

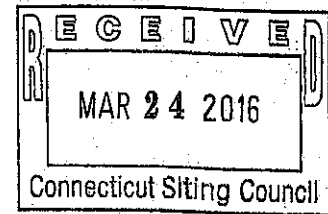


Homeland Towers, LLC

22 Shelter Rock Lane
Danbury CT 06810
Phone 203-297-6345
Fax 203-797-1137

March 21, 2016

Honorable Robert Stein, Chairman
And Members of the Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051



Re: Docket No. 445 – Homeland Towers LLC (HT) and Town of Ridgefield (Town)
320 Old Stagecoach Road, Ridgefield, CT

ORIGINAL

Dear Chairman Stein and Members of the Siting Council,

On behalf of the Town of Ridgefield, please accept this letter from Homeland Towers and InSite Towers requesting approval for a revision to the installation of the Town of Ridgefield's public safety equipment. Below is an outline for comparison purposes on the Town's equipment that the CSC had approved during the D&M process and what the Town is now requesting. Please note that the tower is fully constructed and AT&T is operational. To date, the Town has not commenced the installation of their equipment. Homeland Towers requests that you please accept for review and Council approve this revision to the Town of Ridgefield's public safety equipment.

Town of Ridgefield Public Safety Equipment Installation List

Microwave Dishes

- CSC approved (1) 2' dish at a mounting height of 65'. Change- Town instead is proposing only (1) 3' dish at the 70' mounting height. The increase from 2' to 3' is due to the length of the microwave path. Microwave Antenna Model: VHLP3-11W-6WH, weight: 53lbs, line size: EW90, frequency is 11.2GHz.
- CSC approved (1) 2' dish at a mounting height of 80'. Change- Town will not be installing this dish at a mounting height of 80'.

Receive/Transmit Antennas

- CSC approved (1) 11'-5" BA40-41 DIN antenna at mounting height of 150'- No Change
- CSC approved (1) 20'-5" antenna at a mounting height of 70'- Change-Town instead is proposing (1) 5' SD210R-SF2P90LDF at a mounting height of 66'

Fuel Source

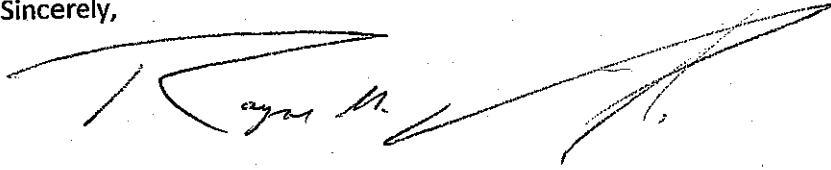
- The CSC approved a 500 gallon propane tank for a propane generator- Change -Town instead is proposing a 35kW diesel generator.

Shelter

- The CSC approved equipment shelter - No change

Enclosed are (15) sets of 11"x17" construction drawings being filed on behalf of the Town of Ridgefield in accordance with the Council's Decision and Order dated September 4, 2014 ("Decision and Order"). Two full-sized sets of the construction drawings are also enclosed along with specifications for the generator.

Sincerely,

A handwritten signature in black ink, appearing to read "Raymond M. Vergati", with a long, sweeping horizontal stroke extending to the right.

Raymond Vergati
Site Development Manager, Homeland Towers LLC
rv@homelandtowers.us

Enclosures

Cc: Rudy Marconi, First Selectman, Town of Ridgefield
Melanie Bachman, Connecticut Siting Council
InSite Towers
Daniel M. Laub, Esq., Cuddy & Feder

GENERAC®

INDUSTRIAL POWER

SD035

3.4L

Industrial Diesel Generator Set

EPA Certified Stationary Emergency

SD035 35 kW

1 of 6

Standby Power Rating
35 kW 44 kVA 60 Hz

Prime Power Rating*
32 kW 39 kVA 60 Hz

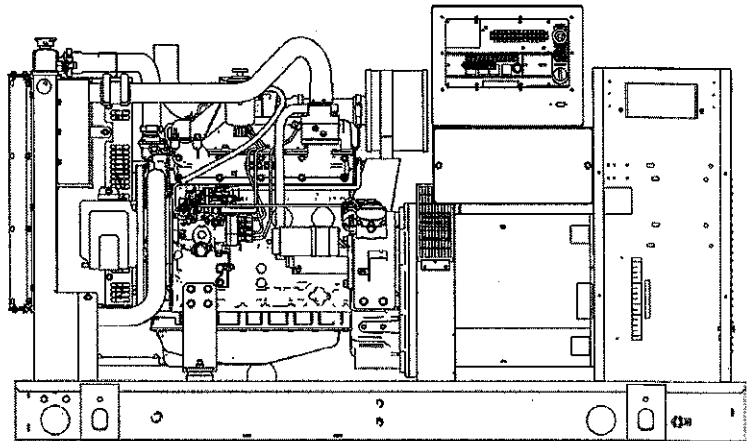


Image used for illustration purposes only

*EPA Certified Prime ratings are not available in the U.S. or its Territories

Codes and Standards

Generac products are designed to the following standards:



UL2200, UL508, UL142, UL498



NFPA70, 99, 110, 37



NEC700, 701, 702, 708



ISO9001, 8528, 3046, 7637, Pluses #2b, 4



NEMA ICS10, MG1, 250, ICS6, AB1



ANSI C62.41
American National Standards Institute

Powering Ahead

For over 50 years, Generac has led the industry with innovative design and superior manufacturing.

Generac ensures superior quality by designing and manufacturing most of its generator components, including alternators, enclosures and base tanks, control systems and communications software.

Generac's gensets utilize a wide variety of options, configurations and arrangements, allowing us to meet the standby power needs of practically every application.

Generac searched globally to ensure the most reliable engines power our generators. We choose only engines that have already been proven in heavy-duty industrial application under adverse conditions.

Generac is committed to ensuring our customers' service support continues after their generator purchase.

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Standard Features

ENGINE SYSTEM

- General
- Oil Drain Extension
 - Air Cleaner
 - Fan Guard
 - Stainless Steel flexible exhaust connection
 - Critical Exhaust Silencer (enclosed only)
 - Factory Filled Oil
 - Radiator Duct Adapter (open set only)

Fuel System

- Fuel lockoff solenoid
- Primary fuel filter

Cooling System

- Closed Coolant Recovery System
- UV/Ozone resistant hoses
- Factory-Installed Radiator
- Radiator Drain Extension
- 50/50 Ethylene glycol antifreeze
- 120 VAC Coolant Heater

Engine Electrical System

- Battery charging alternator
- Battery cables
- Battery tray
- Solenoid activated starter motor
- Rubber-booted engine electrical connections

ALTERNATOR SYSTEM

- UL2200 GENprotect™
- 12 leads (3-phase, non 600 V)
- Class H insulation material
- Vented rotor
- 2/3 pitch
- Skewed stator
- Auxiliary voltage regulator power winding
- Amortisseur winding
- Brushless Excitation
- Sealed Bearings
- Automated manufacturing (winding, insertion, lacing, varnishing)
- Rotor dynamically spin balanced (get tolerance)
- Full load capacity alternator
- Protective thermal switch

GENERATOR SET

- Internal Genset Vibration Isolation
- Separation of circuits - high/low voltage
- Separation of circuits - multiple breakers
- Silencer Heat Shield
- Wrapped Exhaust Piping
- Silencer housed in discharge hood (enclosed only)
- Standard Factory Testing
- 2 Year Limited Warranty (Standby rated Units)
- 1 Year Limited Warranty (Prime rated units)
- Silencer mounted in the discharge hood (enclosed only)

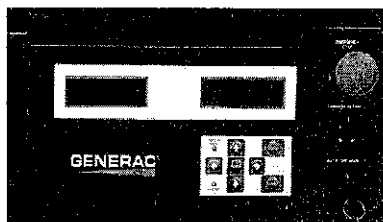
ENCLOSURE (if selected)

- Rust-proof fasteners with nylon washers to protect finish
- High performance sound-absorbing material
- Gasketed doors
- Stamped air-intake louvers
- Air discharge hoods for radiator-upward pointing
- Stainless steel lift off door hinges
- Stainless steel lockable handles
- Rhino Coat™ - Textured polyester powder coat

TANKS (if selected)

- UL 142
- Double wall
- Vents
- Sloped top
- Sloped bottom
- Factory pressure tested (2 psi)
- Rupture basin alarm
- Fuel level
- Check valve in supply and return lines
- Rhino Coat™ - Textured polyester powder coat
- Stainless hardware

CONTROL SYSTEM



Control Panel

- Digital H Control Panel - Dual 4x20 Display
- Programmable Crank Limiter
- 7-Day Programmable Exerciser
- Special Applications Programmable PLC
- RS-232/485
- All-Phase Sensing DVR
- Full System Status
- Utility Monitoring
- Low Fuel Pressure Indication
- 2-Wire Start Compatible
- Power Output (kW)
- Power Factor
- kW Hours, Total & Last Run

- Real/Reactive/Apparent Power
- All Phase AC Voltage
- All Phase Currents
- Oil Pressure
- Coolant Temperature
- Coolant Level
- Engine Speed
- Battery Voltage
- Frequency
- Date/Time Fault History (Event Log)
- Isochronous Governor Control
- Waterproof/sealed Connectors
- Audible Alarms and Shutdowns
- Not in Auto (Flashing Light)
- Auto/Off/Manual Switch
- E-Stop (Red Mushroom-Type)
- NFPA110 Level I and II (Programmable)
- Customizable Alarms, Warnings, and Events
- Modbus protocol
- Predictive Maintenance algorithm
- Sealed Boards
- Password parameter adjustment protection
- Single point ground
- 15 channel data logging
- 0.2 msec high speed data logging
- Alarm information automatically comes up on the display

Alarms

- Oil Pressure (Pre-programmable Low Pressure Shutdown)
- Coolant Temperature (Pre-programmed High Temp Shutdown)
- Coolant Level (Pre-programmed Low Level Shutdown)
- Low Fuel Pressure Alarm
- Engine Speed (Pre-programmed Over speed Shutdown)
- Battery Voltage Warning
- Alarms & warnings time and date stamped
- Alarms & warnings for transient and steady state conditions
- Snap shots of key operation parameters during alarms & warnings
- Alarms and warnings spelled out (no alarm codes)

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Configurable Options

ENGINE SYSTEM

- General
- Oil Make-Up System
- Oil Heater
- Industrial Exhaust Silencer

Fuel System

- Flexible fuel lines
- Primary fuel filter

Engine Electrical System

- 10A UL battery charger
- 2.5A UL battery charger
- Battery Warmer

ALTERNATOR SYSTEM

- Alternator Upsizing
- Anti-Condensation Heater
- Tropical coating
- Permanent Magnet Excitation

CIRCUIT BREAKER OPTIONS

- Main Line Circuit Breaker
- 2nd Main Line Circuit Breaker
- Shunt Trip and Auxiliary Contact
- Electronic Trip Breakers

GENERATOR SET

- Gen-Link Communications Software (English Only)
- 8 Load Position Load Center
- 2 Year Extended Warranty
- 5 Year Warranty
- 5 Year Extended Warranty

ENCLOSURE

- Weather Protected
- Level 1 Sound Attenuation
- Level 2 Sound Attenuation
- Steel Enclosure
- Aluminum Enclosure
- 150 MPH Wind Kit
- 12 VDC Enclosure Lighting Kit
- 120 VAC Enclosure Lighting Kit
- AC/DC Enclosure Lighting Kit
- Door Alarm Switch

TANKS (Size on last page)

- Electrical Fuel Level
- Mechanical Fuel Level
- 54 Gal (204.4 L) Usable Capacity
- 132 Gal (499.7 L) Usable Capacity
- 211 Gal (798.7 L) Usable Capacity
- 300 Gal (1135.6 L) Usable Capacity
- 8" Vent Extension
- 13" Vent Extension
- 19" Vent Extension

CONTROL SYSTEM

- 21-Light Remote Annunciator
- Remote Relay Panel (8 or 16)
- Oil Temperature Sender with Indication Alarm
- Remote E-Stop (Break Glass-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Surface Mount)
- Remote E-Stop (Red Mushroom-Type, Flush Mount)
- Remote Communication - Modem
- Remote Communication - Ethernet
- 10A Run Relay
- Ground fault indication and protection functions

Engineered Options

ENGINE SYSTEM

- Coolant heater ball valves
- Block Heaters
- Fluid containment pans

ALTERNATOR SYSTEM

- 3rd Breaker System

GENERATOR SET

- Special Testing
- IBC Seismic Certification

ENCLOSURE

- Motorized Dampers
- Door switched for intrusion alert
- Enclosure ambient heaters

TANKS

- Spare inputs (x4) / outputs (x4) - H Panel Only
- Battery Disconnect Switch
- Overfill protection valve
- UL2085 Tank
- ULC S-801 Tank
- Stainless Steel Tank
- Special Fuel Tanks (MIDEQ and FL DEP/DERM, etc.)
- Vent Extensions

Rating Definitions

Standby – Applicable for a varying emergency load for the duration of a utility power outage with no overload capability.

Prime – Applicable for supplying power to a varying load in lieu of utility for an unlimited amount of running time. A 10% overload capacity is available for 1 out of every 12 hours. The Prime Power option is only available on International applications.

Power ratings in accordance with ISO 8528-1, Second Edition dated 2005-06-01, definitions for Prime Power (PRP) and Emergency Standby Power (ESP).

SD035
application and engineering data
ENGINE SPECIFICATIONS
General

Make	Generac
EPA Emissions Compliance	Stationary Emergency
EPA Emissions Reference	See Emissions Data Sheet
Cylinder #	4
Type	In-Line
Displacement - L (cu in)	3.4 (207.48)
Bore - mm (in)	98 (3.86)
Stroke - mm (in)	113 (4.45)
Compression Ratio	18.5:1
Intake Air Method	Turbocharged/Aftercooled
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
Crankshaft Type	Forged Steel

Engine Governing

Governor	Electronic Isochronous
Frequency Regulation (Steady State)	+ 0.25%

Lubrication System

Oil Pump Type	Gear
Oil Filter Type	Full Flow Cartridge
Crankcase Capacity - L (qts)	7 (7.4)

Cooling System

Cooling System Type	Closed Recovery
Water Pump Flow	Pre-Lubed, Self-Sealing
Fan Type	Pusher
Fan Speed (rpm)	NA
Fan Diameter mm (in)	560 (22)
Coolant Heater Wattage	1500
Coolant Heater Standard Voltage	120 V /240 V

Fuel System

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Specifications	ASTM
Fuel Filtering (microns)	10
Fuel Inject Pump	Bosch (VE)
Fuel Pump Type	Engine Driven Gear
Injector Type	Pintel - 2100-PSI
Fuel Supply Line - mm (in)	7.92 (0.312)
Fuel Return Line - mm (in)	7.92 (0.312)

Engine Electrical System

System Voltage	12 VDC
Battery Charging Alternator	20 A
Battery Size	See Battery Index 0161970SBY
Battery Voltage	12 VDC
Ground Polarity	Negative

ALTERNATOR SPECIFICATIONS

Standard Model	390
Poles	4
Field Type	Revolving
Insulation Class - Rotor	H
Insulation Class - Stator	H
Total Harmonic Distortion	< 3%
Telephone Interference Factor (TIF)	< 50
Standard Excitation	Synchronous
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Load Capacity - Standby	100%
Prototype Short Circuit Test	Yes

Voltage Regulator Type	Digital
Number of Sensed Phases	All
Regulation Accuracy (Steady State)	± 0.25%

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operating data

POWER RATINGS

	Standby	
Single-Phase 120/240 VAC @1.0pf	35 kW	Amps: 146
Three-Phase 120/208 VAC @0.8pf	35 kW	Amps: 122
Three-Phase 120/240 VAC @0.8pf	35 kW	Amps: 105
Three-Phase 277/480 VAC @0.8pf	35 kW	Amps: 53
Three-Phase 346/600 VAC @0.8pf	35 kW	Amps: 42

STARTING CAPABILITIES (sKVA)

sKVA vs. Voltage Dip

Alternator	kW	480 VAC						208/240 VAC					
		10%	15%	20%	25%	30%	35%	10%	15%	20%	25%	30%	35%
Standard	35	24	36	48	60	72	84	18	27	36	45	54	63
Upsize 1	40	27	41	54	68	81	95	20	31	41	51	61	71
Upsize 2	50	34	52	69	86	103	120	26	39	52	65	77	90
Upsize 3	60	42	63	83	104	125	146	32	47	62	78	94	110

FUEL CONSUMPTION RATES*

Fuel Pump Lift - ft (m)		Diesel - gph (lph)	
3 (1)		Percent Load	gph (lph)
Total Fuel Pump Flow (Combustion + Return)		25%	1.03 (3.90)
5.5 gph		50%	1.72 (6.52)
		75%	2.4 (9.09)
		100%	3.1 (11.74)

* Fuel supply installation must accommodate fuel consumption rates at 100% load.

COOLING

	Standby	
Coolant Flow per Minute	gpm (lpm)	12.2 (46)
Coolant System Capacity	gal (L)	2.5 (9.5)
Heat Rejection to Coolant	BTU/hr	96,000
Inlet Air	cfm (m3/hr)	7500 (212)
Max. Operating Radiator Air Temp	F° (C°)	122 (50)
Max. Ambient Temperature (before derate)	F° (C°)	110 (43.3)
Maximum Radiator Backpressure	in. H ₂ O	0.5

COMBUSTION AIR REQUIREMENTS

Flow at Rated Power	cfm (m3/min)	Standby
		150 (4.2)

ENGINE

	Standby	
Rated Engine Speed	rpm	1800
Horsepower at Rated kW**	hp	56
Piston Speed	ft/min (m/min)	1335
BMEP	psi	118

** Refer to "Emissions Data Sheet" for maximum bHP for EPA and SCAQMD permitting purposes.

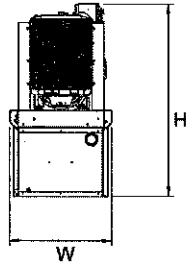
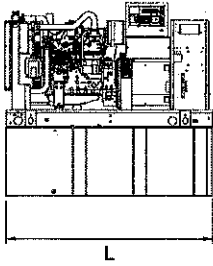
EXHAUST

	Standby	
Exhaust Flow (Rated Output)	cfm (m ³ /min)	342 (9.7)
Max. Backpressure (Post Silencer)	inHg (Kpa)	1.5 (5.1)
Exhaust Temp (Rated Output)	°F (°C)	900 (482)
Exhaust Outlet Size (Open Set)	mm (in)	63.5 (2.5)

Deration – Operational characteristics consider maximum ambient conditions. Derate factors may apply under atypical site conditions. Please consult a Generac Power Systems Industrial Dealer for additional details. All performance ratings in accordance with ISO3046, BS5514, ISO8528 and DIN6271 standards.

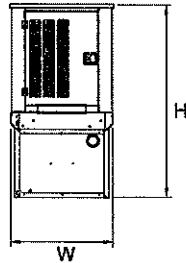
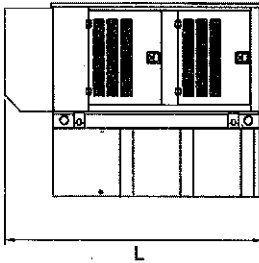
SD035

dimensions and weights*



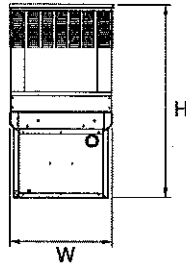
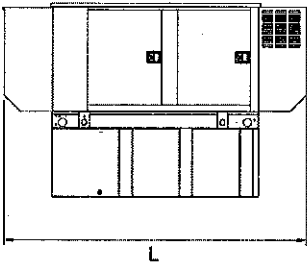
OPEN SET

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Tank & Open Set	
			Steel	Aluminum
NO TANK	-	76 (1930.4) x 38 (914.4) x 45 (1143)	1756 (796)	
17	54 (204.4)	76 (1930.4) x 38 (914.4) x 58 (1473.2)	2236 (1014)	
43	132 (499.7)	76 (1930.4) x 38 (914.4) x 70 (1778)	2466 (1119)	
68	211 (798.7)	76 (1930.4) x 38 (914.4) x 82 (2082.8)	2675 (1213)	
97	300 (1135.6)	93 (2362.2) x 38 (914.4) x 86 (2184.4)	2738 (1242)	



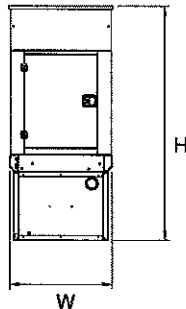
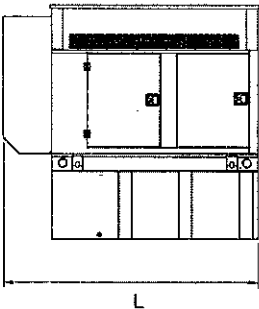
STANDARD ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	95 (2413) x 38 (965.2) x 50 (1270)		
17	54 (204.4)	95 (2413) x 38 (965.2) x 63 (1600.2)	334 (152)	115 (52)
43	132 (499.7)	95 (2413) x 38 (965.2) x 75 (1905)		
68	211 (798.7)	95 (2413) x 38 (965.2) x 87 (2209.8)		
97	300 (1135.6)	95 (2413) x 38 (965.2) x 91 (2311.4)		



LEVEL 1 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	113 (2870.2) x 38 (965.2) x 50 (1270)		
17	54 (204.4)	113 (2870.2) x 38 (965.2) x 63 (1600.2)	435 (198)	150 (68)
43	132 (499.7)	113 (2870.2) x 38 (965.2) x 75 (1905)		
68	211 (798.7)	113 (2870.2) x 38 (965.2) x 87 (2209.8)		
97	300 (1135.6)	113 (2870.2) x 38 (965.2) x 91 (2311.4)		



LEVEL 2 ACOUSTIC ENCLOSURE

RUN TIME HOURS	USABLE CAPACITY GAL (L)	L x W x H in (mm)	WT lbs (kg) - Enclosure Only	
			Steel	Aluminum
NO TANK	-	95 (2413) x 38 (965.2) x 62 (1574.8)		
17	54 (204.4)	95 (2413) x 38 (965.2) x 75 (1905)	520 (236)	179 (81)
43	132 (499.7)	95 (2413) x 38 (965.2) x 87 (2209.8)		
68	211 (798.7)	95 (2413) x 38 (965.2) x 99 (2514.6)		
97	300 (1135.6)	95 (2413) x 38 (965.2) x 103 (2616.2)		

*All measurements are approximate and for estimation purposes only. Sound dBA can be found on the sound data sheet. Enclosure Only weight is added to Tank & Open Set weight to determine total weight.

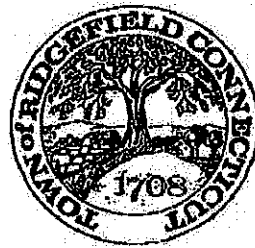
YOUR FACTORY RECOGNIZED GENERAC INDUSTRIAL DEALER

Specification characteristics may change without notice. Dimensions and weights are for preliminary purposes only. Please consult a Generac Power Systems Industrial Dealer for detailed installation drawings.

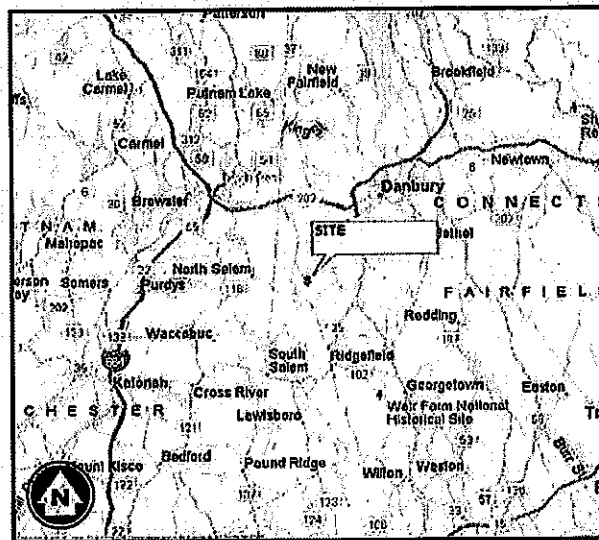
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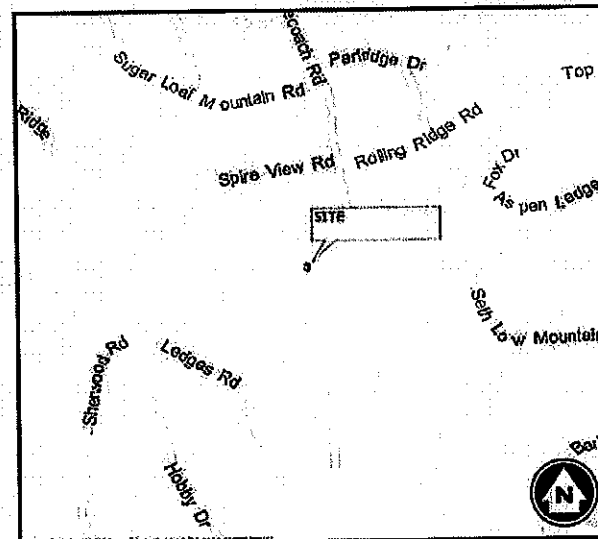
TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK



RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

INFINIGY

1033 Watervliet Shaker Road | Albany, NY 12205
Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com



MOTOROLA SOLUTIONS

PYRAMID
Network Services, LLC

PROJECT INFORMATION

SITE NAME: RIDGEFIELD LEDGE
SITE ADDRESS: OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877
LATITUDE: 41° 19' 48.6" N
LONGITUDE: 73° 26' 0.5" W

PROJECT DIRECTORY

LAND OWNER: TOWN OF RIDGEFIELD
TOWN PROJECT MANAGER: DICK AARONS
DEPUTY EMERGENCY MANAGER
RIDGEFIELD, CT
(203) 770-2800
DEM@RIDGEFIELDCT.ORG
MOTOROLA PROJECT MANAGER: STEFANITA VASILESCU
MOTOROLA SOLUTIONS, INC.
(914) 281-0867
STEFANITA.VASILESCU@MOTOROLASOLUTIONS.COM
PYRAMID PROJECT MANAGER: ROB BAUMEISTER
PYRAMID NETWORK SERVICES, LLC
11 RIVER ROAD
GLENMONT, NY 12077
(518) 505-9330
RBAUMEISTER@PYRAMIDNETWORKSERVICES.COM
INFINIGY PROJECT MANAGER: ALEX WELLER
INFINIGY SOLUTIONS, LLC.
1033 WATERVLIET SHAKER ROAD
ALBANY, NY 12207
(518) 690-0790
AWELLER@INFINIGY.COM

DRAWING INDEX

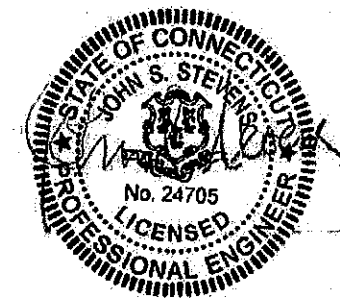
DRWG. #	TITLE	REV.#	DATE
T1	TITLE SHEET	C	3/7/16
C1	GENERAL NOTES	C	3/7/16
C2	GENERAL NOTES & LEGEND	C	3/7/16
C3	OVERALL SITE PLAN	C	3/7/16
C3A	ENLARGED SITE PLAN	C	3/7/16
C4	BUILDING ELEVATION	C	3/7/16
C5	ANTENNA SPECS & MOUNTING DETAILS	C	3/7/16
C6	SHELTER DETAILS	C	3/7/16
C7	SHELTER FOUNDATION DETAILS	C	3/7/16
C8	ICE BRIDGE DETAILS	C	3/7/16
E1	ELECTRICAL PLAN	C	3/7/16
E2	ELECTRICAL DETAILS	C	3/7/16
E3	GROUNDING PLAN	C	3/7/16
E4	GROUNDING NOTES	C	3/7/16
E5	GROUNDING DETAILS	C	3/7/16
E6	GROUNDING DETAILS	C	3/7/16

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.

PROJECT DESCRIPTION:

INSTALL EQUIPMENT SHELTER W/ ICE BRIDGE, ISOLATION TRANSFORMER AND ASSOCIATED TRENCHING FOR CONDUITS @ GROUND LEVEL. INSTALL MICROWAVE DISH AND ANTENNAS W/ ASSOCIATED CABLING AND GROUNDING.

CONNECTICUT ONE-CALL
CALL FOR UNDERGROUND UTILITIES PRIOR TO DIGGING:
1-800-272-1000
EMERGENCY:
CALL 911



GENERAL REQUIREMENTS

1. GENERAL

1.1. SUMMARY OF WORK

A. THE WORK MAY CONSIST OF, BUT NOT BE LIMITED TO, THE INSTALLATION OF AN EQUIPMENT SHELTER, ANTENNAS AND LINES, GROUNDING, ELECTRICAL WORK, ETC., ASSOCIATED WITH THE MOTOROLA EQUIPMENT AS INDICATED ON DRAWINGS AND AS SPECIFIED HEREIN. CONTRACTOR SHALL SUPPLY ALL PERMANENT MATERIALS/EQUIPMENT REQUIRED AND ALL LABOR, EQUIPMENT, TOOLS, UTILITIES, MINOR HARDWARE/MATERIALS, TRANSPORTATION AND FACILITIES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF SERVICES AND INSTALL WORK, WHETHER TEMPORARY OR PERMANENT. CONTRACTOR SHALL BE OBLIGATED TO PERFORM ALL THE WORK OUTLINED IN THESE DRAWINGS IN ACCORDANCE WITH THE CONTRACT AGREEMENT, FEDERAL REGULATIONS, STATE REQUIREMENTS, LOCAL CODES, COMMERCIAL/INDUSTRY STANDARDS, DETAILED SCOPE OF WORK AND THE DOCUMENTS IDENTIFIED BELOW. IN CASE OF A CONFLICT BETWEEN THE ABOVE LISTED DOCUMENTS REGARDING STANDARDS OF WORK, THE MORE STRINGENT CRITERIA SHALL APPLY. ANY ADDITIONAL COSTS OR DELAYS RESULTING FROM CORRECTION OF THE WORK TO COMPLY WITH THE ABOVE REQUIREMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

1.2. SITE VISIT

CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE ITSELF WITH THE SCOPE OF WORK REQUIRED PER THE DRAWINGS AND ALL LOCAL CONDITIONS AND LAWS AND REGULATIONS THAT MAY IN ANY MANNER AFFECT THE PRICE, PROGRESS AND PERFORMANCE OF WORK, INCLUDING ANY COSTS ASSOCIATED WITH IT. THE CONTRACTOR ALSO MUST VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND NOTIFY THE MOTOROLA REPRESENTATIVE OF ANY DISCREPANCIES OR INTERFERENCES WHICH AFFECT THE WORK OF THIS CONTRACT.

1.3. STANDARDS AND CODES

THE FOLLOWING DOCUMENTS (LATEST REVISION) SHALL BE CONSIDERED TO BE SPECIFICATION AND ARE INCORPORATED HEREIN BY REFERENCE. IN THE EVENT OF CONFLICT BETWEEN THE REQUIREMENTS OF THIS SPECIFICATION AND THE REQUIREMENTS OF THE REFERENCED DOCUMENTS, THE STRICTER SPECIFICATION SHALL GOVERN. WHERE PROVISIONS OF THE CODES AND STANDARDS ARE IN CONFLICT WITH THE BUILDING CODE IN FORCE FOR THIS PROJECT, THE BUILDING CODE SHALL GOVERN.

CONTRACTOR TO USE THE FOLLOWING STANDARDS AS NEEDED:

A. AMERICAN CONCRETE INSTITUTE:

- * ACI 301 - "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
- * ACI 305 "HOT WEATHER CONCRETING".
- * ACI 308 "COLD WEATHER CONCRETING".
- * ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE."
- * ACI 614 "RECOMMENDED PRACTICE FOR MEASURING, MIXING AND PLACING CONCRETE".
- * ACI 311 "RECOMMENDED PRACTICE FOR CONCRETE INSPECTION".
- * ACI 315 "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES".
- * ACI 613 "RECOMMENDED PRACTICE FOR SELECTING PROPORTIONS FOR CONCRETE".

B. AMERICAN NATIONAL STANDARDS INSTITUTE:

- * ANSI Z359 REQUIREMENTS FOR PERSONAL FALL ARREST SYSTEMS, SUBSYSTEMS AND COMPONENTS
- * ANSI Z87.1 OCCUPATIONAL AND EDUCATIONAL EYE AND FACE PROTECTION
- * ANSI Z89.1 PROTECTIVE HEADWEAR FOR INDUSTRIAL WORKERS -REQUIREMENTS
- * ANSI/IEEE C95.1 SAFETY LEVELS WITH RESPECT TO HUMAN EXPOSURE TO RADIO FREQUENCY ENERGY
- * ANSI/TLA/EIA STANDARD 222: STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES.

C. AMERICAN INSTITUTE OF STEEL CONSTRUCTION"

- * AISC MANUAL OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION: LATEST EDITION

D. AMERICAN SOCIETY FOR TESTING AND MATERIALS:

- * ASTM A615 - "SPECIFICATION FOR DEFORMED AND PLAIN BILLET STEEL BARS FOR CONCRETE REINFORCEMENT".
- * ASTM C94-80 - "SPECIFICATION FOR READY-MIX CONCRETE".
- * ASTM C39-77 - "SPECIFICATION FOR TEST FOR COMPREHENSIVE STRENGTH OF CYLINDRICAL CONCRETE SPECIMEN".
- * ASTM C33 - "SPECIFICATION FOR CONCRETE AGGREGATES".
- * ASTM C150 - "SPECIFICATION FOR PORTLAND CEMENT".
- * ASTM C172 - "SAMPLING FRESH CONCRETE".
- * ASTM C143 - "SLUMP OF PORTLAND CEMENT CONCRETE".
- * ASTM D698-91 - "TEST METHOD FOR LABORATORY COMPACTION CHARACTERISTICS OF SOIL USING STANDARD EFFORT".
- * ASTM D1556-64 - "DENSITY OF SOIL IN PLACE BY THE SAND-CONE METHOD".
- * ASTM D1557 - "TEST FOR MOISTURE-UNIT WEIGHT RELATIONS OF SOILS AND SOIL-AGGREGATE MIXTURES USING 10-LB. HAMMER AND 18-IN. DROP". (PROCEDURE C)
- * ASTM D2487 - "STANDARD CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOIL CLASSIFICATION SYSTEM)"
- * ASTM D2922 - "DENSITY OF SOIL AND SOIL AGGREGATE IN PLACE BY NUCLEAR METHODS SHALLOW DEPTH".
- * ASTM D2940 - "STANDARD SPECIFICATION FOR GRADED AGGREGATE MATERIAL FOR BASES OR SUB-BASES FOR HIGHWAYS OR AIRPORTS"

E. AMERICAN WELDING SOCIETY:

- * AWS D12.1 - "RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL, METAL INSERTS AND CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION".

F. CONCRETE REINFORCING STEEL INSTITUTE:

- * "MANUAL OF STANDARD PRACTICE"

G. FEDERAL AVIATION ADMINISTRATION:

- * DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR, AC 70/7460-1K CHANGE 2: OBSTRUCTION MARKING AND LIGHTING.
- * DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR, 150-5345-43, FAA/DOD SPECIFICATION L-856: HIGH INTENSITY OBSTRUCTION LIGHTING SYSTEMS.

H. FEDERAL COMMUNICATIONS COMMISSION:

- * FEDERAL COMMUNICATIONS COMMISSION - RULES AND REGULATIONS PART 17: CONSTRUCTION, MARKING AND LIGHTING OF ANTENNA STRUCTURES.

I. STRUCTURAL STEEL PAINTING COUNCIL:

- * SSPC-SP-1-63: SPECIFICATION FOR PAINTING STEEL STRUCTURES.

J. MOTOROLA R56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES (LATEST REVISION).

K. MOTOROLA'S CIVIL WORKS BID SPECIFICATIONS

L. NATIONAL FIRE PROTECTION ASSOCIATION:

- * NFPA 1 - FIRE PREVENTION CODE
- * NFPA 70 - NATIONAL ELECTRICAL CODE
- * NFPA 101 - LIFE SAFETY CODE
- * NFPA 111 - STANDARD ON STORED ELECTRICAL ENERGY, EMERGENCY AND STANDBY POWER SYSTEMS
- * NFPA 780 - STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS

M. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION:

- * OSHA 1926
- * OSHA DIRECTIVES CPL 2-1.29 - INTERIM INSPECTION PROCEDURES DURING COMMUNICATION TOWER CONSTRUCTION ACTIVITIES.

1.4. NOTICE TO PROCEED

WHEN THE SITE IS READY FOR INSTALLATION, MOTOROLA SHALL ISSUE A NOTICE TO PROCEED TO THE CONTRACTOR. UPON RECEIPT OF THE NOTICE OF PROCEED, THE CONTRACTOR SHALL SUBMIT TO MOTOROLA A SCHEDULE REFLECTING THE WORK PLAN. THE CONTRACTOR SHALL ADVISE THE MOTOROLA REPRESENTATIVE IMMEDIATELY OF ANY SCHEDULE CHANGES. THE CONTRACTOR SHALL ADJUST HIS WORK, AS REQUIRED, TO COORDINATE WITH THE MOTOROLA INSTALLATION TEAM IF THE SCHEDULES OVERLAP.

1.5. MOTOROLA REPRESENTATIVE

MOTOROLA SHALL DESIGNATE A REPRESENTATIVE. THIS PERSON IS THE ONLY CONTACT POINT AUTHORIZED TO MAKE ANY CHANGES TO THE CONTRACT PROVISIONS OR THE PLANS AND SPECIFICATIONS. ANY CHANGES MADE BY THE CONTRACTOR ARE AT THE CONTRACTOR'S RESPONSIBILITY AND RISK.

1.6. CONTRACTORS FIELD REPRESENTATIVE

CONTRACTOR SHALL ASSIGN A FIELD REPRESENTATIVE WHO IS FAMILIAR WITH THESE SPECIFICATIONS AND WILL REPRESENT THE CONTRACTOR AND HAVE THE AUTHORITY TO ACT FOR THE CONTRACTOR AND SUPERVISE ALL CONSTRUCTION ACTIVITIES. THE FIELD REPRESENTATIVE SHALL BE AVAILABLE WHEN CONSTRUCTION ACTIVITIES BEGIN. THE FIELD REPRESENTATIVE SHALL BE THE PRIMARY POINT OF CONTACT FOR MOTOROLA DURING THE CONSTRUCTION PHASE OF THE WORK.

1.7. PROJECT MEETINGS

THE CONTRACTOR SHALL CONDUCT THE INITIAL (PRE-CONSTRUCTION) MEETING (INCLUDING ALL SUB-CONTRACTORS) WITH THE MOTOROLA REPRESENTATIVE WITHIN TWO WEEKS AFTER AWARD OF THE CONTRACT. SUBSEQUENTLY, THE CONTRACTOR SHALL PROVIDE PROGRESS SCHEDULE UPDATES TO MOTOROLA ON A WEEKLY BASIS.

1.8. MATERIALS

CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AS REQUIRED FOR COMPLETE SYSTEMS INCLUDING: ALL PARTS OBVIOUSLY OR REASONABLY INCIDENTAL TO A COMPLETE INSTALLATION, WHETHER SPECIFICALLY INDICATED OR NOT. ALL SYSTEMS SHALL BE COMPLETELY ASSEMBLED, TESTED, ADJUSTED AND DEMONSTRATED TO BE READY FOR OPERATION PRIOR TO MOTOROLA'S ACCEPTANCE.

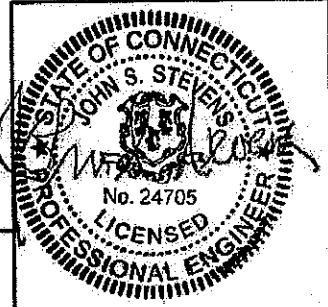
MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KINDS (AS DEFINED BY INDUSTRY STANDARDS), FREE OF DEFECTS AND ALL MATERIALS SHALL BE NEW AND UNUSED IN ALL CASES, UNLESS OTHERWISE SPECIFIED. WHERE THE NAME OF A CONCERN OR MANUFACTURER IS MENTIONED ON DRAWINGS OR IN SPECIFICATIONS IN REFERENCE TO A REQUIRED SERVICE OR PRODUCT, AND NO QUALIFICATIONS OR SPECIFICATION OF SUCH IS INCLUDED, THEN THE MATERIAL SPECIFICATIONS, DETAILS OF MANUFACTURE, FINISH, ETC., SHALL BE IN ACCORDANCE WITH MANUFACTURER'S STANDARD PRACTICE, DIRECTION OR SPECIFICATIONS. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S / VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.

1.9. VERIFICATION OF EXISTING CONDITIONS

BEFORE STARTING ANY OPERATION, THE CONTRACTOR SHALL EXAMINE EXISTING WORK, OR WORK PERFORMED BY OTHERS, TO WHICH ITS WORK IS TO ADJOIN OR BE APPLIED, AND SHALL REPORT TO MOTOROLA PROJECT MANAGER ANY CONDITIONS THAT WILL PREVENT SATISFACTORY ACCOMPLISHMENT OF HIS WORK. PRIOR TO COMMENCING ANY EXCAVATION OR GRADING, THE CONTRACTOR SHALL SATISFY HIMSELF AS TO THE ACCURACY OF ALL SURVEY DATA AS INDICATED IN THE PLANS AND SPECIFICATIONS AND/OR AS PROVIDED BY MOTOROLA. SHOULD THE CONTRACTOR DISCOVER ANY INACCURACIES, ERRORS, OR OMISSIONS IN THE SURVEY DATA, HE SHALL IMMEDIATELY NOTIFY THE MOTOROLA REPRESENTATIVE IN ORDER THAT PROPER ADJUSTMENTS CAN BE ANTICIPATED AND ORDERED. FAILURE TO NOTIFY THE MOTOROLA REPRESENTATIVE OF DEFICIENCIES, ERRORS OR FAULTS PRIOR TO COMMENCEMENT OF WORK SHALL CONSTITUTE ACCEPTANCE THEREOF AND WAIVER OF ANY CLAIMS OF UNSUITABILITY, ERRORS, OMISSIONS OR INACCURACIES.

THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PRESERVING ALL ESTABLISHED SURVEY CONTROL POINTS. IF THE CONTRACTOR OR ANY OF HIS SUB-CONTRACTORS MOVE OR DESTROY ANY SURVEY CONTROL POINTS, THE COST INCURRED BY THE LAND OWNER OR MOTOROLA TO RE-ESTABLISH THEM WILL BE BORNE BY THE CONTRACTOR.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



NO.	DATE	REVISIONS	BY	CHK	APP'D
C	3/7/16	REVISED PER COMMENTS	JLM	ASW	ASW
B	1/22/16	REVISED PER COMMENTS	JLM	ASW	ASW
A	11/10/15	ISSUED FOR INITIAL REVIEW	JLM	ASW	ASW

INFINIGY
1033 Waterlot Shaker Rd
Albany, NY 12205
Office # (518) 699-0700
Fax # (518) 990-0703
INFINIGY JOB# 419 005

MOTOROLA SOLUTIONS

PYRAMID
Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

GENERAL NOTES
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

C1
REV C

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

1.10. PERMITS

THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS WHICH MAY BE REQUIRED FOR THE WORK BY THE STATE, COUNTY OR LOCAL GOVERNMENT AUTHORITY. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. THE CONTRACTOR SHALL MEET ALL OF THE REGULATORY REQUIREMENTS OF THE JURISDICTION GOVERNING CONSTRUCTION.

1.11. SITE INSPECTION

MOTOROLA SHALL HAVE THE RESPONSIBILITY FOR ARRANGING WITH TOWN OF RIDGEFIELD FOR AN INSPECTION PRIOR TO COVERING UP ALL WORK THAT WILL BE COVERED IN FINISHED CONDITION. IT IS THE SITE GENERAL CONTRACTOR'S RESPONSIBILITY TO MANAGE THE SEQUENCE OF WORK AND REQUEST THE INSPECTIONS IN A TIMELY MANNER. THE SITE GENERAL CONTRACTOR SHALL NOT REQUEST AN INSPECTION UNLESS ALL OF THE RELATED WORK HAS BEEN COMPLETED. WORK SHALL NOT PROCEED TO THE NEXT STEP UNTIL THE PREVIOUS STEP HAS BEEN INSPECTED AND APPROVED BY THE LOCAL INSPECTORS, TOWN OF RIDGEFIELD, AND THE MOTOROLA REPRESENTATIVE. THE PRESENCE OF THE TOWN OF RIDGEFIELD OR MOTOROLA REPRESENTATIVE ON THE JOB SITE IN NO WAY RELIEVES THE SITE GENERAL CONTRACTOR OF THE ASSOCIATED RESPONSIBILITIES OF THE JOB. ANY WORK WHICH DOES NOT MEET THE REQUIREMENTS OF THE CONTRACT DOCUMENTS WILL BE CORRECTED OR REMOVED SOLELY AT THE SITE GENERAL CONTRACTOR'S EXPENSE.

THE FOLLOWING INFORMATION IS INCLUDED AS A GUIDE TO THE CONTRACTOR TO ASSIST IN DETERMINING THE TYPE AND FREQUENCY OF INSPECTIONS. THE LISTED INSPECTIONS REPRESENT THOSE REQUIRED FOR SMALL OR SIMPLE PROJECTS. LARGE OR COMPLEX PROJECTS MAY REQUIRE ADDITIONAL INSPECTIONS DEPENDING ON THE SEQUENCE OF WORK.

- * FOUNDATIONS EXCAVATION AND REBAR: TO BE MADE AFTER TRENCHES ARE EXCAVATED AND FORMS ERECTED, REINFORCEMENT PLACED, COMPACTION TESTED, SOIL TREATED, VAPOR BARRIER PLACED, AND ESSENTIALLY READY FOR CONCRETE PLACEMENT
- * GROUNDING: TO BE MADE AFTER THE BELOW GROUND CADWELD CONNECTIONS HAVE BEEN COMPLETED, PRIOR TO COVERING UP THE TRENCHES
- * ELECTRICAL WORK WITHIN WALLS: TO BE MADE AFTER THE ROOF, FRAMING, FIREBLOCKING AND BRACING IS IN PLACE PRIOR TO THE INSTALLATION OF INSULATION OR WALL/CEILING MEMBRANES.

AS A GENERAL RULE, THE CONTRACTOR SHALL PROVIDE ADVANCE NOTICE TO MOTOROLA FOR INSPECTION OF ALL WORK PRIOR TO CONCEALMENT. THE CONTRACTOR HAS RESPONSIBILITIES RELATIVE TO ALL TYPES OF INSPECTIONS AND IS RESPONSIBLE FOR CONTACTING ALL OF THE INSPECTING ENTITIES TO DETERMINE HIS RESPONSIBILITIES. ALL OF THESE INSPECTING ENTITIES HAVE UNIQUE AND SEPARATE RESPONSIBILITIES. ONE INSPECTION FROM AN ENTITY WILL NOT SUBSTITUTE FOR AN INSPECTION FROM ANOTHER ENTITY.

1.12. SAFETY

THE CONTRACTOR, HIS EMPLOYEES, ANY SUB-CONTRACTORS, VENDORS, THEIR RESPECTIVE EMPLOYEES AND CONTRACTOR'S VISITORS SHALL COMPLY WITH ALL SAFETY STANDARDS, ACCIDENT PREVENTION REGULATIONS AND ENVIRONMENTAL REGULATIONS PROMULGATED BY FEDERAL, STATE OR LOCAL AUTHORITIES HAVING JURISDICTION AND SHALL AT ALL TIMES CONDUCT ALL OPERATIONS UNDER THE CONTRACT IN A MANNER TO AVOID THE RISK OF BODILY HARM TO ANY PERSONS AND THE RISK OF DAMAGE TO ANY PROPERTY, EQUIPMENT OR MATERIAL. SUCH PARTIES SHALL ALSO COMPLY WITH ANY SAFETY PROGRAMS AND/OR RULES PROMULGATED BY OWNER AND/OR MOTOROLA.

1.13. ELECTRO MAGNETIC EMISSIONS

THE CONTRACTOR SHALL ACKNOWLEDGE ALL OR PORTIONS OF THE WORK MAY INVOLVE POSSIBLE EXPOSURE OF CONTRACTOR, SUB-CONTRACTORS, AND THEIR RESPECTIVE EMPLOYEES, AGENTS, INVITEES, LICENSEES AND OTHER VISITORS TO THE JOBSITE AND/OR MOTOROLA PREMISES TO ELECTRO-MAGNETIC ENERGY ("EME") WHILE PERFORMING WORK UNDER THIS CONTRACT, ESPECIALLY IF WORK IS PERFORMED ON EXISTING ANTENNA TOWERS OR BUILDING TOPS WHERE ANTENNAS ARE LOCATED. THE CONTRACTOR REPRESENTS THAT CONTRACTOR, SUBCONTRACTORS, AND ALL OF THEIR RESPECTIVE EMPLOYEES, AGENTS, INVITEES, LICENSEES, AND OTHER AUTHORIZED REPRESENTATIVES WHO ARE PERFORMING SERVICES UNDER THIS AGREEMENT WILL COMPLY WITH ALL ANSI AND ANY OTHER APPLICABLE EME STANDARDS, RULES OR REGULATIONS, INCLUDING, BUT NOT LIMITED TO THOSE RULES OR REGULATIONS IMPOSED OR SUGGESTED BY MOTOROLA, IF ANY.

THE CONTRACTOR SHALL ADHERE TO ALL OSHA RULES, REGULATIONS AND ADOPTED POLICIES. ALL CONTRACTOR PERSONNEL SHALL HAVE UNDERGONE ELECTROMAGNETIC ENERGY (EME) TRAINING FOR PERSONNEL WORKING IN THE VICINITY OF ACTIVE ANTENNAS. AS SUCH IT IS RECOMMENDED THAT RF MONITORS BE USED BY THE TOWER PERSONNEL TO MONITOR EXPOSURE LEVELS. IF EME LEVELS AT THE SITE EXCEED THE MAXIMUM PERMISSIBLE EXPOSURE LIMITS, THE CONTRACTOR SHALL COORDINATE WITH THE INDIVIDUALS RESPONSIBLE FOR USE OF THE TRANSMITTER TO MAKE SURE THAT THE EQUIPMENT IS DEACTIVATED BEFORE WORK CAN BE RESUMED, WITHOUT CAUSING A SERIOUS DISRUPTION OF THE SERVICE.

1.14. SITE CLEANUP

THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, VEGETATION, AND RUBBISH, AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. WHENEVER THE WORK-SITE IS LEFT UNATTENDED, THE CONTRACTOR SHALL BLOCK THE OPENING WITH WARNING TAPE TO DISCOURAGE TRESPASSING. THE PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE AT THE CONCLUSION OF SITE WORK.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LANDSCAPE GRADING AND SEEDING OF THE DISTURBED SOIL. THE CONTRACTOR SHALL USE LOCAL GRASS SEED TO STABILIZE SOIL AND SHALL COVER DISTURBED AREAS WITH HAY MULCH TO REDUCE RUNOFF OF SEDIMENT TO DOWNSTREAM AREAS. THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION. ALL SLOPES AND DISTURBED AREAS NOT RECEIVING AGGREGATE SURFACING ARE TO BE PREPARED AND BROADCAST SEEDS AND FERTILIZED FOR EROSION PROTECTION. SEEDING FOR AREAS DISTURBED SHALL BE ESTABLISHED SEASONALLY AS REQUIRED BY LOCAL CODES.

THE CONTRACTOR SHALL EXERCISE ALL CARE TO AVOID DAMAGE OR INTERRUPTION OF EXISTING UNDERGROUND OR OVERHEAD ELECTRIC SERVICES, UNDERGROUND GROUNDING AND FUEL LINES, EQUIPMENT AND BUILDINGS ON THE SITE, PLUS OFF SITE SERVICES, BURIED OR OVERHEAD, SURROUNDING THE EXISTING OR EXPANDED COMPOUND. ANY PROPERTY DAMAGE CAUSED BY THE CONTRACTOR OR HIS OPERATIONS SHALL BE CORRECTED AND/OR RESTORED TO THE SATISFACTION OF THE PROPERTY OWNER(S) AND MOTOROLA AT NO ADDITIONAL COST TO THE PROPERTY OWNER OR MOTOROLA.

BURNING WILL NOT BE PERMITTED.

1.15. FACILITY STARTUP & COMMISSIONING

THE CONTRACTOR AND/OR SUB-CONTRACTORS SHALL DEMONSTRATE TO MOTOROLA THAT ALL SYSTEMS AND SUB-SYSTEMS INSTALLED UNDER THIS CONTRACT, OPERATE PROPERLY PRIOR TO THE FINAL ACCEPTANCE INSPECTION. PROVIDE THE OPERATIONS AND MAINTENANCE MANUALS AT THIS TIME.

1.16. AS-BUILT DRAWINGS

THE CONTRACTOR SHALL KEEP UP-TO-DATE MARKED-UP PRINTS OF THE PROJECT DRAWINGS. UPON COMPLETION OF WORK AT THE SITE, THE CONTRACTOR SHALL REVIEW THE COMPLETED AS-BUILT DRAWINGS, AND ASCERTAIN THAT ALL DATA FURNISHED ON THE DRAWINGS IS ACCURATE AND TRULY REPRESENTS THE WORK AS ACTUALLY INSTALLED. MARKINGS INDICATING CHANGES TO THE DRAWINGS SHALL BE RED OR GREEN AND CLEARLY VISIBLE. TWO (2) SETS OF "AS-BUILT" DRAWINGS SHALL BE FURNISHED TO THE MOTOROLA REPRESENTATIVE WITHIN 5 DAYS OF THE COMPLETION OF THE PROJECT. THESE DRAWINGS SHALL ALSO SHOW THE FOLLOWING:

- * MODIFICATIONS TO SITE LAYOUT.
- * GROUNDING SYSTEM LAYOUT.
- * UNDERGROUND ELECTRICAL RUN.

WHERE THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE SITE EQUIPMENT (SHELTER, ISOLATION TRANSFORMER, ETC.) THAT REQUIRES PERIODIC MAINTENANCE, THE CONTRACTOR SHALL INCLUDE ALL OPERATION AND MAINTENANCE MANUALS AND ALL AS-BUILT DRAWINGS WHICH FULLY DESCRIBE THE ACTUAL INSTALLED EQUIPMENT.

1.17. TEST PROCEDURES AND RESULTS

CONTRACTOR WILL CONTRACT WITH A THIRD PARTY "INDEPENDENT" TESTING FIRM TO PERFORM & SUBMIT THE RESULTS OF ALL TESTS REQUIRED BY THE PROJECT SPECIFICATIONS AND DRAWINGS THAT FALL WITHIN THE SCOPE OF WORK. THESE RESULTS SHALL BE SUBMITTED TO THE DESIGNATED CT STATE POLICE REPRESENTATIVE WITHIN FIVE (5) DAYS OF THE TEST. MOTOROLA IS REQUIRED TO SUBMIT TEST PROCEDURES NINETY (90) DAYS PRIOR TO THE TESTS BEING CONDUCTED. IN GENERAL, THE "INDEPENDENT" TESTING FIRM SHALL SUBMIT THE FOLLOWING TEST RESULTS:

- * CONCRETE COMPRESSION TEST FOR ALL CONCRETE WORK.
- * TIME DOMAIN REFLECTOMETER (TDR) / SWEEP TEST FOR ANTENNA AND TRANSMISSION LINE INSTALLATION WORK.
- * FUEL LINE LEAKAGE TEST FOR FUEL TANK AND PIPING INSTALLATION WORK.
- * SLUMP TEST FOR CONCRETE WORK.
- * GROUNDING RESISTANCE TEST FOR GROUNDING WORK.
- * ANY OTHER TEST THAT MAY BE REQUIRED.

1.18. CONTRACT CLOSEDOUT

THE MOTOROLA REPRESENTATIVE WILL PROVIDE A CERTIFICATE OF COMPLETION AND APPROVE FINAL PAYMENT WHEN ALL PUNCH-LIST ITEMS HAVE BEEN CORRECTED AND ALL SYSTEMS ARE ACCEPTABLE. AFTER FINAL PAYMENT, CONTRACTOR WILL SIGN A RELEASE OF LIEN.

1.19. WARRANTY

ALL WORK PERFORMED BY THE CONTRACTOR IN COMPLETING THE SCOPE IDENTIFIED ON THE DRAWINGS SHALL BE GUARANTEED BY THE CONTRACTOR FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL COMPLETION OF THE PROJECT. THIS GUARANTEE SHALL COVER ALL MATERIALS, EQUIPMENT OR WORKMANSHIP WHICH IN THE OPINION OF MOTOROLA IS RENDERED DEFECTIVE OR INFERIOR OR NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT DURING THE GUARANTEE PERIOD. IF, WITHIN THE GUARANTEE PERIOD, REPAIRS OR CHANGES ARE REQUIRED TO CORRECT THE GUARANTEE WORK, THEN UPON RECEIPT OF NOTICE, THE CONTRACTOR SHALL PROMPTLY AND WITHOUT EXPENSE TO MOTOROLA OR THE COUNTY, PROCEED TO:

- * PLACE IN SATISFACTORY CONDITION ALL OF SUCH GUARANTEED WORK AND CORRECT ALL DEFECTS THEREIN.
- * MAKE GOOD ALL DAMAGES TO THE STRUCTURE OR SITE OR EQUIPMENT OR CONTENTS THEREOF, WHICH, IN THE OPINION OF THE MOTOROLA, IS THE RESULT OF THE USE OF MATERIALS, EQUIPMENT, OR WORKMANSHIP WHICH ARE INFERIOR, DEFECTIVE, OR NOT IN ACCORDANCE WITH THE TERMS OF THE CONTRACT;
- * MAKE GOOD ANY WORK, MATERIALS OR EQUIPMENT, AND ADJACENT STRUCTURES DISTURBED IN FULFILLING THE GUARANTEE.

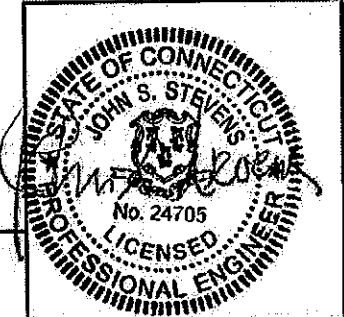
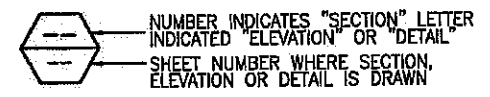
1.20. RELATED DOCUMENTS

CONTRACTOR SHALL BECOME FAMILIAR WITH THE INFORMATION AND REQUIREMENTS CONTAINED IN THE FOLLOWING DOCUMENTS RELATED TO THE PROJECT:

- A. TOWER AND TOWER FOUNDATION DRAWINGS BY THE MANUFACTURER OR TOWER MAPPING REPORT FURNISHED BY THE TOWER'S OWNER
- B. R-56 STANDARDS AND GUIDELINES FOR COMMUNICATIONS SITES BY MOTOROLA.
- C. ALL OTHER PERTINENT DOCUMENTS

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.

EXISTING	LEGEND	PROPOSED
	UTILITY POLE	⚡
	TREE	VARIES
	UTILITY POLE GUY WIRE	⚡---
	FENCE LINE	---x---
	SILT FENCE	---x-x-x---
	BUILDING LINE	///////
	GROUNDING LINE	⊗---⊗
	GROUND ROD	⊗
	GROUND TEST WELL	⊗
	UNDERGROUND ELEC. LINE	---E---
	UNDERGROUND TELE. LINE	---T---
	UNDERGROUND GAS LINE	---GAS---



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A	11/10/15	ISSUED FOR INITIAL REVIEW	JLM	ASW	ASW

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infinigy.com 419-006

MOTOROLA SOLUTIONS

PYRAMID
Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

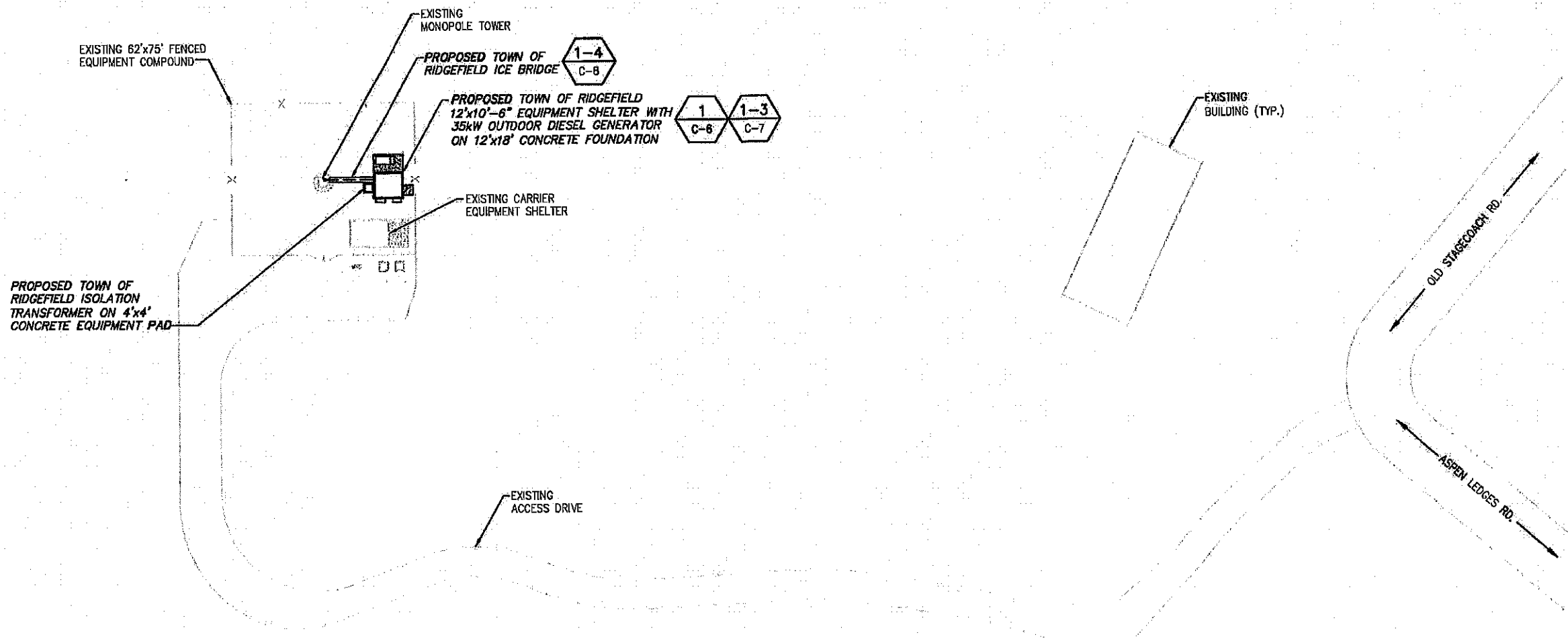
GENERAL NOTES AND LEGEND

RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

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IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



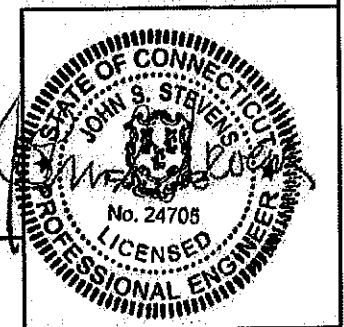
THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES & BUILDING MANAGEMENT OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES & BUILDING MANAGEMENT DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION, BUILDING MANAGEMENT, & THE ENGINEER.

BASEMAPPING PREPARED FROM INFORMATION OBTAINED FROM A SITE VISIT BY INFINIGY ENGINEERING ON 7/1/15 AND INFORMATION PROVIDED FROM PYRAMID NETWORK SERVICES AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.

 **OVERALL SITE PLAN**
SCALE: AS NOTED

GRAPHIC SCALE
50' 25' 0 25' 50'
SCALE (11x17): 1" = 50'-0"
SCALE (22x34): 1" = 25'-0"



NO.	DATE	REVISIONS	BY	CHK	APP'D
C	3/7/16	REVISED PER COMMENTS	JLM	ASW	ASW
B	1/22/16	REVISED PER COMMENTS	JLM	ASW	ASW
A	11/10/15	ISSUED FOR INITIAL REVIEW	JLM	ASW	ASW

INFINIGY
1033 Waterbury Shaker Rd
Albany, NY 12205
Office: (518) 690-0700
Fax: (518) 690-0753
INFINIGY JOB#: 418-005

 **MOTOROLA SOLUTIONS**

 **PYRAMID**
Network Services, LLC

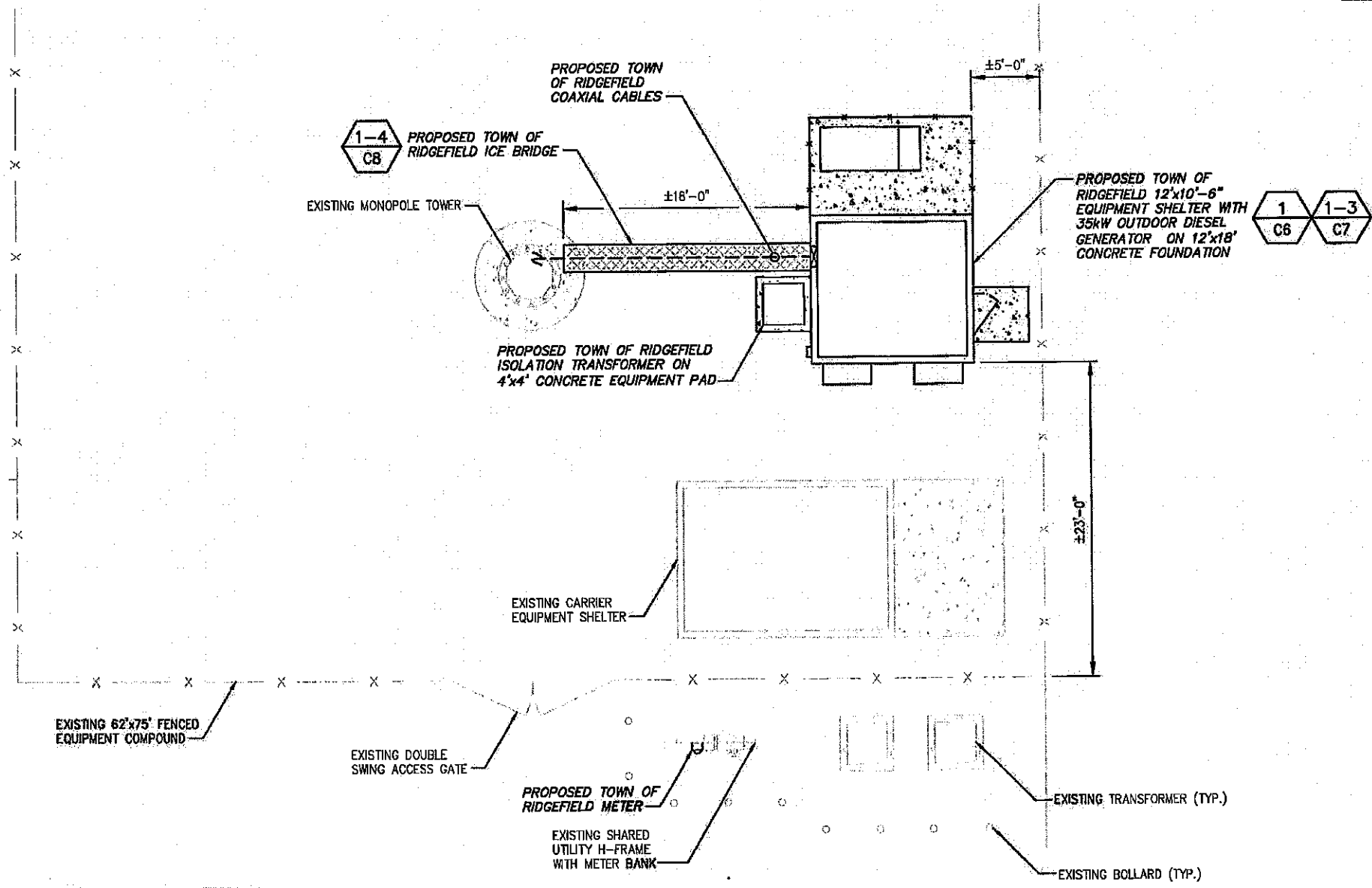
**TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK**

OVERALL SITE PLAN
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

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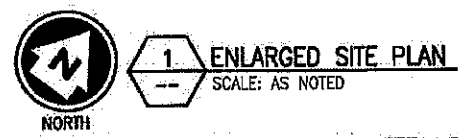
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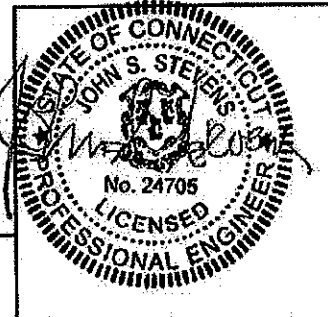


BASEMAPPING PREPARED FROM INFORMATION OBTAINED FROM A SITE VISIT BY INFINIGY ENGINEERING ON 7/1/15 AND INFORMATION PROVIDED FROM PYRAMID NETWORK SERVICES AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



GRAPHIC SCALE
 10' 5' 0 5' 10'
 SCALE (11x17): 1" = 10'-0"
 SCALE (22x34): 1" = 5'-0"



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INFINIGY
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 Albany, NY 12205
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 INFINGY JOB# 419-003

MOTOROLA SOLUTIONS

PYRAMID
 Network Services, LLC

TOWN OF RIDGEFIELD
 PUBLIC SAFETY
 COMMUNICATIONS NETWORK

ENLARGED SITE PLAN
 RIDGEFIELD LEDGE
 OLD STAGECOACH RD. & ASPEN LEDGES RD.
 RIDGEFIELD, CT 06877

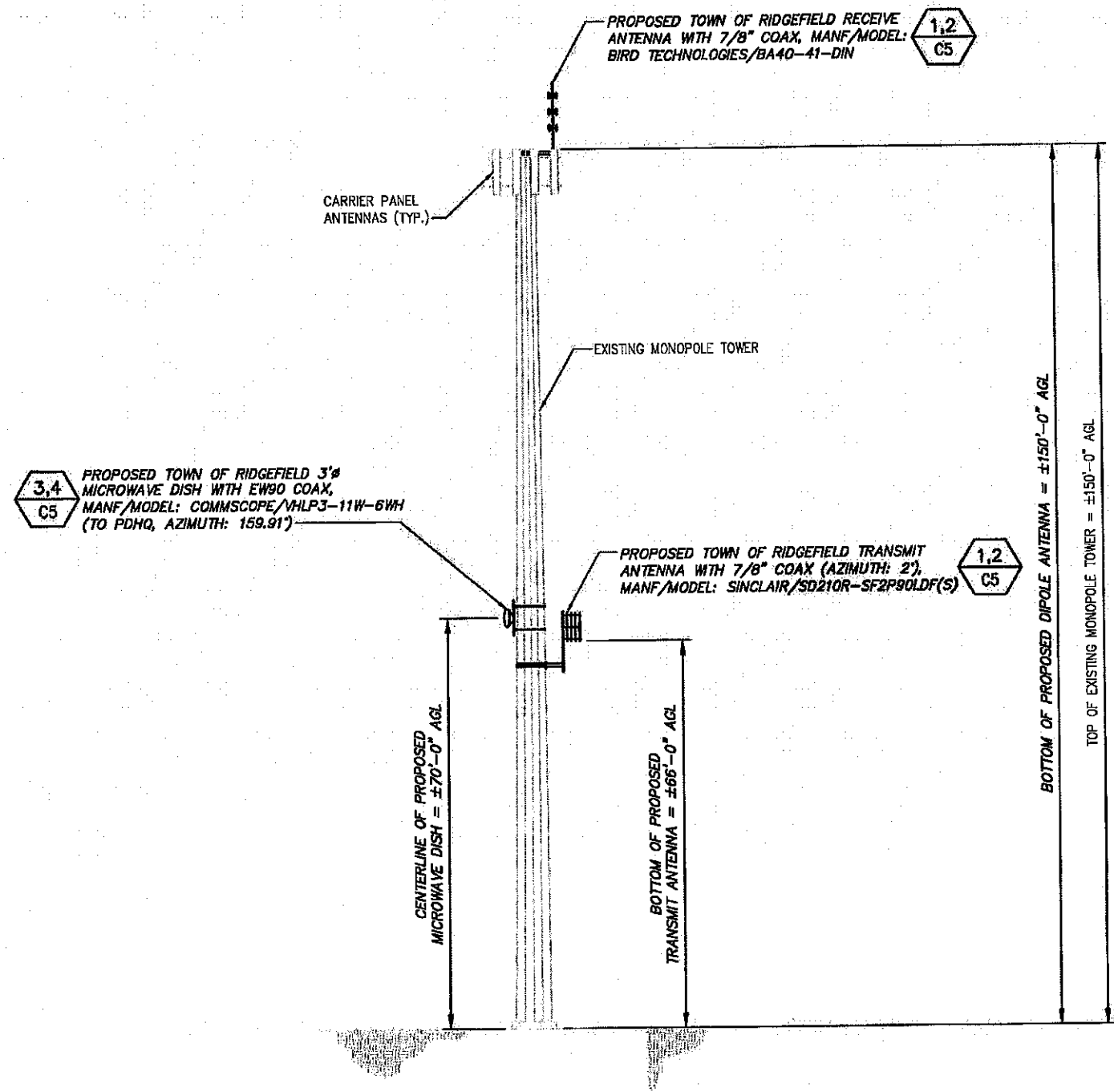
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STRUCTURAL ANALYSIS TO BE COMPLETED PRIOR TO INSTALLATION. INFINIGY HAS NOT EVALUATED THE EXISTING AND PROPOSED LOADING CONDITIONS.

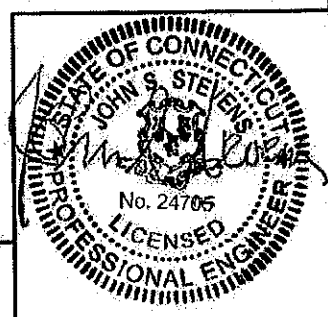
GENERAL NOTES:

- ALL VERTICAL TRANSMISSION LINE RUNS FROM THE ANTENNAS SHALL BE GROUNDED AT THE AGB AND AT THE COLLECTOR GROUND BAR (BEFORE THE CABLE MAKES HORIZONTAL TRANSITION IN THE BUILDING). ADDITIONAL TRANSMISSION LINE GROUND KITS SHALL BE INSTALLED AS NEEDED TO LIMIT THE DISTANCE BETWEEN GROUND KITS IN ACCORDANCE WITH R-56 STANDARDS. ANY NEW OR EXISTING TOWER MOUNTED GROUND BARS ARE TO BE INSTALLED DIRECTLY TO THE TOWER, NO INSULATORS.
- THE CONTRACTOR SHALL CONDUCT A TDR SWEEP TEST ON ALL THE NEWLY INSTALLED TRANSMISSION LINES TO DETERMINE THE CABLE CONDUCTOR RESISTANCE, CABLE INSERTION LOSS, REFLECTION AND STIMULUS RESPONSE MEASUREMENTS.
- DRIP LOOPS SHALL BE INCORPORATED IN CABLE RUNS TO PREVENT WATER FROM TRICKLING DOWN THE LINES INTO THE BUILDING.
- ALL TRANSMISSION LINES SHALL BE MARKED WITH APPROPRIATE COLOR TAPE BANDS (ONE INCH WIDE COLOR TAPE) FOR IDENTIFICATION NEAR THE ANTENNA, JUST BEFORE ENTERING THE BUILDING AS WELL AS INSIDE THE BUILDING, BEFORE CONNECTING TO THE SURGE SUPPRESSORS.
- FIELD VERIFY MOUNTING HARDWARE OF ANTENNAS AND STAND-OFF BRACKETS. COORDINATE MAXIMUM SPACING BETWEEN ANTENNAS WITH MOTOROLA RF ENGINEER.
- CONTRACTOR TO CONFIRM ANTENNA TYPES, COAX LENGTHS, AZIMUTHS AND HEIGHTS WITH FINAL RF INFORMATION.



1 TOWER ELEVATION
NOT TO SCALE

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



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INFINIGY JOB#: 418-008

MOTOROLA SOLUTIONS

PYRAMID
Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

TOWER ELEVATION
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

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VHF Omnidirectional Dipole Arrays
138-174 MHz
Heavy Array Series

These heavy-duty VHF omnidirectional dipole arrays are for use in high capacity mobile radio systems. They are designed for use in mobile radio systems where high capacity and reliability are required. The arrays are designed for use in mobile radio systems where high capacity and reliability are required. The arrays are designed for use in mobile radio systems where high capacity and reliability are required.

Each of the dipole elements in the array is mounted on a heavy-duty stainless steel support structure. The dipole elements are made of high conductivity material and are designed for use in mobile radio systems where high capacity and reliability are required.

- Features:**
- 30° beam directional pattern
 - Available in 138-174 MHz or 144-148 MHz frequency adjustment
 - Heavy-duty mounting arm for use in mobile radio systems where high capacity and reliability are required
 - Available in 138-174 MHz or 144-148 MHz frequency adjustment
 - Available in 138-174 MHz or 144-148 MHz frequency adjustment

Model	Frequency Range (MHz)	Beamwidth (°)	Gain (dB)
138-174 MHz	138-174	30	2.0
144-148 MHz	144-148	30	2.0

1. The antenna is designed for use in mobile radio systems where high capacity and reliability are required. The antenna is designed for use in mobile radio systems where high capacity and reliability are required.

SINCLAIR
Superior then, Superior now.
A Motorola Company

Antennas
Low Band, Aviation, and VHF Antennas
SDATOR-L - PIM Certified Series

SECTION 0-FP-0013 (P) Low PIM VHF reflector, 92" diameter, 138-174 MHz

- 90 degree horizontal beamwidth for 10-20 dB gain
- 100% PIM certified
- 100% PIM certified
- 100% PIM certified

The SDATOR-L is a low PIM VHF reflector antenna with a 90 degree horizontal beamwidth. It is designed for use in mobile radio systems where high capacity and reliability are required. The antenna is designed for use in mobile radio systems where high capacity and reliability are required.

Each of the dipole elements in the array is mounted on a heavy-duty stainless steel support structure. The dipole elements are made of high conductivity material and are designed for use in mobile radio systems where high capacity and reliability are required.

The antenna is designed for use in mobile radio systems where high capacity and reliability are required. The antenna is designed for use in mobile radio systems where high capacity and reliability are required.

Application Notes:

- Mount on a heavy-duty support structure
- Mount on a heavy-duty support structure
- Mount on a heavy-duty support structure

Mechanical Specifications:

- Diameter: 92"
- Height: 100"
- Weight: 100 lbs
- Material: Aluminum
- Finish: Powder Coat

Electrical Specifications:

- Frequency Range: 138-174 MHz
- Beamwidth: 90°
- Gain: 10-20 dB
- PIM: 100% Certified

Environmental Specifications:

- Operating Temperature: -40°C to 70°C
- Storage Temperature: -55°C to 125°C
- Humidity: 5% to 95%

Mounting Dimensions:

- Mounting Hole Diameter: 1/2"
- Mounting Hole Spacing: 12"

Weight and Dimensions:

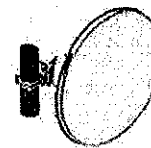
- Weight: 100 lbs
- Diameter: 92"
- Height: 100"

Notes:

- All dimensions are in inches unless otherwise specified.
- All dimensions are in inches unless otherwise specified.
- All dimensions are in inches unless otherwise specified.

Product Specifications

COMMSCOPE



VHF3-11W6WH/A
1.0 m | 8.0 W High Performance Low Profile Antenna, single polarized, 138-174 MHz, 30° beamwidth, white antenna, composite braided gray radome, stainless steel, standard pole-mountable reflector

General Specifications

Antenna Type: VHF3 - Va Ultra High Performance Low Profile Antenna, single-polarized
Elementary Pattern: 1.0 m | 8.0 W
Package: Standard pack
Color: Gray
Composite Braided: Composite braided
One-piece Reflector: One-piece reflector
Material: COMSCO
Antenna Color: White
Antenna Type: VHF3 - Va Ultra High Performance Low Profile Antenna, single-polarized
Elementary Pattern: 1.0 m | 8.0 W
Beamwidth: 30°
Gain: 10

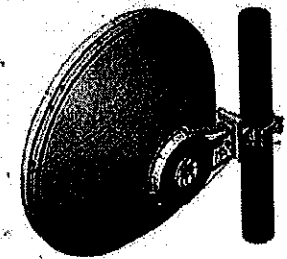
Electrical Specifications

Operating Frequency Band: 10.125 - 11.700 GHz
Beamwidth, Horizontal: 30°
Beamwidth, Vertical: 30°
Gain: 10 dB
Front-to-Back Ratio: 20 dB
Gain, Low Band: 20 dB
Gain, Mid Band: 20 dB
Gain, High Band: 20 dB
Operating Frequency Band: 10.125 - 11.700 GHz
Radome Material: Composite Braided
Radome Color: Gray
Radome Type: VHF3

Mechanical Specifications

Antenna Adjustment: 415°
Feed Extension Adjustment: 815°
Mounting Pole Diameter: 90 mm - 120 mm | 3.5 in - 4.7 in
Net Weight: 17 kg | 37 lb
Site Service: 1 to 1000

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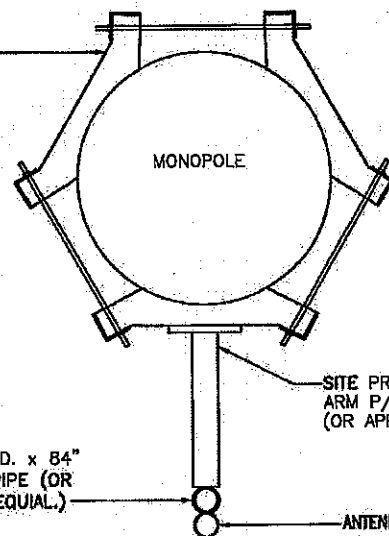


Antenna Size (mm)	A	B	C	D	E
1015	20	100	150	200	250

1 DIPOLE ANTENNA SPECIFICATIONS
NOT TO SCALE

SITE PRO 1 UNIVERSAL RING MOUNT (OR APPROVED EQUAL)

PART #	POLE DIA.
LWRM	12"-45"
UGLM	10.5"-28"



SITE PRO 1 SUPPORT ARM P/N: SV197-36 (OR APPROVED EQUAL)

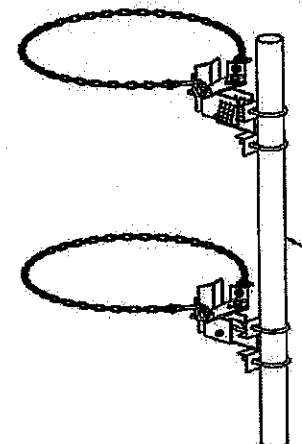
2-3/8" O.D. x 84" MOUNTING PIPE (OR APPROVED EQUAL)

ANTENNA (TYP.)

2 DIPOLE ANTENNA MOUNTING DETAIL
NOT TO SCALE

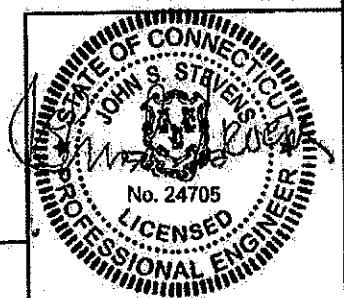
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3 MICROWAVE DISH SPECIFICATIONS
NOT TO SCALE



SITE PRO 1 ADJUSTABLE CHAIN MOUNT P/N: TCHM1 (OR APPROVED EQUAL)

4 MICROWAVE DISH MOUNTING DETAIL
NOT TO SCALE



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INFINIGY
1033 Waterfall St. Albany, NY 12206
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MOTOROLA SOLUTIONS

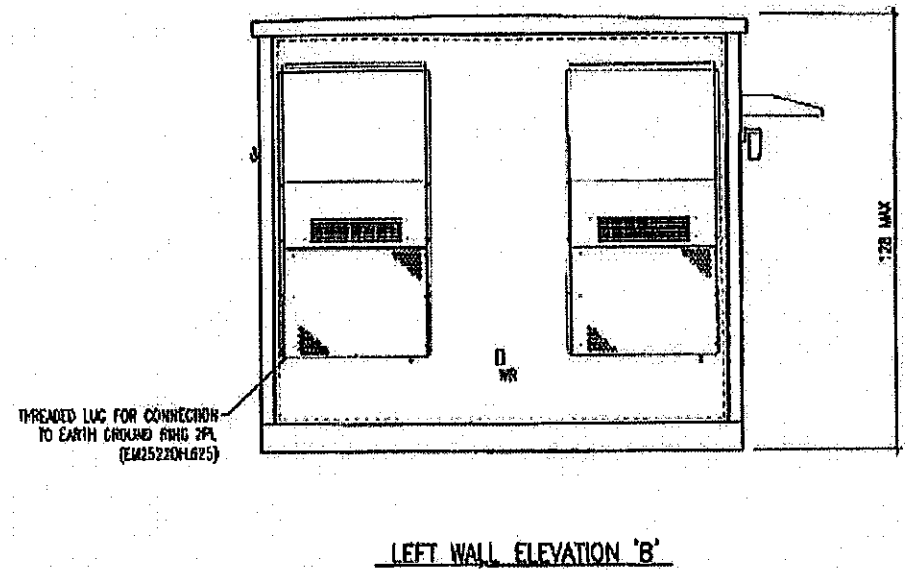
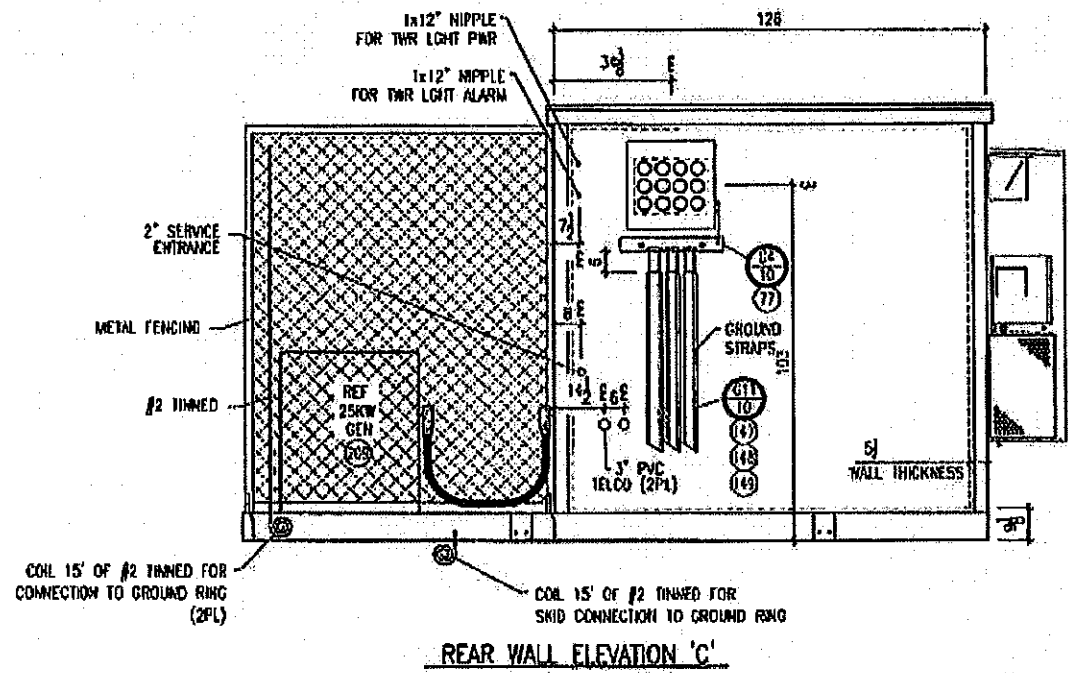
PYRAMID
Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

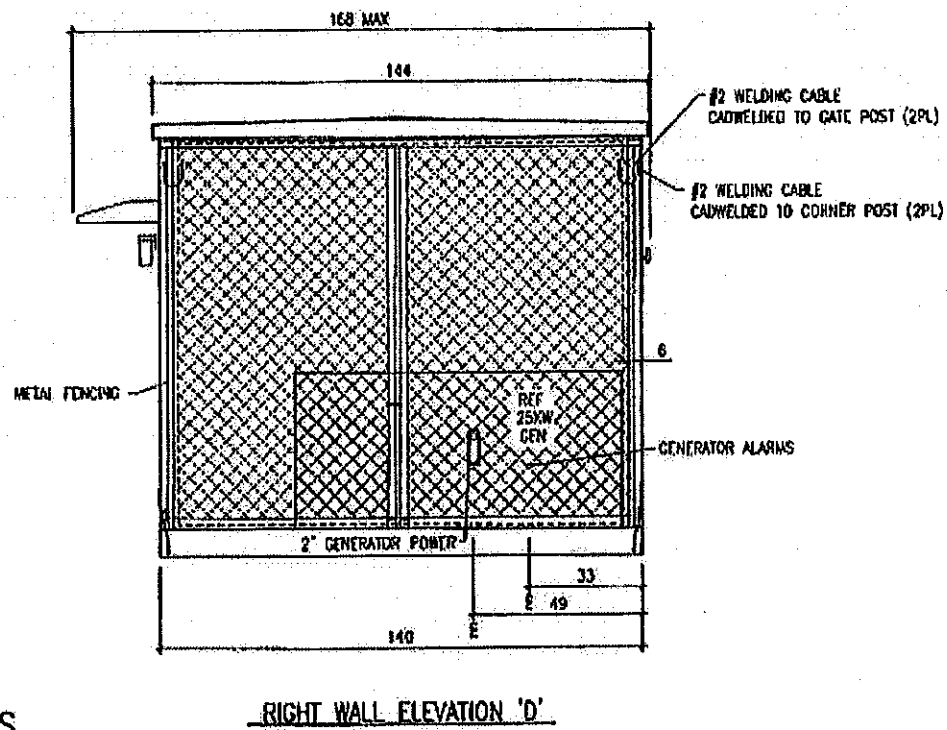
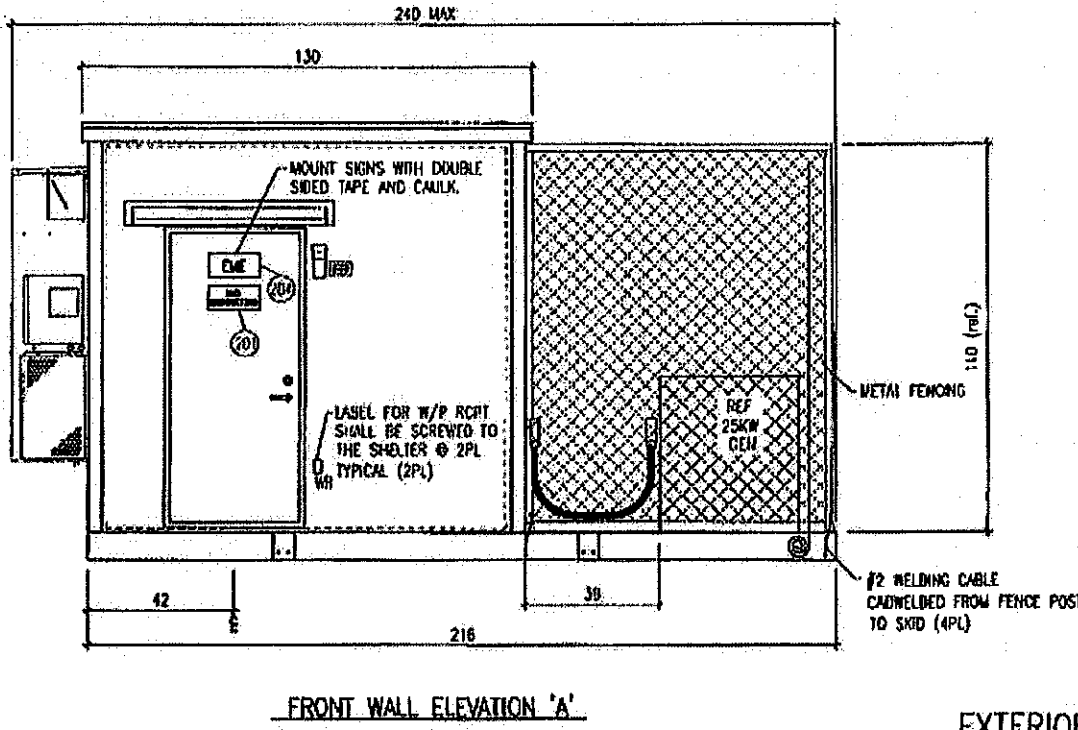
ANTENNA SPECS & MOUNTING DETAILS
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

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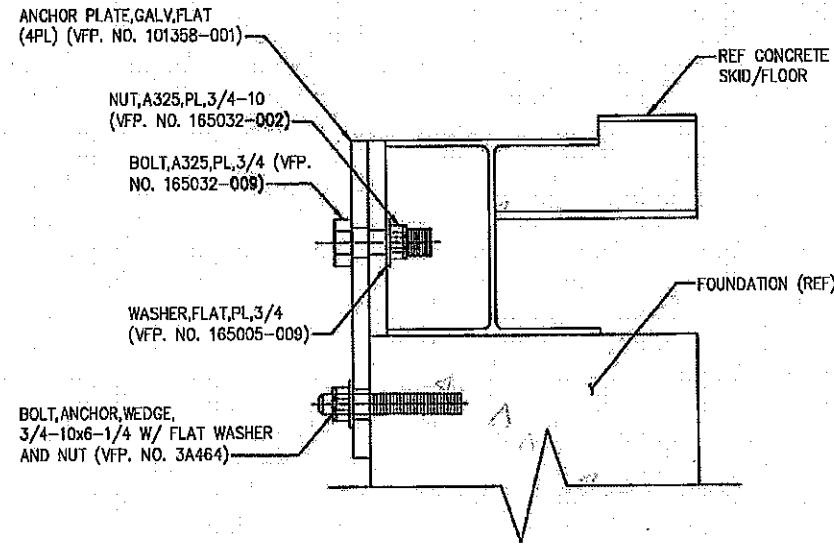
NOTE: INFORMATION CONTAINED IN THESE DRAWINGS REFERRING TO THE PROPOSED TOWN OF RIDGEFIELD EQUIPMENT SHELTER WERE OBTAINED FROM STANDARD EQUIPMENT SHELTER DRAWINGS PROVIDED BY PYRAMID AND PRODUCED BY VFP, INC. THE SHELTER MANUFACTURER. THE INFORMATION CONTAINED IN THESE PLANS SHOULD BE CONSIDERED AS A GUIDE AND CONTRACTOR IS SPECIFICALLY DIRECTED TO OBTAIN AND USE THE VFP INCORPORATED PLANS PROVIDED BY PYRAMID SPECIFIC TO THIS SITE.



EXTERIOR ELEVATIONS
DIMENSIONS SHOWN ARE FOR REFERENCE ONLY.
1 SHELTER DETAILS
NOT TO SCALE

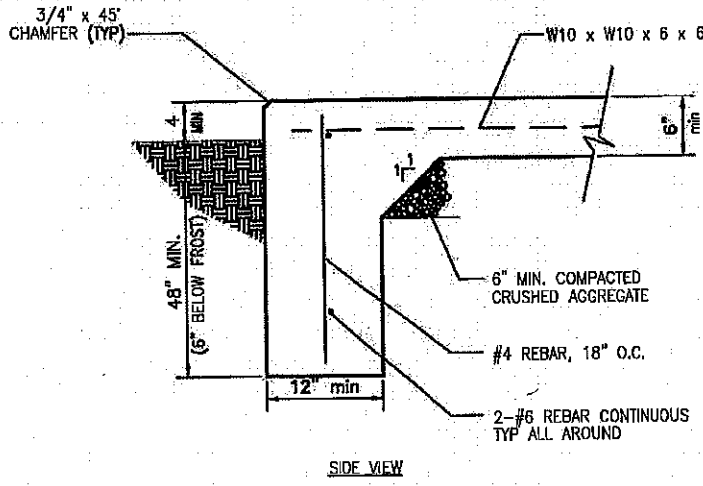
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 1033 Watervliet Shaker Rd Albany, NY 12205 Office # (518) 892-0100 Fax # (518) 892-0103 info@inigy.com 419-000			TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK	SHELTER DETAILS		C6	
				RIDGEFIELD LEDGE	OLD STAGECOACH RD. & ASPEN LEDGES RD. RIDGEFIELD, CT 06877		

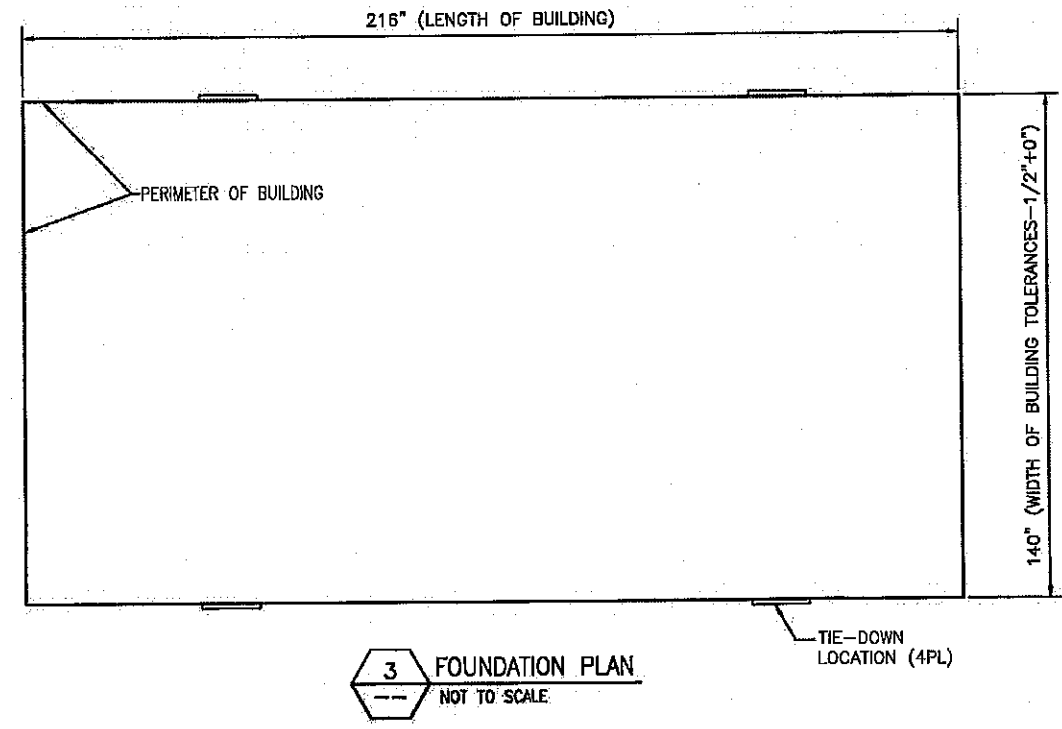


1 SHALTER CONNECTION DETAIL
NOT TO SCALE

NOTE:
THE MINIMUM FROST PROTECTION DEPTH IS 42" IN ALL MUNICIPALITIES IN THE STATE OF CONNECTICUT (IBC SECTION 1805.2.1; IRC TABLE 301.2(1)).



2 SHALTER SECTION
NOT TO SCALE



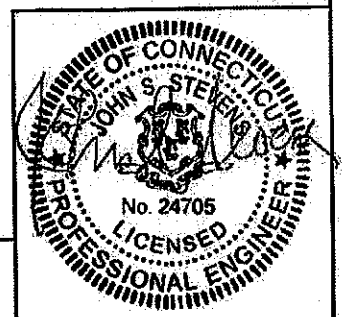
3 FOUNDATION PLAN
NOT TO SCALE

SHALTER FOUNDATION NOTES

- TOPS OF THE CONCRETE FOUNDATION SHALL BE WITHIN 0.02" PER FOOT OF THE PROPOSED ELEVATION.
- DISTANCES MEASURED BETWEEN OPPOSITE CORNERS SHALL DIFFER NO MORE THAN 1/4".
- FOR BUILDING LOADS, TABLE ON SHALTER DRAWINGS.
- ALL FOOTING EXCAVATIONS SHALL BE CLEAN AND FREE OF DEBRIS, STANDING WATER AND LOOSE SOIL AND BE INSPECTED AND APPROVED BY MOTOROLA'S REPRESENTATIVE PRIOR TO PLACEMENT OF CONCRETE. SOIL BEARING CAPACITY SHALL NOT BE LESS THAN 2000 PSF.
- BACKFILL AGAINST GRADE WALLS SHALL BE EVEN ON ALL SIDES.
- CONTRACTORS ARE ADVISED TO BECOME FAMILIAR WITH THE FOUNDATION ENGINEERING REPORT.
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY MOTOROLA'S REPRESENTATIVE OF ANY DISCREPANCY IMMEDIATELY.
- COORDINATE THIS DRAWING WITH ALL OTHER DRAWINGS FOR BLOCK CUTS, ELECTRICAL REQUIREMENTS AND BUILDING ANCHOR BOLT ATTACHMENTS.
- ALL SUBTERRANEAN STRUCTURES, UTILITIES, PIPING, ETC. IN THE AREA OF ALL EXCAVATIONS TO BE LOCATED AND MARKED BY THE CONTRACTOR PRIOR TO EARTH REMOVAL WORK. PIN FLAGS OR PAINT ARE ACCEPTABLE METHODS. CONTRACTOR TO MAINTAIN MARKERS UNTIL ALL EXCAVATION ACTIVITIES HAVE CEASED. COORDINATE WITH MOTOROLA.
- ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 P.S.I. W/ AN AIR CONTENT OF 3% TO 6%, AND SLUMP < 4 INCHES.
- ALL REINFORCEMENT BARS SHALL CONFORM TO ASTM-A615-81a, GRADE 60.
- ALL REINFORCEMENT BARS SHALL BE FABRICATED IN ACCORDANCE WITH THE 1986 CRSI MANUAL OF STANDARD PRACTICE AND SHALL BE CLEAN AND FREE OF GREASE AND SCALING RUST. WELDING OF REBAR IS NOT PERMITTED.
- ALL CONCRETE WORK SHALL CONFORM TO: ACI 318-99, STANDARD BUILDING CODE FOR REINFORCED CONCRETE AND ACI 301, SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS.
- ALL SECTIONS, DETAILS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.
- SLABS AND STOOPS SHALL RECEIVE A BRUSH FINISH. INSTALL STOOPS AFTER SHELTERS ARE SET.
- TIE DOWN PLATES MUST BE ENTIRELY ABOVE GRADE.
- SHELTER MUST BE SHIMMED TO LEVEL. SHIM HARDNESS NOT LESS THAN 60 DUROMETER OR COMPRESSIVE STRENGTH 9,000 PSI, MIN. SHIMS 3" SQUARE MIN.
- PROVIDE PROPER DRAINAGE AWAY FROM FOUNDATION AT GRADE.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.

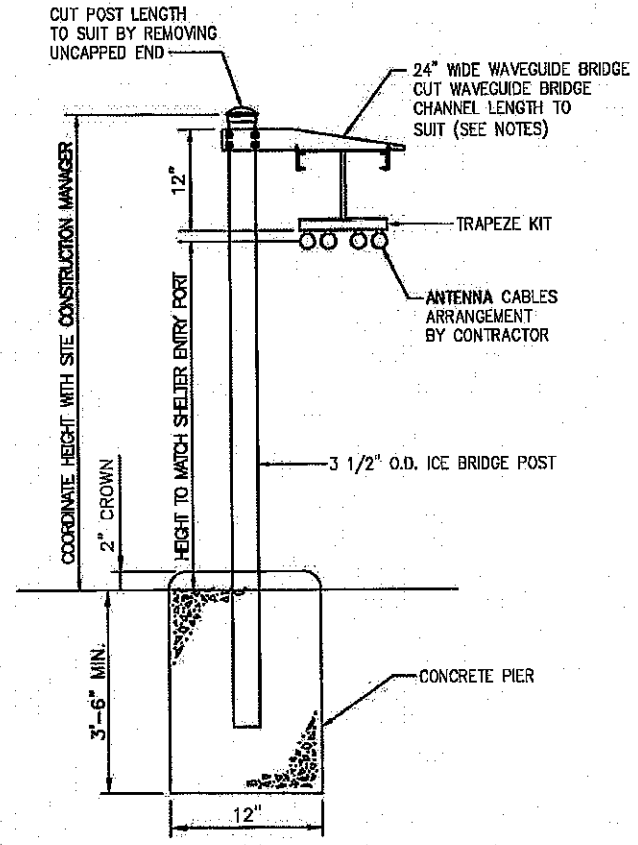
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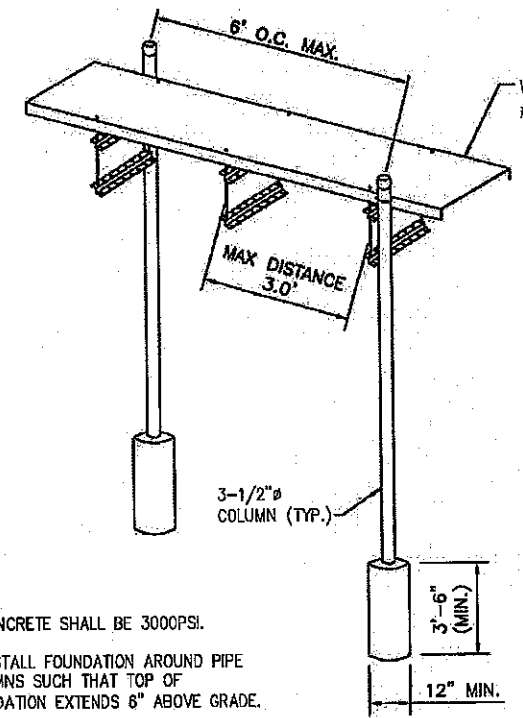
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				RIDGEFIELD LEDGE OLD STAGECOACH RD. & ASPEN LEDGES RD. RIDGEFIELD, CT 06877		

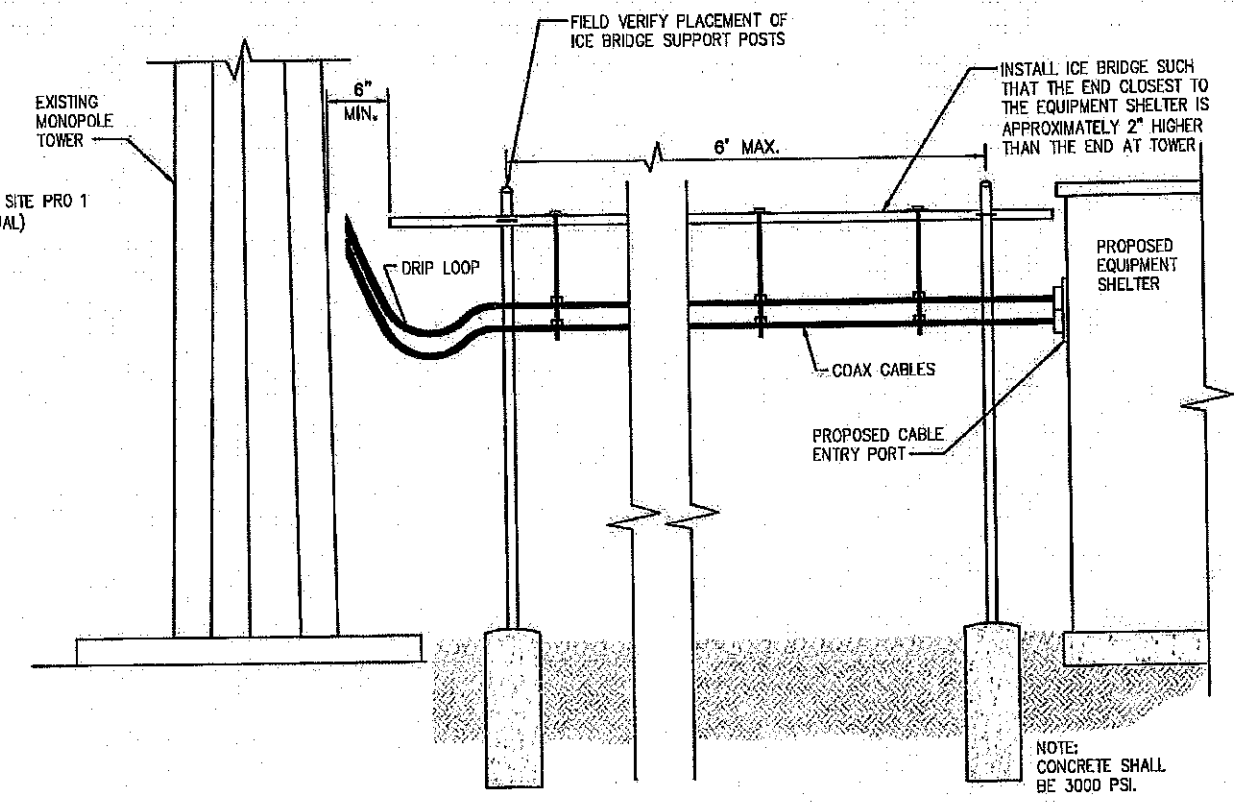
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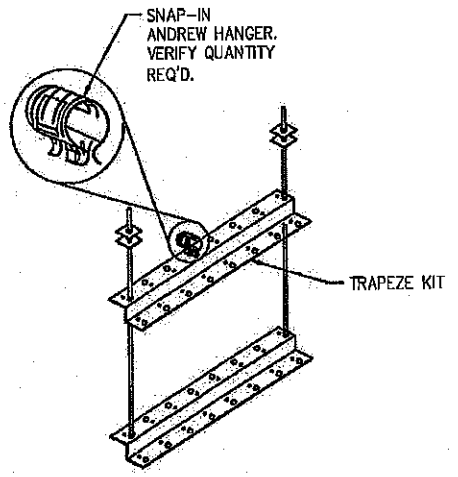
1 WAVEGUIDE BRIDGE SUPPORT POST FOUNDATION
NOT TO SCALE



2 WAVEGUIDE BRIDGE DETAIL
NOT TO SCALE



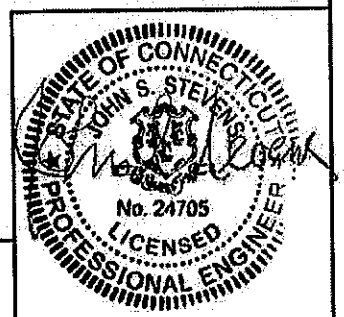
3 WAVEGUIDE BRIDGE ELEVATION (SIDE)
NOT TO SCALE



4 TRAPEZE KIT DETAIL
NOT TO SCALE

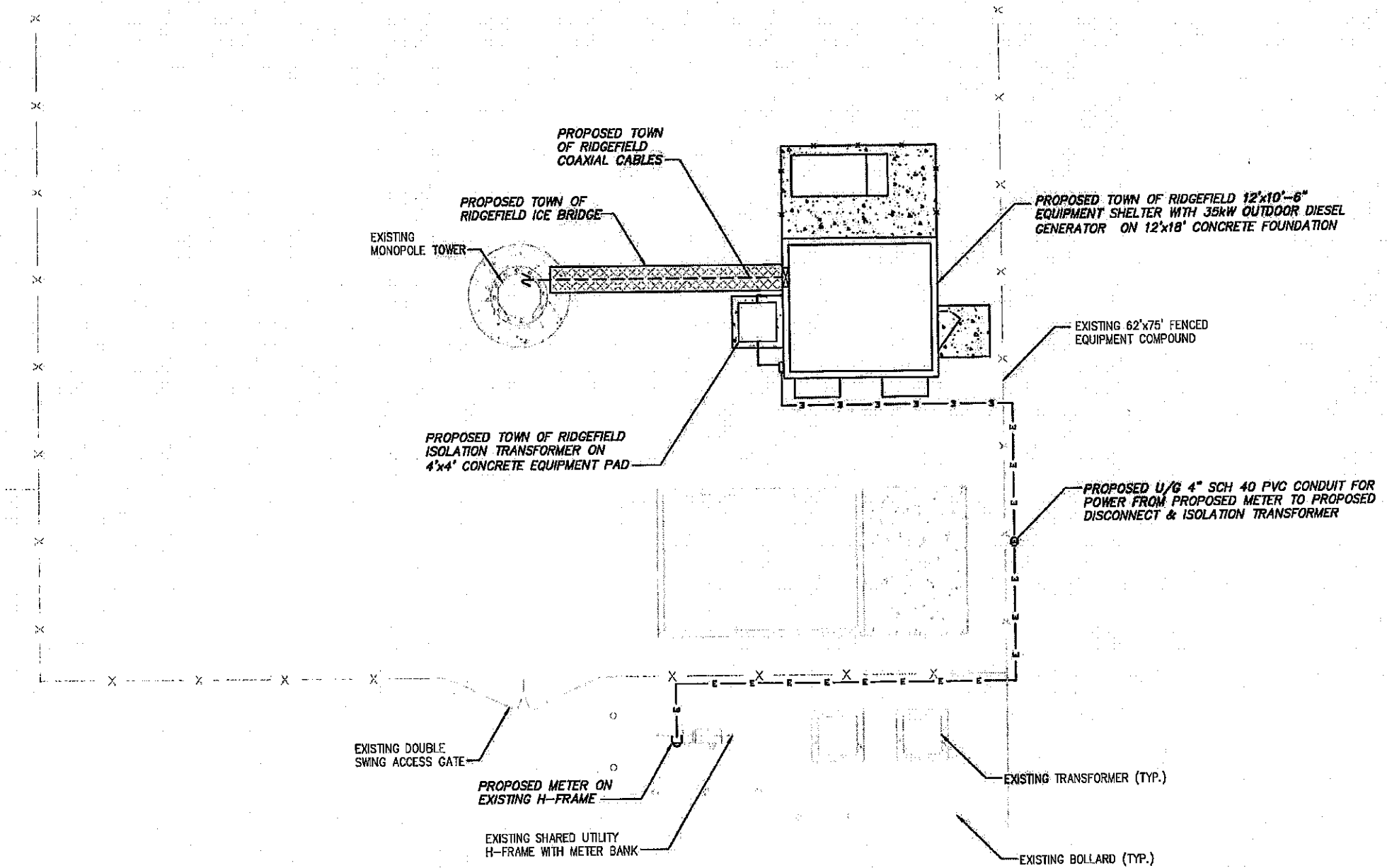
NOTE: ALL PROPOSED CONSTRUCTION ACTIVITIES & MODIFICATIONS SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R56 DESIGN STANDARDS (LATEST REVISION).

- NOTES:**
1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 6 FEET FOR 10 FEET BRIDGE CHANNEL.
 2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
 3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF ICE BRIDGES, WITH A MAXIMUM CANTILVER DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE ICE BRIDGE.
 4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH A MATERIAL TO RESTORE THESE EDGES TO THE ORIGINAL CHANNEL, OR EQUIVALENT, FINISH.
 5. ICE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS, PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOLLOWED.
 6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
 7. DEVIATIONS FROM ICE BRIDGE FOUNDATIONS REQUIRE ENGINEERING APPROVAL.

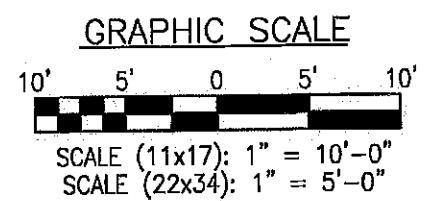


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 1033 Waterfront Station Rd Albany, NY 12205 Office: (518) 590-0790 Fax: (518) 590-0780 INFINIGY JOB#: 419-208			TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK	ICE BRIDGE DETAILS		C8
				RIDGEFIELD LEDGE		
OLD STAGECOACH RD. & ASPEN LEDGES RD. RIDGEFIELD, CT 06877				REV	C	IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

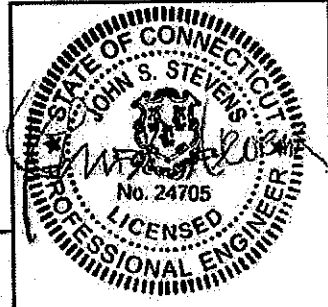


1 ELECTRICAL PLAN
SCALE: AS NOTED



THE LOCATION, SIZE AND TYPE OF MATERIAL OF EXISTING UTILITIES INDICATED ON THE PLANS IS NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT OR COMPLETE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES, INCLUDING THE SERVICE CONNECTIONS TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES & BUILDING MANAGEMENT OF HIS OPERATIONAL PLANS AND SHALL OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES & BUILDING MANAGEMENT DETAILED INFORMATION AND ASSISTANCE RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULE OF THE COMPANIES FOR REMOVAL OR ADJUSTMENT WHERE REQUIRED. IN THE EVENT AN UNEXPECTED UTILITY INTERFERENCE IS ENCOUNTERED DURING CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE UTILITY COMPANY OF JURISDICTION, BUILDING MANAGEMENT, & THE ENGINEER.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



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INFINIGY JOB# 418 003

MOTOROLA SOLUTIONS

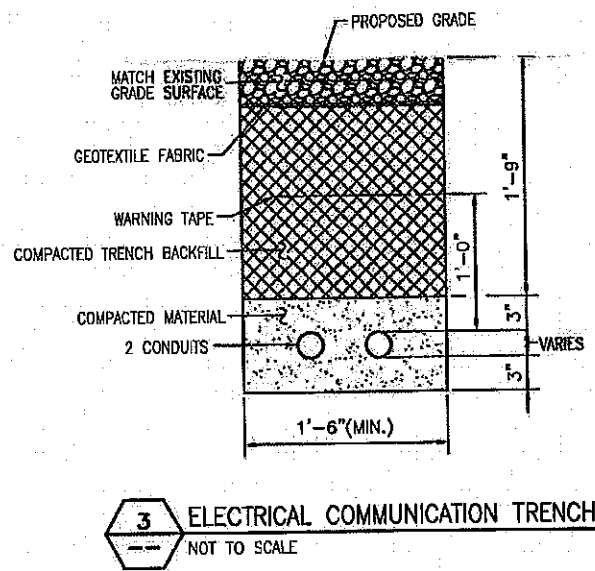
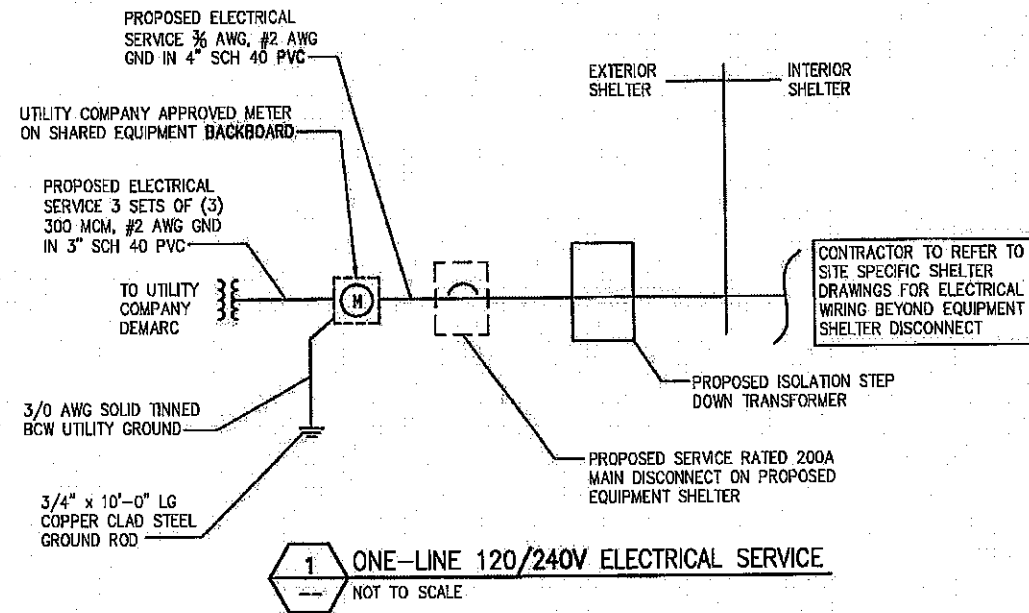
PYRAMID
Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

ELECTRICAL PLAN
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

E1
REV C

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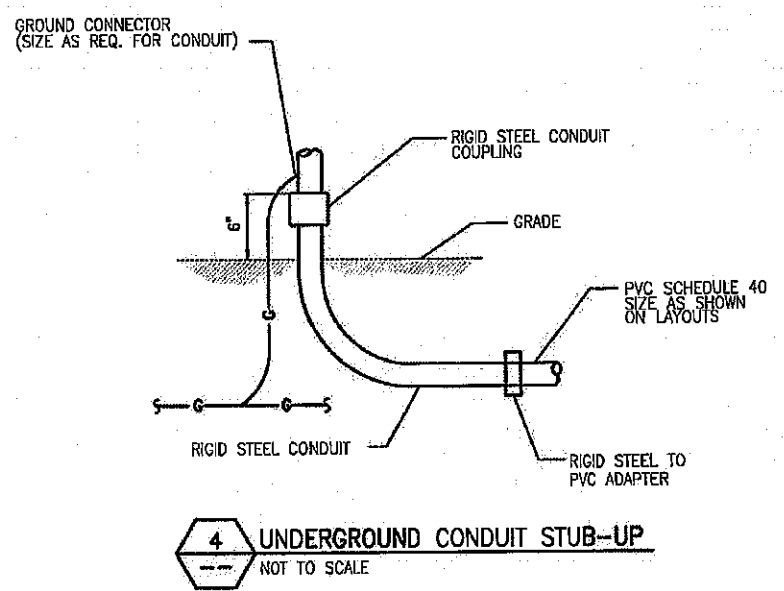


ELECTRIC SERVICE NOTES:

1. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (2002 NEC), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATION WHICH VOID THE U.L. LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
2. COORDINATE ELECTRIC SERVICE WITH LOCAL POWER UTILITY COMPANY. COORDINATE WITH UTILITY FOR METER TYPE AND CONNECTION.
3. ALL CONDUIT SHALL BE SEALED WATERTIGHT UNTIL FINAL TERMINATIONS ARE MADE.
4. PROVIDE PULL CORD IN ALL CONDUITS. SECURE AT EACH END.
5. ADJUST DEPTH OF CONDUITS TO PASS ABOVE GROUNDING SYSTEM.
6. PROVIDE 18 INCH (MIN.) RADIUS ELBOWS FOR ALL BENDS.
7. PROVIDE PHENOLIC ENGRAVED NAMEPLATES AT THE SERVICE DISCONNECT LABELED: "SERVICE DISCONNECT", & "NOTE ENGINE GENERATOR NEUTRAL IS ALSO BONDED TO GROUND AT THE SERVICE DISCONNECT". PROVIDE ADDITIONAL NAMEPLATES NOTING TYPE AND LOCATION OF STANDBY POWER SOURCE.

1 ONE-LINE 120/240V ELECTRICAL SERVICE
NOT TO SCALE

3 ELECTRICAL COMMUNICATION TRENCH
NOT TO SCALE

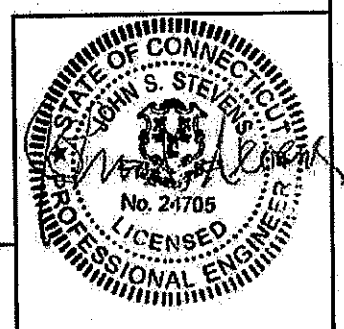


4 UNDERGROUND CONDUIT STUB-UP
NOT TO SCALE

NOTES

1. ALL CONDUIT ABOVE GRADE MUST BE RIGID STEEL.
2. ALL PVC SCH. 40 CONDUIT MUST HAVE MIN. BURIAL DEPTH.
3. ALL NEW STRUCTURAL STEEL SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A123 G90 AFTER FABRICATION.
4. FIELD ABRASIONS SHALL BE TOUCH UP PAINTED WITH ZINC RICH GALVANIZING REPAIR PAINT IN ACCORDANCE WITH ASTM A780.
5. ALL EXPOSED ENDS OF CONDUITS SHALL HAVE WEATHER PROOF CAPS. DO NOT USE DUCT TAPE.
6. PROVIDE 200LB. TEST PULL WIRES IN EACH TELEPHONE AND POWER CONDUIT. STUB CONDUITS INTO ENCLOSURE AND LABEL CONDUIT ENDS TO HAVE CHASE NIPPLE TO PROTECT CABLE FROM DAMAGE WHILE PULLING WIRE.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



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MOTOROLA SOLUTIONS

PYRAMID Network Services, LLC

TOWN OF RIDGEFIELD
PUBLIC SAFETY
COMMUNICATIONS NETWORK

ELECTRICAL DETAILS
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

E2
REV C

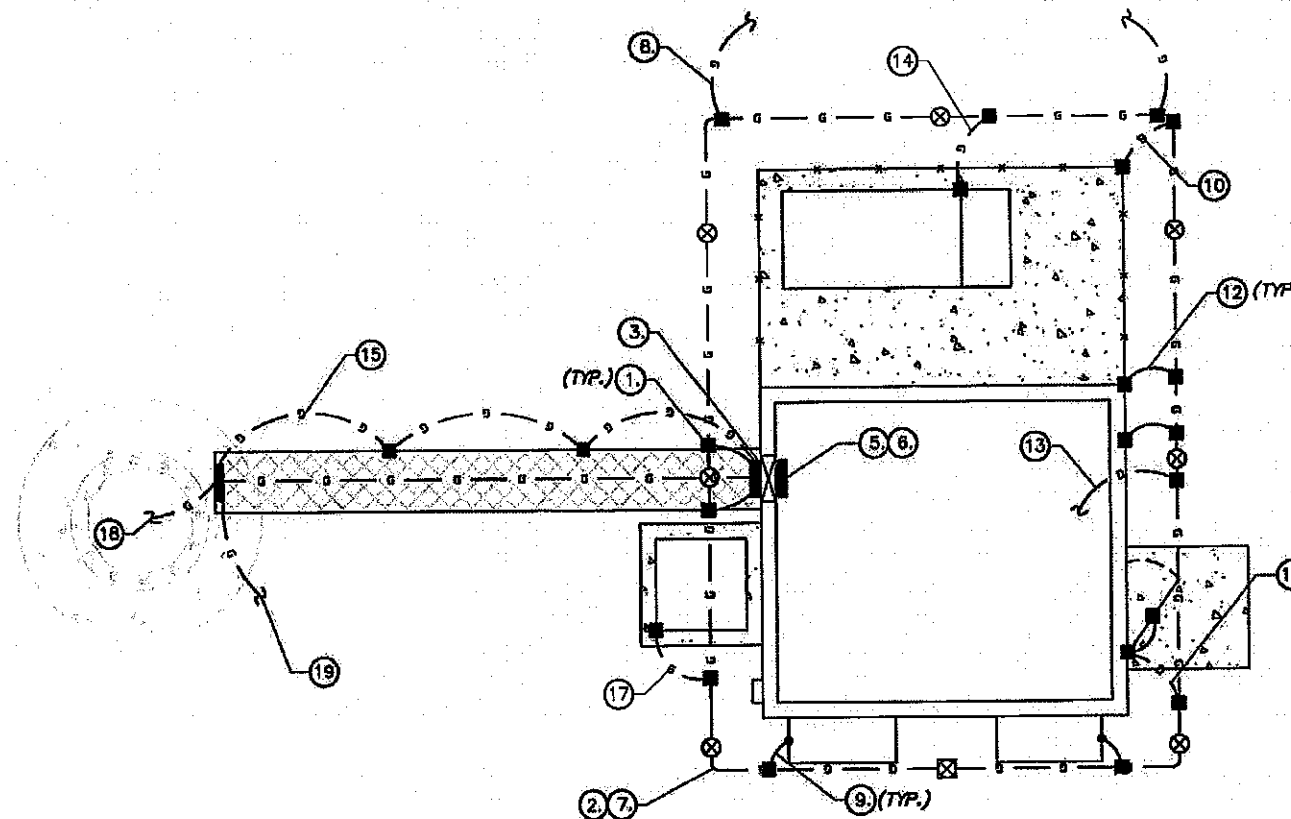
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CODED NOTES:

- ① BOND PROPOSED SHELTER MGB TO PROPOSED SHELTER GROUND RING. BOND SHELTER ECB1 TO SHELTER GROUND RING.
- ② SYSTEM GROUND RESISTANCE SHALL NOT EXCEED 10 OHMS. A THREE POINT SYSTEM RESISTANCE TEST SHALL BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH MOTOROLA SPECIFICATION R56.
 - A. PERFORM THREE TESTS AT EACH SITE.
 - B. CONTRACTOR SHALL PROVIDE A WRITTEN REPORT ON FORMS PROVIDED WITHIN THE MOTOROLA SPECIFICATION R56 CONSISTING OF THE FOLLOWING: SITE NAME, ADDRESS AND IDENTIFICATION NUMBER, DESCRIPTION OF SITE SOIL AND MOISTURE CONDITION, DESCRIPTION OF WEATHER, MODEL NUMBER OF TESTING EQUIPMENT, DATE OF LAST CALIBRATION, SITE SKETCH SHOWING LOCATION OF TEST PROBES, AND ALL FIELD DATA COLLECTED (READINGS, RANGE, TEST, MILLIAMPS, ETC.).
 - C. CONTRACTOR SHALL NOTIFY THE MOTOROLA CONSTRUCTION MANAGER IF THERE ARE ANY DIFFICULTIES PERFORMING SYSTEM RESISTANCE TESTS OR IF MEASUREMENTS ARE ABOVE 5 OHMS. THE MOTOROLA CONSTRUCTION MANAGER SHALL PROVIDE INSTRUCTION TO THE CONTRACTOR TO INSTALL ADDITIONAL GROUNDING MEASURES TO MEET THE 10 OHM REQUIREMENT.
- ③ GROUND COAX INTO EXTERNAL GROUND BAR (EGB), & TOWER GROUND BAR (TGB).
- ④ PROPOSED INTERIOR PERIMETER GROUND BUS. (NOT SHOWN)
- ⑤ INTERIOR GROUND SYSTEM GROUNDED TO PROPOSED GROUND RING.
- ⑥ INTERIOR PERIMETER GROUND BUS GROUNDED TO MASTER GROUND BAR.
- ⑦ PROPOSED SHELTER GROUND RING BURIED TO A DEPTH OF 30"
- ⑧ BOND PROPOSED SHELTER GROUND RING TO EXISTING EQUIPMENT COMPOUND GROUND SYSTEM. (2 PLACES)
- ⑨ BOND HVAC TO PROPOSED INTERIOR PERIMETER HALO.
- ⑩ BOND FENCE TO PROPOSED EXTERIOR GROUND RING.
- ⑪ BOND AWNING & DOOR FRAME TO PROPOSED SHELTER GROUND RING.
- ⑫ BOND SHELTER TIE DOWN PLATES TO GROUNDING ELECTRODE SYSTEM.
- ⑬ GROUND SHELTER FOUNDATION TO PROPOSED SHELTER GROUND RING.
- ⑭ BOND GENERATOR TO PROPOSED SHELTER GROUND RING PER MANUFACTURER SPECS.
- ⑮ BOND PROPOSED ICE BRIDGE TO PROPOSED SHELTER GROUND RING.
- ⑯ PROPOSED CONCRETE-ENCASED ELECTRODES ("UFER"): #4 AWG GROUND WIRE IN THE ENTIRE SLAB FOUNDATION PERIMETER. BOND TO PROPOSED SHELTER GROUND RING. MINIMUM 2" FROM BOTTOM OF CONCRETE FOUNDATION OR FOOTING IN DIRECT CONTACT WITH EARTH AND AT LEAST 20 FEET IN LENGTH.
- ⑰ BOND TRANSFORMER TO PROPOSED SHELTER GROUND RING.
- ⑱ BOND CABLE GROUND KIT TO TOWER BOTTOM GROUND BAR.
- ⑲ BOND TOWER GROUND BAR TO EXISTING TOWER GROUND RING (TYP. OF (2) PLACES)

NOTE:
ALL GROUNDING SHALL MEET
MOTOROLA'S R-56 STANDARDS.
(LATEST REVISION)

NOTE:
ENSURE THAT ALL NECESSARY BOXES, CONDUITS,
CABLE TRAYS, ETC. THAT ARE ALTERED OR INSTALLED
AS PART OF THIS CONTRACT ARE PROPERLY BONDED
TO PROPOSED INTERIOR PERIMETER GROUND HALO
PER R56 DESIGN STANDARDS (LATEST REVISION).

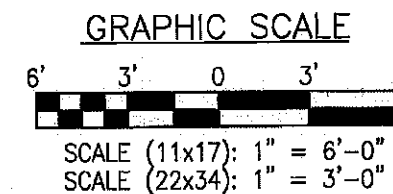


GROUNDING SYMBOLS

- ▬ GROUND BAR
- ⊗ GROUND ROD
- ACCESS WELL
- ⊗ GROUND ROD WITH ACCESS
- COMPRESSION TYPE CONNECTION
- CADWELD TYPE CONNECTION
- #2 AWG BARE COPPER
- ① INDICATES CODED NOTE



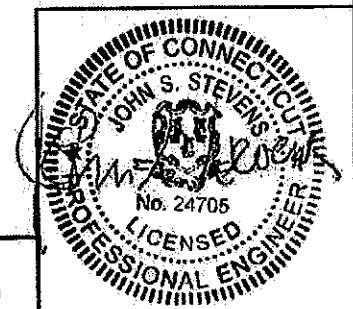
1 GROUNDING PLAN
SCALE: AS NOTED



EXTERIOR GROUNDING NOTES:

1. GROUNDING SHALL CONFORM WITH THE MOTOROLA R-56 STANDARD AND FEDERAL, STATE AND LOCAL CODES. IN THE EVENT OF A CONFLICT, MEET THE MOST STRINGENT REQUIREMENT.
2. ALL GROUND CONDUCTORS SHALL BE AWG BARE SOLID COPPER. MINIMUM BEND RADIUS FOR CONDUCTOR SHALL BE 8 INCHES. CONDUCTOR SIZE IS DEPENDENT UPON LENGTH.
3. ALL GROUNDING INSTALLATIONS SHALL BE INSPECTED AND APPROVED BY, TOWN OF RIDGEFIELD AND MOTOROLA.
4. ALL GROUNDING SPLICES AND CONNECTIONS SHALL BE MADE BY THE EXOTHERMIC WELD PROCESS (CADWELD OR EQUIVALENT). COAT ALL WELDS WITH A ZINC RICH PAINT.

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



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USFPC037 2052-419-005

MOTOROLA SOLUTIONS

PYRAMID Network Services, LLC

TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK

GROUNDING PLAN
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

E3

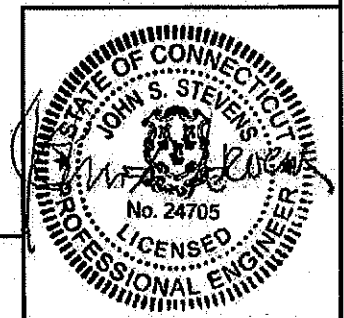
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GENERAL GROUNDING NOTES:

1. ALL GROUND CABLE IN CONCRETE OR THROUGH WALL SHALL BE IN 3/4" PVC CONDUIT. NO METALLIC CONDUIT SHALL BE USED FOR GROUNDING CONDUCTOR SLEEVES.
2. GROUND ALL EXPOSED METALLIC OBJECTS USING A TWO-HOLE NEMA DRILLED CONNECTOR SUCH AS THOMAS & BETTS #32207 OR APPROVED EQUAL.
3. THE CONTRACTOR SHALL NOTIFY THE MOTOROLA REPRESENTATIVE WHEN THE GROUND RING IS INSTALLED SO THAT THE REPRESENTATIVE CAN INSPECT GROUND RING BEFORE IT IS CONCEALED.
4. ALL EXTERIOR GROUND CONDUCTORS INCLUDING GROUND RING SHALL BE #2 AWG SOLID BARE TINNED COPPER. MAKE ALL GROUND CONNECTIONS AS SHORT AND DIRECT AS POSSIBLE. AVOID SHARP BENDS. THE RADIUS OF ANY BEND SHALL NOT BE LESS THAN 8" AND THE INCLUSIVE ANGLE OF ANY BEND SHALL NOT EXCEED 90°. GROUNDING CONDUCTORS SHALL BE ROUTED DOWNWARD TOWARD THE BURIED GROUND RING.
5. ALL BELOW GROUND EXTERNAL CONNECTIONS SHALL BE EXOTHERMICALLY WELDED. ALL EXOTHERMIC WELDS TO BURIED GROUND RING SHALL BE THE PARALLEL-TYPE, EXCEPT FOR THE GROUND RODS WHICH ARE TEE-TYPE EXOTHERMIC WELDS. REPAIR ALL GALVANIZED SURFACES THAT HAVE BEEN DAMAGED BY EXOTHERMIC WELDING. USE SPRAY GALVANIZED SUCH AS HOLLUB LECTROSOL #15-501.
6. WHERE MECHANICAL CONNECTORS (TWO-HOLE OR CLAMP) ARE USED, APPLY A LIBERAL PROTECTIVE COATING OF A CONDUCTIVE ANTI-OXIDE COMPOUND ON ALL CONNECTORS. PROVIDE LOCK WASHERS ON ALL MECHANICAL CONNECTORS. USE STAINLESS STEEL HARDWARE THROUGHOUT. THOROUGHLY REMOVE ALL PAINT AND CLEAN ALL DIRT FROM SURFACES REQUIRING GROUND CONNECTORS. REPAINT TO MATCH EXISTING AFTER CONNECTION IS MADE TO MAINTAIN CORROSION RESISTANCE. ALL GROUND CONNECTIONS SHALL BE APPROVED FOR THE TYPES OF METALS BEING ATTACHED TO.
7. THE CONTRACTOR SHALL COORDINATE AS REQUIRED TO HAVE UTILITY COMPANY REPRESENTATIVE AT THE SITE TO DISCONNECT THE UTILITY NEUTRAL FROM GROUNDING SYSTEM DURING FINAL INSPECTION SO THAT REQUIRED TESTING ON THE GROUND SYSTEM CAN BE PERFORMED. THE CONTRACTOR SHALL PROVIDE NOTICE TO THE MOTOROLA REPRESENTATIVE (TWO) DAYS PRIOR TO FINAL TESTING. IF THE CONTRACTOR FAILS TO MAKE UTILITY COMPANY REPRESENTATIVE AVAILABLE DURING THE FINAL TESTING, THE CONTRACTOR SHALL PAY THE COST FOR AN INDEPENDENT GROUNDING CONSULTANT TO PERFORM THE GROUND RESISTANCE TEST. GROUNDING CONSULTANT SHALL BE SELECTED BY THE MOTOROLA REPRESENTATIVE. IF THE UTILITY COMPANY REPRESENTATIVE FAILS TO APPEAR DUE TO NO FAULT THE CONTRACTOR, NO PENALTY APPLY.
8. A RESISTANCE TO GROUND OF (10) OHMS OR LESS IS REQUIRED FOR ALL MOTOROLA SITES. THE CONTRACTOR SHOULD RETAIN HIS OWN TESTER AT HIS OWN EXPENSE. IN ADDITION, A THIRD PARTY SHOULD BE HIRED TO OBTAIN MEGGER AND SWEEP RESULTS ON ALL SITES INCLUSIVE OF WHAT RESULTS THE CONTRACTOR SUBMITS, TO INSURE PROPER QUALITY CONTROL ON ALL SITES. SCHEDULE FINAL MEGGER TEST SUCH THAT THE MOTOROLA REPRESENTATIVE CAN BE PRESENT FOR FIELD VERIFICATION. REFER TO THE MOTOROLA MASTER SPECIFICATION FOR MEGGER TESTING PROCEDURES. IF THE FINAL GROUNDING RESISTANCE MEASUREMENT EXCEEDS 10 (TEN) OHMS, THE CONTRACTOR SHALL NOTIFY THE MOTOROLA REPRESENTATIVE.
9. ALL MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
10. THE GROUND CONDUCTORS SHALL BE RUN STRAIGHT FOR MINIMUM INDUCTANCE AND VOLTAGE DROP. SINCE CABLE BENDS INCREASE INDUCTANCE, THE MINIMUM REQUIRED BENDING RADIUS IS 8 INCHES WHEN BENDS ARE UNAVOIDABLE. ALL METAL WORK WITHIN 10 FEET OF THE GROUND RING SHALL BE DIRECTLY BONDED TO THIS GROUND SYSTEM, WITHOUT USING SERIES OR DAISY CHAIN CONNECTION ARRANGEMENTS.
11. PAINT, ENAMEL, LACQUER AND OTHER ELECTRICALLY NON-CONDUCTIVE COATINGS SHALL BE REMOVED FROM THREADS AND SURFACE AREAS WHERE CONNECTIONS ARE MADE TO ENSURE GOOD ELECTRICAL CONTINUITY.
12. CONNECTIONS BETWEEN DISSIMILAR METALS SHALL NOT BE MADE UNLESS THE CONDUCTORS ARE SEPARATED BY A SUITABLE MATERIAL THAT IS A PART OF THE ATTACHMENT DEVICE LISTED AND APPROVED FOR USE WITH THE SPECIFIC DISSIMILAR METALS MAY BE USED FOR THE PURPOSE.
13. ALL BELOW GRADE GROUND SYSTEM CONDUCTORS SHALL BE A MINIMUM DEPTH OF 30".

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



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TOWN OF RIDGEFIELD
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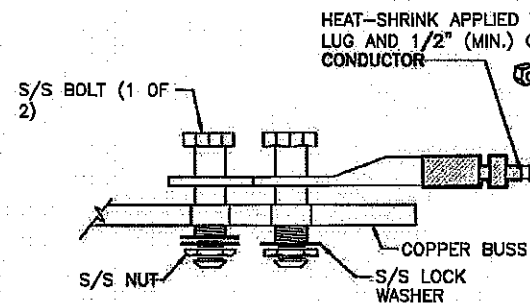
GROUNDING NOTES

RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06577

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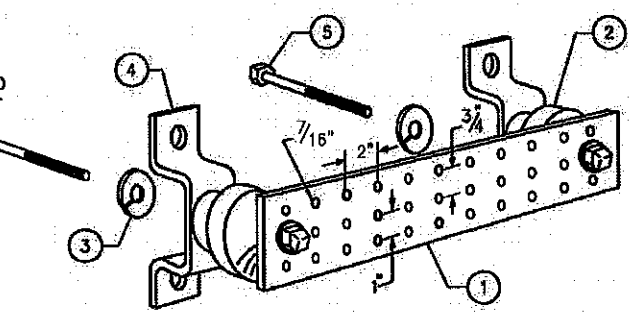
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1 LUG DETAIL
NOT TO SCALE

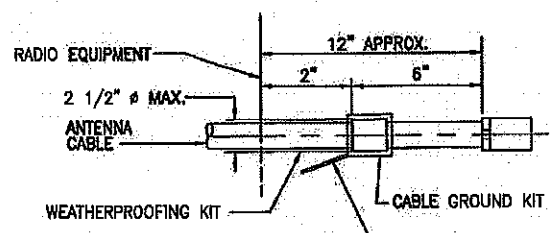
- ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING BELLEVILLES. COAT ALL SURFACES WITH KOPR-SHEILD BEFORE MATING.
- FOR GROUND, BOND TO STEEL ONLY: INSERT A LOCK WASHER BETWEEN LUG AND STEEL. COAT ALL SURFACES WITH KOPR-SHEILD.
- ALL HARDWARE TO BE 3/8" DIAMETER.



LEGEND

- COPPER GROUND BAR, 1/4"x 4"x 24", HARGER PART NO. TGBI4424TMGB.
- 1 1/2" INSULATORS
- 5/8" LOCKWASHERS
- STAINLESS STEEL WALL MOUNTING BRACKET
- 5/8-11 X 1" S.S. BOLTS
- GROUND BARS SHALL BE NEITHER FIELD FABRICATED NOR NEW HOLES DRILLED.
- GROUND LUGS SHALL MATCH THE HOLE SPACING ON THE BAR
- HARDWARE DIAMETER SHALL BE MINIMUM 3/8"

2 GROUND BAR
NOT TO SCALE

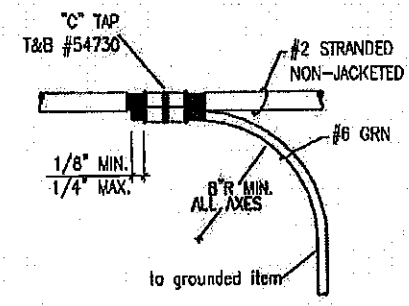


#6 AWG SOLID COPPER GROUND WIRE (GROUNDED TO GROUND BAR) (STANDARD CABLEWAVE GROUNDING KIT)

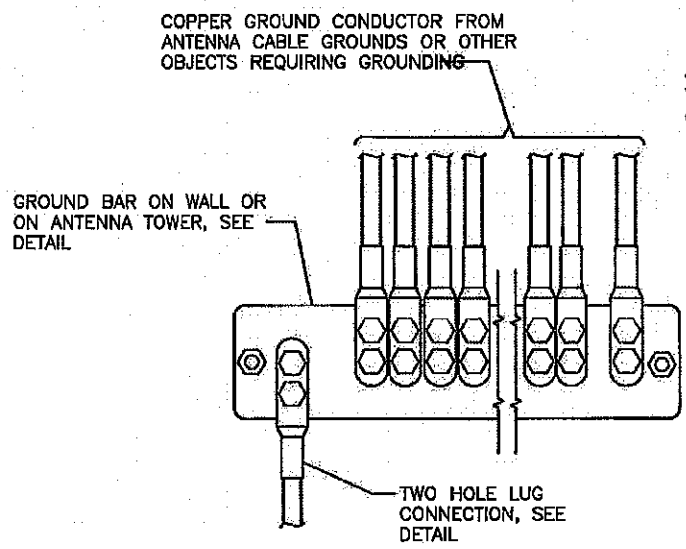
TO ANTENNA CABLE

NOTE:
DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

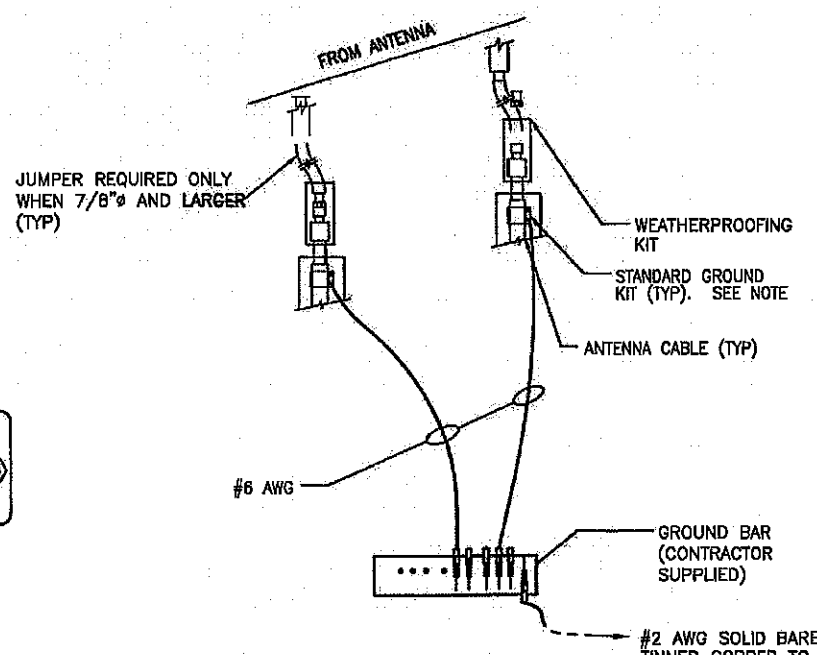
3 CABLE GROUND KIT CONNECTION
NOT TO SCALE



4 IPGB RING GROUND TAP
NOT TO SCALE

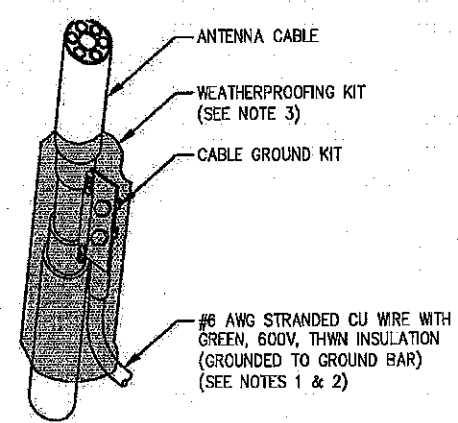


5 INSTALLATION OF GROUND WIRE TO GROUND BAR
NOT TO SCALE



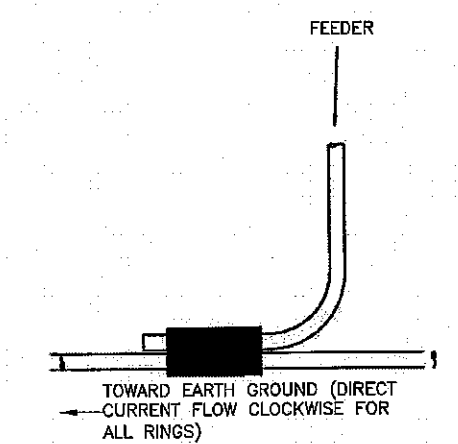
NOTE: DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR

6 CONNECTION OF GROUND WIRES TO GROUNDING BARS @ ANTENNAS
NOT TO SCALE



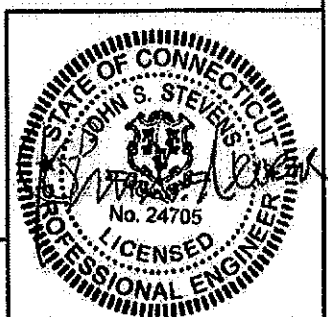
NOTES:
1) DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2) GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3) WEATHERPROOFING SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.

7 CONNECTION OF GROUND KIT TO ANTENNA CABLE
NOT TO SCALE



8 GROUND CONDUCTOR CONNECTION
NOT TO SCALE

NOTE: ALL CONSTRUCTION ACTIVITIES SHALL BE DONE IN ACCORDANCE WITH MOTOROLA'S R-56 DESIGN STANDARDS.



NO.	DATE	REVISIONS	BY	CHK	APP'D
C	3/7/18	REVISED PER COMMENTS	JLM	ASW	ASW
B	1/22/18	REVISED PER COMMENTS	JLM	ASW	ASW
A	11/10/15	ISSUED FOR INITIAL REVIEW	JLM	ASW	ASW

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INFINIGY JOB# 439-006

MOTOROLA SOLUTIONS

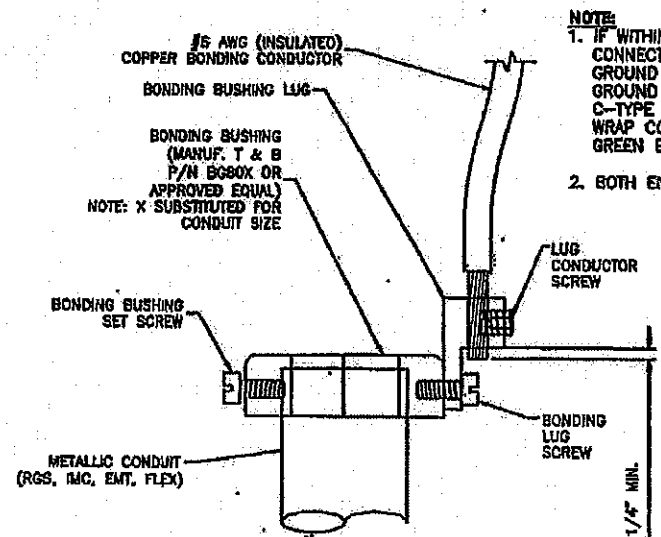
PYRAMID Network Services, LLC

TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK

GROUNDING DETAILS
RIDGEFIELD LEDGE
OLD STAGECOACH RD. & ASPEN LEDGES RD.
RIDGEFIELD, CT 06877

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REV C

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

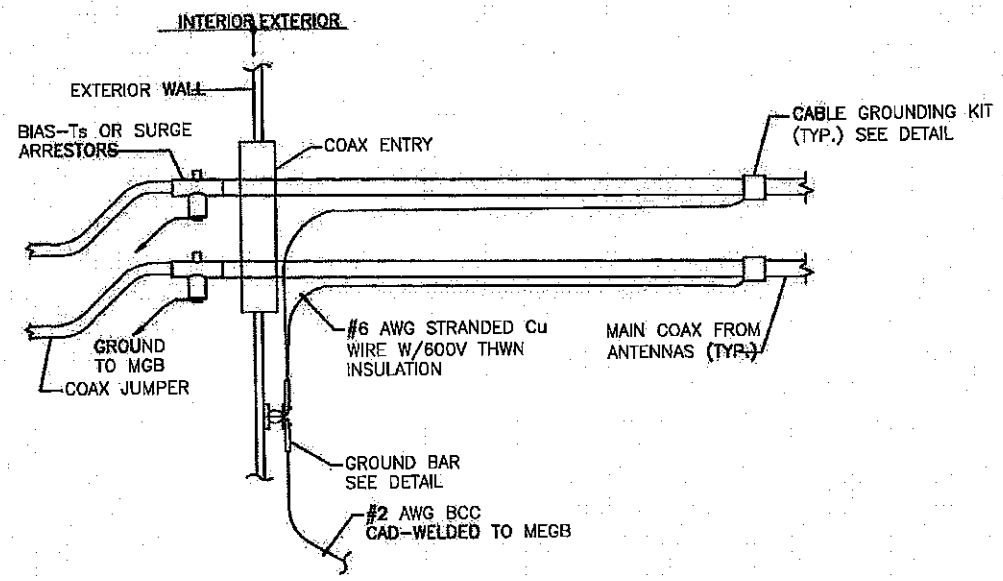


1 CONDUIT BOND/GROUND BUSHING DETAIL
NOT TO SCALE

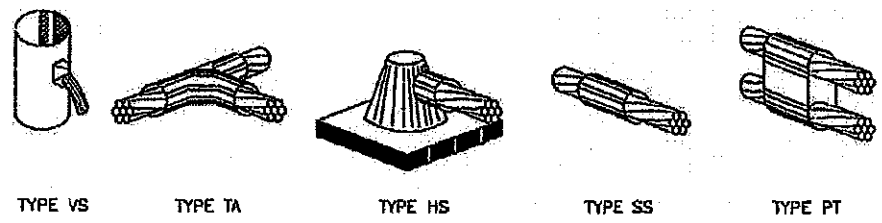
- DIRECTIONS:**
1. MOUNT BONDING BUSHING ONTO CONDUIT
 2. TIGHTEN BOND BUSHING SET SCREW
 3. INSERT COPPER CONDUCTOR INTO LUG
 4. TIGHTEN LUG CONDUCTOR SCREW
 5. TIGHTEN BONDING LUG SCREW

NOTE: BONDING BUSHING, SET SCREW, LUG, LUG SCREW, COND. LUG SCREW, SHOWN AS COMPLETE UNIT.

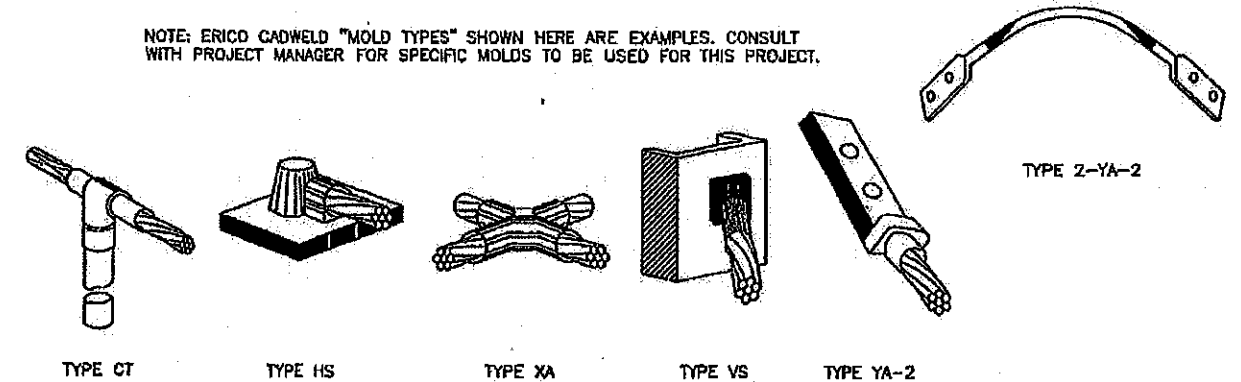
- NOTE:**
1. IF WITHIN 18 INCHES OF A GROUND BAR, CONNECT CONDUIT BOND CONDUCTOR TO GROUND BAR. OTHERWISE, CONNECT TO MAIN GROUND CONDUCTOR EXITING CONDUIT VIA C-TYPE COMPRESSION CONNECTION. WRAP CONNECTION POINT WITH UL LISTED GREEN ELECTRICAL TAPE
 2. BOTH ENDS OF CONDUIT TO BE GROUNDED.



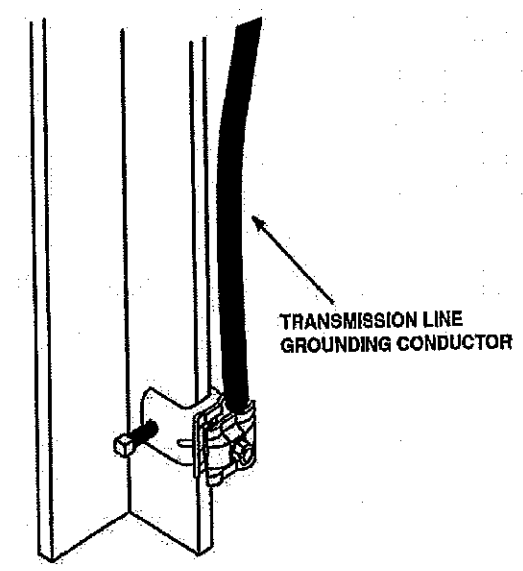
2 EXTERIOR ANTENNA CABLE GROUNDING AT EQUIPMENT SHELTER COAX ENTRY
NOT TO SCALE



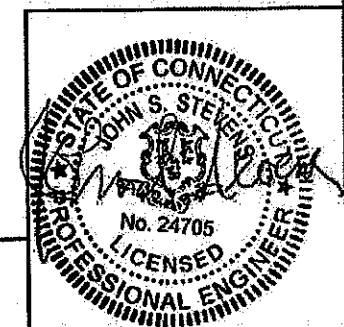
NOTE: ERICO CADWELD "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH PROJECT MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.



3 EXOTHERMIC WELD DETAILS
NOT TO SCALE



4 TRANSMISSION LINE GROUNDING
NOT TO SCALE



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C	3/7/18	REVISED PER COMMENTS	JLM	ASW	ASW
B	1/22/18	REVISED PER COMMENTS	JLM	ASW	ASW
A	1/10/16	ISSUED FOR INITIAL REVIEW	JLM	ASW	ASW

 1033 Water/via Shelter Rd Albany, NY 12245 Office # (518) 860-0700 Fax # (518) 860-0703 INFNIGYJOB# 418 006			TOWN OF RIDGEFIELD PUBLIC SAFETY COMMUNICATIONS NETWORK	GROUNDING DETAILS		E6
				RIDGEFIELD LEDGE OLD STAGECOACH RD. & ASPEN LEDGES RD. RIDGEFIELD, CT 06877		

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