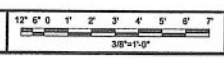



ENLARGED SITE PLAN
 SCALE: 3/8" = 1'-0" (22X34) ; 1/2" = 1'-0" (11X17)




1

PREPARED FOR:



NORTH SHORE NETWORKS

PREPARED BY:



ALBUL ENGINEERING

3840 E. ROBINSON ROAD
 AMHERST, NY 14228
 ALBULENG.COM

DMITRIY ALBUL
 NY LICENSE NO.089075

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RFD5 RAN TEMPLATE: N/A

PRELIMINARY DOCUMENTS

SUBMITTALS

REV.	DATE	DESCRIPTION
A	02-12-25	PRELIMINARY

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 38633.NSN.CDN.V118280.0

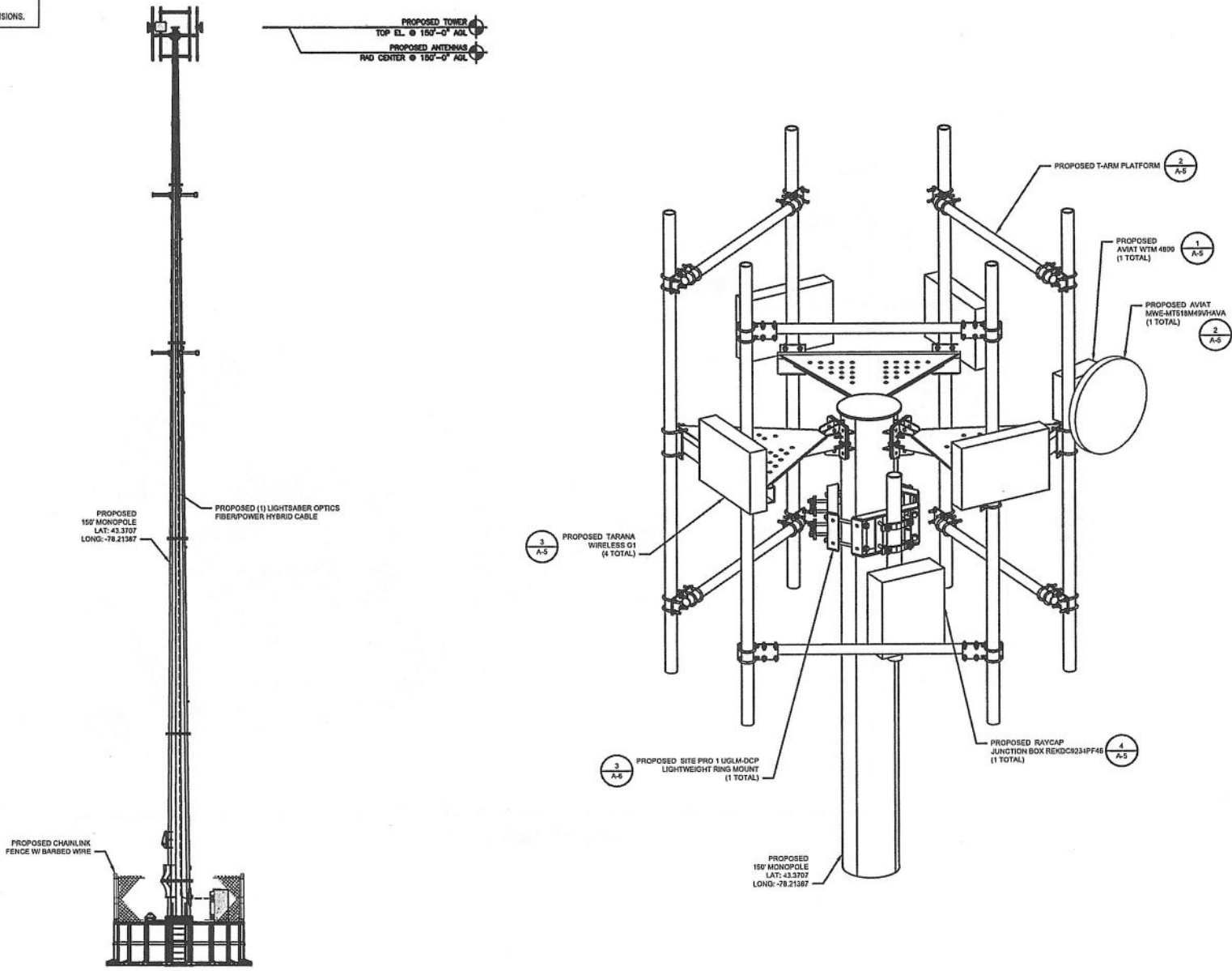
PROJECT INFORMATION:
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
 SITE ID: TBD
 961 WILSON ROAD
 WATERPORT, NY 14517

SHEET TITLE:
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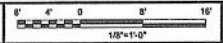
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A-2

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NOTES:
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.



TOWER ELEVATION
SCALE: 1/8" = 1'-0" (2X34); 3/32" = 1'-0" (1X17)



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RFDS RAN TEMPLATE: NIA

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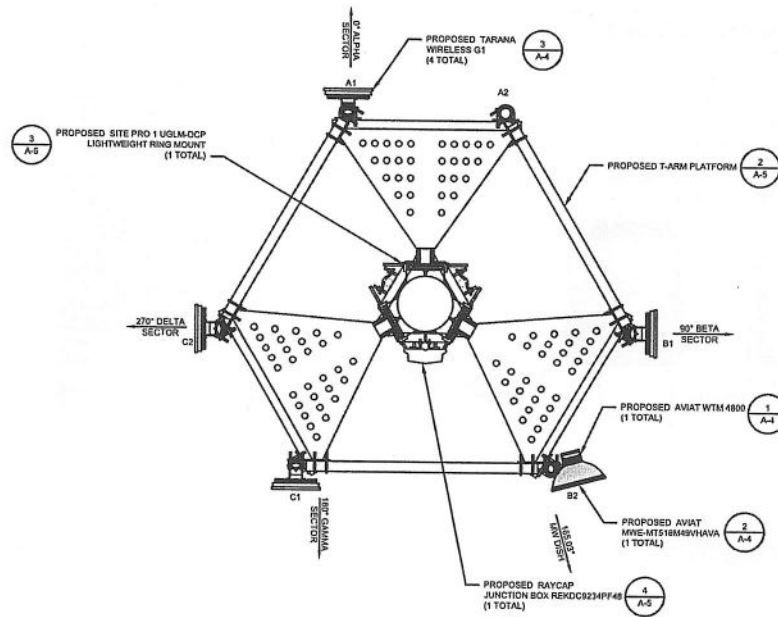
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PROJECT INFORMATION:
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

SHEET TITLE:
TOWER ELEVATION & ANTENNA CONFIGURATION

SHEET NUMBER:
A-3

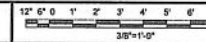
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ANTENNA SCHEDULE								
SECTOR	ANTENNA POSITION	ANTENNA MANUFACTURER/MODEL	ANTENNA DIMENSIONS (HxWxD)	RAD CENTER	AZIMUTH	RRU MANUFACTURER QUANTITY & MODEL	CABLE QUANTITY & TYPE	CABLE LENGTH
1	A1	(P) TARAANA WIRELESS G1	16.4"x21.2"x4.6"	150'-0"	0°	-	(P) (1) OPTICS FIBER/POWER HYBRID	60m
2	B1	(P) TARAANA WIRELESS G1	16.4"x21.2"x4.6"	150'-0"	90°	-		
3	C1	(P) TARAANA WIRELESS G1	16.4"x21.2"x4.6"	150'-0"	180°	-		
	C2	(P) TARAANA WIRELESS G1	16.4"x21.2"x4.6"	150'-0"	270°	-		

MW DISH SCHEDULE								
ANTENNA POSITION	DISH MANUFACTURER/MODEL	DISH SIZE	RAD CENTER	AZIMUTH	TILT	RADIO MANUFACTURER QUANTITY & MODEL	CABLE QUANTITY & TYPE	CABLE LENGTH
B2	(P) MVE-MT518M49VHAVA	Ø 2FT, NOMINAL	150'-0"	165.83	N/A	(P) (1) AVIAT WTM 4800	(P) (1) OPTICS FIBER/POWER HYBRID	60m

ANTENNA PLAN
SCALE: 3/8" = 1'-0" (22X34); 3/4" = 1'-0" (11X17)



1

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CHECKED BY: ANN

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SUBMITTALS		
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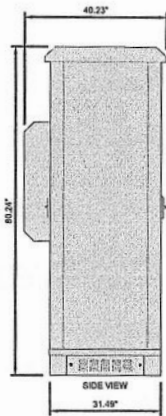
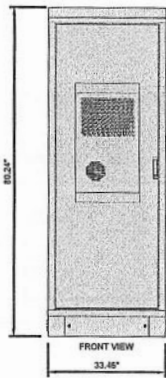
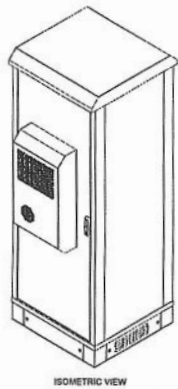
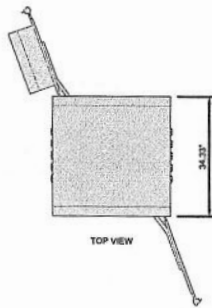
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SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

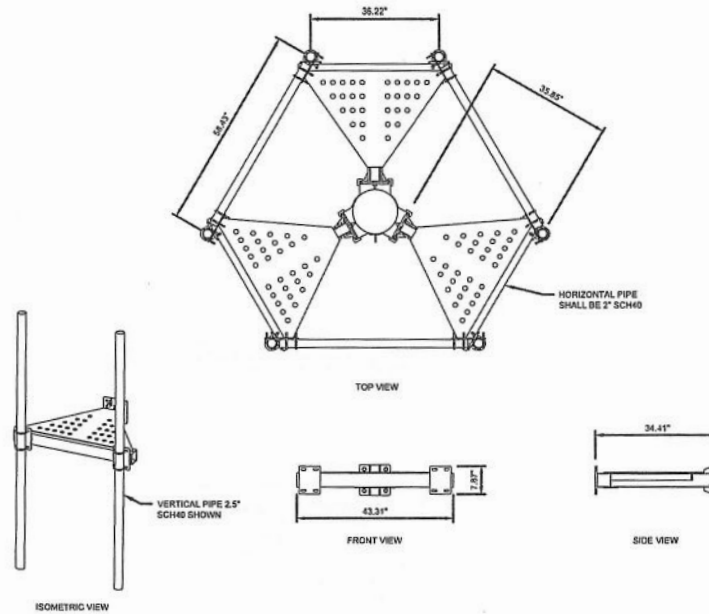
SHEET TITLE:
ANTENNA PLAN & SCHEDULE

SHEET NUMBER:
A-4

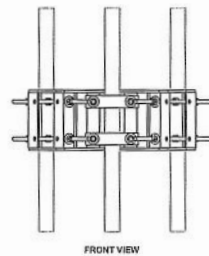
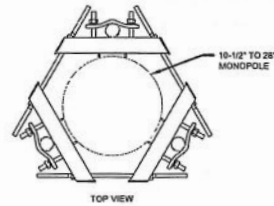
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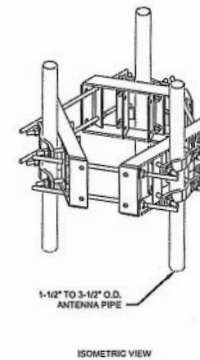
1 LIGHTSABER-OPTICS-LSO-20UOD-850800-AC1000W-H
A-6 SCALE: N.T.S.



2 T-ARM PLATFORM 36\"/>



3 SITE PRO 1 UGLM-DCP LIGHTWEIGHT RING MOUNT
A-6 SCALE: N.T.S.



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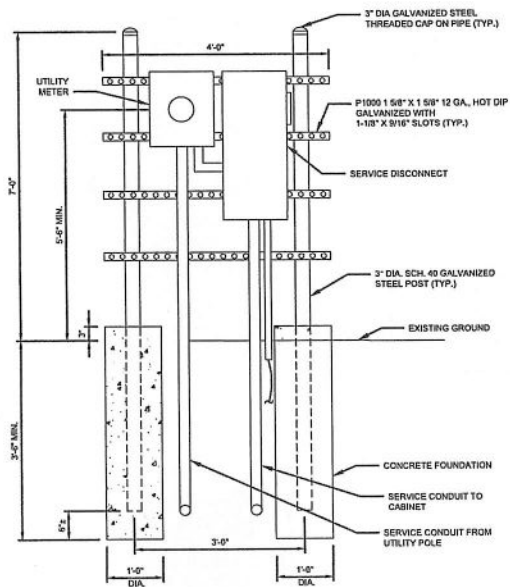
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38633.NSN.CDN.V118280.0

PROJECT INFORMATION:
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

SHEET TITLE:
SITE DETAILS - I

SHEET NUMBER:
A-6

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1 UTILITY RACK DETAIL
SCALE: N.T.S.



NOTES

1. SIGN SHALL BE MOUNTED AT ROOF DOOR
2. MOUNTING HEIGHT SHALL BE 5' A.R.L. TO SIGN CENTERLINE

2 SAFETY SIGN DETAIL
SCALE: N.T.S.

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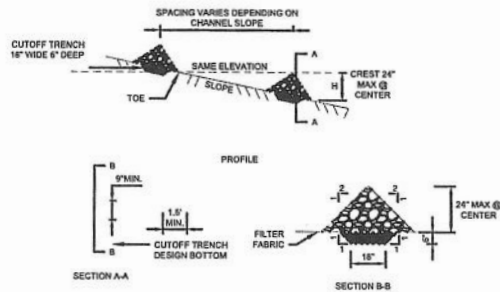
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

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SITE DETAILS - II

SHEET NUMBER:

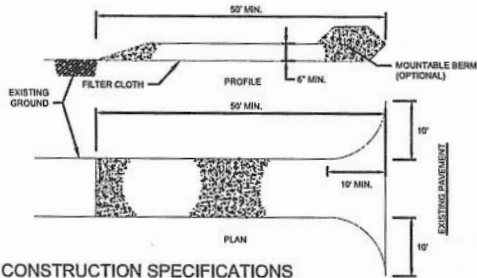
A-7



CONSTRUCTION SPECIFICATIONS

- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- SET SPACING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.

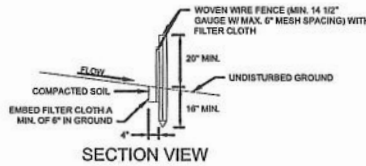
1 CHECK DAM DETAIL
SCALE: N.T.S.



CONSTRUCTION SPECIFICATIONS

- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 40 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OF EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANING OF ANY MEASURES USED TO TRAP SEDIMENT.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY, WHEN WASHING IS REQUIRED. IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

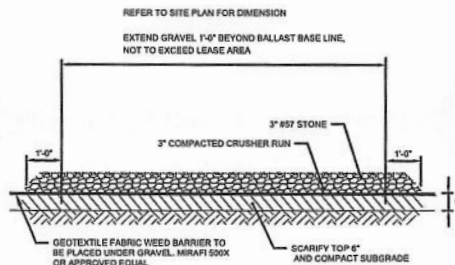
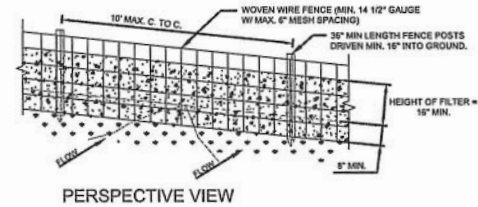
2 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.



SILT FENCE NOTES:

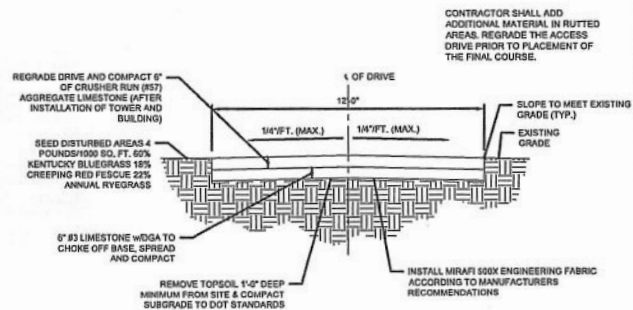
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOPAB, ENVROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

2 SILT FENCE DETAILS
SCALE: N.T.S.



- NOTES:**
- REMOVE TOP 6 INCHES OF GRADE FROM COMPAUND.
 - SCARIFY TOP 6 INCHES AND COMPACT SUBGRADE.

4 SITE COMPAUND GRAVER DETAIL
SCALE: N.T.S.



5 ACCESS DRIVE TYPICAL SECTION
SCALE: N.T.S.

PREPARED FOR:



PREPARED BY:



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CHECKED BY: AMN

RFDS RAN TEMPLATE: N/A

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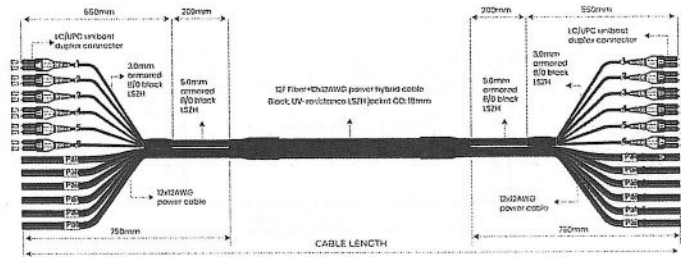
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ALBUL ENGINEERING PROJECT NUMBER:
38633.NSN.CDN.V118280.0

PROJECT INFORMATION:
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

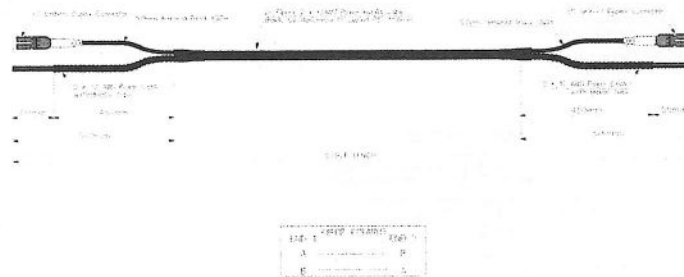
SHEET TITLE:
SITE DETAILS - III

SHEET NUMBER:
A-8



LENGTH	TOLERANCE
+30m	+30.0mm
+10m, -30m	+30.0mm
+2m, +10m	+20.0mm
±1m	+8.0mm
+355m	+30.0mm

1 LIGHTSABER OPTICS 12F+12X12AWG HYBRID CABLE
SCALE: N.T.S.



2 LIGHTSABER OPTICS 2F FIBER+2X12AWG HYBRID CABLE
SCALE: N.T.S.

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PREPARED BY:



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RFDS RAN TEMPLATE: N/A

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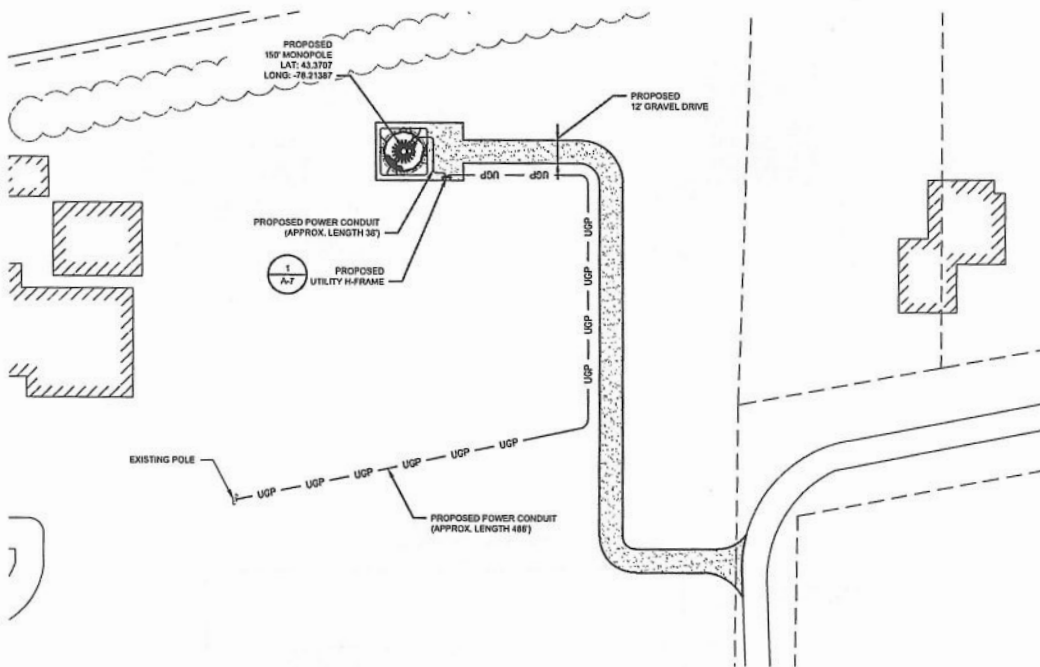
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VILLAGE OF ALBION WATER
DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

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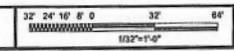
A-9



ELECTRICAL NOTES:

- SUBMITTAL OF BID INDICATES THAT THE CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR TO SHALL PERFORM ALL VERIFICATIONS, OBSERVATION TESTS, AND EXAMINATION WORK PRIOR TO ORDERING OF ANY EQUIPMENT AND THE ACTUAL CONSTRUCTION, CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE PROJECT MANAGER LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT AND DISCREPANCIES
- VERIFY HEIGHTS WITH PROJECT MANAGER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- CONTRACTOR SHALL COORDINATE ALL WORK BETWEEN TRADES AND ALL OTHER SCHEDULING AND PROVISIONARY CIRCUMSTANCES SURROUNDING THE PROJECT.
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION CONSTRUCTION TOOLS, TRANSPORTATION, ETC. FOR COMPLETE AND FUNCTIONALLY OPERATING SYSTEMS ENERGIZED AND READY FOR USE THROUGHOUT AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND IN PERFECT CONDITION WHEN INSTALLED AND SHALL BE OF THE BEST GRADE AND OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP EQUIPMENT. ELECTRICAL MATERIALS SHALL BE LISTED AND APPROVED BY UNDERWRITERS LABORATORIES AND SHALL BEAR THE GOVERNING BODIES HAVING JURISDICTION OVER THE CONSTRUCTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH ALL CURRENT APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA AND NFPA. ALL MATERIALS AND EQUIPMENT SHALL BE FOR THEIR INTENDED USE AND LOCATION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE GOVERNING STATE, COUNTY AND CITY CODES AND OSHA, NFPA, NEC AND ASHRAE REQUIREMENTS.
- ENTIRE JOB SHALL BE GUARANTEED FOR A PERIOD OF (1) YEAR AFTER THE DATE OF ACCEPTANCE. ALL WORK, MATERIAL AND EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- PROPERLY SEAL ALL PENETRATIONS, PROVIDE UL LISTED FIRE-STOPS WHERE PENETRATIONS ARE MADE THROUGH PRE-FABED ASSEMBLIES, WATER-TIGHT USING SILICONE SEALANT.
- LOCATE ALL PENETRATIONS SUCH THAT ALL REINFORCEMENT CONTAINED WITHIN THE EXISTING BUILDING CONSTRUCTION REMAINS INTACT AND UNDISTURBED. SUBMIT LOCATING METHOD TO THE PROJECT MANAGER FOR APPROVAL TO EXECUTION.
- DELIVER ALL BROCHURES, OPERATING MANUALS, CATALOGS AND SHOP DRAWINGS TO THE PROJECT MANAGER AT JOB COMPLETION. PROVIDE MAINTENANCE MANUALS FOR MECHANICAL EQUIPMENT, AFFIX MAINTENANCE LABELS TO MECHANICAL EQUIPMENT.
- ALL CONDUCTORS SHALL BE COPPER, MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG, UNLESS OTHERWISE NOTED. CONDUCTORS SHALL BE TYPE THHW, RATED IN ACCORDANCE WITH NEC 110-14(C).
- ALL CIRCUIT BREAKERS, FUSES AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM INTERRUPTING CURRENT TO WHICH THEY MAY BE SUBJECTED.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE; ARTICLES 250 & 810 AND UTILITY COMPANY STANDARDS.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR AND SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - LIQUID-TIGHT FLEXIBLE METAL CONDUIT SHALL BE U.L. LISTED AND SHALL BE USED AT FINAL CONNECTIONS TO MECHANICAL EQUIPMENT & RECTIFIERS AND WHERE PERMITTED BY CODE. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL CONTAIN A FULL-SIZE GROUND CONDUCTOR.
 - CONDUIT RUNS SHALL BE SURFACE MOUNTED ON CEILINGS OR WALLS UNLESS NOTED OTHERWISE. ALL CONDUIT SHALL RUN PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, CEILING, OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH THE PROJECT MANAGER PRIOR TO INSTALLING.
 - PVC CONDUIT MAY BE PROVIDED ONLY WHERE SHOWN OR IN UNDERGROUND INSTALLATIONS. PROVIDE UV-RESISTANT CONDUIT WHERE EXPOSED TO THE ATMOSPHERE. PROVIDE GROUND CONDUCTOR IN ALL PVC RUNS, EXCEPT WHERE PERMITTED BY CODE TO OMIT.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELLED WITH PERMANENT ENGRAVED PLASTIC LABELS. BACKGROUND SHALL BE BLACK WITH WHITE LETTERS; EXCEPT AS REQUIRED BY CODE TO FOLLOW A DIFFERENT SCHEME.
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, SHORT CIRCUIT, AND FALL OF POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS, IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE PROJECT MANAGER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE.
- CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK AND LEAVE WORK IN A COMPLETE AND UNDAMAGED CONDITION. LEGALLY DISPOSE OF ALL REMOVED, UNUSED AND EXCESS MATERIAL GENERATED BY THE WORK OF THIS CONTRACT. DELIVER ITEMS INDICATED ON THE DRAWINGS TO THE OWNER IN GOOD CONDITION. OBTAIN SIGNED RECEIPT UPON DELIVERY.
- COORDINATE WITH UTILITY COMPANY FOR CONNECTION OF TEMPORARY AND PERMANENT POWER TO THE SITE. THE TEMPORARY POWER AND ALL HOOKUP COSTS SHALL BE PAID BY THE CONTRACTOR.
- VERIFY ALL EXISTING CIRCUITRY PRIOR TO REMOVAL AND NEW WORK. MAINTAIN POWER TO ALL OTHER AREAS & CIRCUITS NOT SCHEDULED FOR REMOVAL.
- RED LINED AS-BUILT PLANS SHALL BE PROVIDED TO THE CONSTRUCTION MANAGER.

ELECTRICAL PLAN
SCALE: 1/32" = 1'-0" (22X34); 1/16" = 1'-0" (11X17)



PREPARED FOR:



PREPARED BY:



3840 E. ROBINSON ROAD
AMHERST, NY 14228
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DMITRIY ALBUL
NY LICENSE NO.089075

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PRELIMINARY DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	02-12-15	PRELIMINARY

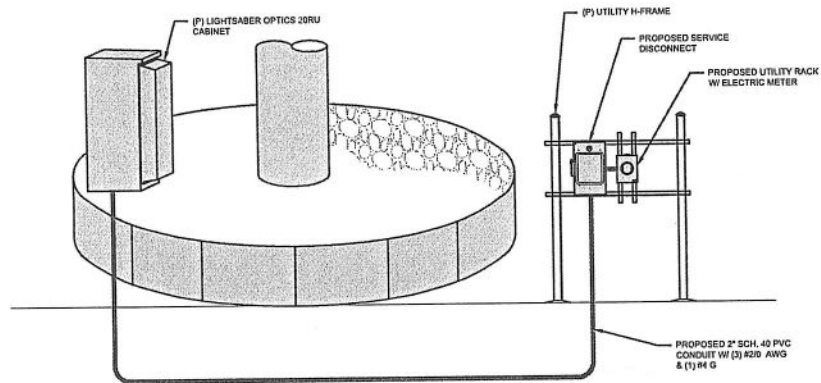
ALBUL ENGINEERING PROJECT NUMBER:
38633.NSN.CDN.V118280.0

PROJECT INFORMATION:
VILLAGE OF ALBION WATER DEPARTMENT (VAWD-TOWER)
SITE ID: TBD
961 WILSON ROAD
WATERPORT, NY 14517

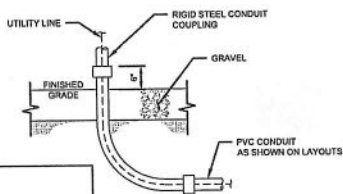
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ELECTRICAL PLAN

SHEET NUMBER:
E-1

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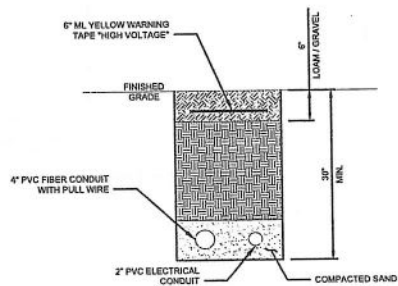


1 POWER DIAGRAM
SCALE: N.T.S.

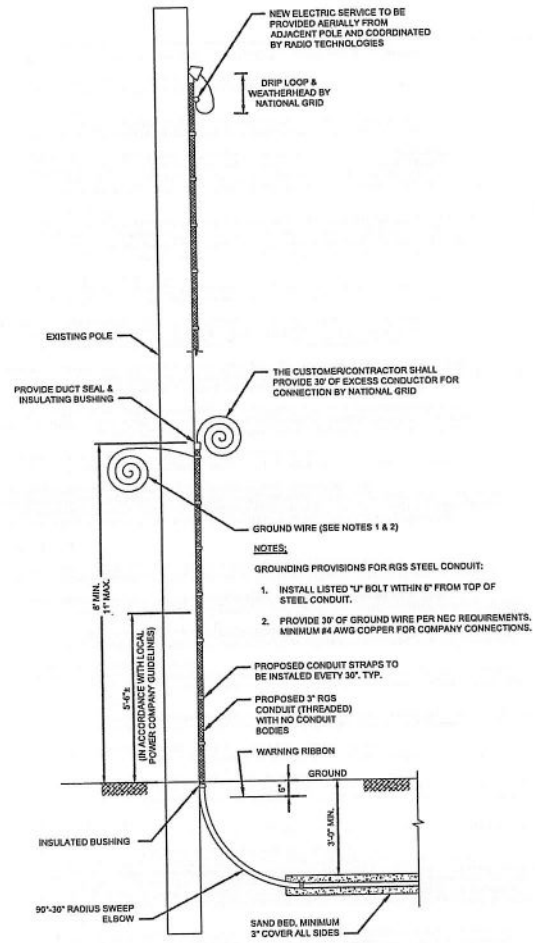


NOTE:
CONTRACTOR TO FIELD VERIFY EXACT LOCATION OF CONDUIT STUB-UP.

3 CONDUIT STUB-UP DETAIL
SCALE: 3/4" = 1'-0"



4 UTILITY CONDUIT DETAIL
SCALE: NONE



- NOTES:
GROUNDING PROVISIONS FOR RGS STEEL CONDUIT:
1. INSTALL LISTED "U" BOLT WITHIN 6" FROM TOP OF STEEL CONDUIT.
 2. PROVIDE 30" OF GROUND WIRE PER NEC REQUIREMENTS. MINIMUM #4 AWG COPPER FOR COMPANY CONNECTIONS.

2 UTILITY POLE CONDUIT RISER DETAIL
SCALE: NONE

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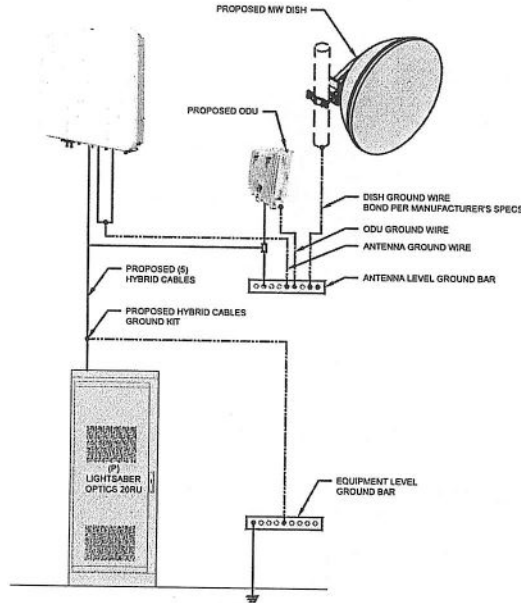
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ELECTRICAL & GROUNDING DETAILS

SHEET NUMBER:

E-2

GROUNDING NOTES:

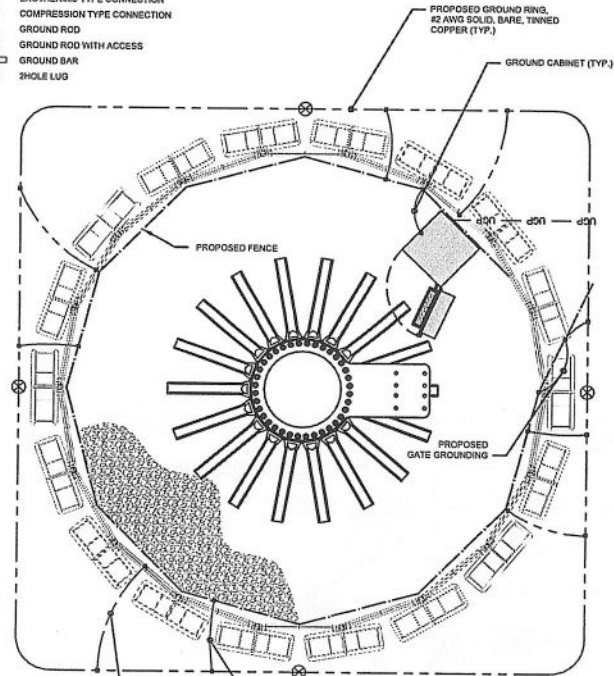
- GROUNDING SHALL COMPLY WITH ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL GROUNDING DEVICES SHALL BE U.L. APPROVED OR LISTED FOR THEIR INTENDED USE.
- ALL WIRES SHALL BE AWG THIN/THIN COPPER UNLESS NOTED OTHERWISE.
- GROUNDING CONNECTIONS TO GROUND RODS, GROUND RING WIRE, TOWER BASE AND FENCE POSTS SHALL BE EXOTHERMIC ("CADWELDS") UNLESS NOTED OTHERWISE. CLEAN SURFACES TO SHINY METAL. WHERE GROUND WIRES ARE CADWELDED TO GALVANIZED SURFACES, SPRAY CADWELD WITH GALVANIZING PAINT.
- GROUNDING CONNECTIONS TO GROUND BARS ARE TO BE TWO-HOLE BRASS MECHANICAL CONNECTORS WITH STAINLESS STEEL HARDWARE (INCLUDING SCREW SET) CLEAN GROUND BAR TO SHINY METAL. AFTER MECHANICAL CONNECTION, TREAT WITH PROTECTIVE ANTIOXIDANT COATING.
- GROUND COAXIAL CABLE SHIELDS AT BOTH ENDS WITH MANUFACTURER'S GROUNDING KITS.
- ROUTE GROUNDING CONDUCTORS THE SHORTEST AND STRAIGHTEST PATH POSSIBLE. BEND GROUNDING LEADS WITH A MINIMUM 12" RADIUS.
- INSTALL #2 AWG GREEN-INSULATED STRANDED WIRE FOR ABOVE GRADE GROUNDING AND #2 BARE TINNED COPPER WIRE FOR BELOW GRADE GROUNDING UNLESS OTHERWISE NOTED.
- REFER TO GROUNDING PLAN FOR GROUND BAR LOCATIONS. GROUNDING CONNECTIONS SHALL BE EXOTHERMIC TYPE ("CADWELDS") TO ANTENNA MOUNTS AND GROUND RING. REMAINING GROUNDING CONNECTIONS SHALL BE COMPRESSION FITTINGS. CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO-HOLE LUGS.
- THE GROUND ELECTRODE SYSTEM SHALL CONSIST OF DRIVEN GROUND RODS POSITION ACCORDING TO GROUNDING PLAN. THE GROUND RODS SHALL BE 5/8"x19'-0" COPPER CLAD STEEL INTERCONNECTED WITH #2 BARE TINNED COPPER WIRE BURIED 36" BELOW GRADE. BURY GROUND RODS A MAXIMUM OF 15' APART, AND A MINIMUM OF 8' APART.
- IF ROCK IS ENCOUNTERED GROUND RODS SHALL BE PLACED AT AN OBLIQUE ANGLE NOT TO EXCEED 45°.
- EXOTHERMIC WELDS SHALL BE MADE IN ACCORDANCE WITH ERICO PRODUCTS BULLETIN A-A.
- CONSTRUCTION OF GROUND RING AND CONNECTIONS TO EXISTING GROUND RING SYSTEM SHALL BE DOCUMENTED WITH PHOTOGRAPHS PRIOR TO BACKFILLING SITE. PROVIDE PHOTOS TO THE CONSTRUCTION MANAGER.
- ALL GROUND LEADS EXCEPT THOSE TO THE EQUIPMENT ARE TO BE #2 BARE TINNED COPPER WIRE. ALL EXTERIOR GROUND BARS TINNED COPPER.
- PRIOR TO INSTALLING LUGS ON GROUND WIRES, APPLY THOMAS & BETTS KOPR-SHIELD (TM OF JET LUBE INC.). PRIOR TO BOLTING GROUND WIRE LUGS TO GROUND BARS, APPLY KOPR-SHIELD OR EQUAL.
- ENGAGE AN INDEPENDENT ELECTRICAL TESTING FIRM TO TEST AND VERIFY THAT IMPEDANCE DOES NOT EXCEED FIVE OHMS TO GROUND BY MEANS OF "FALL OF POTENTIAL TEST". TEST SHALL BE WITNESSED BY A REPRESENTATIVE, AND RECORDED ON THE "GROUND RESISTANCE TEST" FORM.
- WHERE BARE COPPER GROUND WIRES ARE ROUTED FROM ANY CONNECTION ABOVE GRADE TO GROUND RING, INSTALL WIRE IN 3/4" PVC SLEEVE, FROM 1' BELOW GRADE AND SEAL TOP WITH SILICONE MATERIAL.
- PREPARE ALL BONDING SURFACES FOR GROUNDING CONNECTIONS BY REMOVING ALL PAINT AND CORROSION DOWN TO SHINY METAL. FOLLOWING CONNECTION, APPLY APPROPRIATE ANTI-OXIDIZATION PAINT.
- ANY SITE WHERE THE EQUIPMENT (BTS, CABLE BRIDGE, PPC, GENERATOR, ETC.) IS LOCATED WITHIN 6 FEET OF METAL FENCING, THE GROUND RING SHALL BE BONDED TO THE NEAREST FENCE POST USING (3) RUNS OF #2 BARE TINNED COPPER WIRE.



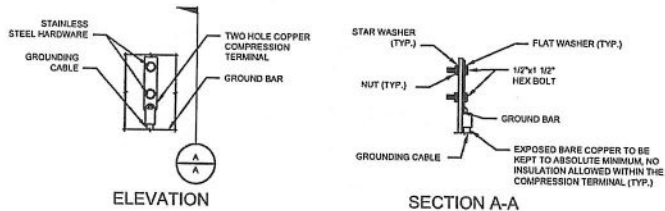
1 TYPICAL GROUNDING DETAIL
SCALE: N.T.S.

LEGEND:

- EXOTHERMIC TYPE CONNECTION
- COMPRESSION TYPE CONNECTION
- GROUND ROD
- ⊕ GROUND ROD WITH ACCESS
- ▬ GROUND BAR
- 2HOLE LUG



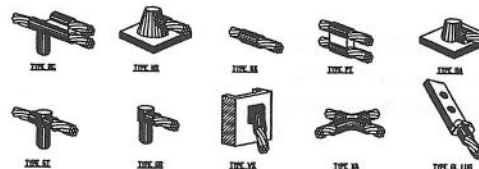
2 GROUNDING LAYOUT
SCALE: N.T.S.



NOTES

- DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS

3 MECHANICAL CONNECTION DETAIL
SCALE: N.T.S.



4 CADWELD GROUNDING CONNECTION DETAILS
SCALE: N.T.S.

PREPARED FOR:
NORTH SHORE NETWORKS

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NY LICENSE NO.089075

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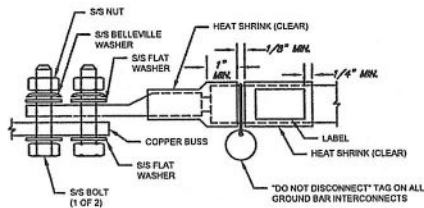
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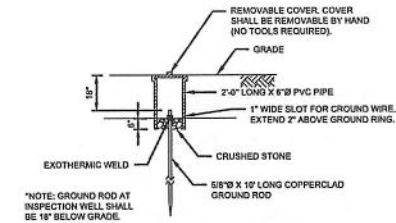
SHEET TITLE:
GROUNDING PLAN & DETAILS

SHEET NUMBER:
G-1

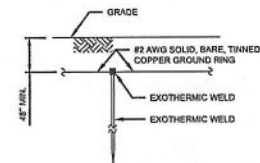
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1 GROUND BAR DETAIL
SCALE: N.T.S.

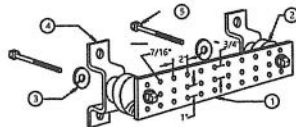


4 GROUND ROD INSPECTION WELL
SCALE: N.T.S.



- NOTES:
- WHERE ROCK IS ENCOUNTERED, ROCK WILL BE DRILLED, FILLED W/ CONDUCTIVE SOIL ARCS INSTALLED TO FULL DEPTH.
 - GROUND RODS SHALL BE INSTALLED IN ACCORDANCE W/ NEC REQUIREMENTS.

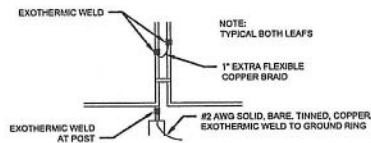
7 GROUND ROD
SCALE: NONE



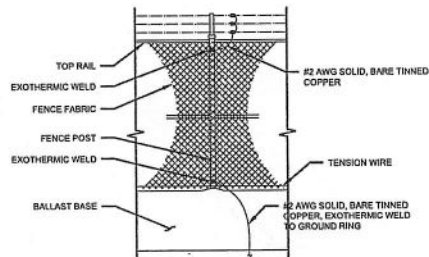
LEGEND

- COPPER GROUND BAR, 1/4\"/>
- INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4
- 3/8\"/>
- WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-8256
- 5/8-11 X 1\"/>

2 GROUND BAR DETAIL
SCALE: N.T.S.



5 GATE GROUNDING
SCALE: N.T.S.

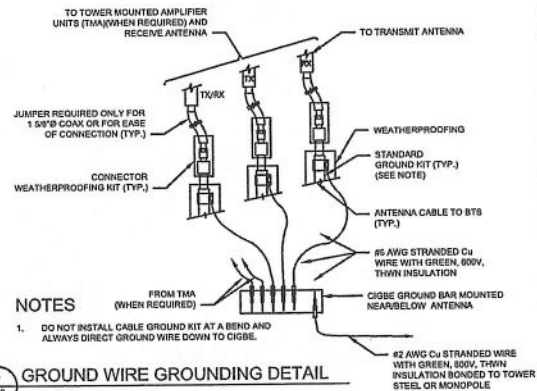
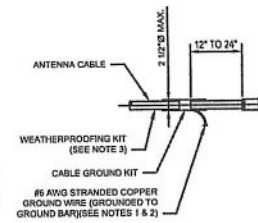


8 FENCE GROUNDING
SCALE: N.T.S.

NOTE

- DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
- GROUNDING KIT SHALL BE ANDREW SURE GROUND TYPE KIT WITH TWO-HOLE LUGS.
- WEATHER PROOFING SHALL BE ANDREW TWO-PART TAPE SUPPLIED WITH KIT. GOLD SHRINK SHALL NOT BE USED.

3 ANTENNA GROUND KIT DETAIL
SCALE: N.T.S.



7 GROUND WIRE GROUNDING DETAIL
SCALE: N.T.S.

PREPARED FOR:



PREPARED BY:



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