



**SITE LOCATION** 



# **SUN PRAIRIE POLICE (BIRD STREET WT)** SUN PRAIRIE, WISCONSIN **EQUIPMENT CABINET INSTALLATION**

### PROJECT DIRECTORY

ENGINEER: EDGE CONSULTING ENGINEERS, INC. 624 WATER STREET PRAIRIE DU SAC, WI 53578 CONTACT: ARLEN OSTRENG, PE PHONE: (608) 644-1449

SUN PRAIRIE UTILITIES 125 W. MAIN STREET SUN PRAIRIE, WI 53590 CONTACT: RICK WICKLUND, UTILITY MANAGER PHONE: (608) 960-4047 EXT. 231

TECHNOLOGY CONSULTANT: GENERAL COMMUNICATIONS, INC. 2880 COMMERCE PARK DR MADISON, WI 53719 CONTACT: GARY PELLETIER PHONE: (608) 310-7122

PHONE: (608) 960-4047 EXT. 231

ELECTRICAL SERVICE PROVIDER: SUN PRAIRIE UTILITIES 125 W. MAIN STREET CONTACT: RICK WICKLUND, UTILITY MANAGER

### **PROJECT INFO**

#### 991 N BIRD ST SUN PRAIRIE, WI 53590

PROPERTY OWNER: SUN PRAIRIE UTILITIES 125 W. MAIN STREET SUN PRAIRIE, WI 53590

TOWER COORDINATES (PER PREVIOUS DRAWINGS: LAT (NAD83/2011): 43°-11'-36.0" N (43.193333) LONG (NAD83/2011): 89°-13'-31.1" W (-89.225306) GROUND ELEVATION (NAVD 88): 1014' ASR NUMBER: N/A

PARCEL ID: 081105287006

ZONING CLASSIFICATION: (NC) NEIGHBORHOOD COMMERCIAL

## **SHEET INDEX**

E-504

E-505

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G-001	TITLE SHEET
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**UTILITY DETAILS** 

**UTILITY RACK DETAILS** 

**CHEET TITLE** 





TITLE SHEET
PRAIRIE POLICE (BIRD STREET
SUN PRAIRIE, WISCONSIN SUN

TO OBTAIN LOCATION OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN WISCONSIN, CALL DIGGERS HOTLINE

TOLL FREE: 1-800-242-8511 FAX A LOCATE: 1-800-242-5811

WI STATUTE 182.0175 (1974) REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE

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I HEREBY CERTIFY THAT THIS PLAN SET WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION OTHER THAN THE EXCEPTIONS NOTED IN THE SHEET INDEX, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF WISCONSIN.

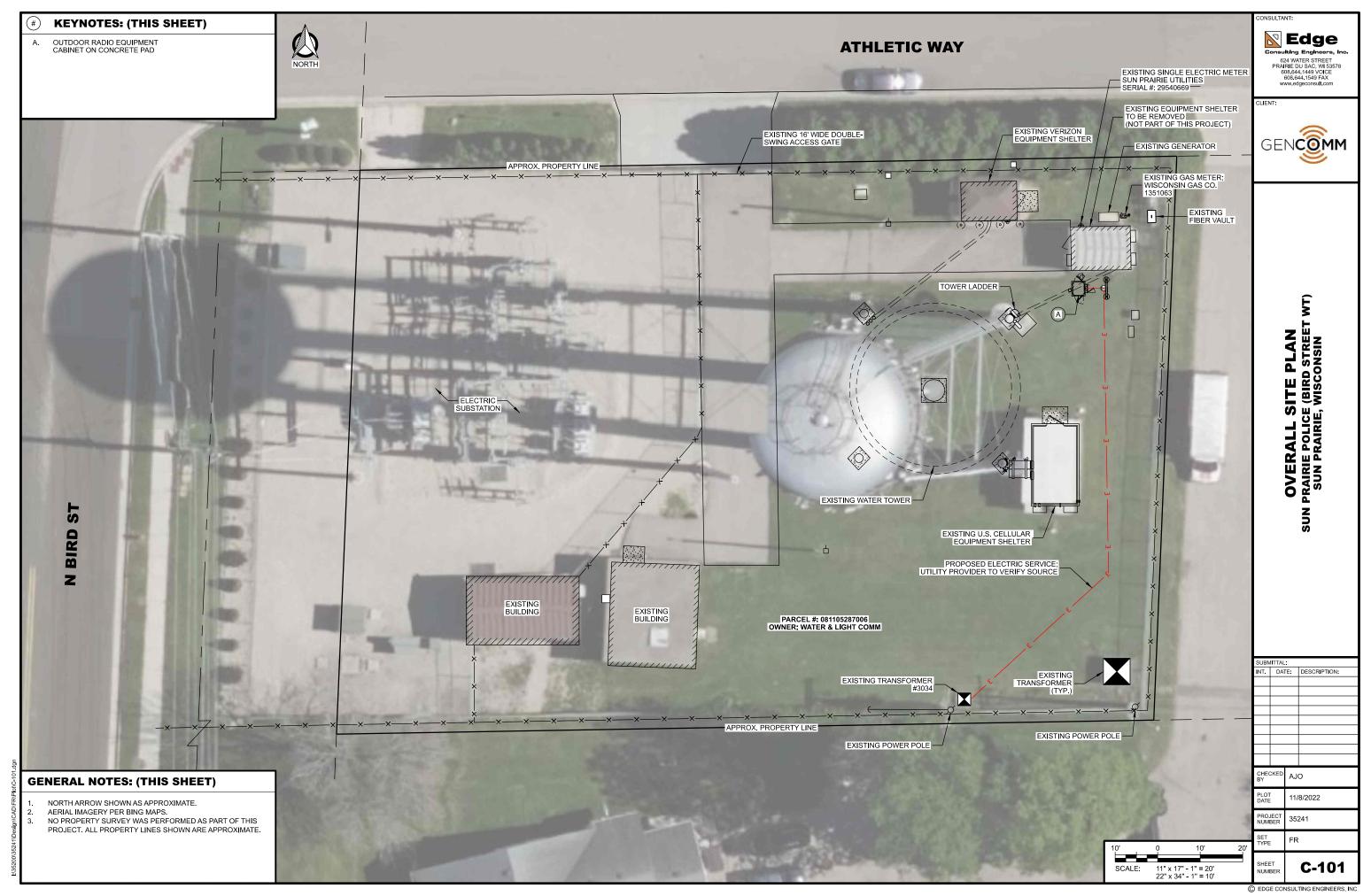
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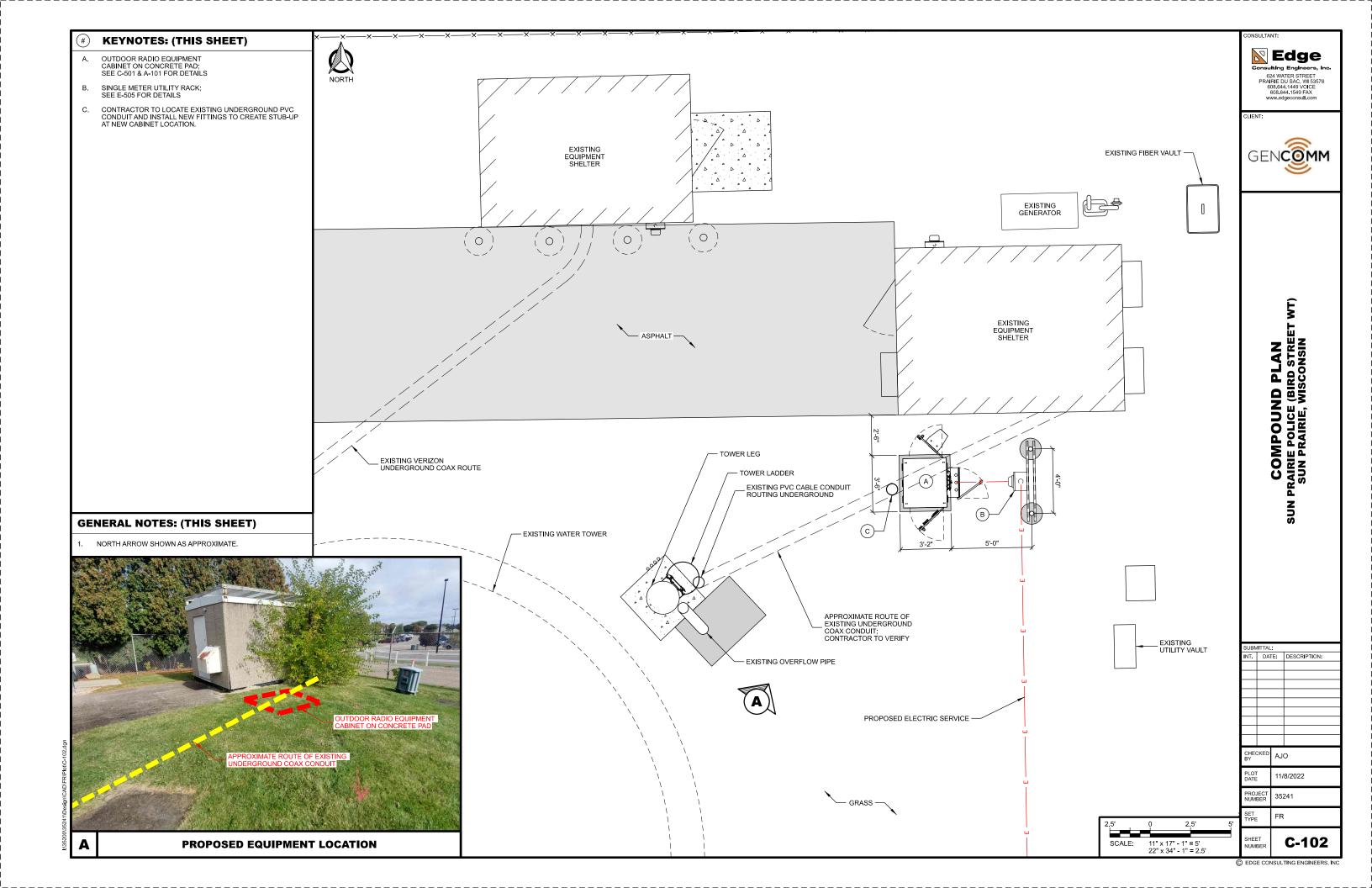
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<u> </u>	PROJECT NUMBER	35241	

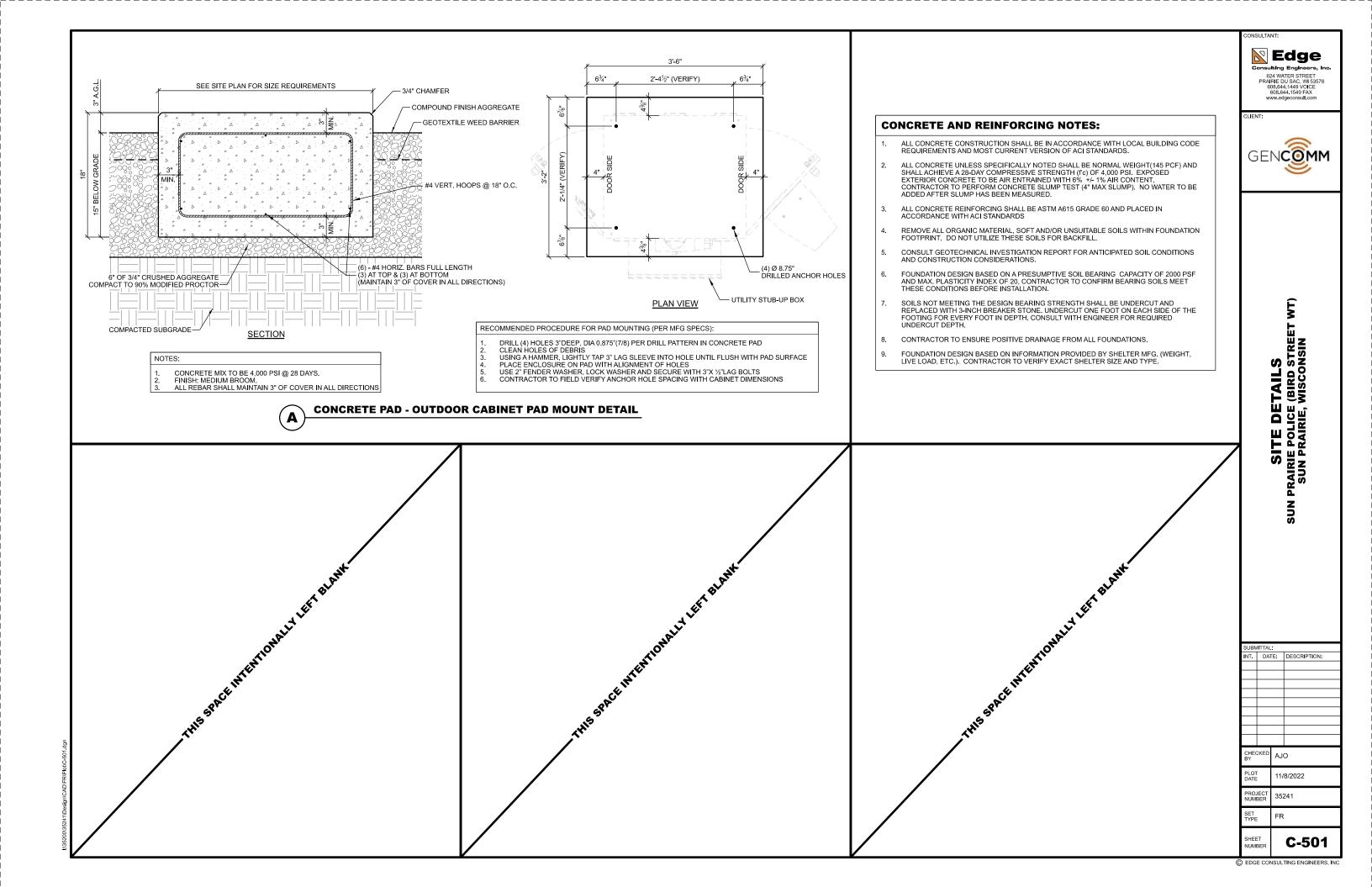
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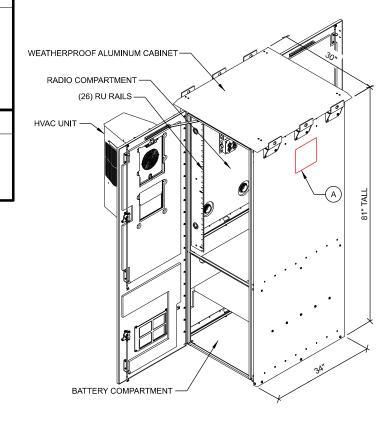


#### **KEYNOTES: (THIS SHEET)**

CONTRACTOR TO FIELD CUT TRANSMISSION LINE CABLE ENTRY OPENING INTO CABINET WALL. VERIFY PORT SIZING AND REQUIREMENTS. ORDER CABLE ENTRY FROM DDB UNLIMITED

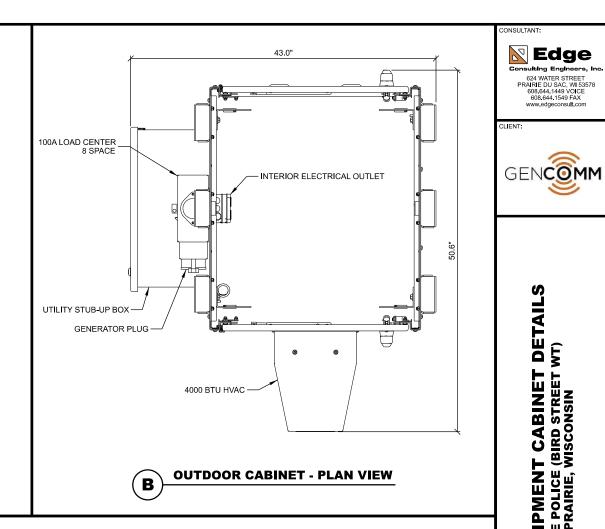
#### GENERAL NOTES: (THIS SHEET)

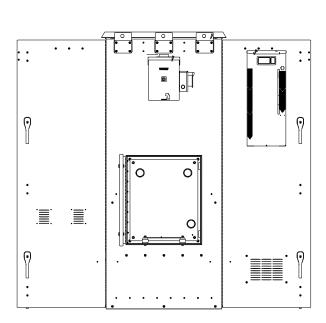
CABINET DRAWINGS PROVIDED BY:
DDB UNLIMITED
MODEL: 5G-LTE (NEMA 4)
DIMENSIONS: 81"H x 30"W x 34"D (26 RU)
WEIGHT: 550 LBS (BARE CABINET)
WARRANTY: 15 YEAR



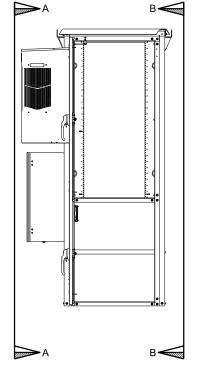


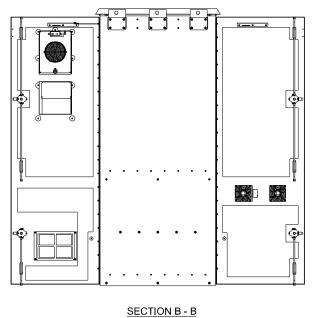
**OUTDOOR CABINET - ISOMETRIC VIEW** 

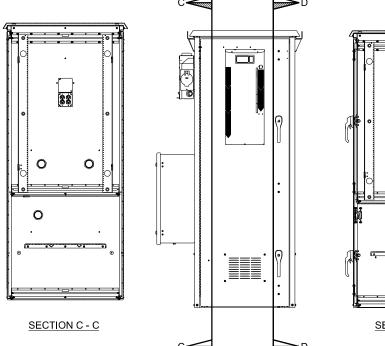


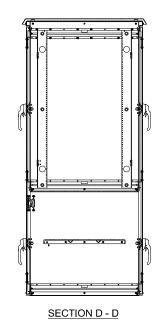


SECTION A - A











**Edge** 

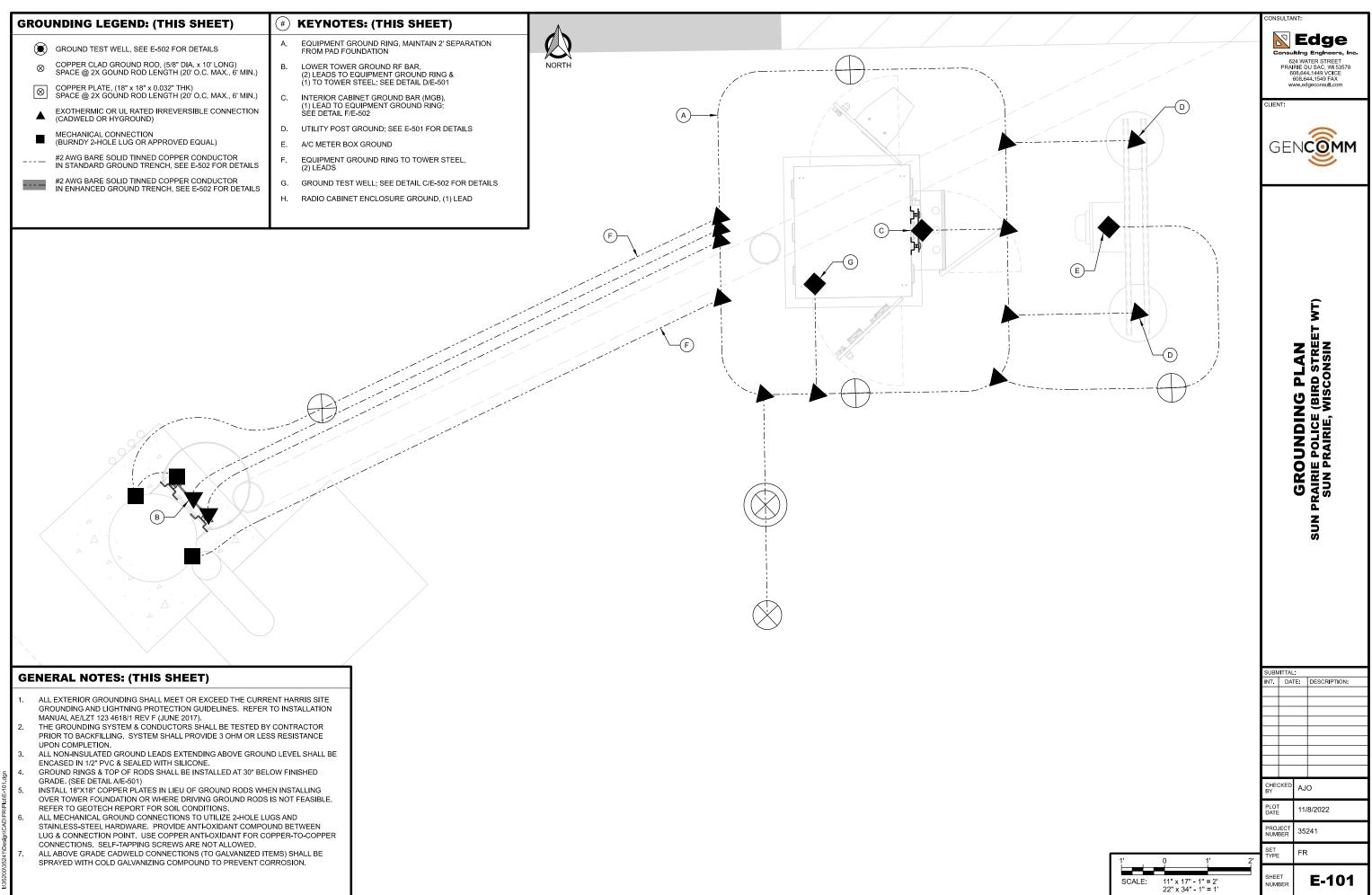
624 WATER STREET
PRAIRIE DU SAC, WI 53578
608.644.1449 VOICE
608.644.1549 FAX
www.edgeconsult.com

OUTDOOR EQUIPMENT CABINET DETAILS SUN PRAIRIE POLICE (BIRD STREET WT) SUN PRAIRIE, WISCONSIN

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**OUTDOOR CABINET - ELEVATION VIEWS** (c

A-101



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# (#) KEYNOTES: (THIS SHEET) **Edge** A. OUTDOOR RADIO EQUIPMENT CABINET 624 WATER STREET PRAIRIE DU SAC, WI 53578 608.644.1449 VOICE 608.644.1549 FAX www.edgeconsult.com 8 SLOT 100A LOAD CENTER BUILT INTO RADIO CABINET UTILITY CONDUIT STUB-UP(S) TO ENTER CABINET THROUGH "UTILITY STUB-UP BOX" 100A 120/240V 1P ELECTRIC SERVICE TO OUTDOOR EQUIPMENT RADIO CABINET. (1) 1.25" CONDUIT (RNMC) INSTALLED BY CONTRACTOR; COORDINATE INSTALLATION WITH UTILITY PROVIDER SINGLE ELECTRIC METER UTILITY RACK INSTALLED BY CONTRACTOR; SEE E-505 FOR DETAILS 100A 120/240V 1P SECONDARY ELECTRIC SERVICE TO SINGLE ELECTRIC METER UTILITY RACK. (1) 1.25" CODUIT (RNMC); SEE C-101 FOR APPROXIMATE ROUTE; COORDINATE INSTALLATION WITH UTILITY PROVIDER UTILITY PLAN PRAIRIE POLICE (BIRD STREET WT) SUN PRAIRIE, WISCONSIN **GENERAL NOTES: (THIS SHEET)** CONTRACTOR SHALL FIELD VERIFY DEPTHS, LOCATIONS, & SIZES OF ALL EXISTING UTILITIES. ALL UTILITIES SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL REQUIREMENTS. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES. ALL UNDERGROUND TRENCHING, PIPE AND CONDUIT SUN INSTALLATION TO BE COMPLETED PRIOR TO FINAL SUBGRADE COMPACTION AND AGGREGATE INSTALLATION. ALL CONDUCTORS TO BE COPPER. ALL UNDERGROUND ELECTRICAL & TELCO CONDUITS TO BE SCH. 80 PVC UNLESS OTHERWISE REQUIRED BY THE UTILITY ALL OUTDOOR ABOVE GRADE EXPOSED ELECTRICAL CONDUIT RUNS TO BE RIGID GALVANIZED STEEL (RGS). ALL BELOW GRADE CONDUIT STUB UPS TO BE SCH 80 PVC WITH SLIP REFERENCE MANUFACTURER AND CATALOG NUMBERS ARE USED FOR QUALITY AND PERFORMANCE ONLY. EQUIPMENT MFR. BY OTHERS ARE EQUALLY ACCEPTABLE PROVIDED THEY MEET OR EXCEED THE SPEC. PROVIDE AND INSTALL ALL NECESSARY WIRING AND CONDUITS FROM EXTERIOR ELECTRICAL ITEMS TO DISTRIBUTION PANEL WITHIN EQUIPMENT BUILDING. 10. ALL CONDUIT STUBS IN BUILDINGS & PULL BOXES TO BE INT. DATE: DESCRIPTION: IDENTIFIED AND LABELED. PROVIDE PULL STRINGS IN ALL CONDUITS. 12. ALL INDOOR EXPOSED CONDUIT TO BE METALLIC (EMT OR RGS). COMPRESSION FITTINGS ARE REQUIRED FOR EMT CONDUITS. 13. SEE E-503 FOR CONDUIT INSTALLATION REQUIREMENTS. AJO 11/8/2022 35241

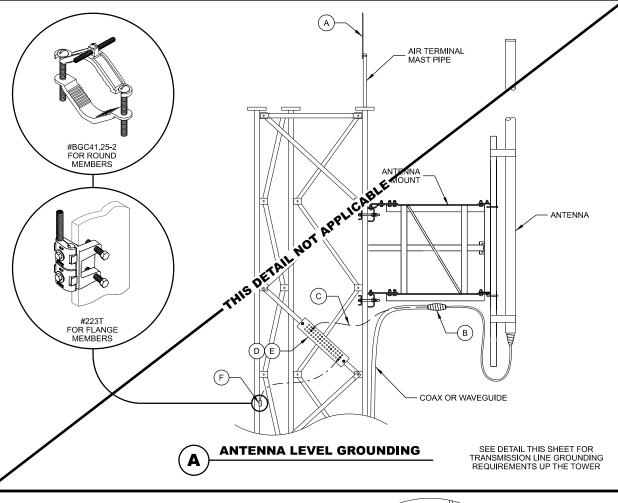
E-102

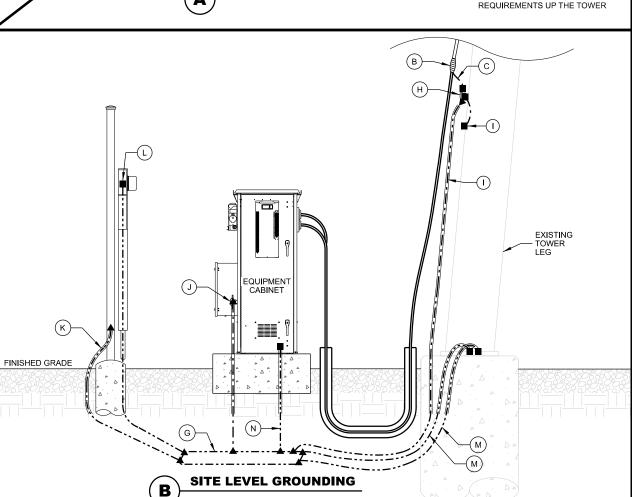
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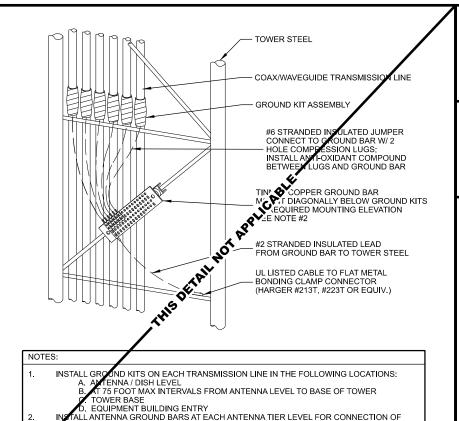
11" x 17" - 1" = 2' 22" x 34" - 1" = 1'

#### (#) KEYNOTES: (THIS SHEET)

- A. AIR TERMINAL; EXTEND 2' ABOVE HIGHEST ANTENNA MIN. ON MAST PIPE MECHANICALLY FASTEN AIR TERMINAL TO MAST PIPE MAST PIPE TO BE MECHANICALLY CONNECTED TO TOWER STEEL
- B. COAX / WAVEGUIDE TRANSMISSION LINE GROUND KIT; SEE DETAIL THIS SHEET
- C. GROUND KIT JUMPER;
- CONNECT TO GROUND BAR WITH 2 HOLE LONG BARREL LUG
- D. ANTENNA GROUND BAR (TINNED); FOR CONNECTION OF MULTIPLE GROUND KITS AT ONE LEVEL MOUNT TO TOWER STEEL; INSTALL #2 STRANDED LEAD FROM GROUND BAR TO TOWER STEF!
- E. FOR SINGLE ANTENNAS AT ONE LEVEL OMIT ANTENNA GROUND BAR CONNECT GROUND KIT JUMPER DIRECTLY TO TOWER STEEL WITH UL LISTED BONDING CLAMP
- F. UL LISTED BONDING CLAMP;
  - HARGER BGC41.25-2 PIPE CLAMPS FOR 1-1/4" TO 2" DIA. ROUND MEMBERS
  - HARGER #223T HEAVY DUTY TINNED FLANGE
  - BONDING PLATE
     USE EXTERNAL ANTI-OXIDATION COMPOUND.
- PAINT WITH COLD GALV. COMPOUND AFTER BONDING.
- G. EQUIPMENT GROUND RING; MAINTAIN 2' SEPARATION FROM PAD FOUNDATION; #2 BARE SOLID TINNED
- H. LOWER TOWER GROUND RF BAR (TGB) (TINNED); 4" x 18"  $\times$  1/4" SIZED FOR (30) 2 HOLE GROUND LUGS MOUNT DIAGONALLY FOR EASIER HOOK-UP OF GROUNDING KIT LEADS INSTALL ON TOWER WITH INSULATORS AT 12" (ABOVE ICE BRIDGE)
- I. LOWER TGB GROUNDS;
  #2 BARE SOLID TINNED ENCASED IN CARFLEX CONDUIT
  FROM LOWER TGB TO EQUIPMENT GROUND RING (2) REQ'D
  AND FROM LOWER TGB TO TOWER STEEL (1) REQ'D;
  CONDUIT TO BE SUPPORTED EVERY +/- 30-INCHES TO
  GRADE. SUPPORT ALONG TOWER LEG WITH COAX SNAP-IN
  HANGERS OR ANGLE ADAPTERS CONNECTED TO TOWER
  STEEL.
- J. INTERIOR RADIO CABINET GROUND BAR (MGB); (1) LEAD TO EQUIPMENT GROUND RING
- K. UTILITY RACK POST GROUND; #2 BARE SOLID TINNED ENCASE IN CARFLEX CONDUIT TO 24" BELOW GRADE; SEE E-502 FOR DETAILS
- L. A/C METER BOX GROUND
- M. EQUIPMENT GROUND RING TO TOWER STEEL;(2) LEADS
- N. RADIO CABINET ENCLOSURE GROUND, (1) LEAD



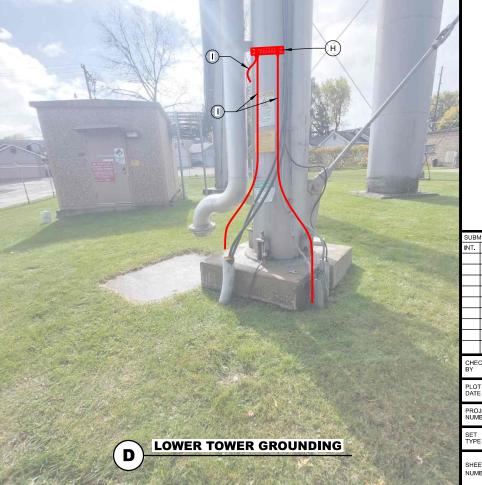




ULTIPLE ANTENNAS AT EACH LEVEL. WHEN ONLY ONE ANTENNA IS INSTALLED AT A LEVEL CONNECT GROUND KIT DIRECTLY TO TOWER STEEL WITH UL LISTED BONDING CLAMP.

TRANSMISSION LINE GROUNDING

C



GROUNDING DETAILS
PRAIRIE POLICE (BIRD STREET WT)
SUN PRAIRIE, WISCONSIN

Edge

624 WATER STREET PRAIRIE DU SAC, WI 53578

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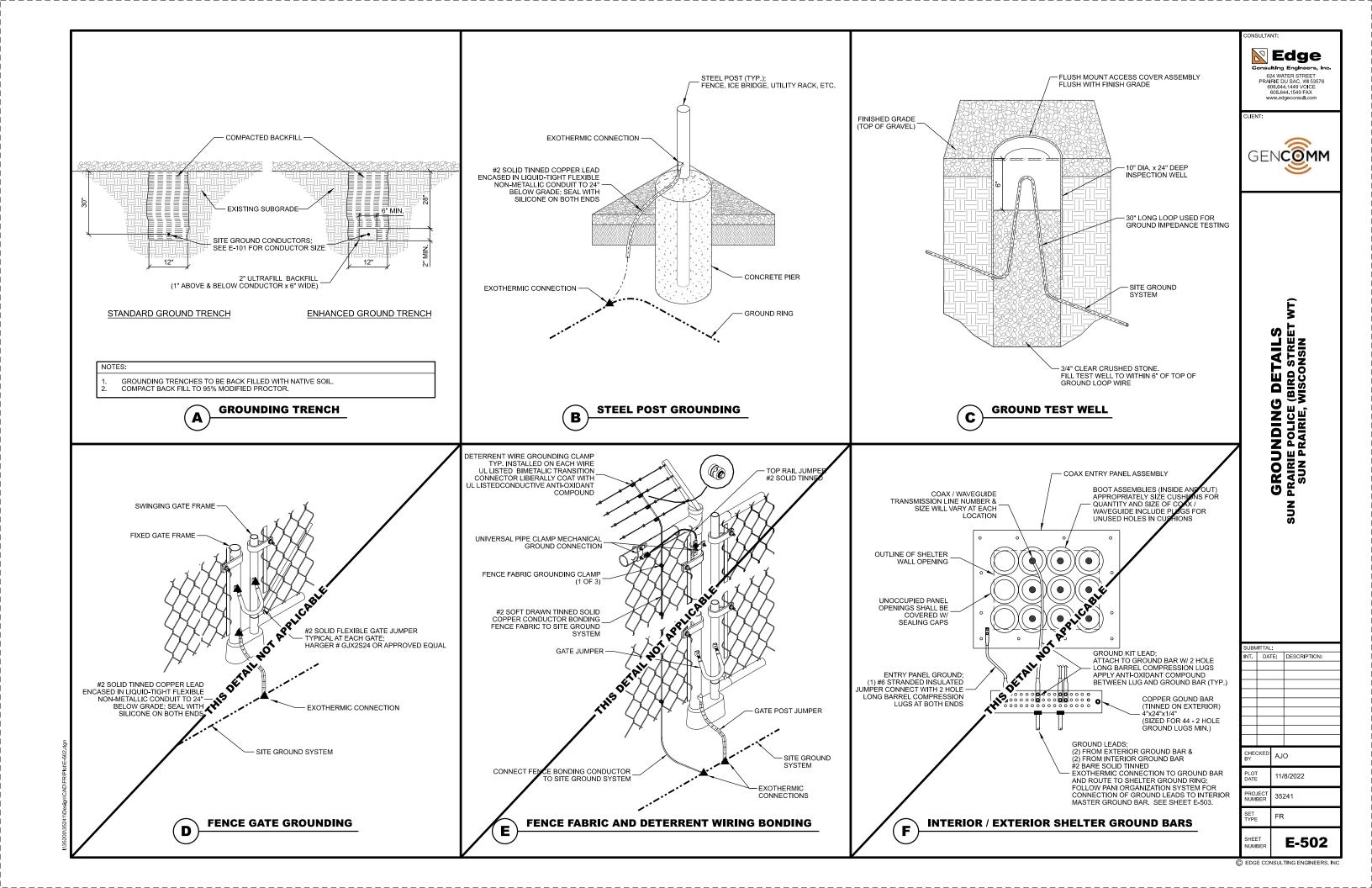
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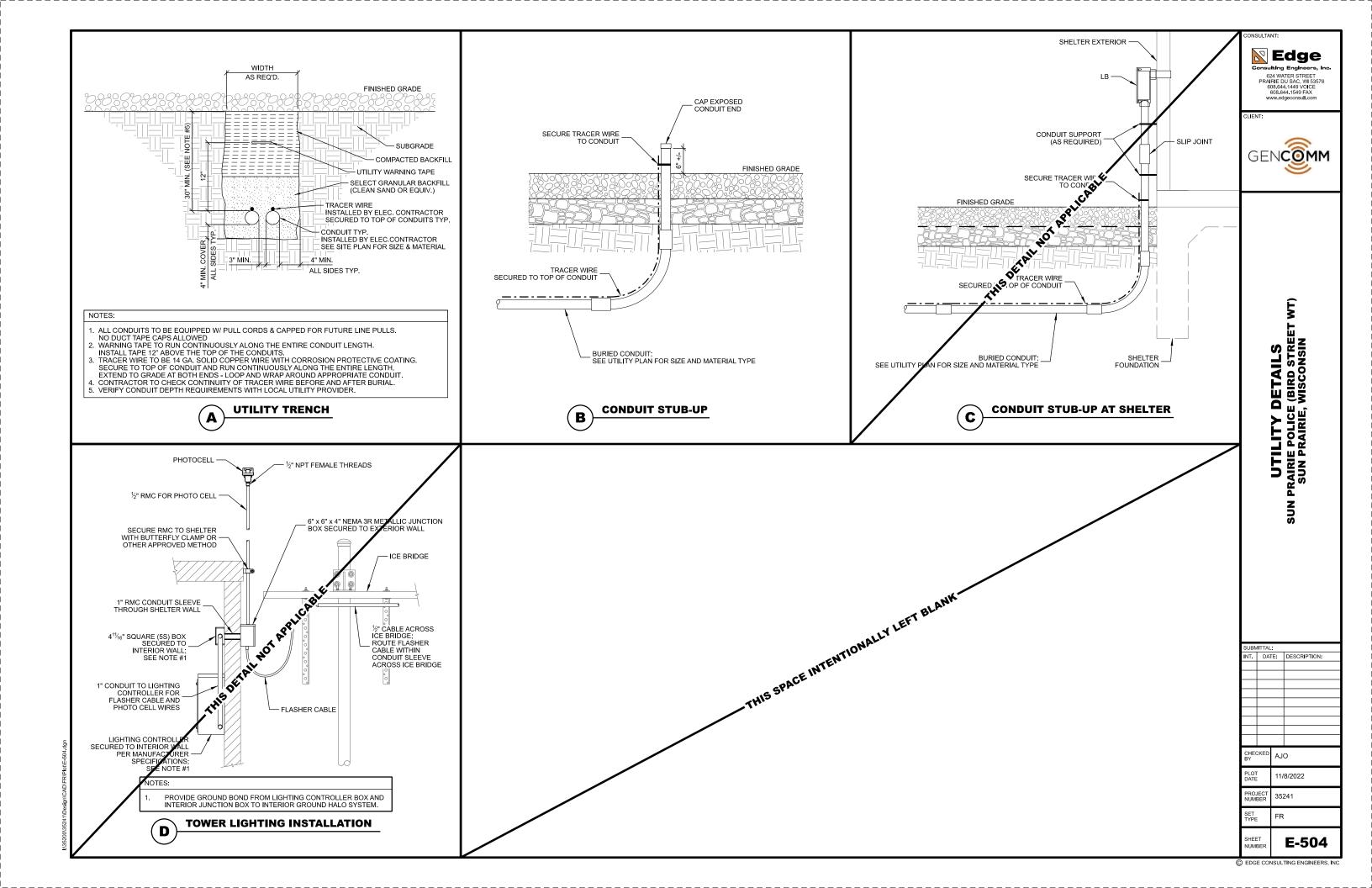
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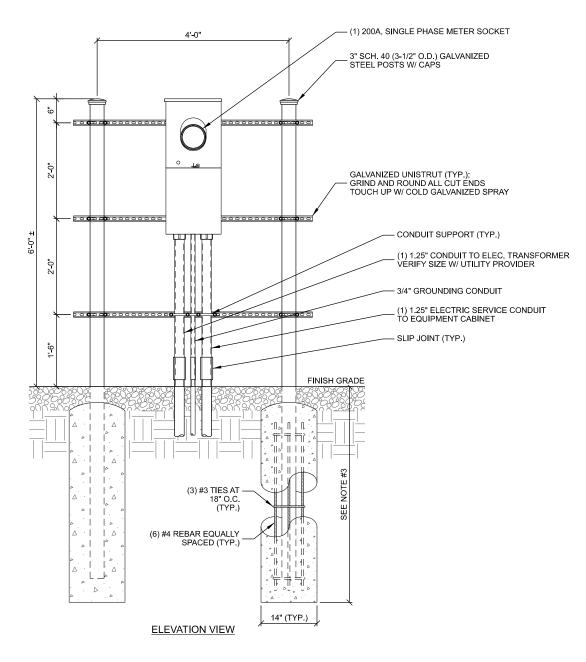
E-501

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#### PLAN VIEW



#### NOTES:

- CONCRETE FOR PIER TO BE A MINIMUM OF 4,000 PSI AT 28 DAYS.
  MAINTAIN 3" MINIMUM REBAR COVER IN ALL DIRECTIONS.
  PIER FOUNDATION DEPTH TO BE A MINIMUM OF 48"; DEPTH TO EXCEED LOCAL FROST DEPTH.



### SINGLE METER UTILITY RACK

SCALE: 11" x 17" - 1/2" = 1'-0" 22" x 34" - 1" = 1'-0"

**Edge** Consulting Engineers, Inc. 624 WATER STREET PRAIRIE DU SAC, WI 53578 608.644.1449 VOICE 608.644.1549 FAX www.edgeconsult.com



UTILITY RACK DETAILS SUN PRAIRIE POLICE (BIRD STREET WT) SUN PRAIRIE, WISCONSIN

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