



CROWN CASTLE ID #
LV004

9499 WINNING COLORS DRIVE
LAS VEGAS, NEVADA 89117

CROWN CASTLE
CROWN CASTLE NG WEST LLC
2055 SOUTH STEARMAN DRIVE
CHANDLER, ARIZONA 85286

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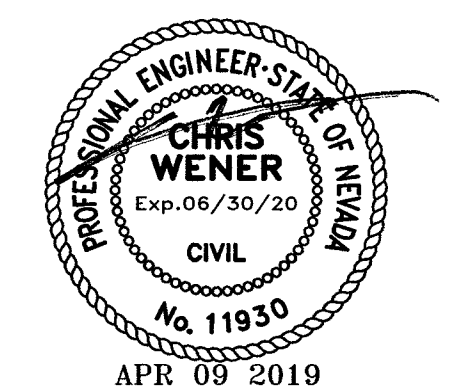
REV.	DATE	DESCRIPTION	BY
2	02/05/19	POLE REVISION	R.C.
1	10/15/18	100% PERMITTING	C.P.
0	09/17/18	90% PERMITTING	R.C.

PLANS PREPARED BY:

SPECTRUM

DGS
CONSULTING ENGINEERING SERVICES LLC

LICENSURE:



SHEET TITLE:

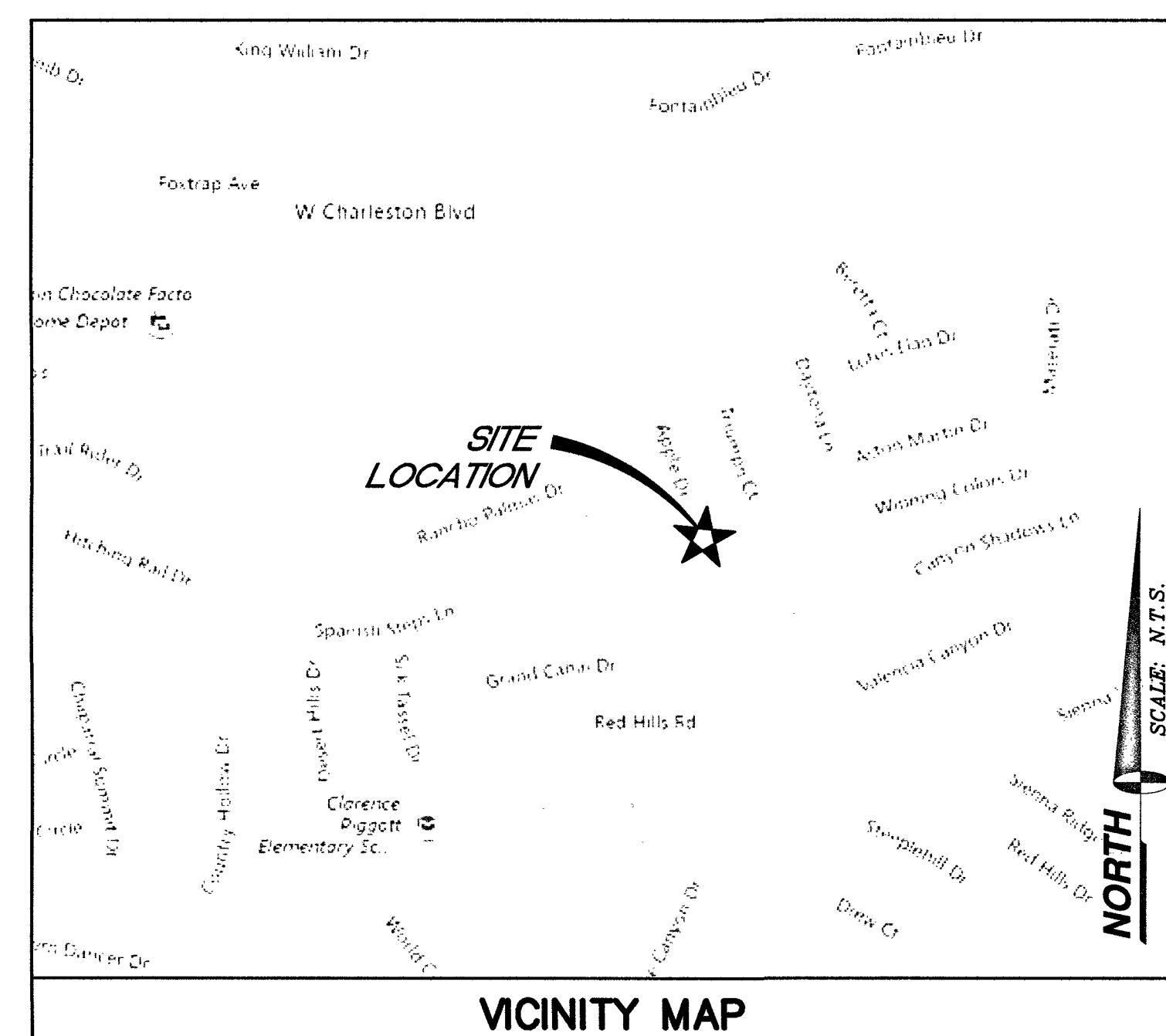
TITLE SHEET

SHEET NUMBER: REVISION:

C1 2

- REPLACEMENT OF AN EXISTING CONCRETE LIGHT POLE WITH A NEW RADIO AND ANTENNA AT THE TOP

TOTAL ENCROACHMENT NOTE



VICINITY MAP

APPLICANT/LESSEE
CROWN CASTLE NG WEST LLC
2055 SOUTH STEARMAN DRIVE
CHANDLER, ARIZONA 85286

CONTACT: MATT BOND
MOBILE: (480) 586-4306

PROPERTY INFORMATION

OWNER: PUBLIC RIGHT-OF-WAY
OCCUPANCY TYPE: U
CONSTRUCTION TYPE: V-B
CURRENT ZONING: RESIDENTIAL PLANNED DEVELOPMENT DISTRICT (R-PD7)
JURISDICTION: CITY OF LAS VEGAS
APN: 163-06-597-009
LATITUDE: 36.156194
LONGITUDE: -115.302278
HANDICAP REQUIREMENTS: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS NOT REQUIRED.

PROJECT SUMMARY

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES.

- INTERNATIONAL BUILDING CODE 2018 W/STATE AMENDMENTS
- INTERNATIONAL EXISTING BUILDING CODE 2018 W/STATE AMENDMENTS
- INTERNATIONAL ENERGY CONSERVATION CODE 2018
- UNIFORM MECHANICAL CODE 2018
- UNIFORM PLUMBING CODE 2018
- NATIONAL ELECTRIC CODE 2017
- INTERNATIONAL FIRE CODE 2018
- ANSI/EIA-222-G LIFE SAFETY CODE
- LOCAL BUILDING CODE(S)
- CITY AND/OR COUNTY ORDINANCES

CODE COMPLIANCE

SPECIAL INSPECTIONS ARE REQUIRED FOR THE TYPES OF WORK DESCRIBED BELOW:

- HIGH-STRENGTH BOLTS. (IF REQUIRED)
- WELDING: FIELD WELDING OF STRUCTURAL STEEL AND REINFORCING STEEL. (IF REQUIRED)
- STRUCTURAL STEEL. (IF REQUIRED)
- CONCRETE: REINFORCING STEEL AND PLACEMENT.
- CONCRETE WITH DESIGN GREATER THAN 2500 PSI.
- PILE, PIER OR CAISSON FOUNDATIONS.
- SOILS: SITE PREPARATION, FILL PLACEMENT, IN-PLACE DENSITY.

SPECIAL INSPECTIONS

CIVIL ENGINEER

SPECTRUM SERVICES, INC.
4850 WEST OQUENDO ROAD
LAS VEGAS, NEVADA 89118
CHRIS WENER
PHONE: (702) 367-7705
FAX: (702) 367-8733

ELECTRICAL ENGINEER

DGS CONSULTING ENGINEERING SERVICES LLC
9811 W. CHARLESTON BOULEVARD, SUITE 2539
LAS VEGAS, NEVADA 89117
PHONE: (702) 885-1552

PROJECT TEAM

SHEET	DESCRIPTION	REV.
C1	TITLE SHEET	2
C2	SITE PHOTO, GENERAL & CONSTRUCTION NOTES	2
C3	SITE PLAN	2
C4	EXISTING AND PROPOSED NORTH ELEVATIONS	3
C5	CONSTRUCTION DETAILS	2
C6	CONCRETE FOUNDATION DETAILS	3
E1	GROUNDING LAYOUT, NOTES & DETAILS	2

SHEET INDEX

PERMIT

CITY OF LAS VEGAS
APPROVED FOR CONSTRUCTION

THIS APPROVAL IS FOR WORK IN CITY OF LAS VEGAS R/W ONLY. OBTAINING PERMISSION OR EASEMENTS FOR WORK SHOWN ON PRIVATE PROPERTY IS THE RESPONSIBILITY OF THE UTILITY.

APPROVAL

L19-00260

5 23 19

DATE

100V7724-F1B

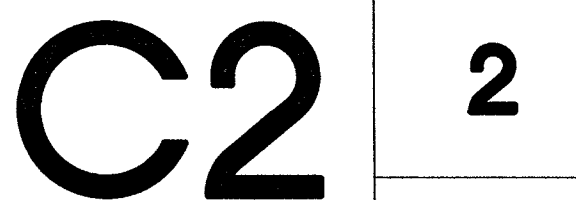
4/15/19

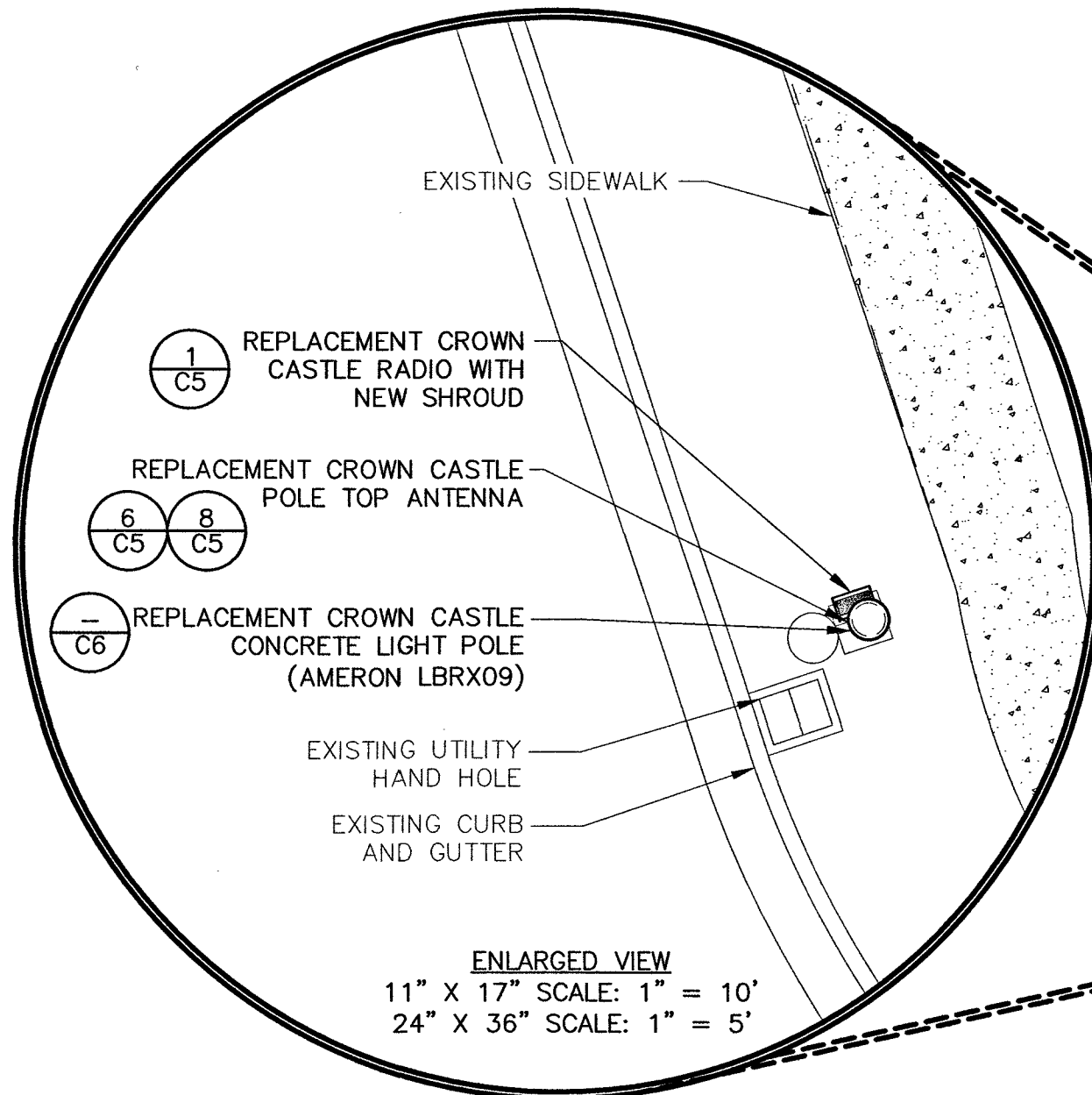
L19-00260



- ## PROJECT GENERAL NOTES

- ## CONSTRUCTION NOTES





C3	2
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CHARTING SCALE

(IN FEET)

11" X 17" SCALE	24" X 36" SCALE
1" = 80'	1" = 40'

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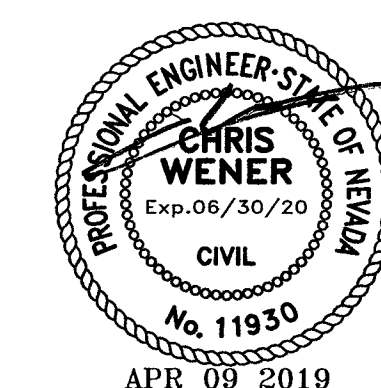
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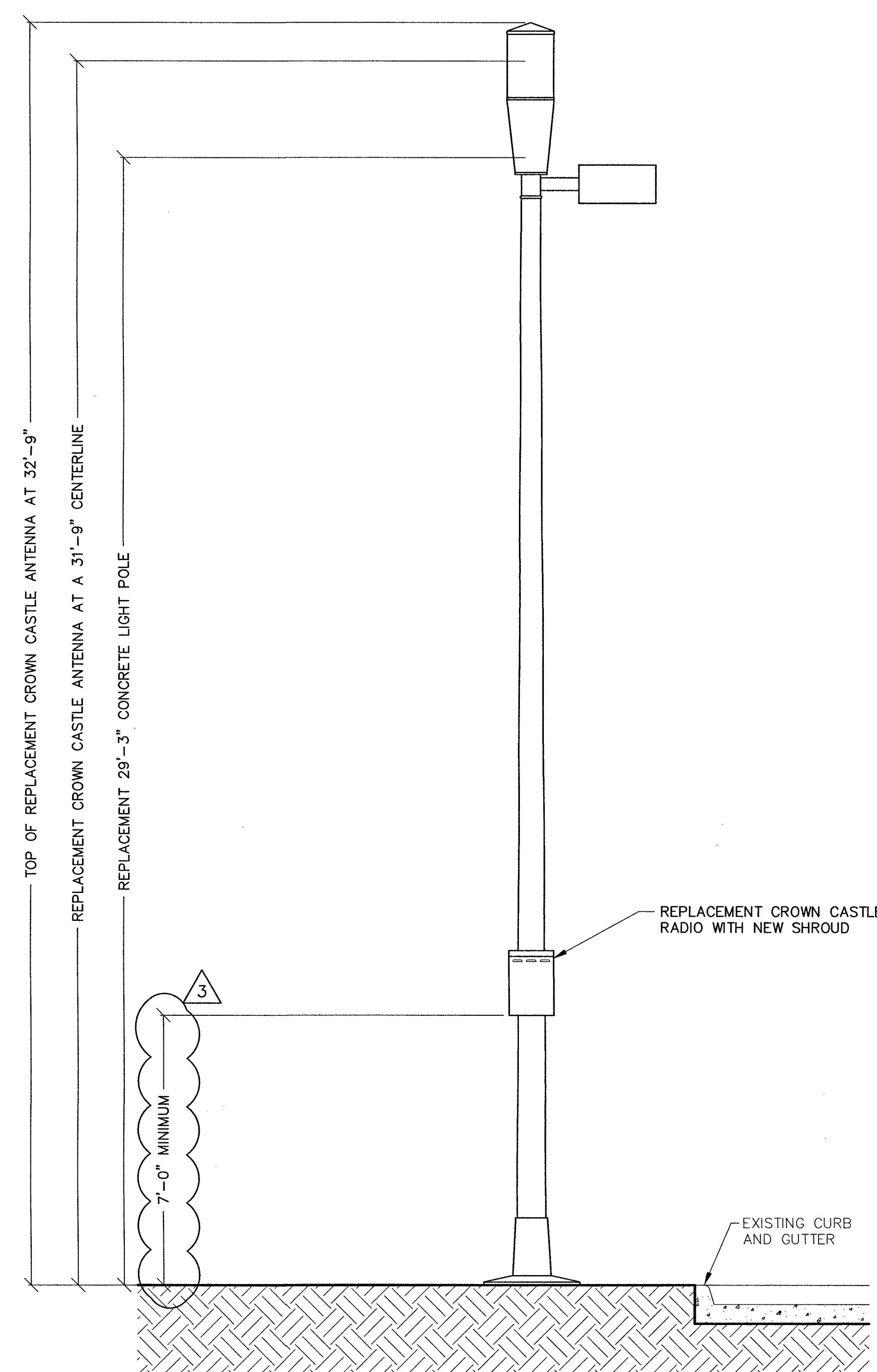


SHEET TITLE:

EXISTING AND PROPOSED
NORTH ELEVATION

SHEET NUMBER: REVISION:

C4 3

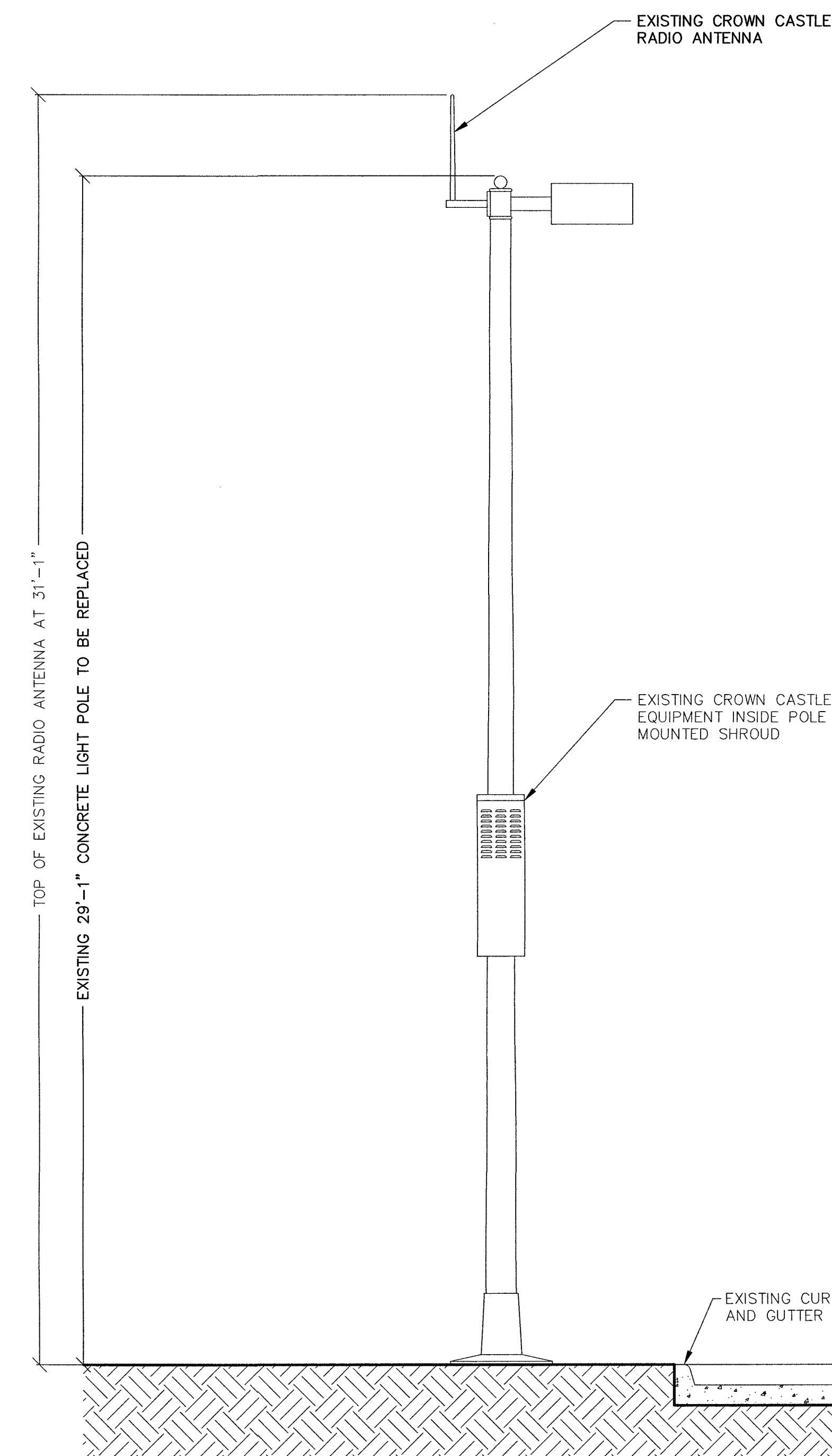


PROPOSED NORTH ELEVATION

11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

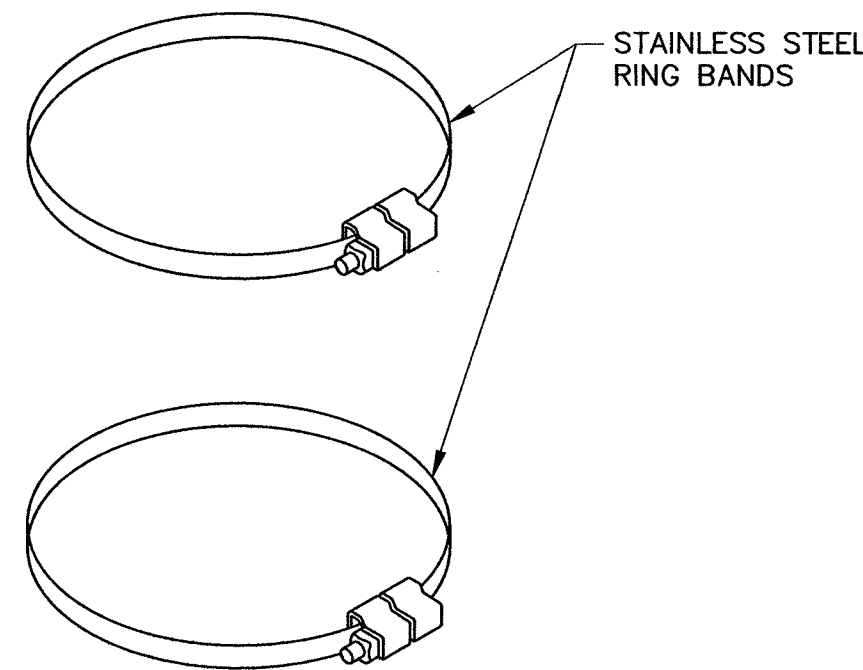
2

EXISTING NORTH ELEVATION



11" X 17" SCALE 24" X 36" SCALE
1" = 5' 1" = 2'-6"

1



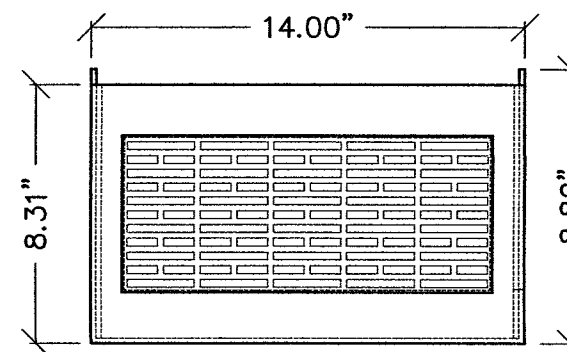
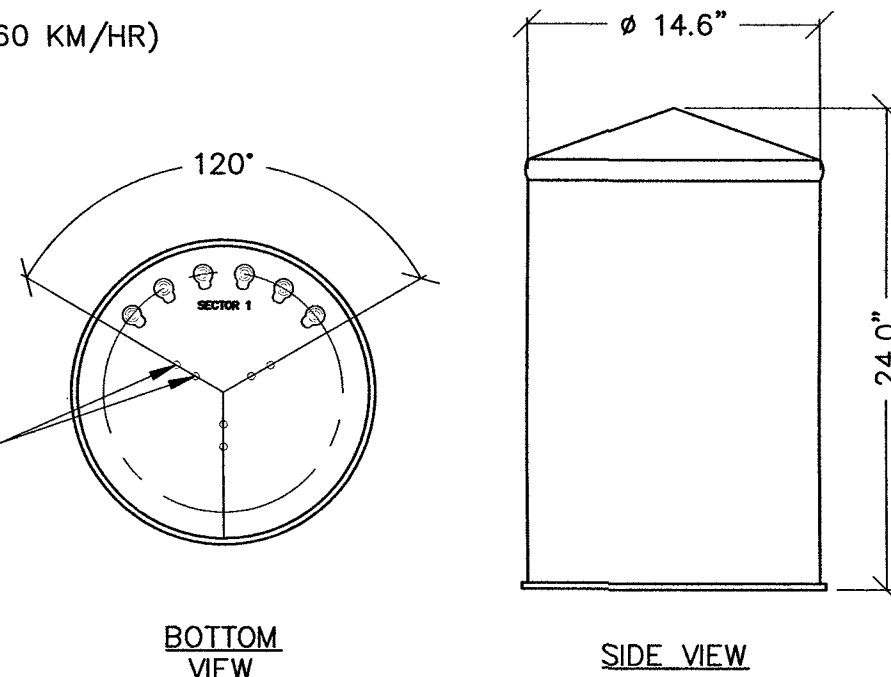
AMPHENOL 2C2U3MT360X06FXYZ0 ANTENNA SPECIFICATIONS
INPUT CONNECTOR (2X) 4.3/10 OR 7/16-DIN / FEMALE / BOTTOM
DIMENSION (H x DIA.) 24.0 x 14.6 IN.
ANTENNA WEIGHT 22.1 LBS
LIGHTNING PROTECTION DIRECT GROUND

WIND SURVIVAL SPEED
241 KM/HR - 150 MPH

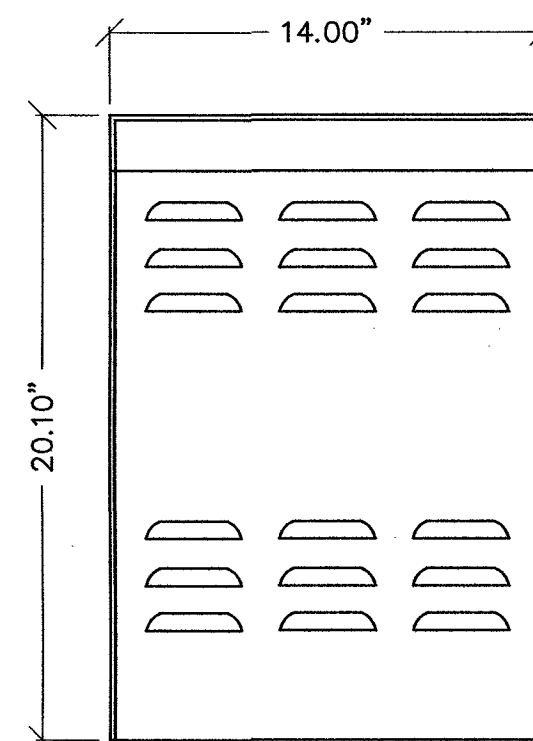
WIND LOAD @ 100 MPH (160 KM/HR)
191 N - 43 LBF

Ø4" & 6" Ø BCD FOR
3/8"-16 UNC MOUNTING
STUDS (X6) AT 120°
APART THEY EXTEND 1
1/4" BELOW PLATE FOR
MOUNTING

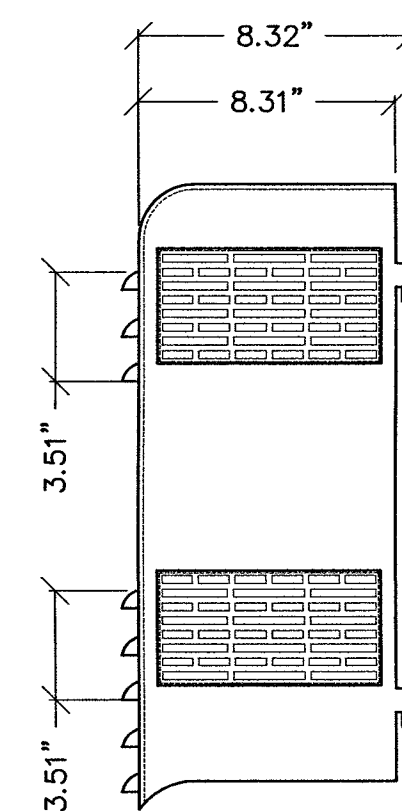
NOTES:
1. CONNECTOR HOLES ARE 2" FROM CENTER TO CENTER
APART IN EACH SECTOR



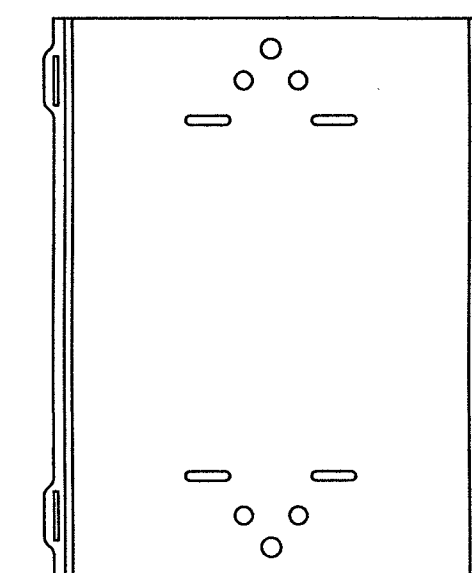
TOP VIEW



FRONT VIEW



RIGHT SIDE
VIEW



BACK PLATE

STAINLESS STEEL RING BAND

SCALE:
NONE

9

ANTENNA DETAIL

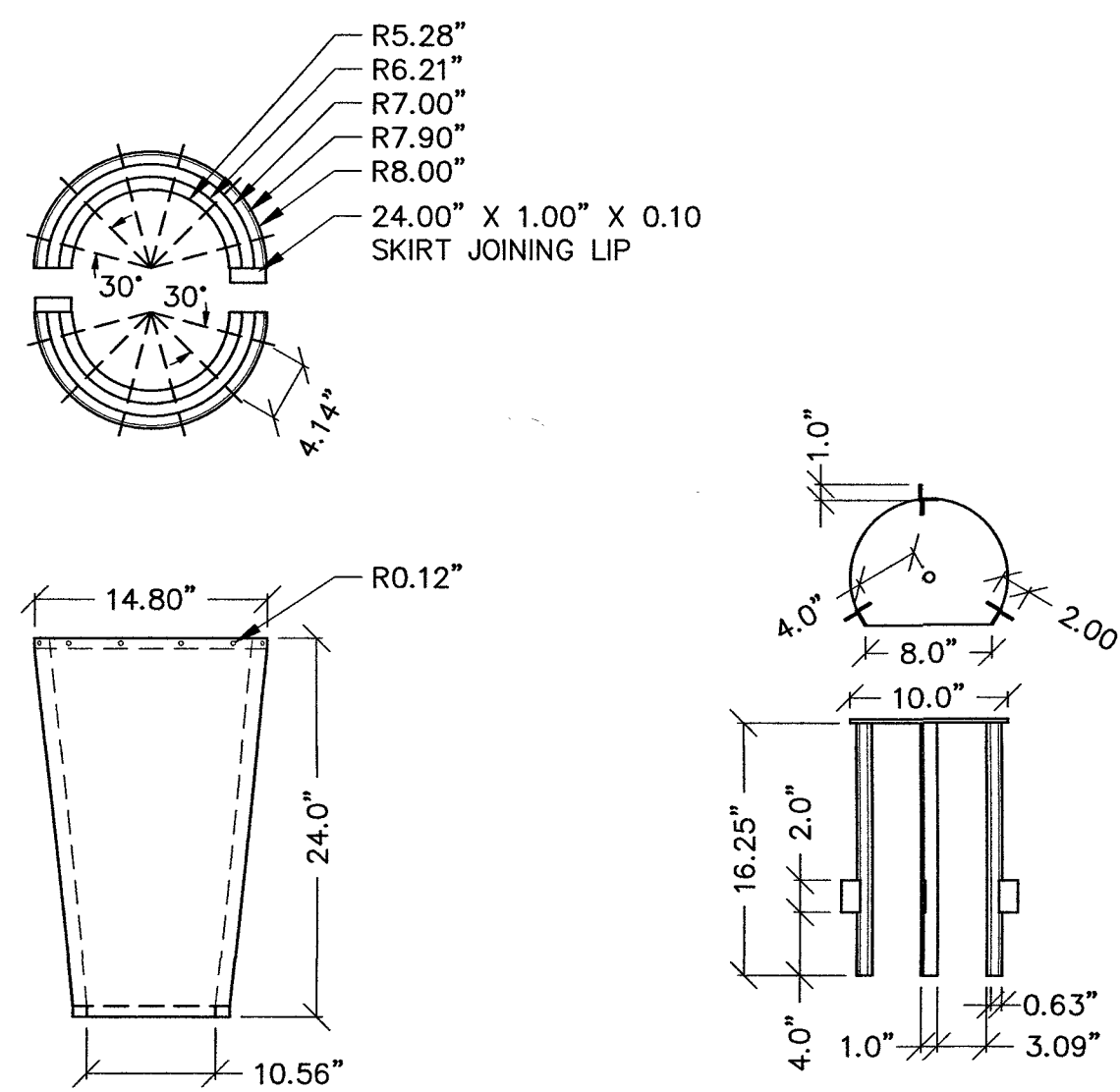
SCALE:
NONE

7

RADIO SHROUD

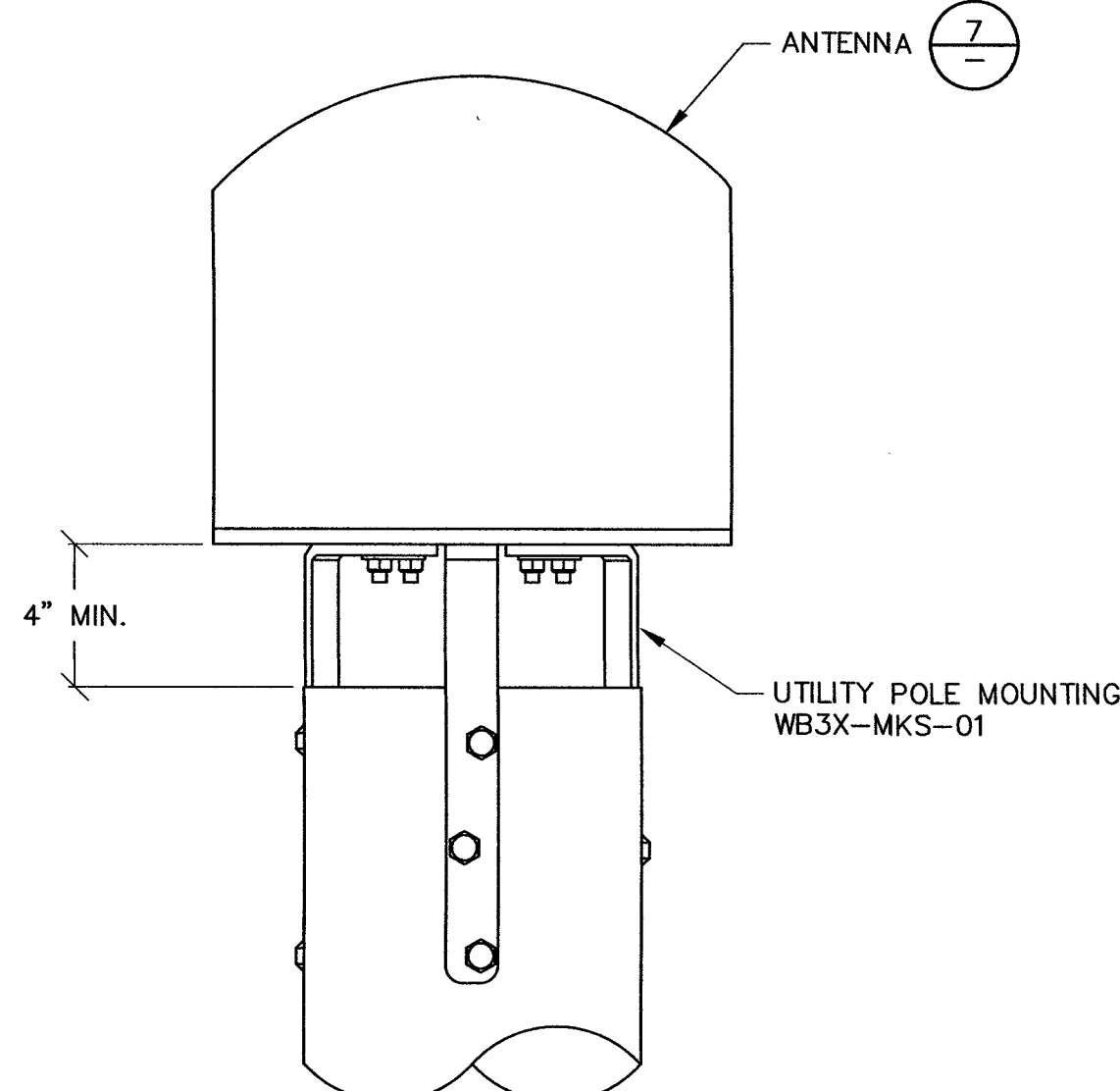
SCALE:
NONE

2



FOAM SKIRT

STREET LIGHT
POLE INSERT



ANTENNA MOUNTING DETAIL

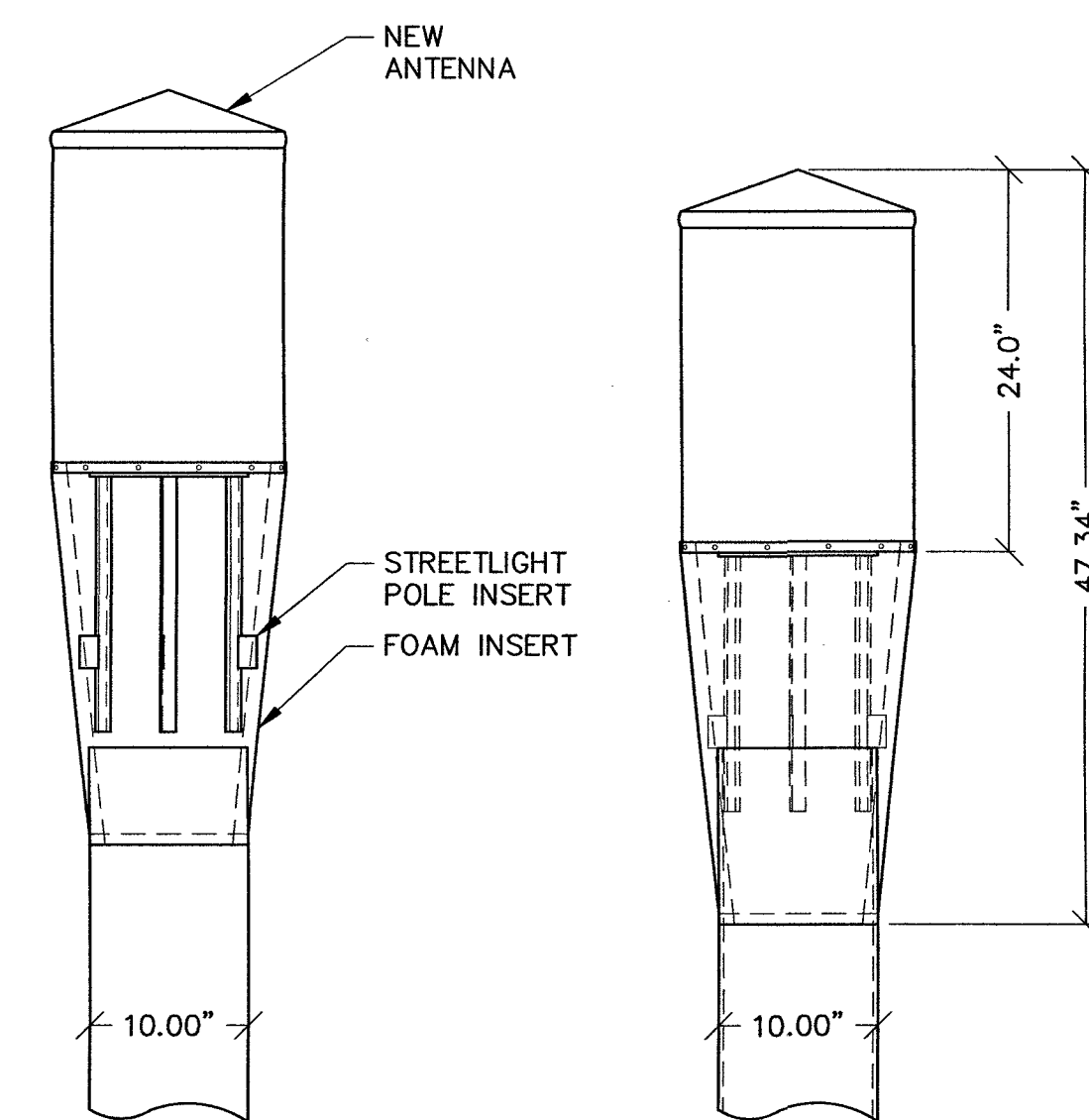
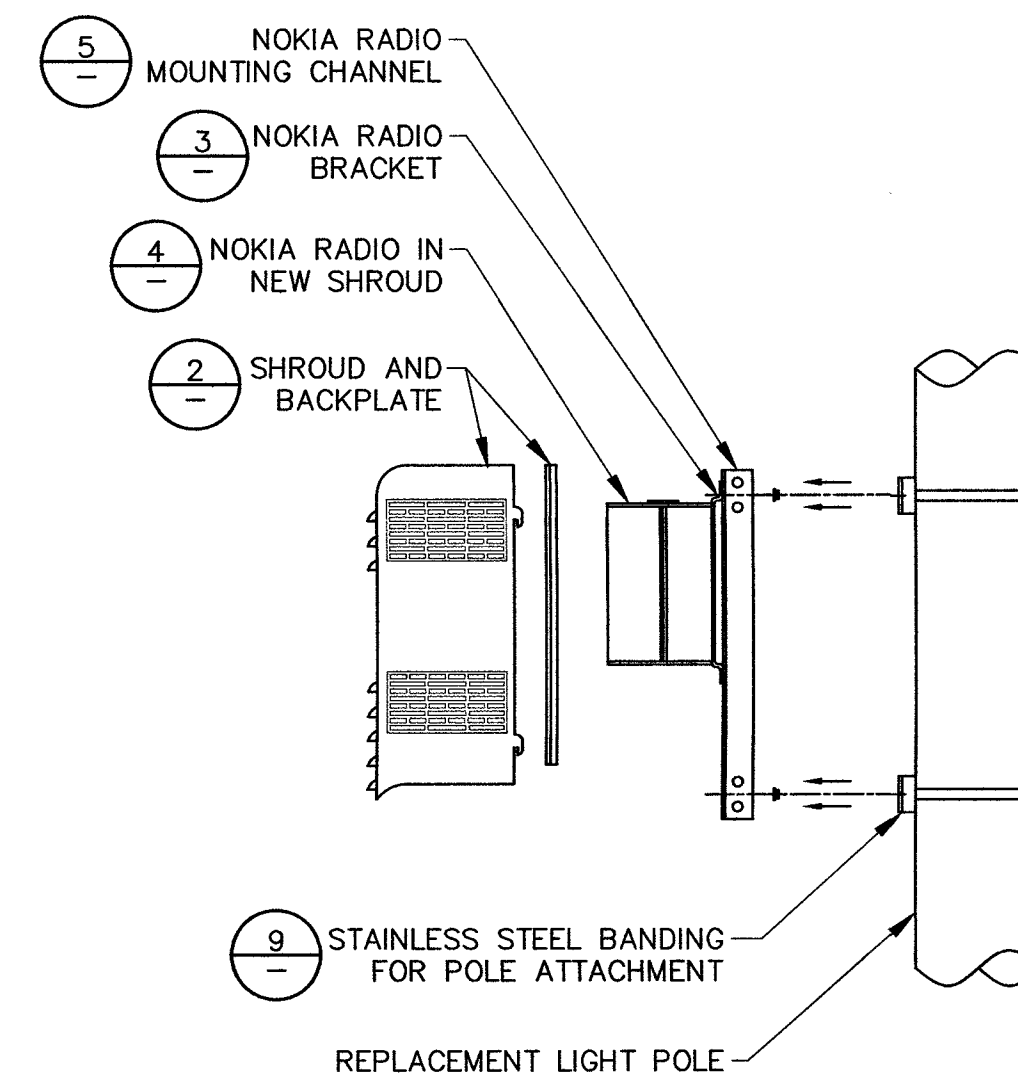
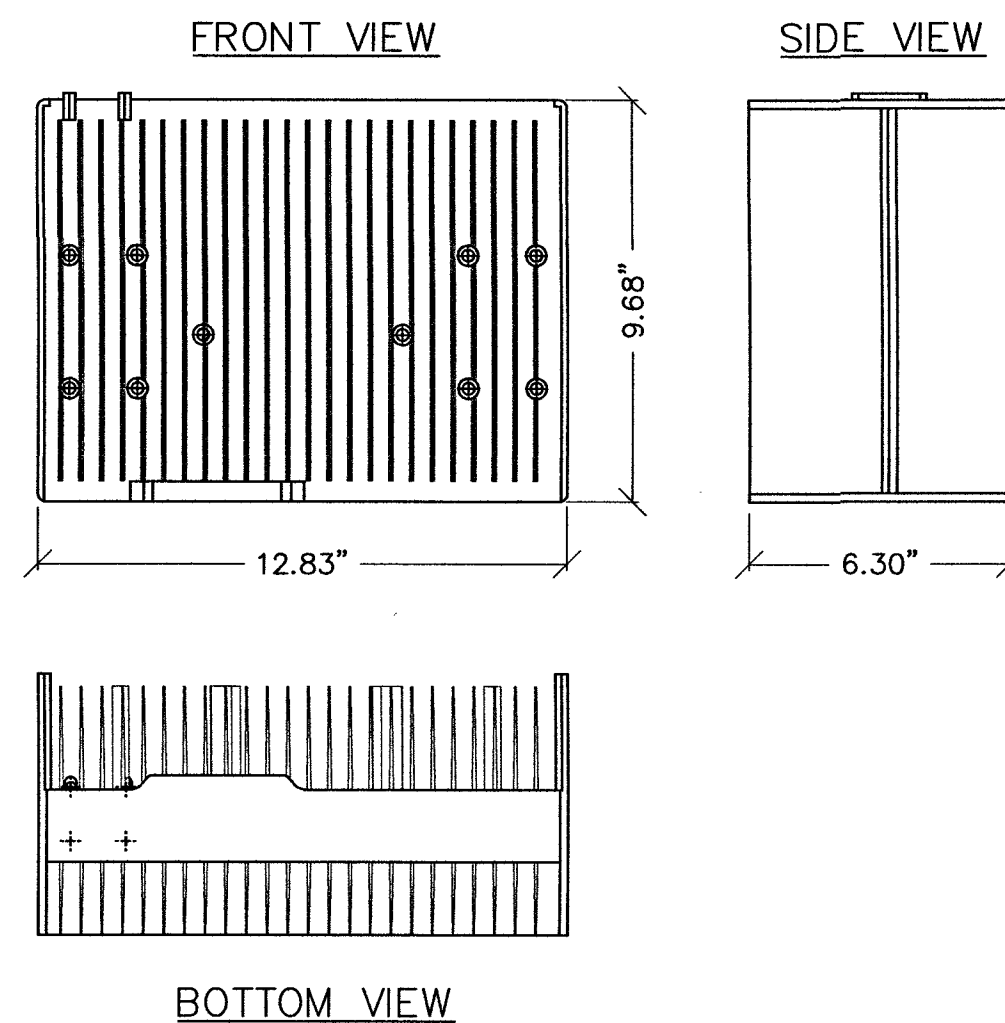
SCALE:
NONE

6

NOKIA 20W RADIO

SCALE:
NONE

4



ASSEMBLY

ANTENNA SHROUD

SCALE:
NONE

8

NOKIA 20W RADIO MOUNTING CHANNEL

SCALE:
NONE

5

NOKIA 20W RADIO BRACKET

SCALE:
NONE

3

SHROUD ASSEMBLY

SCALE:
NONE

1



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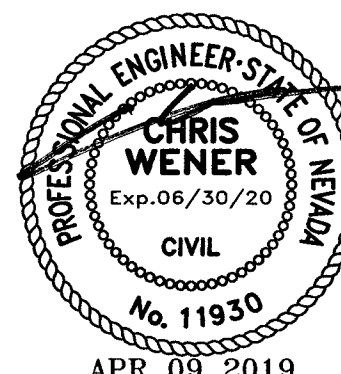
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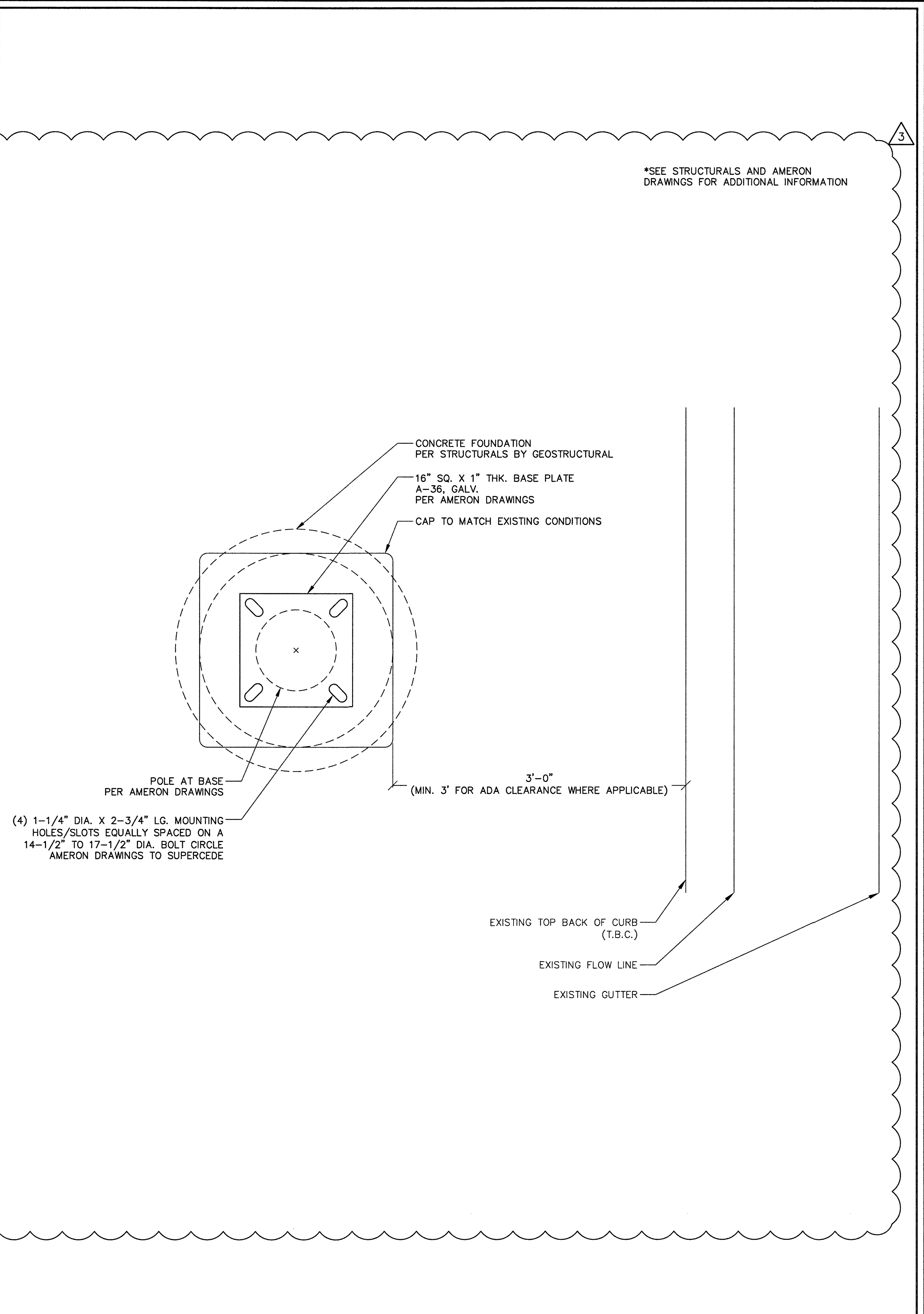
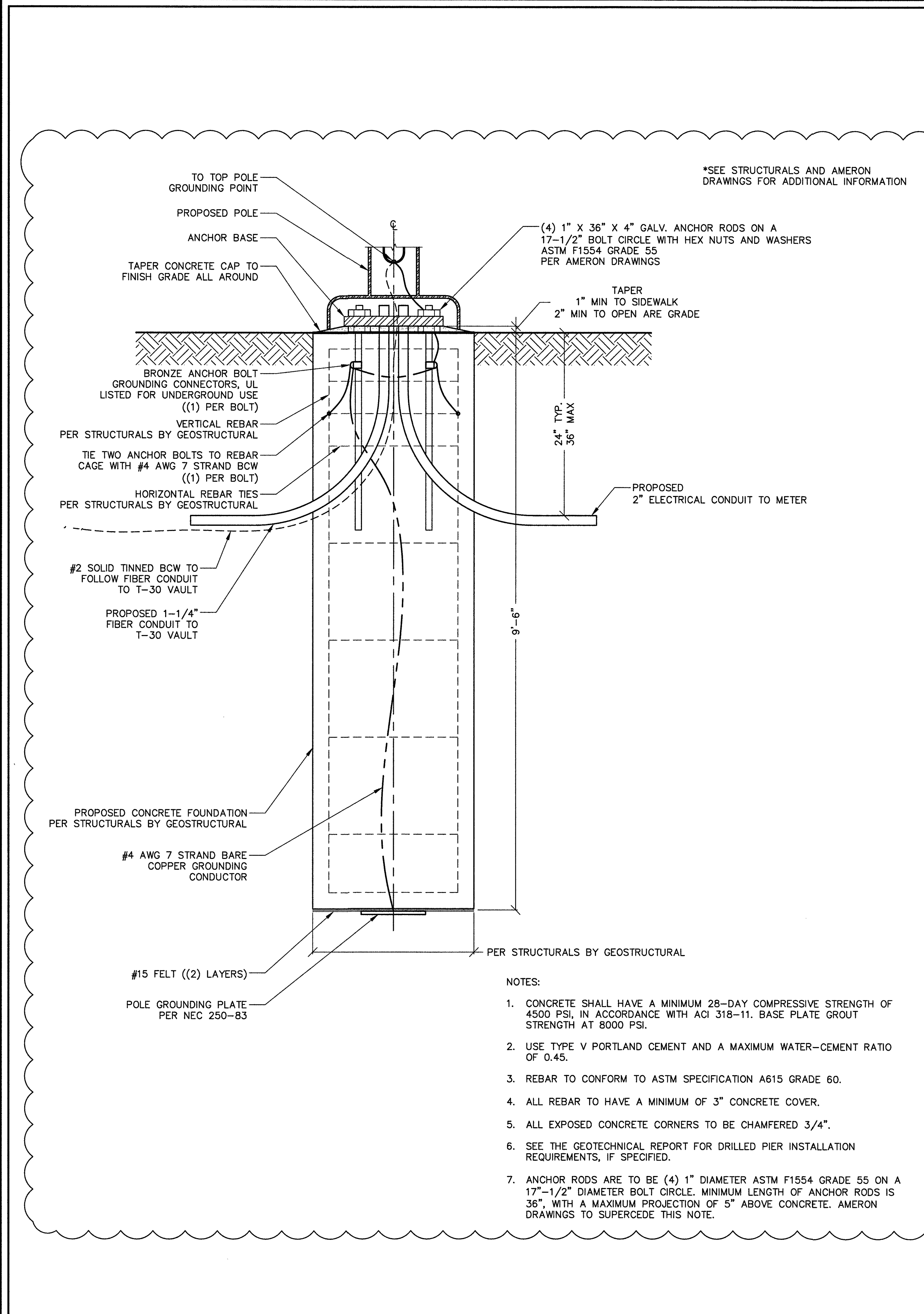


SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

C5 2



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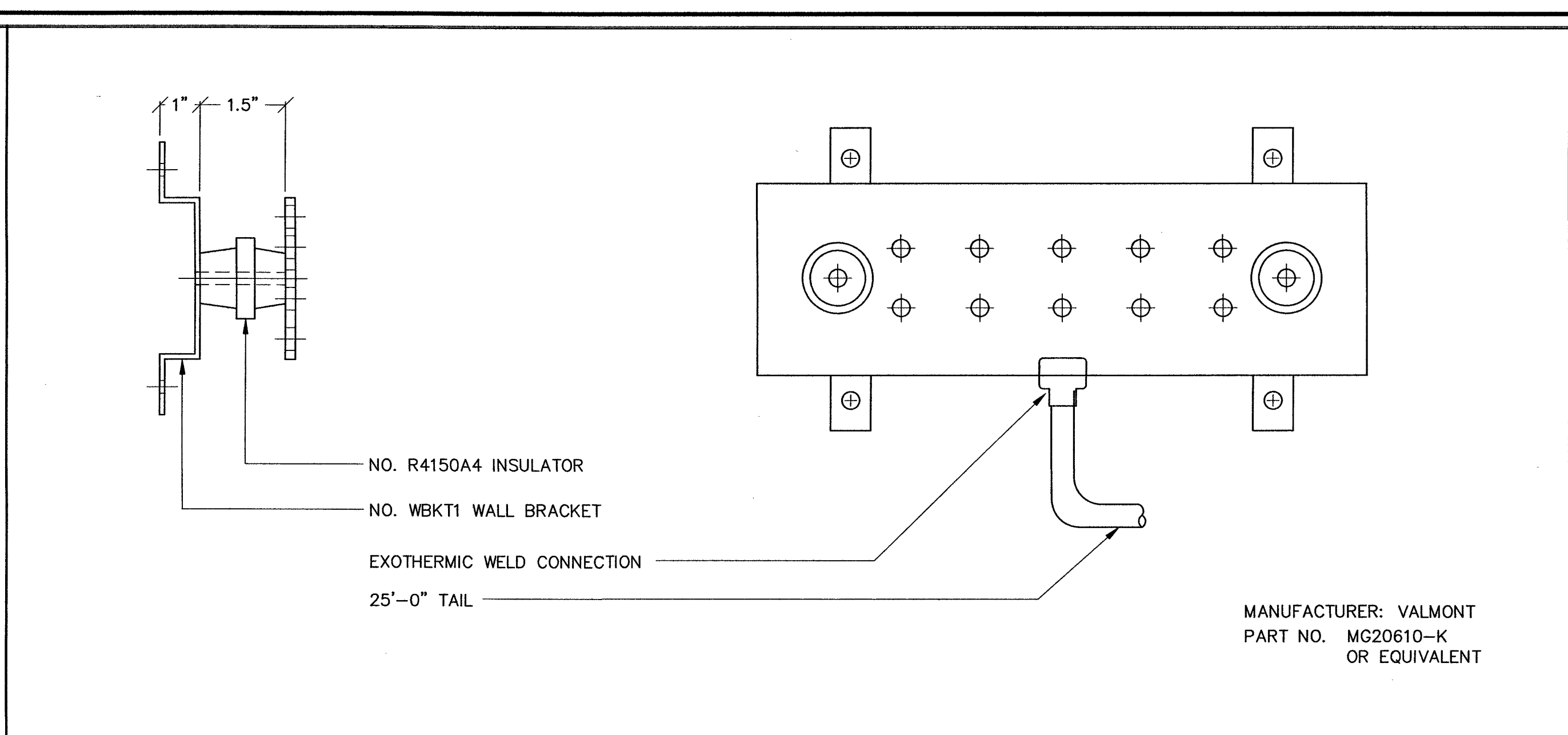
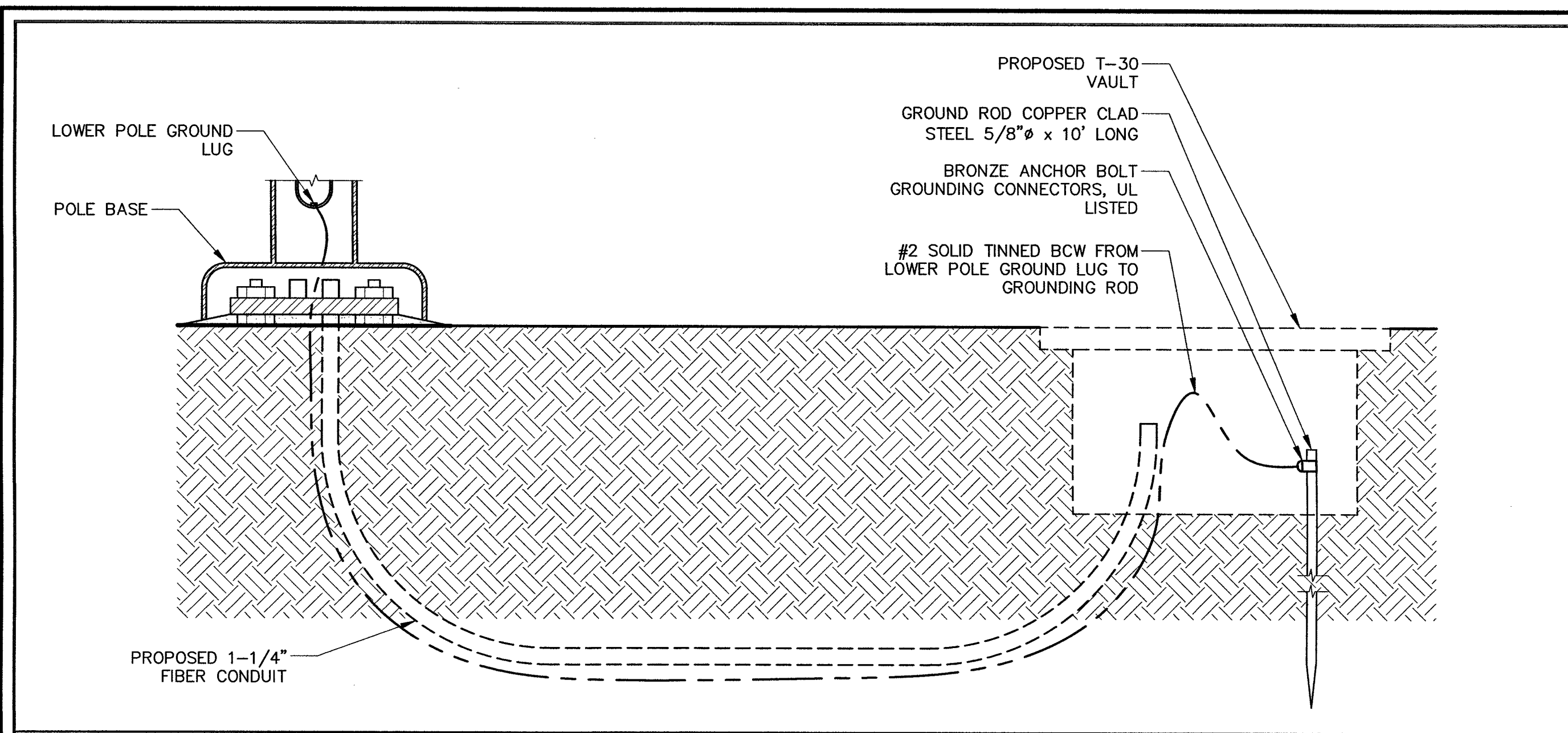
SHEET TITLE:

CONCRETE FOUNDATION DETAILS

SHEET NUMBER: REVISION:

C6

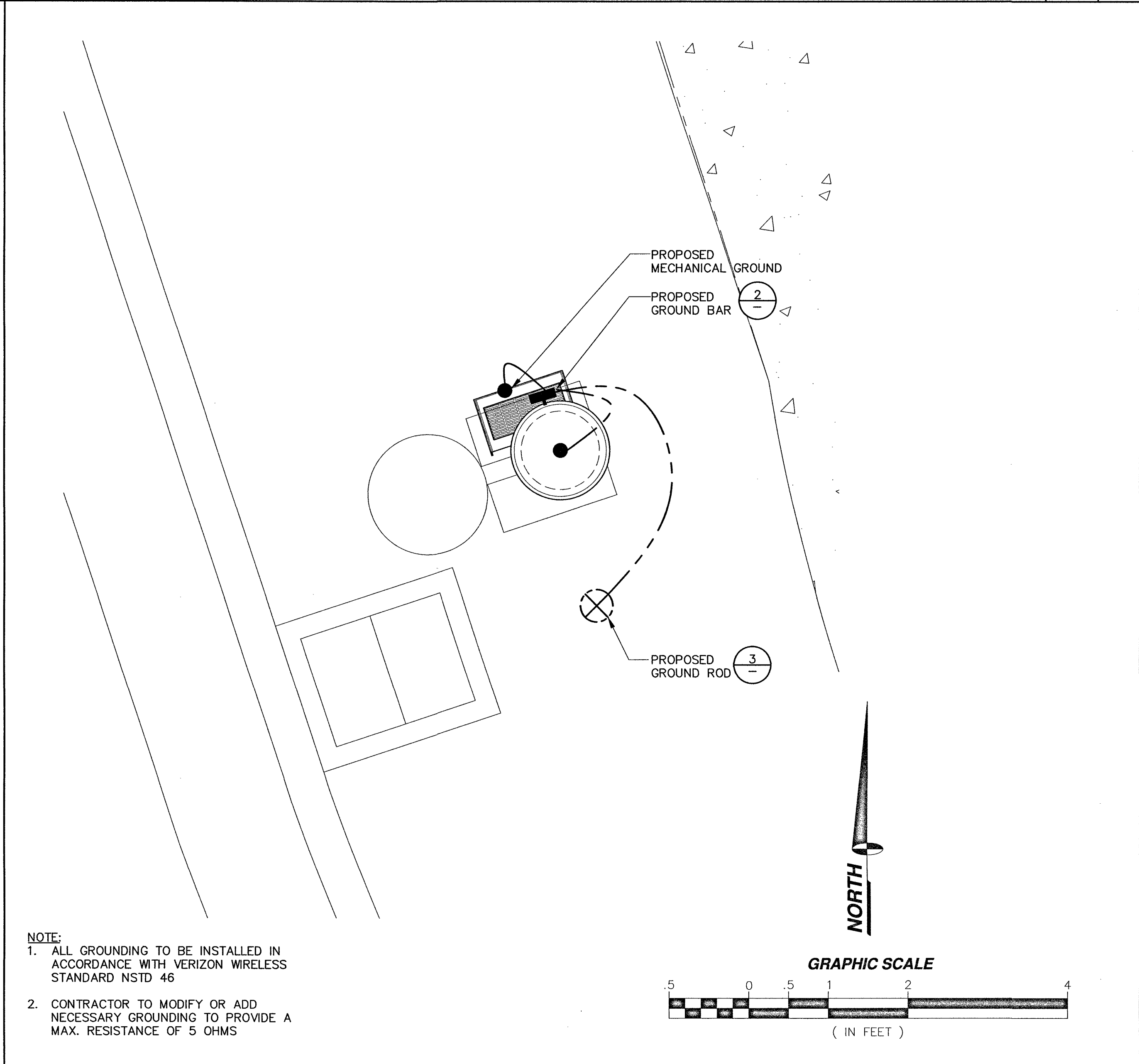
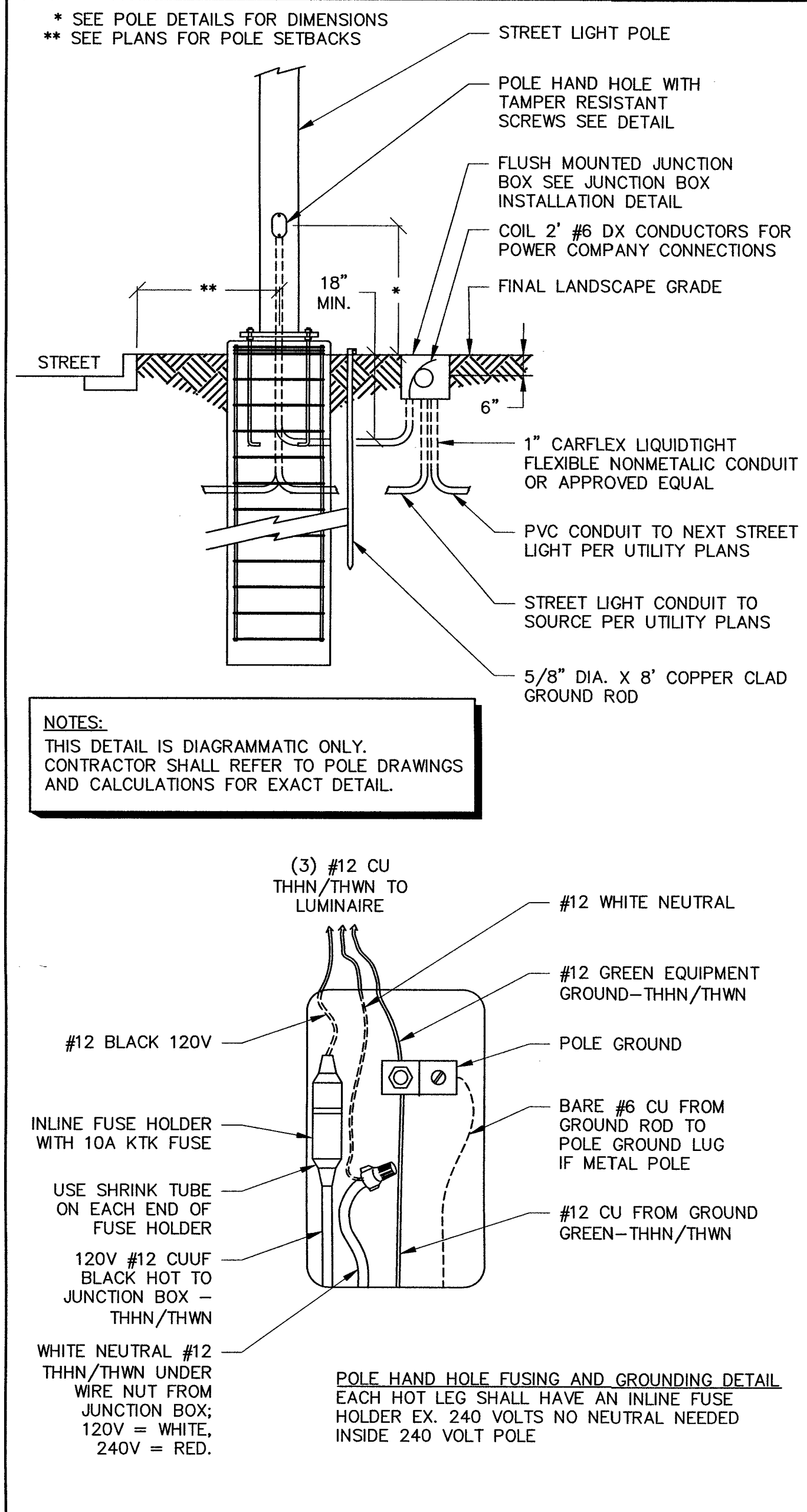
3



GROUND ROD SCALE: NONE 4

GROUND BAR SCALE: NONE 2

- ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS AND CARRIER GROUNDING STANDARD, LATEST REVISION.
- ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
- GROUND RING TO GROUND BAR CONNECTIONS SHALL BE CADWELED QTY. (2) #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
- GROUND BAR TO EQUIPMENT AND CABLES SHALL BE #2 AWG BTCW W/ DOUBLE LUG CONNECTIONS.
- GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
- GROUND BAR LOCATED BELOW WAVEGUIDE ENTRY PORT. CABLES SHALL BE #2 AWG BTCW/DOUBLE LUG CONNECTIONS. TWO PATHS TO GROUND RING.
- ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
- EXTERIOR GROUNDING CONDUCTORS: BURIED TO A MINIMUM DEPTH OF 1'-6" BELOW FINISHED GRADE TO ALLOW FOR FUTURE CONSTRUCTION.
- INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
- EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
- GROUND BARS:
EQUIPMENT GROUND BUSS BAR (EGB) LOCATED AT BOTTOM OF ANTENNA POLE/MAST FOR MAKING GROUNDING JUMPER CONNECTIONS TO COAX FEEDER CABLES SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. JUMPERS (FURNISHED BY OWNERS) SHALL BE INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR.
MAIN GROUND BUSS BAR (MGB) LOCATED NEAR THE BASE OF THE RADIO EQUIPMENT CABINET(S) SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR.
- ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
- ALL BOLTED TORQUE CONNECTORS SHALL BE LONG-BARRELED TYPES AND HAVE TWO HOLES FOR CONNECTION TO SURFACE AND NON-OXIDIZING AGENT APPLIED TO INHIBIT CORROSION.



GROUNDING LAYOUT SCALE: NONE 3

GROUNDING NOTES SCALE: NONE 5

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