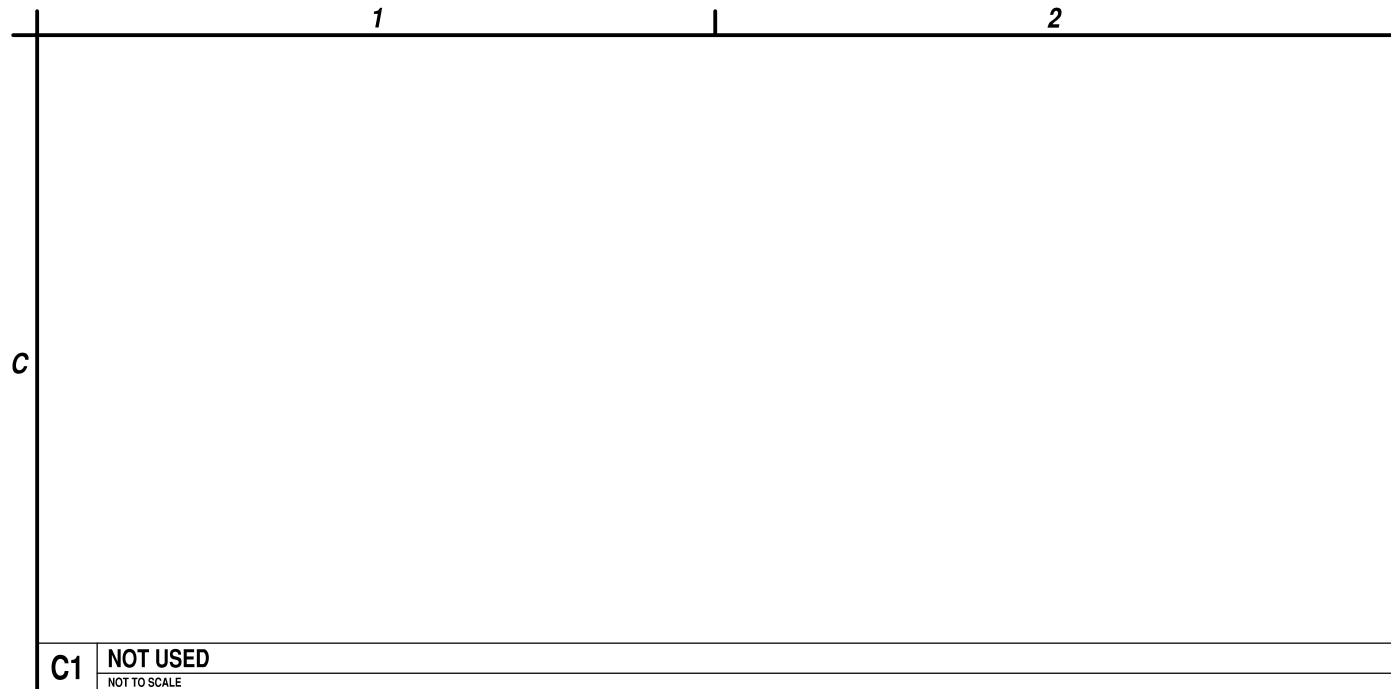
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WAVEGUIDE/ CABLE  
DETAILS

C-505

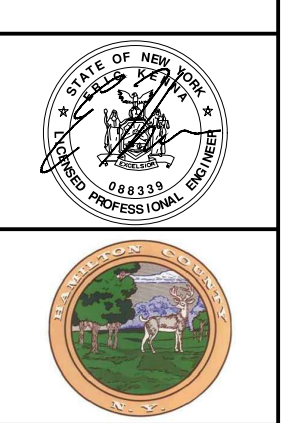


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FENCE  
DETAILS

C-506

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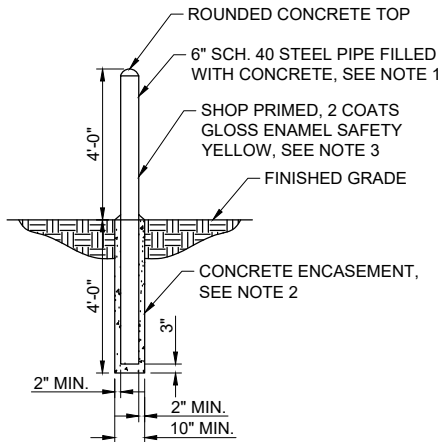
B

A

C1 PROTECTIVE BOLLARD DETAIL

NOTES:

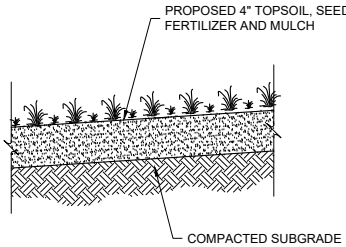
- PIPE SHALL BE SCHEDULE 40 BLACK STEEL PIPE CONFORMING TO ASTM A120..
- CONTRACTOR SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,000 PSI AND SHALL CONFORM TO CLASS A CONCRETE AS SPECIFIED IN SECTION 501 OF THE NYSDOT STANDARD SPECIFICATIONS.
- PRIMER SHALL BE A ZINC YELLOW-IRON OXIDE-BASE PAINT 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.



C3 TYPICAL GRASS RESTORATION DETAIL

NOTES:

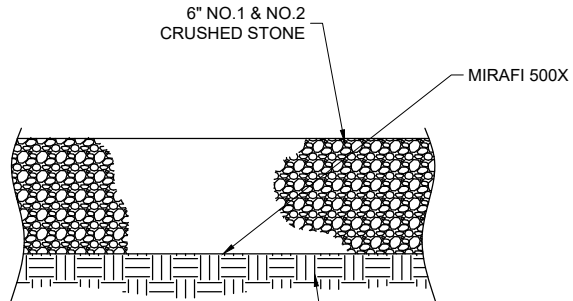
- REFER TO APPENDIX C-3 OF SWPPP REPORT, STANDARD AND SPECIFICATIONS FOR PERMANENT CONSTRUCTION AREA PLANTING



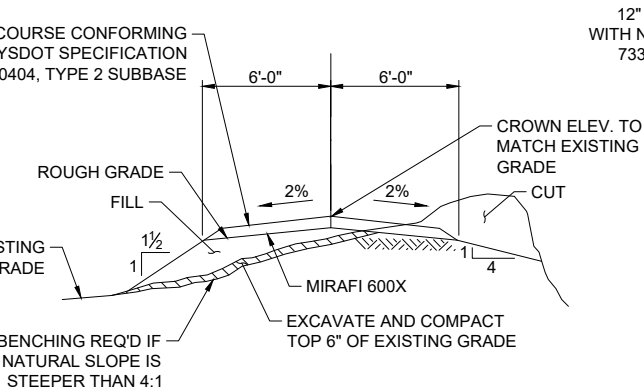
C4 STONE YARD

NOTE:

- EXTEND 1'-0" BEYOND FENCE UNLESS NOTED OTHERWISE.



B2 ACCESS ROAD DETAIL

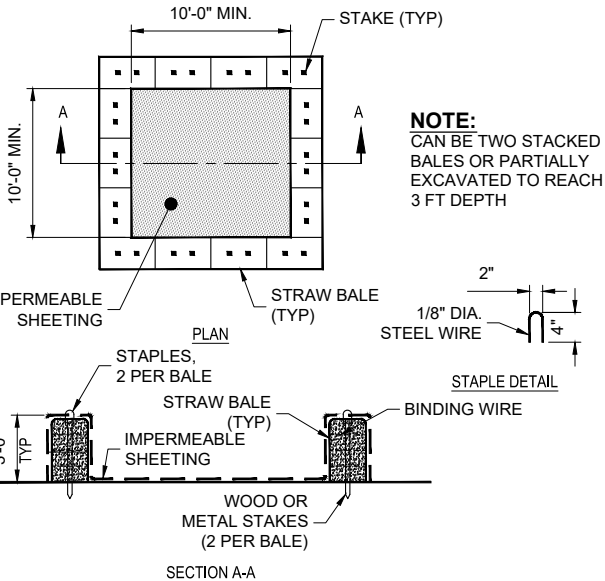


NOTE:

- REMOVE ANY SOFT SOILS EXCAVATED DURING INSTALLATION OF ACCESS ROAD.

CONSTRUCTION SPECIFICATIONS

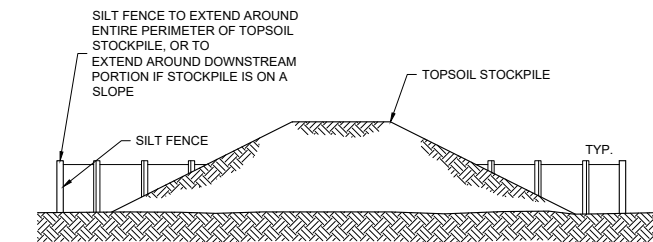
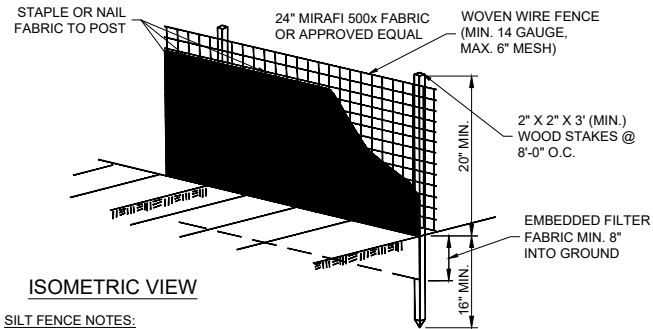
- LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
- SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
- PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
- PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
- KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER.
- PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.



B4 SILT FENCE DETAIL

SILT FENCE NOTES:

- WOVEN WIRE FENCE SHALL BE SECURELY FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION, WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
- MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS DIRECTED BY ENGINEER AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- CONTRACTOR SHALL REMOVE THE SILT FENCE AT THE APPROPRIATE TIME, DRESS THE DISTURBED AREAS, AND DISPOSE OF THE SILT FENCE.



TEMPORARY TOPSOIL STOCKPILE NOTES:

- REFER TO SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
- IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH BURLAP MATTING OR SEEDING WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
- INSPECTION OF SILT FENCE SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SEDIMENT TRAPPED BY THE SILT FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
- SILT FENCE SHALL BE MAINTAINED IN PLACE UNTIL TOPSOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE ENGINEER.
- TOPSOIL STOCKPILE LOCATION SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER OR AN AUTHORIZED REPRESENTATIVE

A1 CONSTRUCTION SEQUENCE

A2 TEMPORARY CONCRETE WASH-OUT AREA (STRAW BALE) DETAIL

A4 TYPICAL TOPSOIL STOCKPILE DETAIL

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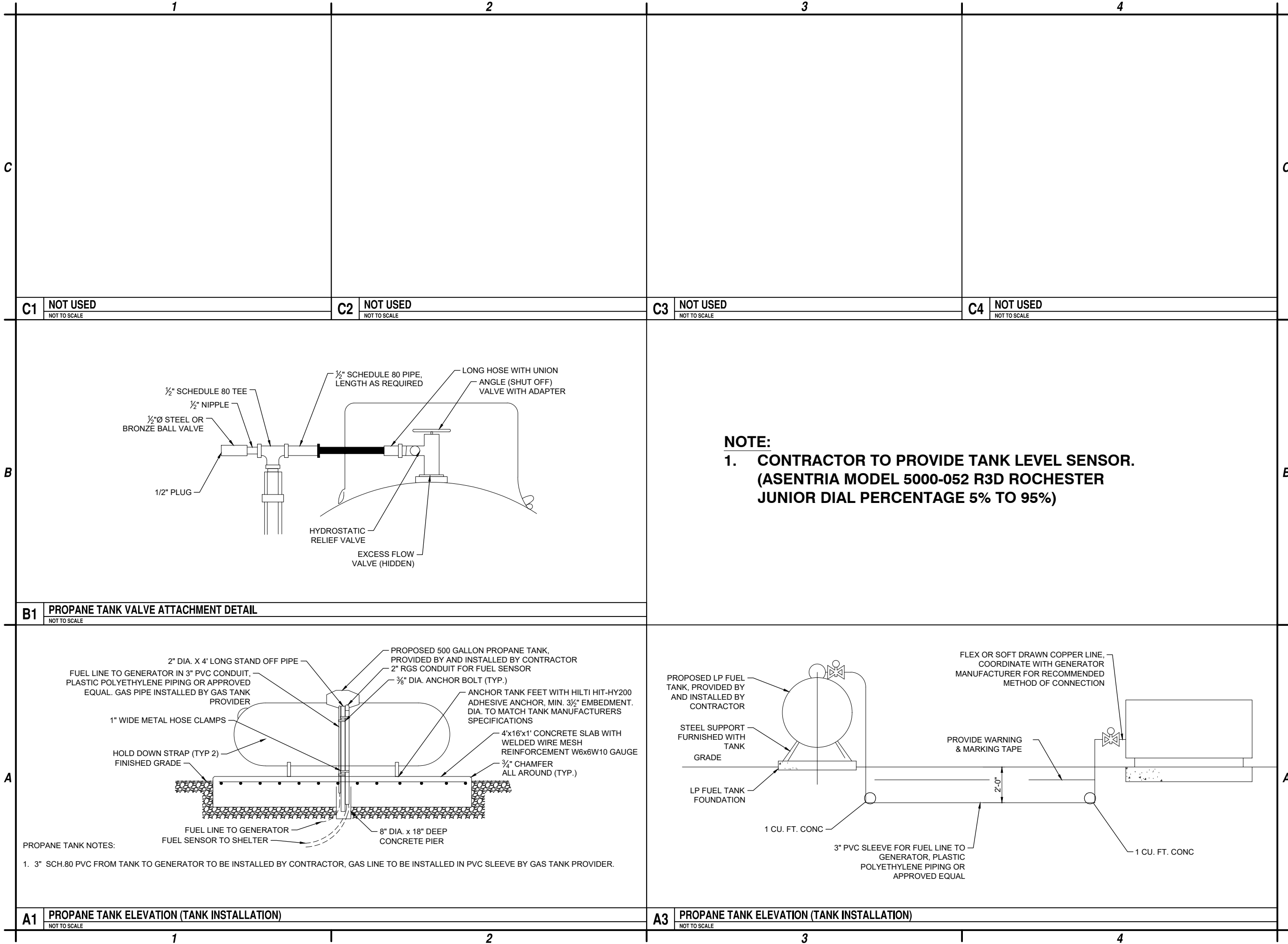
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SITE  
DETAILS

C-507



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PROPANE TANK  
DETAILS

C-508

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1		2		3		4	
C							C
B							B
A							A
A1	CAUTION SIGN DETAIL					B4	SIGN NOTES
NTS						NTS	
1		2		3		4	

72 POINT HELVETICA (3/8")  
RED LETTERING  
WHITE BACKGROUND

CAUTION

NO SPARK WITHIN  
10 FEET FROM  
PROPANE TANK

40 POINT HELVETICA (3/16")  
RED LETTERING  
WHITE BACKGROUND

72 POINT HELVETICA (3/8")  
RED LETTERING  
WHITE BACKGROUND

DANGER

SMOKING  
PROHIBITED

WITHIN 25 FEET OF  
FILLING OPERATIONS  
POINT OF TRANSFER

72 POINT HELVETICA (3/8")  
WHITE LETTERING  
RED BACKGROUND

NO  
TRESPASSING

THIS AREA IS UNDER  
24 HOURS  
LIVE/RECORDED  
VIDEO SURVEILLANCE

VIOLATORS WILL BE PROSECUTED

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WHITE BACKGROUND

DANGER

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PROHIBITED

WITHIN 25 FEET OF  
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POINT OF TRANSFER

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HAMILTON COUNTY  
SITE NAME: TOWN OF HOPE  
STATE ROUTE 30  
HOPE FALLS, NY

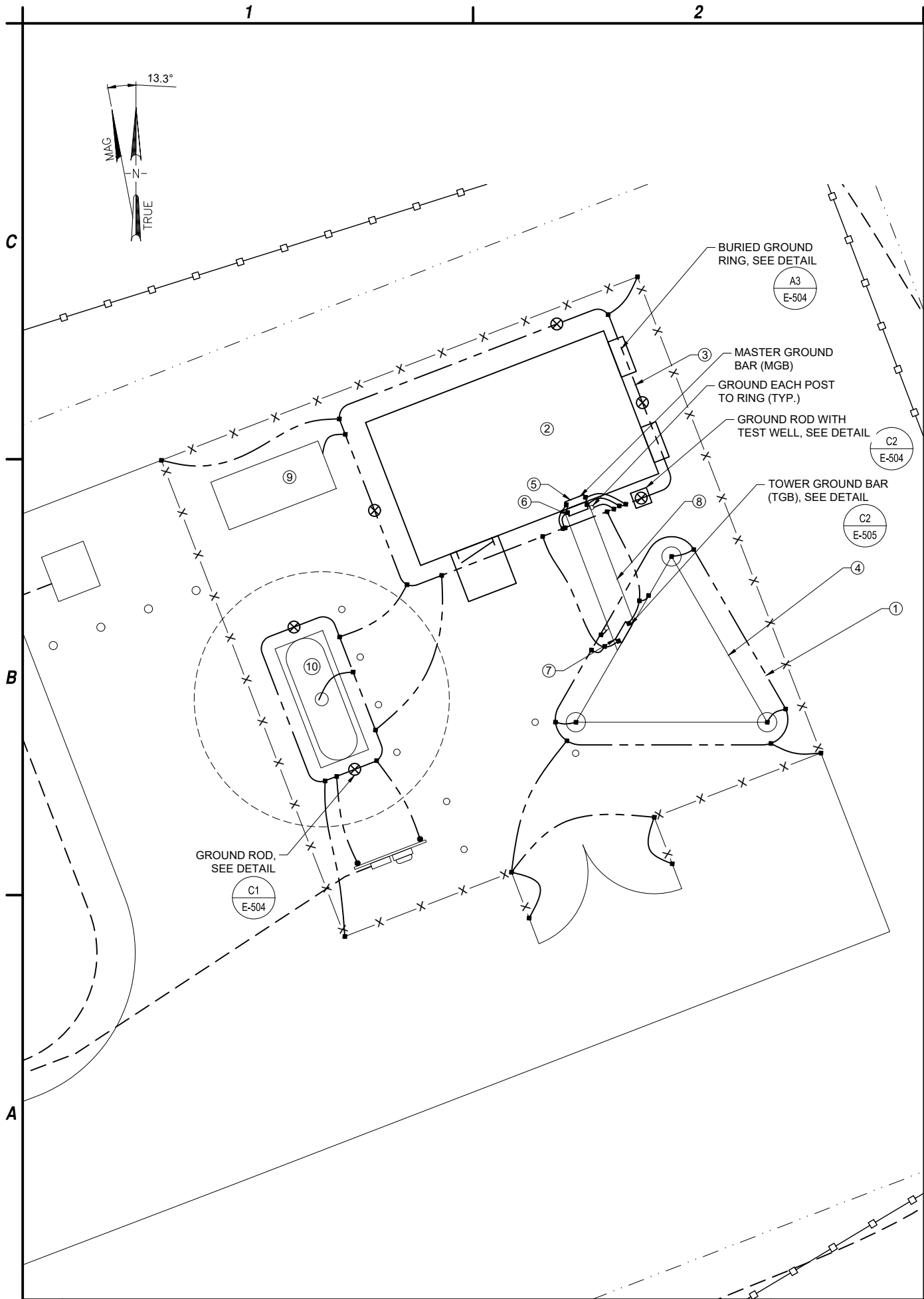
1	5-29-24	SWPPP
0	2-12-24	ISSUED FOR PERMITTING
MARK	DATE	DESCRIPTION
REVISIONS		
PROJECT NO: F75.001.001		
DATE: NOVEMBER 2023		
DRAWN BY: M. BUCKINGHAM		
DESIGNED BY: E.N. KENNA, P.E.		
CHECKED BY: E.N. KENNA, P.E.		
NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW		

SIGN DETAILS AND SPECIFICATIONS

C-509



Aug 05, 2024 - 9:00am F:\Project\Y75 - Hamilton County\Town of Hope\Construction\Sheet Files\Electrical\F75004001\_E-101.DWG



**CODED DRAWING NOTES:**

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

- 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.
- 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.
- 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.
- 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.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING, SHALL BE #2 AWG SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- 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.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE AND EXTERIOR.
- 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.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR AND INTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 FT OF MAIN GROUND WIRES WITH 1-#2 AWG TIN-PLATED COPPER GROUND CONDUCTOR.
- 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.
- 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.
- 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.
- 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                                  |
| (M) | METER SOCKET BY CONTRACTOR                              |
| ⌋   | METER BY UTILITY COMPANY                                |
| --- | GROUNDING WIRE, #2 BCC U.N.O.                           |
| #   | CODED DRAWING NOTE                                      |
| MGB | MGB - MASTER GROUND BAR                                 |
| EGB | EGB - EXTERNAL GROUND BAR                               |
| TGB | TGB - TOWER GROUND BAR                                  |
| ⊗   | 5/8"x8'-0" COPPER CLAD GROUND ROD                       |
| ⊗   | 5/8"x8'-0" COPPER CLAD GROUND ROD WITH ACCESS TEST WELL |

**A1 GROUNDING PLAN**

SCALE: 1" = 5'-0"

**A3 GROUNDING NOTES**

NTS



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**GROUNDING  
PLAN AND  
NOTES**

**E-101**

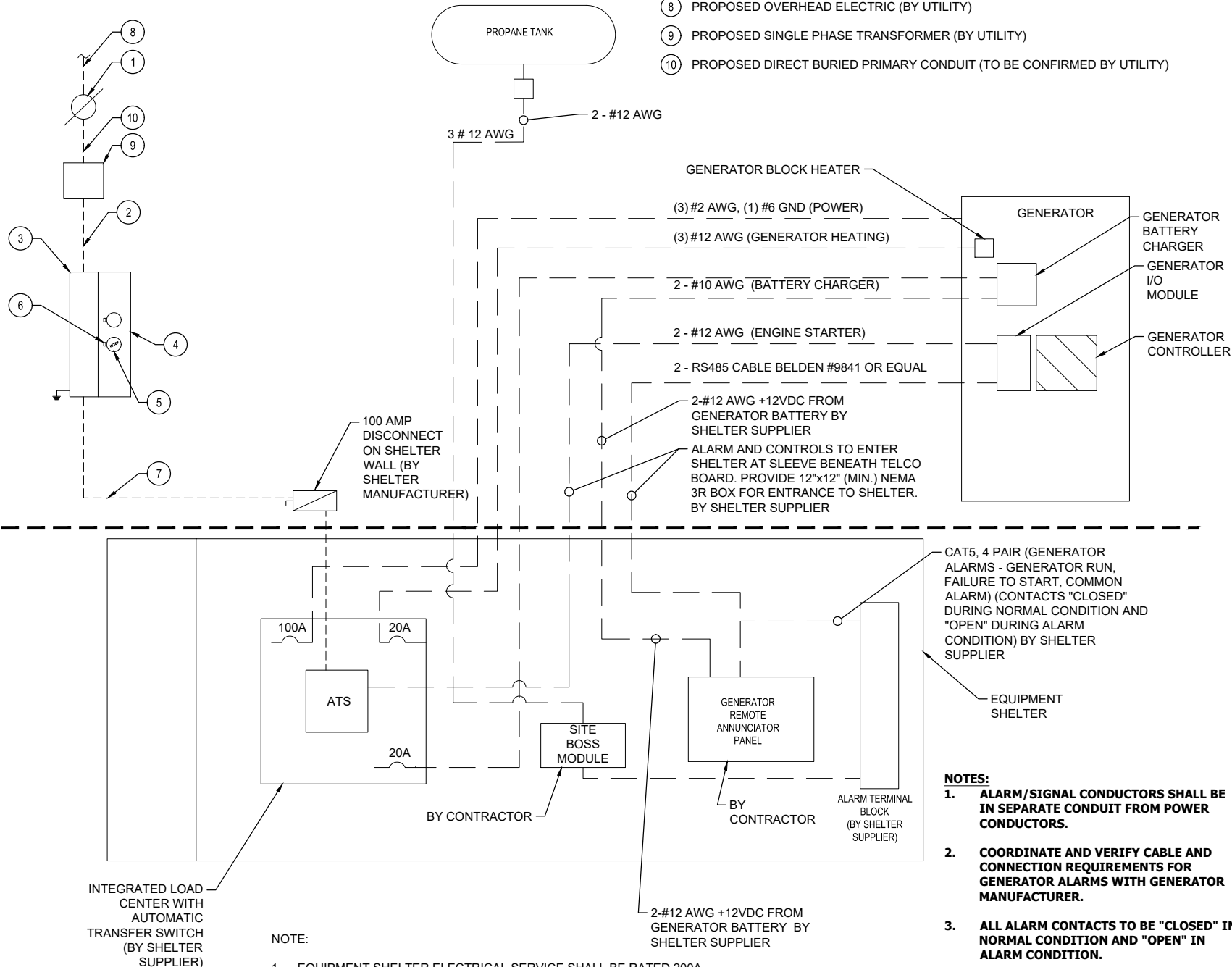
Aug 05, 2024 - 9:00am F:\Project\Y75 - Hamilton County\Town of Hope\Construction\Sheet Files\Electrical\75004001\_E-501.dwg

ELECTRICAL INSTALLATION NOTES

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, POWER PHASE CONDUCTOR (I.E., HOTS), GROUNDING, AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- RIGID GALVANIZED STEEL INTERMEDIATE (RGS) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- ELECTRICAL METALLIC TUBING (EMT) SHALL BE USED FOR ALL INDOOR LOCATIONS.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- WIREWAYS SHALL BE EPOXY-COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 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.

A2

POWER ONE-LINE DIAGRAM



- EXISTING UTILITY POLE, PROPOSED SOURCE OF ELECTRIC SERVICE (BY UTILITY).
- 1 - 4" SCH. 80 PVC CONDUIT WITH (3) 350 KCMIL AND (1) #1/0 AWG GND (FINAL DESIGN TO BE CONFIRMED BY UTILITY)
- 400A, 240V, SINGLE PHASE, NEMA 3R SQUARE D TERMINAL BOX
- 240V, SINGLE PHASE, 2 GANG NEMA 3R METER BASE, 225A MAX BRANCH CIRCUIT
- PROPOSED HAMILTON COUNTY METER (METER BY UTILITY)
- 100A 2-POLE BREAKER (BY CONTRACTOR)
- 3-#2 AWG 1-#6 GND IN 2" SCH. 80 PVC CONDUIT
- PROPOSED OVERHEAD ELECTRIC (BY UTILITY)
- PROPOSED SINGLE PHASE TRANSFORMER (BY UTILITY)
- PROPOSED DIRECT BURIED PRIMARY CONDUIT (TO BE CONFIRMED BY UTILITY)

NOTES:

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



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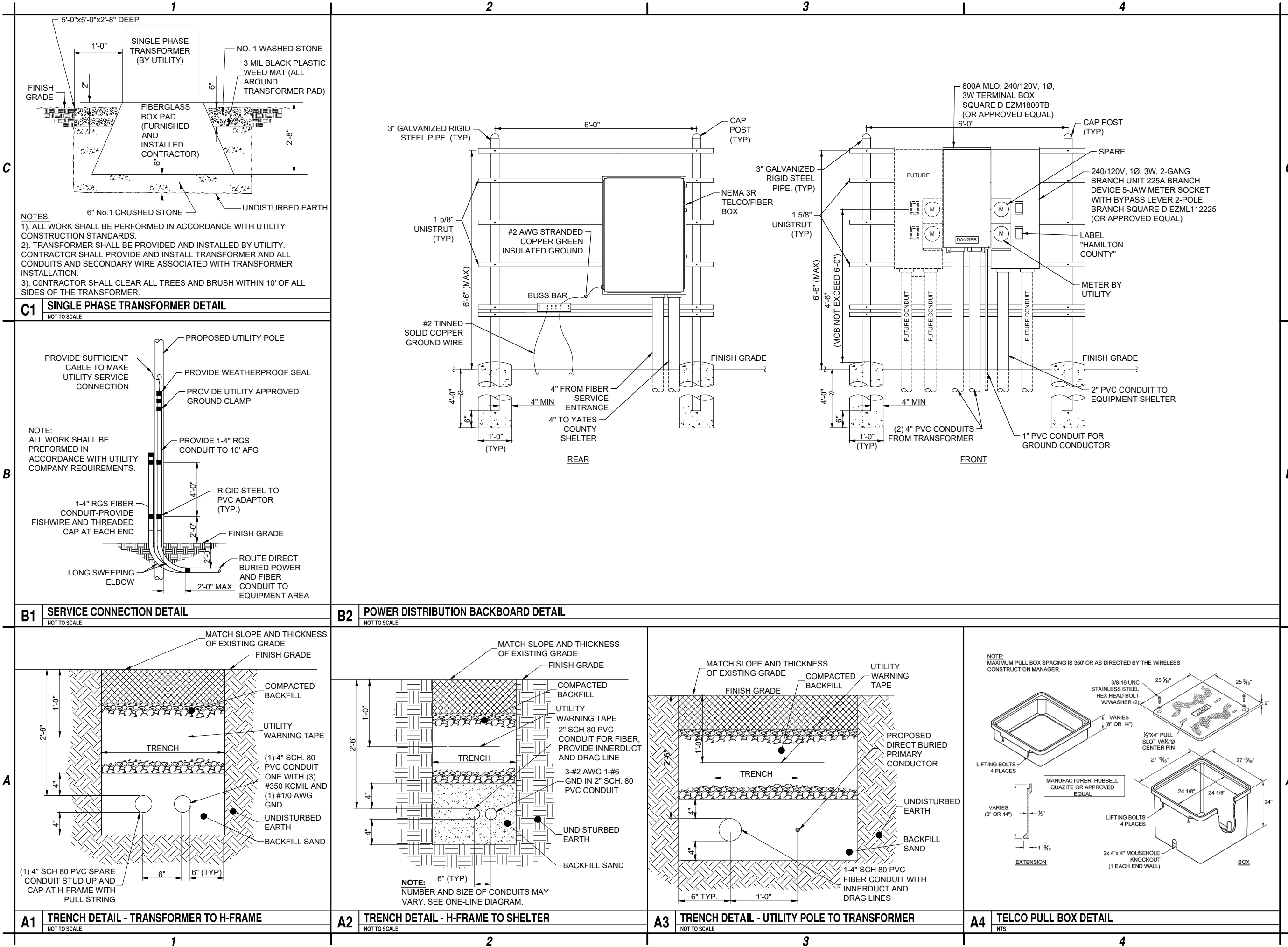
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ELECTRICAL DETAILS

E-501



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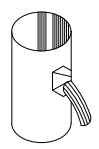
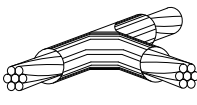
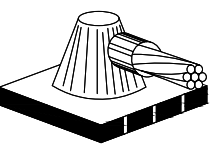
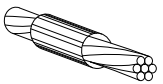
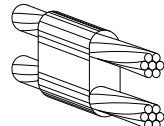
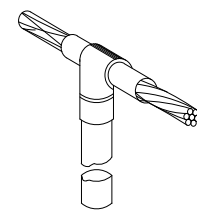
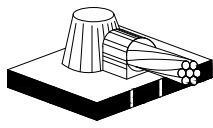
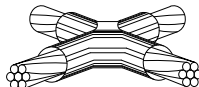
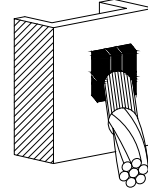
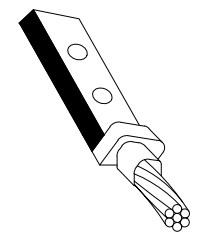
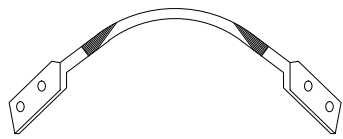
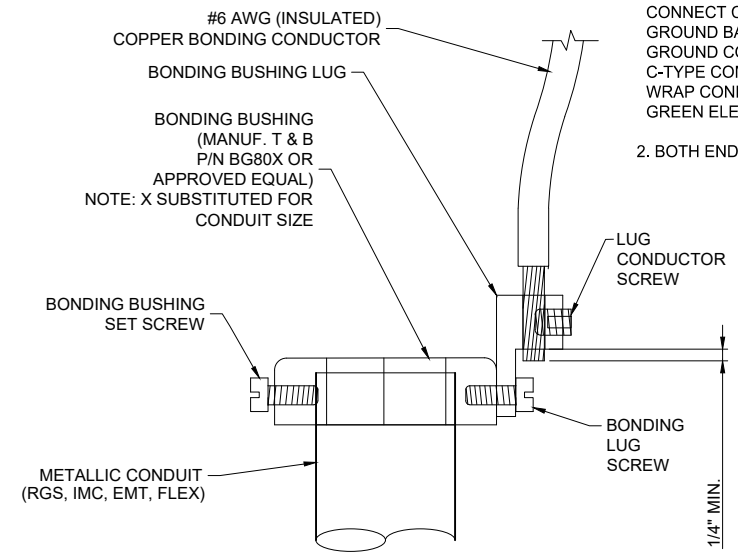
HAMILTON COUNTY  
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STATE ROUTE 30  
HOPE FALLS, NY

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ELECTRICAL  
DETAILS

E-502

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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		



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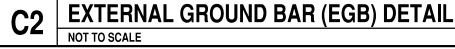
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ELECTRICAL  
DETAILS

E-503



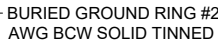
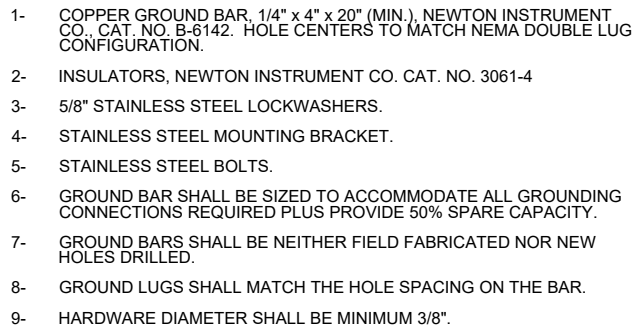
<b>A1</b>	<b>CABLE GROUND KIT CONNECTION</b>
	NOT TO SCALE



## A2 INSTALLATION OF CONDUCTOR TO GROUNDING BAR

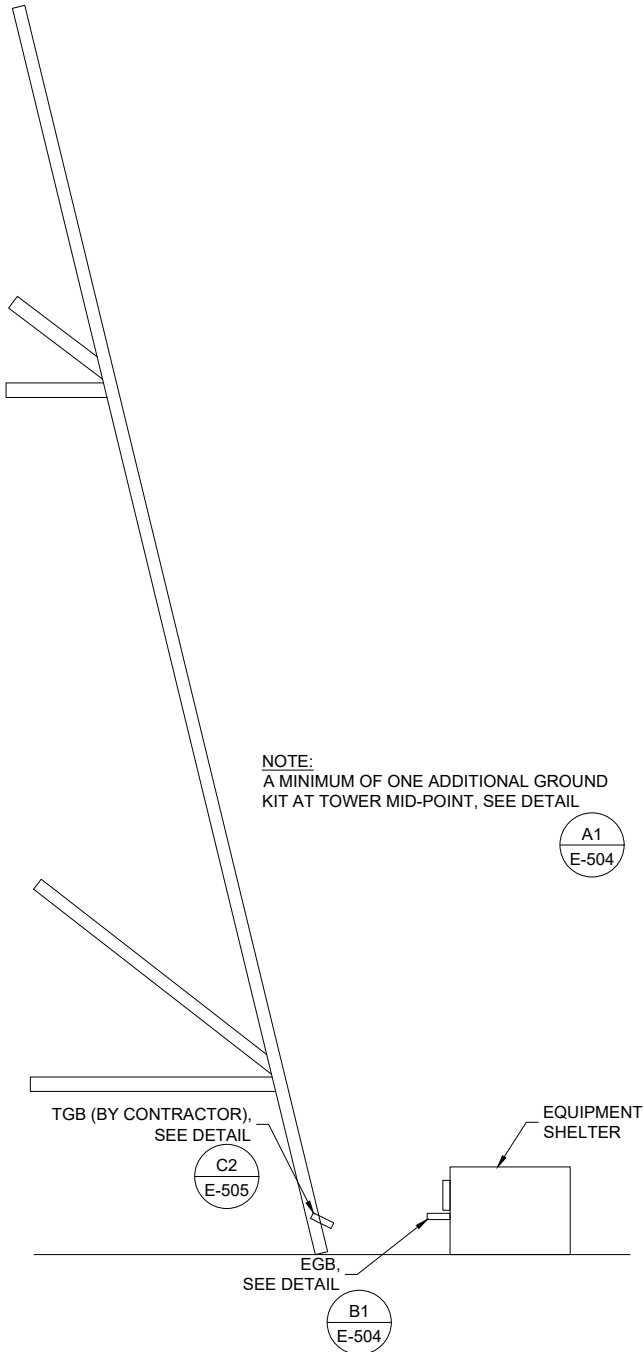


**NOTE:** ALL METALLIC OBJECTS ON SHELTER EXTERIOR SHALL BE CADWELDED TO THE BURIED GROUND RING (TYP.) WITH #2 BCC (SOLID TINNED). GROUND CONDUCTOR SHALL BE IN ¾" SCH. 80 PVC CONDUIT ATTACHED AT 3'-0" O.C. SEAL TOP END OF CONDUIT WITH SILICONE AFTER INSTALLATION.

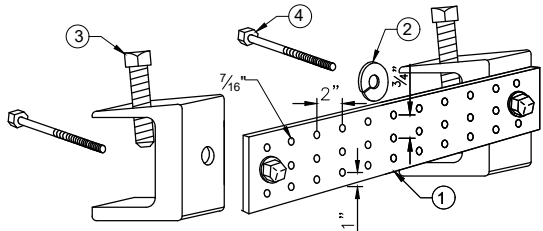




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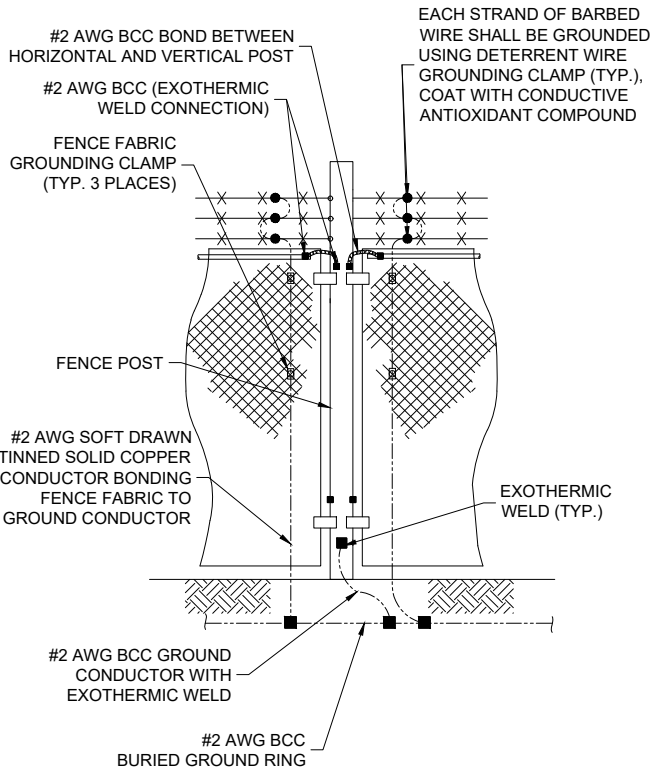


A1 GROUND KIT LOCATION  
NTS

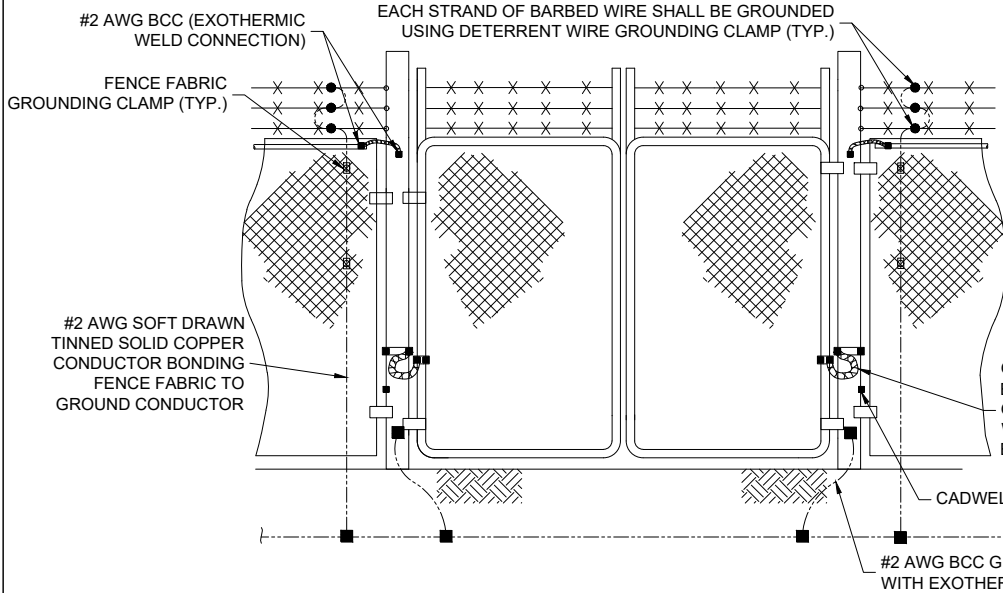


LEGEND  
1- COPPER GROUND BAR, 1/4" X 4" X 20" (MIN), NEWTON INSTRUMENT CO. CAT. NO. B-6142. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION  
2- 5/8" STAINLESS STEEL LOCKWASHERS.  
3- STAINLESS STEEL MOUNTING BRACKET.  
4- STAINLESS STEEL BOLTS

C2 TOWER GROUND BAR  
NTS



A2 FENCE GROUNDING  
NTS

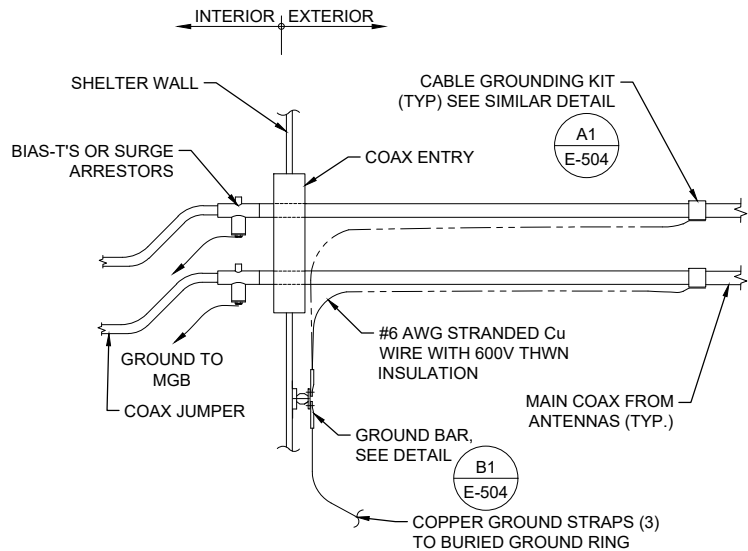


NOTES:  
1. BOND EACH HORIZONTAL POLE/BRACE TO EACH OTHER AND TO EACH VERTICAL POLE BONDED TO THE EXTERIOR GROUND RING.  
2. GATE JUMPER SHALL BE INSTALLED SO THAT IT WILL NOT BE SUBJECTED TO DAMAGING STRAIN WHEN GATE IS FULLY OPEN IN EITHER DIRECTION.

C3 FENCE GATE GROUNDING  
NTS

B3 NOT USED  
NTS

B4 NOT USED  
NTS



A3 EXTERIOR ANTENNA CABLE GROUNDING AT SHELTER COAX ENTRY (BY OTHERS)  
NTS



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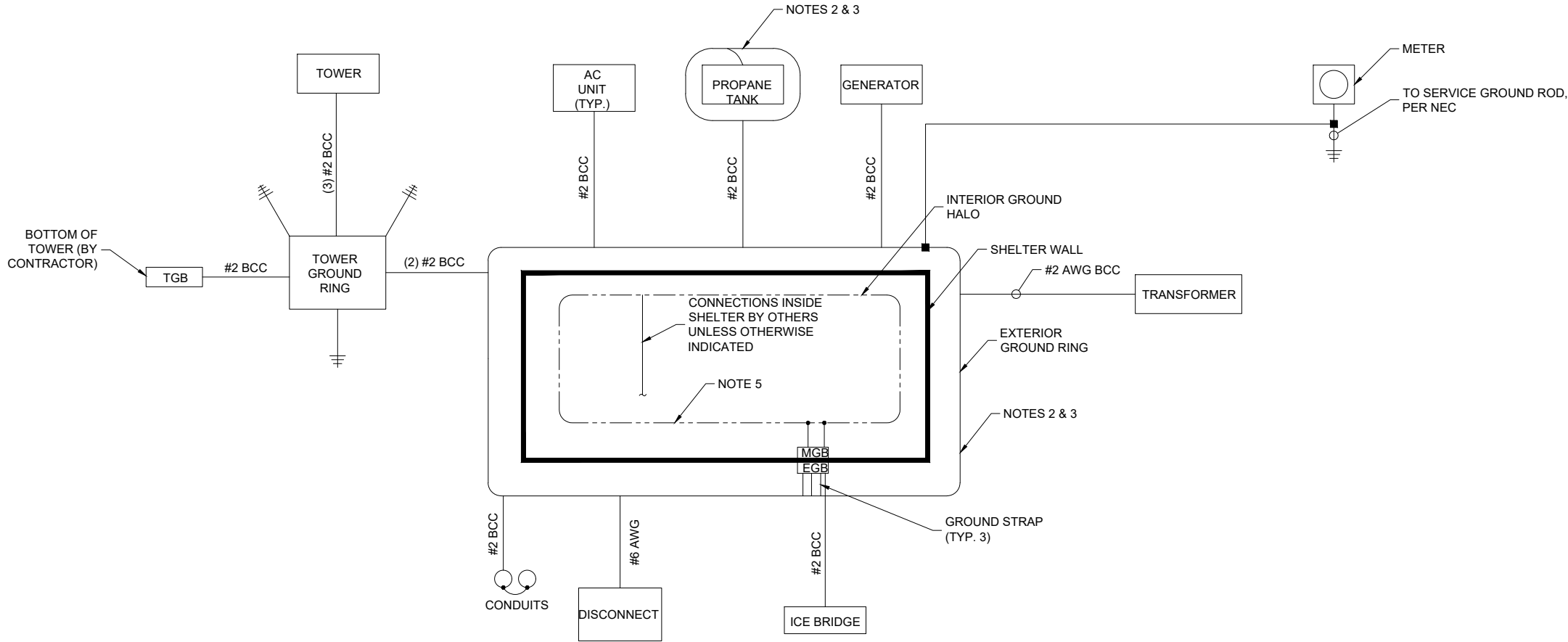
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GROUNDING  
DETAILS

E-505

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- 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.



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GROUNDING  
SCHEMATIC

E-506