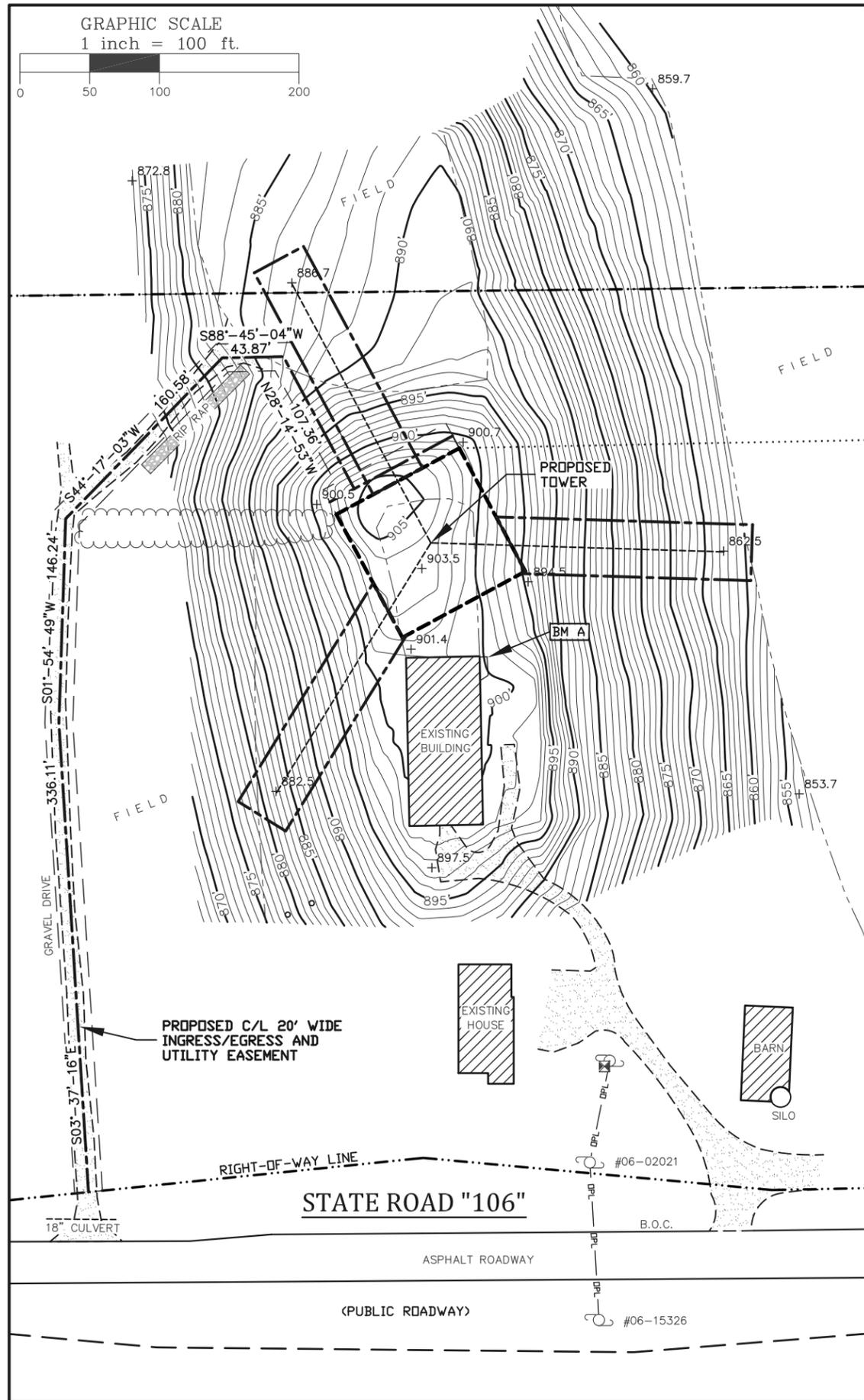


GRAPHIC SCALE
1 inch = 100 ft.

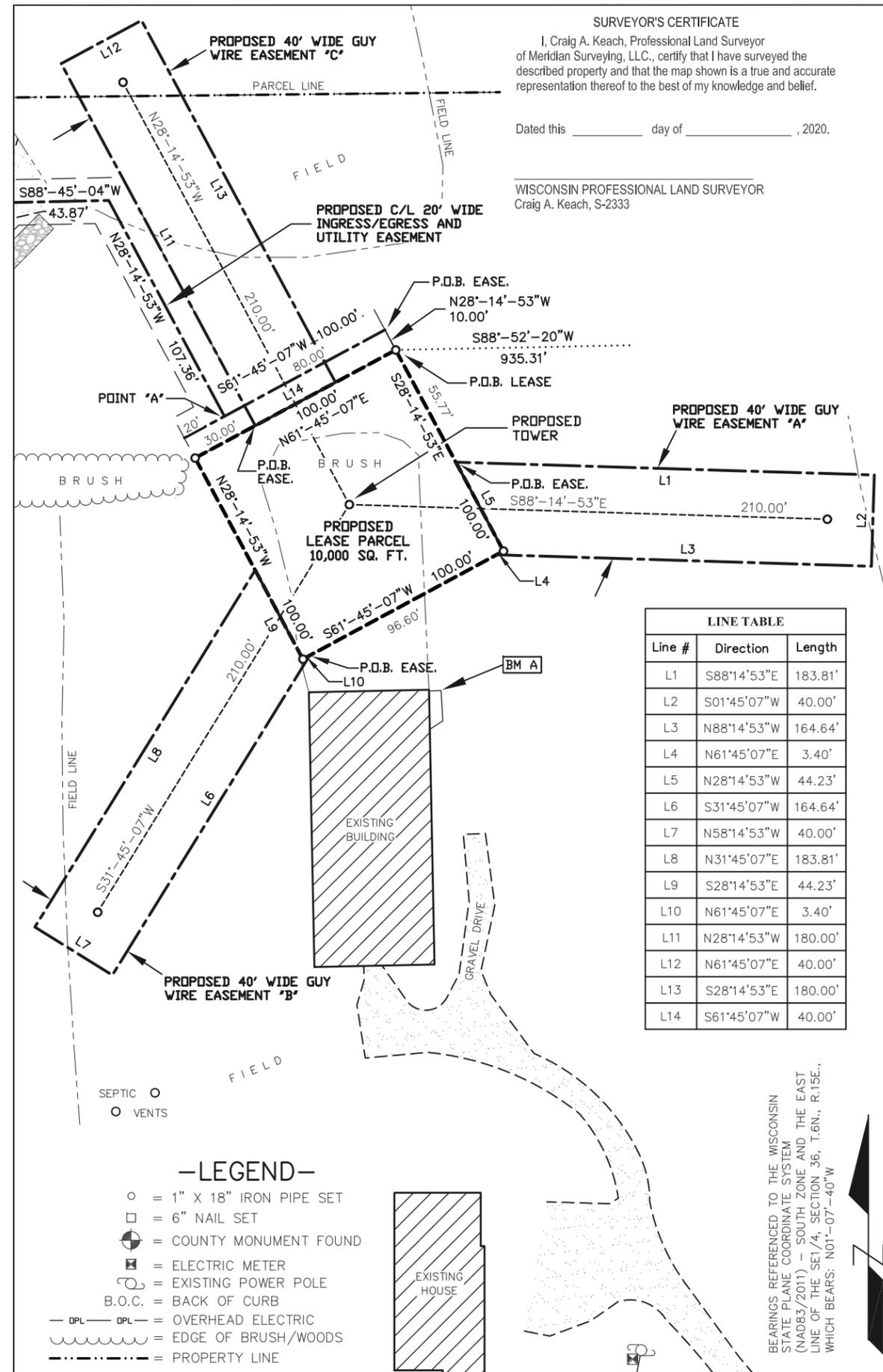


SURVEYOR'S CERTIFICATE

I, Craig A. Keach, Professional Land Surveyor of Meridian Surveying, LLC, certify that I have surveyed the described property and that the map shown is a true and accurate representation thereof to the best of my knowledge and belief.

Dated this _____ day of _____, 2020.

WISCONSIN PROFESSIONAL LAND SURVEYOR
Craig A. Keach, S-2333



LINE TABLE		
Line #	Direction	Length
L1	S88°14'53"E	183.81'
L2	S01°45'07"W	40.00'
L3	N88°14'53"W	164.64'
L4	N61°45'07"E	3.40'
L5	N28°14'53"W	44.23'
L6	S31°45'07"W	164.64'
L7	N58°14'53"W	40.00'
L8	N31°45'07"E	183.81'
L9	S28°14'53"E	44.23'
L10	N61°45'07"E	3.40'
L11	N28°14'53"W	180.00'
L12	N61°45'07"E	40.00'
L13	S28°14'53"E	180.00'
L14	S61°45'07"W	40.00'

- LEGEND—**
- = 1" X 18" IRON PIPE SET
 - = 6" NAIL SET
 - ⊕ = COUNTY MONUMENT FOUND
 - ⊗ = ELECTRIC METER
 - ⊙ = EXISTING POWER POLE
 - B.O.C. = BACK OF CURB
 - OPL — OPL — = OVERHEAD ELECTRIC
 - ~~~~~ = EDGE OF BRUSH/WOODS
 - - - - - = PROPERTY LINE

BEARINGS REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM (NAD83/2011) - SOUTH ZONE AND THE EAST LINE OF THE SE1/4, SECTION 36, T.6N., R.15E., WHICH BEARS: N01°-07'-40"W

SURVEYED FOR:

BERTRAM COMMUNICATIONS LLC
300 Industrial Drive
Random Lake, WI 53075
phone: 920-351-1023
fax: 920-994-9990

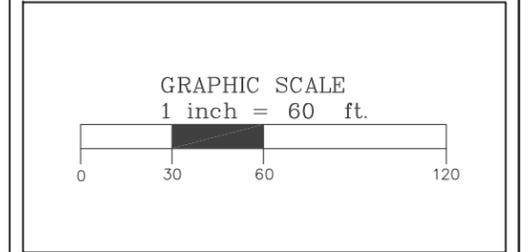
MERIDIAN SURVEYING, LLC

N9637 Friendship Drive Office: 920-993-0881
Kaukauna, WI 54130 Fax: 920-273-6037

SITE NAME:
PALMYRA

SITE NUMBER:
XX

SITE ADDRESS:
**N2562 STATE ROAD 106
JEFFERSON, WI 53549**



PROPERTY OWNER:
ROGER LINDL TRUST
525 N. FREMONT STREET
WHITEWATER, WI 53190

PARCEL NO.:
010-0615-3641-000 & 010-0615-3644-000

ZONED: A-3

DEED REFERENCE: DOCUMENT NO. 1419607

LEASE EXHIBIT
FOR
BERTRAM COMMUNICATIONS

BEING A PART OF THE SE1/4 OF THE SE1/4 AND THE NE1/4 OF THE SE1/4, SECTION 36, T.6N., R.15E., TOWN OF HEBRON, JEFFERSON COUNTY, WISCONSIN

NO.	DATE	DESCRIPTION	BY
1	10/20/20	Preliminary Survey	JD

DRAWN BY: J.D. FIELD WORK DATE: 10-19-20

CHECKED BY: C.A.K. FIELD BOOK: x

JOB NO.: 12395 SHEET 2 OF 3

LEASE PARCEL

Part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section Thirty-Six (36), Township Six (6) North; Range Fifteen (15) East; Town of Hebron, Jefferson County Wisconsin, containing 10,000 square feet (0.230 acres) of land and being described by:

Commencing at the Southeast Corner of said Section 36; thence N01°-07'-40"W 1218.97 feet along the East line of the SE1/4 of said Section 36; thence S88°-52'-20"W 935.31 feet to the point of beginning; thence S28°-14'-53"E 100.00 feet; thence S61°-45'-07"W 100.00 feet; thence N28°-14'-53"W 100.00 feet; thence N61°-45'-07"E 100.00 feet to the point of beginning; Being subject to any and all easements and restrictions of record.

GUY WIRE EASEMENT "A"

Part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section Thirty-Six (36), Township Six (6) North; Range Fifteen (15) East; Town of Hebron, Jefferson County Wisconsin, containing 6,894 square feet (0.158 acres) of land and being described by:

Commencing at the Southeast Corner of said Section 36; thence N01°-07'-40"W 1218.97 feet along the East line of the SE1/4 of said Section 36; thence S88°-52'-20"W 935.31 feet; thence S28°-14'-53"E 55.77 feet to the point of beginning; thence S88°-14'-53"E 183.81 feet; thence S01°-45'-07"W 40.00 feet; thence N88°-14'-53"W 164.64 feet; thence N61°-45'-07"E 3.40 feet; thence N28°-14'-53"W 44.23 feet to the point of beginning; Being subject to any and all easements and restrictions of record.

GUY WIRE EASEMENT "B"

Part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section Thirty-Six (36), Township Six (6) North; Range Fifteen (15) East; Town of Hebron, Jefferson County Wisconsin, containing 6,894 square feet (0.158 acres) of land and being described by:

Commencing at the Southeast Corner of said Section 36; thence N01°-07'-40"W 1218.97 feet along the East line of the SE1/4 of said Section 36; thence S88°-52'-20"W 935.31 feet; thence S28°-14'-53"E 100.00 feet; thence S61°-45'-07"W 96.60 feet to the point of beginning; thence S31°-45'-07"W 164.64 feet; thence N58°-14'-53"W 40.00 feet; thence N31°-45'-07"E 183.81 feet; thence S28°-14'-53"E 44.23 feet; thence N61°-45'-07"E 3.40 feet to the point of beginning; Being subject to any and all easements and restrictions of record.

GUY WIRE EASEMENT "C"

Part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) and part of the Northeast Quarter (NE1/4) of the Southeast Quarter (SE1/4) of Section Thirty-Six (36), Township Six (6) North; Range Fifteen (15) East; Town of Hebron, Jefferson County Wisconsin, containing 7,200 square feet (0.165 acres) of land and being described by:

Commencing at the Southeast Corner of said Section 36; thence N01°-07'-40"W 1218.97 feet along the East line of the SE1/4 of said Section 36; thence S88°-52'-20"W 935.31 feet; thence S28°-14'-53"E 100.00 feet; thence S61°-45'-07"W 100.00 feet; thence N28°-14'-53"W 100.00 feet; thence N61°-45'-07"E 30.00 feet to the point of beginning; thence N28°-14'-53"W 180.00 feet; thence N61°-45'-07"E 40.00 feet; thence S28°-14'-53"E 180.00 feet; thence S61°-45'-07"W 40.00 feet to the point of beginning; Being subject to any and all easements and restrictions of record.

20 FOOT WIDE INGRESS/EGRESS AND UTILITY EASEMENT

Part of the Southeast Quarter (SE1/4) of the Southeast Quarter (SE1/4) of Section Thirty-Six (36), Township Six (6) North; Range Fifteen (15) East; Town of Hebron, Jefferson County Wisconsin, containing 17,883 square feet (0.411 acres) of land and being Ten (10) feet each side of and parallel to the following described centerline:

Commencing at the Southeast Corner of said Section 36; thence N01°-07'-40"W 1218.97 feet along the East line of the SE1/4 of said Section 36; thence S88°-52'-20"W 935.31 feet; thence N28°-14'-53"W 10.00 feet to the point of beginning; thence S61°-45'-07"W 80.00 feet to a point herein after referred to as "Point A"; thence continue S61°-45'-07"W 20.00 feet to the point of termination. Also beginning at said "Point A" thence N28°-14'-53"W 107.36 feet; thence S88°-45'-04"W 43.87 feet; thence S44°-17'-03"W 160.58 feet; thence S01°-54'-49"W 146.24 feet; thence S03°-37'-16"E 336.11 feet to a point on the Northerly Right of Way line of State Trunk Highway 106 and the point of termination. The side lot lines of said easement shall be shortened or lengthened to terminate on the Northerly Right of Way line of State Trunk Highway 106. Being subject to any and all easements and restrictions of record.

SURVEYED FOR:

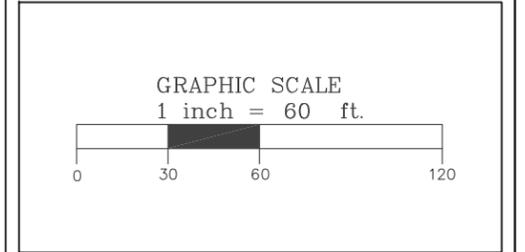


BERTRAM COMMUNICATIONS LLC
 300 Industrial Drive
 Random Lake, WI 53075
 phone: 920-351-1023
 fax: 920-994-9990



MERIDIAN SURVEYING, LLC
 N9637 Friendship Drive Office: 920-993-0881
 Kaukauna, WI 54130 Fax: 920-273-6037

SITE NAME: PALMYRA
SITE NUMBER: XX
SITE ADDRESS: N2562 STATE ROAD 106 JEFFERSON, WI 53549



PROPERTY OWNER:
 ROGER LINDL TRUST
 525 N. FREMONT STREET
 WHITEWATER, WI 53190

PARCEL NO.:
 010-0615-3641-000 & 010-0615-3644-000

ZONED: A-3

DEED REFERENCE: DOCUMENT NO. 1419607

LEASE EXHIBIT
 FOR
BERTRAM COMMUNICATIONS

BEING A PART OF THE SE1/4 OF THE SE1/4 AND THE NE1/4 OF THE SE1/4, SECTION 36, T.6N., R.15E., TOWN OF HEBRON, JEFFERSON COUNTY, WISCONSIN

NO.	DATE	DESCRIPTION	BY
1	10/20/20	Preliminary Survey	JD

DRAWN BY: J.D.	FIELD WORK DATE: 10-19-20
CHECKED BY: C.A.K.	FIELD BOOK: x
JOB NO.: 12395	SHEET 3 OF 3

KEYNOTES: (THIS SHEET)

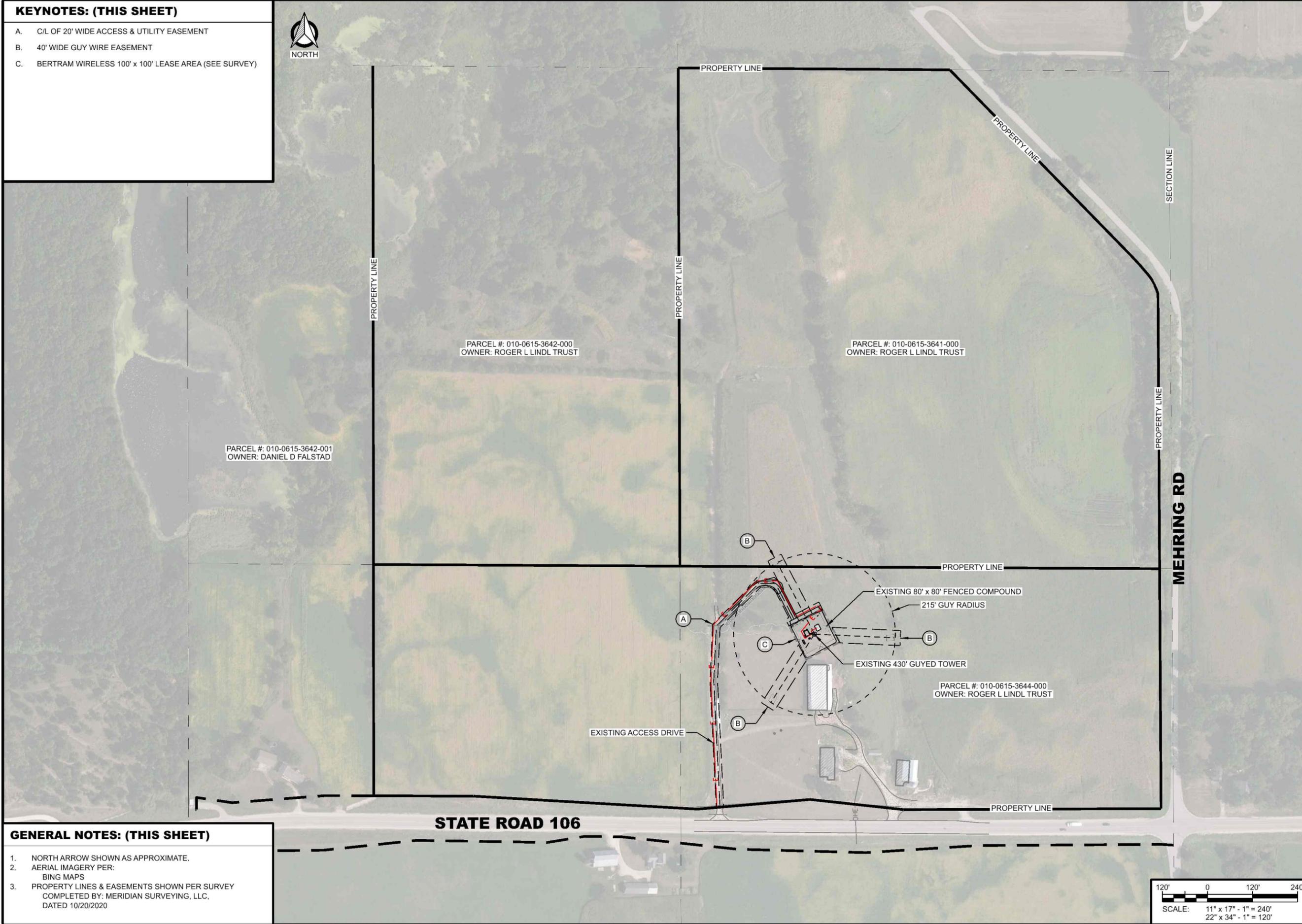
- A. C/L OF 20' WIDE ACCESS & UTILITY EASEMENT
- B. 40' WIDE GUY WIRE EASEMENT
- C. BERTRAM WIRELESS 100' x 100' LEASE AREA (SEE SURVEY)



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



OVERALL SITE PLAN
 PALMYRA (27653)
 HEBRON, WISCONSIN



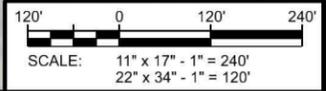
GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. AERIAL IMAGERY PER: BING MAPS
3. PROPERTY LINES & EASEMENTS SHOWN PER SURVEY COMPLETED BY: MERIDIAN SURVEYING, LLC, DATED 10/20/2020

SUBMITTAL:

INT.	DATE	DESCRIPTION

CHECKED BY	AJO
PLOT DATE	5/12/2021
PROJECT NUMBER	27653
SET TYPE	BD
SHEET NUMBER	C-101



I:\27600\27653\Design\CAD\BD\PrintC-101.dgn

KEYNOTES: (THIS SHEET)

- A. JEFFERSON COUNTY EQUIPMENT SHELTER
- B. C/L OF 20' WIDE ACCESS & UTILITY EASEMENT
- C. 40' WIDE GUY WIRE EASEMENT
- D. BERTRAM WIRELESS 100' x 100' LEASE AREA (SEE SURVEY)
- E. UNDERGROUND ELECTRIC UTILITY SERVICE TO SITE TRANSFORMER. UTILITY PROVIDER TO PROVIDE AND INSTALL.



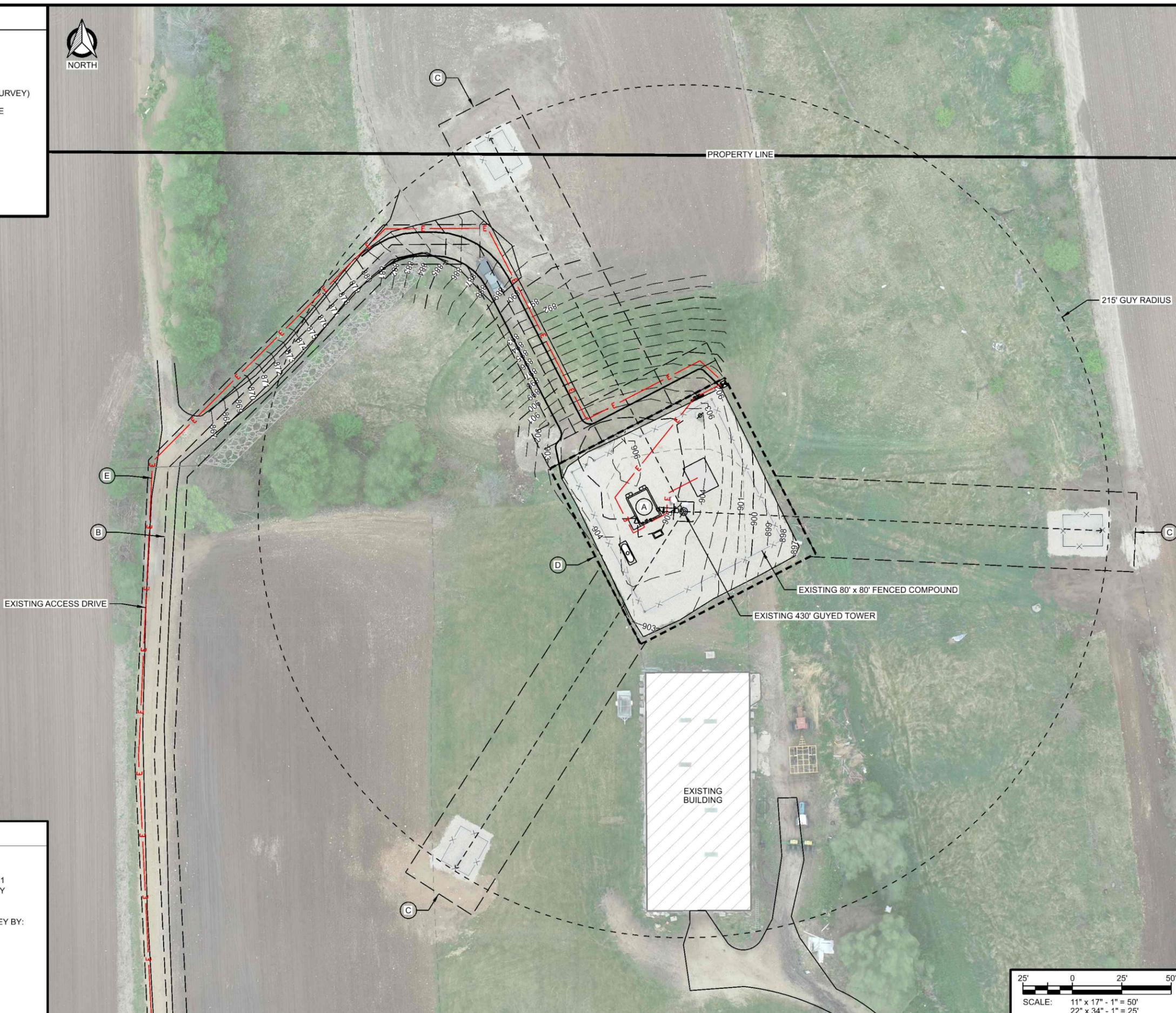
CONSULTANT:

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

CLIENT:



ENLARGED SITE PLAN
 PALMYRA (27653)
 HEBRON, WISCONSIN



GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. AERIAL IMAGERY PER UAS-DRONE FLIGHT: EDGE CONSULTING ENGINEERS, INC. ON 05/04/2021
3. PROPERTY LINES & EASEMENTS SHOWN PER SURVEY COMPLETED BY: MERIDIAN SURVEYING, LLC, DATED 10/20/2020
4. TOPOGRAPHIC FEATURES PER TOPOGRAPHIC SURVEY BY: MERIDIAN SURVEYING, LLC, DATED 10/20/2020

SUBMITTAL:

INT.	DATE	DESCRIPTION

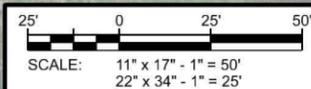
CHECKED BY: AJO

PLOT DATE: 5/12/2021

PROJECT NUMBER: 27653

SET TYPE: BD

SHEET NUMBER: **C-102**



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KEYNOTES: (THIS SHEET)

- A. JEFFERSON COUNTY EQUIPMENT SHELTER;
SEE A-101 FOR DETAILS
- B. 4' x 6' CONCRETE STOOP;
SEE C-503 FOR DETAILS
- C. 24" WIDE ICE BRIDGE;
SEE T-502 FOR DETAILS
- D. 500 GAL. LP FUEL TANK ON CONCRETE SLAB;
SEE C-504 FOR DETAILS
- E. 22 kW GENERATOR ON CONCRETE SLAB;
SEE C-504 FOR DETAILS
- F. CLEARANCE ZONE/SETBACKS
- 10' AROUND LP TANK
- 3' AROUND GENERATOR
- G. SIGNAGE:
- (0) ASR. INSTALL ON VEHICLE GATE.
- (1) SITE IDENTIFICATION. INSTALL ON SHELTER DOOR.
- (4) RF NOTICE. INSTALL ON EACH SIDE OF FENCE
- (2) RF CAUTION. INSTALL ON SHELTER DOOR AND TOWER
- (1) OSHA DANGER. INSTALL ON VEHICLE GATE.
- (1) NFPA LP FUEL. INSTALL ON VEHICLE GATE.
- H. C/L OF 20' WIDE ACCESS & UTILITY EASEMENT
- I. 40' WIDE GUY WIRE EASEMENT
- J. BERTRAM WIRELESS 100' x 100' LEASE AREA (SEE SURVEY)
- K. UTILITY RACK. SEE DETAIL A/E-505
- L. GROUND MOUNTED TRANSFORMER

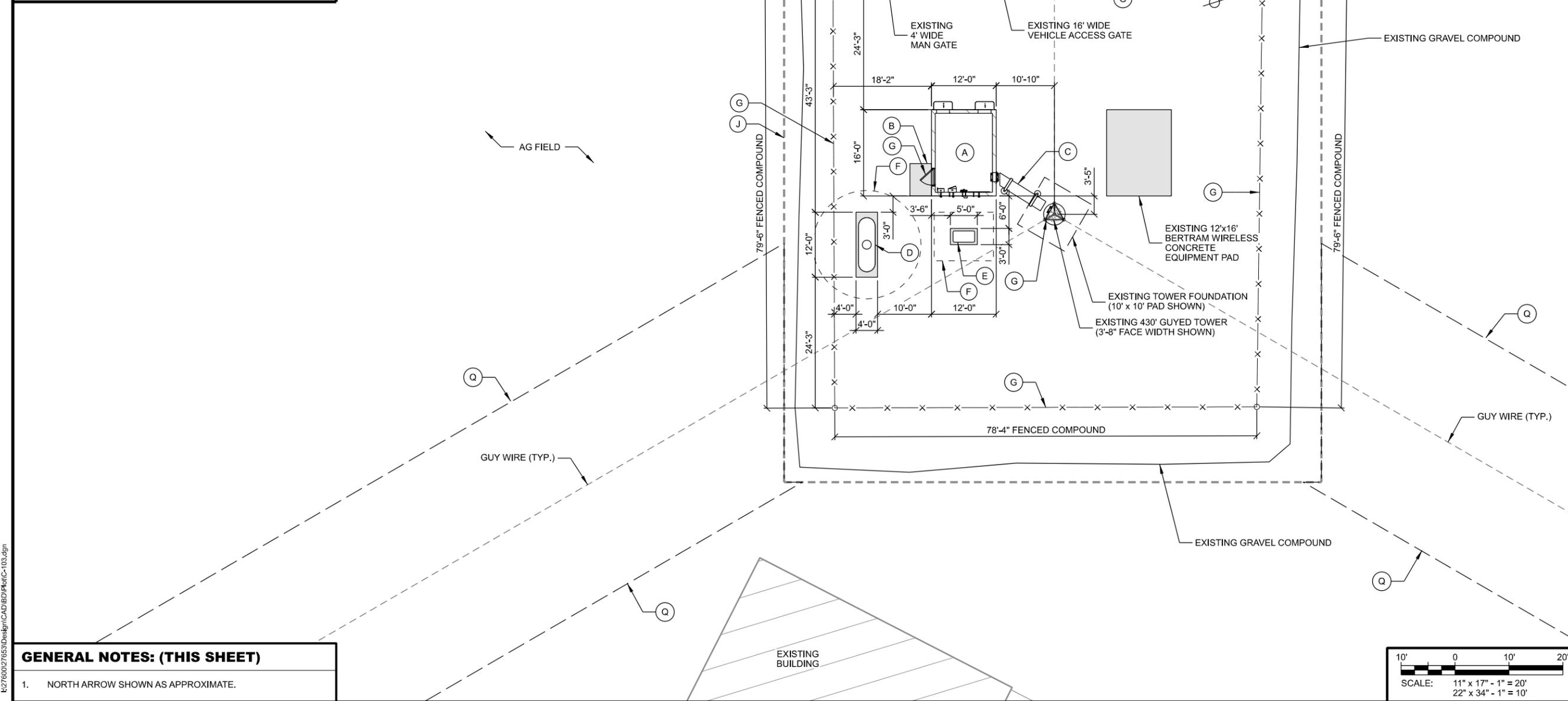


CONSULTANT:

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



COMPOUND PLAN
PALMYRA (27653)
HEBRON, WISCONSIN



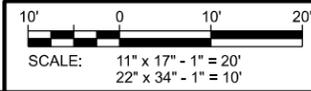
SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	C-103

GENERAL NOTES: (THIS SHEET)

- 1. NORTH ARROW SHOWN AS APPROXIMATE.



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LEGEND: (THIS SHEET)

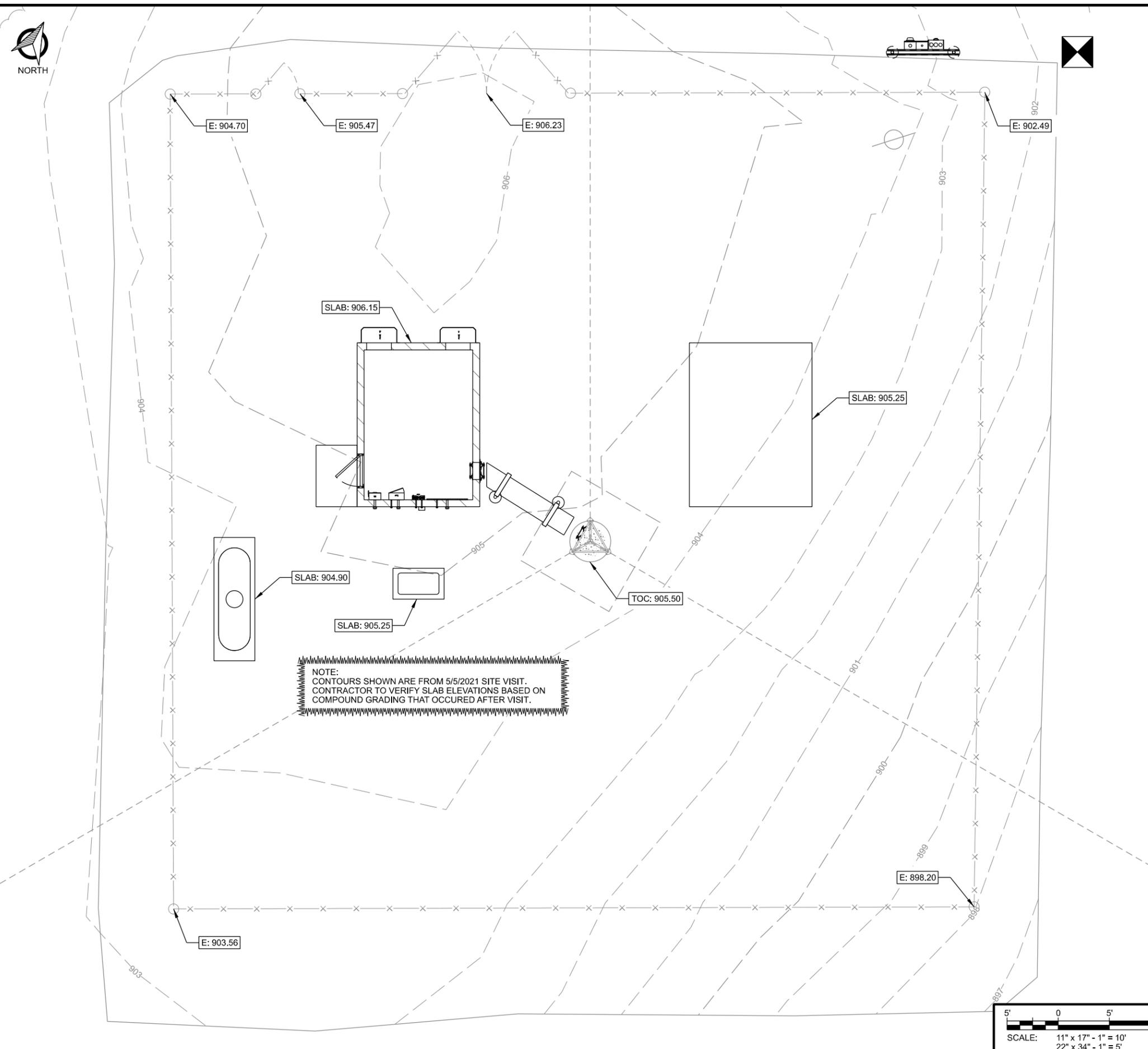
- 973'- EXISTING CONTOUR GRADES
- 973'- PROPOSED CONTOUR GRADES
- SPOT ELEVATIONS
P = PROPOSED ELEV.
E = EXISTING ELEV.
FL = FLOW LINE
IE = INVERT ELEV.
TOC = TOP OF CONC.
- PROPOSED DRAINAGE PATH
- SILT FENCE
- LIMITS OF DISTURBANCE
- EROSION MAT

GRADING NOTES: (THIS SHEET)

1. CONTOUR INTERVAL IS 1 FOOT.
2. PERIMETER CONTROLS AND STONE TRACKING PADS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES, INCLUDING CLEARING AND GRUBBING OPERATIONS. STONE TRACKING PAD SHALL BE A 12'X50' MIN. CONSISTING OF 3" BREAKER STONE.
3. CONTRACTOR SHALL INSTALL ADDITIONAL EROSION CONTROL MEASURES, BEYOND THOSE SHOWN IN THIS PLAN, SUITABLE FOR THEIR MEANS AND METHODS TO KEEP ALL SEDIMENT ON SITE DURING CONSTRUCTION ACTIVITIES. THIS INCLUDES IMPLEMENTATION OF SILT FENCE, EROSION BALES, TRACKING PADS, DIVERSION BERMS AND/OR OTHER APPROPRIATE DEVICES.
4. CONTRACTOR SHALL GRADUALLY MATCH INTO EXISTING GRADE. NO PROPOSED EARTHWORK SHALL HAVE A GREATER SLOPE THAN 3:1. FINISHED SITE TO BE GRADED TO MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.
5. DRIVEWAY GRADE WITHIN 25 FEET OF PUBLIC ROAD ACCESS POINT SHALL BE LESS THAN 10% (10:1).
6. FINISHED GRADE SLOPES GREATER THAN 4:1, DITCH BOTTOMS AND GRASS SURFACES WITHIN 6 FEET OF ANY PAVED OR GRAVEL SURFACE REQUIRE EROSION MAT (TYPE 2.D - 12 MONTH LONGEVITY, DOUBLE NET EROSION CONTROL BLANKET)
7. ALL DISTURBED GRASS/TURF AREAS SHALL BE RESTORED WITH TOPSOIL, SEED AND MULCH. TOPSOIL TO BE 6-INCHES MINIMUM. SEED TO CONSIST OF NATIVE PURE LIVE SEED (PLS) AT 98% PURITY AND 95% GERMINATION. MULCH TO BE WEED-FREE GRAIN STRAW.
8. CONTRACTOR TO PERFORM MAINTENANCE AND INSPECTION OF EROSION CONTROL DEVICES AND EXPOSED GRADE THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL INSPECT THE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES ON A WEEKLY BASIS AND WITHIN 24 HOURS AFTER A PRECIPITATION EVENT 0.5 INCHES OR GREATER WHICH RESULTS IN RUNOFF. CONTRACTOR SHALL CONTINUE MAINTENANCE AND INSPECTION UNTIL FULL VEGETATION ESTABLISHMENT AND/OR PROJECT ACCEPTANCE.
9. CONTRACTOR TO REMOVE EROSION CONTROL MEASURES AFTER PROJECT ACCEPTANCE.
10. SEE SHEET C-102 FOR BENCHMARK LOCATIONS.

GENERAL NOTES: (THIS SHEET)

1. NORTH ARROW SHOWN AS APPROXIMATE.
2. TOPOGRAPHIC FEATURES PER TOPOGRAPHIC SURVEY BY: EDGE CONSULTING ENGINEERS, INC. ON 05/05/2021



CONSULTANT:

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

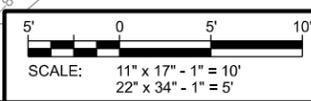


GRADING AND EROSION CONTROL PLAN
 PALMYRA (27653)
 HEBRON, WISCONSIN

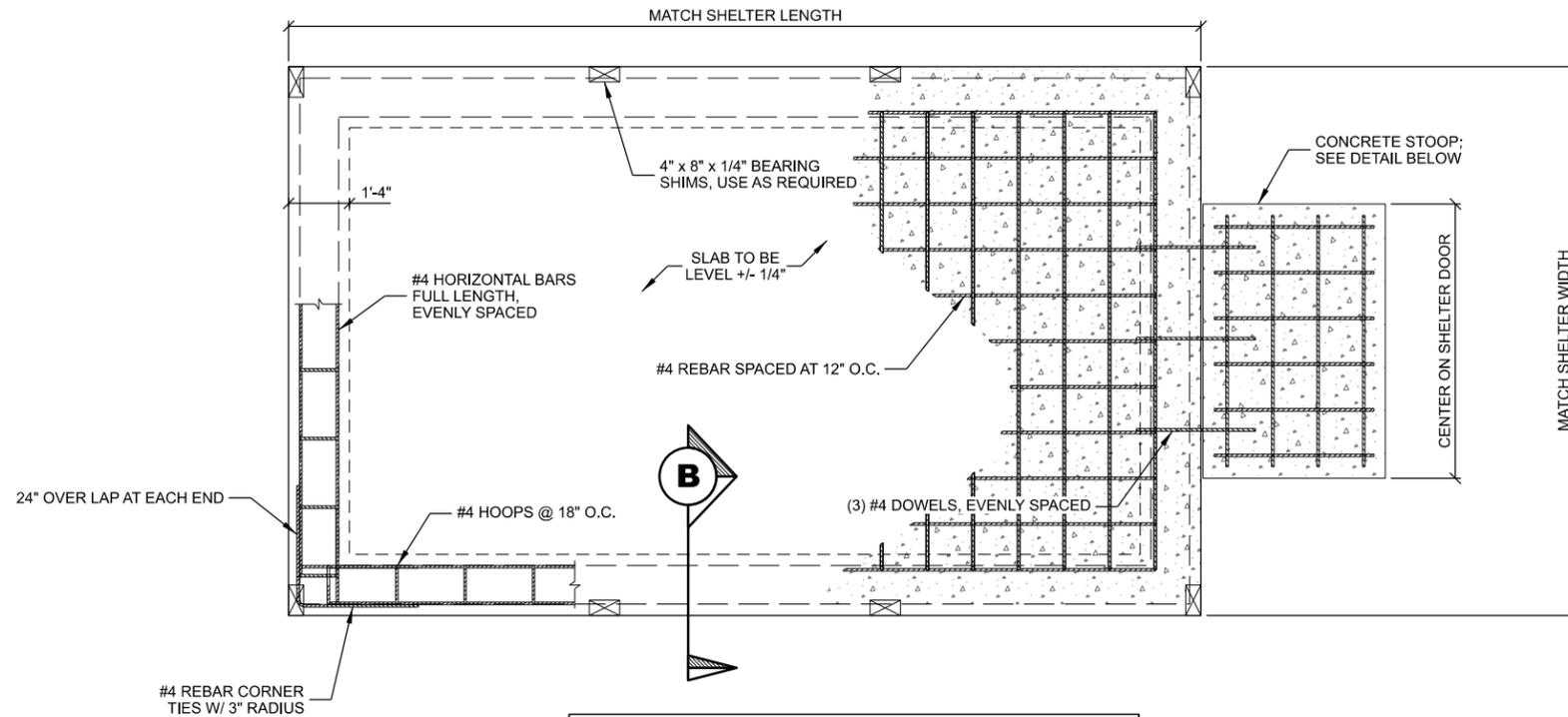
SUBMITTAL:

INT.	DATE	DESCRIPTION:

CHECKED BY	AJO
PLOT DATE	5/12/2021
PROJECT NUMBER	27653
SET TYPE	BD
SHEET NUMBER	C-104

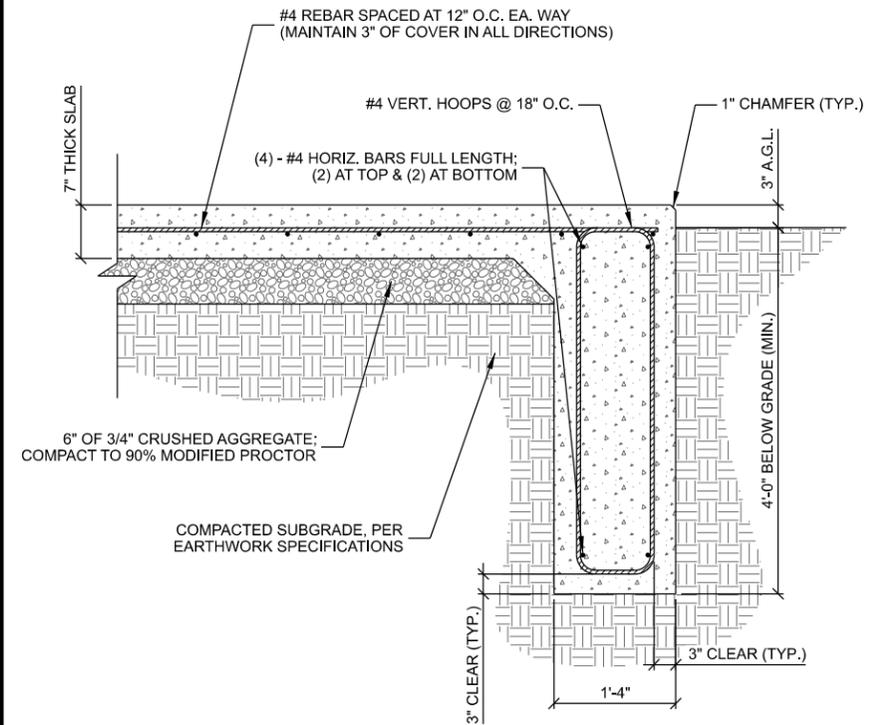


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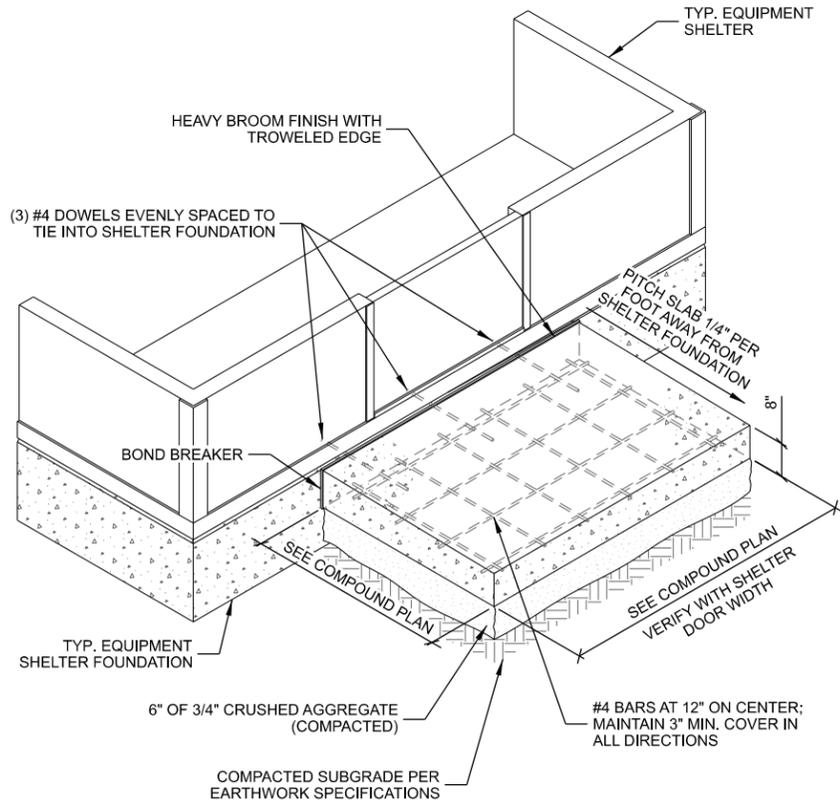


NOTES:
 1. BEARING SHIM: GALVANIZED STEEL, 4 EACH SIDE USE SHIMS AS REQUIRED TO ASSURE SHELTER IS BEARING AT PERIMETER.

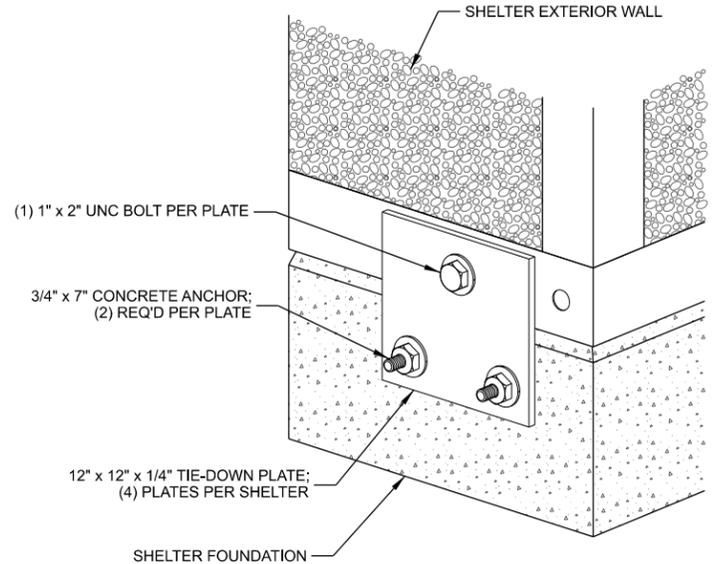
A SHELTER FOUNDATION PLAN
 SCALE: 11" x 17" - 1/4" = 1'-0"
 22" x 34" - 1/2" = 1'-0"



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



C SHELTER STOOP



D TIE DOWN PLATE

CONCRETE AND REINFORCING NOTES:

1. ALL CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODE REQUIREMENTS AND MOST CURRENT VERSION OF ACI STANDARDS.
2. ALL CONCRETE UNLESS SPECIFICALLY NOTED SHALL BE NORMAL WEIGHT (145 PCF) AND SHALL ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (f_c) OF 4,000 PSI. EXPOSED EXTERIOR CONCRETE TO BE AIR ENTRAINED WITH 6% +/- 1% AIR CONTENT. CONTRACTOR TO PERFORM CONCRETE SLUMP TEST (4" MAX SLUMP). NO WATER TO BE ADDED AFTER SLUMP HAS BEEN MEASURED.
3. ALL CONCRETE REINFORCING SHALL BE ASTM A615 GRADE 60 AND PLACED IN ACCORDANCE WITH ACI STANDARDS
4. REMOVE ALL ORGANIC MATERIAL, SOFT AND/OR UNSUITABLE SOILS WITHIN FOUNDATION FOOTPRINT. DO NOT UTILIZE THESE SOILS FOR BACKFILL.
5. CONSULT GEOTECHNICAL INVESTIGATION REPORT FOR ANTICIPATED SOIL CONDITIONS AND CONSTRUCTION CONSIDERATIONS.
6. FOUNDATION DESIGN BASED ON A PRESUMPTIVE SOIL BEARING CAPACITY OF 2000 PSF AND MAX. PLASTICITY INDEX OF 20. CONTRACTOR TO CONFIRM BEARING SOILS MEET THESE CONDITIONS BEFORE INSTALLATION.
7. SOILS NOT MEETING THE DESIGN BEARING STRENGTH SHALL BE UNDERCUT AND REPLACED WITH 3-INCH BREAKER STONE. UNDERCUT ONE FOOT ON EACH SIDE OF THE FOOTING FOR EVERY FOOT IN DEPTH. CONSULT WITH ENGINEER FOR REQUIRED UNDERCUT DEPTH.
8. CONTRACTOR TO ENSURE POSITIVE DRAINAGE FROM ALL FOUNDATIONS.
9. FOUNDATION DESIGN BASED ON INFORMATION PROVIDED BY SHELTER MFG. (WEIGHT, LIVE LOAD, ETC.). CONTRACTOR TO VERIFY EXACT SHELTER SIZE AND TYPE.

CONSULTANT:
Edge
 Consulting Engineers, Inc.
 624 WATER STREET
 PRAIRIE DU SAC, WI 53578
 608.644.1449 VOICE
 608.644.1549 FAX
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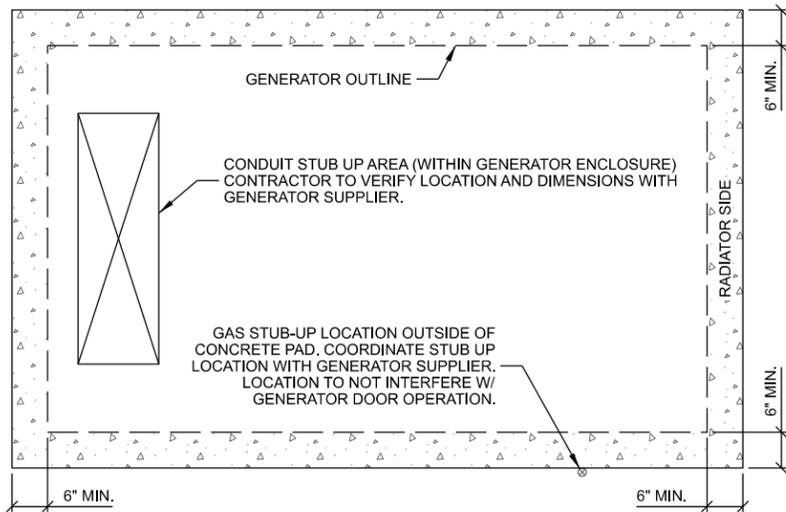
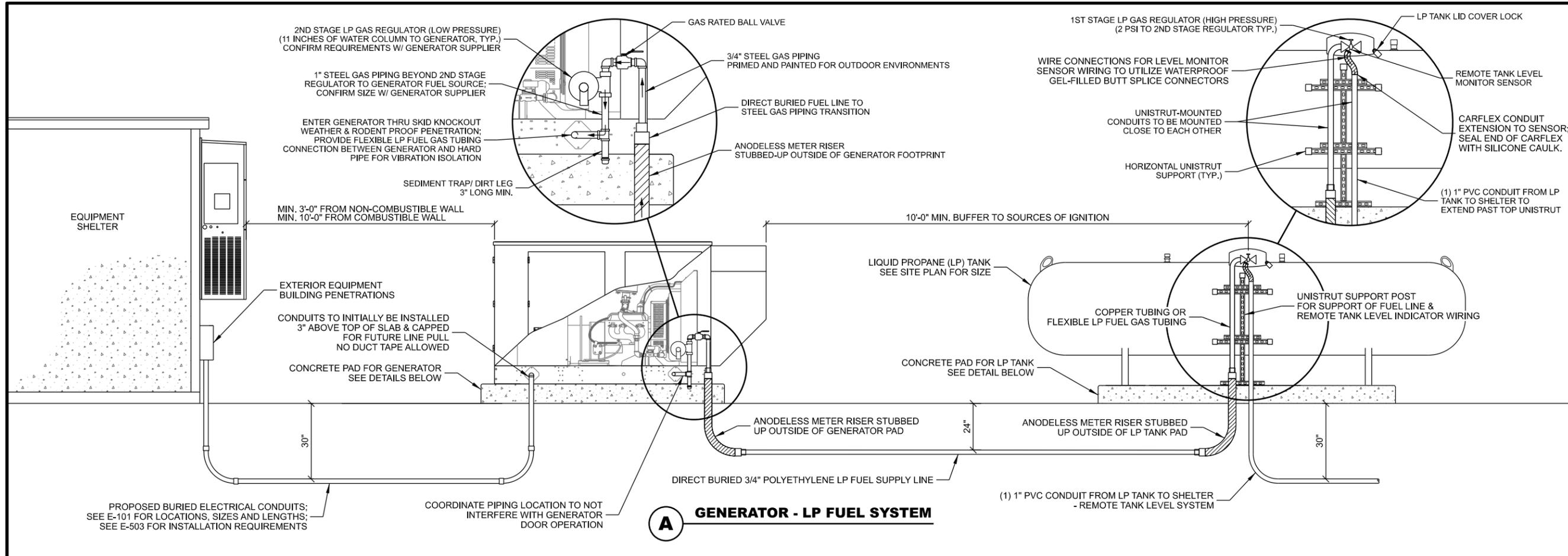
CLIENT:
SHELTER FOUNDATION DETAILS
 PALMYRA (27653)
 HEBRON, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

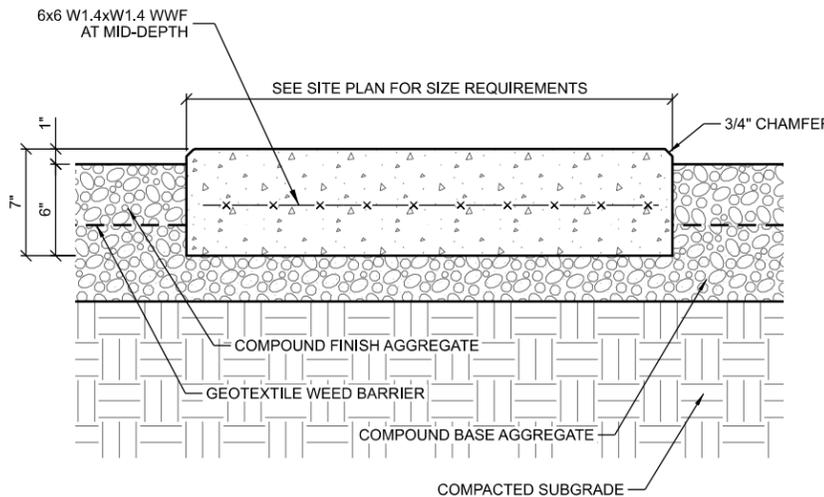
CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	C-503

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- NOTES:**
1. CONTRACTOR TO VERIFY SLAB DIMENSIONS AND PIPING STUB UP LOCATIONS WITH GENERATOR SUPPLIER.
 2. ORIENT RADIATOR SIDE TOWARDS TOWER.
 3. SEE DETAIL TO RIGHT FOR CONCRETE PAD REQUIREMENTS.

B TYP. GENERATOR FOUNDATION PLAN



- NOTES:**
1. CONCRETE MIX TO BE 4,000 PSI @ 28 DAYS.
 2. FINISH: MEDIUM BROOM.

C CONCRETE PAD

THIS SPACE INTENTIONALLY LEFT BLANK

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



GENERATOR FUEL SYSTEM DETAILS
 PALMYRA (27653)
 HEBRON, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	C-504

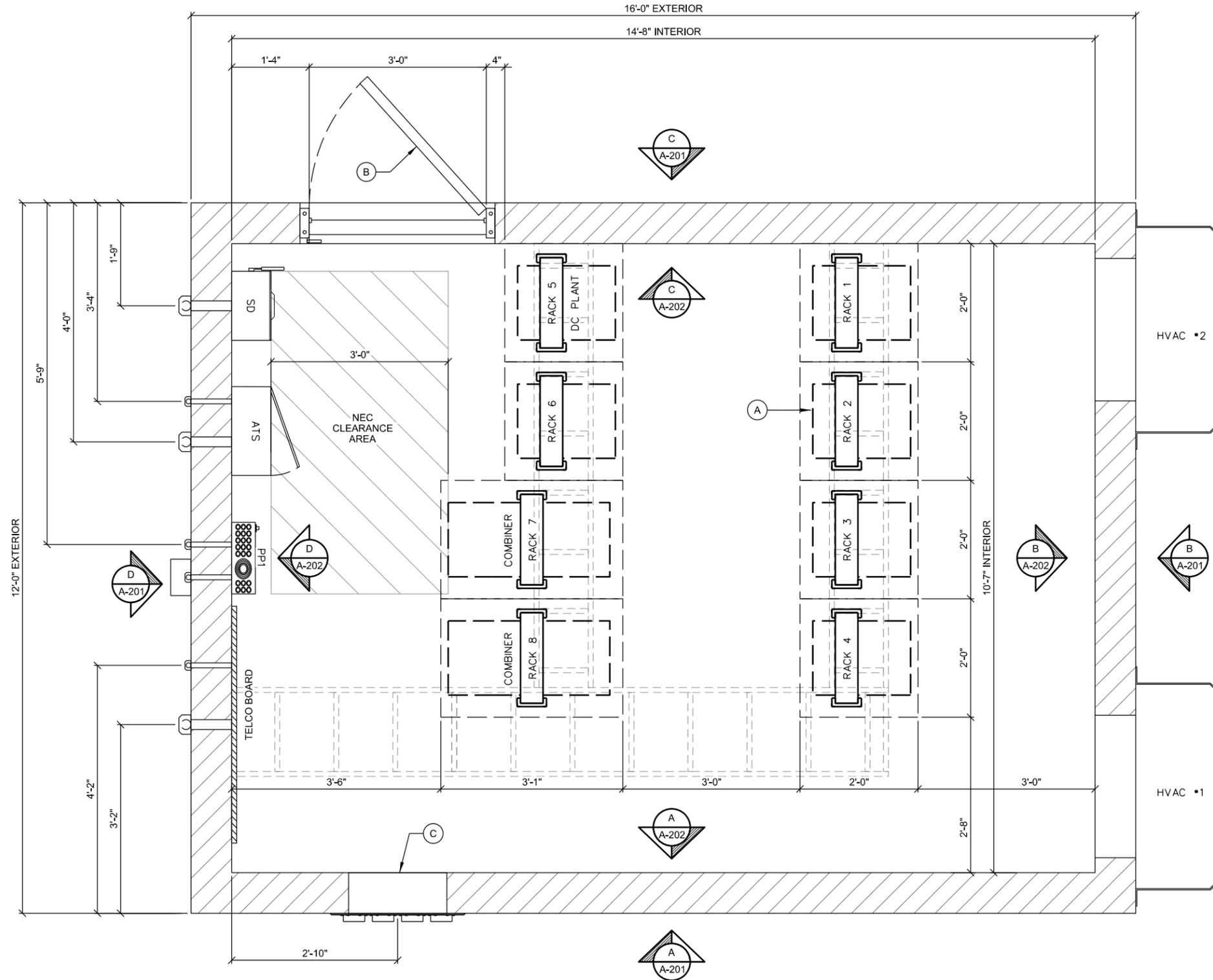
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KEYNOTES: (THIS SHEET)

- A. RADIO EQUIPMENT RACK
INSTALLED BY OTHERS (RADIO VENDOR)
- B. 3'-0" ENTRY DOOR
- C. 12 HOLE (4x3) ENTRY PANEL PORT

GENERAL NOTES: (THIS SHEET)

- 1. CONTRACTOR TO FIELD VERIFY PENETRATION LOCATION DIMENSIONS WITH SUPPLIED BUILDING. DIMENSIONS SHOWN ARE APPROXIMATE.



****SHELTER PROVIDED BY OWNER & INSTALLED BY CONTRACTOR****

A SHELTER FLOOR PLAN
SCALE: 11" x 17" - 1/2" = 1'-0"
22" x 34" - 1" = 1'-0"

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



SHELTER FLOOR PLAN
PALMYRA (27653)
HEBRON, WISCONSIN

SUBMITTAL:		
INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	A-101

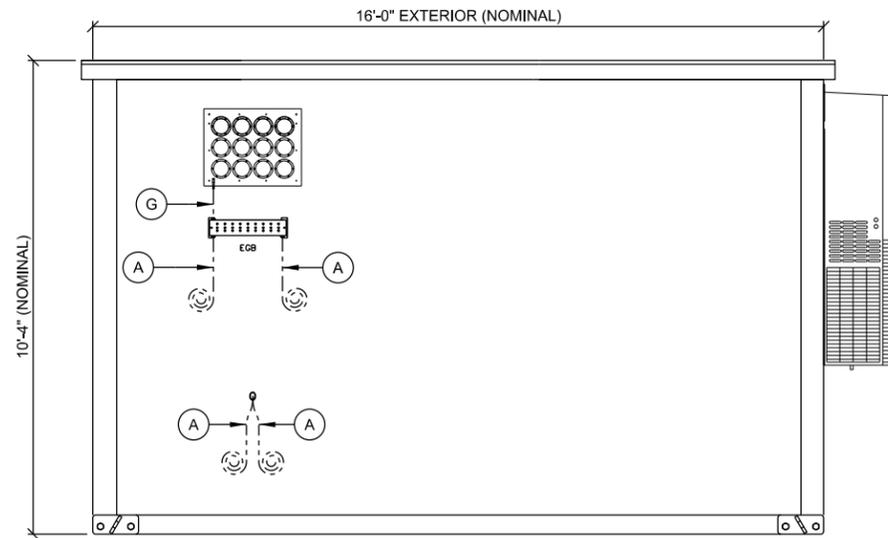
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KEYNOTES: (THIS SHEET)

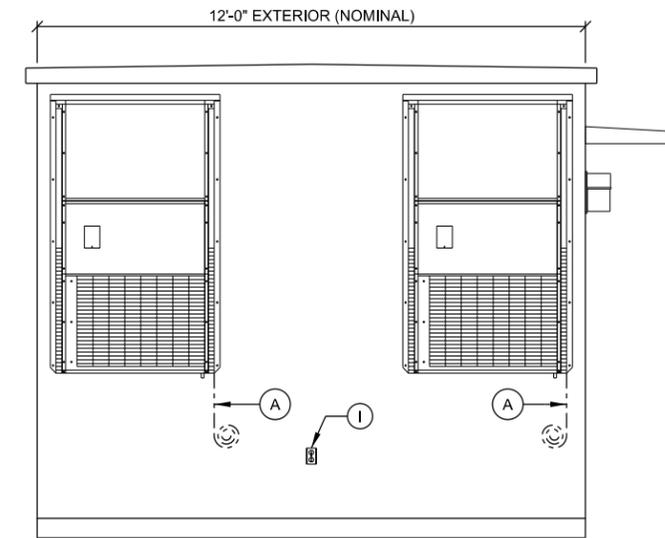
- A. (2) #2 SOLID TINNED GROUND LEADS TO SITE GROUND SYSTEM
- B. 2" CONDUIT TO UTILITY RACK (AC POWER)
- C. 2" CONDUIT TO GENERATOR (AC POWER)
- D. 1" CONDUIT TO GENERATOR (CONTROL & ALARM)
- E. ~~1" CONDUIT TO GENERATOR (CONVENIENCE OUTLET)~~ (NOT REQ'D)
- F. 1" CONDUIT TO LP TANK (REMOTE MONITOR)
- G. #6 STRANDED INSULATED BONDING JUMPER TO ENTRY PORT PLATE
- H. 2" PENETRATION (FUTURE COMMUNICATION SERVICE)
- I. EXTERIOR GFCI RECEPTACLE
- J. EXTERIOR LIGHT (WALL PACK)
- K. DOOR HARDWARE
- L. 3/4" CONDUIT TO BERTRAM EQUIPMENT (AC POWER)

GENERAL NOTES: (THIS SHEET)

1. ALL PVC CONDUITS TO BUILDING TO INCLUDE SLIP JOINTS WHEN EXITING GRADE.
2. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS STEEL HARDWARE. PROVIDE ANTI OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER TO COPPER CONNECTIONS.
3. SELF TAPPING SCREW CONNECTIONS ARE NOT ALLOWED.
4. ALL EXTERIOR METALLIC CONDUITS AND BOXES TO BE PROVIDED WITH GROUND BOND CONNECTION VIA THROUGH WALL HUG CONNECTION TO INTERIOR GROUNDED DEVICE OR OTHER DIRECT CONNECTION TO GROUND SYSTEM.

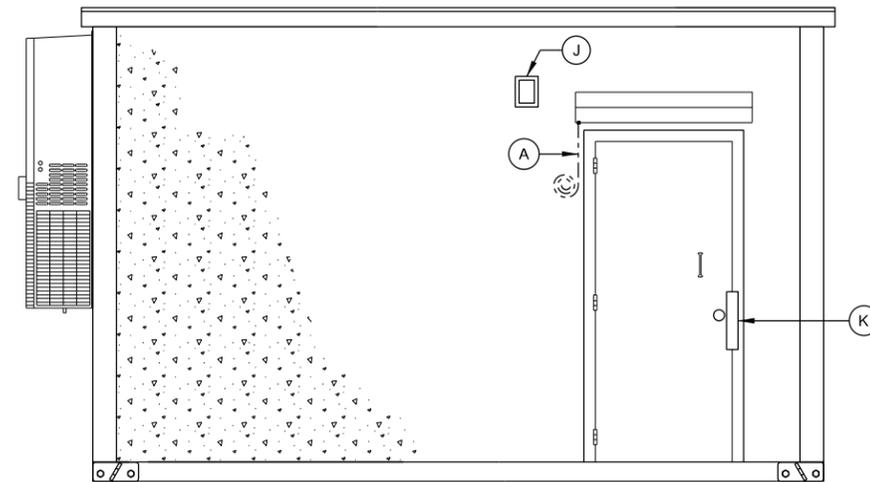


A EXTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

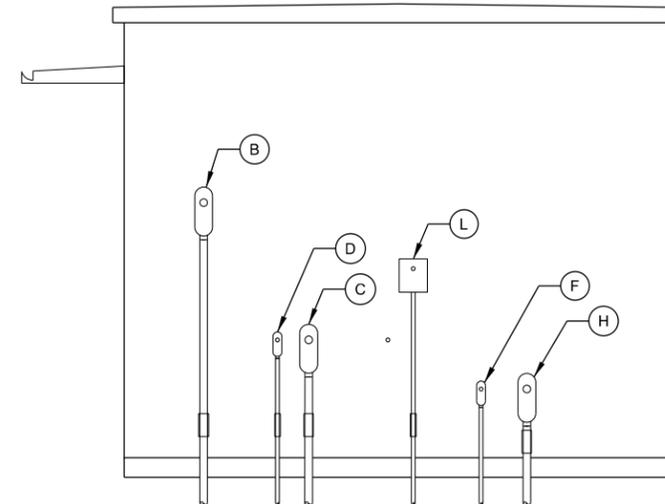


B EXTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

**** SHELTER PROVIDED BY OWNER & INSTALLED BY CONTRACTOR ****



C EXTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



D EXTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

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SHELTER ELEVATIONS: EXTERIOR
PALMYRA (27653)
HEBRON, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	A-201

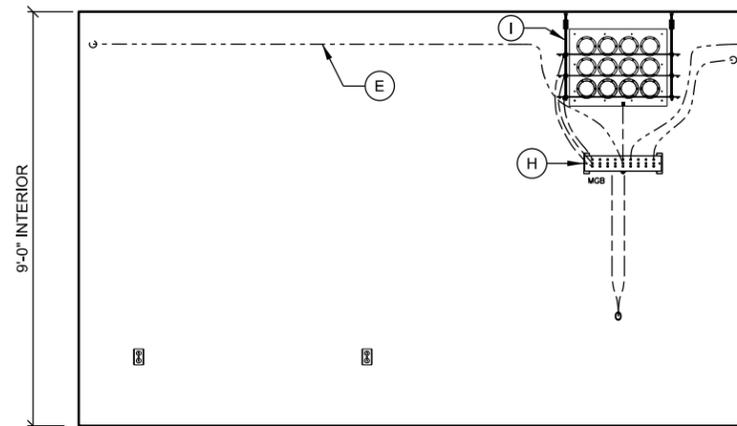
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KEYNOTES: (THIS SHEET)

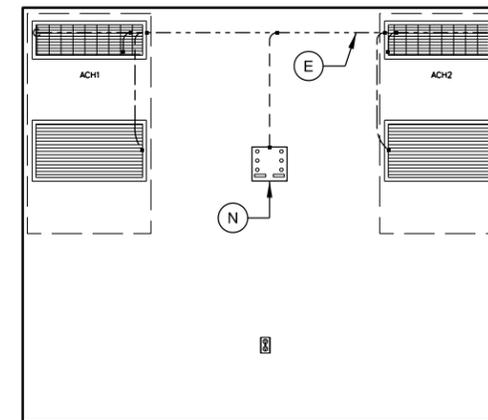
- A. AUTOMATIC TRANSFER SWITCH (ATS) BY CONTRACTOR INSTALL AT 6'-0" ABOVE FINISH FLOOR
- B. CONDUIT/RACEWAY BETWEEN ELECTRIC SERVICE DISCONNECT (SD) & ATS
- C. 60A CIRCUIT BREAKER & SPD1 ON ELEC. SERVICE DISCONNECT
- D. BOND ALL DEVICE BOXES (ATS, SPD1 & SPD2) TO HALO (#6 STRANDED INSULATED)
- E. GROUNDING HALO (#2 STRANDED INSULATED)
- F. SPD2 ON DIST. PANEL (PP1)
- G. LP TANK LEVEL MONITOR BY CONTRACTOR
- H. MASTER GROUND BAR. FOLLOW PANI SYSTEM FOR ORGANIZATION OF CONNECTIONS TO BAR
- I. COAXIAL SURGE PROTECTOR TRAPEZE GROUND SYSTEM
- J. LP MONITOR DOUBLE DUPLEX OUTLET
- K. ALARM WIRING FROM EXISTING AND INSTALLED DEVICES
- L. R66 ALARM BLOCK
- M. NEUTRAL-GROUND BOND CONNECTION FROM SD GROUND TERMINAL TO MGB (#2 STRANDED INSULATED). ROUTE ALONG PERIMETER WALL BELOW HALO OR ALONG CABLE TRAY
- N. HVAC LEAD LAG CONTROLLER
- O. 3/4" ALARM WIRING CONDUIT
- P. HIGH & LOW TEMP ALARMS

GENERAL NOTES: (THIS SHEET)

- 1. ALL INTERIOR CONDUITS TO BE RGS OR EMT. UTILIZE COMPRESSION FITTINGS FOR EMT INSTALLATIONS.
- 2. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS STEEL HARDWARE. PROVIDE ANTI-OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER TO COPPER CONNECTIONS. SELF-TAPPING SCREWS ARE NOT ALLOWED.
- 3. PROVIDE EMT CONDUIT FOR ALL ALARM AND LOW VOLTAGE WIRING FROM DEVICE TO ALARM BOARD. CONDUITS NEED NOT BE FULL LENGTH AND MAY UTILIZE CABLE TRAY FOR HORIZONTAL RUNS. CONDUITS SHALL EXTEND ABOVE AND OVER TO CABLE TRAY AND PROVIDE BUSHINGS ON ENDS.
- 4. ALL METALLIC CONDUITS AND BOXES TO BE GROUND BONDED TO HALO.

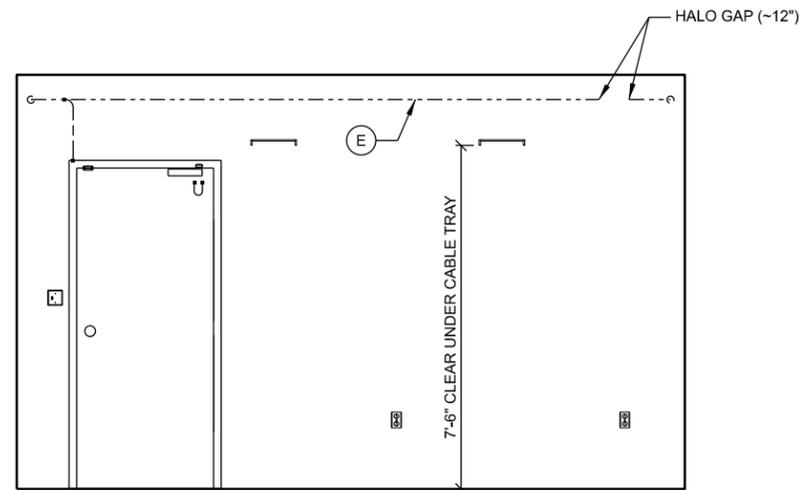


A INTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

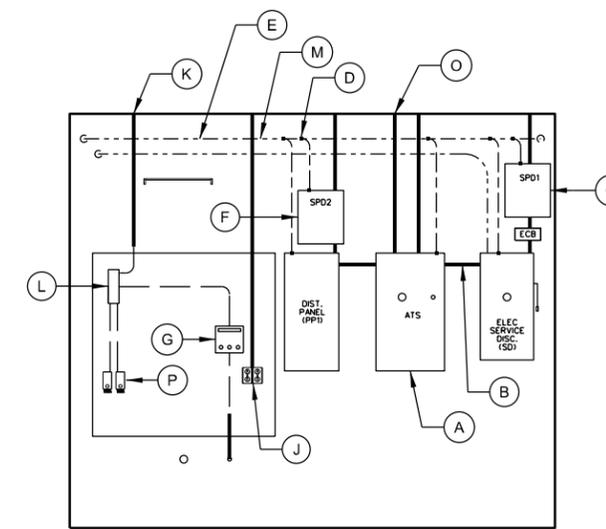


B INTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

****SHELTER PROVIDED BY OWNER & INSTALLED BY CONTRACTOR****
ATS AND LP TANK LEVEL MONITOR ARE BY CONTRACTOR



C INTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"



D INTERIOR ELEVATION
SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

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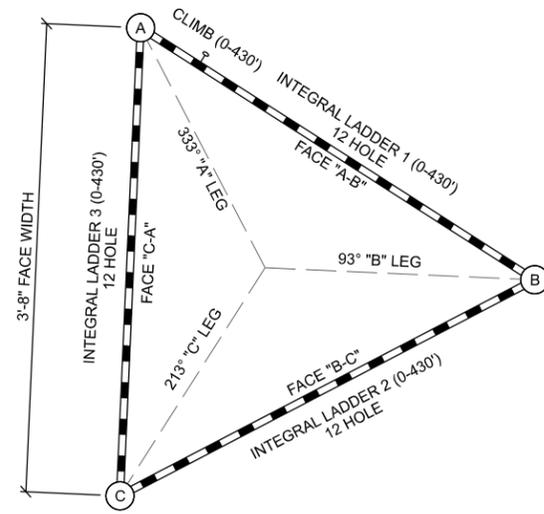


SHELTER ELEVATIONS: INTERIOR
PALMYRA (27653)
HEBRON, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	A-202



A TOWER ORIENTATION

TOWER LOADING

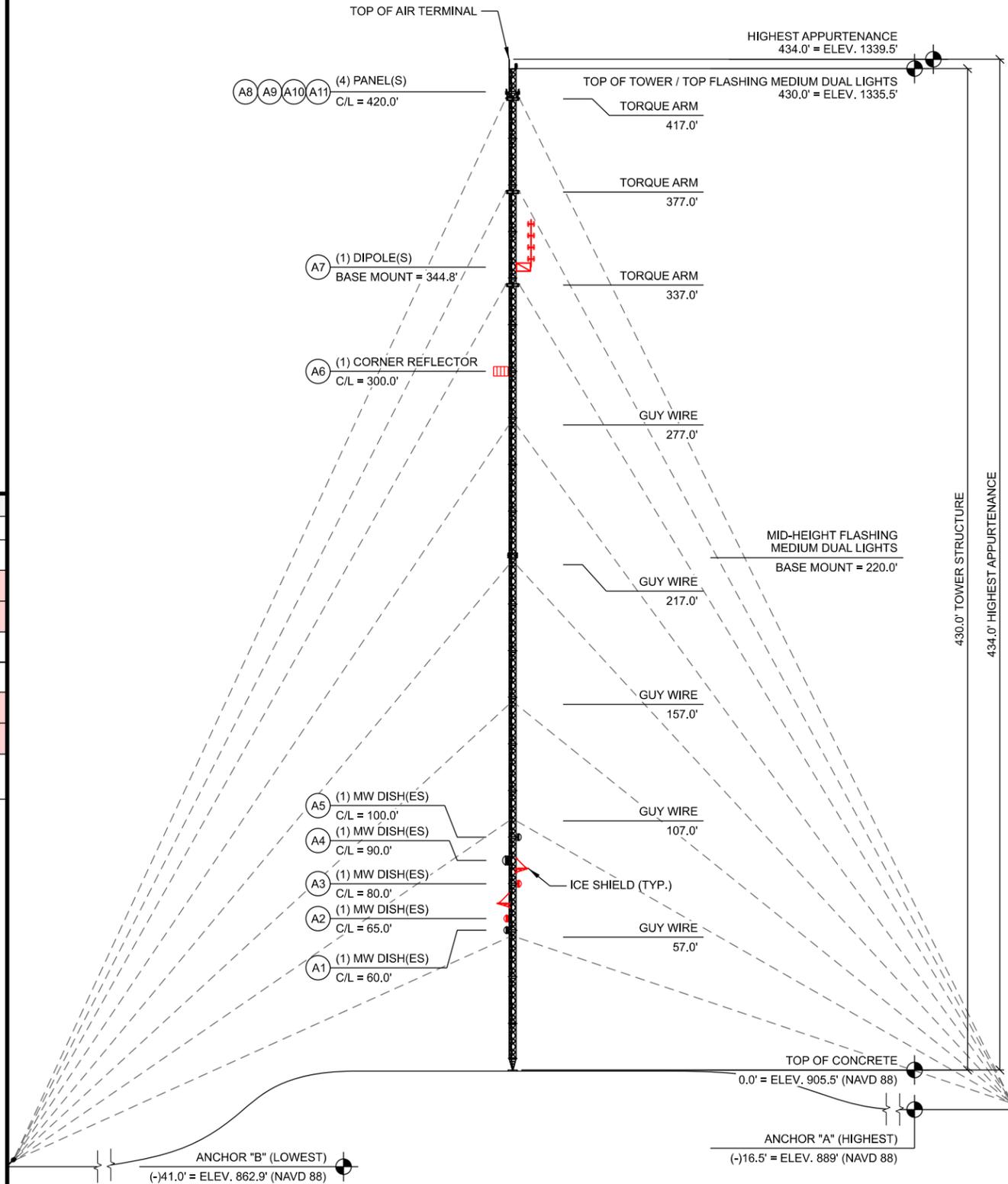
ANTENNA ID	ANTENNA TYPE	(QTY.) ANTENNA MODEL SIZE & WEIGHT	TOWER LEG	ANTENNA MOUNT SIZE & WEIGHT	MOUNT HEIGHT (T.O.C.)	C/L HEIGHT (T.O.C.)	C/L ELEV. (NAVD 88)	ANTENNA AZIMUTH	TLT (+/-)	Tx LINE (QTY.) SIZE	FREQUENCY (MHz)	OWNER USE	NOTES
A1	MW Dish	(1) 3' Solid Dish w/ Radome 3' Dia.	A	(1) Leg Dish Mount	60.0'	60.0'	965.5'	333°		(1) CAT5		Bertram Wireless	
A2	MW Dish	(1) radiowaves HP3-11 (TR) 3' Dia. 50 lbs.	A	Leg Mount (PM-SU4-63) 4.5" OD x 63" Mast Pipe 138 lbs.	65.0'	65.0'	970.5'	23.88°		(1) LDF2-50 (3/8")	11200	Jefferson Co. Path to Sullivan	Ice Shield @ 71.5'
A3	MW Dish	(1) radiowaves HP3-11 (TR) 3' Dia. 50 lbs.	C	Leg Mount (PM-SU4-63) 4.5" OD x 63" Mast Pipe 138 lbs.	80.0'	80.0'	985.5'	211.15°		(1) LDF2-50 (3/8")	11200	Jefferson Co. Whitewater	Ice Shield @ 86.5'
A4	MW Dish	(1) 4' Solid Dish w/ Radome 4' Dia.	A	(1) Leg Dish Mount	90.0'	90.0'	995.5'	5°		(1) CAT5		Bertram Wireless	
A5	MW Dish	(1) 3' Solid Dish w/ Radome 3' Dia.	C	(1) Leg Dish Mount	100.0'	100.0'	1005.5'	262°		(1) CAT5		Bertram Wireless	
A6	Corner Reflector	(1) Comprod 470-70 48" L x 75" W 39 lbs.	B	Leg Mount (PM-SU2B) 2-3/8" OD x 48" Mast Pipe 81 lbs.	300.0'	300.0'	1205.5'	135°		(1) LCF78-50JA (7/8")	132 - 174	Jefferson Co. P25 Tx	
A7	Dipole	(1) Comprod 884-70 20.5' Long 78 lbs.	A	HS-400 Stand-Off 48" Long, 42" High 56 lbs.	344.8'	355.0'	1260.5'	0°		(1) LCF78-50JA (7/8")	138 - 174	Jefferson Co. P25 Rx	
A8 - A11	Panel	(4) Panels - (1) Per Sector KPPA-5GHZDP90S 27" x 7" x 3.5" 8 lbs/ea.	A, B	(2) 4" 2" Mast Pipe w/ 10" Stand-Off. (2) Antennas per Mast (1) Mast per (2) Sectors	420.0'	420.0'	1325.5'			(1) 24-Strand SMF (1/2" Dia.) & (1) 12/3 SOOW Power (5/8" Dia.)		Bertram Wireless	3' X 2' X 12" Box

**** ANTENNA AND LINE INSTALLATION BY OTHERS **
NOT PART OF CONTRACT**

NOTES:

- REFER TO ANTENNA MOUNTING DETAILS FOR ADDITIONAL INFO ON MOUNT DESIGN AND MOUNTING REQUIREMENTS.
- ALL OMNI & DIPOLE ANTENNAS BELOW TOP LAYER TO INCLUDE TOP BRACING WHEN RECOMMENDED BY MANUFACTURER.
- PROPOSED JEFFERSON CO. ANTENNA AND MICROWAVE LOADING IS BASED ON DESIGN SUPPLIED BY GENERAL COMMUNICATIONS, DATED 04/01/2021.
- PROPOSED BERTRAM WIRELESS ANTENNA AND MICROWAVE LOADING IS BASED ON DESIGN SUPPLIED BY BERTRAM WIRELESS, DATED 04/08/2021.

B TOWER LOADING SUMMARY



NOTES:

- ALL DIMENSIONS SHOWN ARE REFERENCED FROM THE TOP OF TOWER STEEL BASE PLATE.
- TOWER MANUFACTURER: SABRE MODEL/SERIAL #: 4400 SRWD TOWER MANUFACTURER JOB #: 470347

C TOWER PROFILE (ELEVATION)

CONSULTANT:



CLIENT:



**TOWER LOADING / ELEVATION
PALMYRA (27653)
HEBRON, WISCONSIN**

SUBMITTAL:

INT.	DATE	DESCRIPTION:

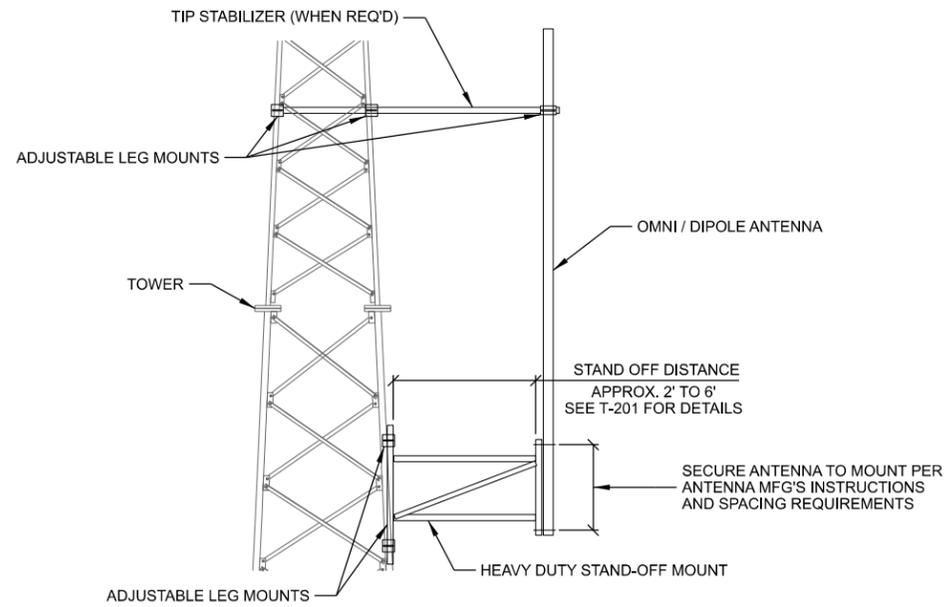
CHECKED BY: AJO

PLOT DATE: 5/12/2021

PROJECT NUMBER: 27653

SET TYPE: BD

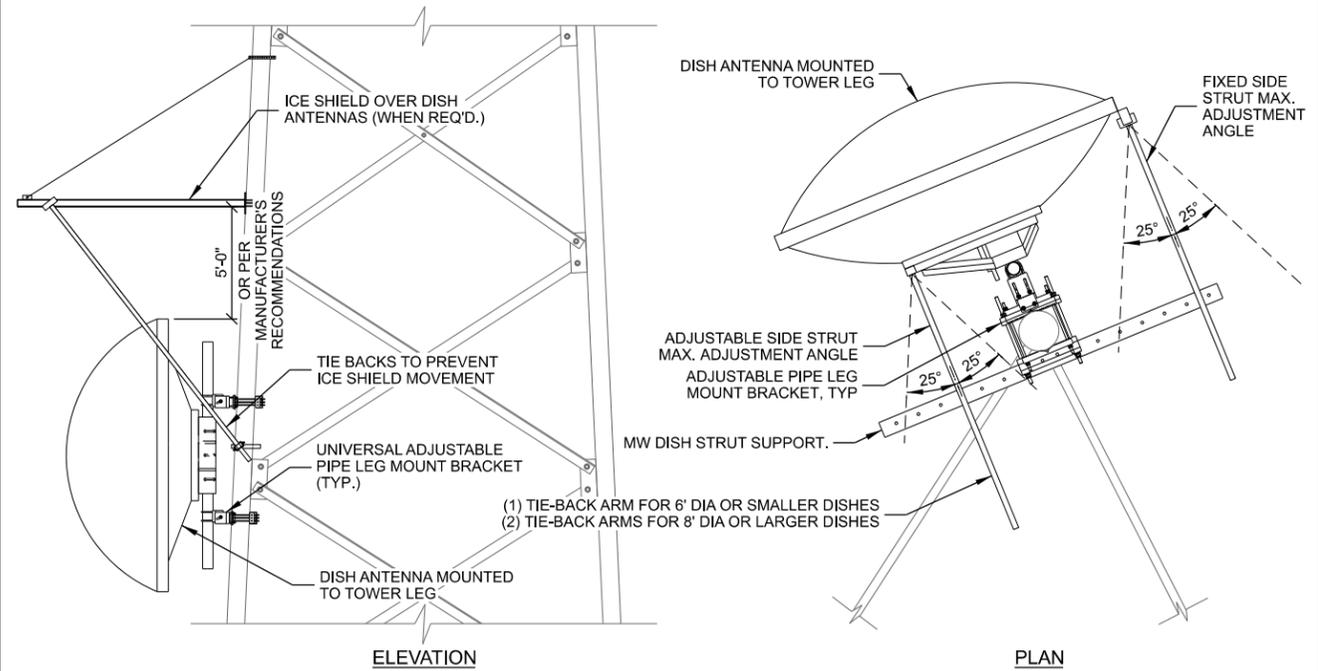
SHEET NUMBER: **T-201**



NOTES:

1. ANTENNA MOUNTS SHOWN ARE SCHEMATIC ONLY. TOWER MANUFACTURER IS RESPONSIBLE TO DESIGN MOUNTS TO MEET THE ANTENNA LOADS AND MAXIMUM WIND DESIGN PARAMETERS AS OUTLINED IN THE SPECS.
2. POSITION LOCATIONS ARE REFERENCED INCREASING IN A CLOCKWISE DIRECTION (INCREASING AZIMUTH).
3. ALL MOUNTS, MOUNTING HARDWARE AND ACCESSORIES TO BE HOT DIPPED GALVANIZED.

A OMNI / DIPOLE STANDOFF MOUNTING



NOTES:

1. 4' DIA. OR GREATER DISH ANTENNAS TO BE MOUNTED ON 4.5" O.D. PIPE MASTS.
2. INSTALL TIE-BACK SUPPORT(S) FOR EACH DISH PER DETAIL OR DISH MANUFACTURERS INSTRUCTIONS.
3. ANTENNA MOUNTS SHOWN ARE SCHEMATIC ONLY. MOUNT MANUFACTURER IS RESPONSIBLE TO DESIGN MOUNTS TO MEET THE ANTENNA LOADS AND MAXIMUM WIND DESIGN PARAMETERS AS OUTLINED IN THE SPECS.
4. ICE SHIELD WIDTH TO BE 2" WIDER THAN DISH DIAMETER MIN.
5. ICE SHIELDS TO INCLUDE TIE BACK WIRES TO PREVENT MOVEMENT & TWIST IN HIGH WIND CONDITIONS.

B DISH MOUNTING

*** * ANTENNA INSTALLATION BY OTHERS * ***
NOT PART OF CONTRACT

CONSULTANT:

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

CLIENT:



ANTENNA INSTALLATION DETAILS
PALMYRA (27653)
HEBRON, WISCONSIN

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	T-503

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GROUNDING LEGEND: (THIS SHEET)

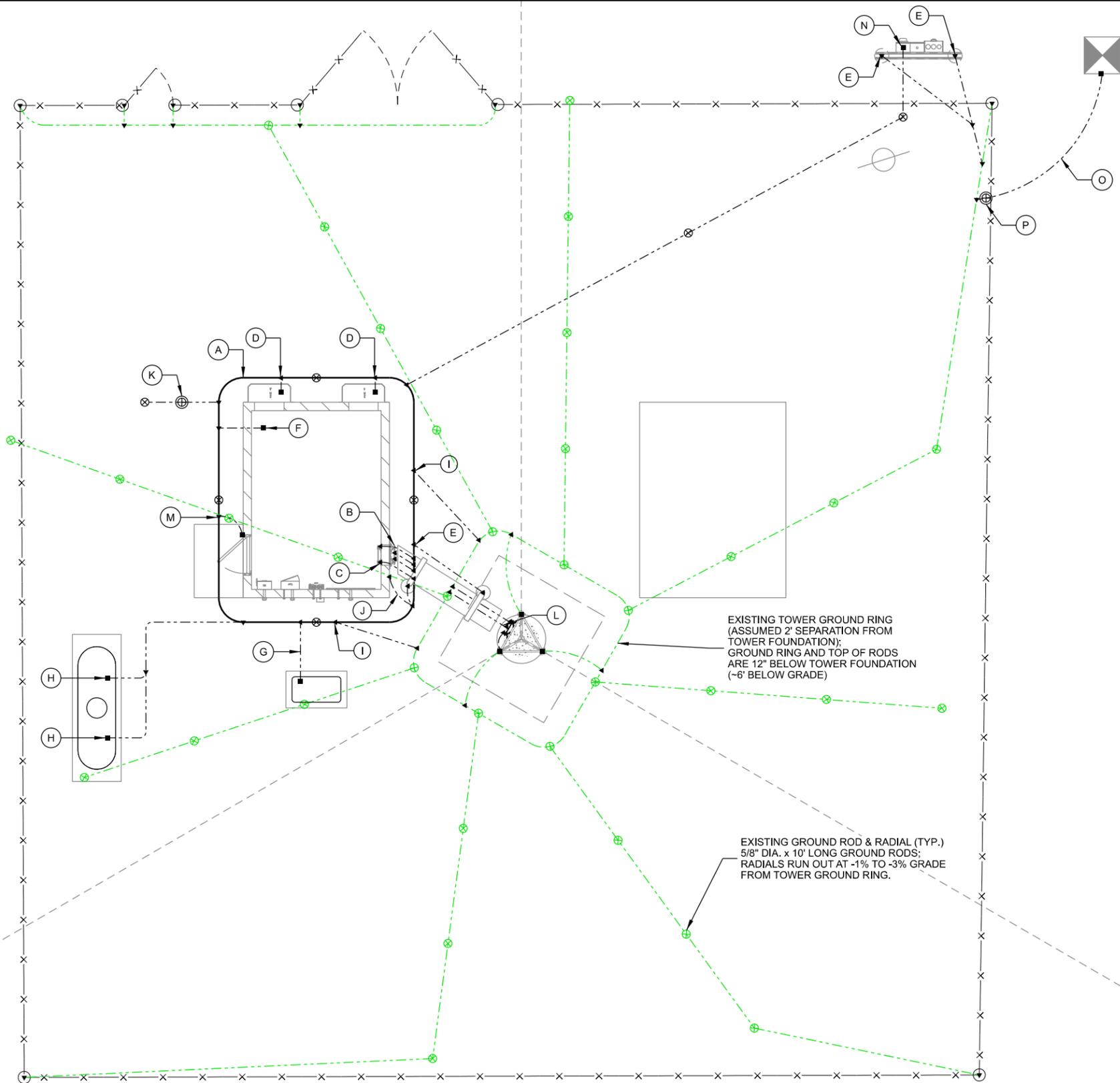
-  GROUND TEST WELL, SEE E-502 FOR DETAILS
-  COPPER CLAD GROUND ROD, (5/8" DIA. x 10' LONG)
SPACE @ 2X GROUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
-  COPPER PLATE, (18" x 18" x 0.032" THK)
SPACE @ 2X GROUND ROD LENGTH (20' O.C. MAX., 6' MIN.)
-  EXOTHERMIC OR UL RATED IRREVERSIBLE CONNECTION
(CADWELD OR HYGROUND)
-  MECHANICAL CONNECTION
(BURNDY 2-HOLE LUG OR APPROVED EQUAL)
-  #2 AWG BARE SOLID TINNED COPPER CONDUCTOR
IN STANDARD GROUND TRENCH, SEE E-502 FOR DETAILS
-  #2/0 AWG BARE STRANDED TINNED COPPER CONDUCTOR
IN STANDARD GROUND TRENCH, SEE E-502 FOR DETAILS
-  #2 AWG BARE SOLID TINNED COPPER CONDUCTOR
IN ENHANCED GROUND TRENCH, SEE E-502 FOR DETAILS

KEYNOTES: (THIS SHEET)

- A. SHELTER GROUND RING, MAINTAIN 2' SEPARATION FROM SHELTER FOUNDATION
- B. EXTERIOR SHELTER GROUND BAR, (2) LEADS TO SHELTER GROUND RING. GROUND BAR PROVIDED W/ SHELTER.
- C. INTERIOR SHELTER GROUND BAR (MGB), (2) LEADS TO SHELTER GROUND RING. GROUND BAR PROVIDED W/ SHELTER.
- D. SHELTER EXTERIOR AC UNIT GROUND
- E. ICE BRIDGE/UTILITY POST GROUND, SEE E-501 FOR DETAILS
- F. SHELTER FOUNDATION GROUND, SEE E-502 FOR DETAILS
- G. GROUND GENERATOR ENCLOSURE, (1) LEAD
- H. GROUND LP TANK, EACH LEG
- I. SHELTER GROUND RING TO TOWER GROUND RING, (2) LEADS
- J. SHELTER ANCHOR TAB GROUND. CLOSEST TAB TO RF ENTRY PORT (1 REQ'D)
- K. GROUND TEST WELL. SEE DETAIL C/E-502
- L. LOWER TOWER GROUND BAR, (2) LEADS TO TOWER GROUND RING & (1) TO TOWER STEEL
- M. SHELTER AWNING GROUND; TIE TO SHELTER GROUND RING
- N. AC METER BOX GROUND. TIE TO SHELTER GROUND RING
- O. TRANSFORMER GROUND. (1) LEAD
- P. TRANSFORMER GROUND DISCONNECT, SEE DETAIL F/E-502

GENERAL NOTES: (THIS SHEET)

1. ALL EXTERIOR GROUNDING SHALL MEET OR EXCEED THE CURRENT HARRIS SITE GROUNDING AND LIGHTNING PROTECTION GUIDELINES. REFER TO INSTALLATION MANUAL AE/LZT 123 4618/1 REV F (JUNE 2017).
2. THE GROUNDING SYSTEM & CONDUCTORS SHALL BE TESTED BY CONTRACTOR PRIOR TO BACKFILLING. SYSTEM SHALL PROVIDE 3 OHM OR LESS RESISTANCE UPON COMPLETION.
3. ALL NON-INSULATED GROUND LEADS EXTENDING ABOVE GROUND LEVEL SHALL BE ENCASED IN 1/2" PVC & SEALED WITH SILICONE.
4. GROUND RINGS & TOP OF RODS SHALL BE INSTALLED AT 30" BELOW FINISHED GRADE. (SEE DETAIL A/E-501)
5. INSTALL 18"x18" COPPER PLATES IN LIEU OF GROUND RODS WHEN INSTALLING OVER TOWER FOUNDATION OR WHERE DRIVING GROUND RODS IS NOT FEASIBLE. REFER TO GEOTECH REPORT FOR SOIL CONDITIONS.
6. ALL MECHANICAL GROUND CONNECTIONS TO UTILIZE 2-HOLE LUGS AND STAINLESS STEEL HARDWARE. PROVIDE ANTI OXIDANT COMPOUND BETWEEN LUG & CONNECTION POINT. USE COPPER ANTI-OXIDANT FOR COPPER TO COPPER CONNECTIONS. SELF-TAPPING SCREWS ARE NOT ALLOWED.
7. ALL ABOVE GRADE CADWELD CONNECTIONS (TO GALVANIZED ITEMS) SHALL BE SPRAYED WITH COLD GALVANIZING COMPOUND TO PREVENT CORROSION.



EXISTING TOWER GROUND RING
(ASSUMED 2' SEPARATION FROM
TOWER FOUNDATION);
GROUND RING AND TOP OF RODS
ARE 12" BELOW TOWER FOUNDATION
(~6' BELOW GRADE)

EXISTING GROUND ROD & RADIAL (TYP.)
5/8" DIA. x 10' LONG GROUND RODS;
RADIALS RUN OUT AT -1% TO -3% GRADE
FROM TOWER GROUND RING.

CONSULTANT:

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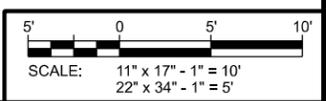
 JEFFERSON COUNTY WI
 ESTABLISHED 1838

**GROUNDING PLAN
PALMYRA (27653)
HEBRON, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	E-101



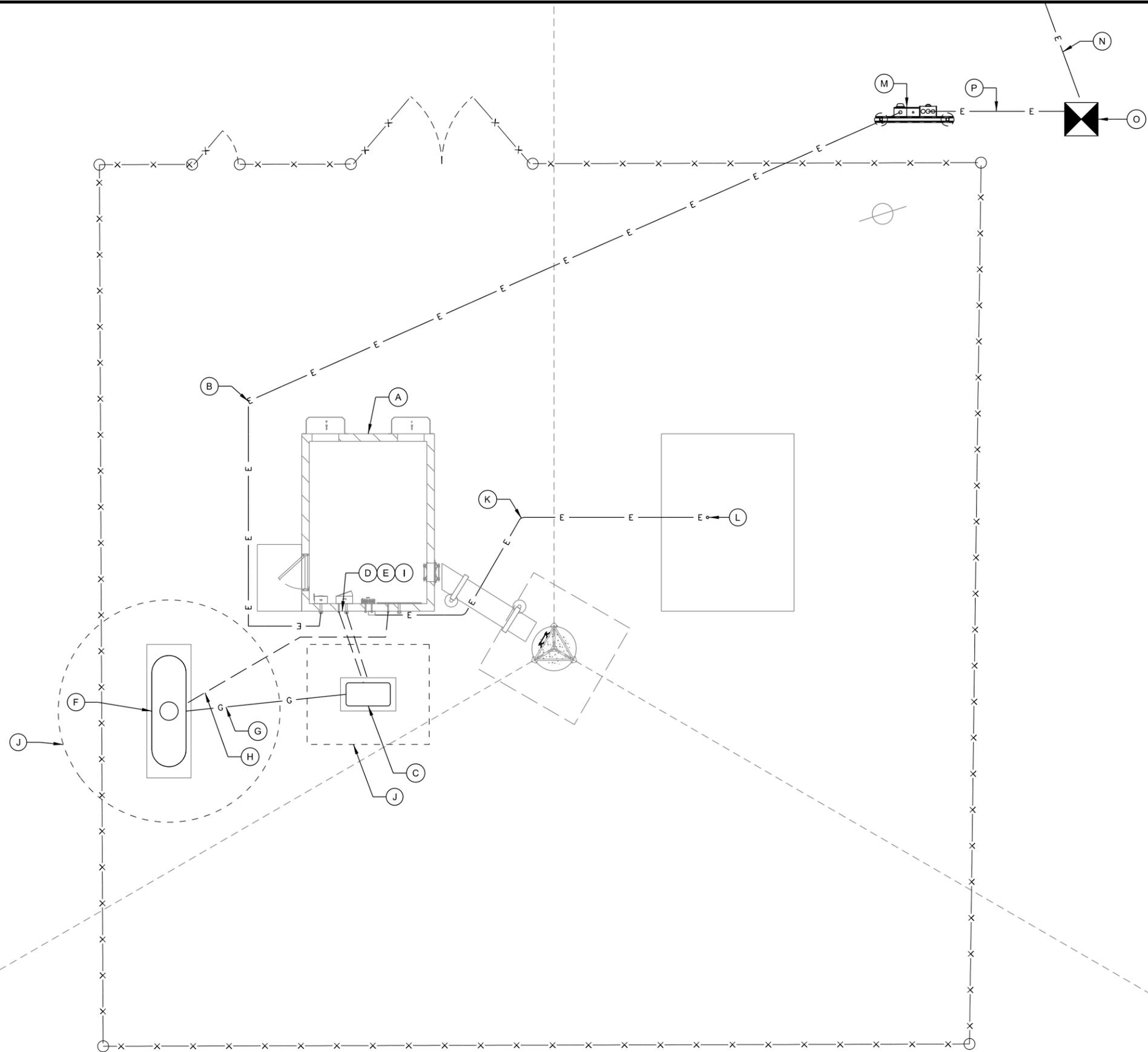
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KEYNOTES: (THIS SHEET)

- A. EQUIPMENT SHELTER
- B. 200A 120/240V 1P ELECTRIC SERVICE TO EQUIPMENT BUILDING;
(1) 2" CONDUIT INSTALLED BY CONTRACTOR
- C. 22kW GENERATOR ON CONCRETE SUPPORT SLAB;
SEE C-504 FOR DETAILS
- D. GENERATOR AC ELECTRIC;
(1) 2" CONDUIT.
- E. GENERATOR CONTROL & ALARM;
(1) 1" CONDUIT.
- F. 500 GAL. LP TANK, SEE C-504 FOR DETAILS
- G. LP FUEL LINE, SEE E-505 FOR DETAILS
- H. REMOTE LP FUEL TANK LEVEL MONITOR CONDUIT;
(1) 1" CONDUIT
- I. STUB ALL CONDUITS ON OUTSIDE OF CONCRETE FOUNDATION. ALL OUTSIDE BUILDING PENETRATIONS TO BE WEATHERPROOF LB, SEE E-503 FOR DETAILS
- J. UTILITY SETBACK / CLEARANCES.
3' AROUND GENERATOR.
10' AROUND LP TANK VALVE
- K. BERTRAM ELECTRIC (1) 30A, 1P CIRCUIT
(1) 3/4" CONDUIT W/ #10 WIRE & PUL STRING
- L. STUB-UP & CAP CONDUIT AT BERTRAM EQUIPMENT LOCATION
- M. UTILITY RACK. SEE DETAIL A/E-505
- N. PRIMARY ELECTRIC UTILITY SERVICE EXTENDED FROM R/W.
INSTALLED BY UTILITY PROVIDER.
- O. GROUND MOUNTED ELECTRIC TRANSFORMER.
INSTALLED BY UTILITY PROVIDER.
- P. 600A 120/240V 1P SECONDARY ELECTRIC SERVICE TO UTILITY RACK. (2) 4" CONDUITS INSTALLED BY CONTRACTOR. COORDINATE INSTALLATION WITH UTILITY PROVIDER.

GENERAL NOTES: (THIS SHEET)

1. CONTRACTOR SHALL FIELD VERIFY DEPTHS, LOCATIONS, & SIZES OF ALL EXISTING UTILITIES.
2. ALL UTILITIES SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL REQUIREMENTS.
3. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES.
4. ALL UNDERGROUND TRENCHING, PIPE AND CONDUIT INSTALLATION TO BE COMPLETED PRIOR TO FINAL SUBGRADE COMPACTION AND AGGREGATE INSTALLATION.
5. ALL CONDUCTORS TO BE COPPER.
6. ALL UNDERGROUND ELECTRICAL & TELCO CONDUITS TO BE SCH. 80 PVC UNLESS OTHERWISE REQUIRED BY THE UTILITY PROVIDER.
7. 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 JOINT.
8. 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.
9. 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 IDENTIFIED AND LABELED.
11. 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.



CONSULTANT:

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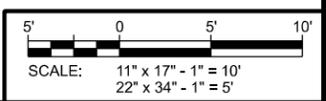


**UTILITY PLAN
 PALMYRA (27653)
 HEBRON, WISCONSIN**

SUBMITTAL:

INT.	DATE:	DESCRIPTION:

CHECKED BY:	AJO
PLOT DATE:	5/12/2021
PROJECT NUMBER:	27653
SET TYPE:	BD
SHEET NUMBER:	E-102



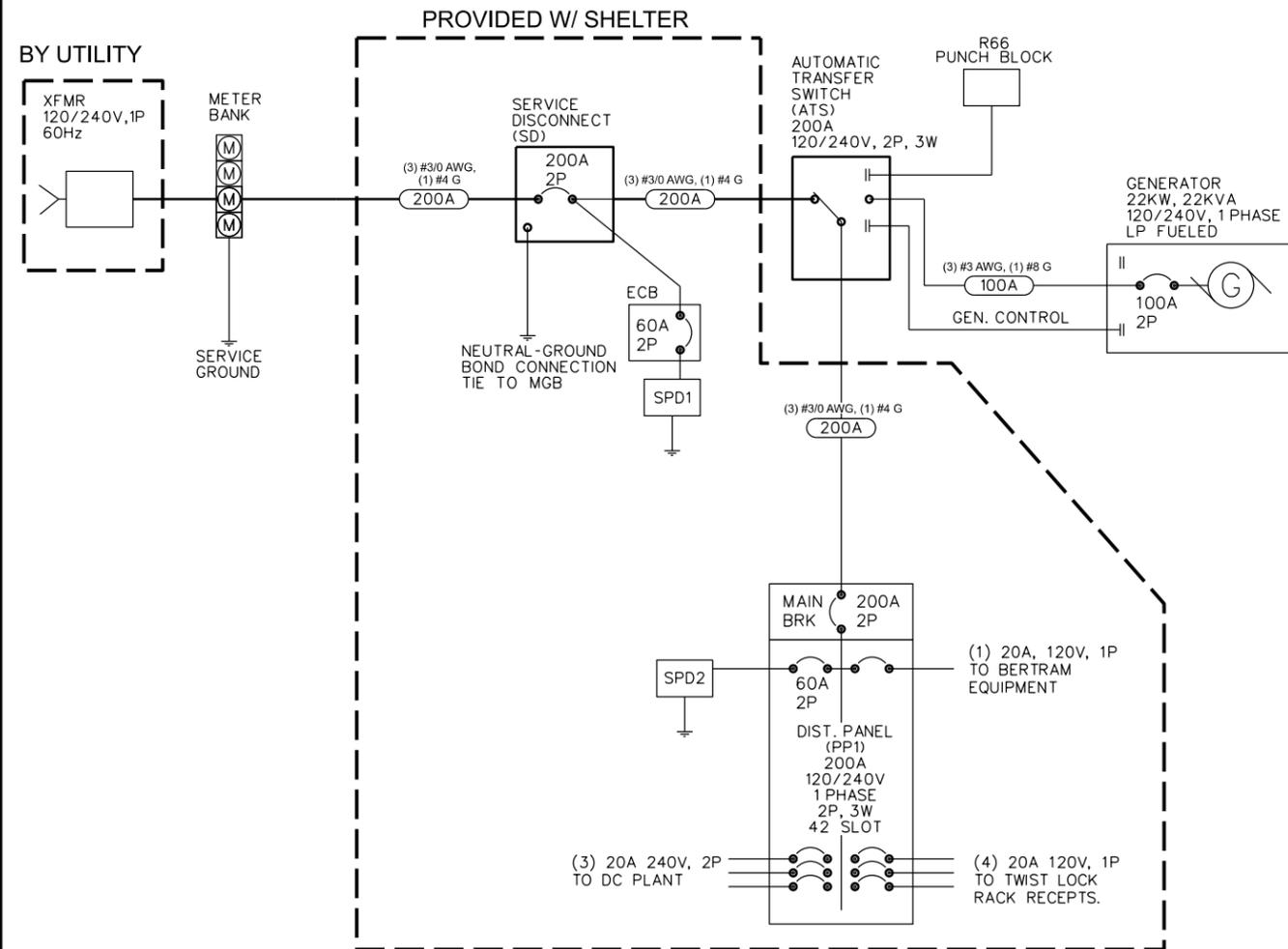
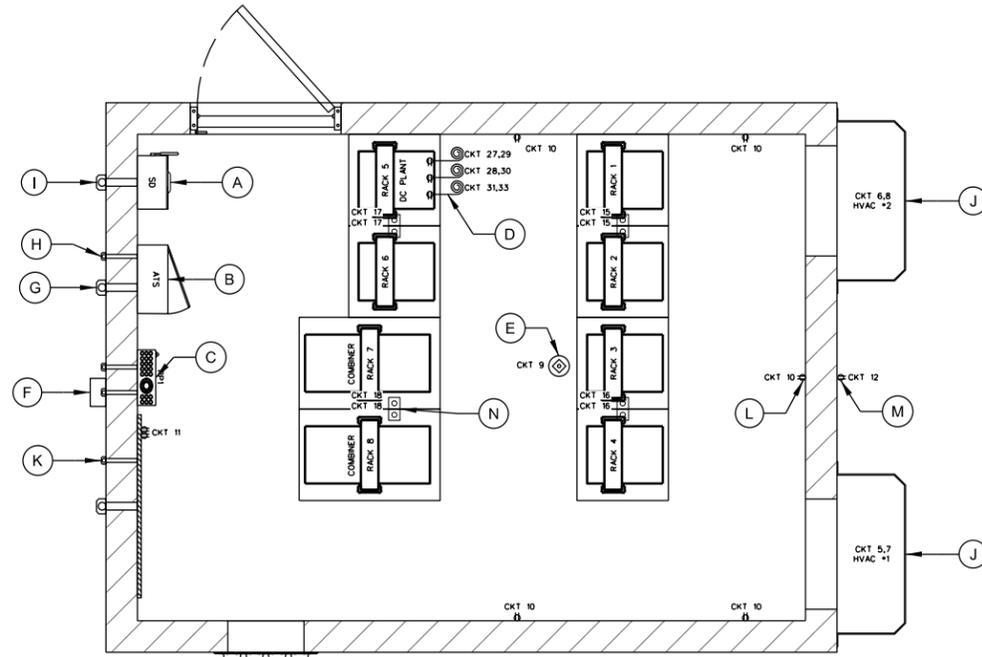
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KEYNOTES: (THIS SHEET)

- A. SERVICE DISCONNECT
- B. AUTOMATIC TRANSFER SWITCH (ATS)
200A GENERAC (30"Hx13.5"Wx7"D)
BY CONTRACTOR
- C. DISTRIBUTION PANEL (PP1)
- D. (3) DC PLANT POWER FEEDS.
PROVIDE PIGTAIL LEADS FROM CEILING MOUNTED
JUNCTION BOX.
CONNECTION TO RACKS BY RADIO VENDOR.
- E. SMOKE ALARM
- F. BERTRAM ELECTRIC SERVICE
- G. GENERATOR A/C POWER FEED
- H. GENERATOR CONTROL WIRING FEED
- I. ELECTRIC UTILITY SERVICE FEED
- J. HVAC UNIT (2 TON)
- K. LP TANK MONITOR RECEPTACLE
- L. INTERIOR CONVENIENCE OUTLET
- M. EXTERIOR CONVENIENCE OUTLET
- N. (2) 20A 120V TWIST LOCK RECEPTACLES, CEILING MOUNTED
IN 2 GANG BOX, LOCATED BETWEEN (2) ADJACENT RACKS.
(1) 20A, 120V CIRCUIT PER EACH PAIR OF TWIST LOCKS.

GENERAL NOTES: (THIS SHEET)

1. ALL ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE AND LOCAL CODES.
2. ALL WIRE AND CONDUIT SIZES SPECIFIED ARE MINIMUMS. LARGER SIZES MAY BE REQUIRED BY CODE. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND CODE REQUIREMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. ALL CONDUCTORS SHALL BE COPPER.
4. ALL INDOOR RACEWAY TO BE EMT OR RGS. EMT INSTALLATIONS SHALL UTILIZE COMPRESSION FITTINGS. CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY WIRING AND CONDUITS FROM ELECTRICAL DEVICES REQUIRED ON PROJECT TO THE DISTRIBUTION PANELS.
5. ALL ELECTRICAL WORK SHALL BE COMPLETED UNDER THE DIRECT SUPERVISION OF A LICENSED MASTER ELECTRICIAN.
6. CONTRACTOR SHALL PERFORM AN INSPECTION OF THE EXISTING ELECTRICAL EQUIPMENT AND INSTALLATION WITHIN THE PRE-MANUFACTURED BUILDING PROVIDED BY THE OWNER FOR CONFORMANCE WITH STATE AND LOCAL ELECTRICAL CODE. ELECTRICAL CONTRACTOR SHALL NOTIFY ENGINEER OF ANY NON-CONFORMING ITEMS.



A SHELTER ELECTRICAL PLAN

SCALE: 11" x 17" - 1/4" = 1'-0"
22" x 34" - 1/2" = 1'-0"

DIST. PANEL (PP1) 120/240VAC	PHASE/WIRE			BUS SIZE		MAIN LUGS			AIC RATING
	1/3	POLE	TRIP	200A		CKT#	TRIP	POLE	LOAD
LOAD	WIRE	TRIP	CKT#	A	B	CKT#	TRIP	POLE	LOAD
Power Fail	12	2	20	1		2	50	2	8
	-	-	-	3		4	-	-	
HVAC #1	10	2	30	5		6	30	2	10
	-	-	-	7		8	-	-	
Smoke Detector	12	1	20	9		10	20	1	12
LP Tank Monitor	12	1	20	11		12	20	1	12
Gen Outlet	12	1	20	13		14	20	1	12
Twist Lock Recept. 1&2	12	1	20	15		16	20	1	12
Twist Lock Recept. 5&6	12	1	20	17		18	20	1	12
SPARE	-	-	-	19		20	20	1	12
SPARE	-	-	-	21		22	-	-	
SPARE	-	-	-	23		24	-	-	
SPARE	-	-	-	25		26	-	-	
DC Drop #1	12	2	20	27		28	20	2	12
	-	-	-	29		30	-	-	
DC Drop #3	12	2	20	31		32	-	-	
	-	-	-	33		34	-	-	
SPARE	-	-	-	35		36	-	-	
SPARE	-	-	-	37		38	-	-	
SPARE	-	-	-	39		40	-	-	
Bertram Electric	10	1	20	41		42	-	-	

C ELECTRIC DISTRIBUTION PANEL DIRECTORY

SCALE: 11" x 17" - NTS
22" x 34" - NTS

B ELECTRICAL ONE LINE DIAGRAM

SCALE: 11" x 17" - NTS
22" x 34" - NTS

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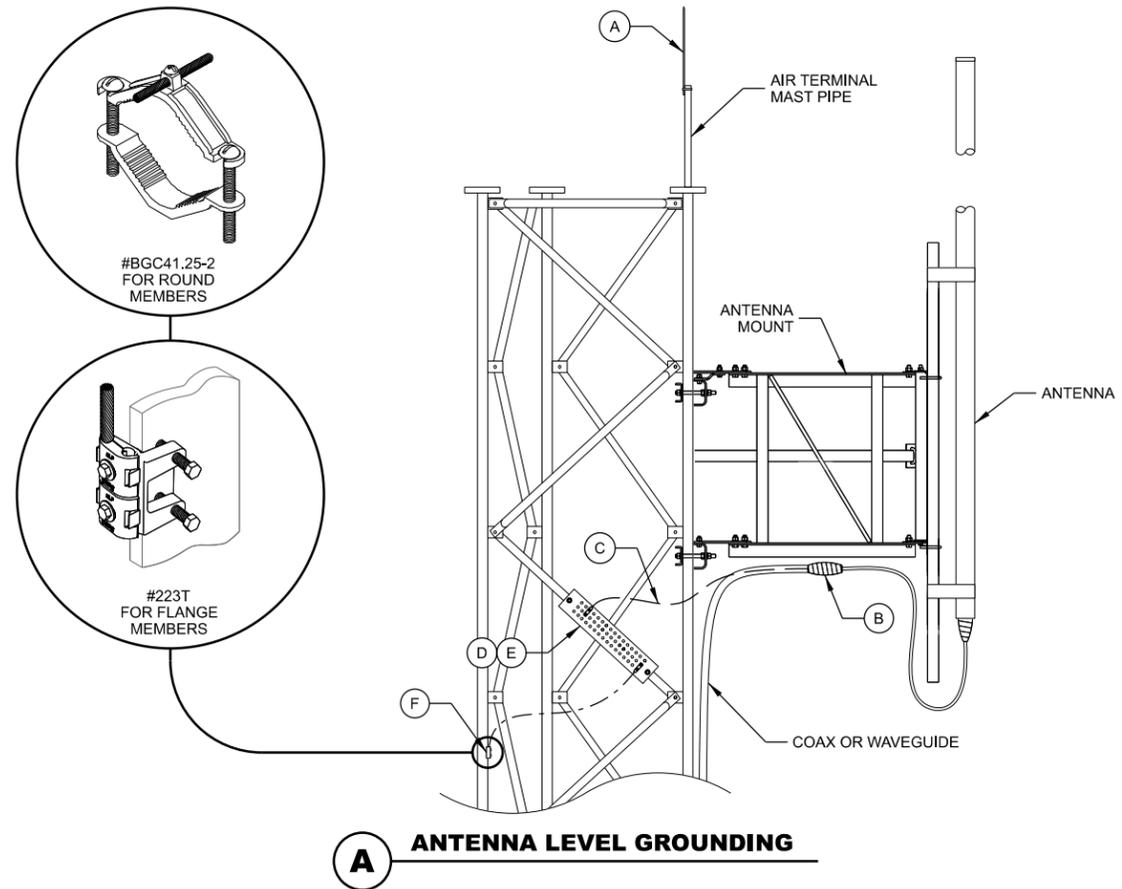


SHELTER ELECTRICAL PLAN
PALMYRA (27653)
HEBRON, WISCONSIN

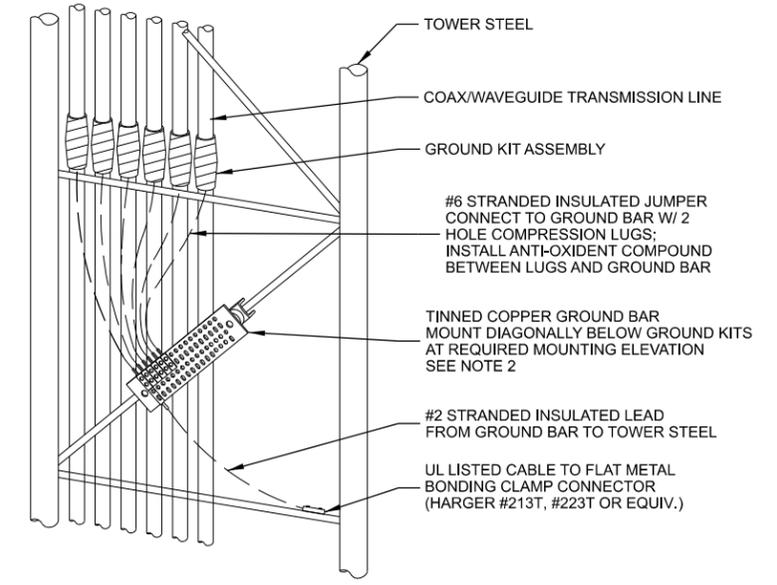
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PLOT DATE:	5/12/2021	
PROJECT NUMBER:	27653	
SET TYPE:	BD	
SHEET NUMBER:	E-104	

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
STEEL
- 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
OR
- HARGER #223T HEAVY DUTY TINNED FLANGE
BONDING PLATE
- USE EXTERNAL ANTI-OXIDATION COMPOUND.
- PAINT WITH COLD GALV. COMPOUND AFTER BONDING.
- G. TOWER GROUND BAR (TGB) (TINNED);
4" x 18" x 1/2" - 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)
- H. TGB GROUNDS;
#2 BARE SOLID TINNED ENCASED IN CARFLEX CONDUIT
FROM TGB TO TOWER GROUND RING (2) REQ'D AND FROM
TGB TO TOWER STEEL (1) REQ'D
- I. TOWER STEEL GROUNDS;
#2 BARE SOLID TINNED ENCASED IN CARFLEX CONDUIT
FROM TOWER STEEL TO TOWER GROUND RING (3) REQ'D.
- J. TOWER FOUNDATION GROUND, (1 REQ'D);
SEE E-502 FOR DETAILS
- K. SHELTER EXTERIOR GROUND BAR (EGB) (TINNED);
SEE DETAIL THIS SHEET
- L. EGB GROUNDS;
#2 BARE SOLID TINNED
SEE DETAIL THIS SHEET
ENCASE IN CARFLEX CONDUIT FROM EGB TO SHELTER
GROUND RING (2) REQ'D.
- M. SURGE ARRESTOR/POLY PHASER
- N. INTERIOR SHELTER GROUND BAR / MASTER GROUND BAR
(MGB);
SEE DETAIL THIS SHEET
- O. #2 BARE SOLID TINNED, ENCASE IN CARFLEX CONDUIT
FROM MGB TO SHELTER GROUND RING (2) REQ'D.;
SEE DETAIL THIS SHEET
- P. ICE BRIDGE POST GROUNDS;
#2 BARE SOLID TINNED ENCASE IN CARFLEX CONDUIT TO 24"
BELOW GRADE;
SEE E-502 FOR DETAILS
- Q. ICE BRIDGE SECTION GROUNDS;
#6 STRANDED INSULATED
2 HOLE LONG BARREL ON EACH END (TYP.)
- R. ICE BRIDGE SECTION TO POST GROUNDS;
#6 STRANDED INSULATED
2 HOLE LONG BARREL ON SECTION & CADWELDED TO POST
ORIENT LEAD WITH HIGH SIDE TOWARDS TOWER
- S. ENTRY PANEL GROUND;
#6 STRANDED INSULATED
2 HOLE LONG BARREL ON EACH END (TYP.)

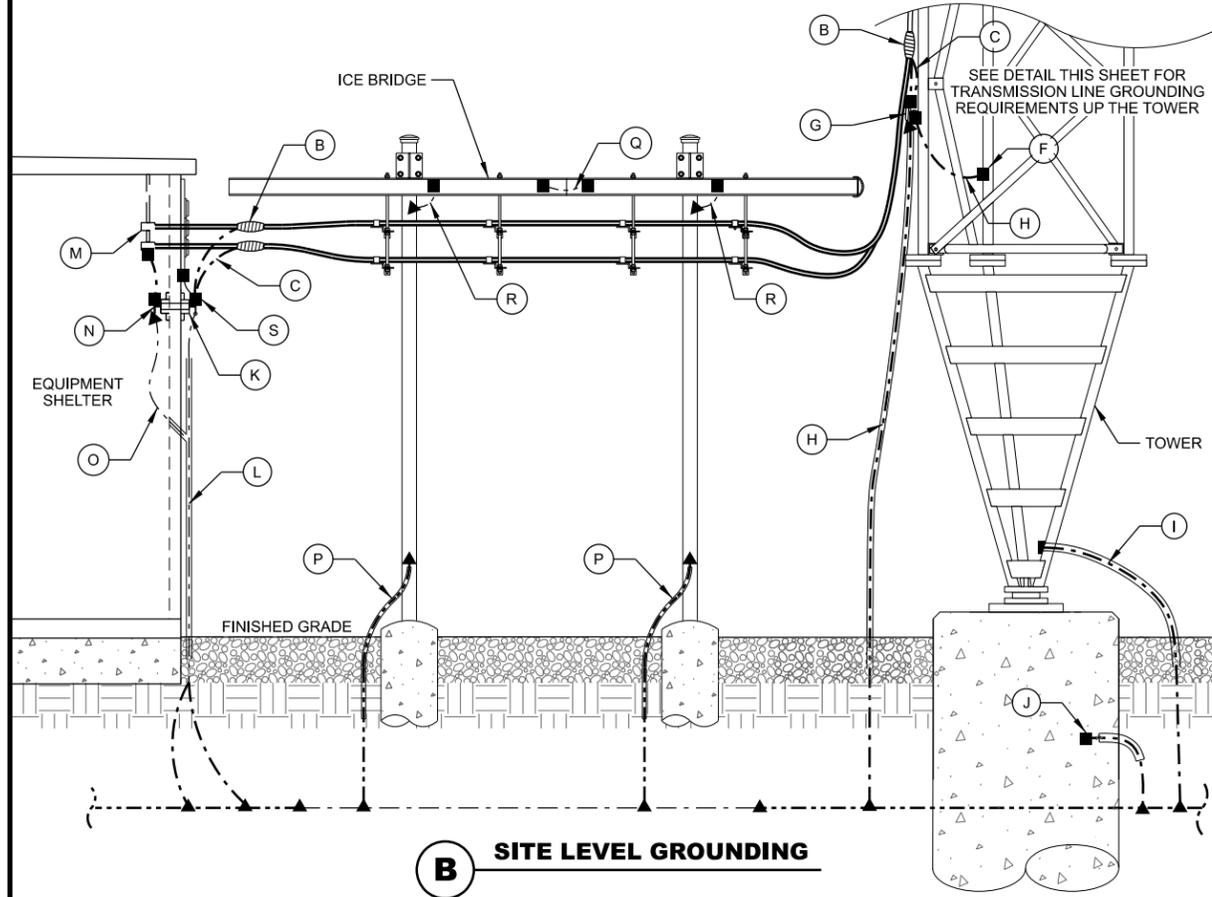


A ANTENNA LEVEL GROUNDING

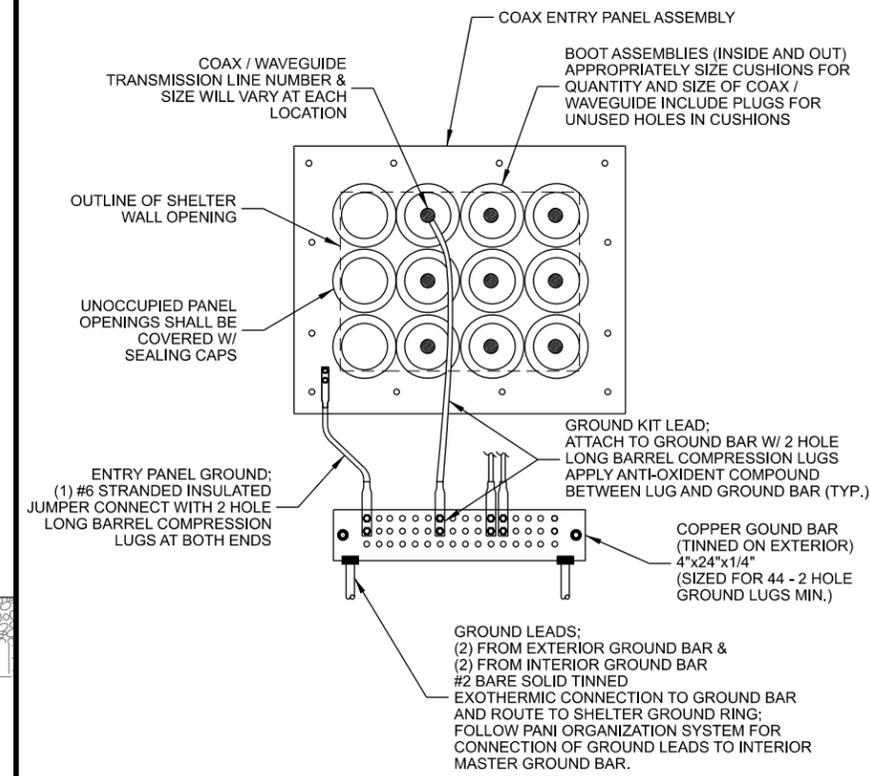


- NOTES:**
- INSTALL GROUND KITS ON EACH TRANSMISSION LINE IN THE FOLLOWING LOCATIONS:
 - A. ANTENNA / DISH LEVEL
 - B. AT 75 FOOT MAX INTERVALS FROM ANTENNA LEVEL TO BASE OF TOWER
 - C. TOWER BASE
 - D. EQUIPMENT BUILDING ENTRY
 - INSTALL ANTENNA GROUND BARS AT EACH ANTENNA TIER LEVEL FOR CONNECTION OF MULTIPLE 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.

C TRANSMISSION LINE GROUNDING



B SITE LEVEL GROUNDING



D INTERIOR / EXTERIOR SHELTER GROUND BARS

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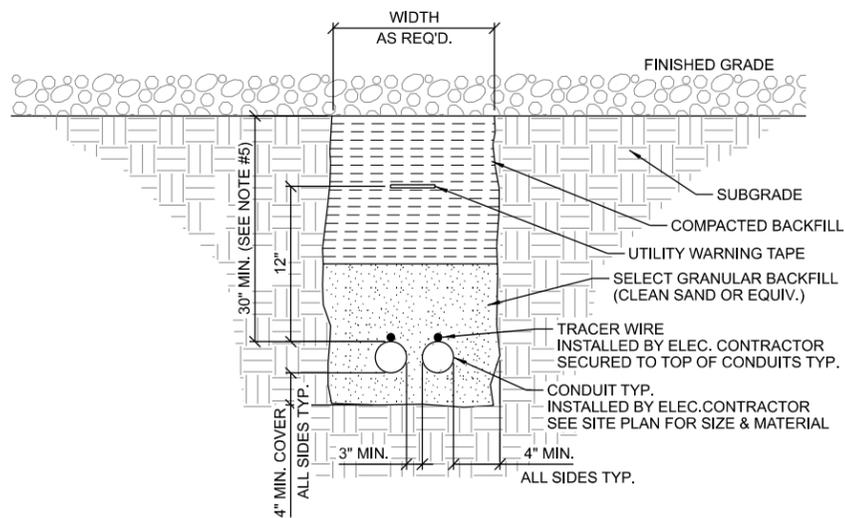
CLIENT:
GROUNDING DETAILS
PALMYRA (27653)
HEBRON, WISCONSIN

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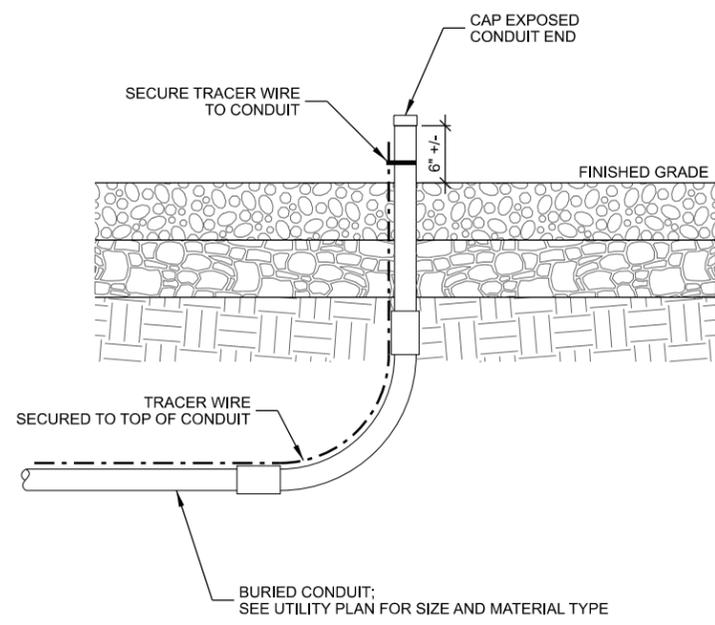
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PLOT DATE:	5/12/2021
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SET TYPE:	BD
SHEET NUMBER:	E-501

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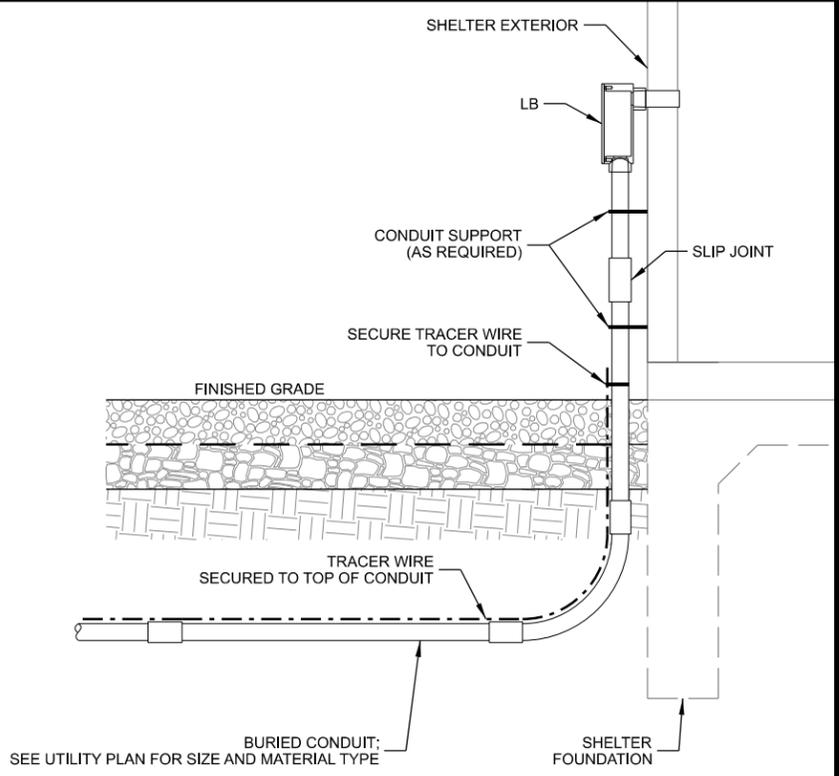


- NOTES:
1. ALL CONDUITS TO BE EQUIPPED W/ PULL CORDS & CAPPED FOR FUTURE LINE PULLS. NO DUCT TAPE CAPS ALLOWED
 2. WARNING TAPE TO RUN CONTINUOUSLY ALONG THE ENTIRE CONDUIT LENGTH. INSTALL TAPE 12" ABOVE THE TOP OF THE CONDUITS.
 3. TRACER WIRE TO BE 14 GA. SOLID COPPER WIRE WITH CORROSION PROTECTIVE COATING. SECURE TO TOP OF CONDUIT AND RUN CONTINUOUSLY ALONG THE ENTIRE LENGTH. EXTEND TO GRADE AT BOTH ENDS - LOOP AND WRAP AROUND APPROPRIATE CONDUIT.
 4. CONTRACTOR TO CHECK CONTINUITY OF TRACER WIRE BEFORE AND AFTER BURIAL.
 5. VERIFY CONDUIT DEPTH REQUIREMENTS WITH LOCAL UTILITY PROVIDER.

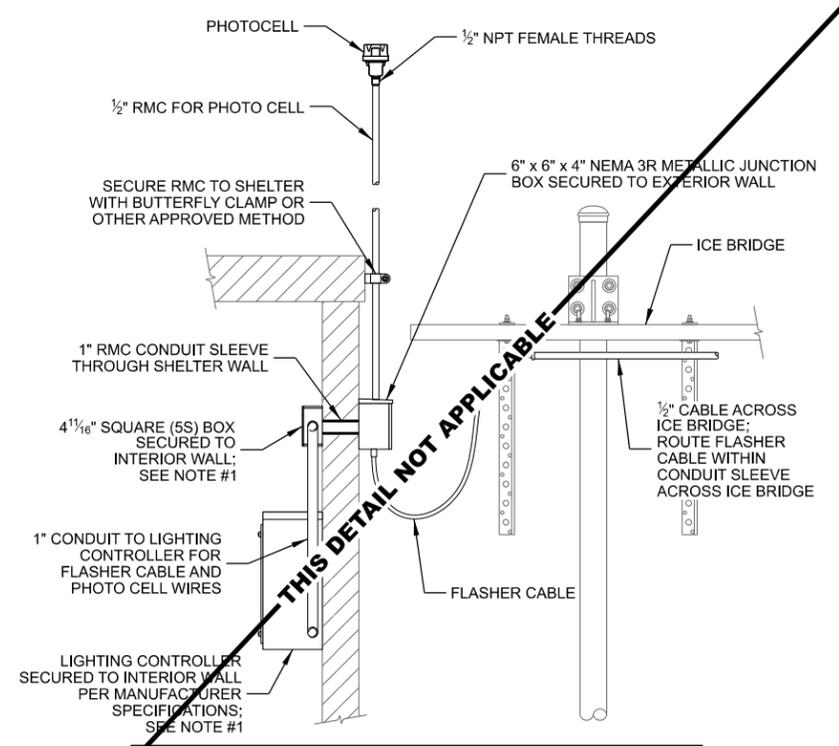
A UTILITY TRENCH



B CONDUIT STUB-UP



C CONDUIT STUB-UP AT SHELTER



- NOTES:
1. PROVIDE GROUND BOND FROM LIGHTING CONTROLLER BOX AND INTERIOR JUNCTION BOX TO INTERIOR GROUND HALO SYSTEM.

D TOWER LIGHTING INSTALLATION

THIS DETAIL NOT APPLICABLE

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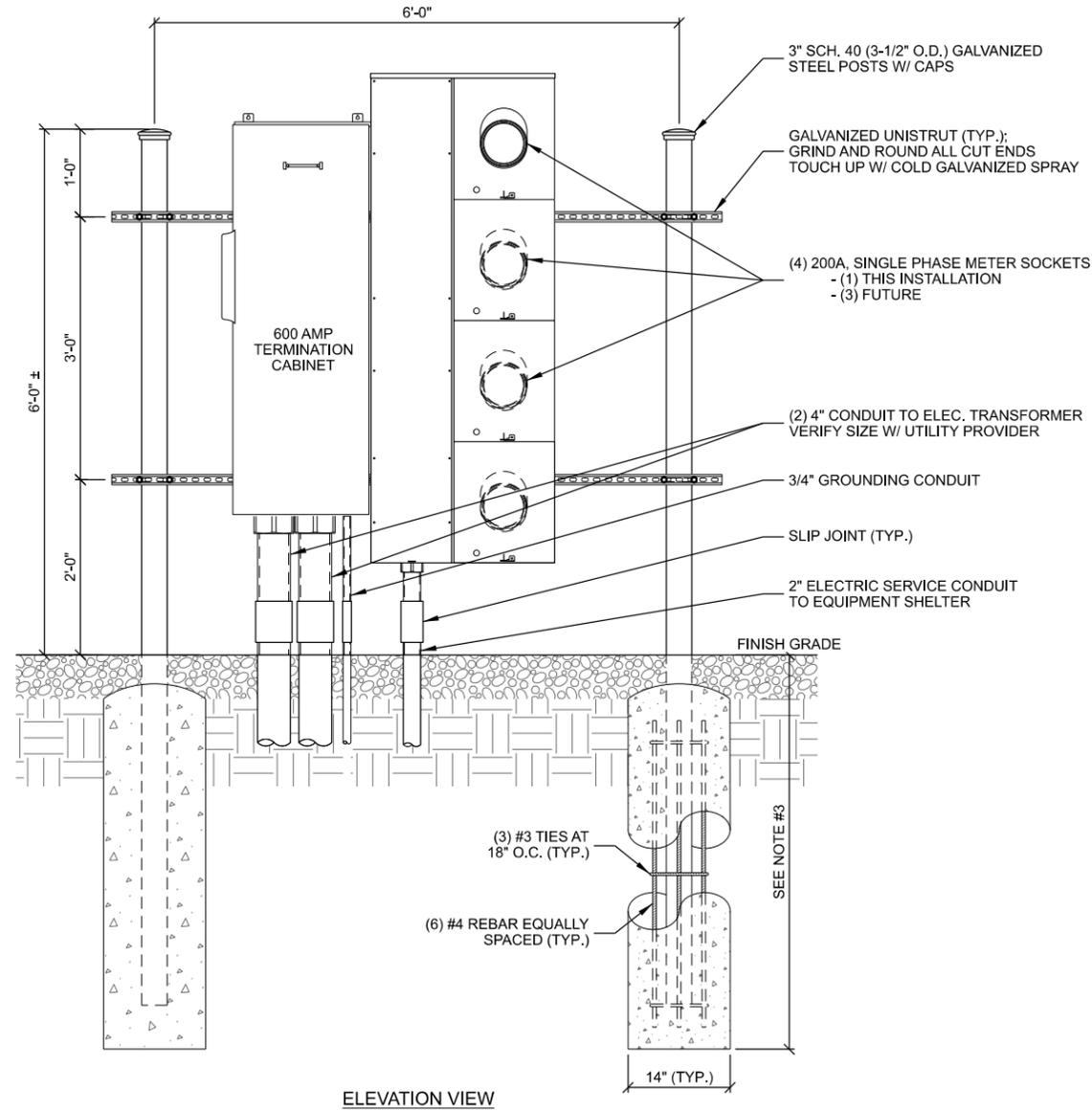
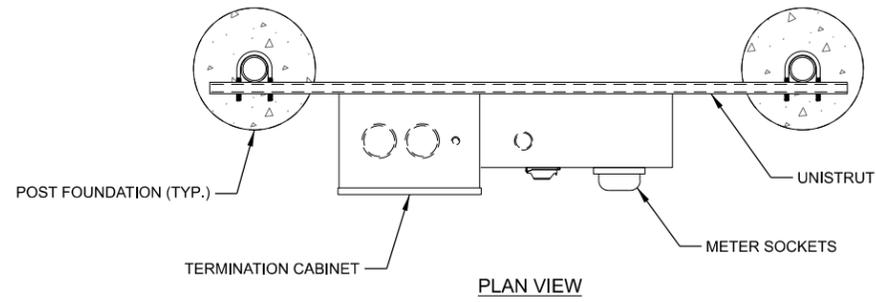
UTILITY DETAILS
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SHEET NUMBER:	E-504

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

A MULTI-METER UTILITY RACK
 SCALE: 11" x 17" - 1/2" = 1'-0"
 22" x 34" - 1" = 1'-0"

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UTILITY RACK DETAILS
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