



State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

ER 13362

NOTICE OF EXEMPTION

TO: Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

FROM: Department of Parks and Recreation
1416 Ninth Street
P.O. Box 942896
Sacramento, CA 94296-0001

PROJECT TITLE: USGS Earthquake Early Detection Warning Station (20/21-IE-08)

LOCATION: Chino Hills State Park

COUNTY: Riverside

DESCRIPTION OF THE NATURE AND PURPOSE OF PROJECT: Purpose of the project is installation by USGS of one Earthquake Early Warning System station in Chino Hills State Park (latitude 33.910908, longitude -117.683528) to provide advance warnings that will allow people and systems to take actions to protect life and property from destructive shaking. The station will occupy a 20' wide by 20' long footprint. See Exhibit A – Plan Drawings.

The station will be solar powered, will not generate noise, will not impede public access to surrounding areas, is low profile, and is encapsulated to prevent animal damage. Construction will occur over 3-4 days. Installation and maintenance to occur only when no threat to sensitive species. State Parks anticipates no water table interaction or soil erosion to occur. No closure to roads is necessary. No new roads or access routes are necessary. Minor vegetation removal from excavation activity would be limited to annual grasses. See Exhibit B – Site Photo.

PUBLIC AGENCY APPROVING THE PROJECT: California Department of Parks and Recreation

NAME OF DIVISION OR DISTRICT CARRYING OUT THE PROJECT: Inland Empire

EXEMPT STATUS:

- ☐ Declared Emergency (Section 15269(a))
☐ Emergency Project (Section 15269(b) and (c))
☐ Statutory Exemption (Section)
☒ Categorical Exemption

Class: 5

Section: 15305 – Minor Alterations in Land Use Limitations

REASONS WHY PROJECT IS EXEMPT: No potential for significant impact to the environment is anticipated in compliance with CEQA §15300.4. If the project is implemented as indicated within the CDPR Project Evaluation Form, then it is exempt under CEQA §15305 – Minor Alterations to Land for both the installation activity and the Department's Right to Enter Permit process.

CONTACT: Harmony Gugino, Environmental Coordinator
Inland Empire District

PHONE NO.: (951) 503-3376

EMAIL: harmony.gugino@parks.ca.gov

Ryan Gill

Kelly Elliott
District Superintendent
Inland Empire District

8/3/2021

DATE

Exhibit A



Southern California Seismic Network
SITE NAME: Chino Hills

PROJECT SUMMARY

PROJECT OWNER
USGS PASADENA
525 S Wilson Ave, Pasadena, CA 91106

PROJECT MANAGER
MARCOS ALVAREZ

SITE ADDRESS:
4721 Sapphire Rd, Chino Hills, CA 91709

JURISDICTION:
SAN BERNADINO COUNTY, CALIFORNIA

OCCUPANCY GROUP:
S2

UTILITY PROVIDER:
SOLAR

CODE ANALYSIS

BUILDING: 2016 CBC
OCCUPANCY GROUP: S2
OCCUPANT LOAD: 0
TYPE OF CONSTRUCTION: VB
RISK CATEGORY: IV
FIRE RESISTANCE REQUIREMENTS: TABLE 601 — CONSTRUCTION TYPE B

PROJECT DESCRIPTION

INSTALLATION OF SOLARCRAFT RADIO CABINET,
SOLAR POWER SOURCE, AND 20'X20' FENCE
ENCLOSURE

GEODETIC COORDINATES

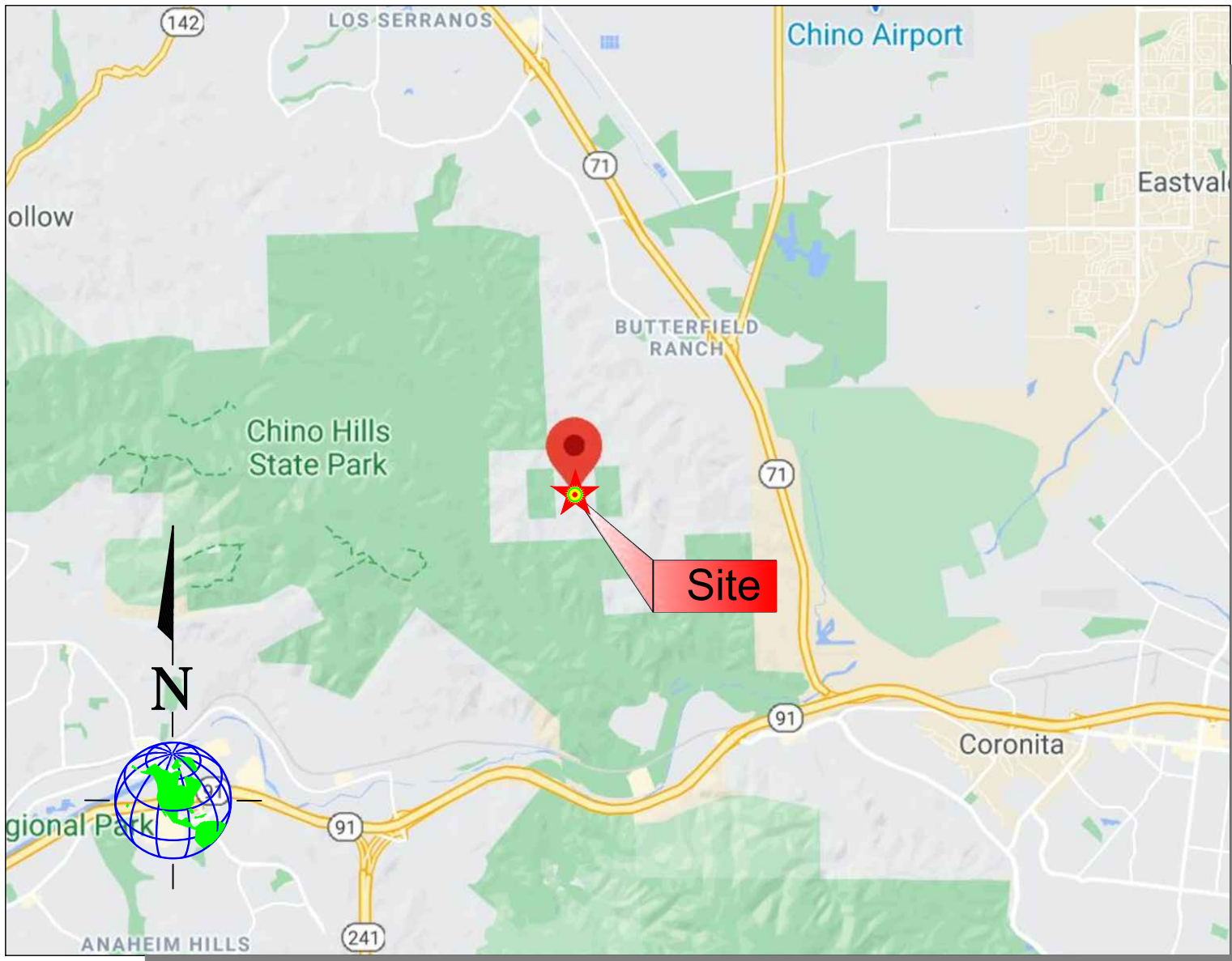
LATITUDE: 33°54'39.27"N
LONGITUDE: 117°41'0.70"W
ELEVATION: 1080 AMSL

CONSULTING TEAM

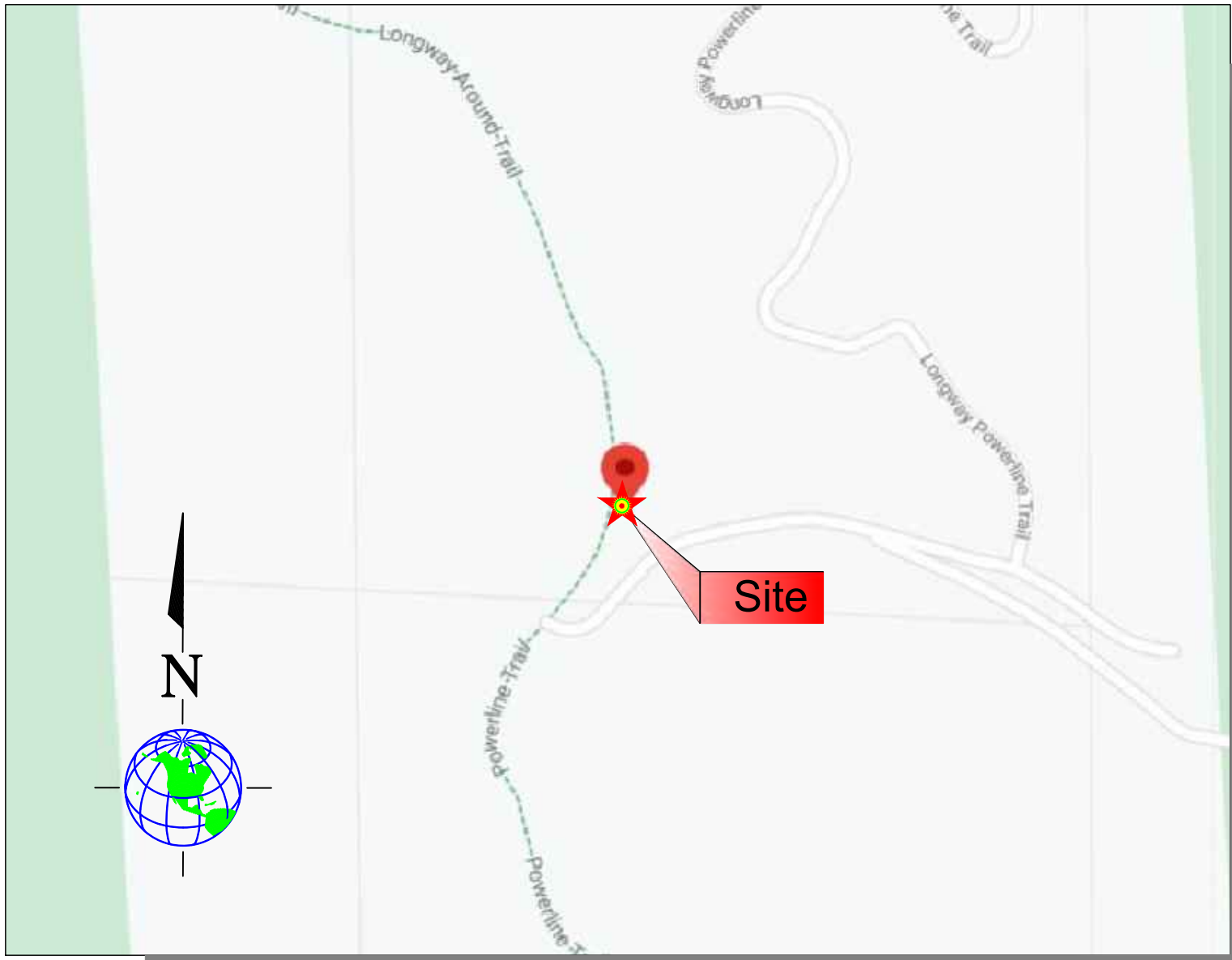
PROJECT MANAGEMENT:
GRAY DS INC.
8149 N. 87TH PLACE, SUITE 140
SCOTTSDALE, AZ 85258
PHONE: (602) 418-5316

CIVIL & STRUCTURAL ENGINEERING SERVICES:
ABN ENGINEERING
1337 E DESERT FLOWER LANE
PHOENIX, AZ 85048
(480) 213-8524
www.ABNENG.com

VICINITY MAP



LOCATION MAP



SHEET INDEX

SHEET NUMBER

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A-2.1	FOUNDATIONS AND TRENCH DETAILS
A-2.2	SOLAR CRAFT CABINET
G-1/1.1/1.2	GROUNDING INFORMATION

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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USGS PROJECT #

SITE NAME
CHINO HILLS

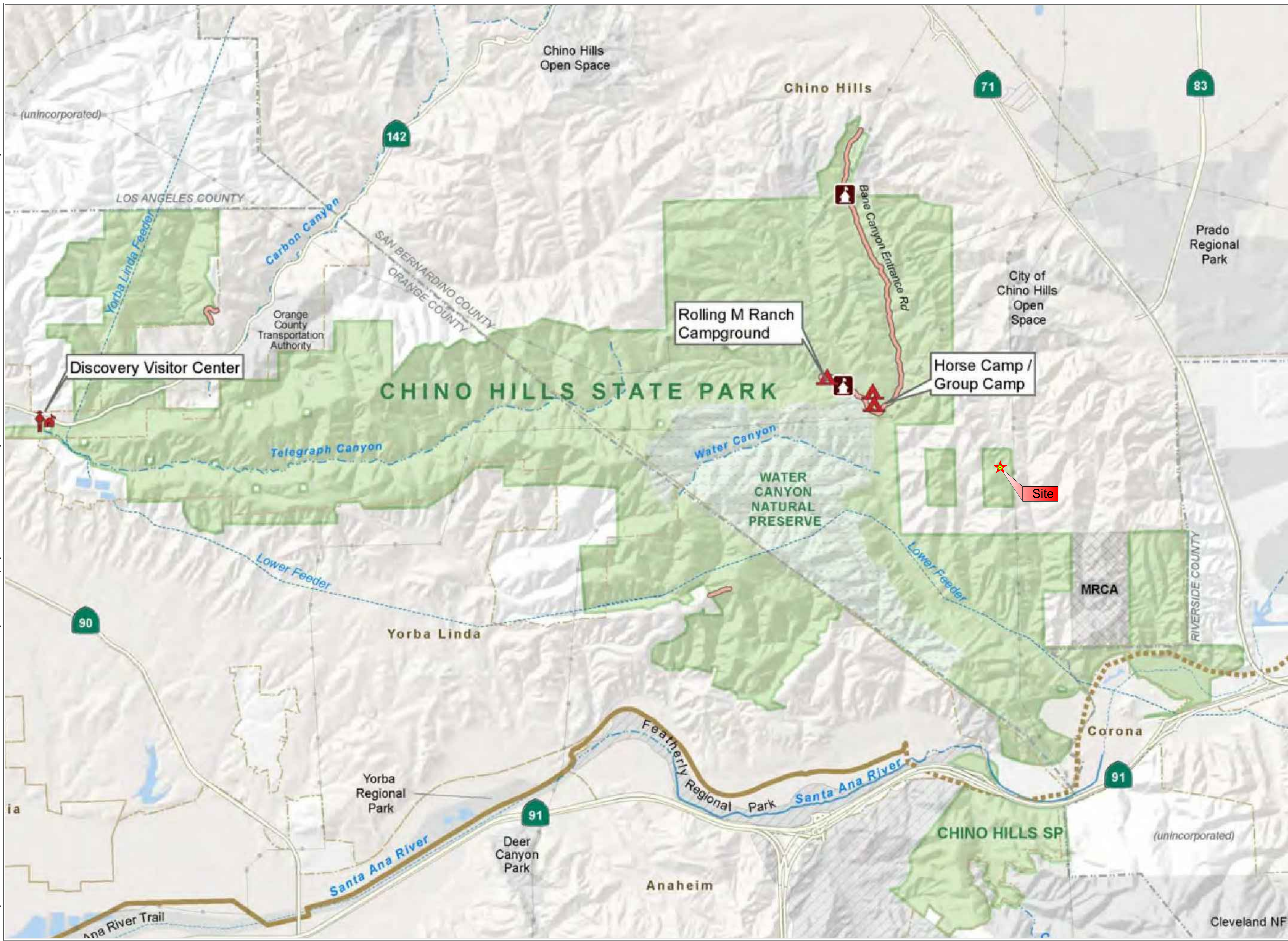
SITE ADDRESS
LATITUDE: 33°54'39.27"N
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SHEET TITLE
**TITLE SHEET, MAP,
AND GENERAL
INFORMATION**

SHEET #

T-1

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SHEET TITLE
STATE PARK MAP

SHEET #
T-2

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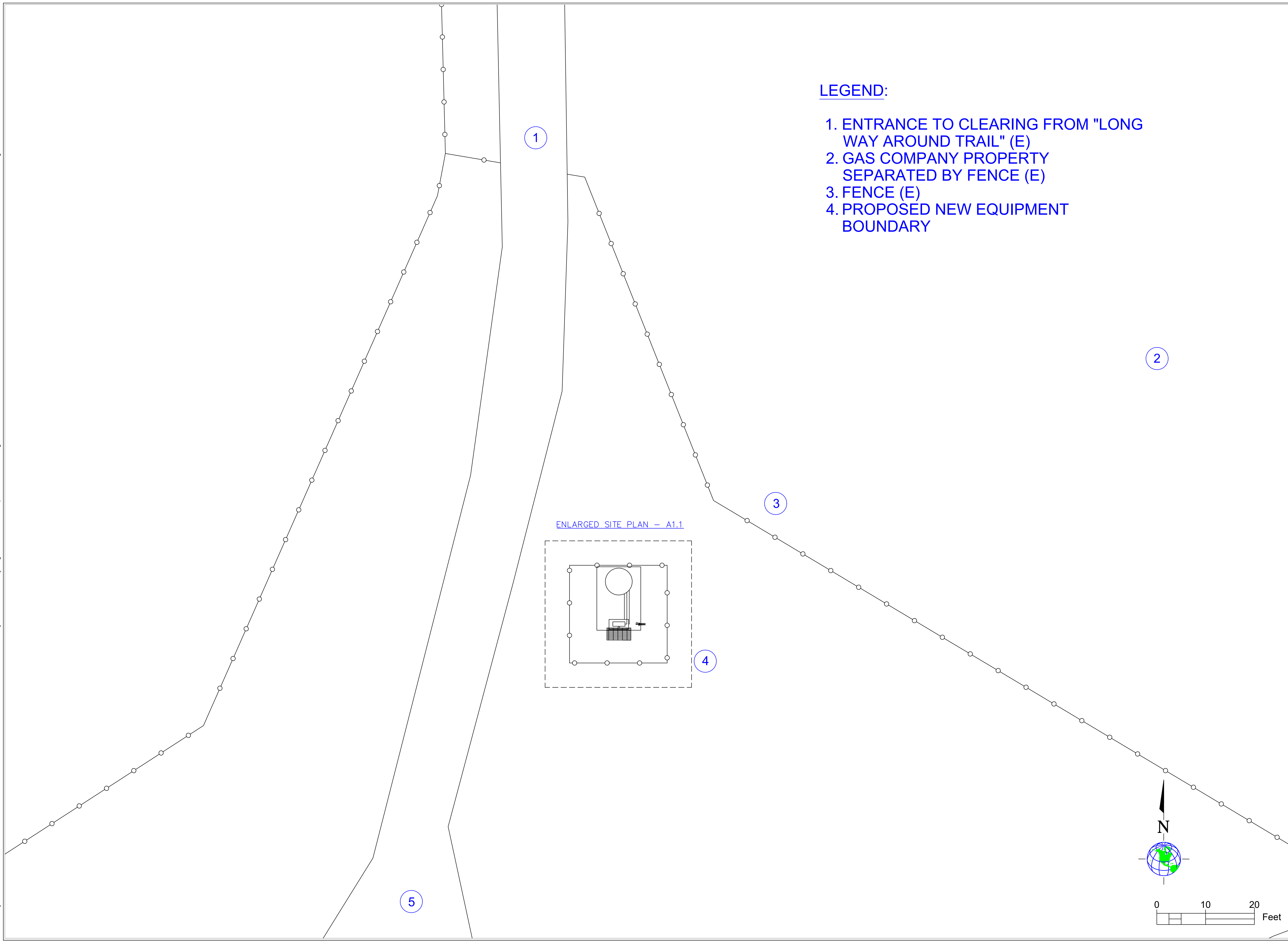
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SHEET TITLE
STATE PARK MAP

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T-3

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LEGEND:

1. ENTRANCE TO CLEARING FROM "LONG WAY AROUND TRAIL" (E)
2. GAS COMPANY PROPERTY SEPARATED BY FENCE (E)
3. FENCE (E)
4. PROPOSED NEW EQUIPMENT BOUNDARY

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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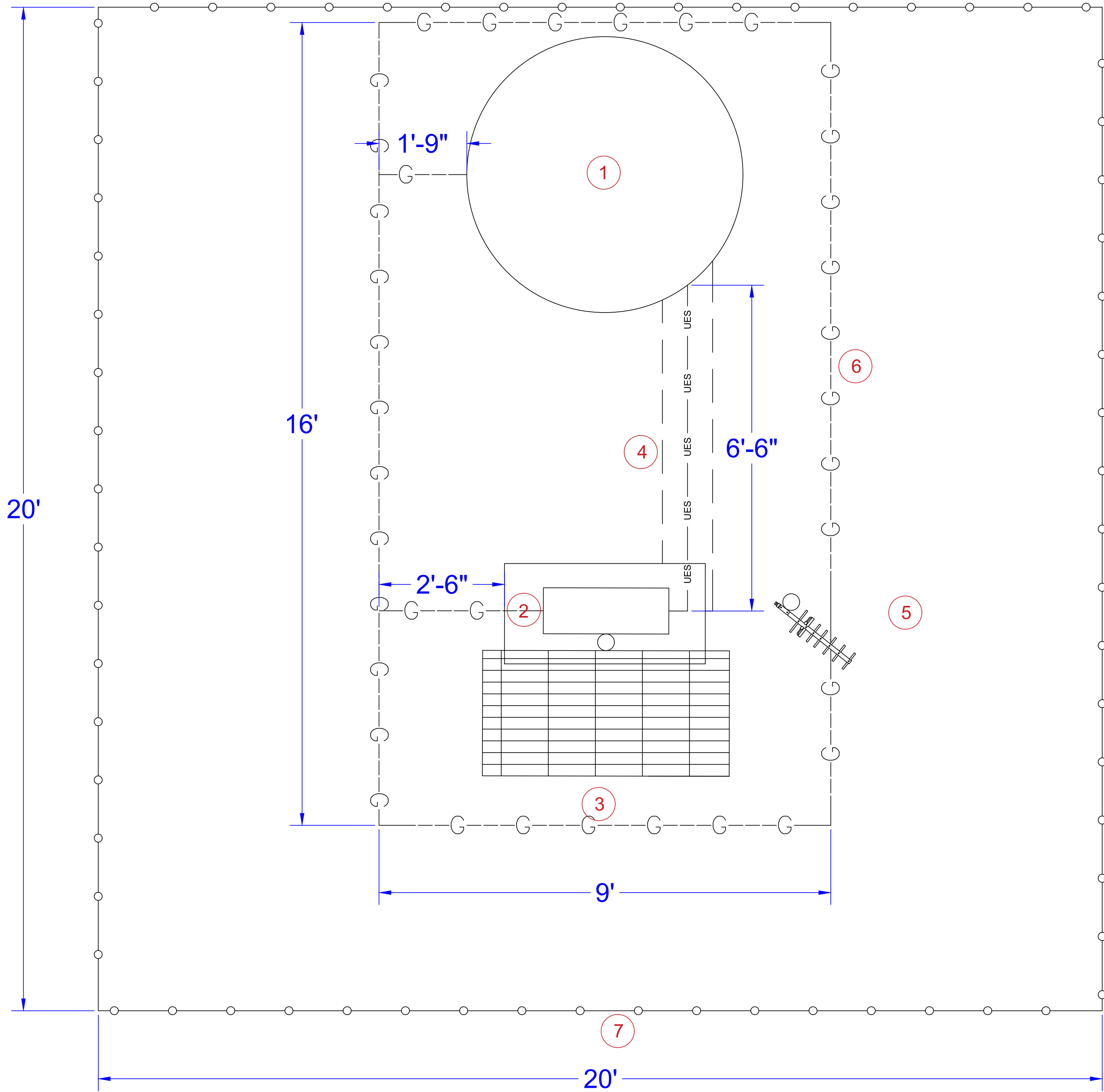
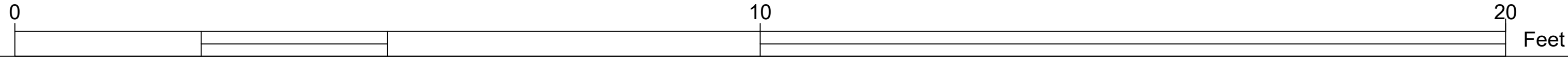
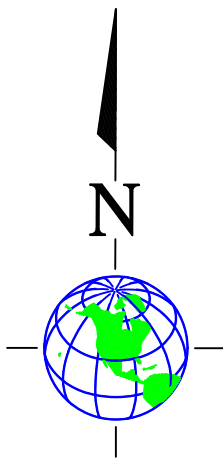
SITE ADDRESS
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SHEET TITLE
SITE OVERVIEW

SHEET #

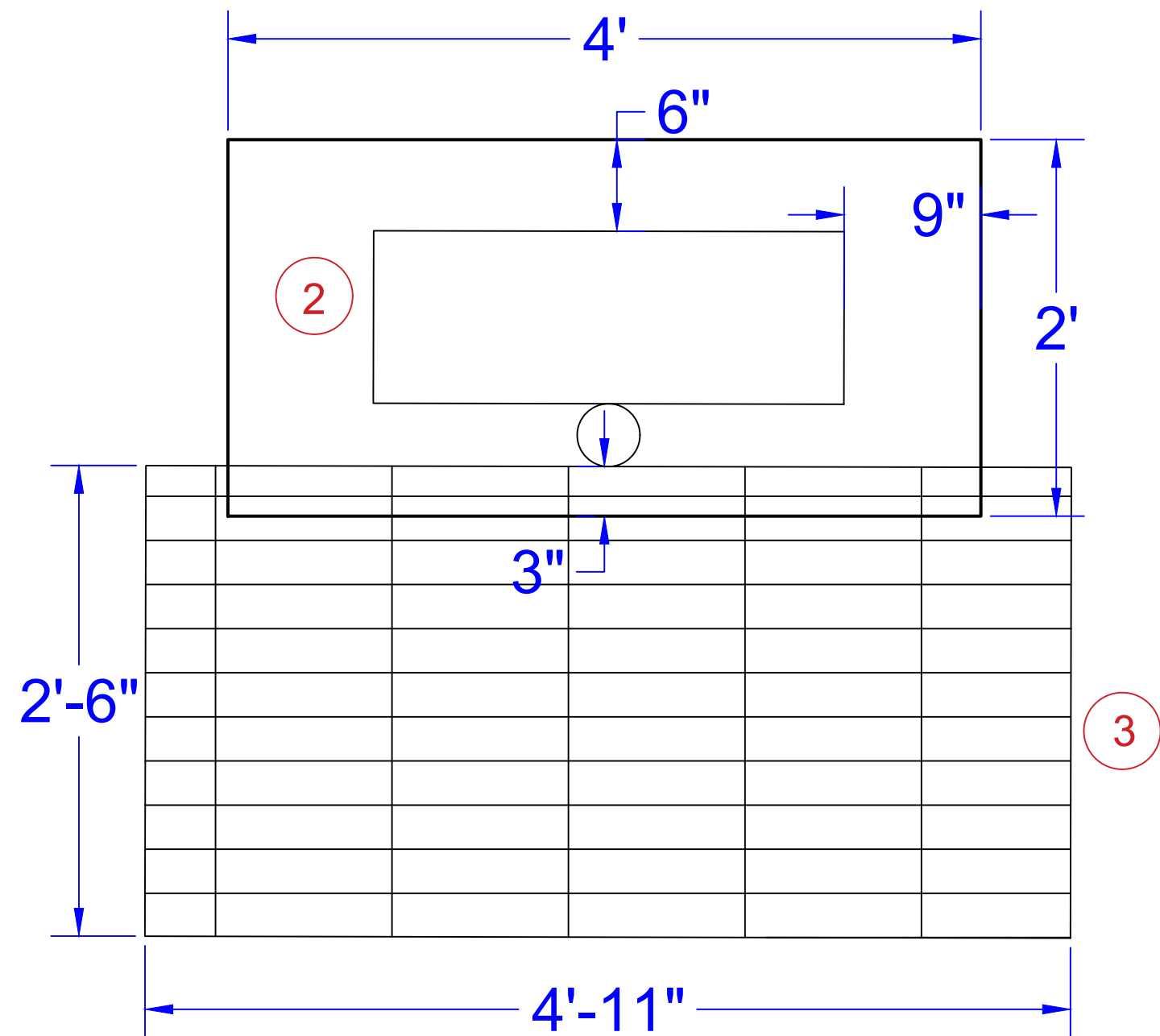
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LEGEND:

1. SENSOR VAULT
2. SOLAR CRAFT RADIO CABINET AND FOUNDATION
3. SOLAR PANEL
4. BURIED COAX CABLE
5. YAGI ANTENNA ON MAST
6. BURIED GROUNDING CABLE
7. FENCE SURROUNDING NEW SITE



Radio Cabinet and Foundation Detail

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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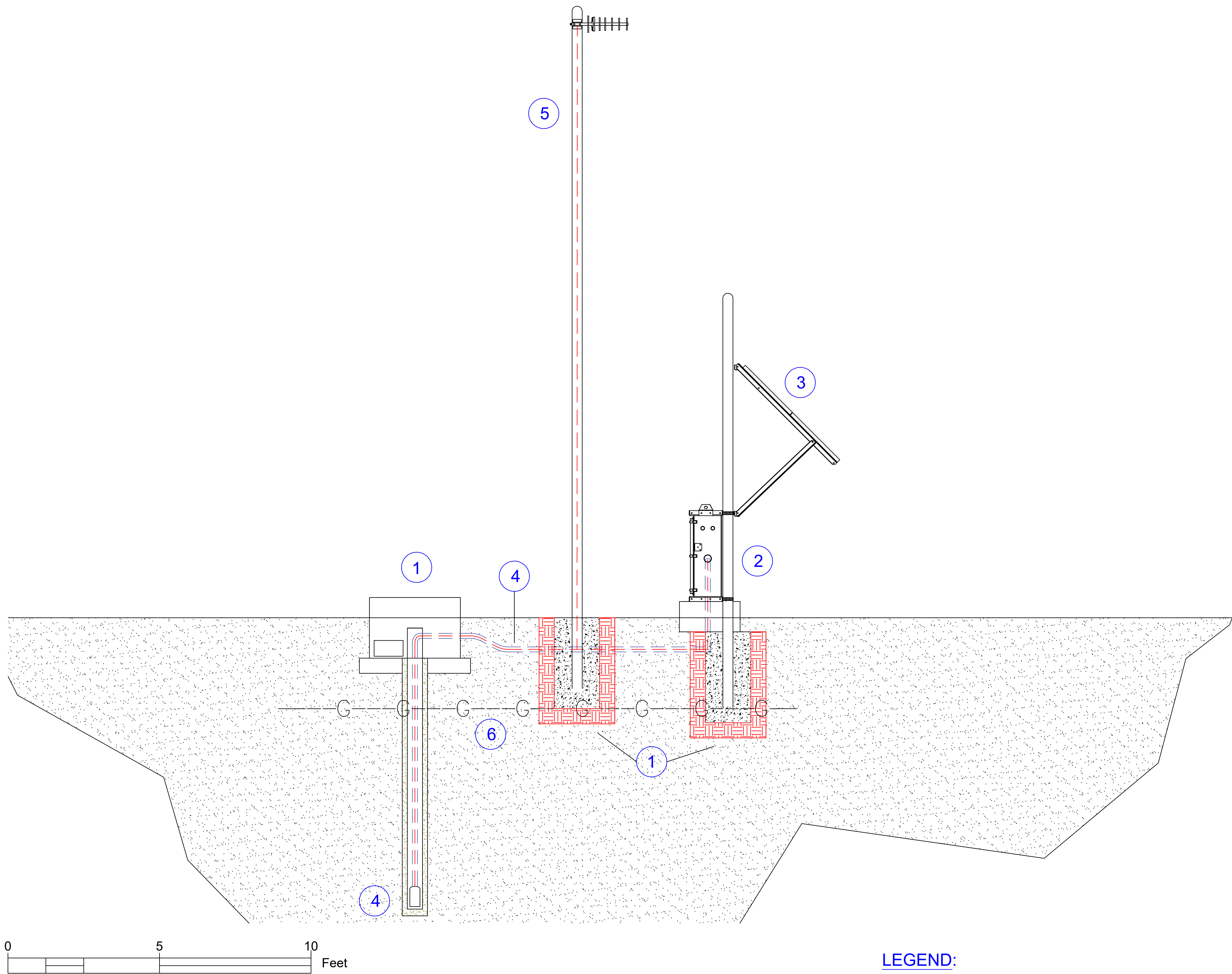
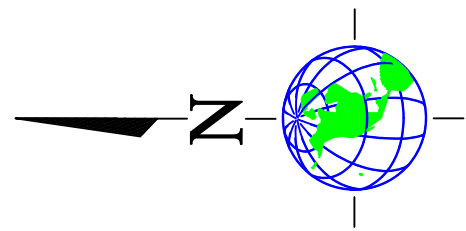
SITE ADDRESS
LATITUDE: 33°54'39.27"N
LONGITUDE: 117°41'0.70"W
ELEVATION: 1080 AMSL

SHEET TITLE
EQUIPMENT LAYOUT

SHEET #

A-1.1

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LEGEND:

- 1. SENSOR VAULT
- 2. SOLAR CRAFT RADIO CABINET AND FOUNDATION
- 3. SOLAR PANEL
- 4. BURIED COAX CABLE
- 5. YAGI ANTENNA ON MAST
- 6. BURIED GROUNDING CABLE
- 7. MAST FOUNDATIONS

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

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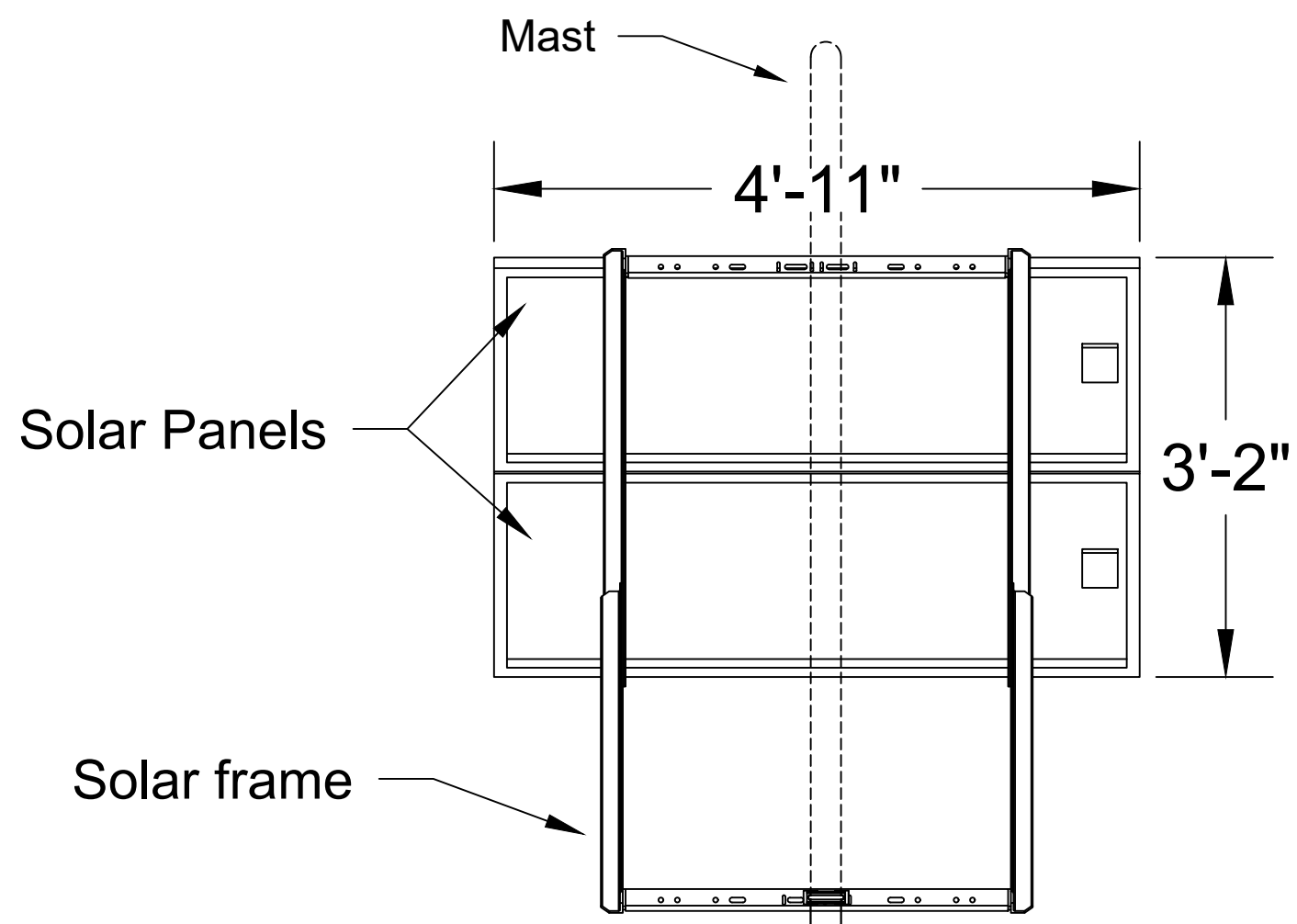
SHEET TITLE

**EQUIPMENT
ELEVATION**

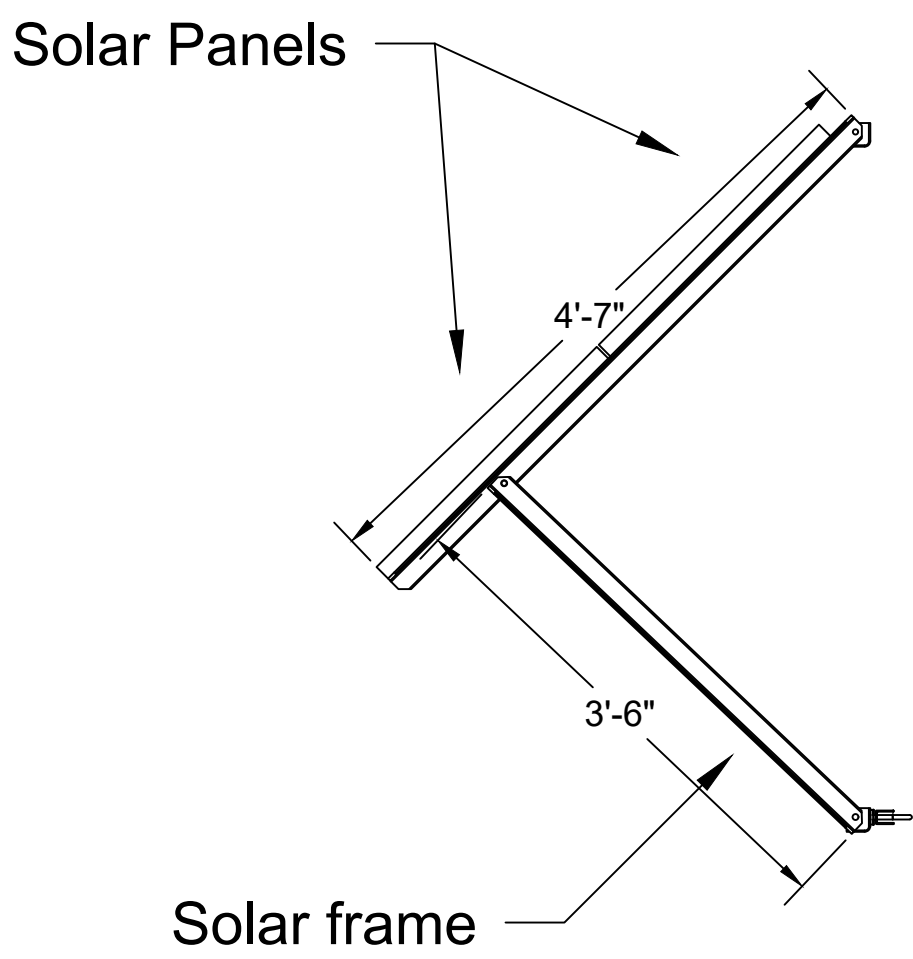
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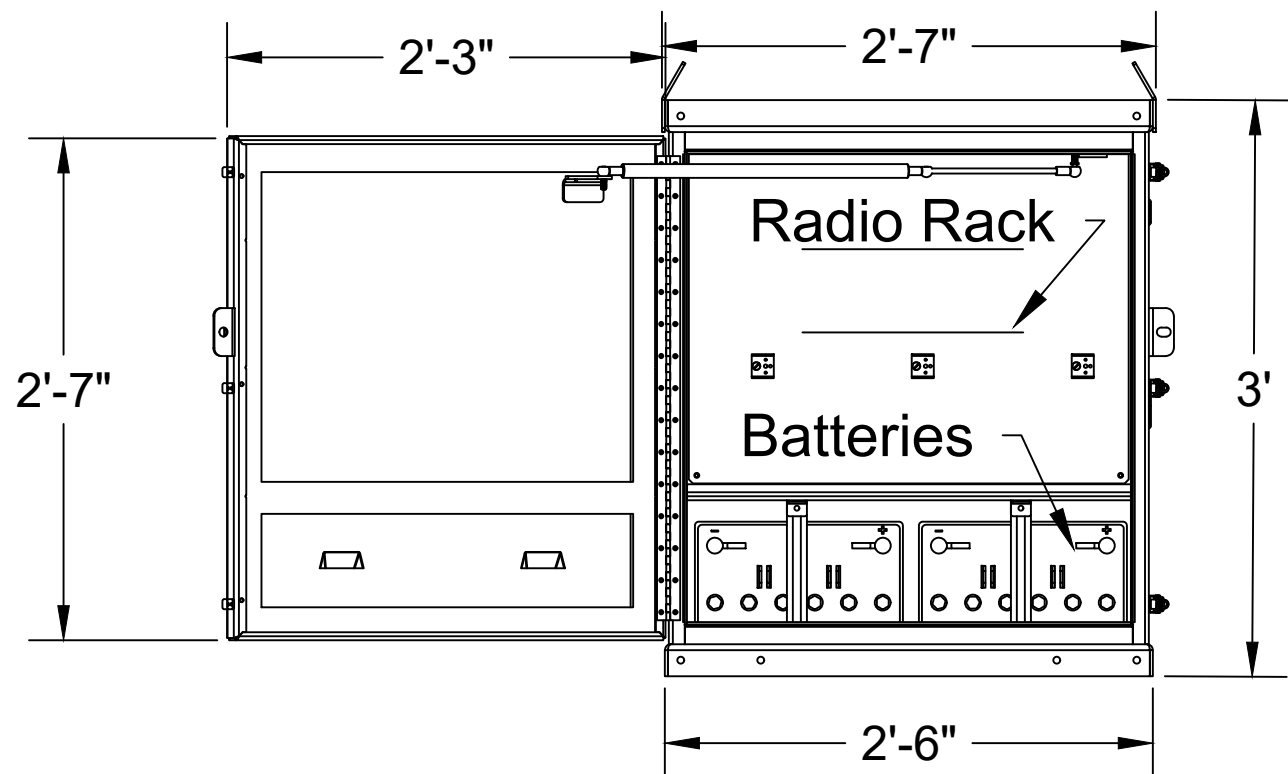
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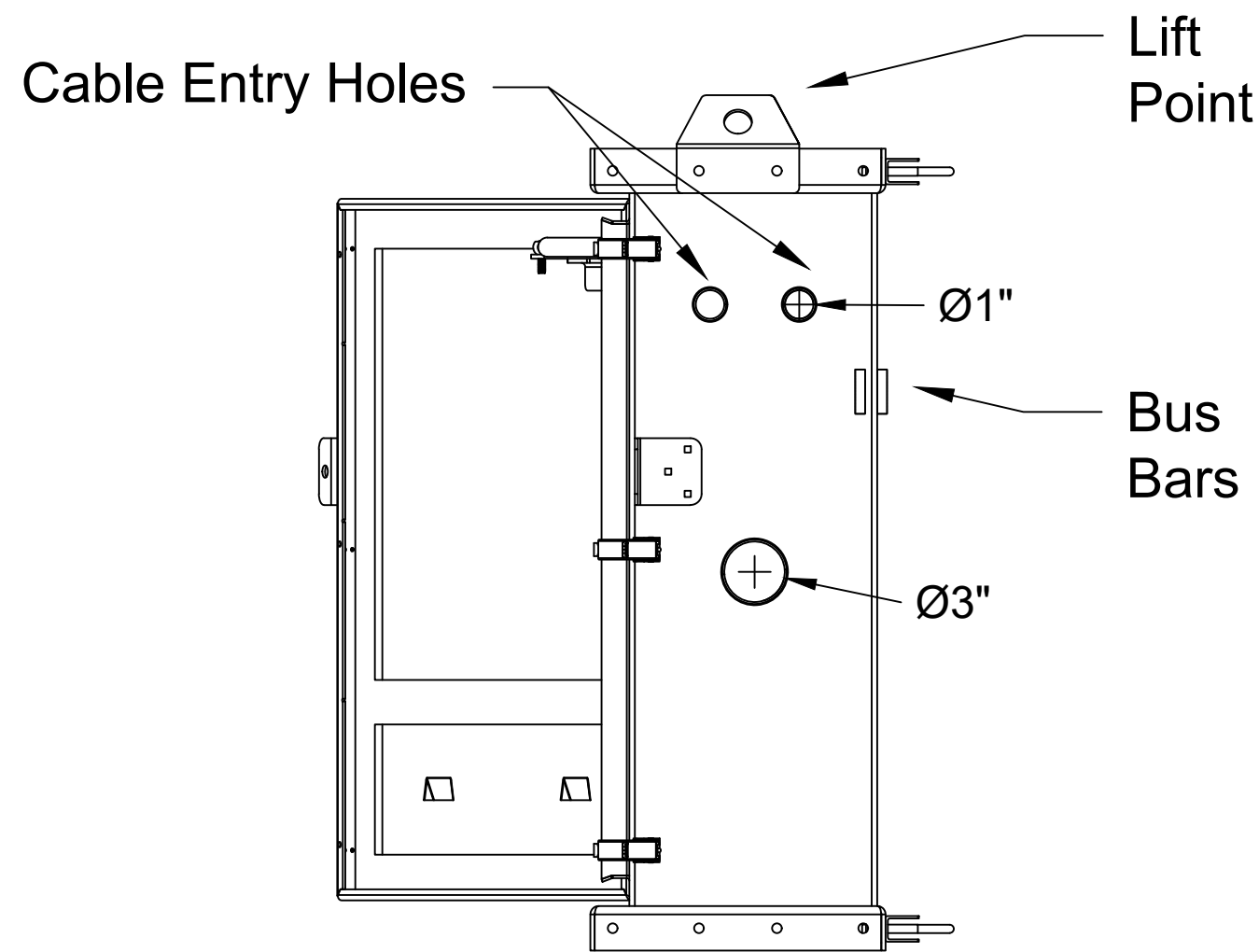
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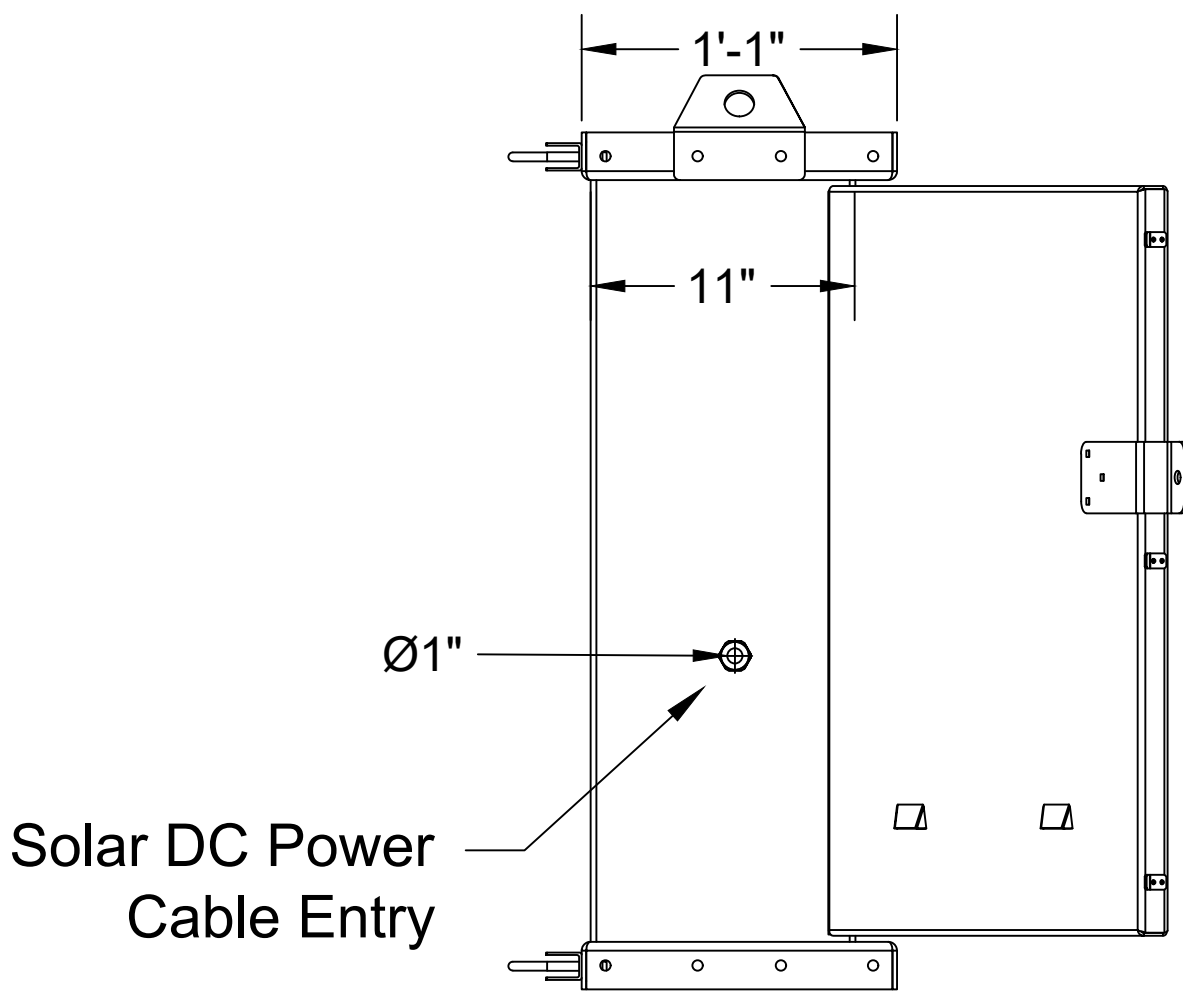
2 Solar Rack - Side View



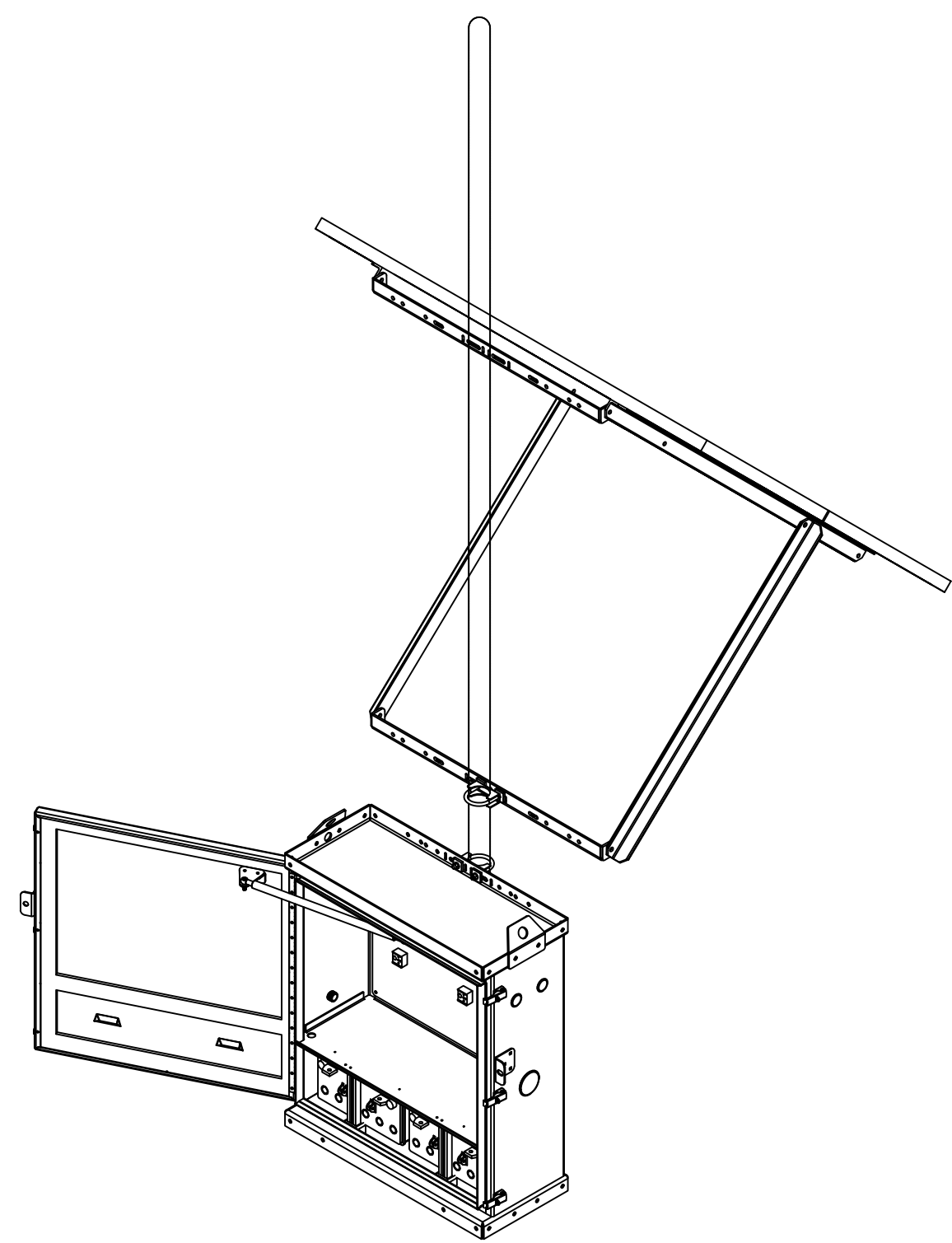
3 Cabinet - Front View



4 Cabinet - Right Side View



5 Cabinet - Left Side View



6 Radio System Installed

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

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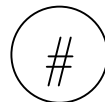
SHEET TITLE
CABINET DETAIL

SHEET #

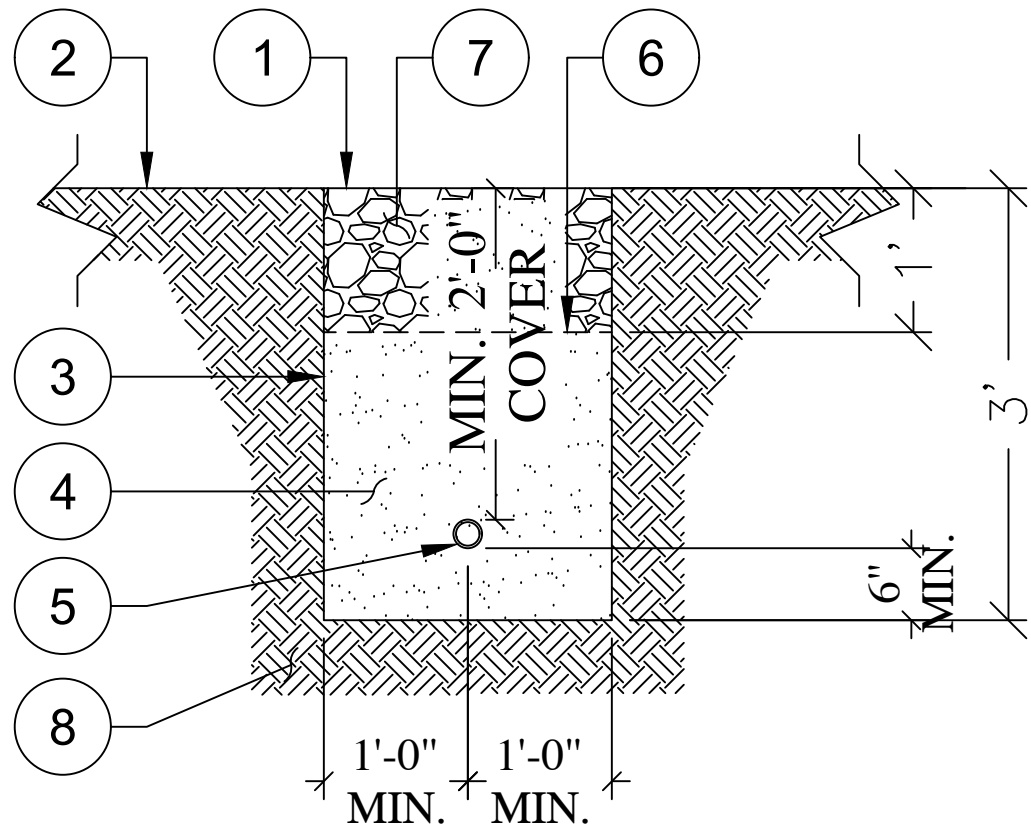
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COAXIAL CABLE TRENCH KEYED NOTES:



1. MATCH EXISTING SURFACE
2. FINISHED GRADE
3. VERTICAL DEPTH W/O SHORING PER GOVERNING CODES
4. BACKFILL WITH CLEAN GRANULAR FILL SAND
5. (1) 4" PVC SCH. 80 GALVANIZED RIDGID HIGH VOLTAGE POWER CONDUIT
6. 6" WIDE UTILITY WARNING TAPE 12" ABOVE CONDUIT
7. COMPACTED SELECT, ROCK FREE BACKFILL (SUITABLE ON SITE MATERIAL) OR SAND OR PEA GRAVEL DEPENDING ON SITE CONDITIONS.
8. UNDISTURBED SOIL



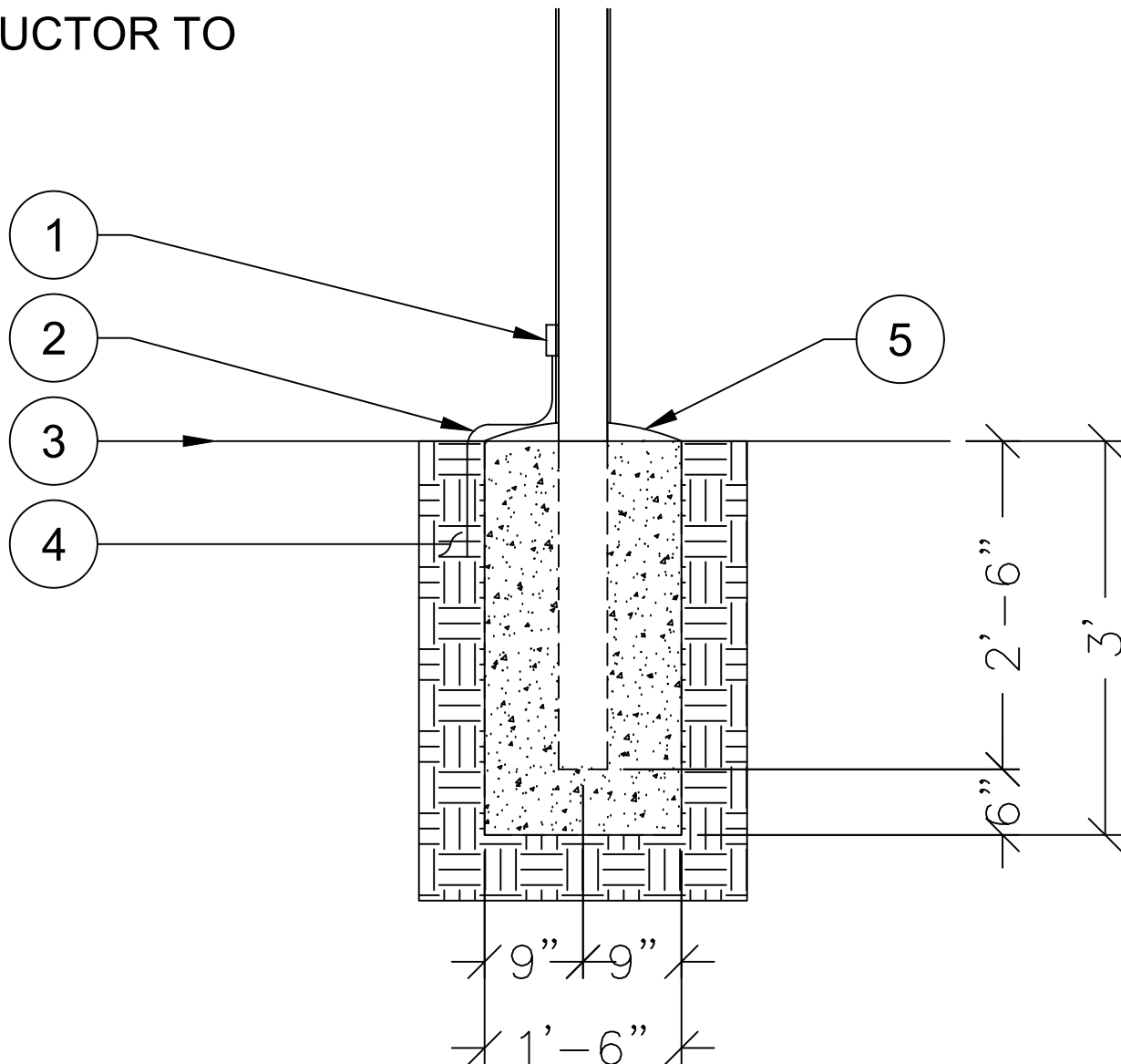
1

COAXIAL CABLE TRENCH DETAIL

MAST FOUNDATION KEYED NOTES:



1. EXOTHERMIC WELD TO STEEL MAST
2. #2 AWG SOLID TINNED BARE COPPER CONDUCTOR TO GROUND RING
3. FINISHED GRADE
4. NATURAL SOIL
5. CAP FOR WATERSHED

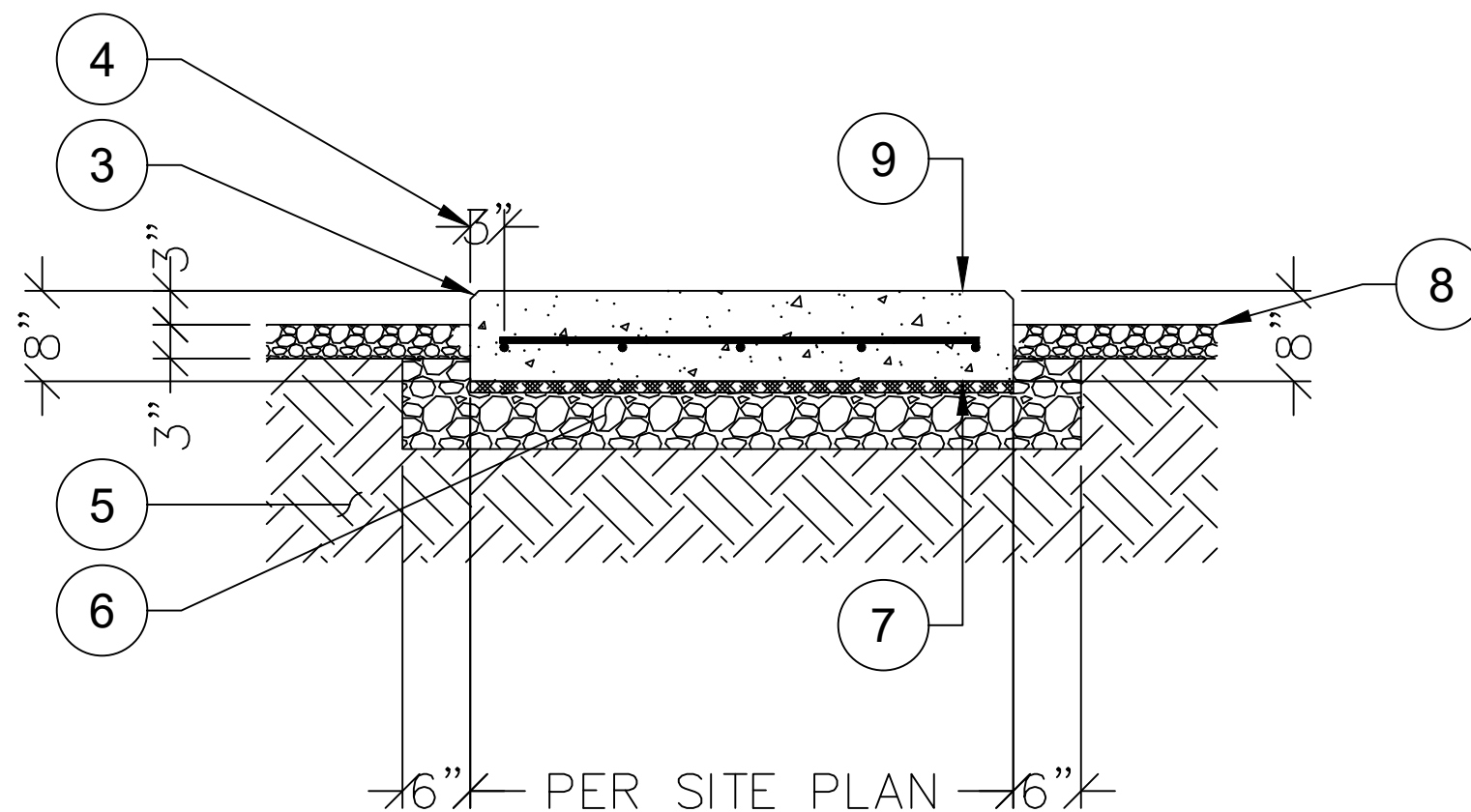
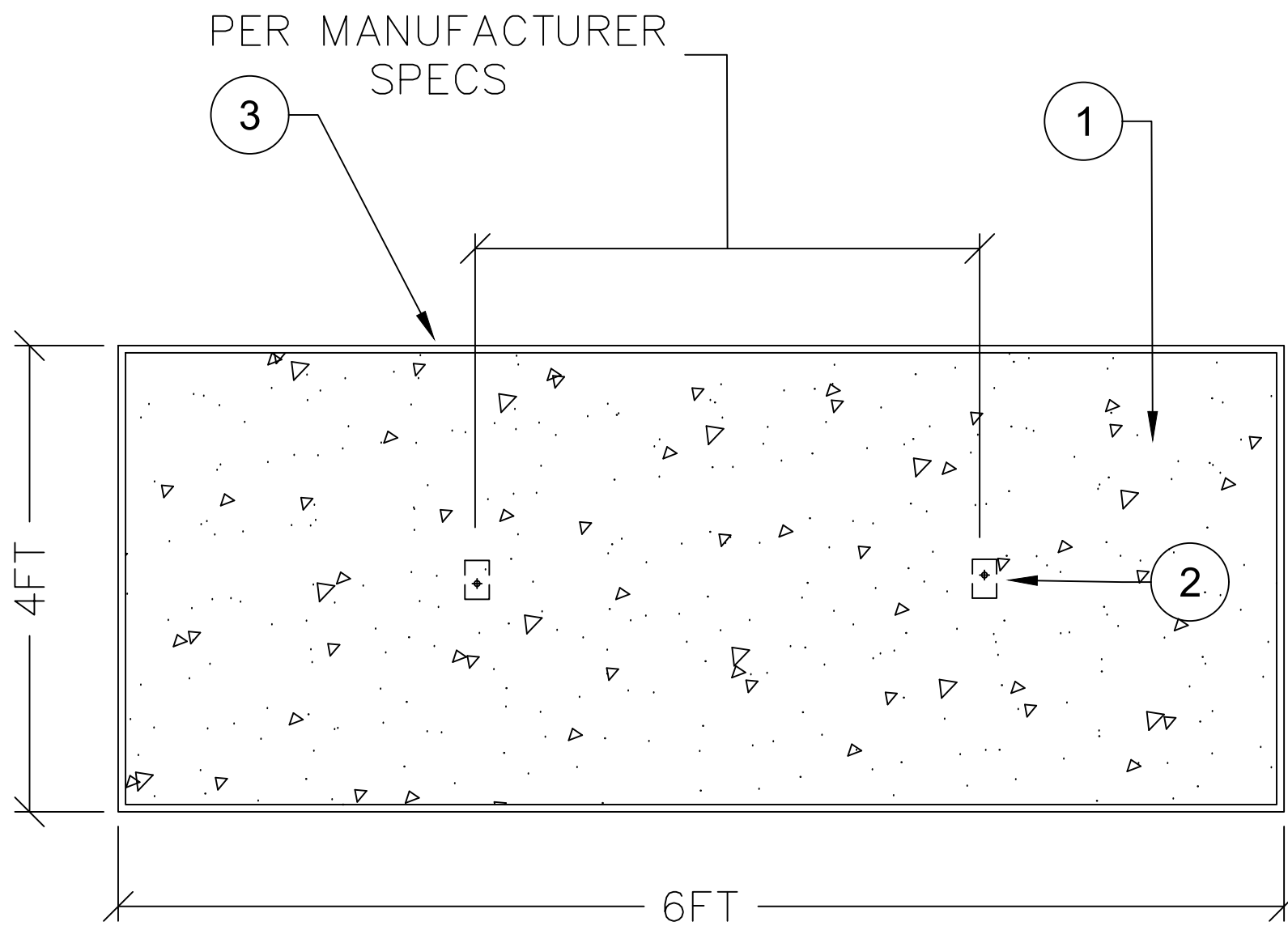


2

MAST FOUNDATION DETAIL

TYPICAL CONCRETE SLAB DETAIL KEYED NOTES:

1. 3/4"Ø HOLES (TYP. OF 4)
2. 3/4" CHAMFER EDGE (TYP.)
3. 3" REINFORCEMENT CLEARANCE FROM SLAB PERIMETER
4. NATURAL SOIL
5. 6" THK. MIN. CRUSHED STONE OR COMPACTED GRANULAR FILL
6. USE 6 MM PLASTIC MOISTURE BARRIER
7. FINISHED GRADE LEVEL
8. 8" THK. SLAB WITH #4 @12" O.C. EACH WAY; SLAB FINISH 4" ABOVE FINISHED GRADE



SECTION A-A

RADIO CABINET FOUNDATION NOTES:

1. VERIFY DIMENSIONS WITH CABINET MANUFACTURER ALONG WITH LOCATION OF BASE FRAME CONNECTIONS.
2. REMOVE ALL LOOSE INORGANIC OR UNSUITABLE SOIL TO UNDISTURBED BEARING STRATA W/ ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF.
3. CONCRETE STRENGTH SHALL BE 4000 PSI, MIN.
4. SUB-GRADE SHALL BE COMPACTED 95% AND INDEPENDENTLY TESTED.

3

CONCRETE FOUNDATION DETAIL

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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USGS PROJECT #

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CHINO HILLS

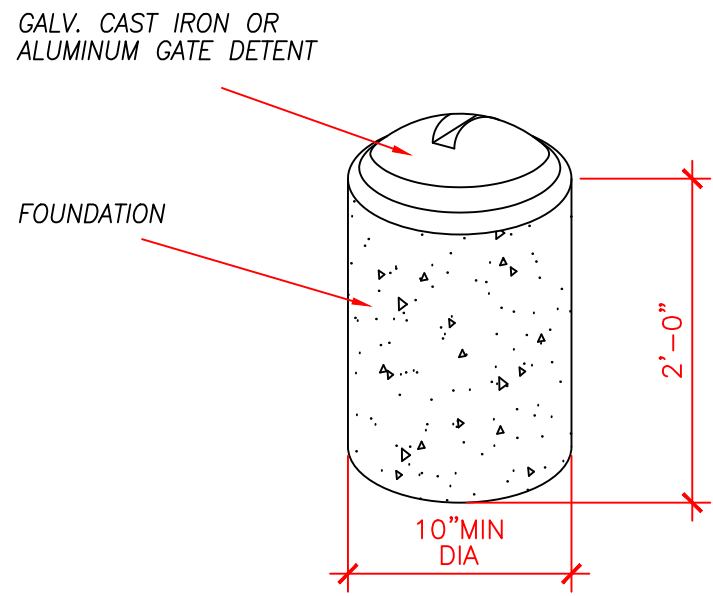
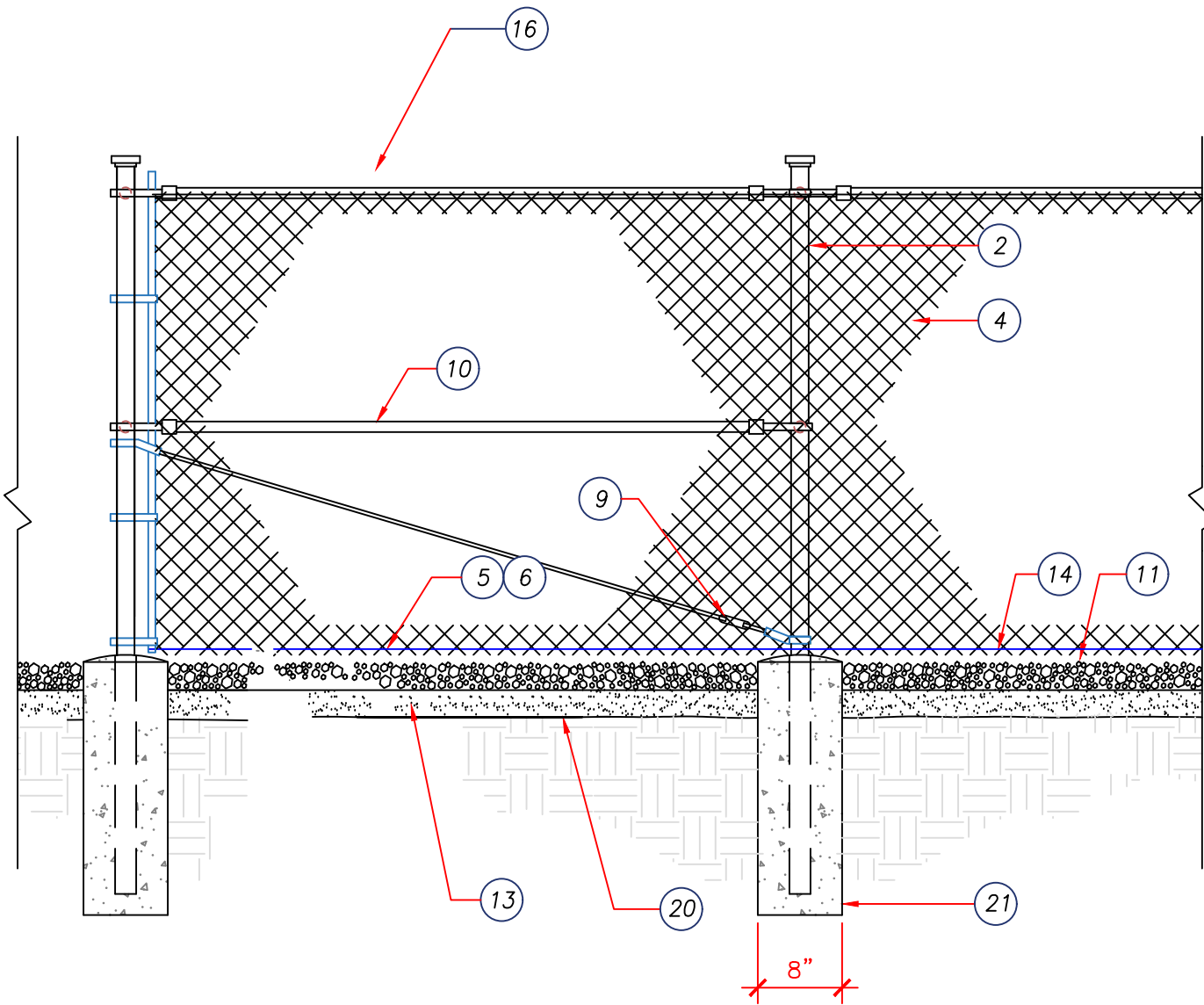
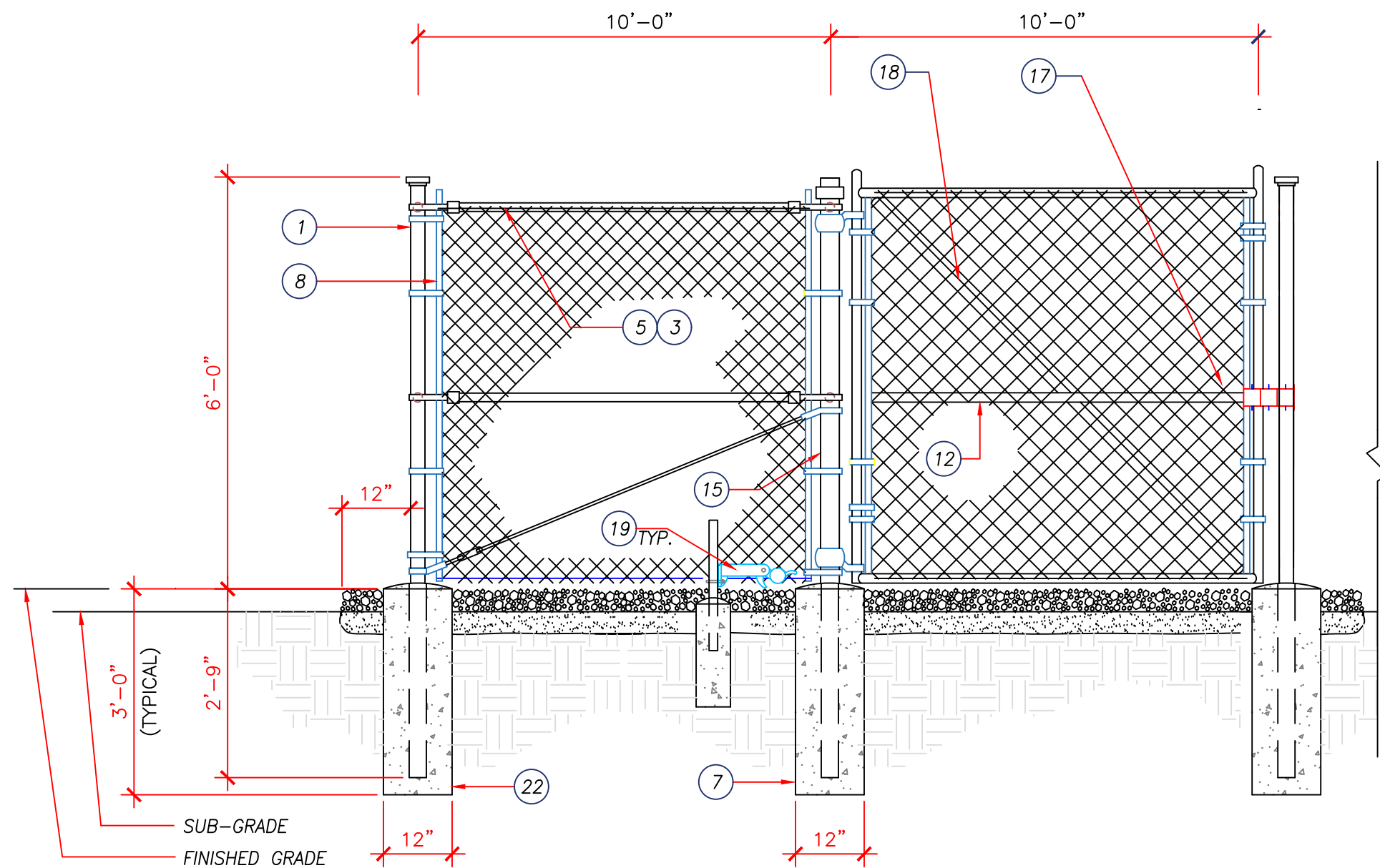
SITE ADDRESS
LATITUDE: 33°54'39.27"N
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ELEVATION: 1080 AMSL

SHEET TITLE
FOUNDATION DETAIL

SHEET #

A2.2

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KEYED NOTES:

- CORNER, END OR PULL POST 3" NOMINAL SCHEDULE 40 PIPE.
- LINE POST: 2 1/2" SCHEDULE 40 PIPE, PER ASTM-F1083. LINE POSTS SHALL BE EQUALLY SPACED AT MAXIMUM 8'-0" O.C.
- TOP RAIL & BRACE RAIL: 1 1/2" PIPE, PER ASTM-F1083.
- FABRIC: 9 GA. CORE WIRE SIZE 2" MESH, CONFORMING TO ASTM-A392.
- TIE WIRE: MINIMUM 11 GA. GALVANIZED STEEL AT POSTS AND RAILS. A SINGLE WRAP OF FABRIC TIE AND AT TENSION WIRE BY HOG-RINGS SPACED MAX. 24" INTERVALS.
- TENSION WIRE: 9 GA. GALVANIZED STEEL.
- GATE POST: CONCRETE FOUNDATION (2000 PSI)
- STRETCHER BAR.
- 3/8" DIAGONAL ROD WITH GALVANIZED STEEL TURNBUCKLE OR DIAGONAL THREADED ROD.
- FENCE CORNER POST BRACE: 1 5/8" DIA. EACH CORNER EACH WAY.
- 1 1/2" MAXIMUM CLEARANCE FROM GRADE.
- GATE BRACE: 1 5/8" DIA. BOTH SIDES
- 4" THICK COMPACTED 95% MINUS 3/4" BASE MATERIAL
- FINISHED GRADE SHALL BE UNIFORM AND LEVEL.
- GATE POST 4" SCHEDULE 40 PIPE, FOR GATE WIDTHS UP TO 7 FEET USE SINGLE SWING GATE, 14 FEET FOR DOUBLE SWING GATE, PER ASTM-F1083.
- GATE FRAME: 1 1/2" PIPE, PER ASTM-F1083.
- LOCKING DEVICE
- GATE DIAGONAL GALVANIZED STEEL 1 1/2" PIPE.
- DUCK BILL OPEN GATE HOLDER. VERIFY LOCATION IN FIELD PRIOR TO INSTALLATION.
- GEOTEXTILE FABRIC.
- LINE POST: CONCRETE FOUNDATION (2000 PSI)
- CORNER POST: CONCRETE FOUNDATION (2000 PSI)

GENERAL NOTES:

- INSTALL FENCING PER ASTM F-567.
- INSTALL SWING GATES PER ASTM F-900.
- POST & GATE PIPE SIZES ARE INDUSTRY STANDARDS. ALL PIPE TO BE 1 1/2" GALV. (HOT DIP, ASTM A120 GRADE "A" STEEL). ALL GATE FRAMES SHALL BE WELDED. ALL WELDING SHALL BE COATED WITH (3) COATS OF COLD GALV. (OR EQUAL).
- ALL OPEN POSTS SHALL HAVE END-CAPS.
- USE GALVANIZED HOG-RING WIRE TO MOUNT ALL SIGNS.
- ALL SIGNS MUST BE MOUNTED ON INSIDE OF FENCE FABRIC.

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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SITE ADDRESS

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SHEET TITLE

FENCE DETAIL

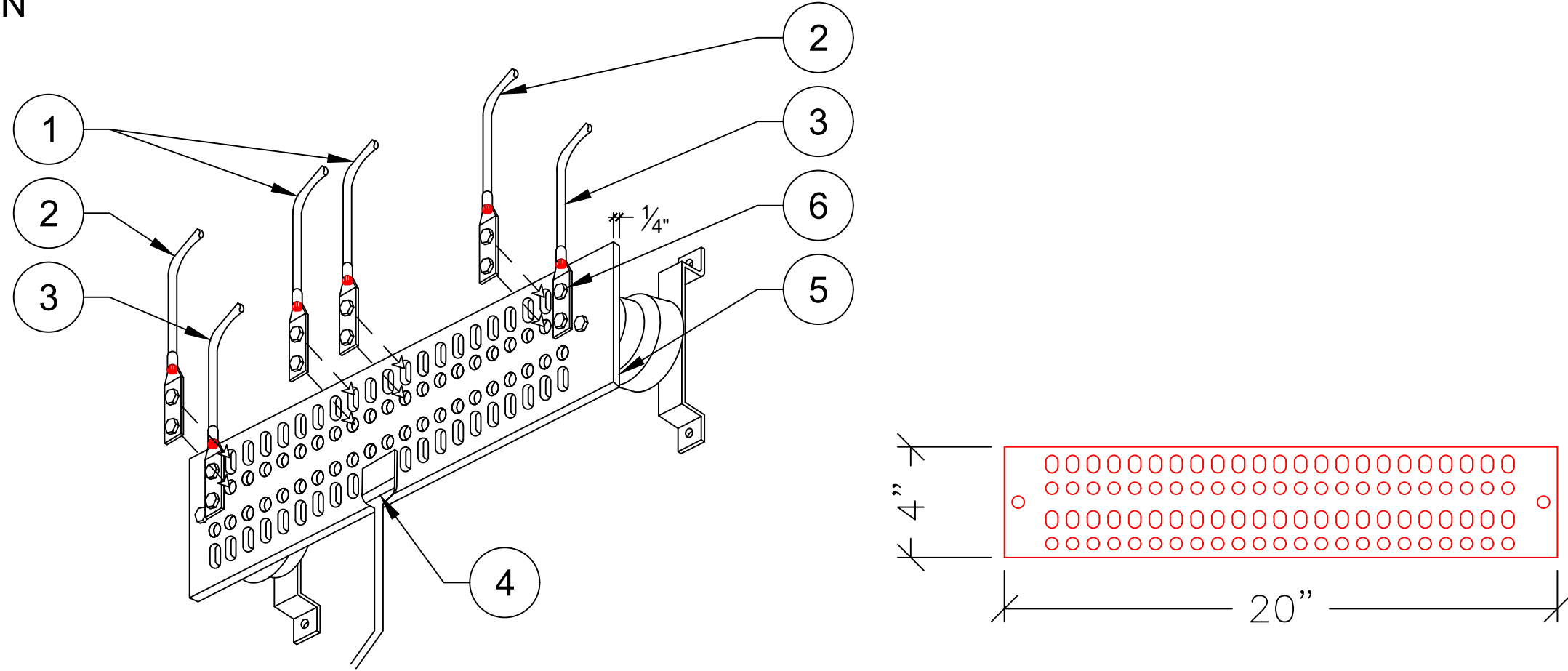
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A3

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INTERNAL MASTER GROUND BUS BAR KEYED NOTES:

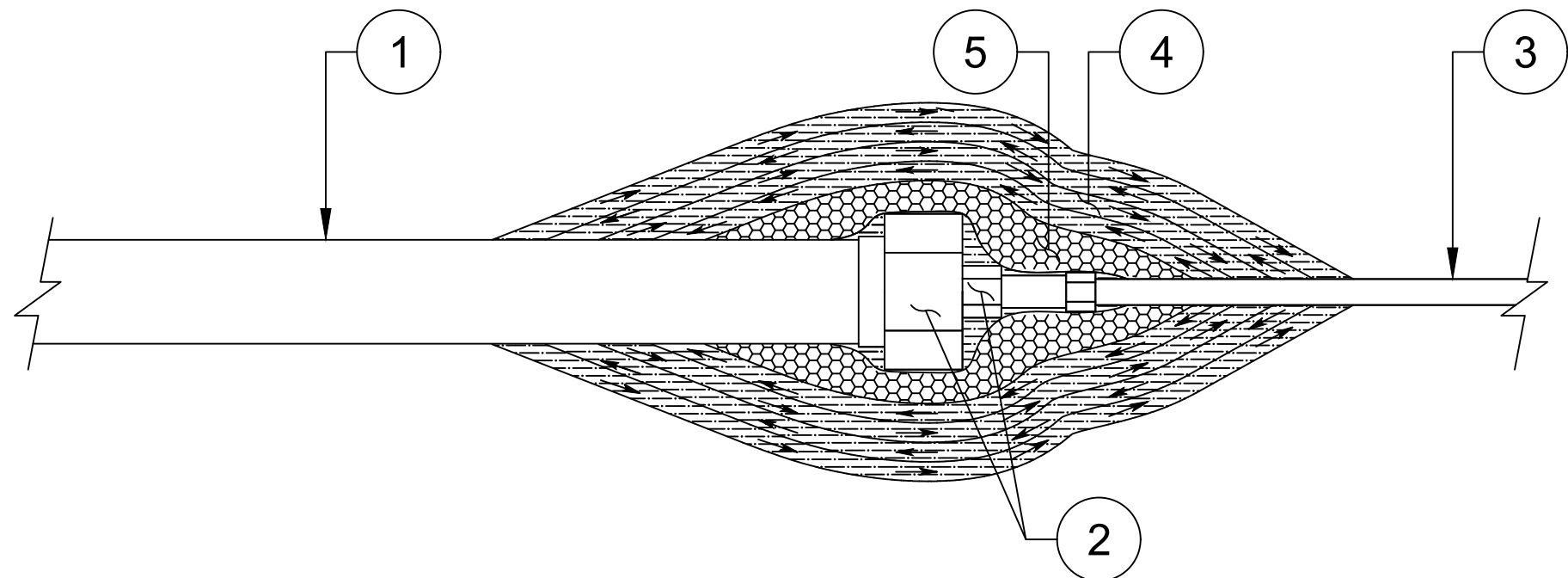
- GROUND LEADS FROM CABINETS & RACKS
- SECOND OUTSIDE POSITION SHALL ALWAYS BE THE SURGE SUPPRESSION RACK GROUND
- OUTSIDE POSITION OF MGB SHALL ALWAYS BE TAKEN BY IPGB / HALO GROUND RING
- CAD WELD #2 AWG TINNED SOLID BARE COPPER WIRE OR APPROVED 2-HOLE LUG PER R56 STANDARDS TO OUTSIDE GROUND; WALL PENETRATION TO BE 45°
- 4"x20" BARE OR TINNED SOLID ALLOY 110 COPPER GROUND BUS BAR
- HEX BOLTS W/ FLAT AND LOCK WASHERS; TWO HOLES PER LUG CONNECTION



1 MASTER BUS BAR DETAIL

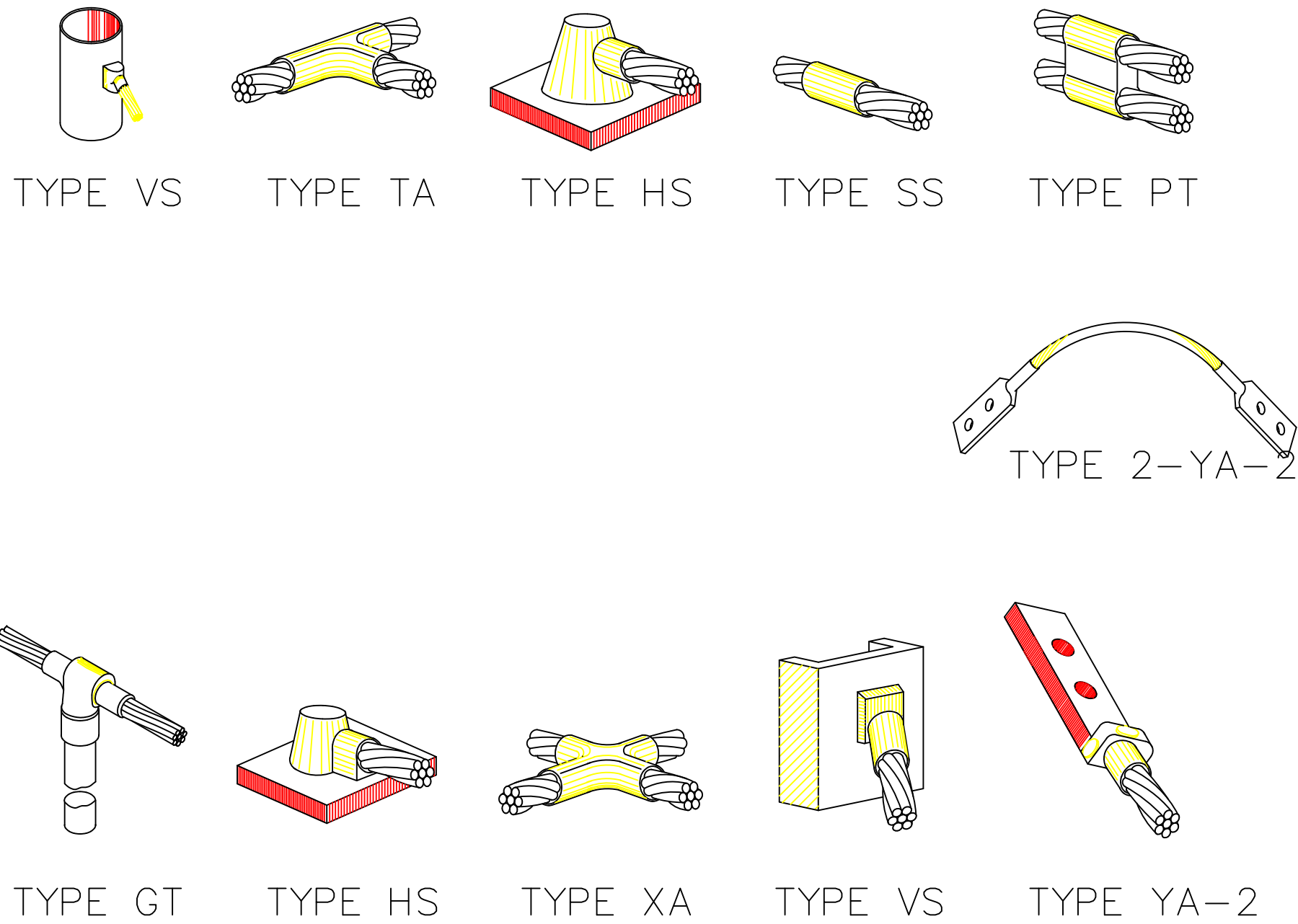
WEATHERPROOFING KEYED NOTES: #

- COAX
- COAX TO JUMPER CONNECTION (TYP.)
- JUMPER (TYP.)
- 3M SCOTCH SUPER 33+ VINYL ELECTRICAL TAPE (OR EQUIVALENT)
- VAPOR WRAP SEALANT

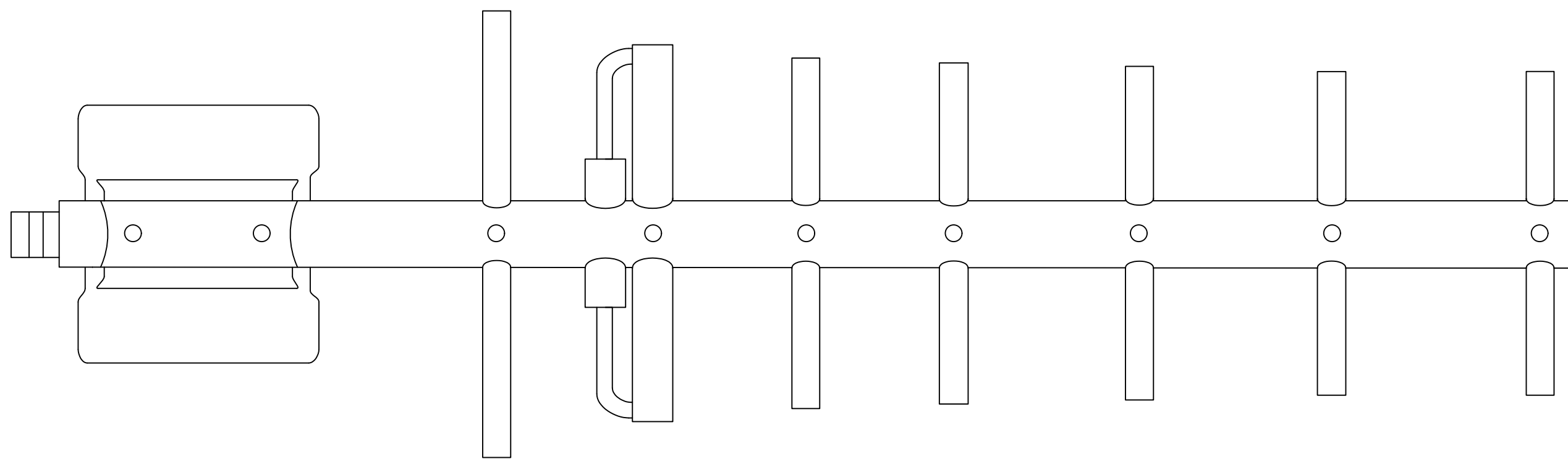


3 COAXIAL CABLE WEATHERPROOFING

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



2 CADWELD DETAIL



4 TY-900 YAGI ANTENNA

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

1	REVISED	3/15/21
REV.	DESCRIPTION	DATE

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USGS INFRASTRUCTURE UPGRADE IS
STRICTLY PROHIBITED

USGS PROJECT #

SITE NAME

CHINO HILLS

SITE ADDRESS

LATITUDE: 33°54'39.27"N
LONGITUDE: 117°41'0.70"W
ELEVATION: 1080 AMSL

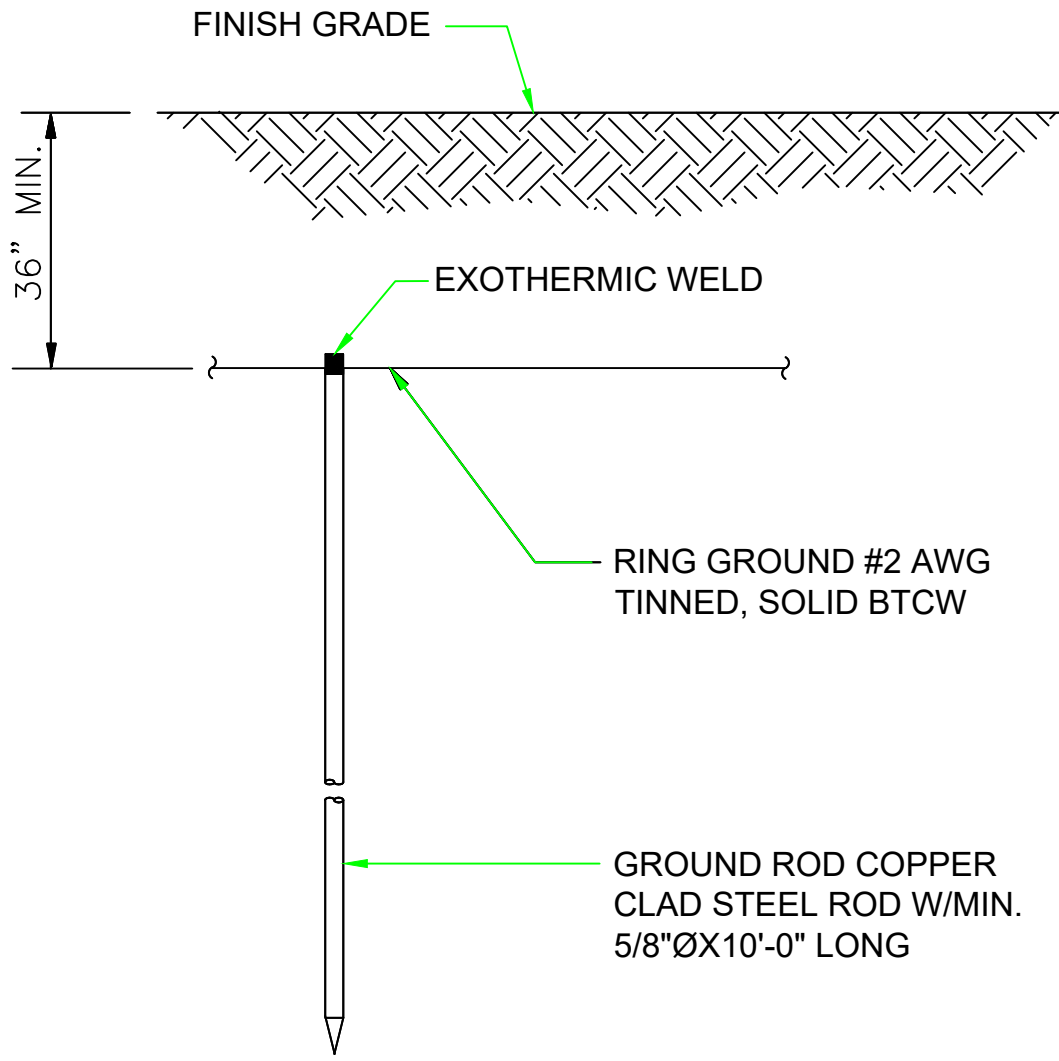
SHEET TITLE

GROUNDING DETAIL

SHEET #

G1

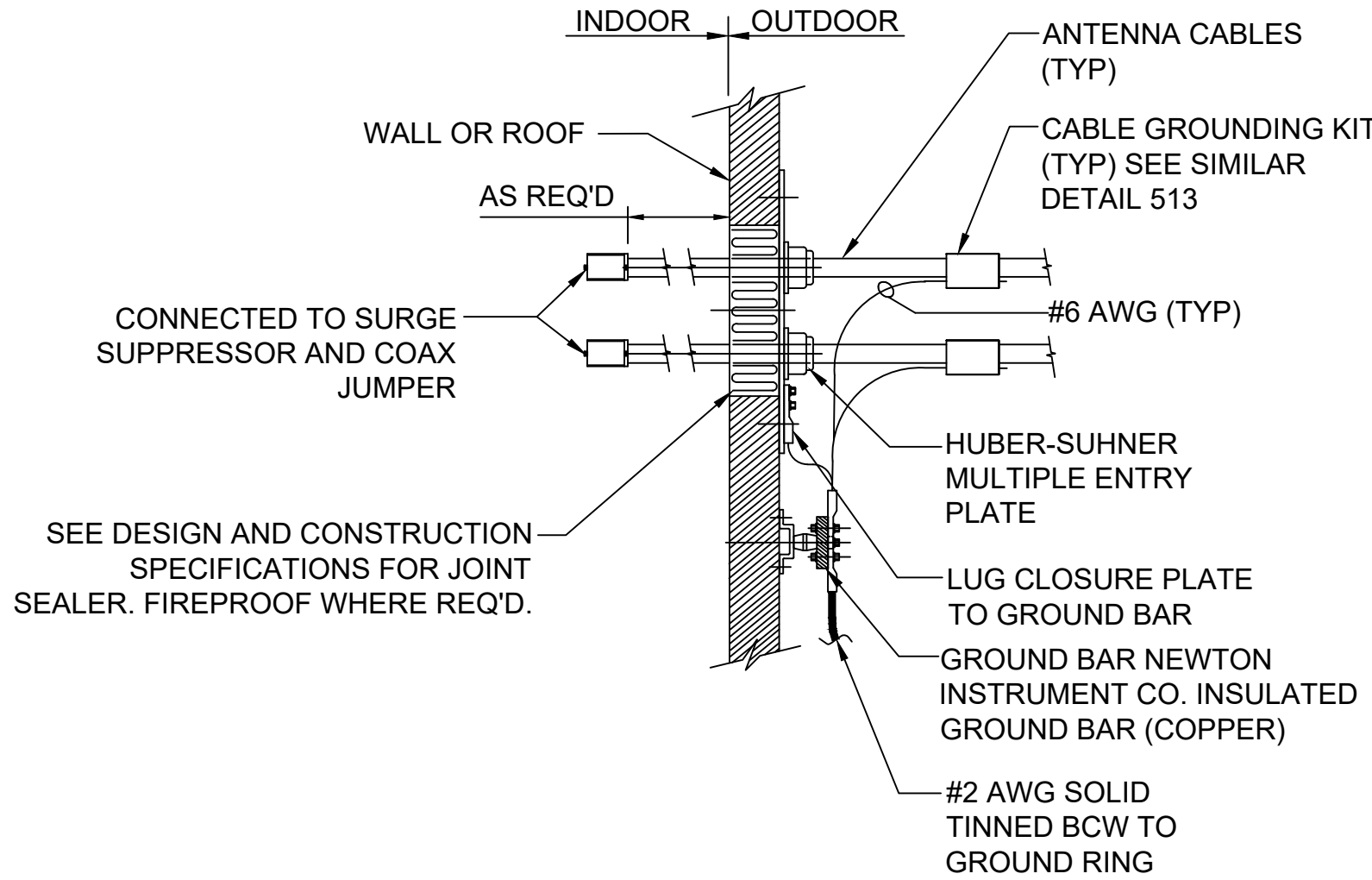
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1. GROUND ROD SHALL BE DRIVEN VERTICALLY, GROUND RODS THAT CANNOT BE DRIVEN VERTICALLY, DUE TO CONTACT WITH ROCK FORMATIONS, MAY BE DRIVEN AT AN OBLIQUE ANGLE OF NOT GREATER THAN 45 DEGREES FROM THE VERTICAL AND SHALL MAINTAIN A MAXIMUM SPACING OF 10 LINEAR FEET BETWEEN ADJACENT GROUND RODS.

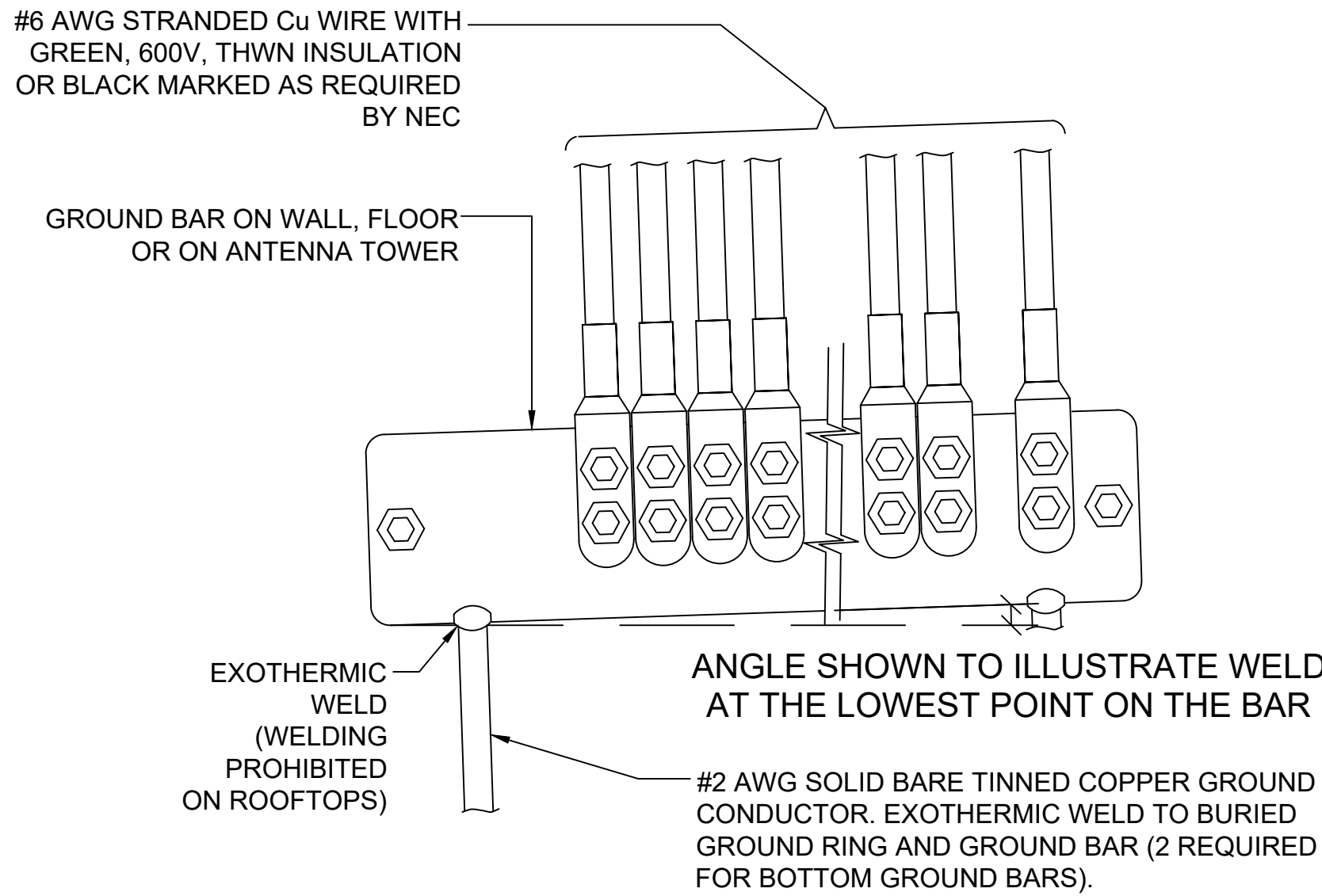
1

GROUNDING ROD



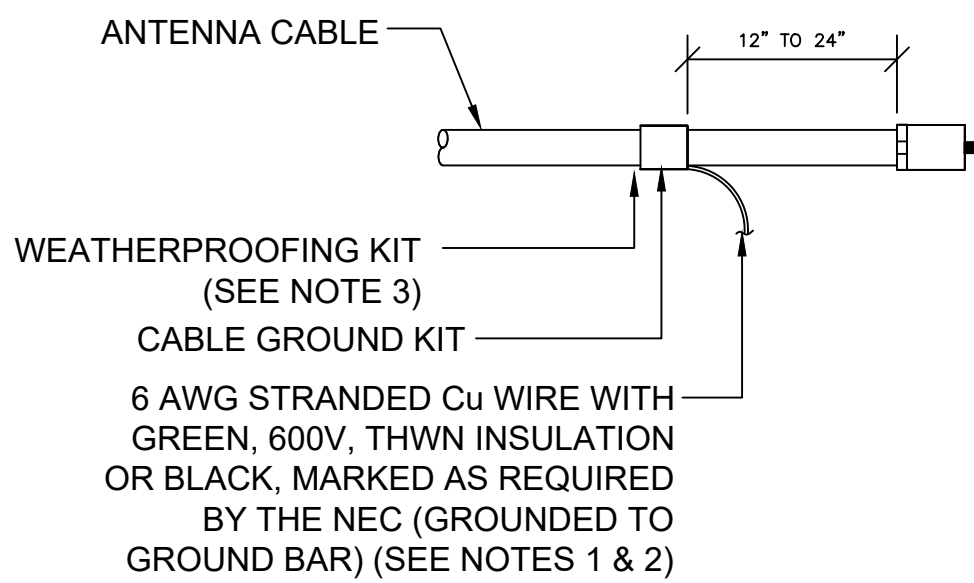
2

GROUNDING AT COAX ENTRY



3

INSTALLATION OF GROUND WIRE TO COAX CABLE GROUND BAR



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. WEATHER PROOFING SHALL BE (TYPE AND PART NUMBER) AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER AND APPROVED BY CONTRACTOR.

4

CONNECTION OF CABLE GROUND KIT TO ANTENNA CABLE

OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

1	REVISED	3/15/21
REV.	DESCRIPTION	DATE

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USGS PROJECT #

SITE NAME
CHINO HILLS

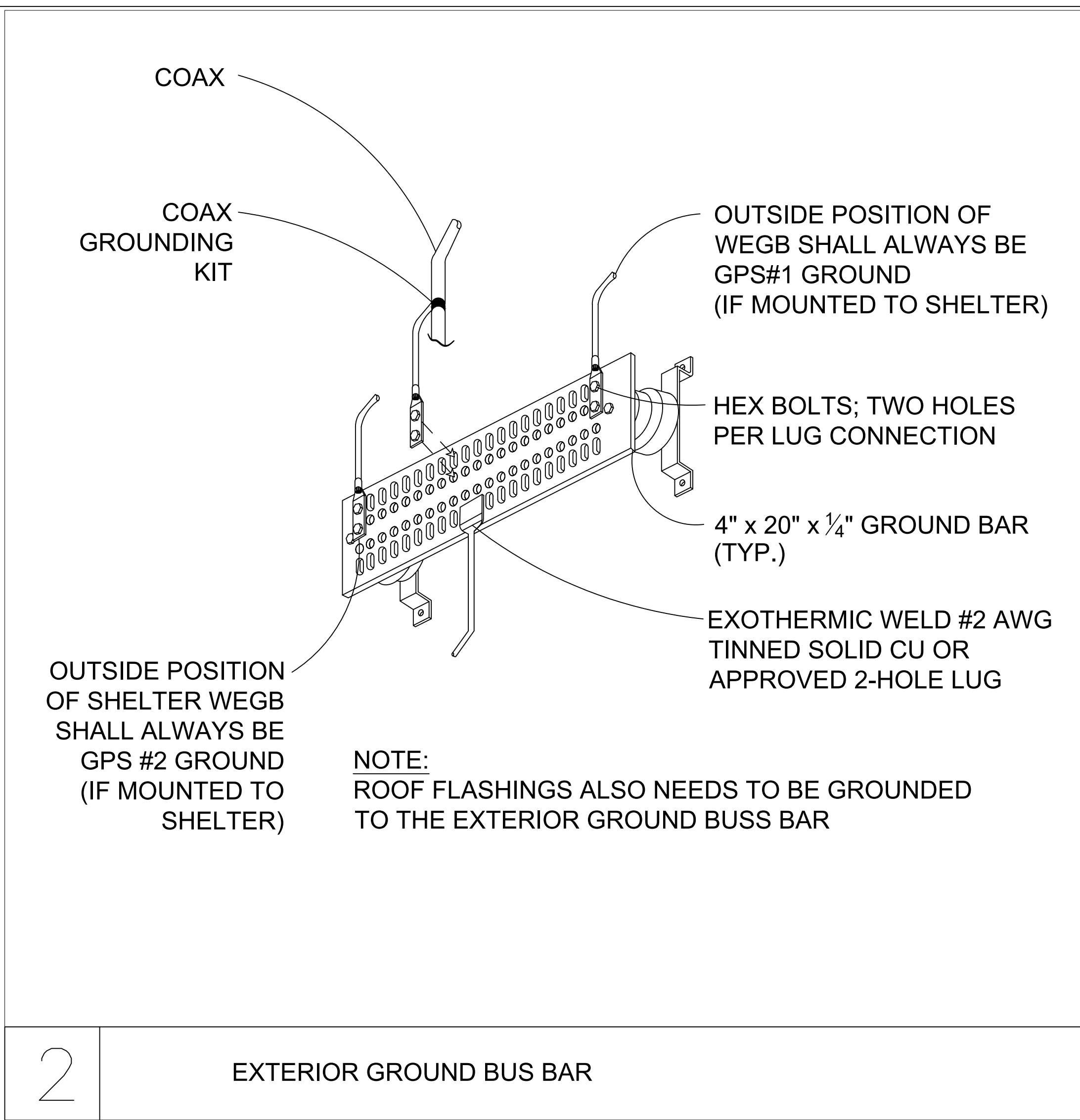
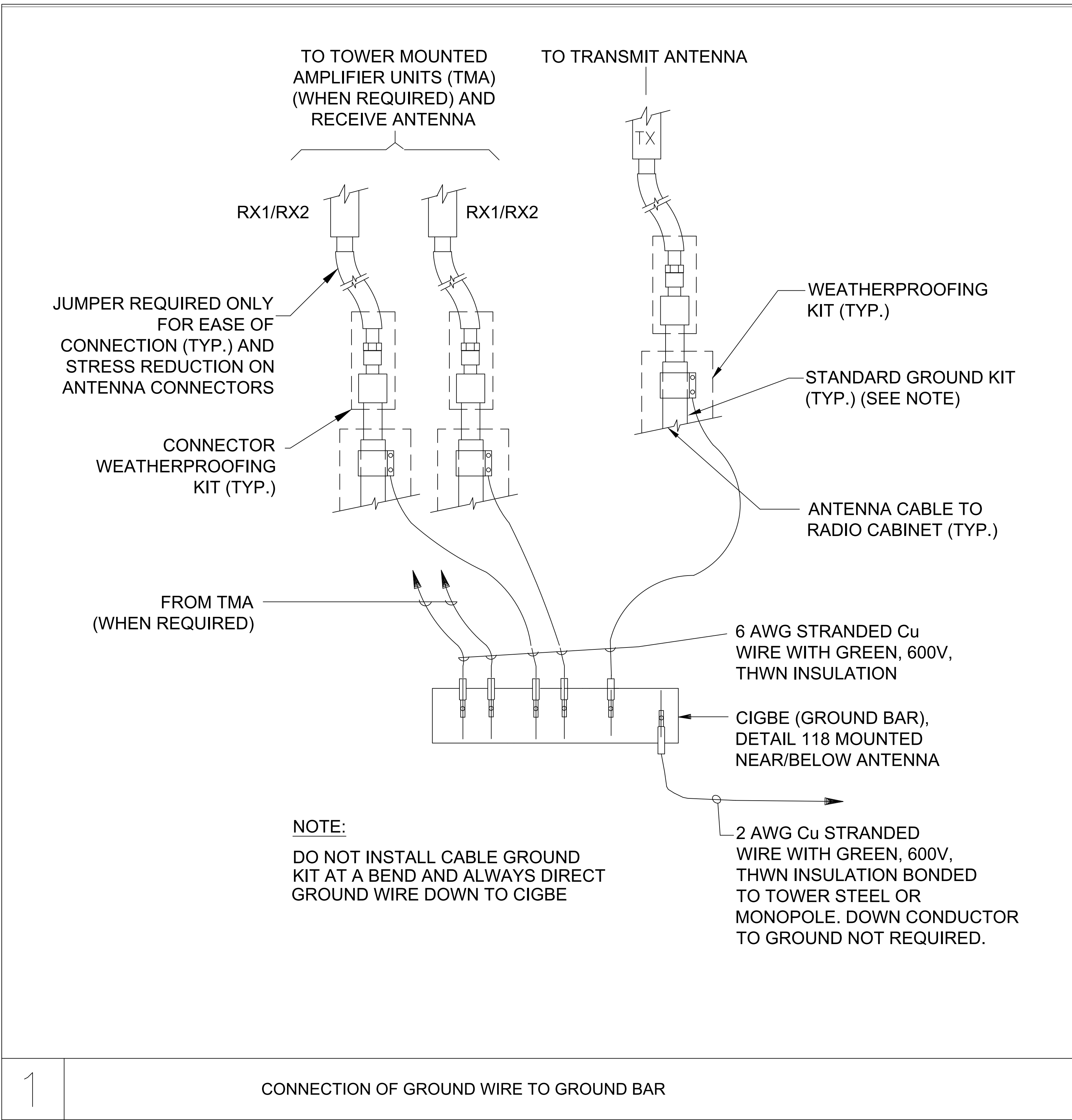
SITE ADDRESS
LATITUDE: 33°54'39.27"N
LONGITUDE: 117°41'0.70"W
ELEVATION: 1080 AMSL

SHEET TITLE
GROUNDING DETAIL

SHEET #

G1.1

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OWNER:



PRIME CONTRACTOR:



A & E DESIGN FIRM:

ENGINEERING SEAL:

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ELEVATION: 1080 AMSL

SHEET TITLE

GROUNDING DETAIL

SHEET #

G1.2



Exhibit B – Site location, facing north.