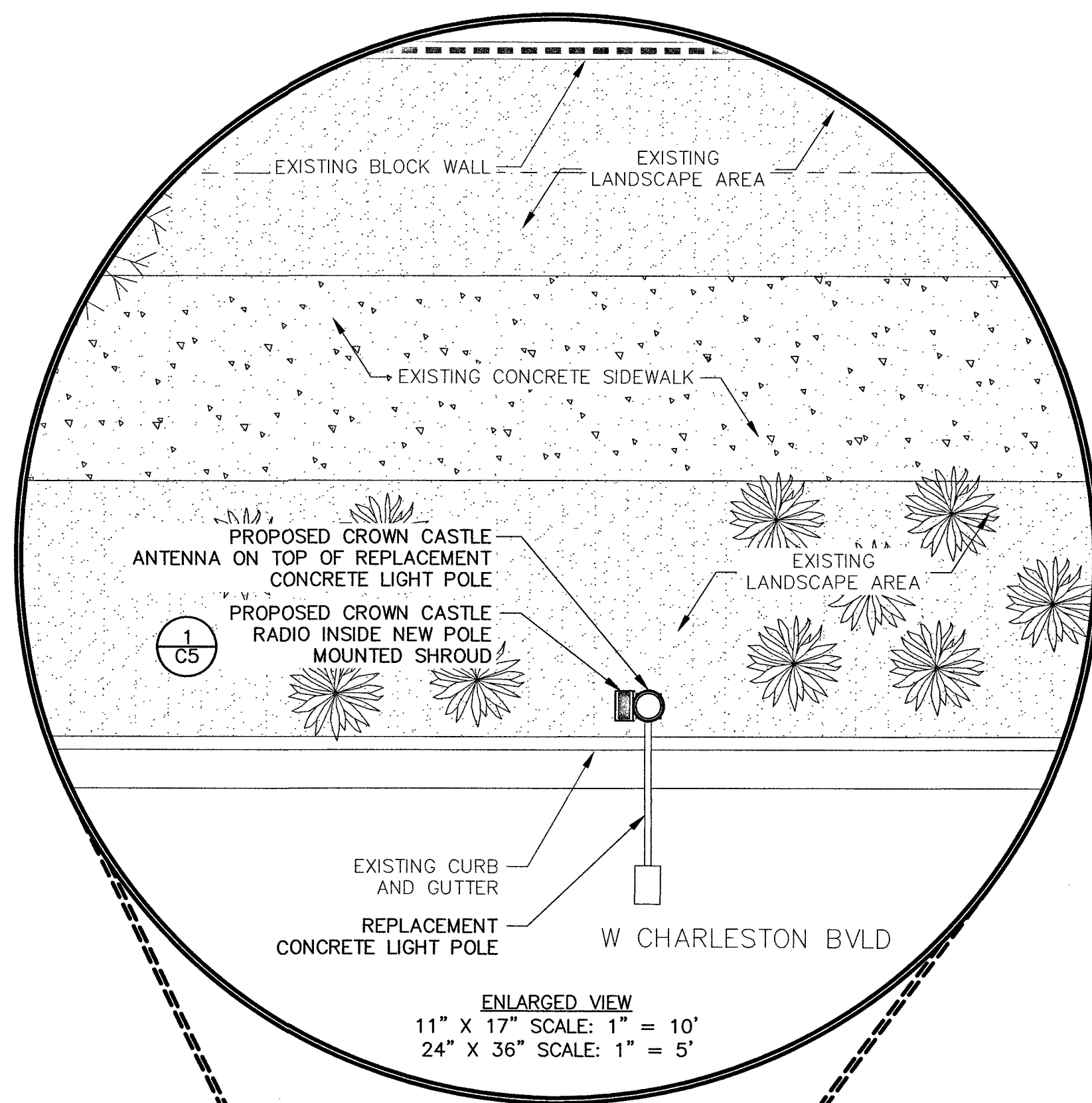
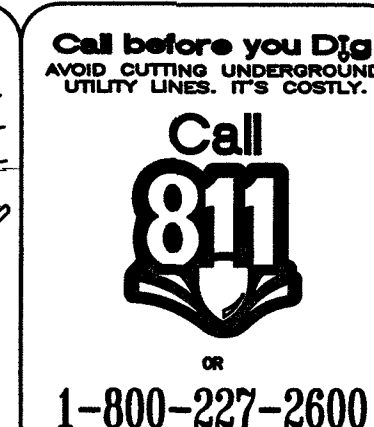
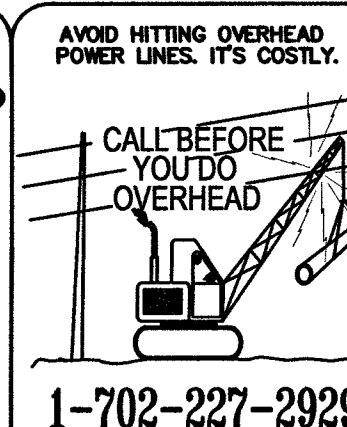


4/15/19 15200-617



LEGEND

- CENTERLINE
- - - EASEMENT
- - - RIGHT-OF-WAY
- - - CURB AND CUTTER
- - - EDGE OF SIDEWALK
- - - F - UNDERGROUND FIBER ROUTE
- ⊗ FIRE HYDRANT
- ⊕ STREET LIGHT



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

PROJECT INFORMATION:

CROWN CASTLE ID #
LV007

WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89138

CURRENT ISSUE DATE:

04/04/19

ISSUED FOR:

PROPOSED WORK

REV.: DATE: DESCRIPTION: BY:

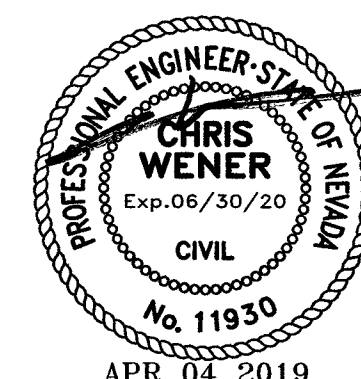
REV.	DATE	DESCRIPTION	BY
2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
0	09/28/18	90% PERMITTING	R.S.

PLANS PREPARED BY:



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

LICENSURE:



SHEET TITLE:

SITE PLAN

SHEET NUMBER: REVISION:

C3

2

SITE PLAN

11" X 17" SCALE 24" X 36" SCALE
1" = 180' 1" = 90' 1

PROJECT INFORMATION:

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LAS VEGAS, NEVADA 89138

CURRENT ISSUE DATE:

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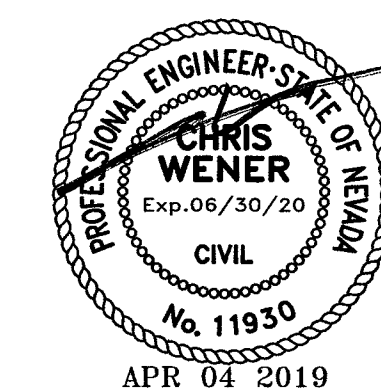
REV.: DATE: DESCRIPTION: BY:

REV.	DATE	DESCRIPTION	BY
2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
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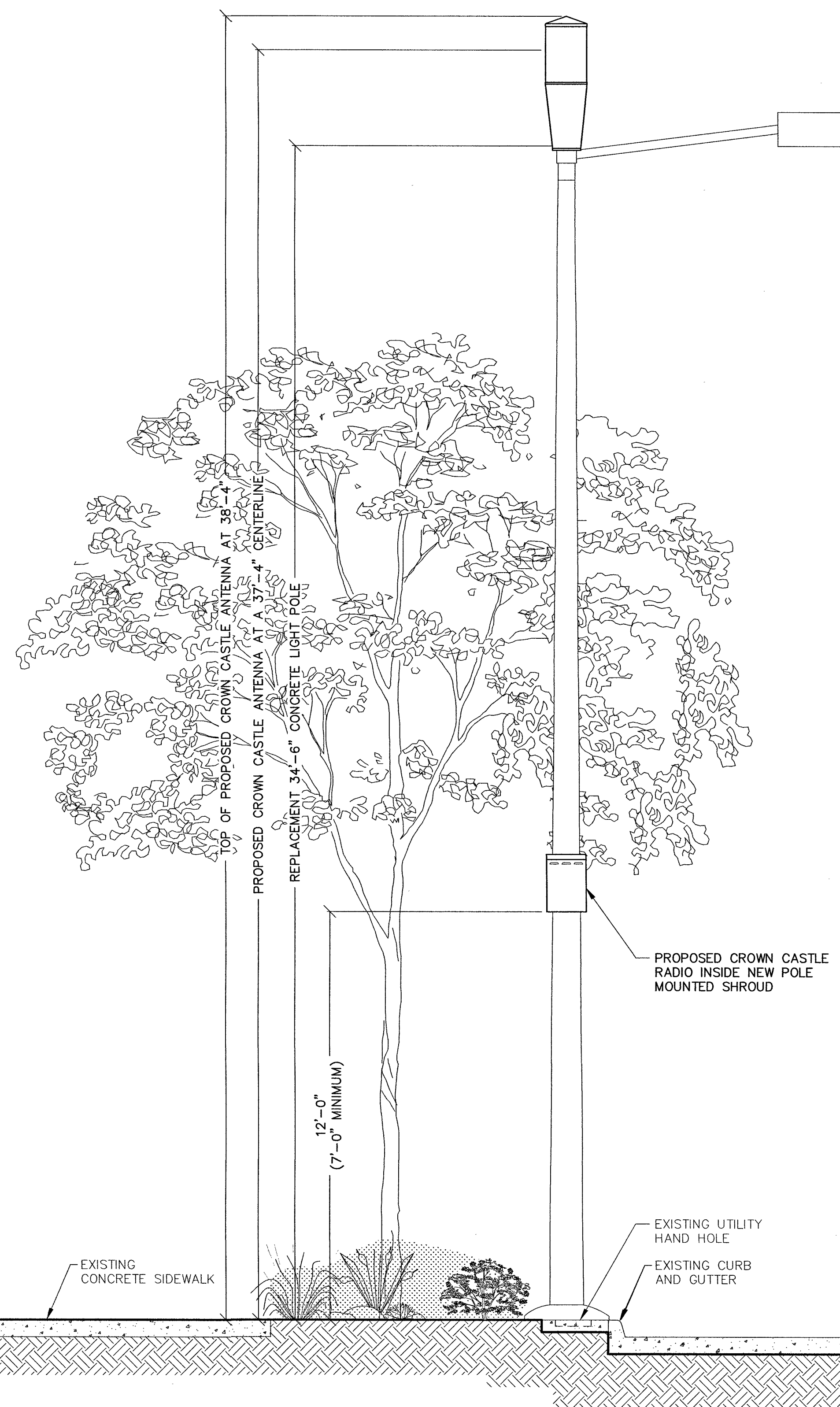


SHEET TITLE:

EXISTING AND PROPOSED
WEST ELEVATION

SHEET NUMBER: REVISION:

C4 **2**

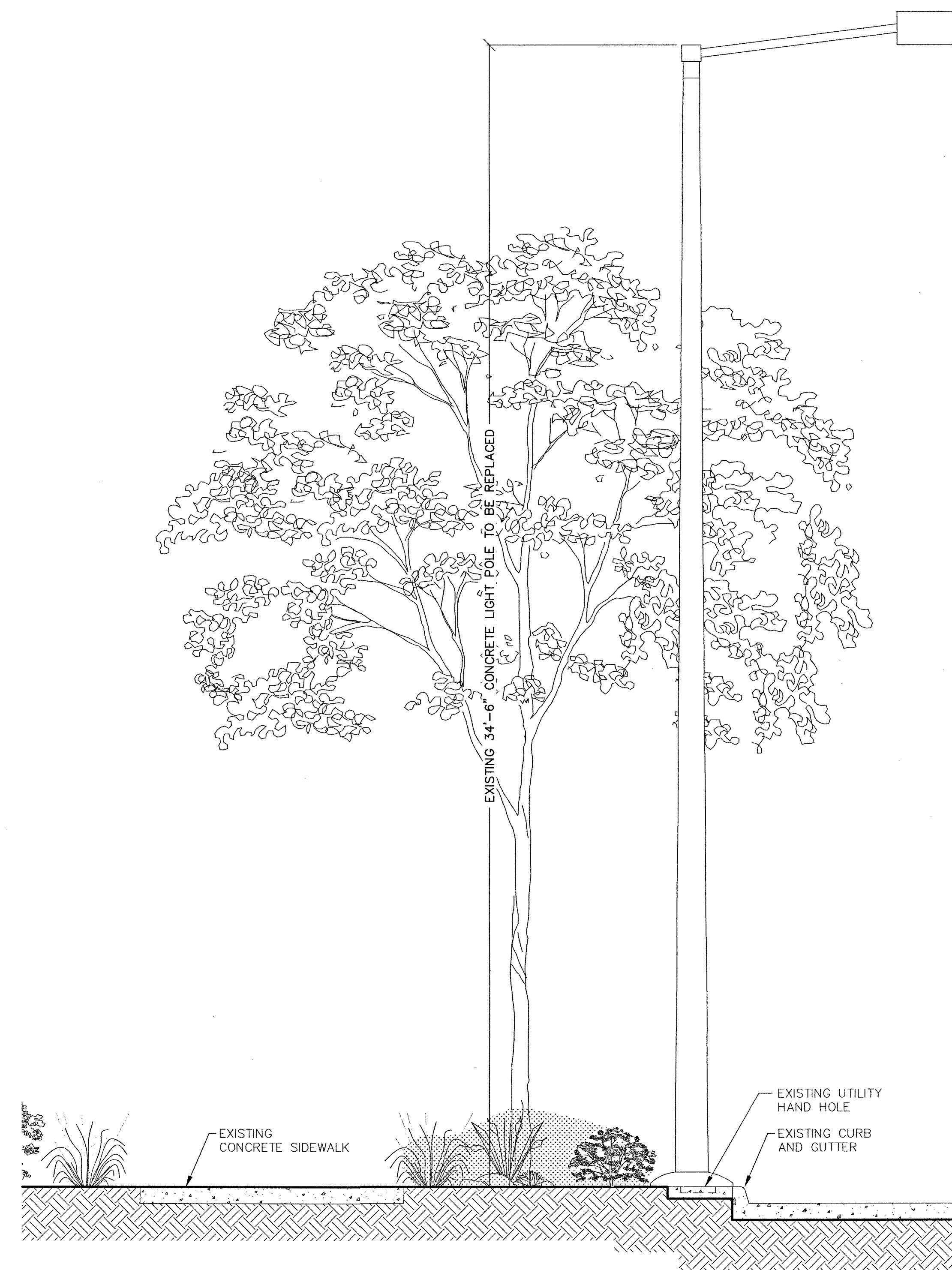


PROPOSED WEST ELEVATION

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

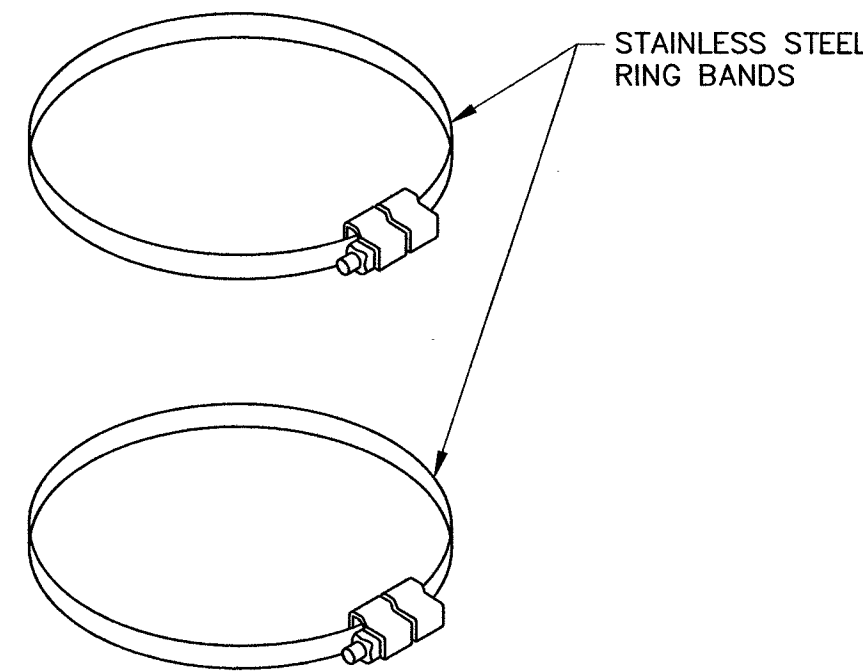
2

EXISTING WEST ELEVATION



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

1



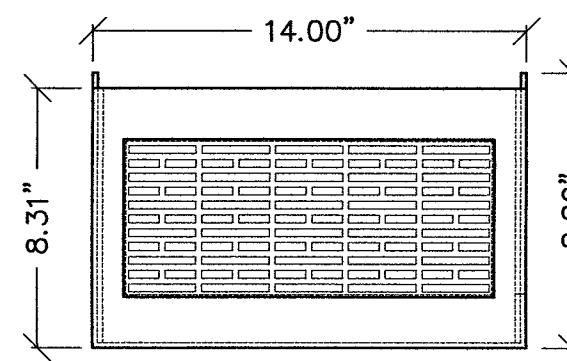
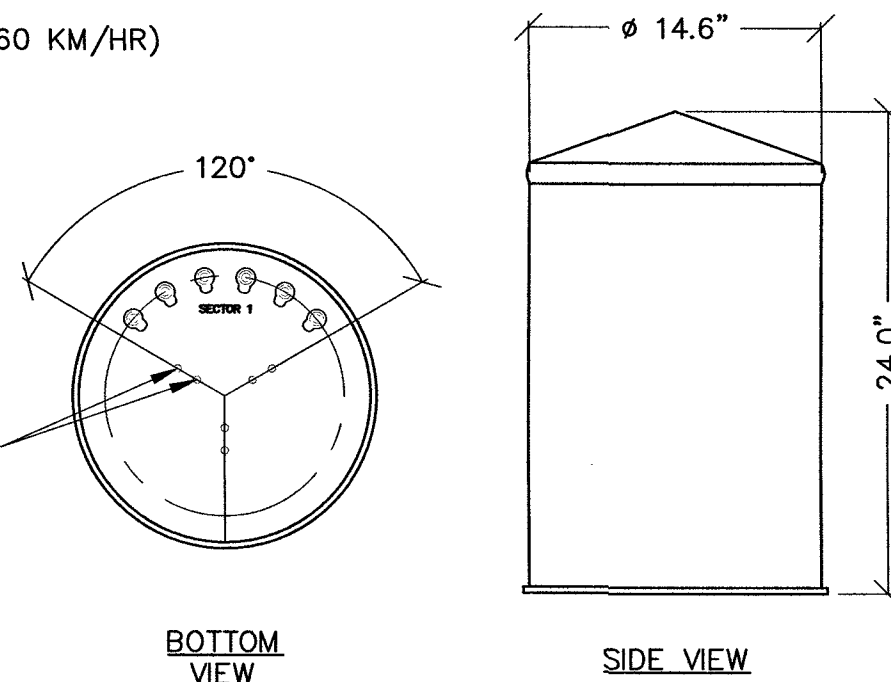
AMPHENOL 2C2U3MT360X06FY70 ANTENNA SPECIFICATIONS
INPUT CONNECTOR (2X) 4.3/10 OR 7/16-DIN / FEMALE / BOTTOM
DIMENSION (H x DIA.) 24.0 x 14.6 IN.
ANTENNA WEIGHT 22.1 LBS
LIGHTNING PROTECTION DIRECT GROUND

WIND SURVIVAL SPEED
241 KM/HR - 150 MPH

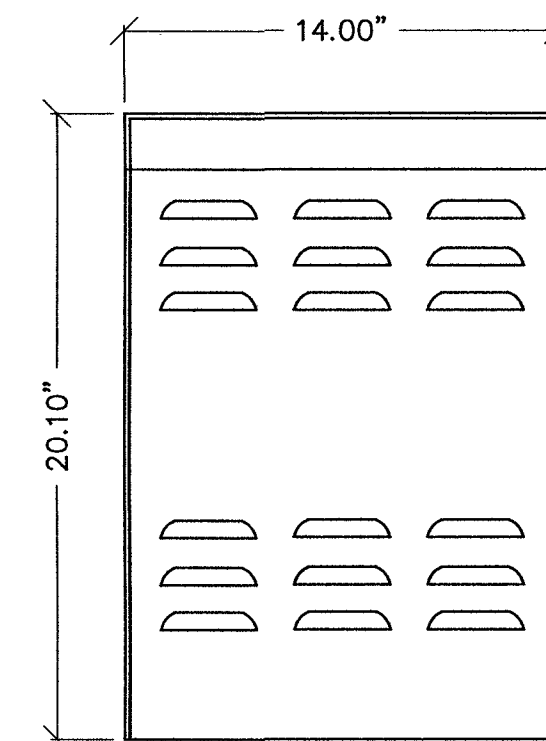
WIND LOAD @ 100 MPH (160 KM/HR)
191 N - 43 LBF

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

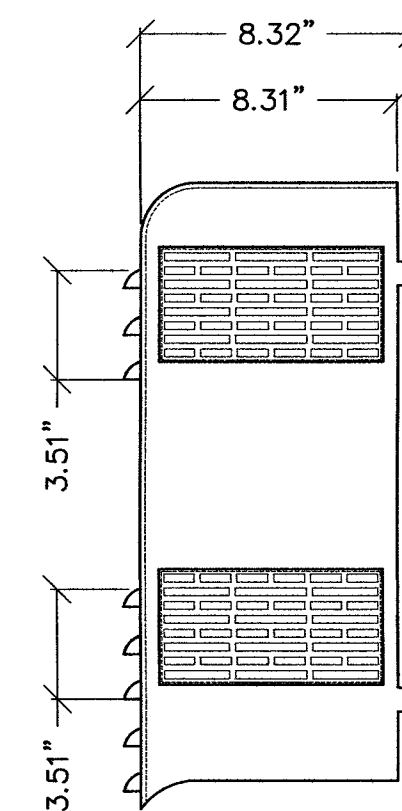
NOTES:
1. CONNECTOR HOLES ARE 2" FROM CENTER TO CENTER
APART IN EACH SECTOR



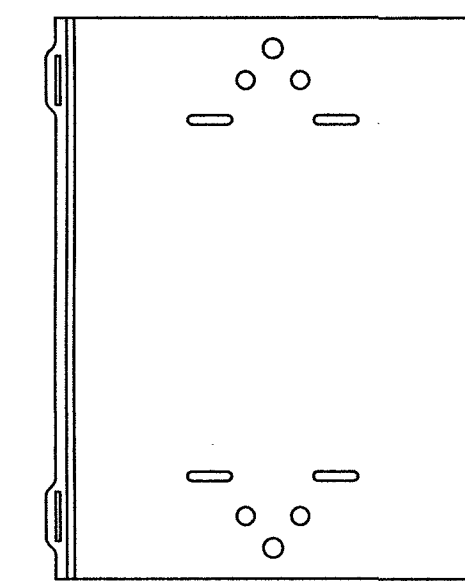
TOP VIEW



FRONT VIEW



RIGHT SIDE
VIEW



BACK PLATE

STAINLESS STEEL RING BAND

SCALE:
NONE

9

ANTENNA DETAIL

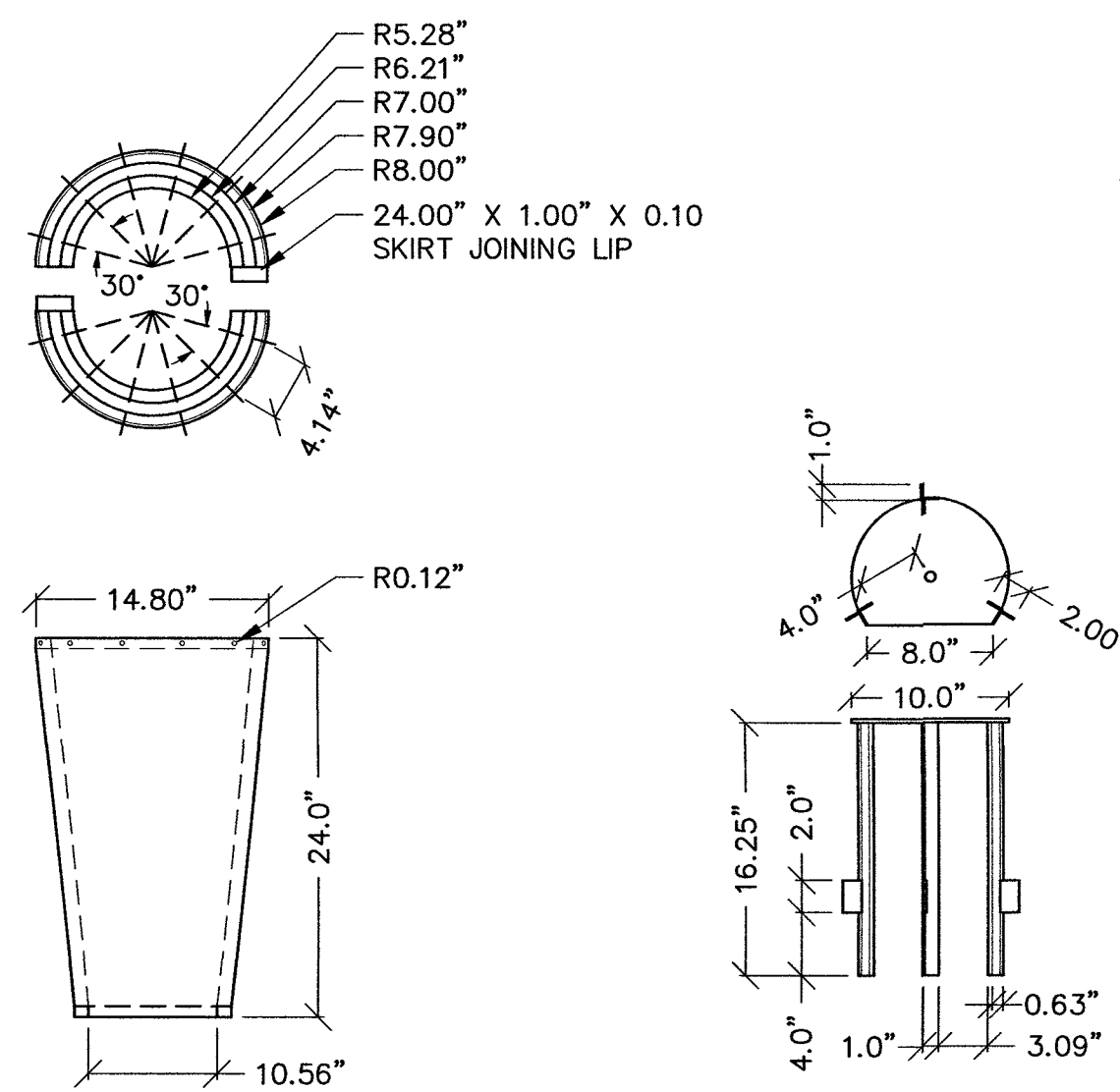
SCALE:
NONE

7

RADIO SHROUD

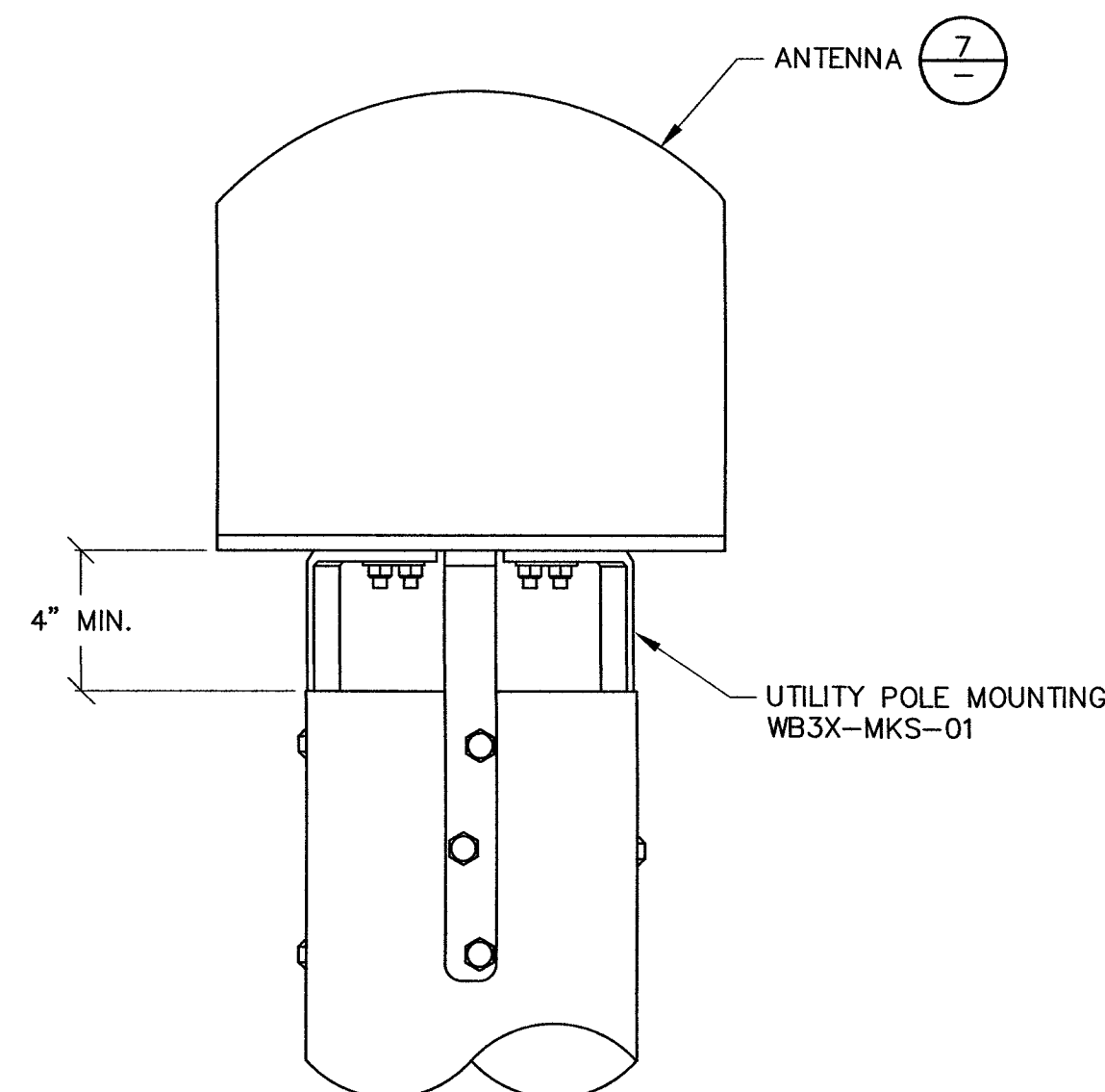
SCALE:
NONE

2



FOAM SKIRT

STREET LIGHT
POLE INSERT



ANTENNA MOUNTING DETAIL

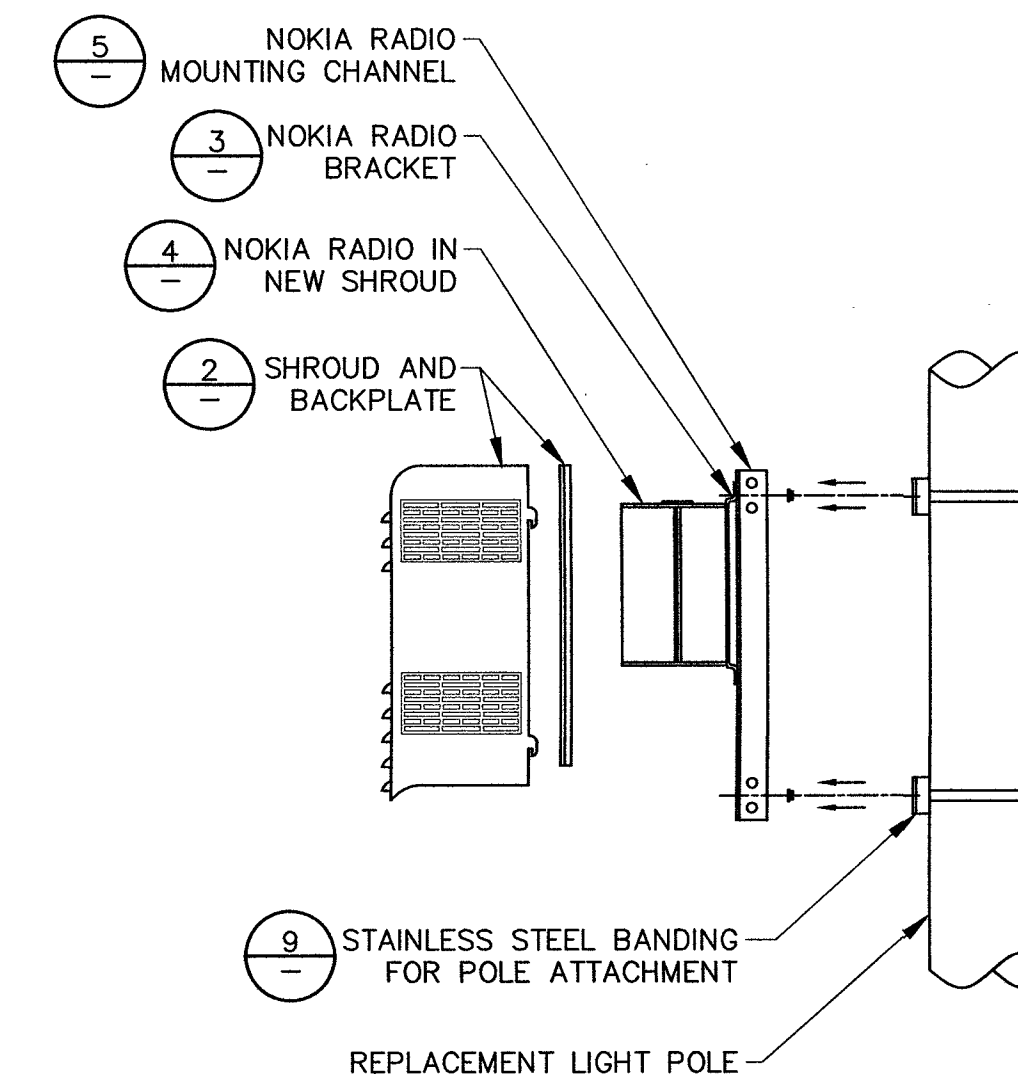
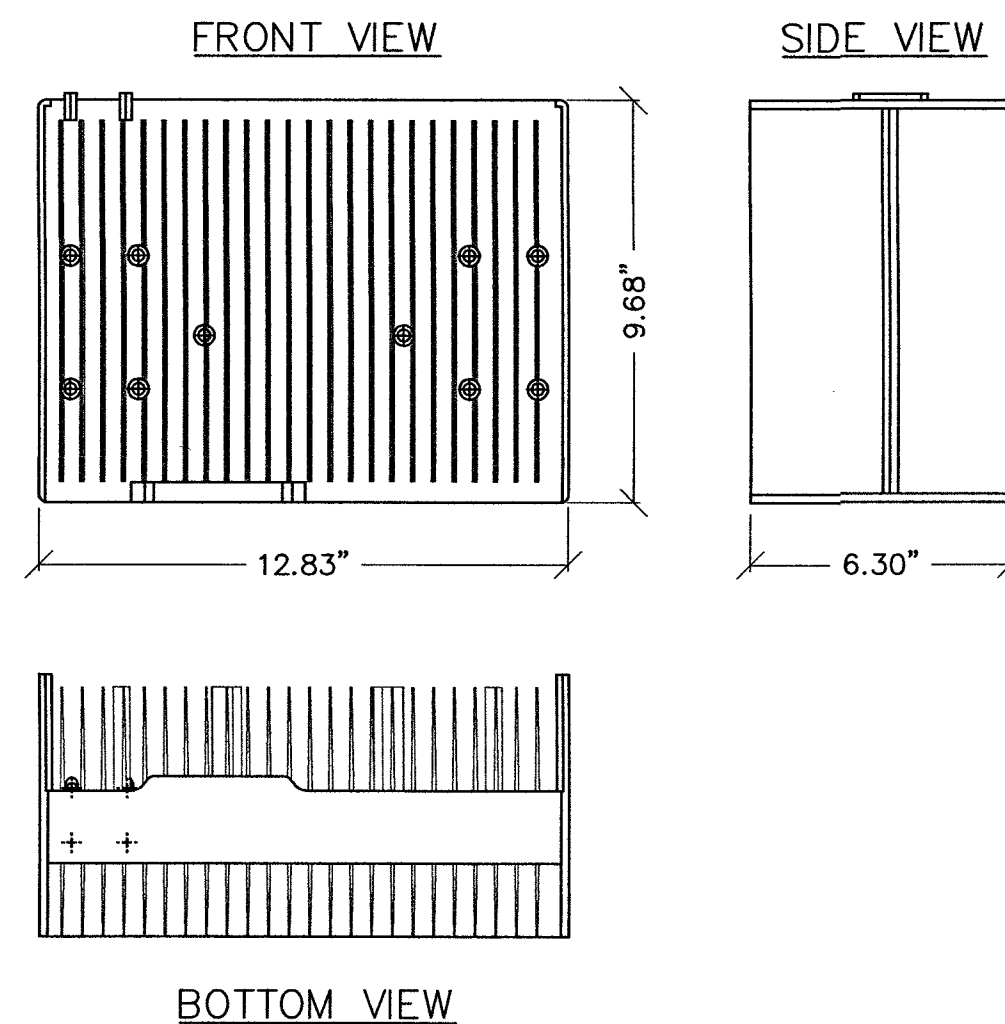
SCALE:
NONE

6

NOKIA 20W RADIO

SCALE:
NONE

4



SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

C5 2

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

SPECTRUM

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



SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

C5 2



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

PROJECT INFORMATION:

CROWN CASTLE ID #
LV007

WEST CHARLESTON BOULEVARD
LAS VEGAS, NEVADA 89138

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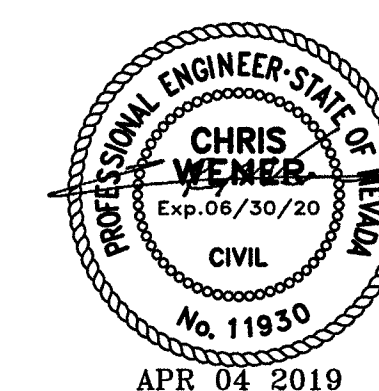
REV.	DATE	DESCRIPTION	BY
3	04/04/19	LAND DEV. COMMENTS	R.S.
2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
0	09/28/18	90% PERMITTING	R.S.

PLANS PREPARED BY:



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LAS VEGAS, NEVADA 89118
PHONE: (702) 367-7705
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LICENSURE:



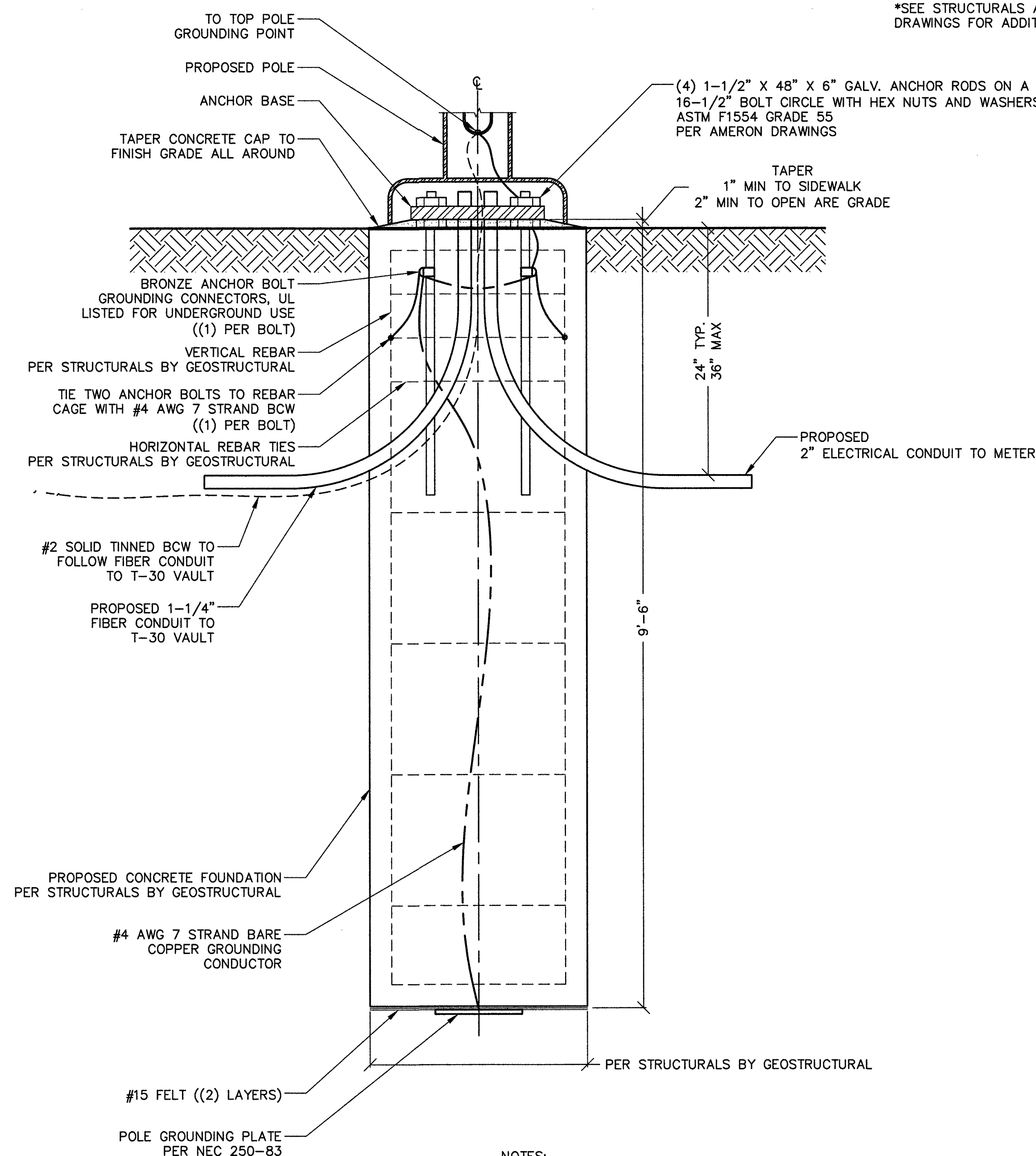
SHEET TITLE:

CONSTRUCTION DETAILS

SHEET NUMBER: REVISION:

C6 3

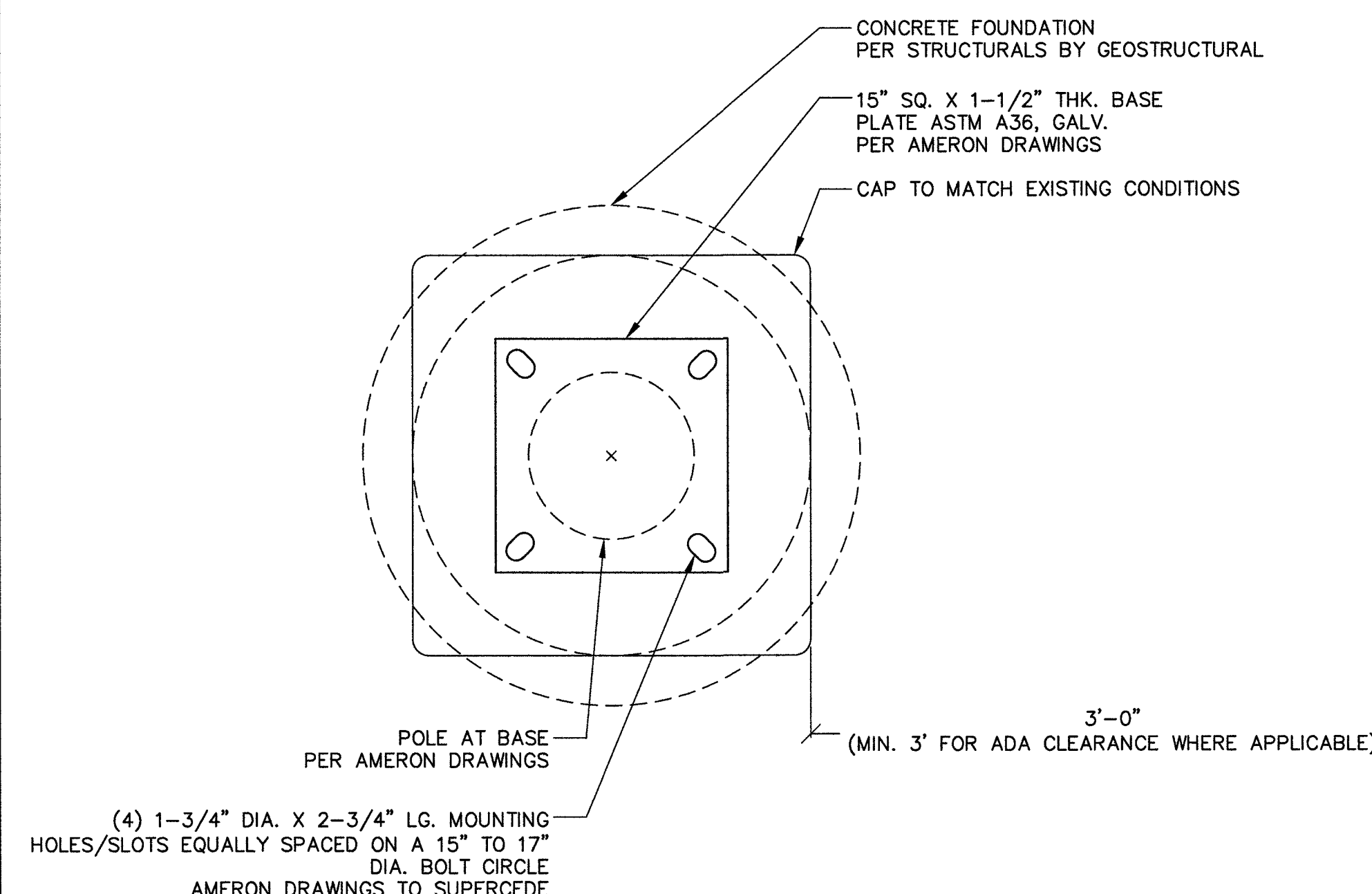
*SEE STRUCTURALS AND AMERON
DRAWINGS FOR ADDITIONAL INFORMATION



NOTES:

1. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI, IN ACCORDANCE WITH ACI 318-11. BASE PLATE GROUT STRENGTH AT 8000 PSI.
2. USE TYPE V PORTLAND CEMENT AND A MAXIMUM WATER-CEMENT RATIO OF 0.45.
3. REBAR TO CONFORM TO ASTM SPECIFICATION A615 GRADE 60.
4. ALL REBAR TO HAVE A MINIMUM OF 3" CONCRETE COVER.
5. ALL EXPOSED CONCRETE CORNERS TO BE CHAMFERED 3/4".
6. SEE THE GEOTECHNICAL REPORT FOR DRILLED PIER INSTALLATION REQUIREMENTS, IF SPECIFIED.
7. ANCHOR RODS ARE TO BE (4) 1-1/2" DIAMETER ASTM F1554 GRADE 55 ON A 16"-1/2" DIAMETER BOLT CIRCLE. MINIMUM LENGTH OF ANCHOR RODS IS 48", WITH A MAXIMUM PROJECTION OF 5" ABOVE CONCRETE. AMERON DRAWINGS TO SUPERCEDE THIS NOTE.

*SEE STRUCTURALS AND AMERON
DRAWINGS FOR ADDITIONAL INFORMATION

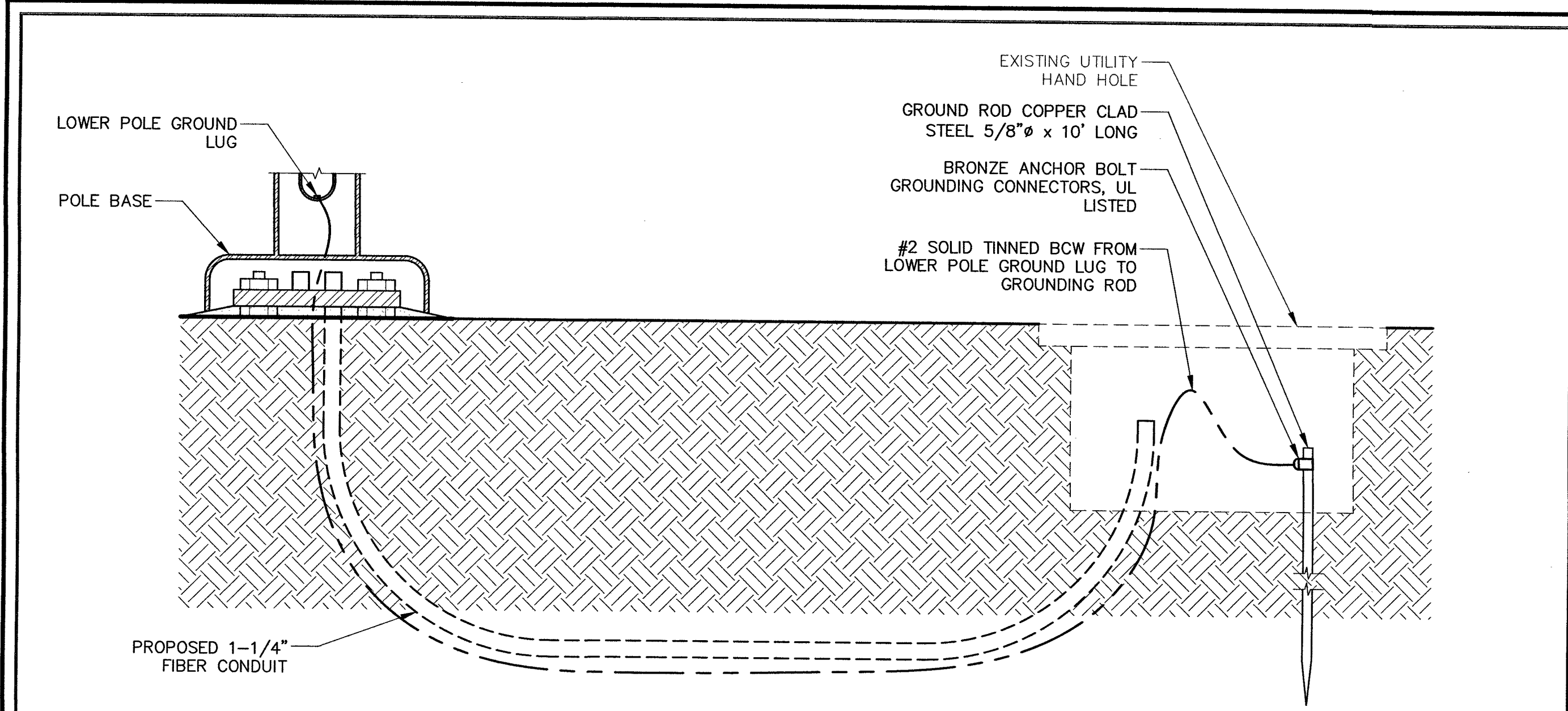


STREETLIGHT FOUNDATION DESIGN

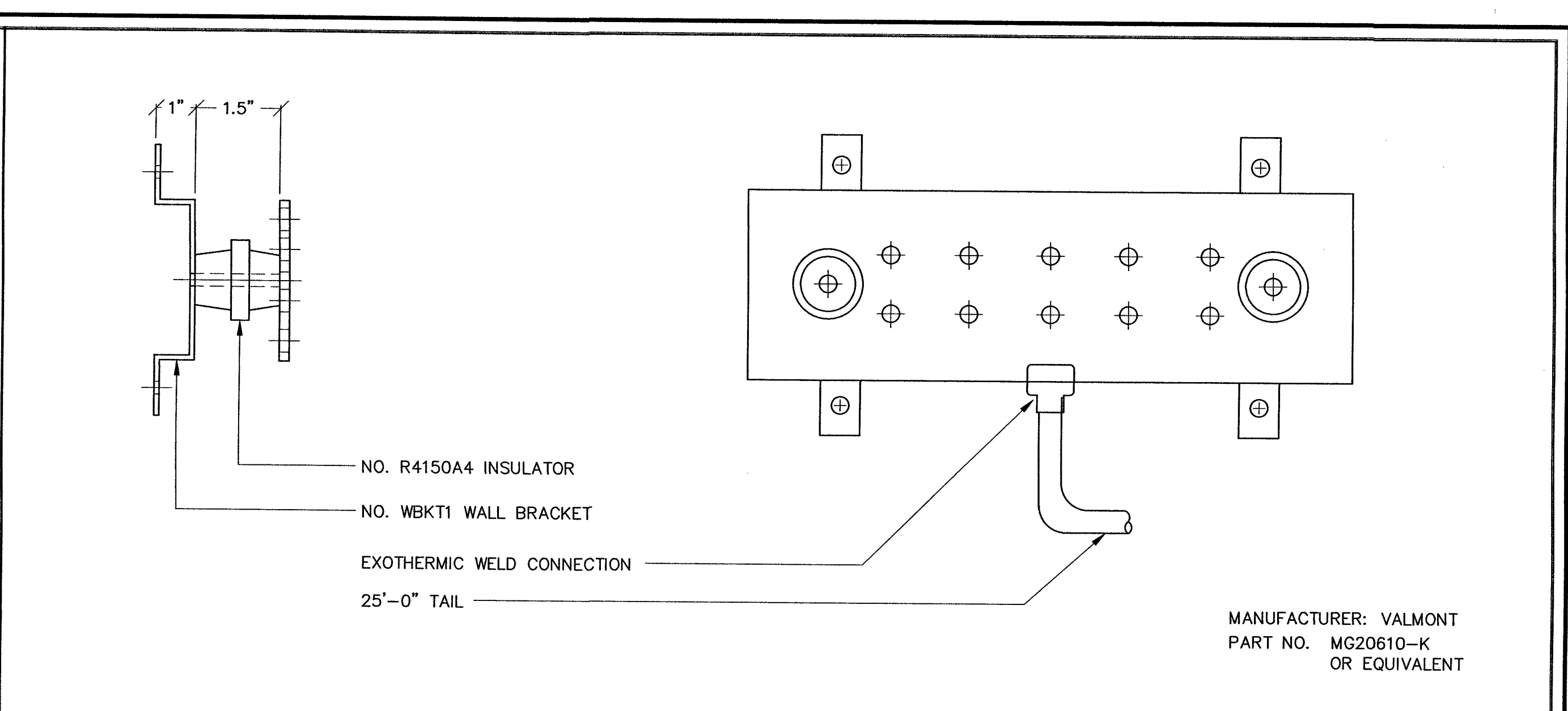
SCALE:
NONE 2

STREETLIGHT PLACEMENT ON CONCRETE FOUNDATION

SCALE:
NONE 1

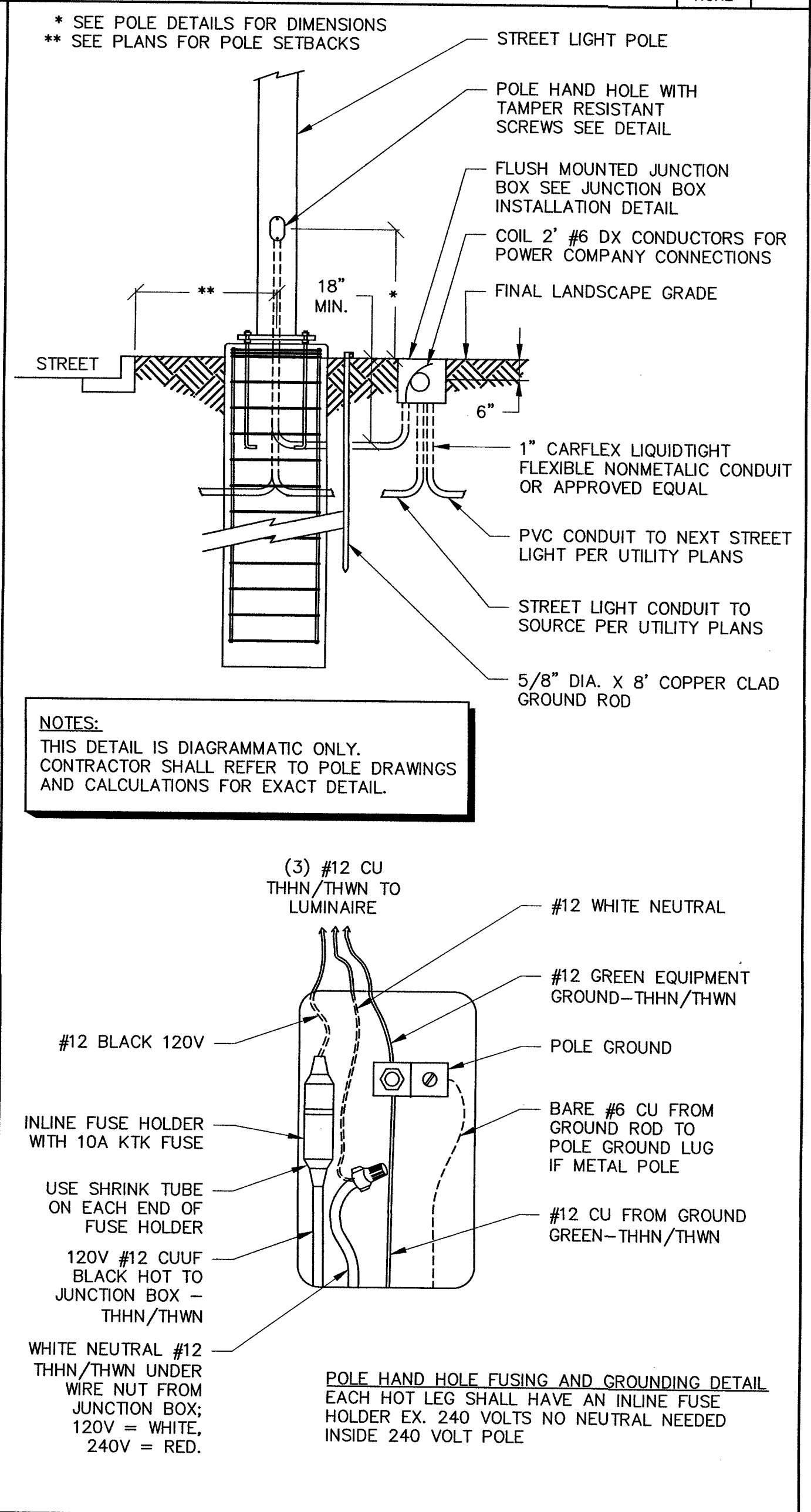


GROUND ROD SCALE: NONE 4

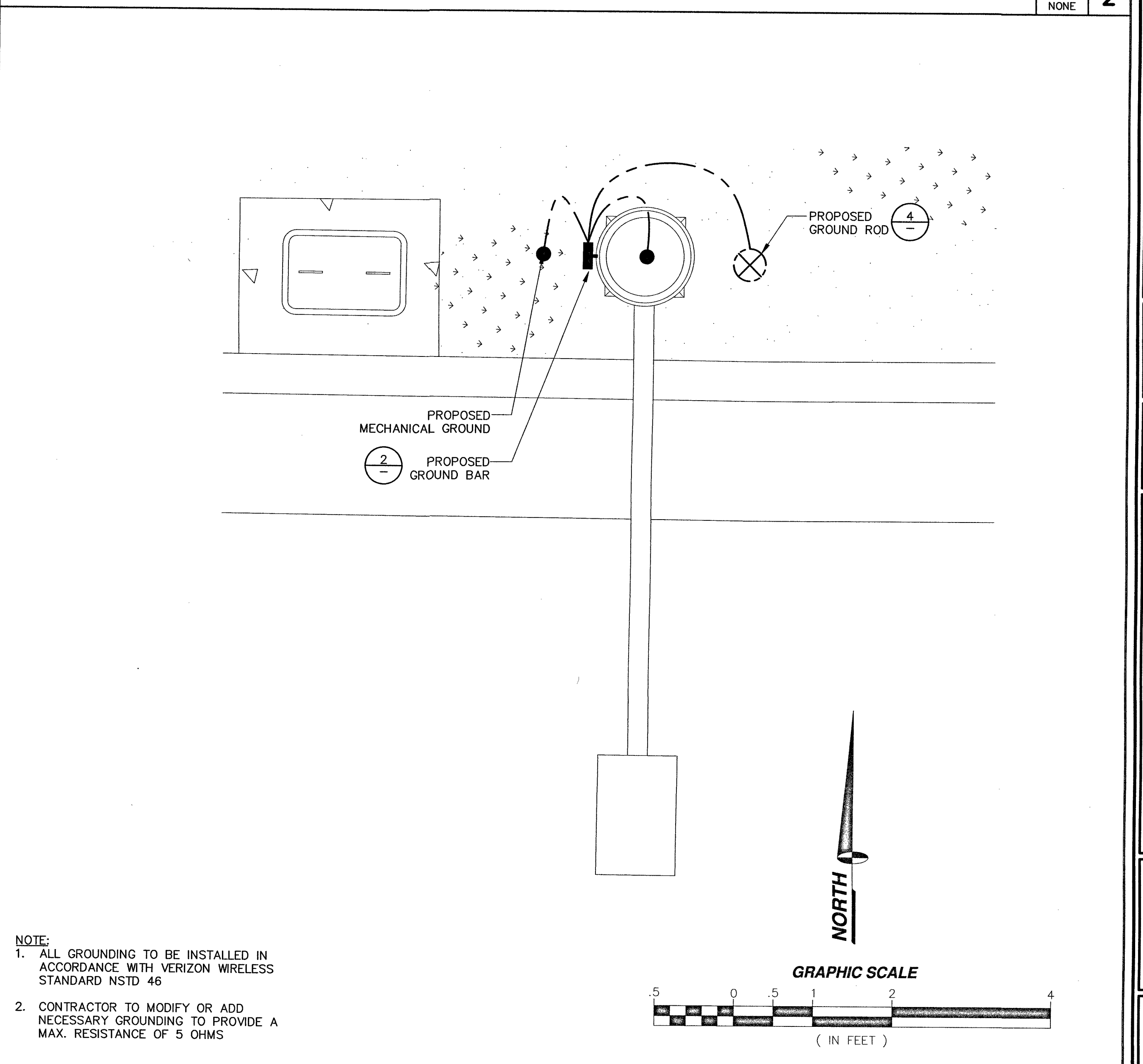


GROUND BAR SCALE: NONE 2

1. ALL DETAILS ARE SHOWN IN GENERAL TERMS. ACTUAL GROUNDING INSTALLATION REQUIREMENTS AND CONSTRUCTION ACCORDING TO SITE CONDITIONS AND CARRIER GROUNDING STANDARD, LATEST REVISION.
2. ALL GROUNDING CONDUCTORS: #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
3. GROUND RING TO GROUND BAR CONNECTIONS SHALL BE CADWELED QTY. (2) #2 AWG SOLID BARE TINNED COPPER WIRE UNLESS OTHERWISE NOTED.
4. GROUND BAR TO EQUIPMENT AND CABLES SHALL BE #2 AWG BTCW W/ DOUBLE LUG CONNECTIONS.
5. GROUND BAR LOCATED IN BASE OF EQUIPMENT WILL BE PROVIDED, FURNISHED AND INSTALLED BY THE VENDOR.
6. GROUND BAR LOCATED BELOW WAVEGUIDE ENTRY PORT. CABLES SHALL BE #2 AWG BTCW/DOUBLE LUG CONNECTIONS. TWO PATHS TO GROUND RING.
7. ALL BELOW GRADE CONNECTIONS: EXOTHERMIC WELD TYPE, ABOVE GRADE CONNECTIONS: EXOTHERMIC WELD TYPE.
8. EXTERIOR GROUNDING CONDUCTORS: BURIED TO A MINIMUM DEPTH OF 1'-6" BELOW FINISHED GRADE TO ALLOW FOR FUTURE CONSTRUCTION.
9. INSTALL GROUND CONDUCTORS AND GROUND ROD MINIMUM OF 1'-0" FROM EQUIPMENT CONCRETE SLAB, SPREAD FOOTING, OR FENCE.
10. EXOTHERMIC WELD GROUND CONNECTION TO FENCE POST: TREAT WITH A COLD GALVANIZED SPRAY.
11. 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.
12. ALL GROUNDING INSTALLATIONS AND CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
13. 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 NOTES SCALE: NONE 5 STREET LIGHT WIRING AND GROUNDING SCALE: NONE 3



GROUNDING LAYOUT SCALE: NONE 1

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

PROJECT INFORMATION:

CROWN CASTLE ID # LV007

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LAS VEGAS, NEVADA 89138

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2	02/05/19	POLE REVISION	R.C.
1	10/16/18	100% PERMITTING	C.P.
0	09/28/18	90% PERMITTING	R.S.

PLANS PREPARED BY:

DGS

CONSULTING ENGINEERING SERVICES LLC

LICENSURE:

APR 04 2019

SHEET TITLE:

GROUNDING LAYOUT, NOTES & DETAILS

SHEET NUMBER: E1 REVISION: 2