



DISH WIRELESS SITE ID:
SFSFO00005A

SITE ADDRESS:
3830 ABORN RD.
SAN JOSE, CA. 95135



ANTHEMNET SITE NAME:
EVERGREEN

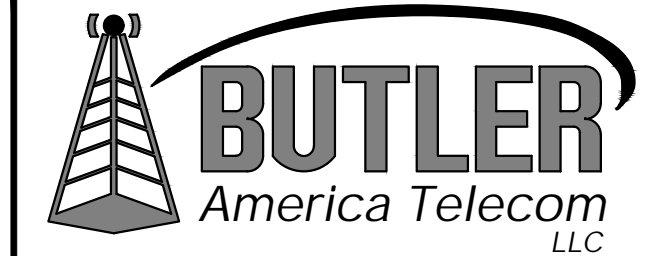
SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

- SECTOR SCOPE OF WORK:
- INSTALL (1) PROPOSED 100'-6" TALL WINDMILL ANTENNA TOWER
- INSTALL (6) PROPOSED 6'-0" PANEL ANTENNAS (2 PER SECTOR)
- INSTALL (12) PROPOSED RRUs (4 PER SECTOR)
- INSTALL (3) PROPOSED SURGE SUPPRESSION DEVICES (1 PER SECTOR)
- INSTALL (3) PROPOSED HYBRID CABLES (1 PER SECTOR)
- INSTALL PROPOSED JUMPERS FROM RRU TO ANTENNAS AS REQ.

- EQUIPMENT SCOPE OF WORK:
- INSTALL 25'X100' CHAIN LINK EQUIPMENT ENCLOSURE
- INSTALL (1) PROPOSED UTILITY H-FRAME
- INSTALL (1) PROPOSED BBU IN CABINET
- INSTALL (1) PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED POWER CONDUIT
- INSTALL (1) PROPOSED TELCO CONDUIT
- INSTALL (1) PROPOSED NEMA 3 TELCO-FIBER BOX
- INSTALL (1) PROPOSED GPS ANTENNA
- INSTALL ICE BRIDGE
- INSTALL CAMLOCK GEN LUG INTERSECT

| SITE INFORMATION | | PROJECT DIRECTORY | |
|----------------------|---|-------------------|---|
| PROPERTY OWNER: | EDUARDO & SUZANNE VARGAS TRUSTEES OF THE VARGAS FAMILY TRUST DATED 6/16/16 3830 ABORN ROAD SAN JOSE, CA 95135 | APPLICANT: | ANTHEMNET, INC. 5944 LUTHER LANE, SUITE 725 AUSTIN, TX 75225 BRIAN RICHMOND brian@anthemnet.com |
| SITE TYPE: | WINDMILL TOWER | CARRIER: | DISH WIRELESS 5701 SOUTH SANTA FE DRIVE LITTLETON, CO 80120 |
| COUNTY: | SANTA CLARA COUNTY | SITE DESIGNER: | CONNELL DESIGN GROUP, INC 22431 ANTONIO PKWY., SUITE B160-131 RANCHO SANTA MARGARITA, CA 92688 DAN CONNELL (949) 306-4644 |
| LATITUDE (NAD 83): | 37.317811' | SITE ACQUISITION: | BUTLER 1511 E. ORANGETHORPE AVE., SUITE D FULLERTON, CA 92831 HENRY CALISTRO (626) 543-3807 |
| LONGITUDE (NAD 83): | -121.757155' | | |
| ZONING JURISDICTION: | COUNTY OF SANTA CLARA | | |
| ZONING DISTRICT: | HS HILLSIDE | | |
| PARCEL NUMBER: | 659-02-011 | | |
| OCCUPANCY GROUP: | U | | |
| CONSTRUCTION TYPE: | V-B | | |
| POWER COMPANY: | PG&E | | |
| FIBER COMPANY: | TBD | | |



1511 E. ORANGETHORPE AVE., SUITE D
FULLERTON, CA 92831

CDG

22431 ANTONIO PKWY
SUITE B160-131
RANCHO SANTA MARGARITA CA 92688
dconnell@connelldesigngroup.com
949-306-4644



DATE STAMPED: 01/12/2023

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| | | |
|-----------|-------------|--------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: |
| LE | JPC | DC |

RFDS REV #2 DATED 12/16/2021

CONSTRUCTION DOCUMENTS

| SUBMITTALS | | |
|------------|------------|--------------------------|
| REV | DATE | DESCRIPTION |
| A | 03/30/2022 | ISSUED FOR 90% CD REVIEW |
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| 3 | 01/12/2023 | ISSUED FOR 100% CD |

(VENDOR) PROJECT NUMBER
SFSFO0005A

DISH WIRELESS PROJECT NUMBER
SFSFO0005A

3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

CODE COMPLIANCE

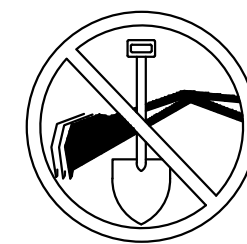
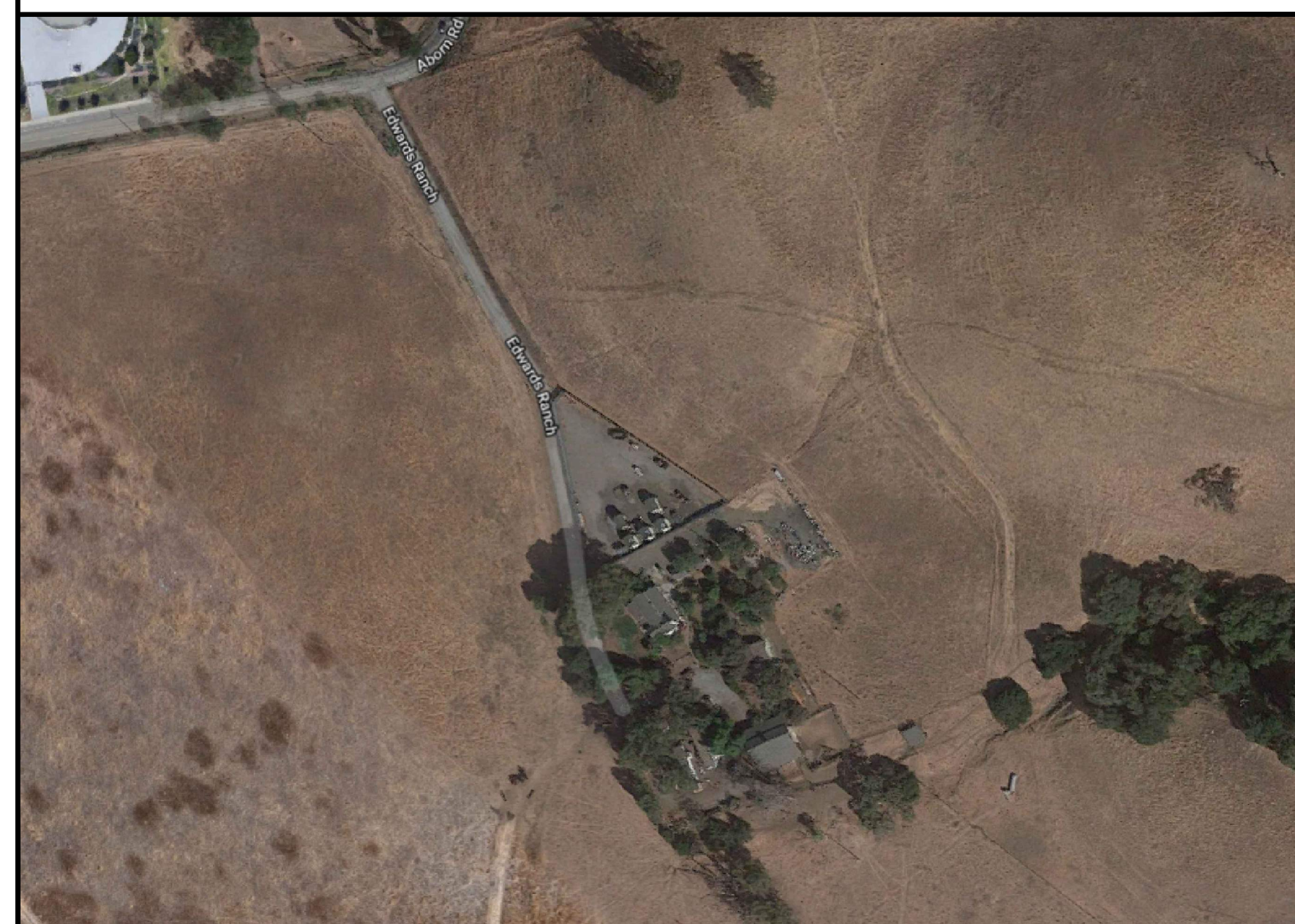
ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

| | |
|------------|----------|
| CODE TYPE | CODE |
| BUILDING | 2022 CBC |
| MECHANICAL | 2022 CMC |
| ELECTRICAL | 2022 CEC |

SHEET INDEX

| SHEET NO. | SHEET TITLE |
|-----------|---|
| T-1 | TITLE SHEET |
| LS-1 | SITE SURVEY |
| A-1 | OVERALL SITE PLAN |
| A-2 | ENLARGED SITE PLAN |
| A-2.1 | ENLARGED EQUIPMENT PLANS |
| A-3 | EQUIPMENT / ANTENNA PLANS, AND SCHEDULE |
| A-4 | ELEVATIONS |
| A-5 | ELEVATIONS |
| D-1 | DETAILS |
| D-2 | DETAILS |
| D-3 | DETAILS |
| RF-1 | RF DATA |
| GN-1 | GENERAL NOTES |
| GN-2 | GENERAL NOTES |
| GN-3 | GENERAL NOTES |
| GN-4 | GENERAL NOTES |

SITE PHOTO



UNDERGROUND SERVICE ALERT
UTILITY NOTIFICATION CENTER OF CALIFORNIA
(800) 422-4133
WWW.CALIFORNIA811.ORG



CALL 2-14 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

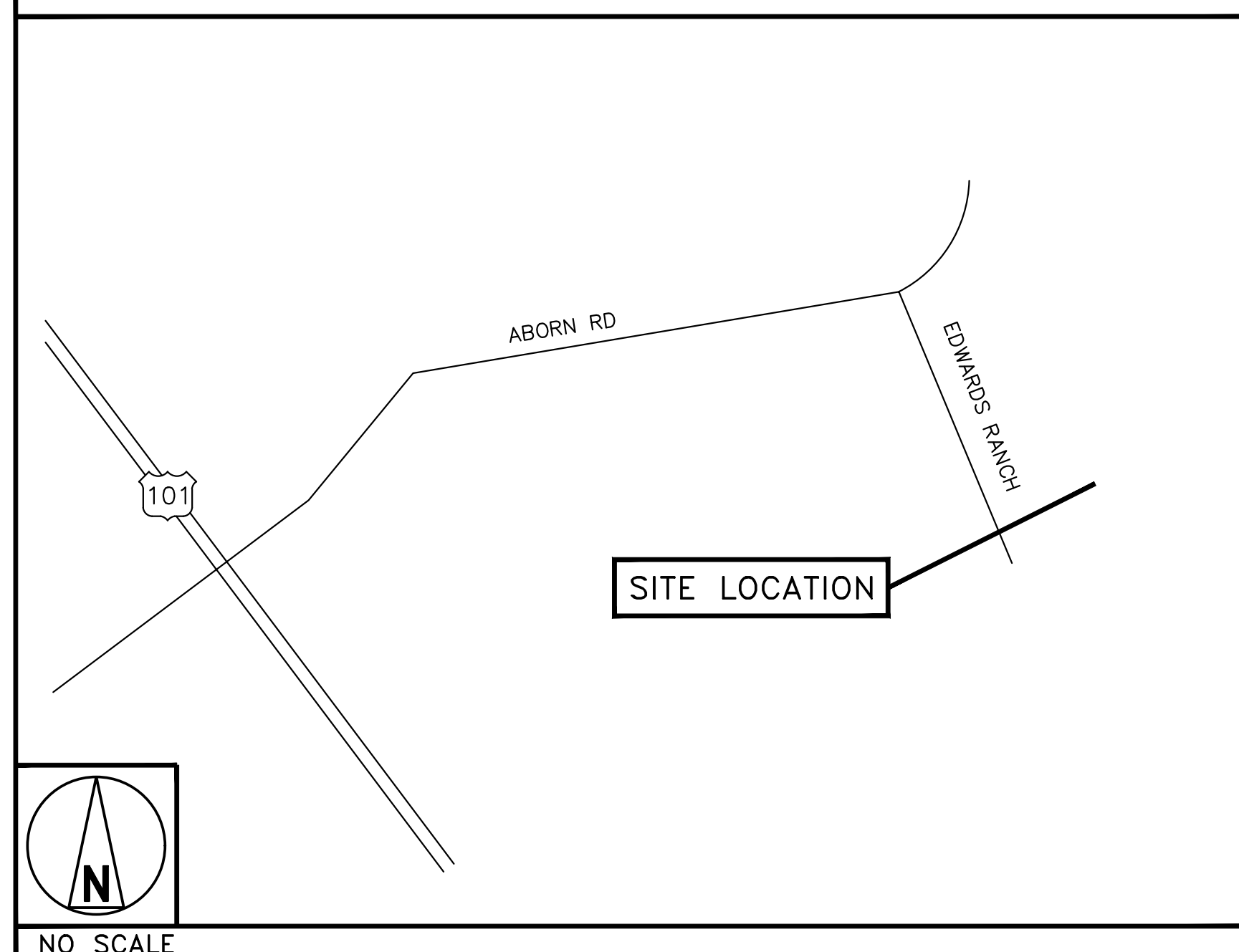
CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

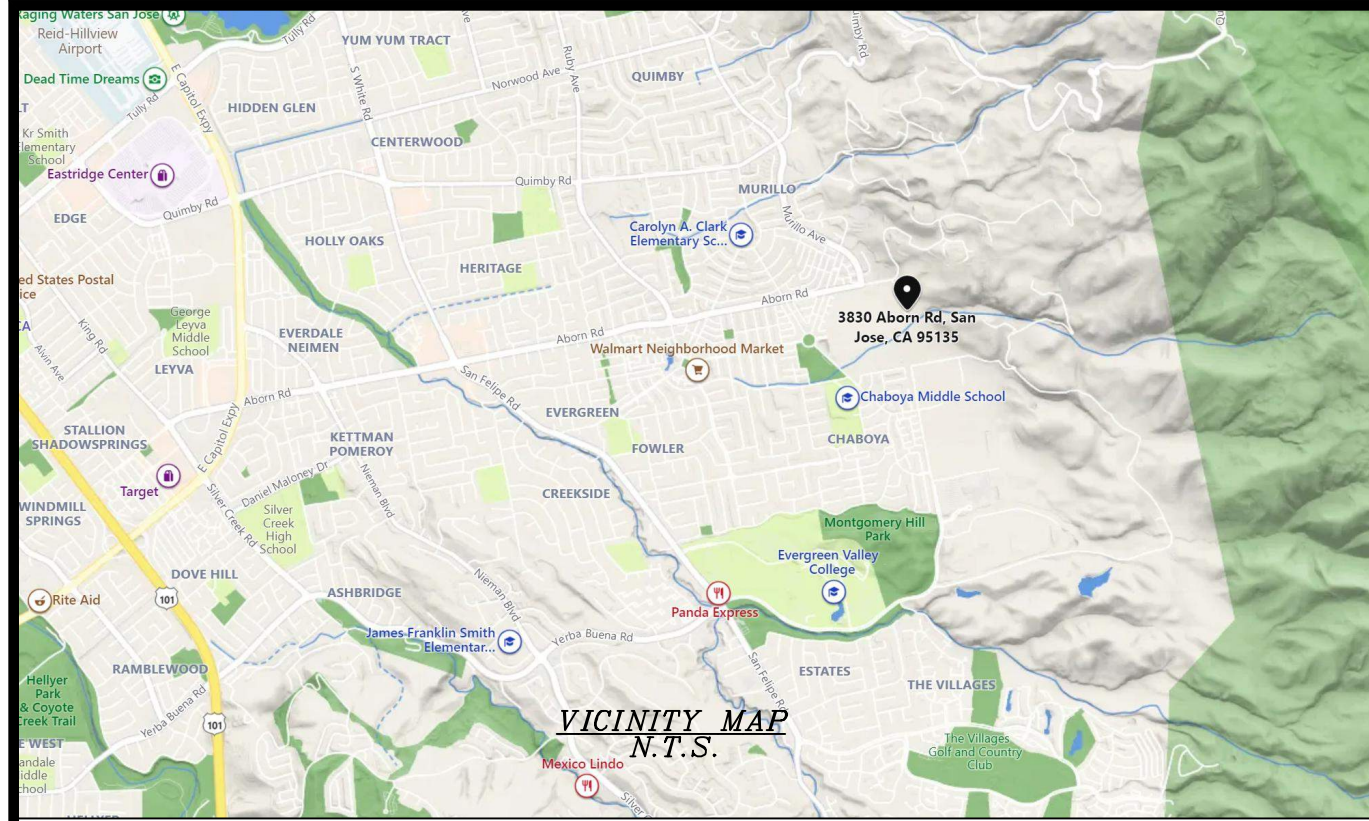
DIRECTIONS

DIRECTIONS FROM SFO AIRPORT:

- HEAD SOUTH
- KEEP LEFT, FOLLOW SIGNS FOR US-101 S/SAN JOSE AND MERGE ONTO US-101 S
- USE THE RIGHT 2 LANES TO TAKE EXIT 382 FOR CAPITOL EXPY
- USE THE LEFT 3 LANES TO TURN LEFT ONTO E CAPITOL EXPY
- TURN RIGHT ONTO ABORN RD
- TURN RIGHT ONTO EDWARDS RANCH
- DESTINATION WILL BE ON THE LEFT

VICINITY MAP





SURVEY DATE

10/30/2021

BASIS OF BEARING

BEARINGS SHOWN HEREON ARE BASED UPON U.S. STATE PLANE NAD83 COORDINATE SYSTEM CALIFORNIA STATE PLANE COORDINATE ZONE THREE, DETERMINED BY GPS OBSERVATIONS.

BENCHMARK

PROJECT ELEVATIONS ESTABLISHED FROM GPS DERIVED ORTHOMETRIC HEIGHTS BY APPLICATION OF NGS "GEOID 18" MODELED SEPARATIONS TO ELLIPSOID HEIGHTS DETERMINED BY OBSERVATIONS OF THE "CRTN" REAL TIME NETWORK. ALL ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD88.

FLOOD ZONE

THIS PROJECT APPEARS TO BE LOCATED WITHIN FLOOD ZONE "D", ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP(S), MAP ID #06085C0259H, DATED 05/18/2009.

UTILITY NOTES

SURVEYOR DOES NOT GUARANTEE THAT ALL UTILITIES ARE SHOWN OR THEIR LOCATIONS ARE DEFINITE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND DEVELOPER TO CONTACT 811 AND ANY OTHER INVOLVED AGENCIES TO LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. REMOVAL, RELOCATION AND/OR REPLACEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.

SURVEYOR'S NOTES

SURVEYOR HAS NOT PERFORMED A SEARCH OF PUBLIC RECORDS TO DETERMINE ANY DEFECT IN TITLE ISSUED.

THE BOUNDARY SHOWN HEREON IS PLOTTED FROM RECORD INFORMATION AND DOES NOT CONSTITUTE A BOUNDARY SURVEY OF THE PROPERTY. ALL DISTANCES SHOWN HEREON ARE GRID DISTANCES. CONTOURS DERIVED FROM DIRECT FIELD OBSERVATIONS AND FOLLOWS THE CURRENT NATIONAL MAP STANDARDS FOR VERTICAL ACCURACY.

LESSOR LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF SANTA CLARA, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

PARCEL ONE:

BEING A PART OF YERBA BUENA RANCHO, IN SAID COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, AND BOUNDED BY BEGINNING AT THE NORTHEAST CORNER OF THE TIM MCCARTY'S TRACT, 20 FEET SOUTH OF HART'S NORTHERN BOUNDARY LINE, THENCE NORTH 79 1/4' EAST 50.55 CHAINS TO A STAKE; THENCE SOUTH 10' 40' EAST 29.18 CHAINS TO A STAKE; THENCE WESTERLY BY A LINE PARALLEL TO HART'S NORTHERN LINE 50.55 CHAINS TO NORTHEAST CORNER OF THE TIM MCCARTY'S TRACT; THENCE NORTH 10 1/2' WEST 29.18 CHAINS TO THE PLACE OF BEGINNING.

PARCEL TWO:

ALSO THAT OTHER PIECE AND PARCEL OF LAND DESCRIBED AS FOLLOWS, TO WIT: BEING PART OF RANCHO YERBA BUENA AND WITHIN THE BOUNDARIES OF THE LAND CONVEYED BY ANTONIO CHABOLLA TO ROBERT HALEY, AND BOUNDED BY BEGINNING AT THE NORTHWEST CORNER OF THE LAND CONVEYED BY SAID HART TO SIMON DONOVAN; THENCE NORTHERLY 20 FEET TO HART'S NORTHERN BOUNDARY LINE; THENCE EASTERLY ALONG THE SAID NORTHERN BOUNDARY LINE OF HART'S TRACT OF LAND TO THE NORTHWEST CORNER OF THE LAND CONVEYED BY HART TO JEREMIA AND PATRICK KELLEHER; THENCE SOUTHERLY 20 FEET TO THE NORTHEAST CORNER OF THE LAND HERETOFORE CONVEYED BY HART TO SAID DONOVAN; THENCE WESTERLY ALONG THE NORTHERN BOUNDARY LINE OF THE DONOVAN TRACT TO THE PLACE OF BEGINNING, BEING THE SAME PREMISES CONVEYED TO ONE RENSSALER HOARD BY DEED BEARING DATE JUNE 15, A.D. 1874, BY ONE JAMES DUFIELD AND RECORDED IN BOOK 32 OF DEEDS, PAGE 334, AND FOLLOWING RECORDS OF THE SANTA CLARA COUNTY.

EXCEPTING FROM PARCELS ONE AND TWO, THAT CERTAIN PARCEL OF LAND DESCRIBED IN THE DEED DATED AUGUST 1, 1961 FROM LLOYD L. EDWARDS AND LELA EDWARDS, HIS WIFE, TO PAUL KERNOFF, ET AL, RECORDED AUGUST 11, 1961 IN BOOK 5261 OF OFFICIAL RECORDS, PAGE 162, AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON PIPE AT THE POINT OF INTERSECTION OF THE NORTHERLY LINE OF FOWLER ROAD (40.00 FEET WIDE) WITH THE EASTERLY LINE OF THAT CERTAIN PARCEL OF LAND DESCRIBED IN THE DEED FROM JUSTINE MIRASSOU TO MIRASSOU VINEYARDS RECORDED ON JUNE 8, 1955 IN BOOK 3193 OFFICIAL RECORDS, PAGE 642, SANTA CLARA COUNTY RECORDS; THENCE NORTH 10' 45' WEST ALONG THE EASTERLY LINE OF THE LAND SO DESCRIBED IN SAID DEED TO MIRASSOU VINEYARDS 1920.73 FEET TO AN IRON PIPE, ON THE SOUTHERLY LINE OF ABORN ROAD (40.00 FEET WIDE); THENCE NORTH 79° 15' EAST ALONG SAID LAST NAMED LINE 1624.06 FEET TO AN IRON PIPE;

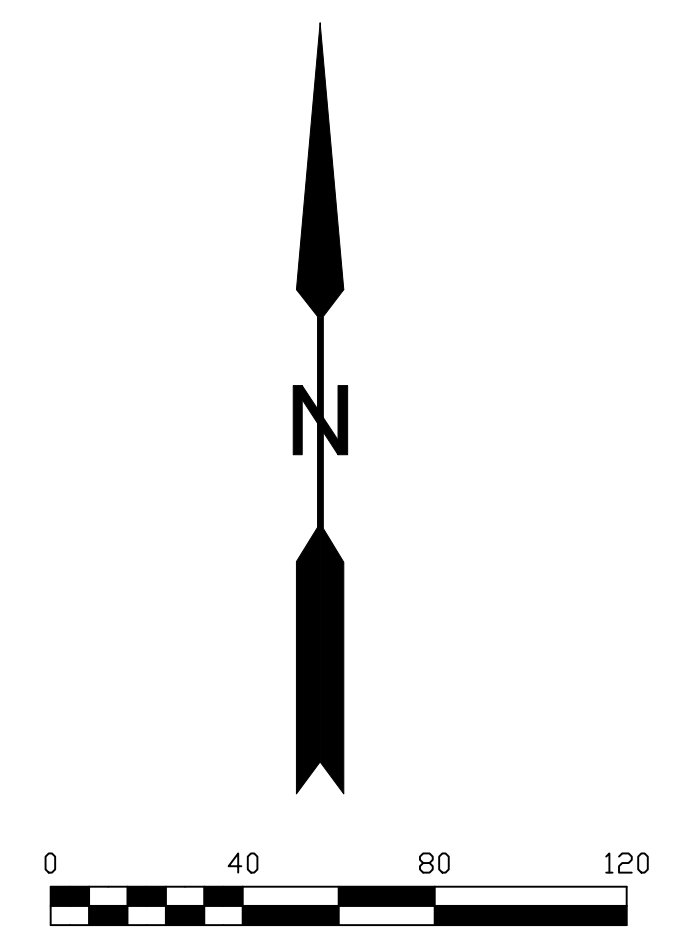
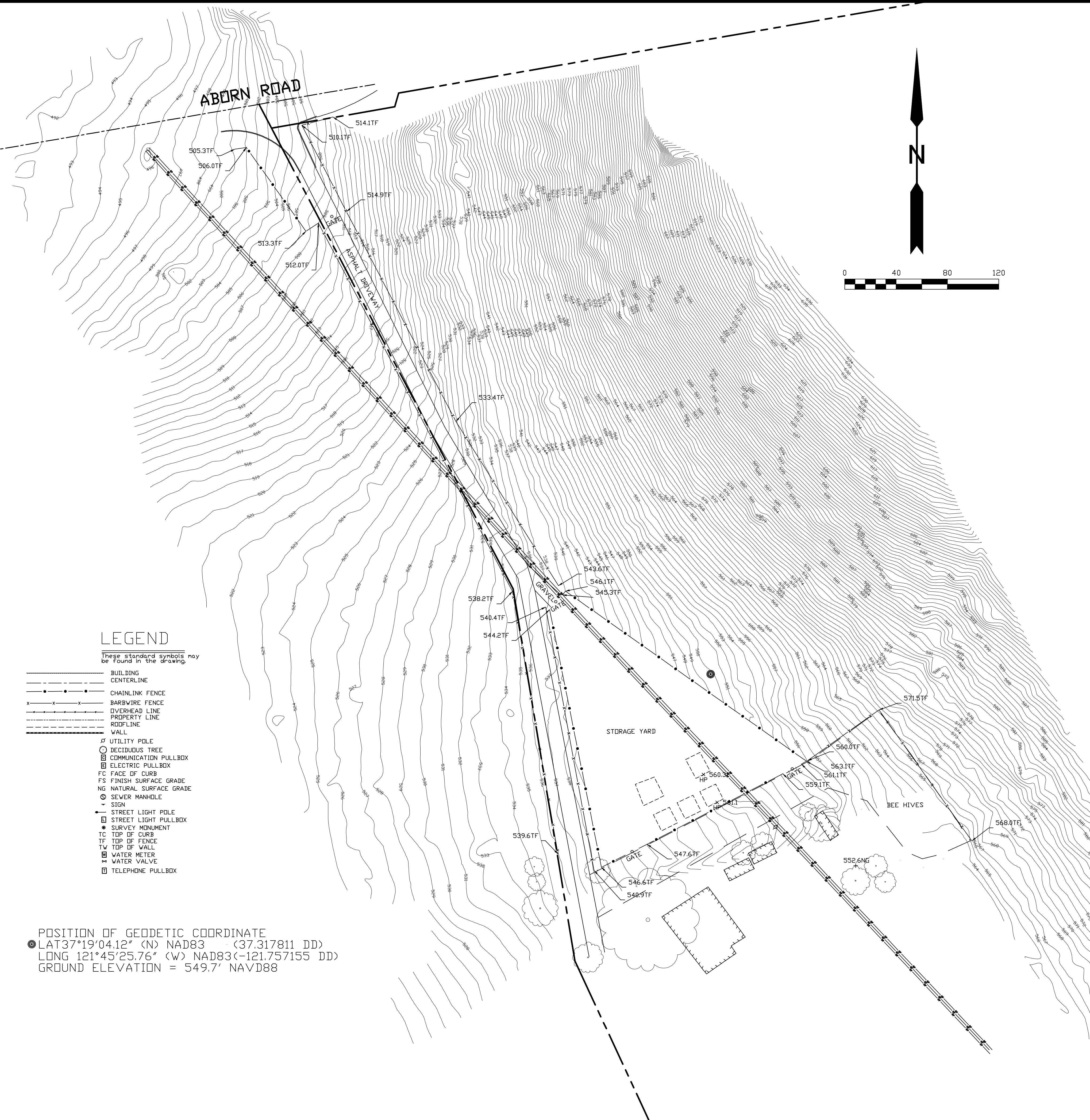
THENCE LEAVING SAID LINE OF ABORN ROAD SOUTH 28° 35' EAST 405.40 FEET TO AN IRON PIPE; THENCE SOUTH 10° 21' 30" EAST 293.89 FEET TO AN IRON PIPE; THENCE SOUTH 25° 48' EAST 253.16 FEET TO AN IRON PIPE; THENCE NORTH 72° 33' EAST 274.76 FEET TO AN IRON PIPE, AND SOUTH 52° 10' 30" EAST 1381.86 FEET TO AN IRON PIPE ON THE SAID NORTHERLY LINE OF FOWLER ROAD; THENCE ALONG SAID LAST NAMED LINE SOUTH 89° 05' WEST 44.77 FEET TO AN IRON PIPE AND SOUTH 79° 15' WEST 2955.00 FEET TO THE POINT OF BEGINNING AND AS SHOWN UPON THAT CERTAIN MAP ENTITLED "RECORD OF SURVEY OF THE LANDS OF L.L. EDWARDS", WHICH MAP WAS FILED FOR RECORD IN THE OFFICE OF THE RECORDER OF THE COUNTY OF SANTA CLARA, STATE OF CALIFORNIA, ON JULY 21, 1961 IN BOOK 135 OF MAPS, PAGE 36.

PARCEL ID: 659-02-011

EASEMENT & RESTRICTION(S) & MISCELLANEOUS ITEMS

- SUBJECT TO RESTRICTIONS, SETBACK LINES, RIGHT OF WAYS, TERMS, PROVISIONS, NOTES, AND EASEMENTS AS SET FORTH IN PLAT AND ANY AND ALL SUBSEQUENT AMENDMENTS THERETO.
- DEGREE ALLOWING AGREED UPON COMPENSATION AND FINAL DISTRIBUTION RECORDED ON 01/31/1990 IN BOOK/PAGE: L245/88

PREPARED USING FIDELITY NATIONAL TITLE'S TITLE REPORT #CA1098789 DATED 08/26/2021;



LEGEND
These standard symbols may be found in the drawing.

| | |
|--|-----------------------|
| | BUILDING |
| | CENTERLINE |
| | CHAINLINK FENCE |
| | BARBWIRE FENCE |
| | OVERHEAD LINE |
| | PROPERTY LINE |
| | ROOFLINE |
| | WALL |
| | UTILITY POLE |
| | DECIDUOUS TREE |
| | COMMUNICATION PULLBOX |
| | ELECTRIC PULLBOX |
| | FACE OF CURB |
| | FINISH SURFACE GRADE |
| | NATURAL SURFACE GRADE |
| | SEWER MANHOLE |
| | SIGN |
| | STREET LIGHT POLE |
| | STREET LIGHT PULLBOX |
| | SURVEY MONUMENT |
| | TOP OF CURB |
| | TOP OF FENCE |
| | TOP OF WALL |
| | WATER METER |
| | WATER VALVE |
| | TELEPHONE PULLBOX |

POSITION OF GEODETIC COORDINATE
 • LAT 37°19'04.12" (N) NAD83 (37.317811 DD)
 • LONG 121°45'25.76" (W) NAD83 (-121.757155 DD)
 • GROUND ELEVATION = 549.7' NAVD88

dish
wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

Eaton Land
Surveying, Inc.
15604 Magnolia Rd.
Grass Valley, CA. 95949
Ph. 530.830.0038

| | |
|-------------|----|
| DRAWN BY: | HE |
| CHECKED BY: | SE |

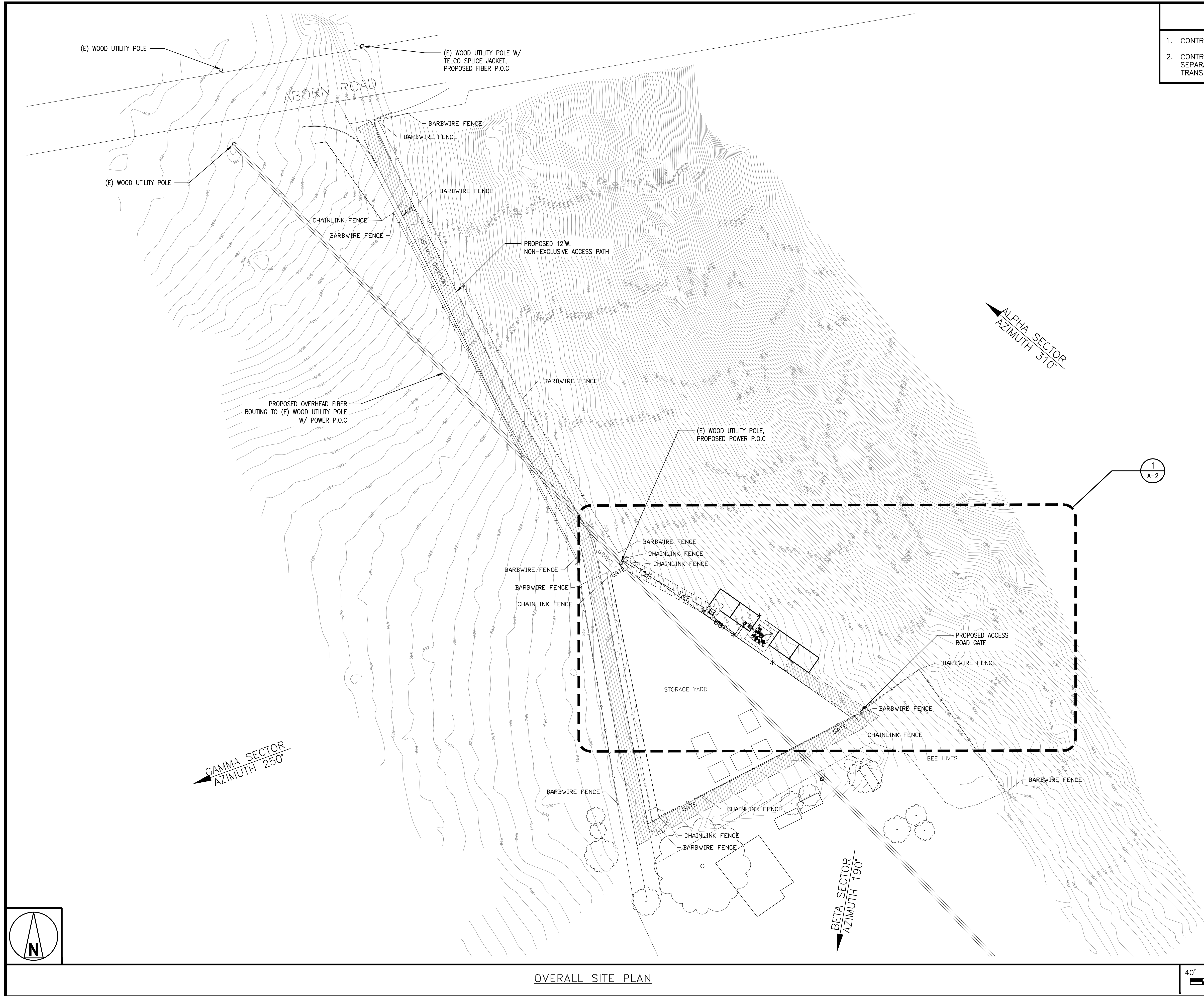
| REVISIONS: | | |
|------------|----------|------------------|
| REV | DATE | DESCRIPTION |
| 1 | 12/23/21 | TOWER RELOCATION |
| 0 | 11/22/21 | SUBMITTAL |

LICENSED LAND SURVEYOR
 SHAWN M. EATON
 #8644
 STATE OF CALIFORNIA
 EXP. 12/31/2021


PROJECT INFORMATION:
SFSFO00005A
 3830 ABORN RD.
 SAN JOSE, CA. 95135
 SANTA CLARA COUNTY

SHEET TITLE:
SITE SURVEY


SHEET NUMBER:
LS-1




- NOTES**
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
 2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.




5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120




5944 LUTHER LANE, SUITE 725
DALLAS, TX 75225



1511 E. ORANGETHORPE AVE., SUITE D
FULLERTON, CA 92831



22431 ANTONIO PKWY
SUITE B160-131
RANCHO SANTA MARGARITA CA 92688
dconnell@connelldesigngroup.com
949-306-4644



REGISTERED PROFESSIONAL ENGINEER
DANIEL MICHAEL CONNELL
NO. 62543
EXP. 12/31/23
CIVIL
STATE OF CALIFORNIA
DATE STAMPED: 01/12/2023

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| | | |
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| DRAWN BY: LE | CHECKED BY: JPC | APPROVED BY: DC |
|--------------|-----------------|-----------------|

RFDS REV #2 DATED 12/16/2021

CONSTRUCTION DOCUMENTS

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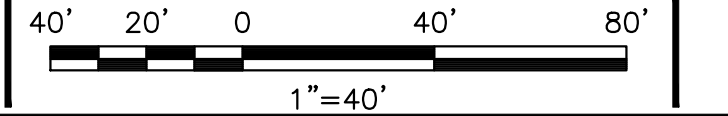
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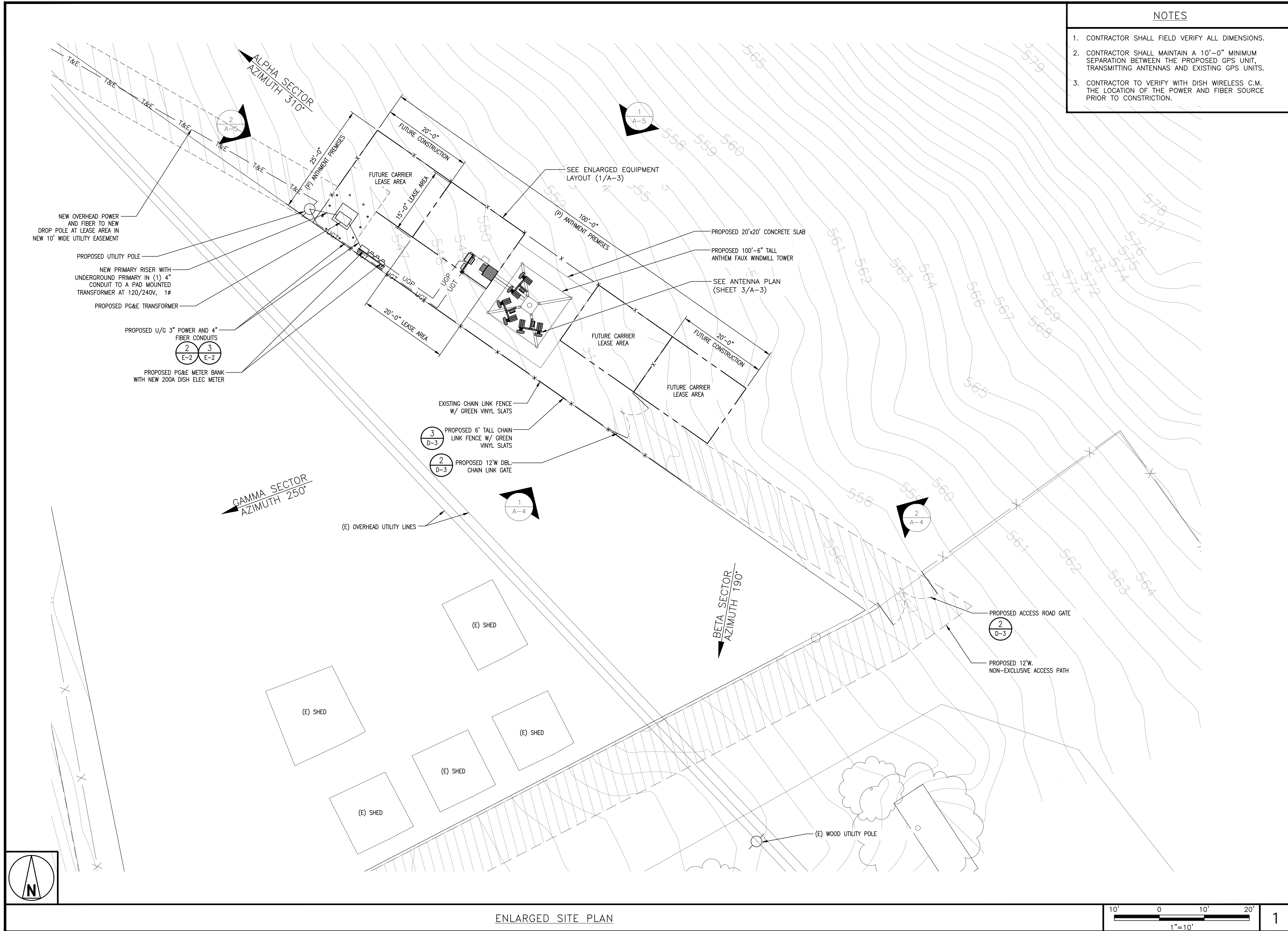
3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE
OVERALL SITE PLAN


SHEET NUMBER
A-1

OVERALL SITE PLAN







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dish WIRELESS
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120




ANTHEMNET
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DALLAS, TX 75225



BUTLER
America Telecom LLC
1511 E. ORANGETHORPE AVE., SUITE D
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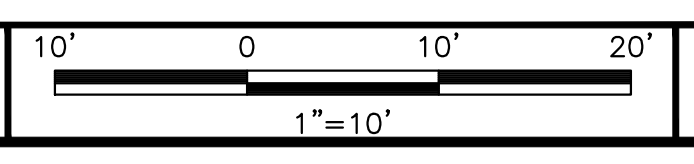
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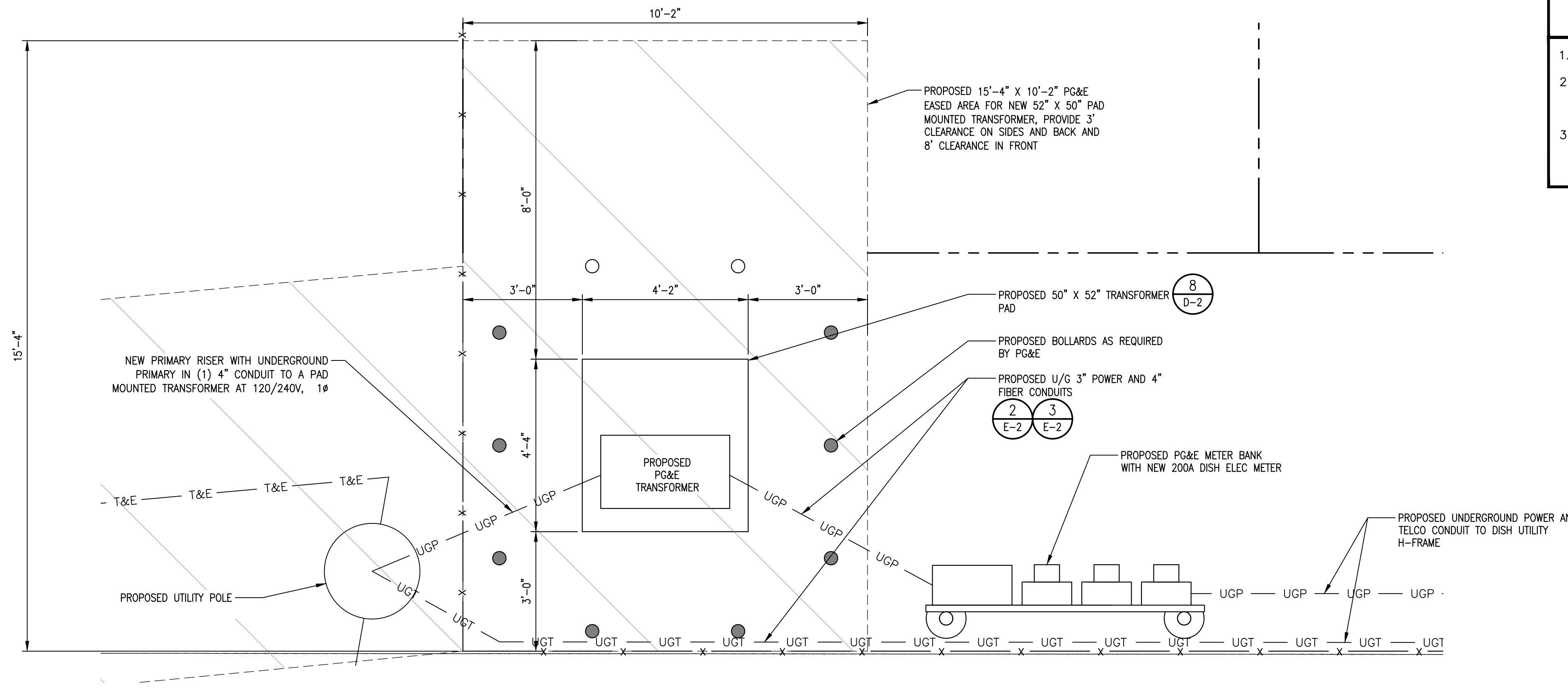
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SAN JOSE, CA 95135
WINDMILL TOWER**

SHEET TITLE
ENLARGED SITE PLAN

SHEET NUMBER
A-2

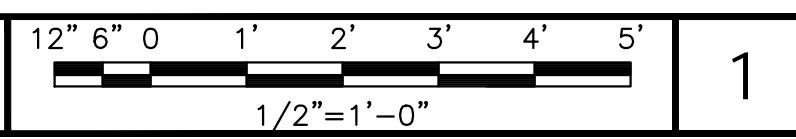
ENLARGED SITE PLAN



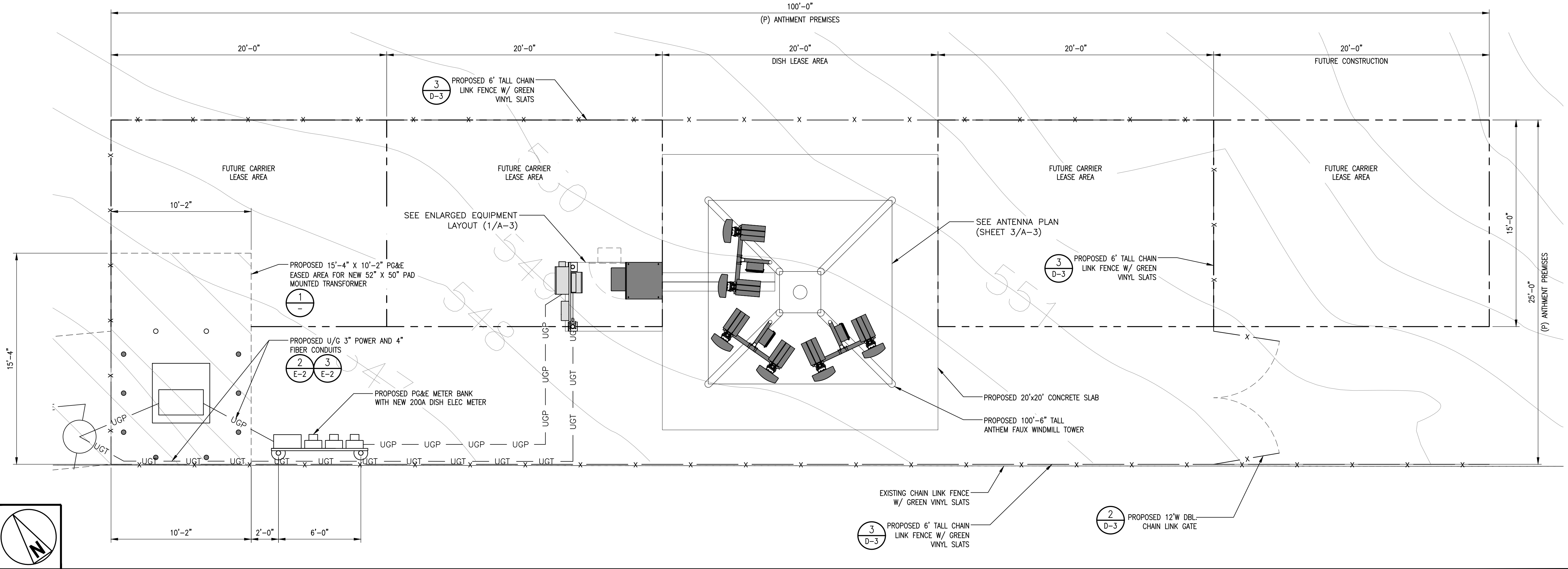


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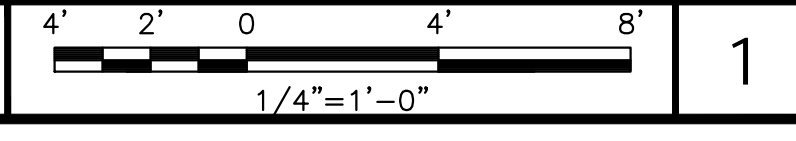
TRANSFORMER AREA PLAN



1



EQUIPMENT AREA PLAN



1



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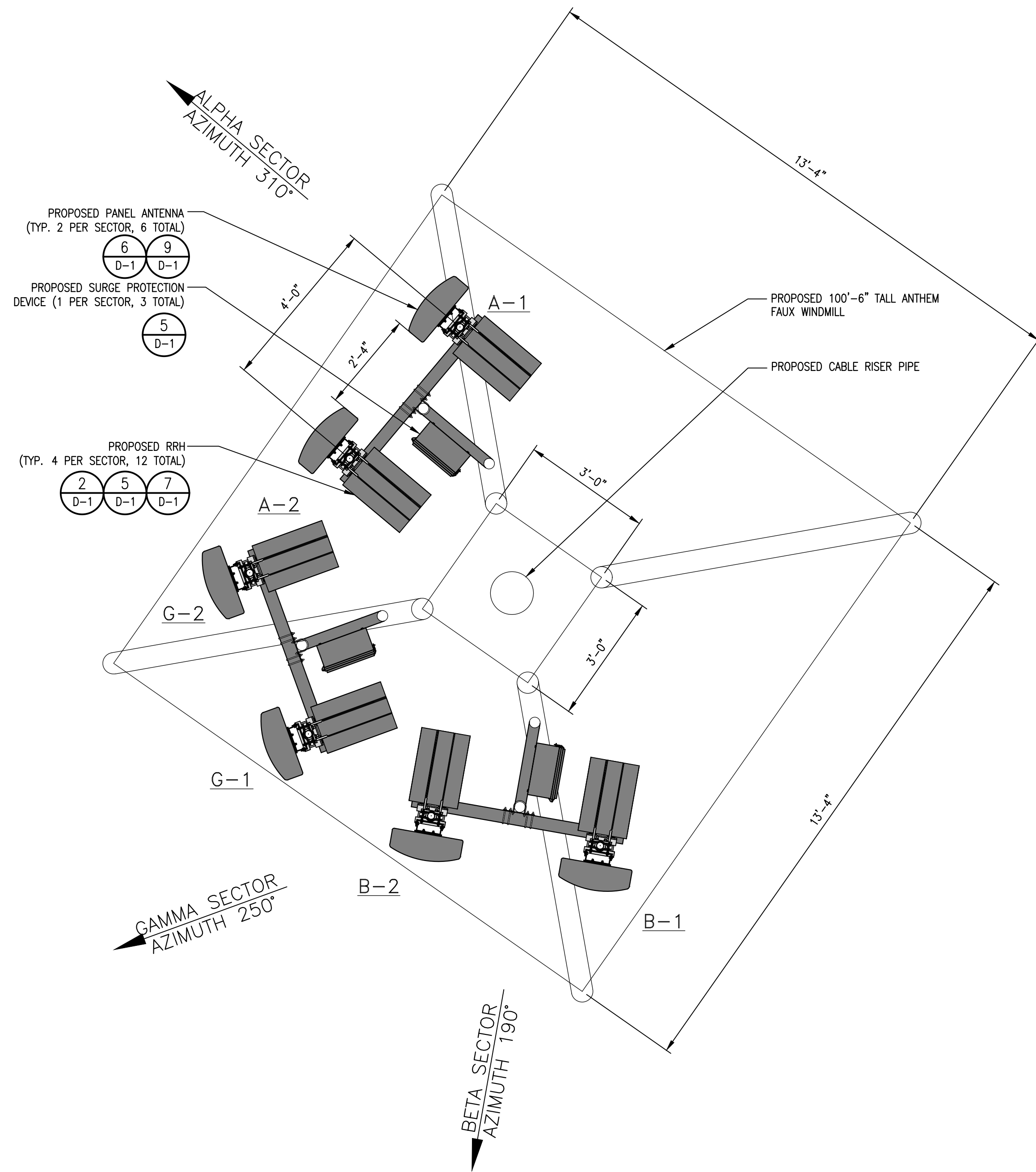
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SHEET TITLE
EQUIPMENT
AREA PLANS

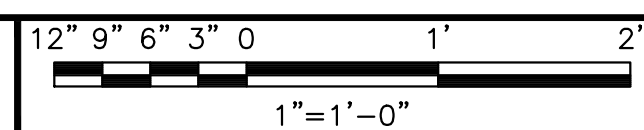
SHEET NUMBER
A-2.1

NOTES

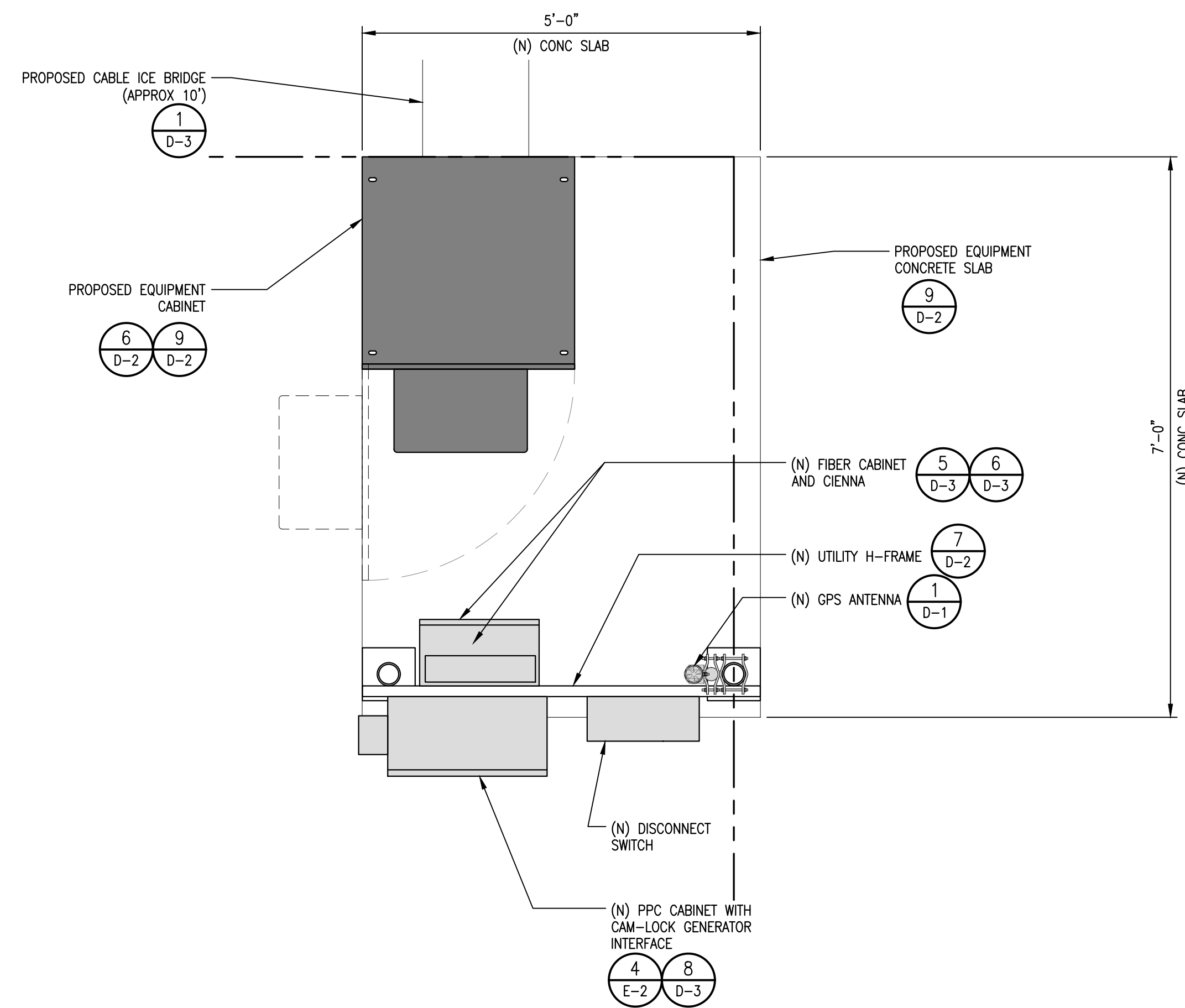
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
- ANTENNA AND MW DISH SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS



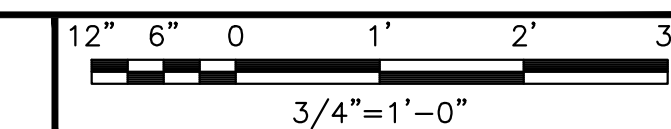
ANTENNA LAYOUT



3



EQUIPMENT LAYOUT



1

| SECTOR | ANTENNA | | | | | | RADIO | | |
|--------|----------|----------------------|---|---------|------------|--|----------|---|---|
| | POSITION | EXISTING OR PROPOSED | SIZE (HxWxD) | AZIMUTH | RAD CENTER | TRANSMISSION CABLE FEED LINE TYPE AND LENGTH | POSITION | SIZE (HxWxD) | TRANSMISSION CABLE FEED LINE TYPE AND LENGTH |
| ALPHA | A1 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 310° | 87'-0" | COAX JUMPERS (±6' LONG) | A1 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | (1) HIGH-CAPACITY HYBRID CABLE (110' LONG) |
| | A1 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 310° | 87'-0" | | A1 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |
| | A2 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 310° | 87'-0" | | A2 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | |
| | A2 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 310° | 87'-0" | | A2 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |
| BETA | B1 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 190° | 87'-0" | COAX JUMPERS (±6' LONG) | B1 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | (1) HIGH-CAPACITY HYBRID CABLE (110' LONG) |
| | B1 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 190° | 87'-0" | | B1 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |
| | B2 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 190° | 87'-0" | | B2 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | |
| | B2 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 190° | 87'-0" | | B2 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |
| GAMMA | C1 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 250° | 87'-0" | COAX JUMPERS (±6' LONG) | C1 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | (1) HIGH-CAPACITY HYBRID CABLE (110' LONG) |
| | C1 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 250° | 87'-0" | | C1 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |
| | C2 | PROPOSED | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 250° | 87'-0" | | C2 | SAMSUNG RF4450t-71A 16.5"x15.0"x11.02" | |
| | C2 | FUTURE | CCI OPA45R-TW6B 72.0" x 19.6" x 8.2" | 250° | 87'-0" | | C2 | SAMSUNG RF4451d-70A 15.0"x15.0"x8.9" | |

NOTES

- CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
- ANTENNA OR RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE 2



DATE STAMPED: 01/12/2023

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DRAWN BY: LE CHECKED BY: JPC APPROVED BY: DC

RFDS REV #2 DATED 12/16/2021

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(VENDOR) PROJECT NUMBER
SFSF00005A

DISH WIRELESS PROJECT NUMBER
SFSF00005A

3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

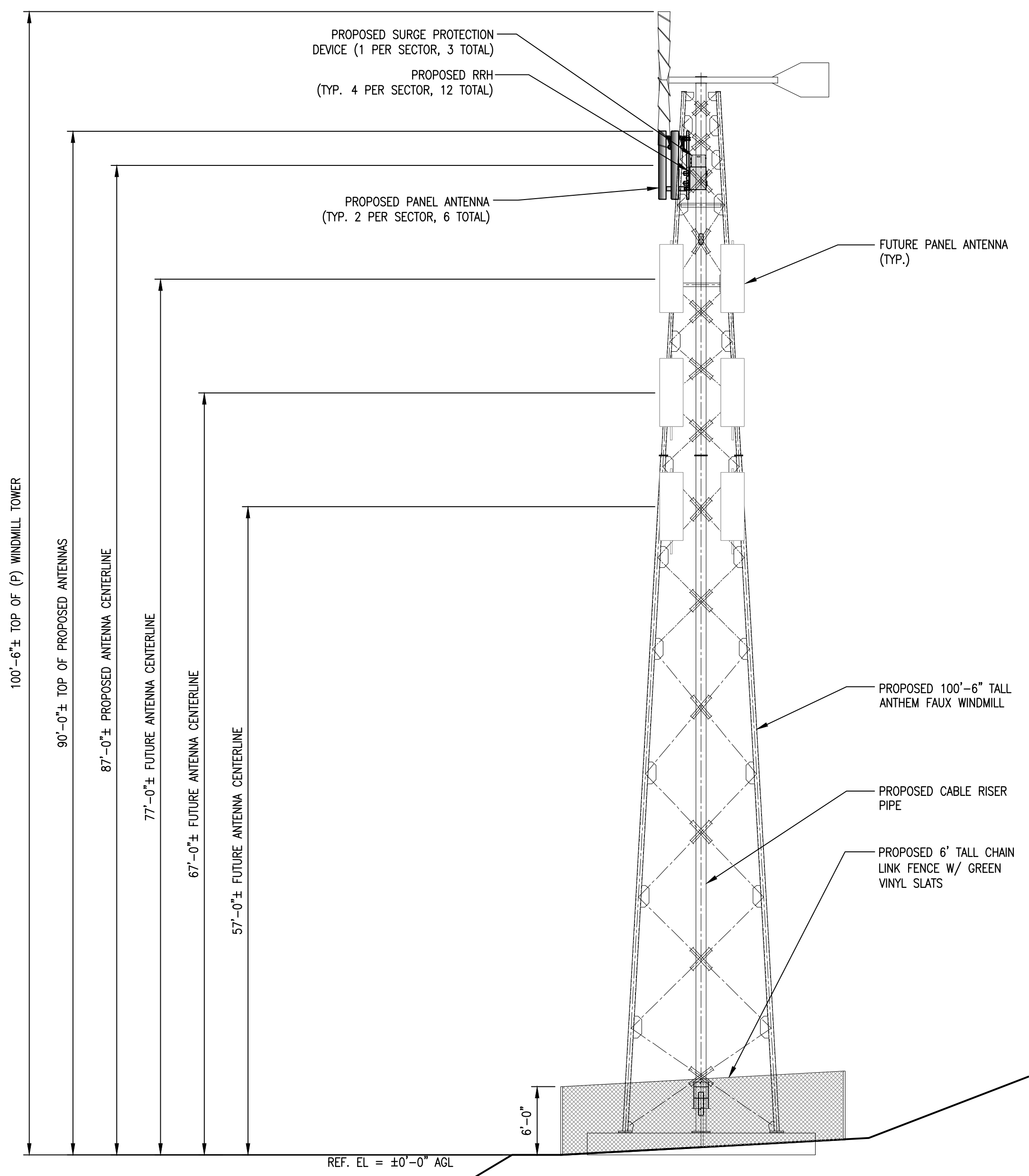
SHEET TITLE
EQUIP / ANTENNA PLANS,
AND SCHEDULE

SHEET NUMBER

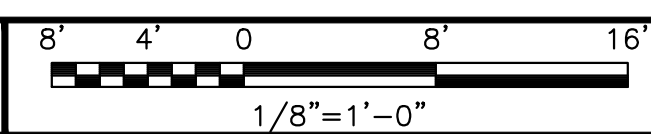
A-3

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.



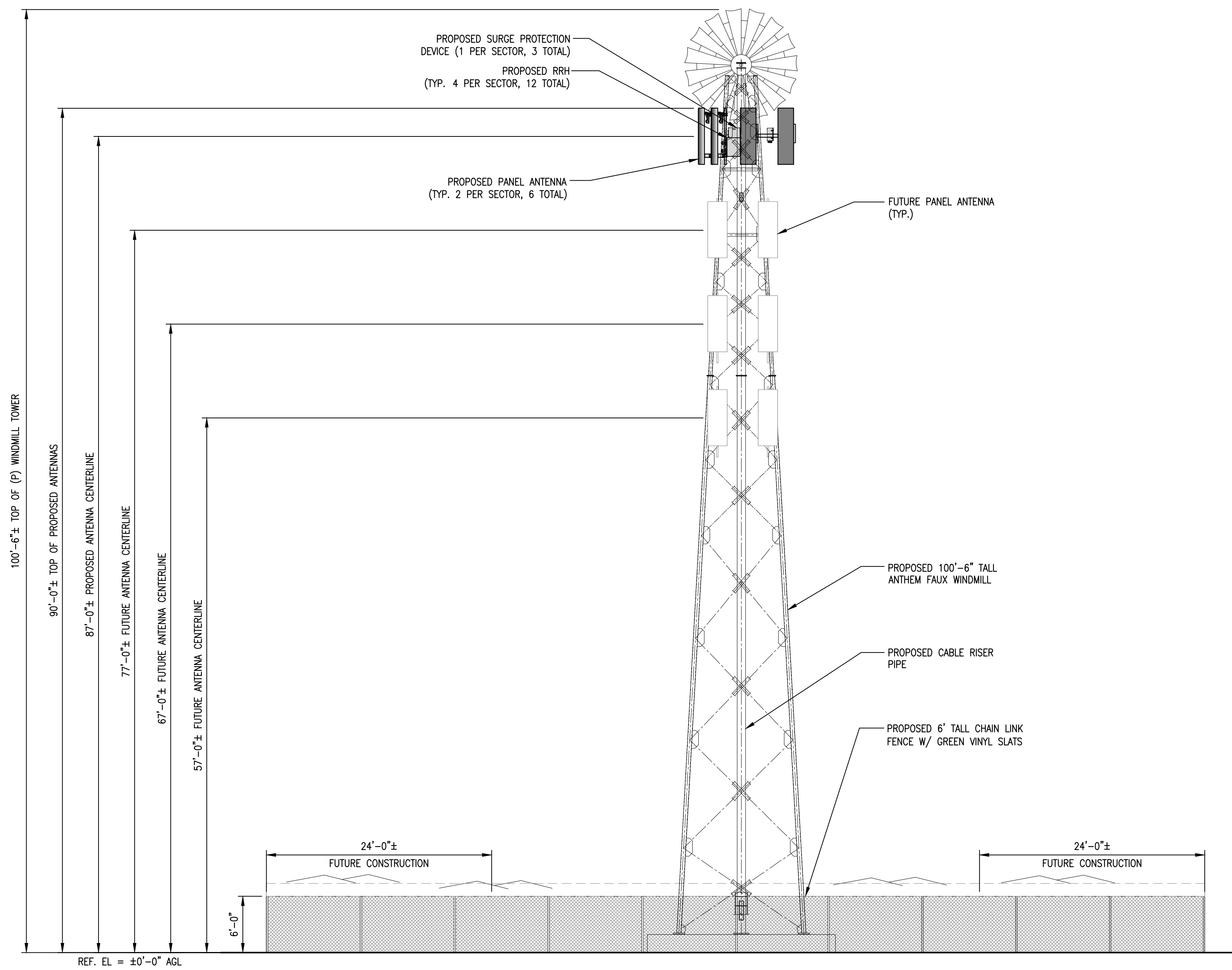
SOUTHEAST ELEVATION



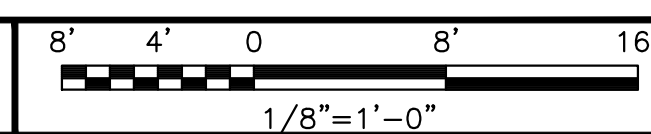
2

NOTES

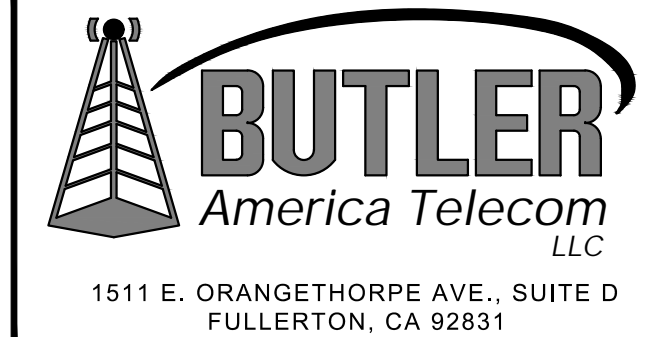
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2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.



SOUTHWEST ELEVATION



1



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DISH WIRELESS PROJECT NUMBER
SFSF00005A

3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

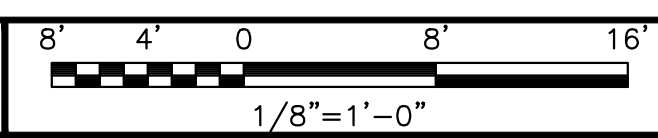
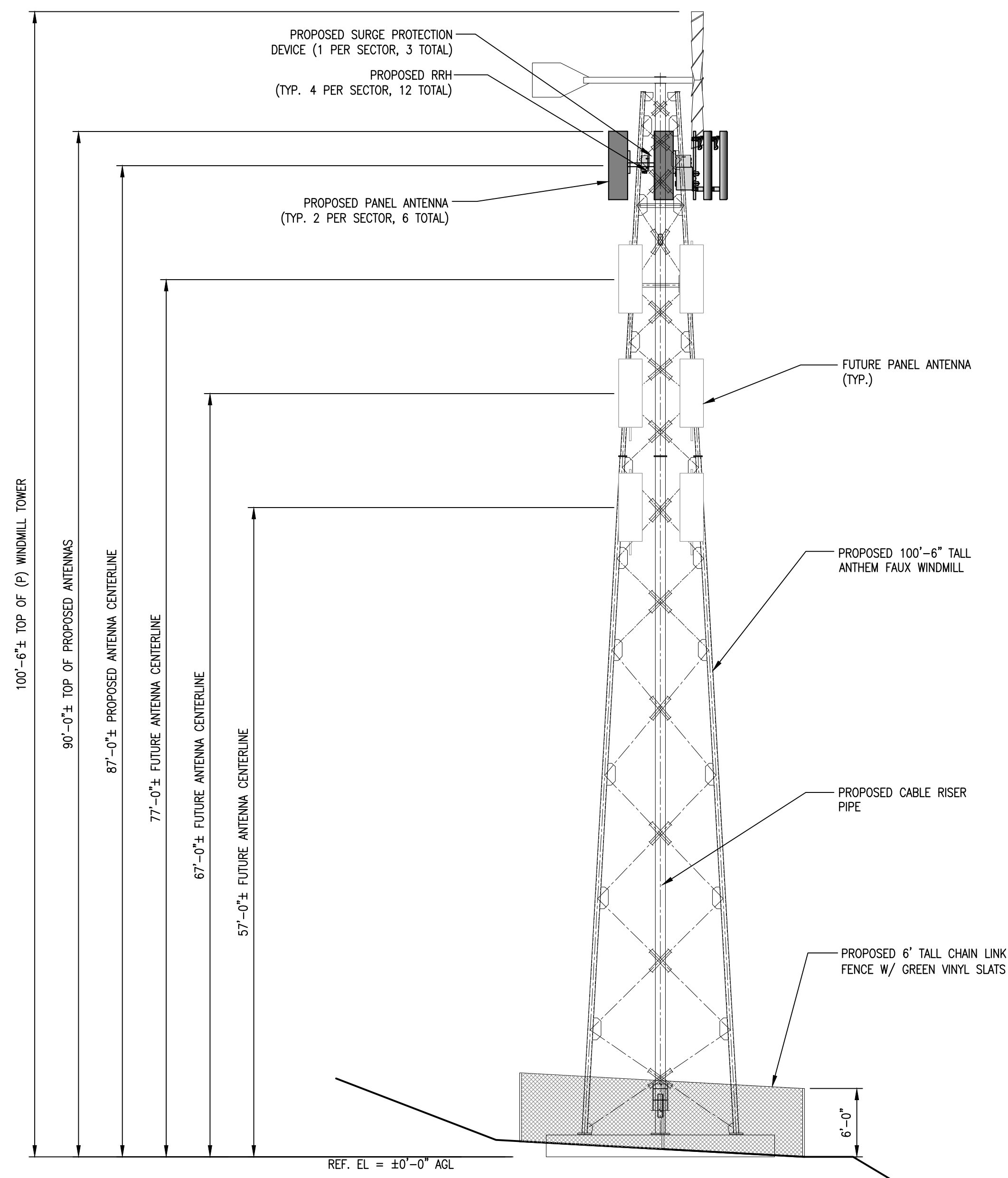
SHEET TITLE
ELEVATIONS

SHEET NUMBER

A-4

NOTES

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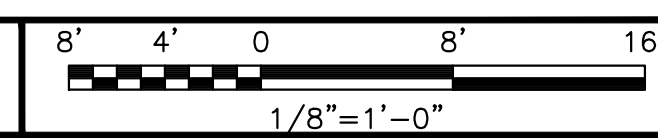
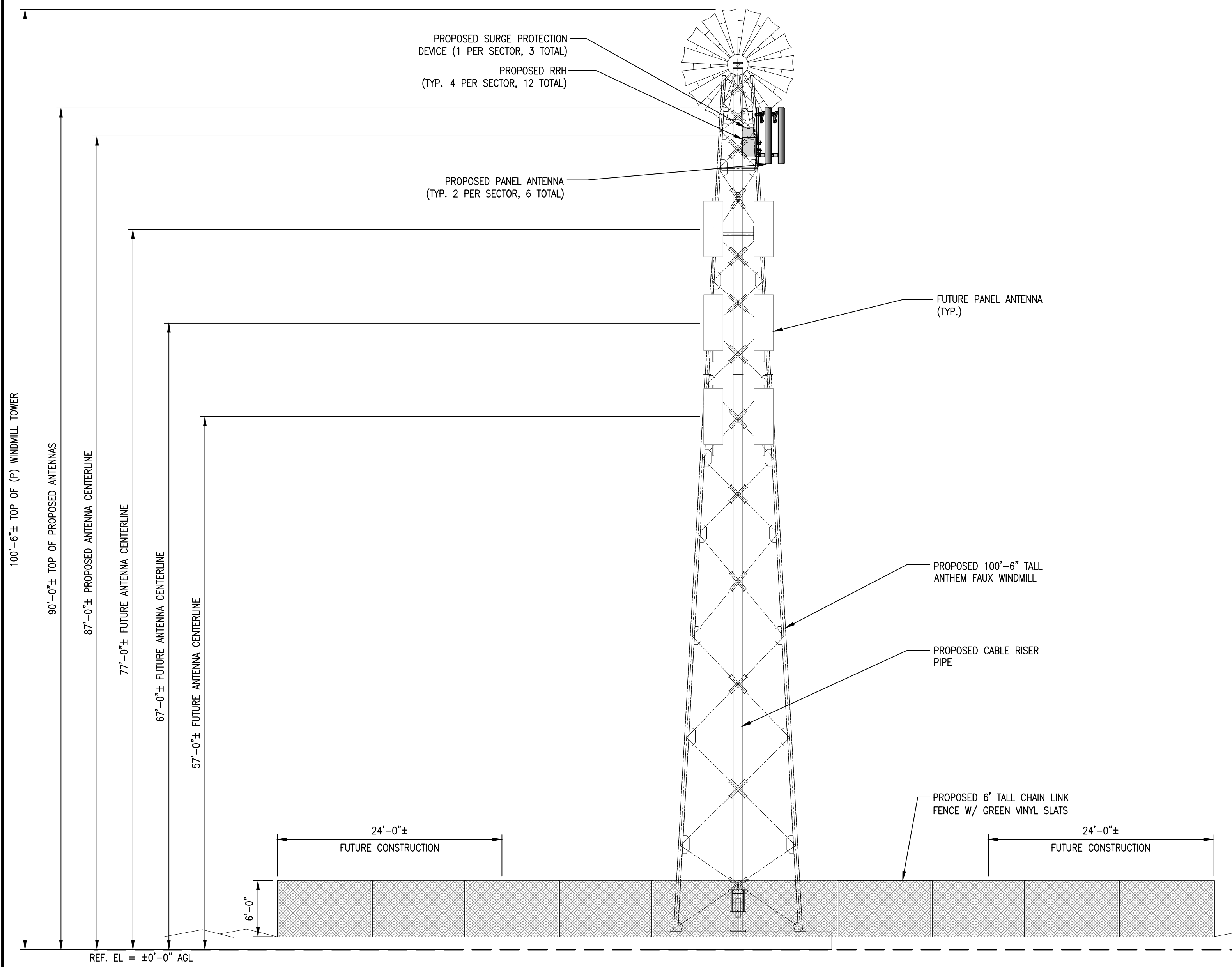


NORTHWEST ELEVATION

2

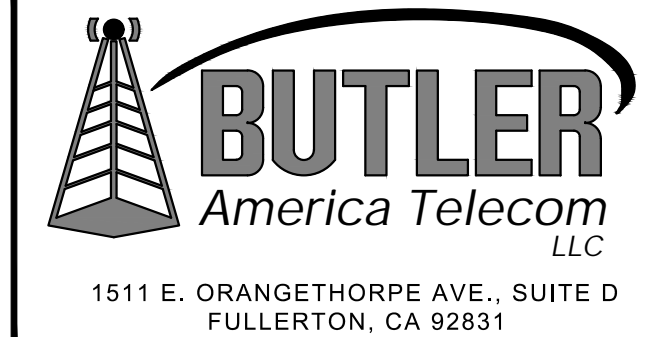
NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.



NORTHEAST ELEVATION

1



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SFSF00005A

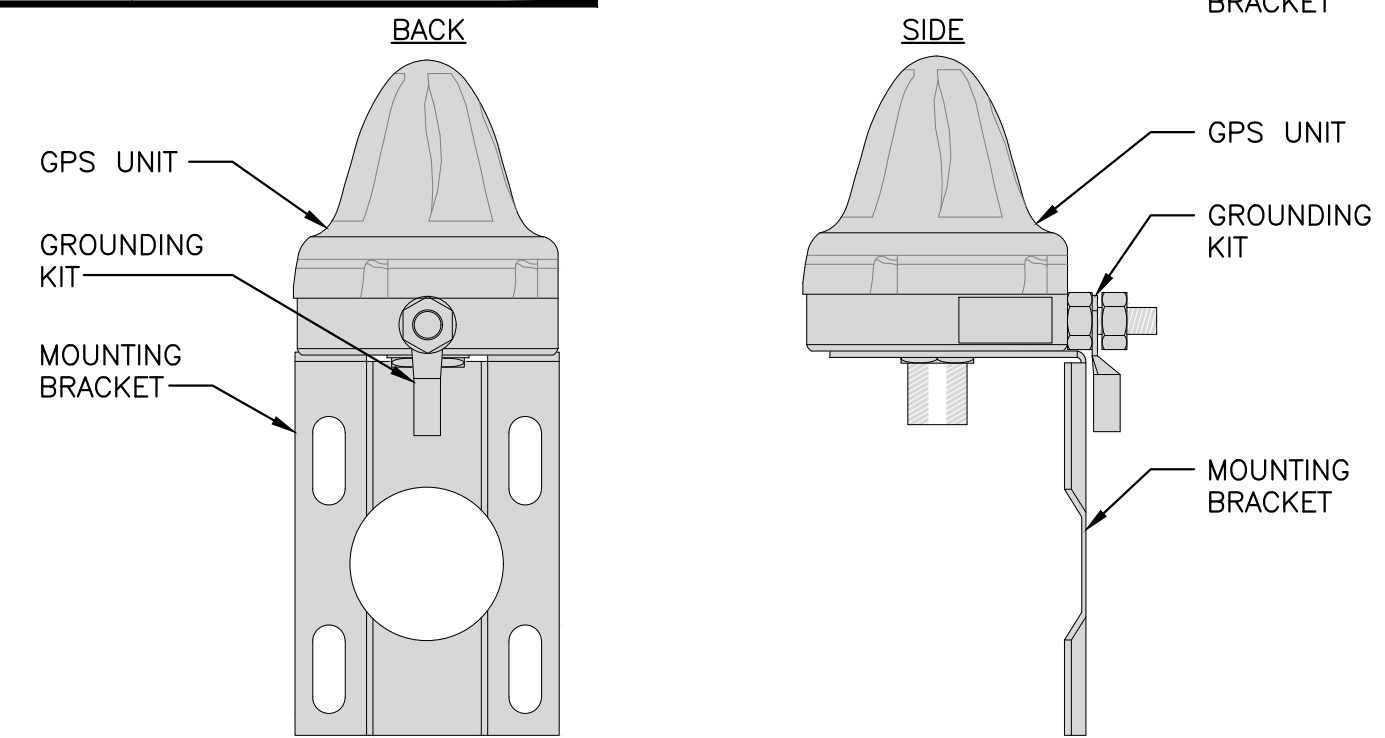
3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE
ELEVATIONS

SHEET NUMBER

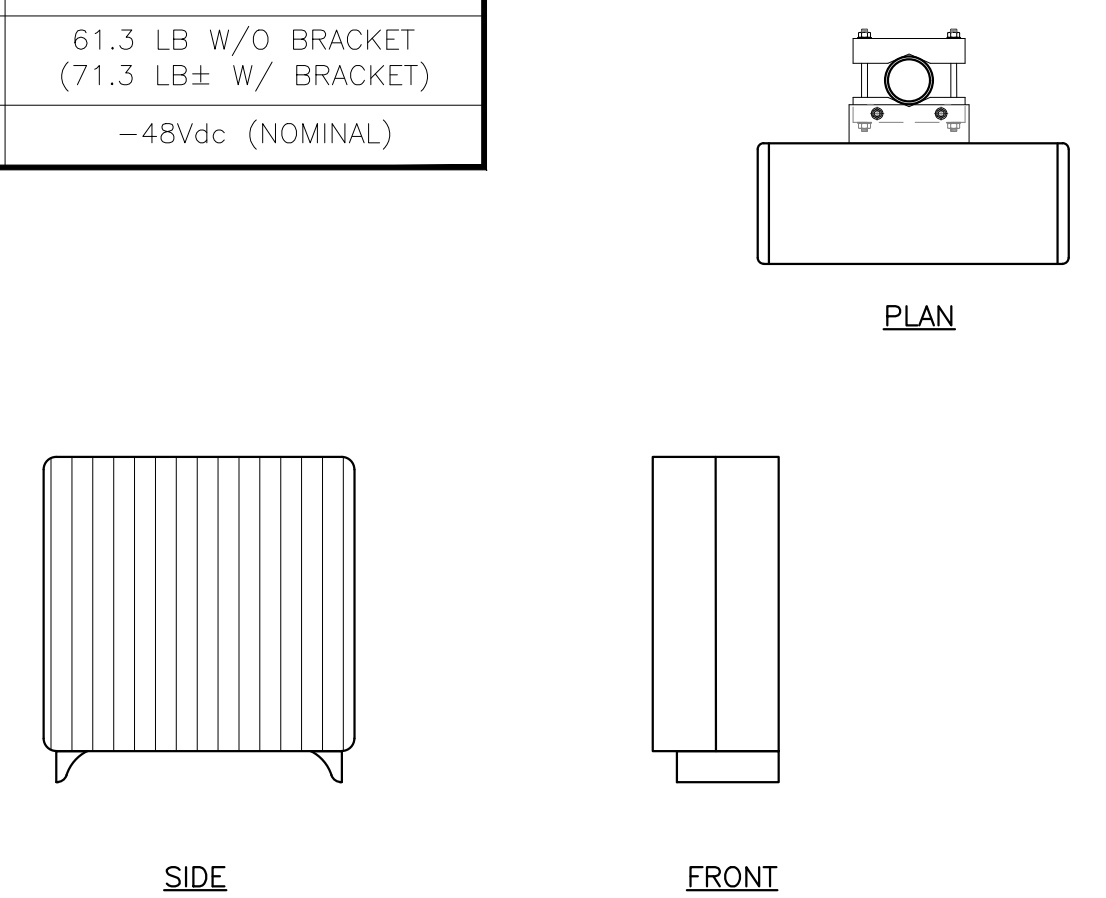
A-5

| ROSENBERGER GPSGLONASS-36-N-S | |
|----------------------------------|----------------------|
| DIMENSION (DIA x H) | 69mm x 98.5mm |
| WEIGHT (WITH ACCESSORIES) | 515.74g |
| CONNECTOR | N-FEMALE |
| FREQUENCY RANGE | 1559 MHz ~ 1610.5MHz |

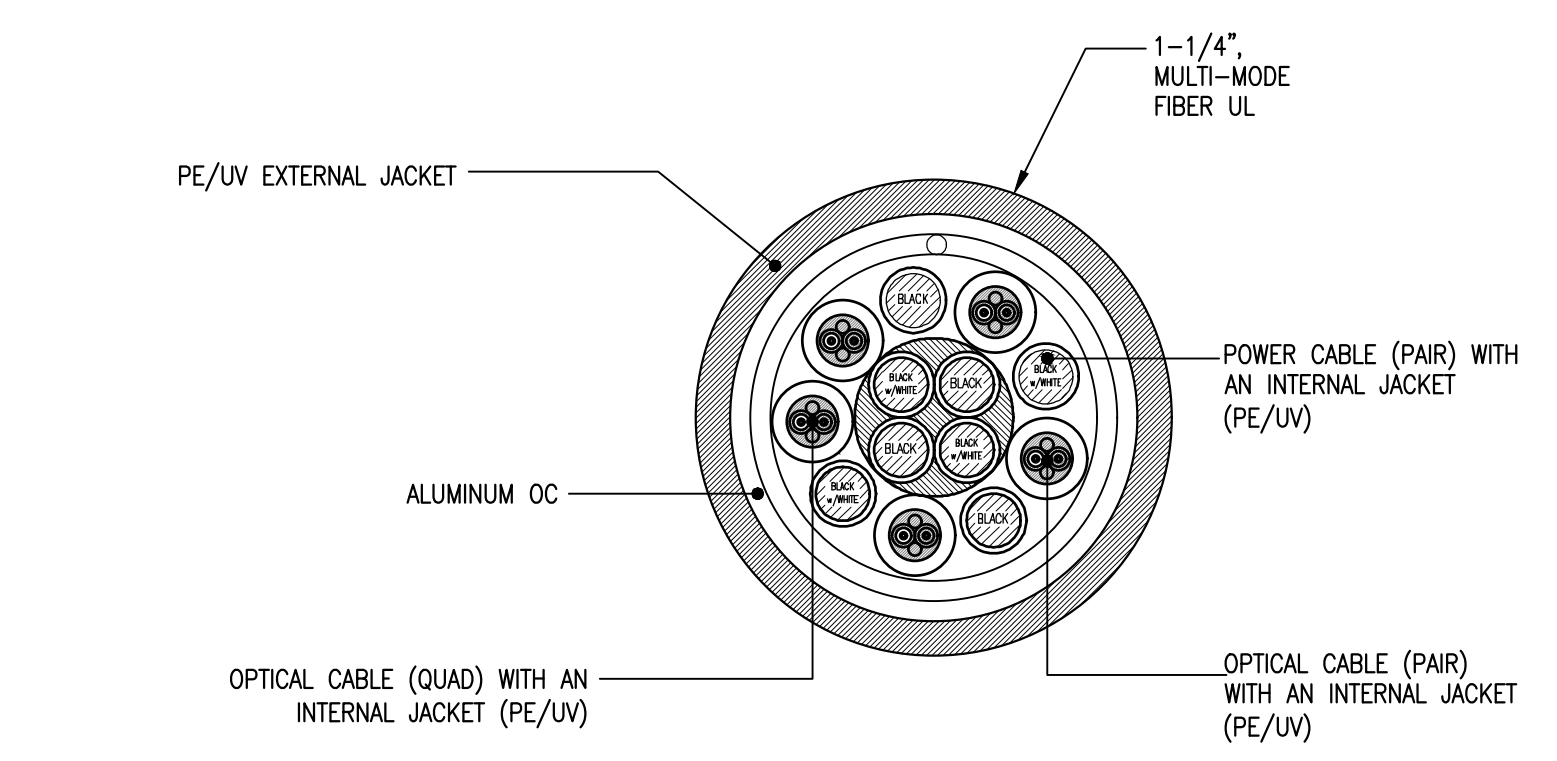


GPS ANTENNA DETAIL NO SCALE 1

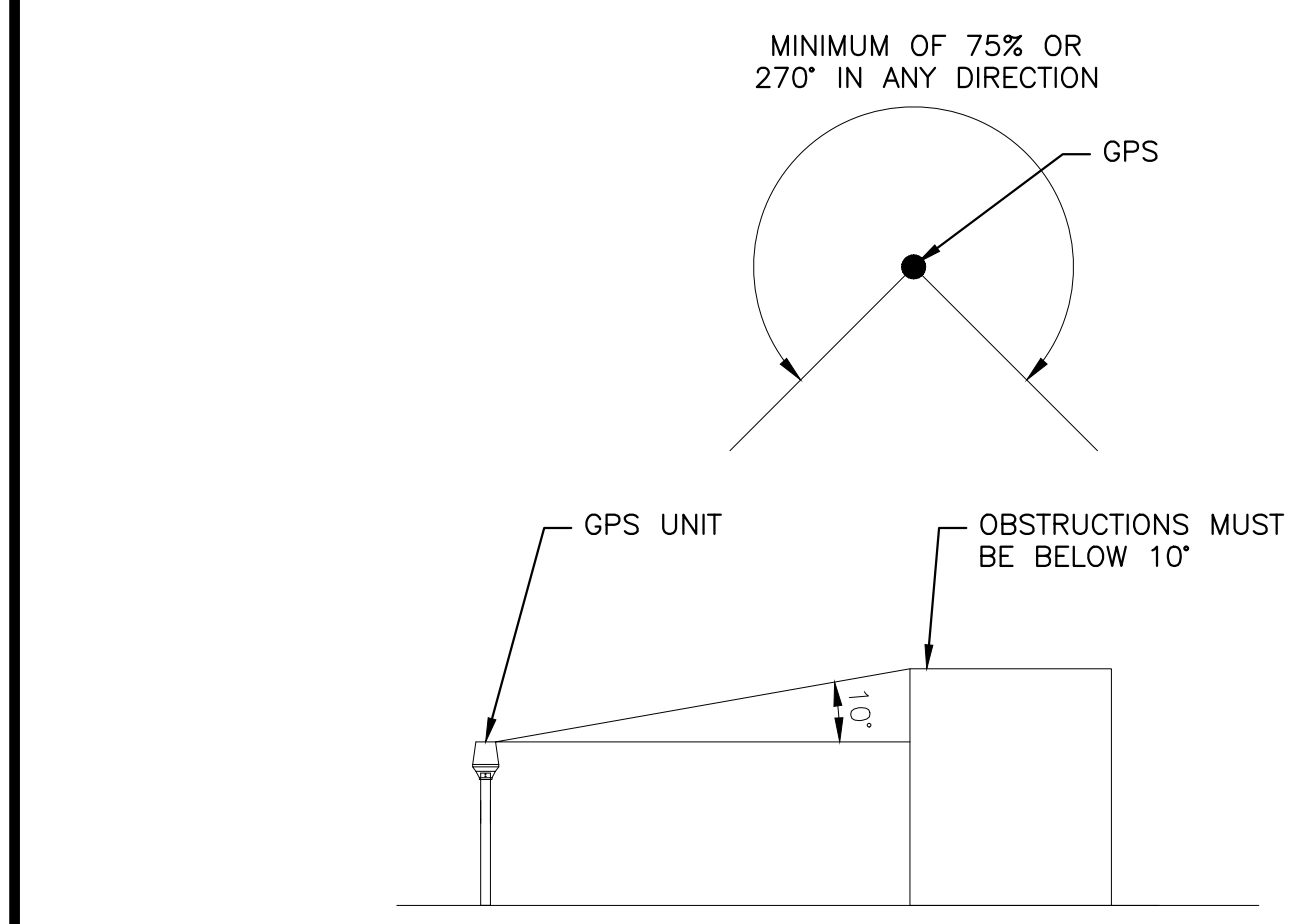
| SAMSUNG TRI BAND RU RF4450t-71A | |
|------------------------------------|---|
| DIMENSIONS (HxWxD) (IN) | 16.5"x15.0"x11.02" |
| TOTAL WEIGHT LB (LB W/ BRACKET) | 61.3 LB W/O BRACKET (71.3 LB± W/ BRACKET) |
| POWER SUPPLY VOLTAGE | -48Vdc (NOMINAL) |



REMOTE RADIO HEAD DETAIL NO SCALE 2

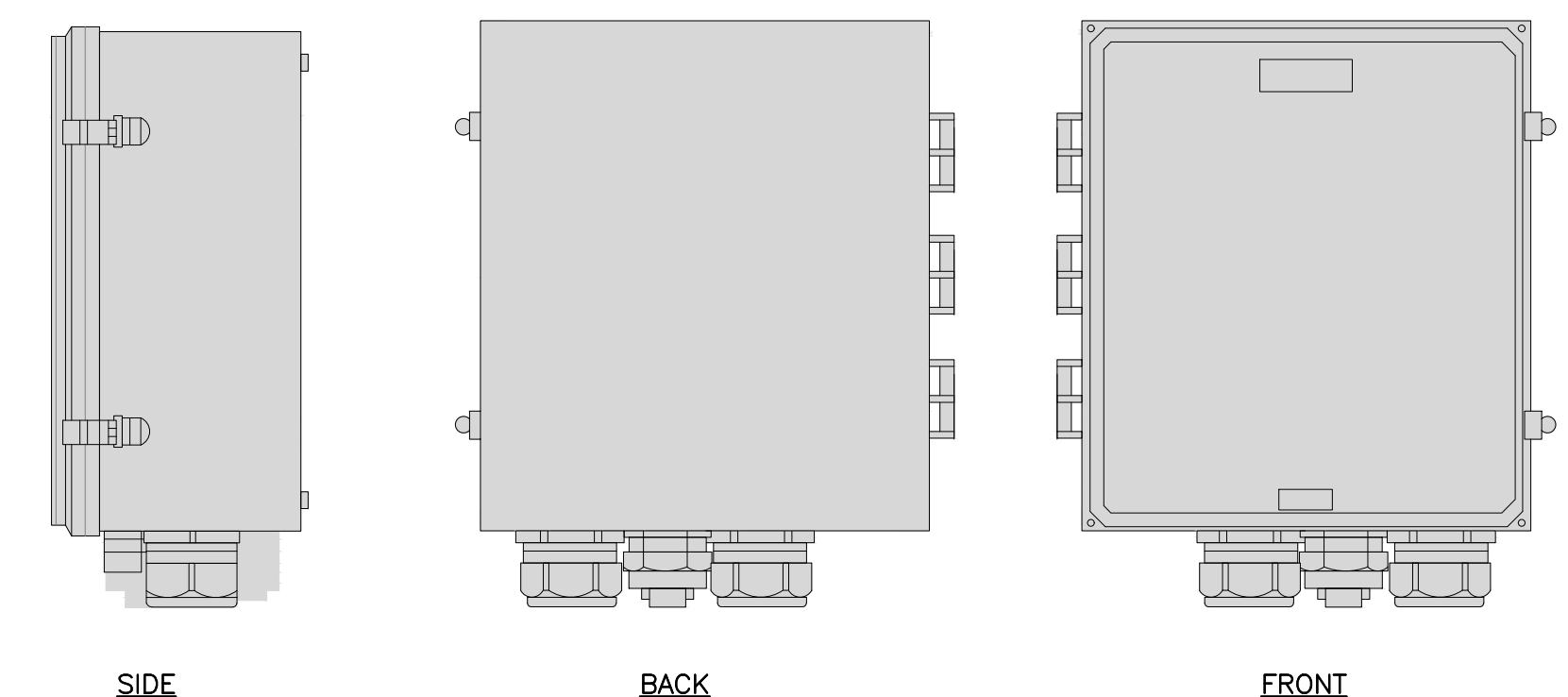


HYBRID CABLE DETAIL (FOR REFERENCE) NO SCALE 3



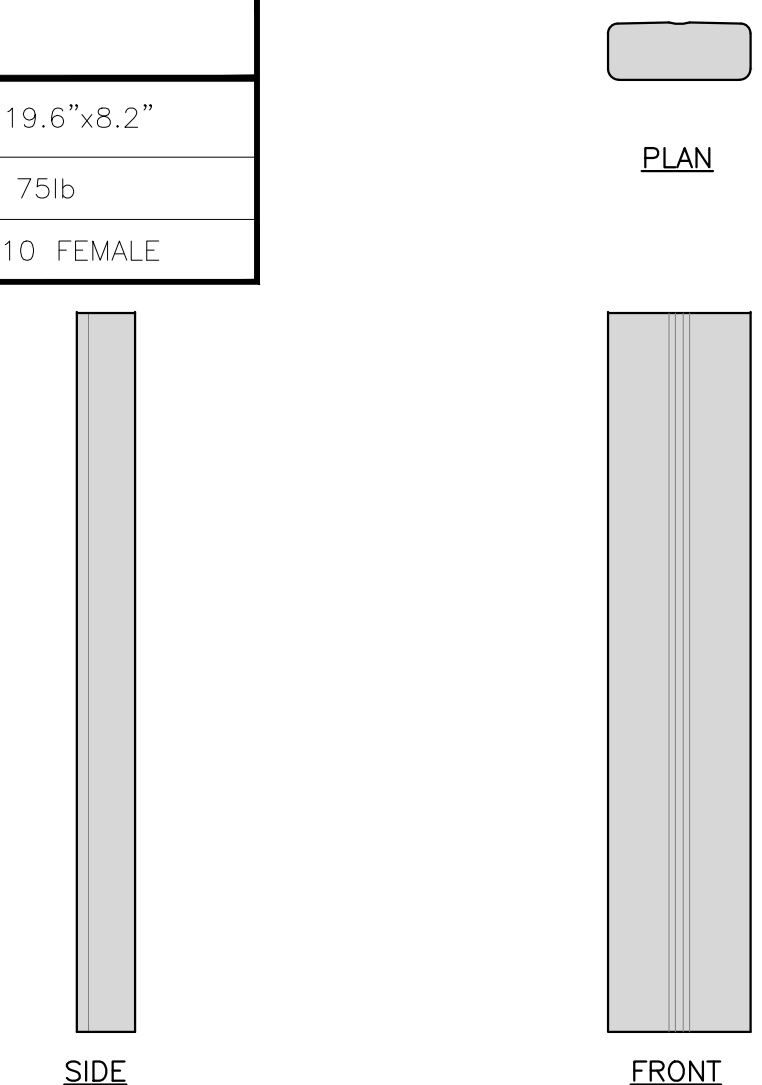
GPS MINIMUM SKY VIEW REQUIREMENTS NO SCALE 4

| RAYCAP RDIDC-9181-PF-48 SURGE PROTECTION DEVICE | |
|--|----------------|
| DIMENSIONS (HxWxD) | 16" X 14" X 8" |
| WEIGHT | 21.85 LBS |



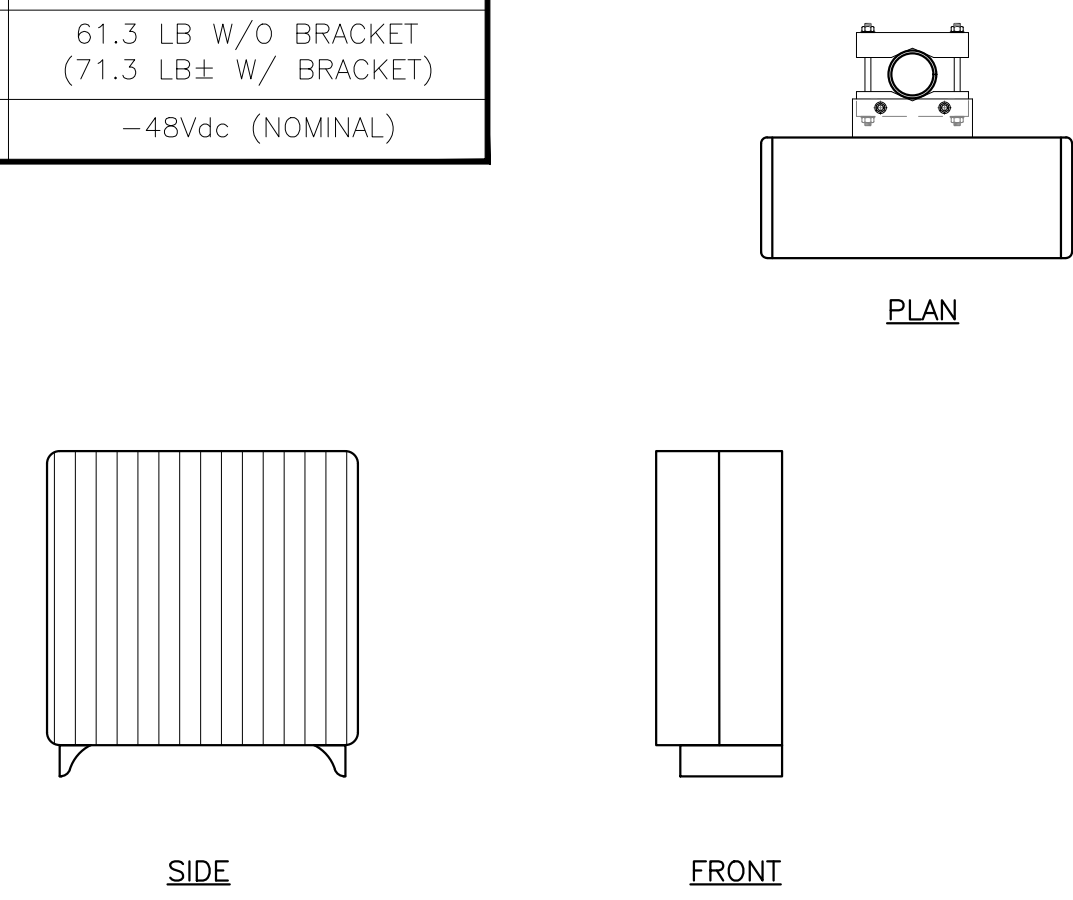
SURGE PROTECTION DEVICE DETAIL NO SCALE 5

| CCI OPA45RTW6B | |
|---------------------------|----------------|
| DIMENSIONS (HxWxD)(MM/IN) | 72"x19.6"x8.2" |
| TOTAL WEIGHT (kg/lb) | 75lb |
| RF CONNECTOR INTERFACE | 4.3-10 FEMALE |



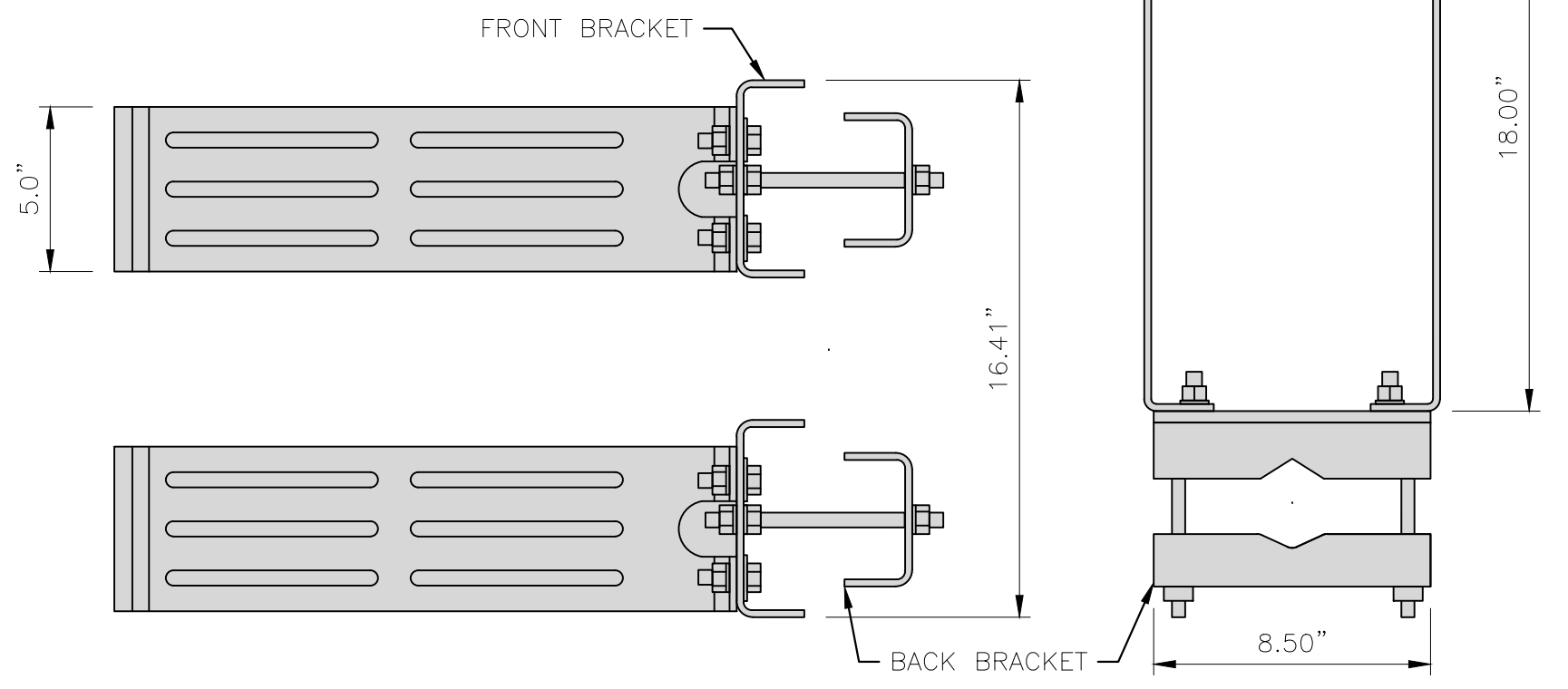
ANTENNA DETAIL NO SCALE 6

| SAMSUNG DUAL BAND RU RF4451d-70A | |
|-------------------------------------|---|
| DIMENSIONS (HxWxD) (IN) | 15"x15.0"x8.9" |
| TOTAL WEIGHT LB (LB W/ BRACKET) | 61.3 LB W/O BRACKET (71.3 LB± W/ BRACKET) |
| POWER SUPPLY VOLTAGE | -48Vdc (NOMINAL) |

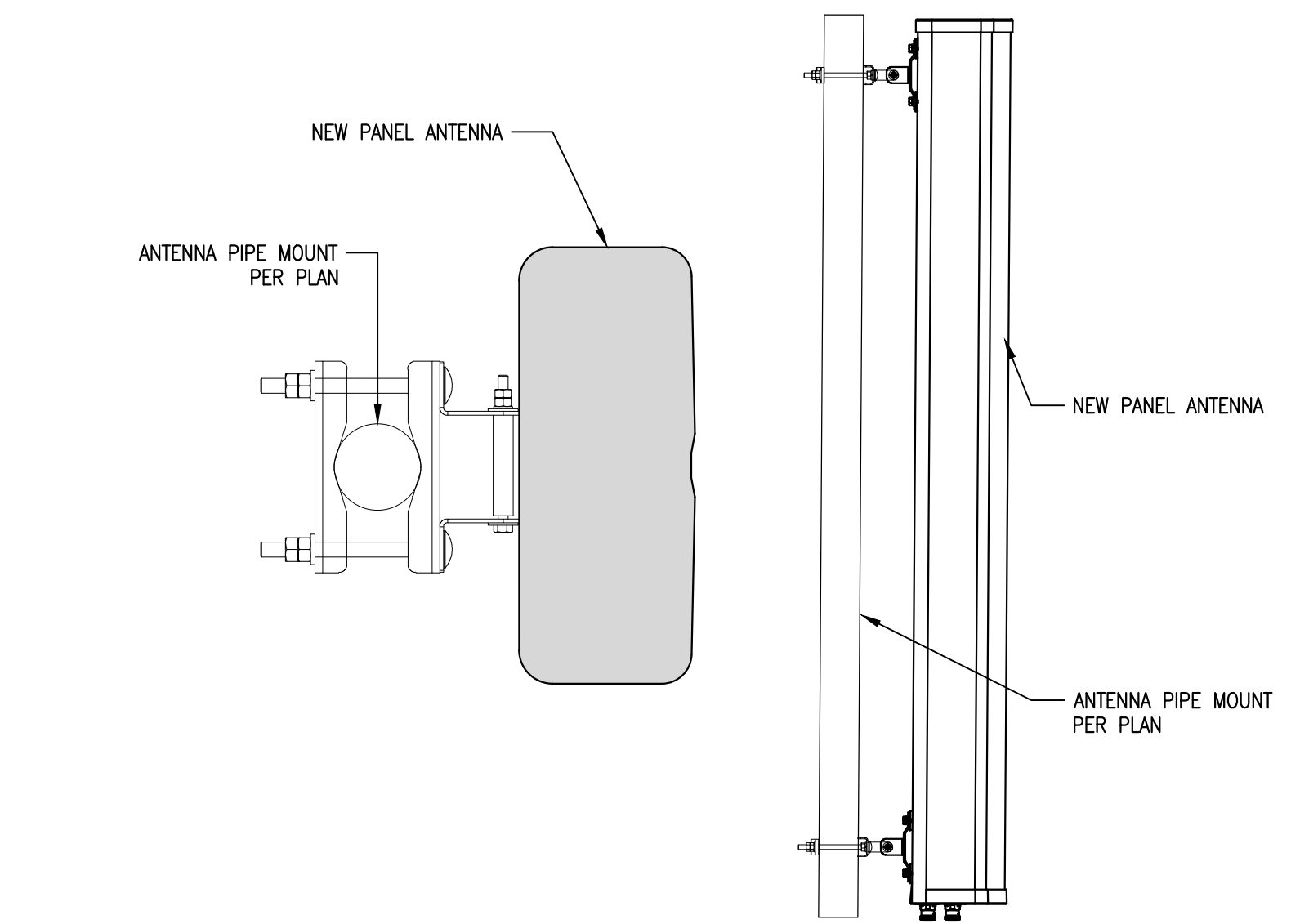


REMOTE RADIO HEAD DETAIL NO SCALE 7

| COMMSCOPE BACK-TO-BACK MOUNT RR-FA2 | |
|--|-------------------|
| DIMENSIONS (HxWxD) | 16.41"x18.0"x3.0" |
| WEIGHT | 39.22 lb |
| PACKAGE QUANTITY | 2 |



REMOTE RADIO MOUNT DETAIL NO SCALE 8



ANTENNA MOUNTING DETAIL NO SCALE 9

5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

5944 LUTHER LANE, SUITE 725
DALLAS, TX 75225

1511 E. ORANGETHORPE AVE., SUITE D
FULLERTON, CA 92831

22431 ANTONIO PKWY
SUITE B160-131
RANCHO SANTA MARGARITA CA 92688
dconnell@connelldesigngroup.com
949-306-4644

DATE STAMPED: 01/12/2023

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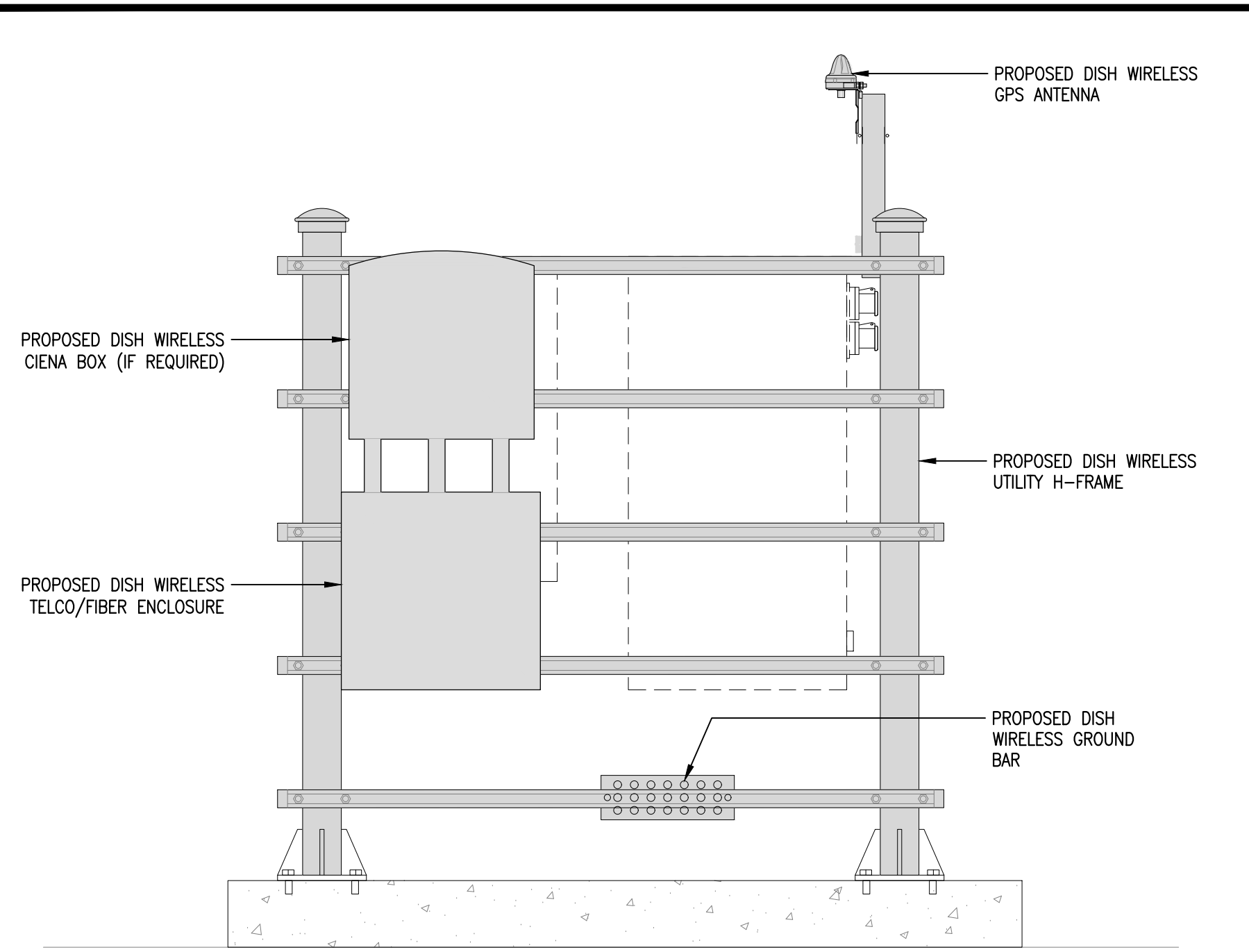
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DISH WIRELESS PROJECT NUMBER
SFSF00005A

**3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER**

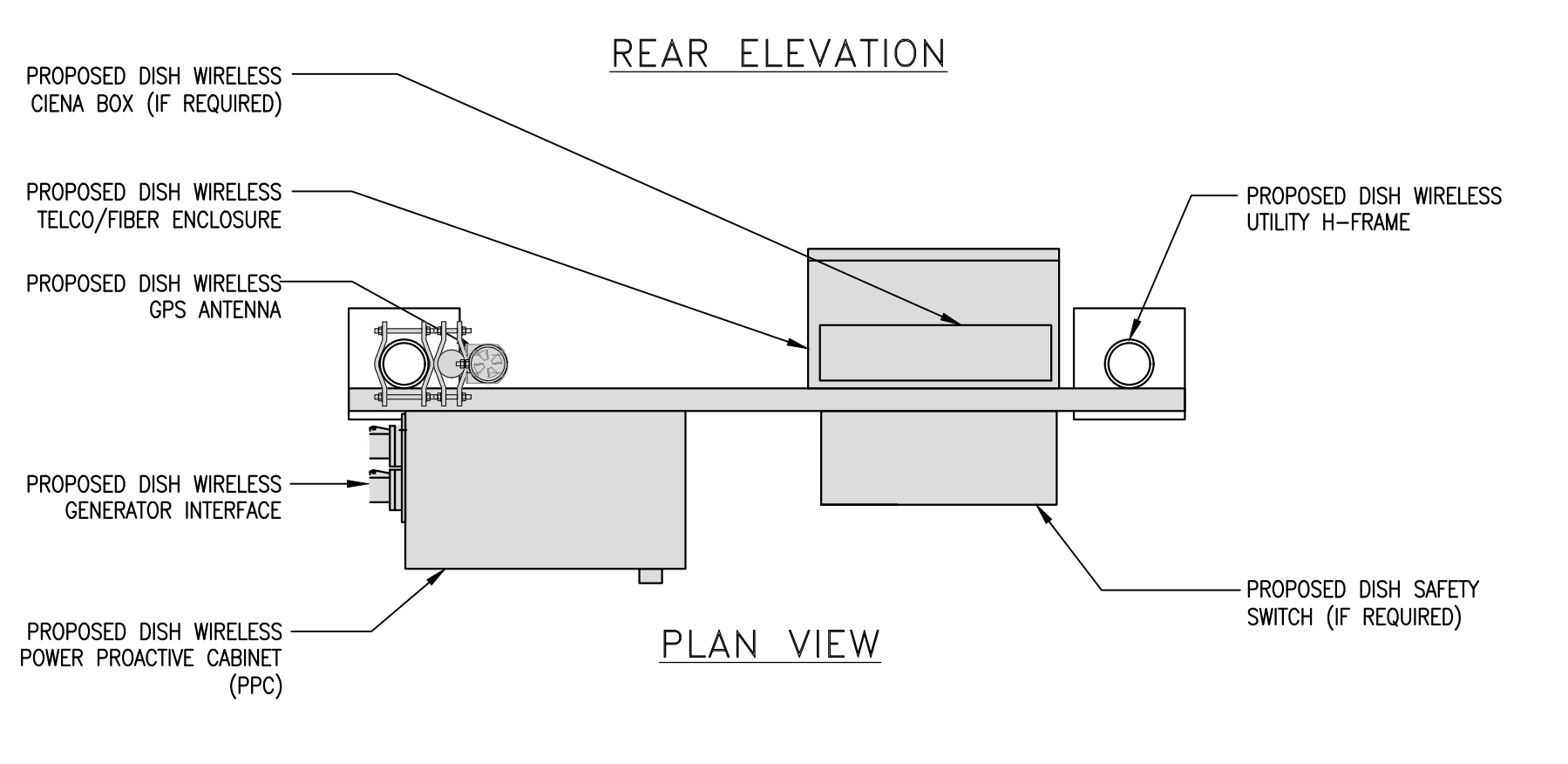
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EQUIPMENT DETAILS

SHEET NUMBER
D-1



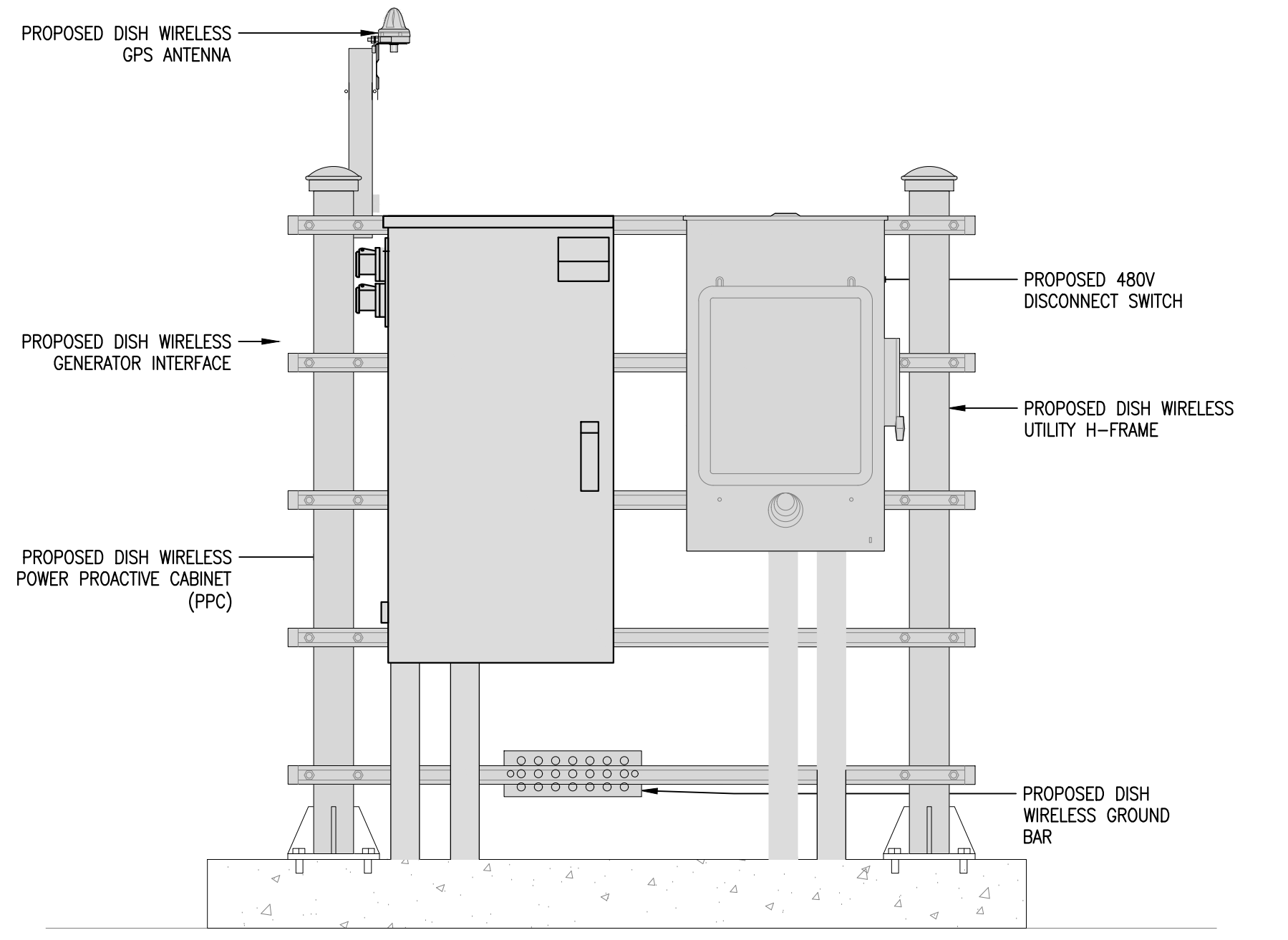
UTILITY H-FRAME DETAIL

NO SCALE 7

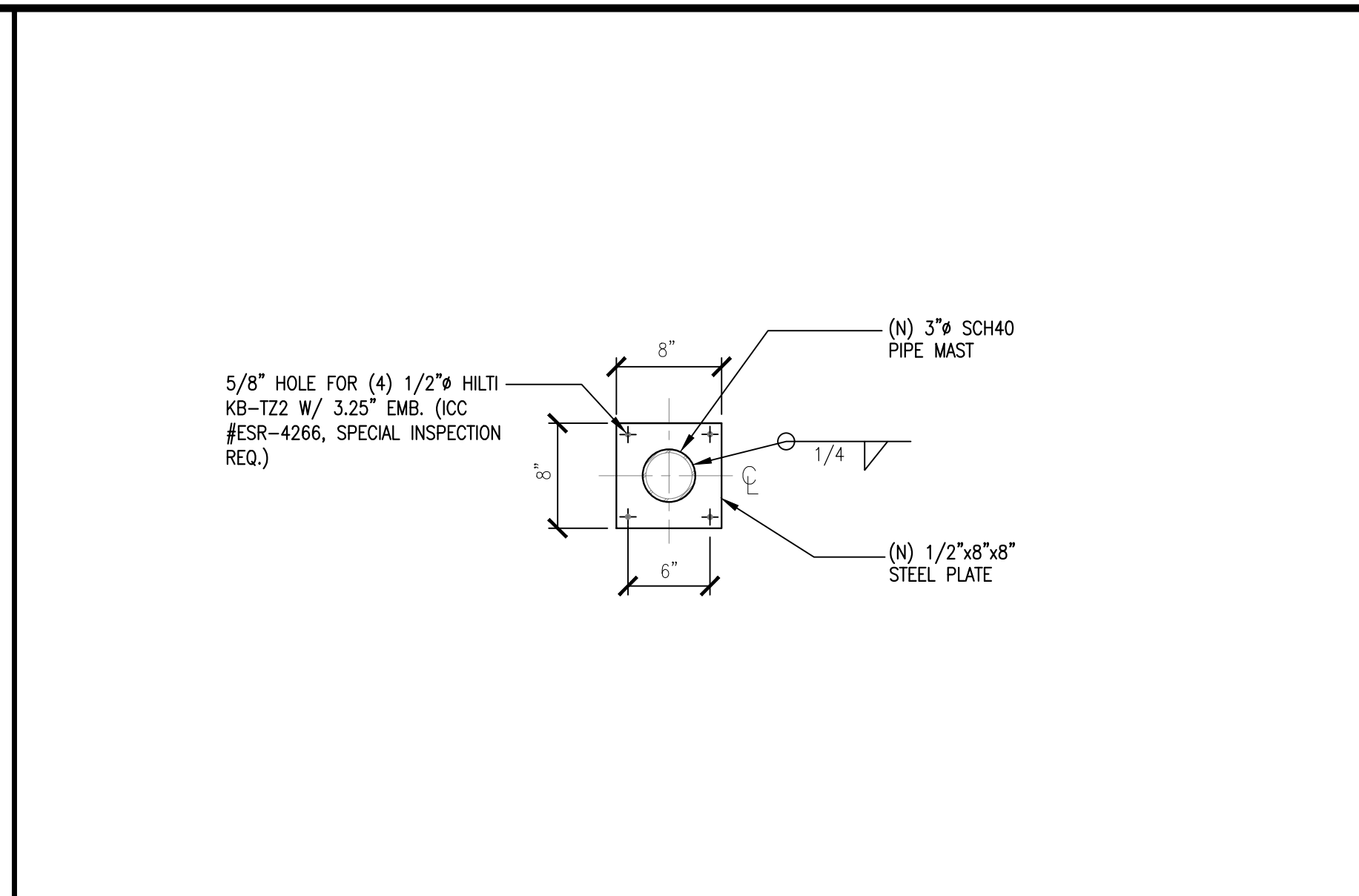


REAR ELEVATION

PLAN VIEW

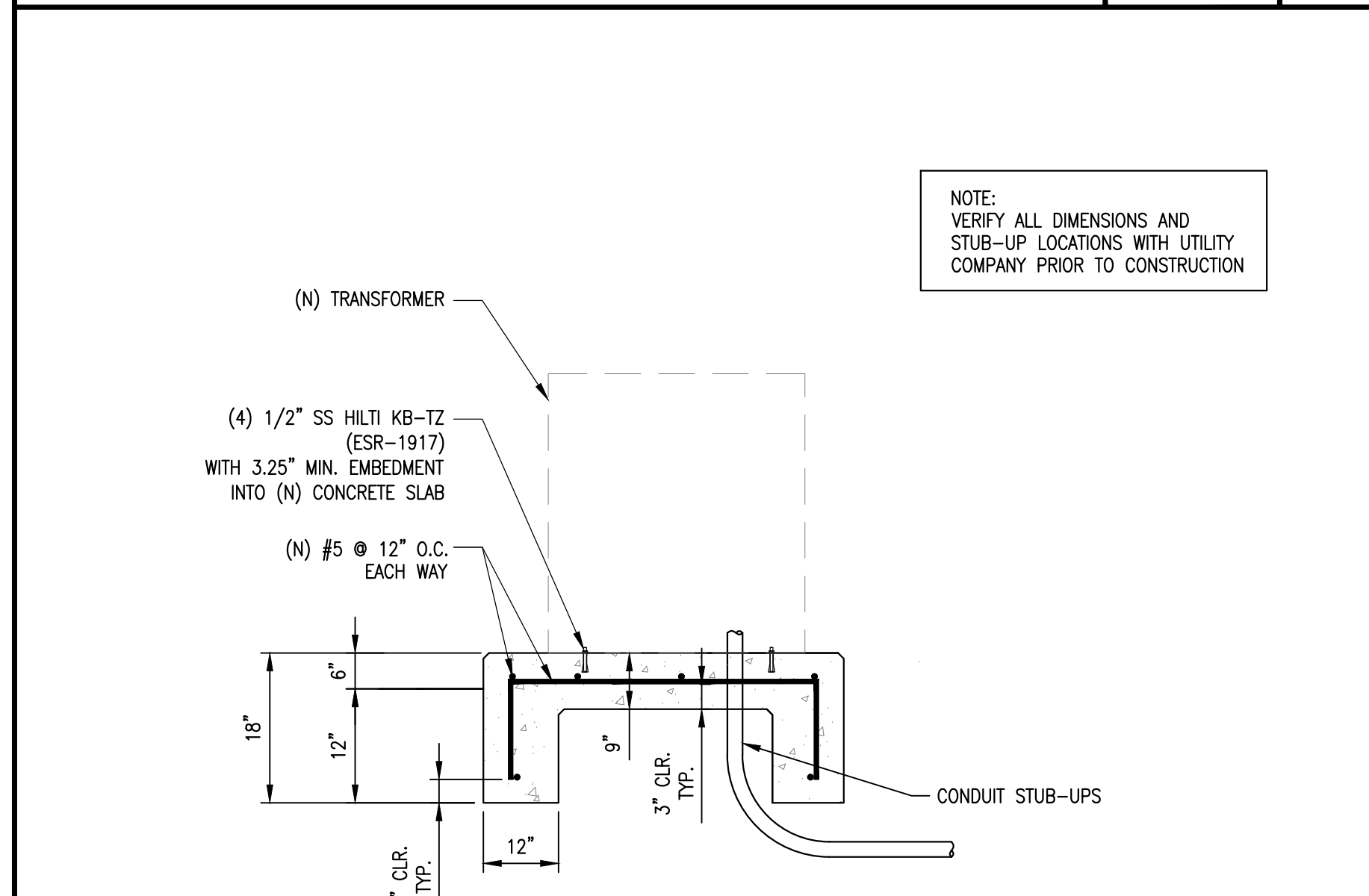


FRONT ELEVATION

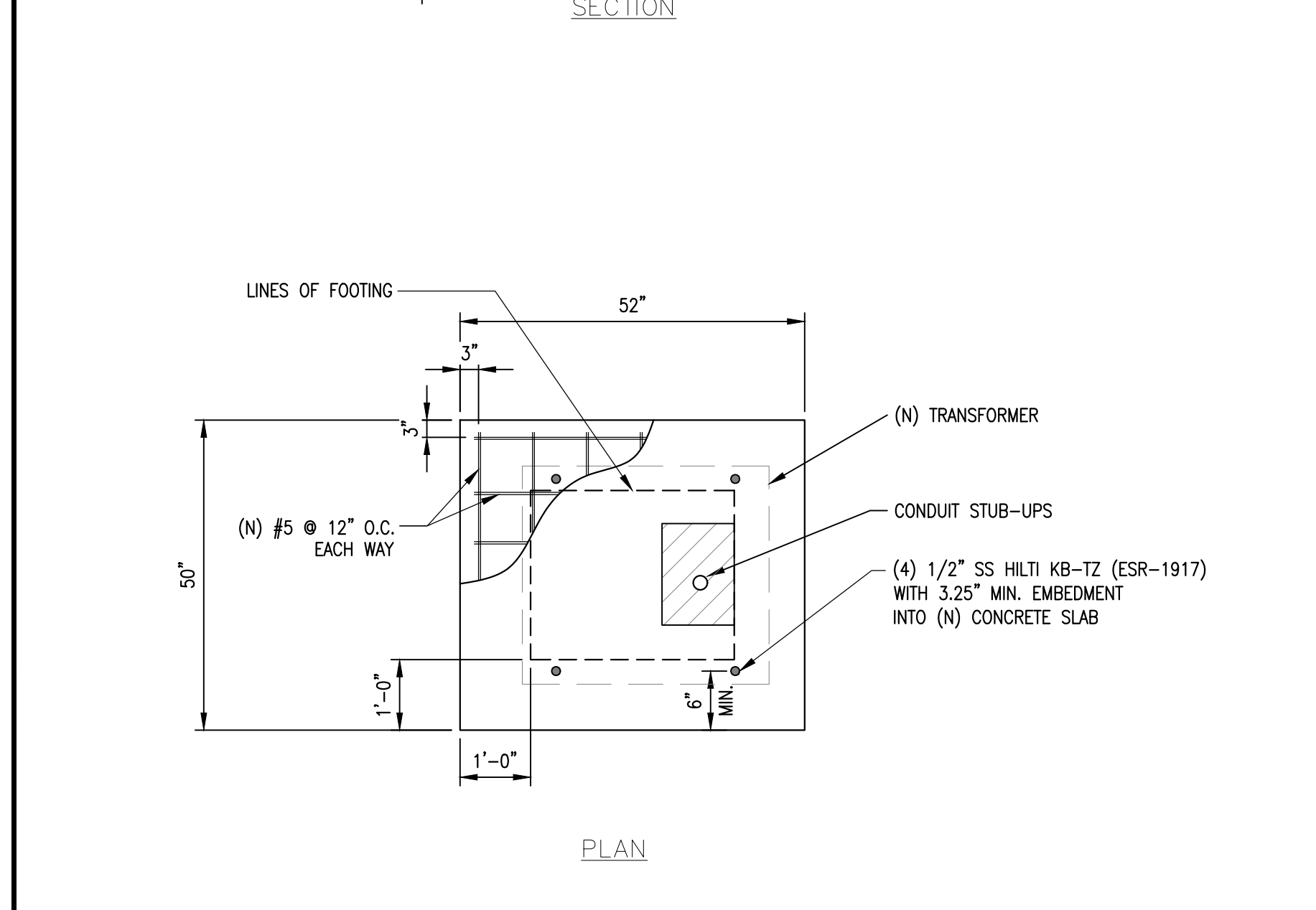


BASEPLATE DETAIL

NO SCALE 2



SECTION



PLAN

TRANSFORMER PAD

NO SCALE 8

LT-PM63915xN4

2. PRODUCT DESCRIPTION

The CUBE is a single equipment compartment with 39RU of 23" horizontal rack mount spacing with a 600A 48VDC rack mounted ABB power system. The PM639155N4 has a 6000W heat exchanger, and the PM63915IN4 has a 6000BTU HVAC system.

Figure 2 shows the CUBE dimensions. Figures 3 and 4 show the main components of each CUBE.

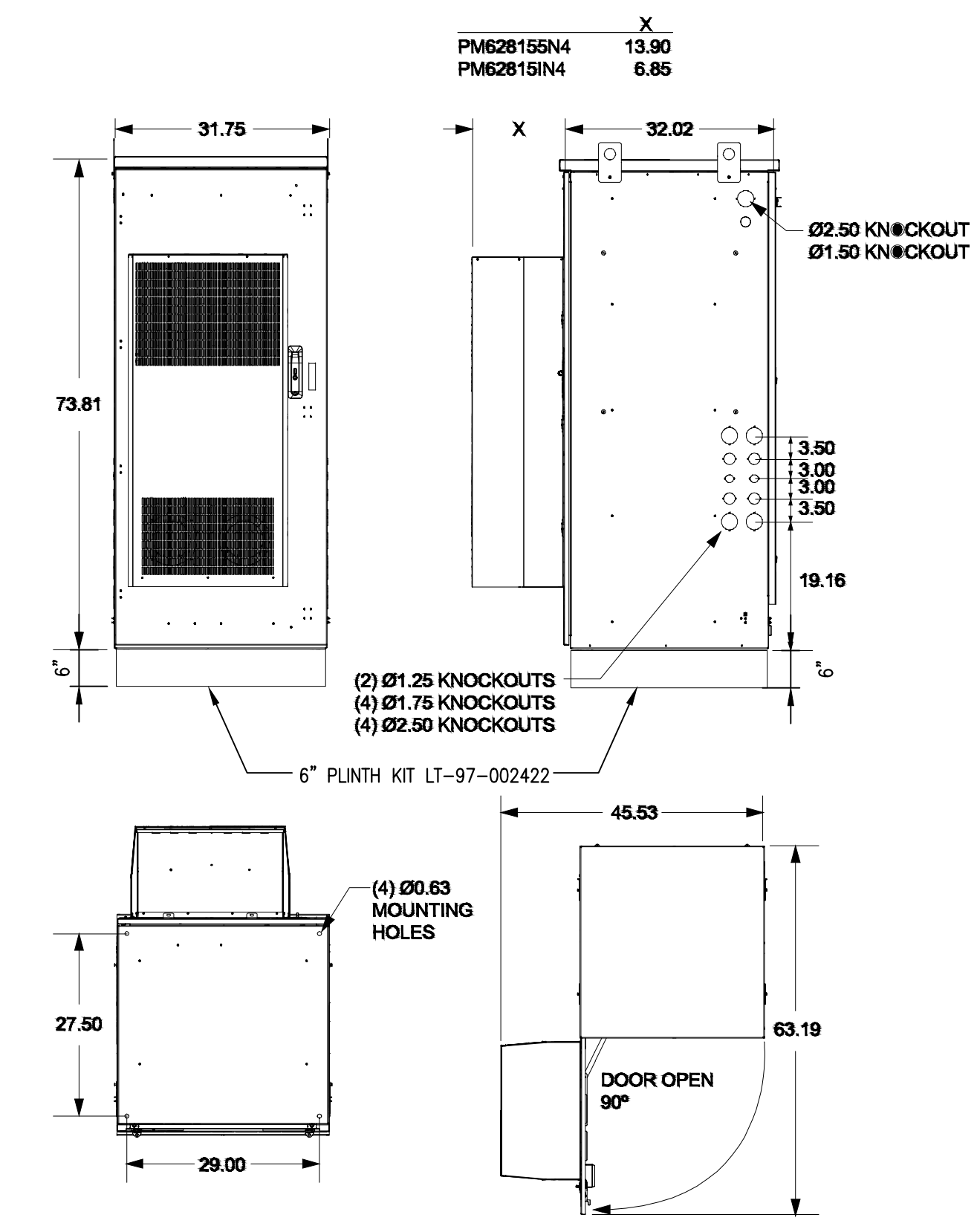
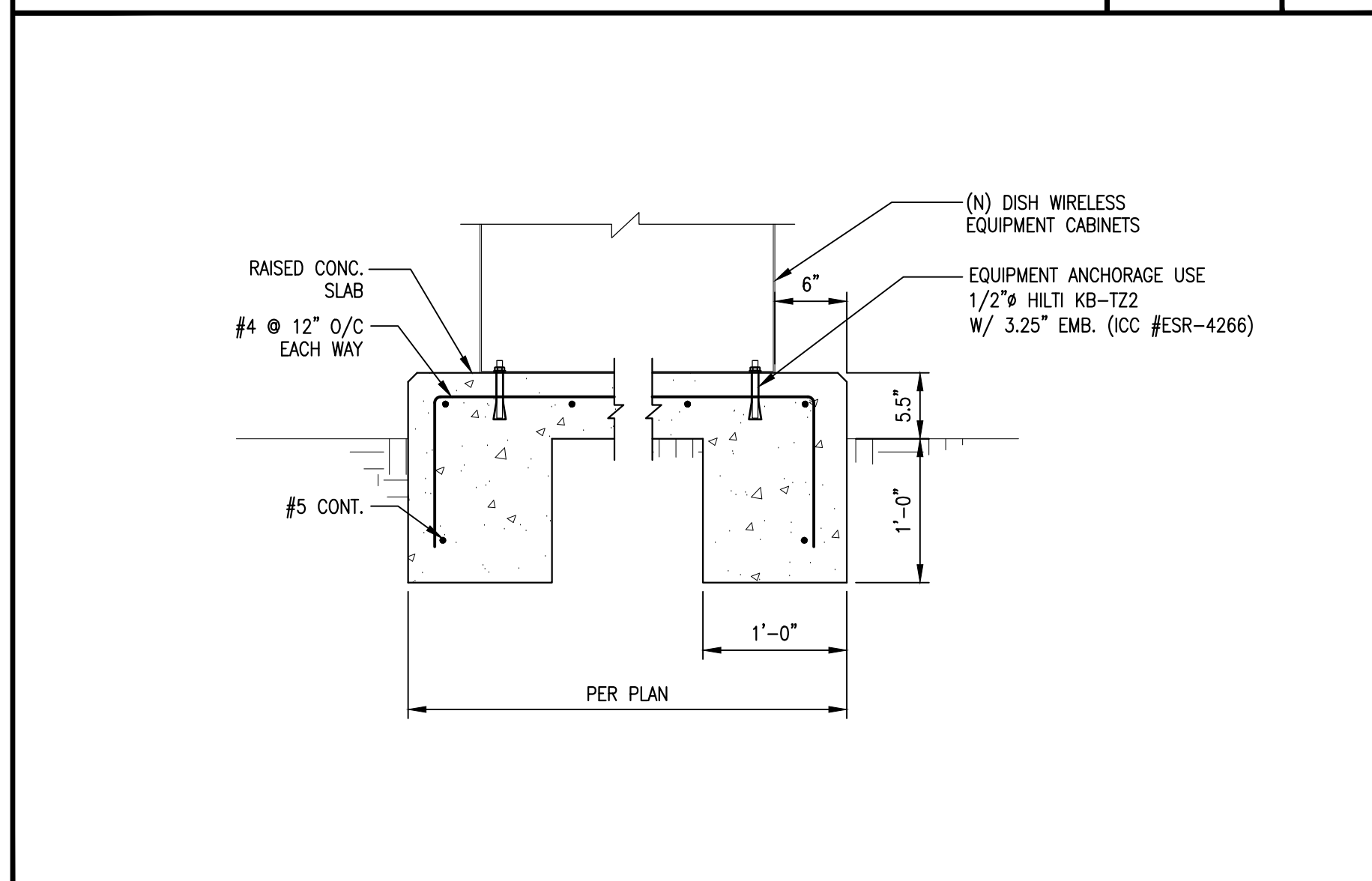


Figure 2 CUBE Dimensions (in inches)
All dimensions are common to both models except for depth of thermal unit.


CABINET DETAIL W/ PLINTH KIT

NO SCALE 6




CABINET MOUNT / SLAB DETAIL


NO SCALE 9




5701 SOUTH SANTA FE DRIVE
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REGISTERED PROFESSIONAL ENGINEER
DANIEL MICHAEL CONNELL
NO. 62543
EXP. 12/31/23
CIVIL
STATE OF CALIFORNIA
DATE STAMPED: 01/12/2023

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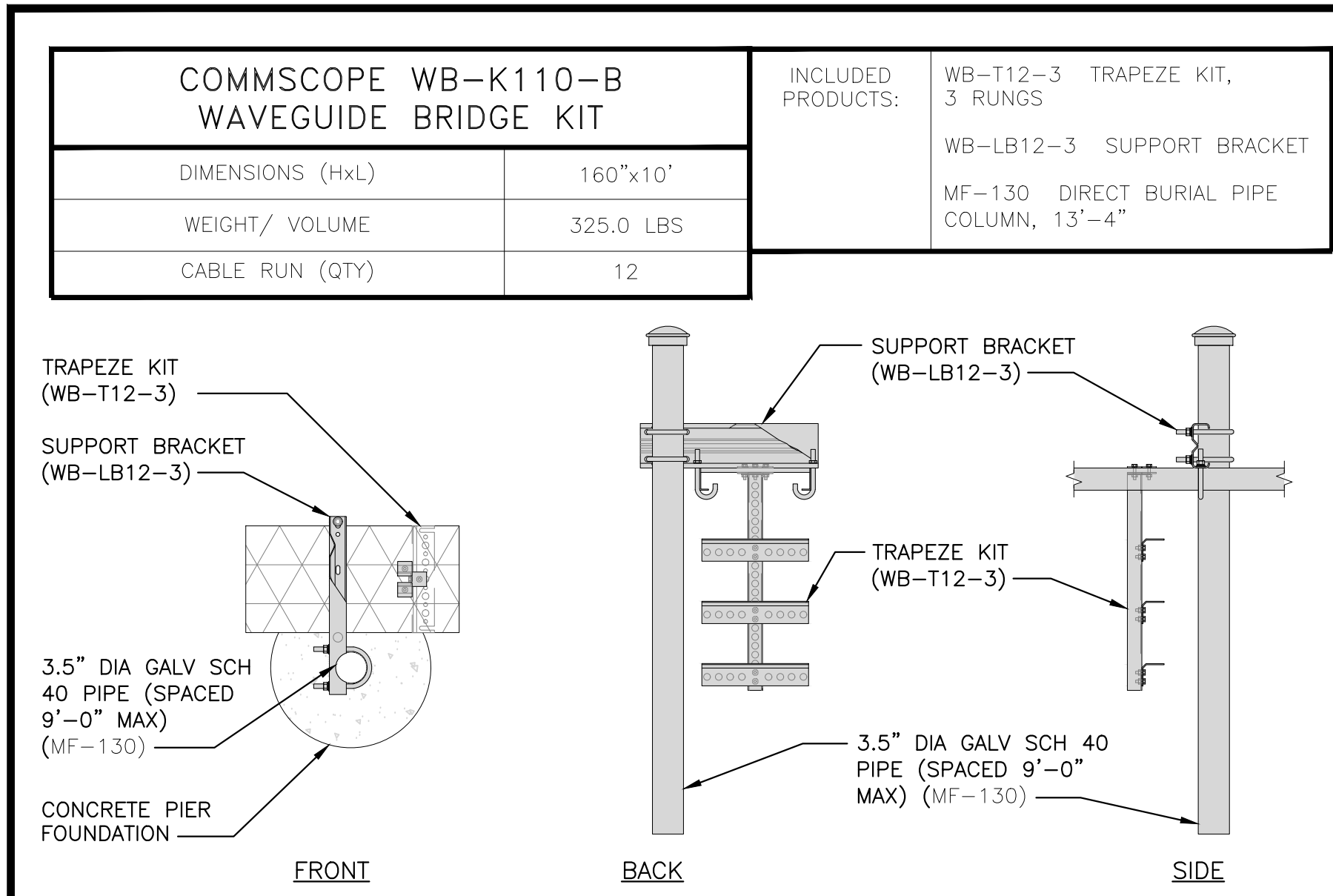
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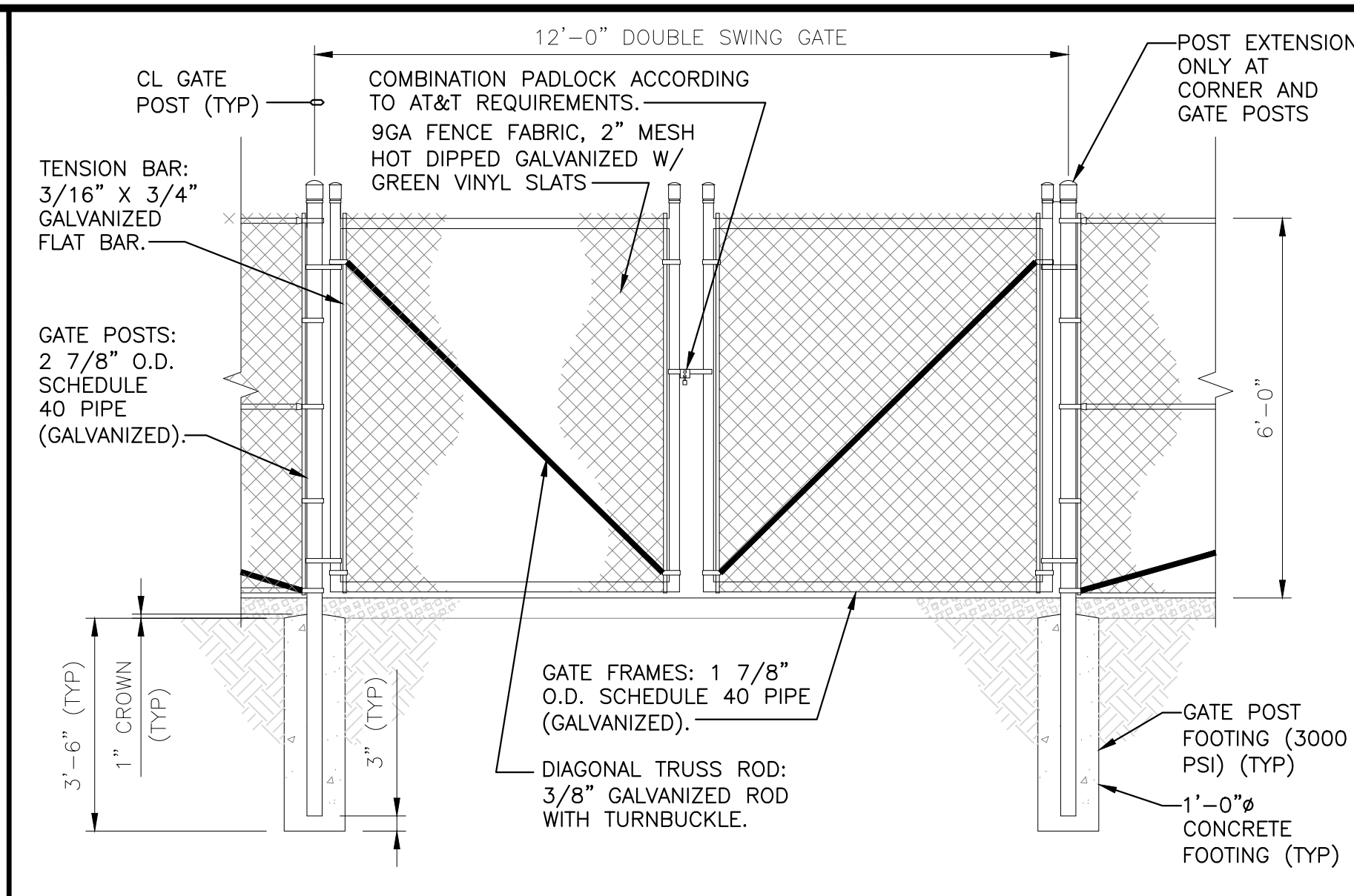
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DETAILS

SHEET NUMBER
D-2



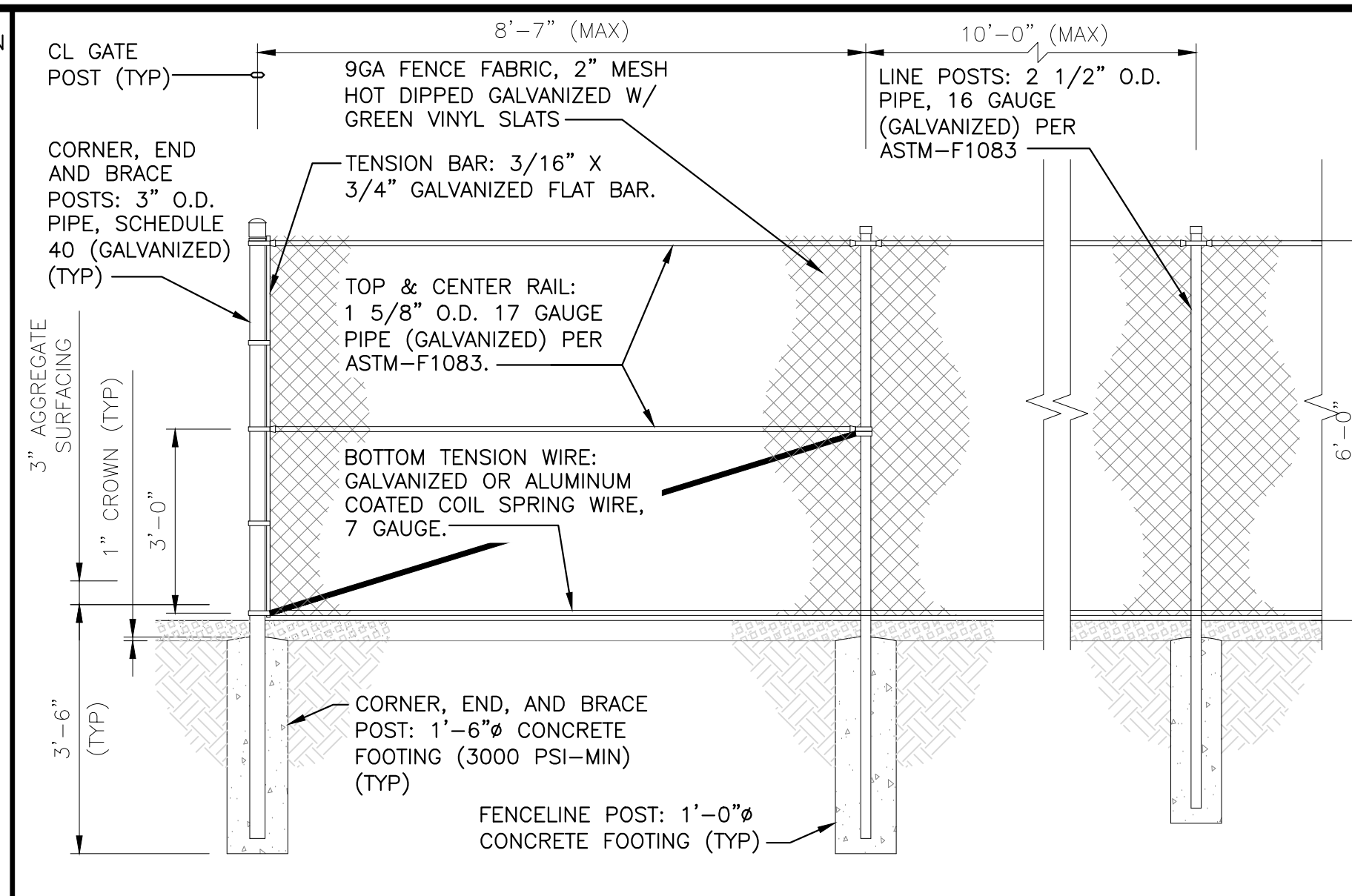
ICE BRIDGE DETAIL

NO SCALE 1



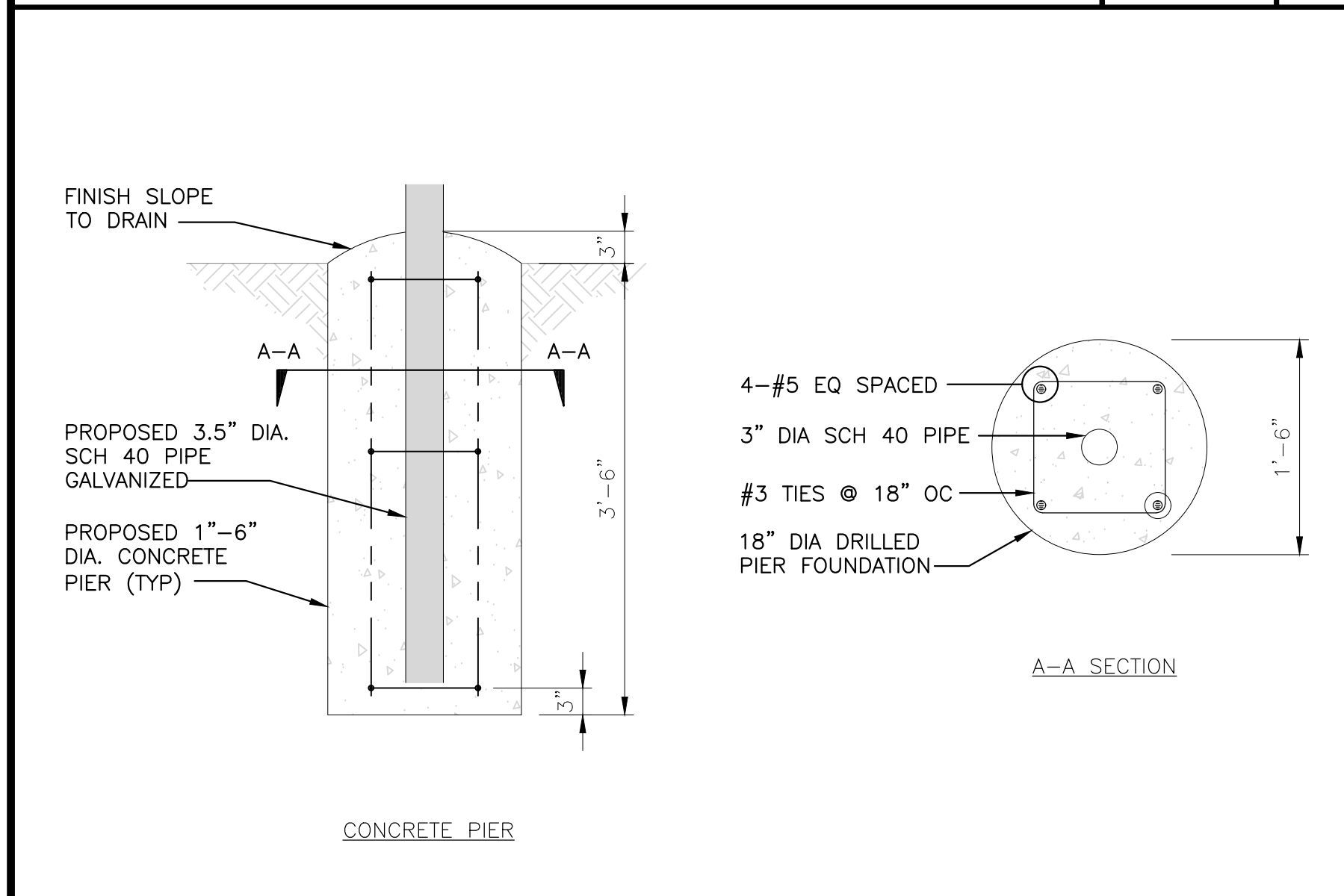
CHAINLINK GATE DETAIL

NO SCALE 2



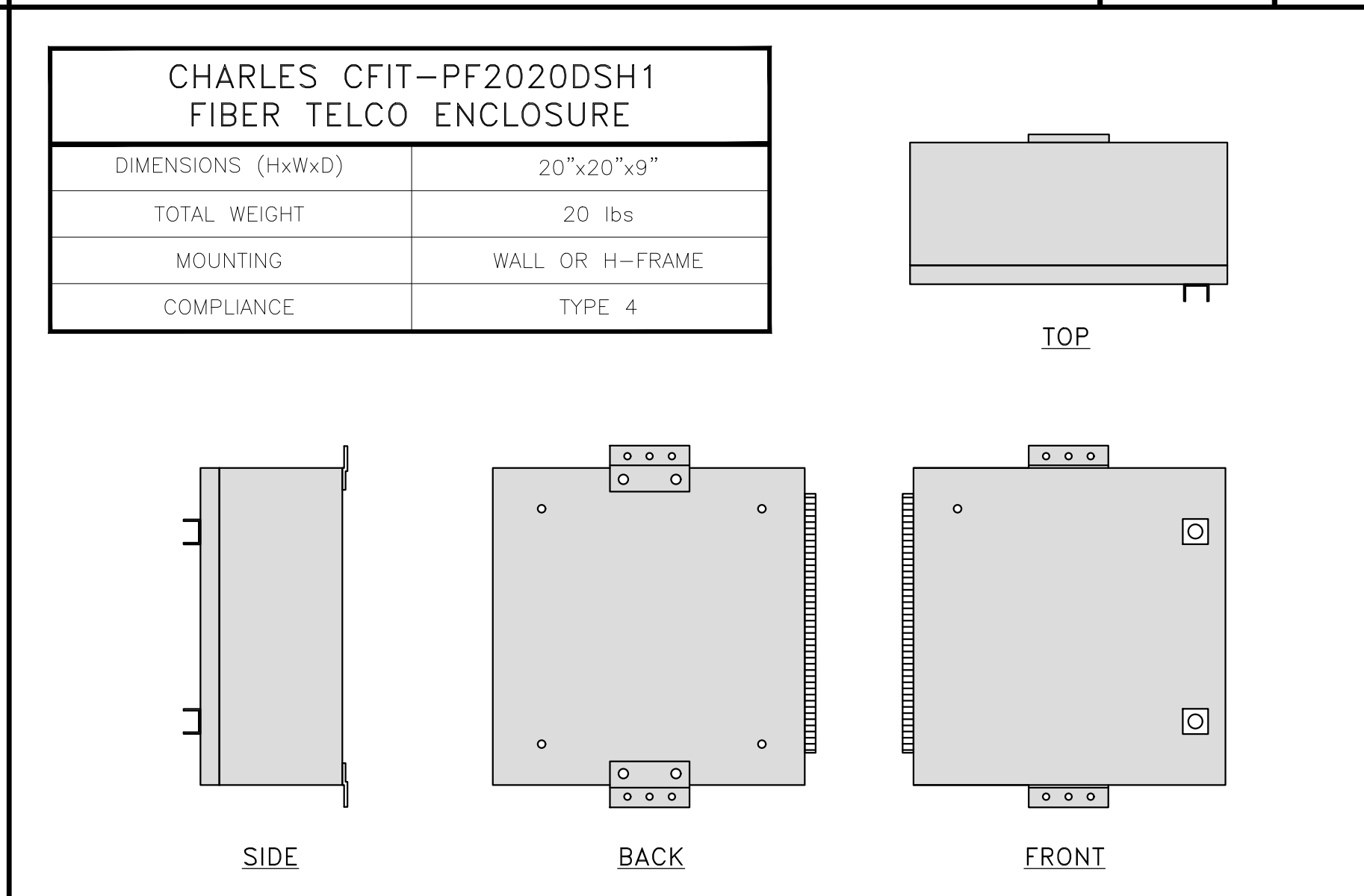
CHAINLINK FENCE DETAIL

NO SCALE 3



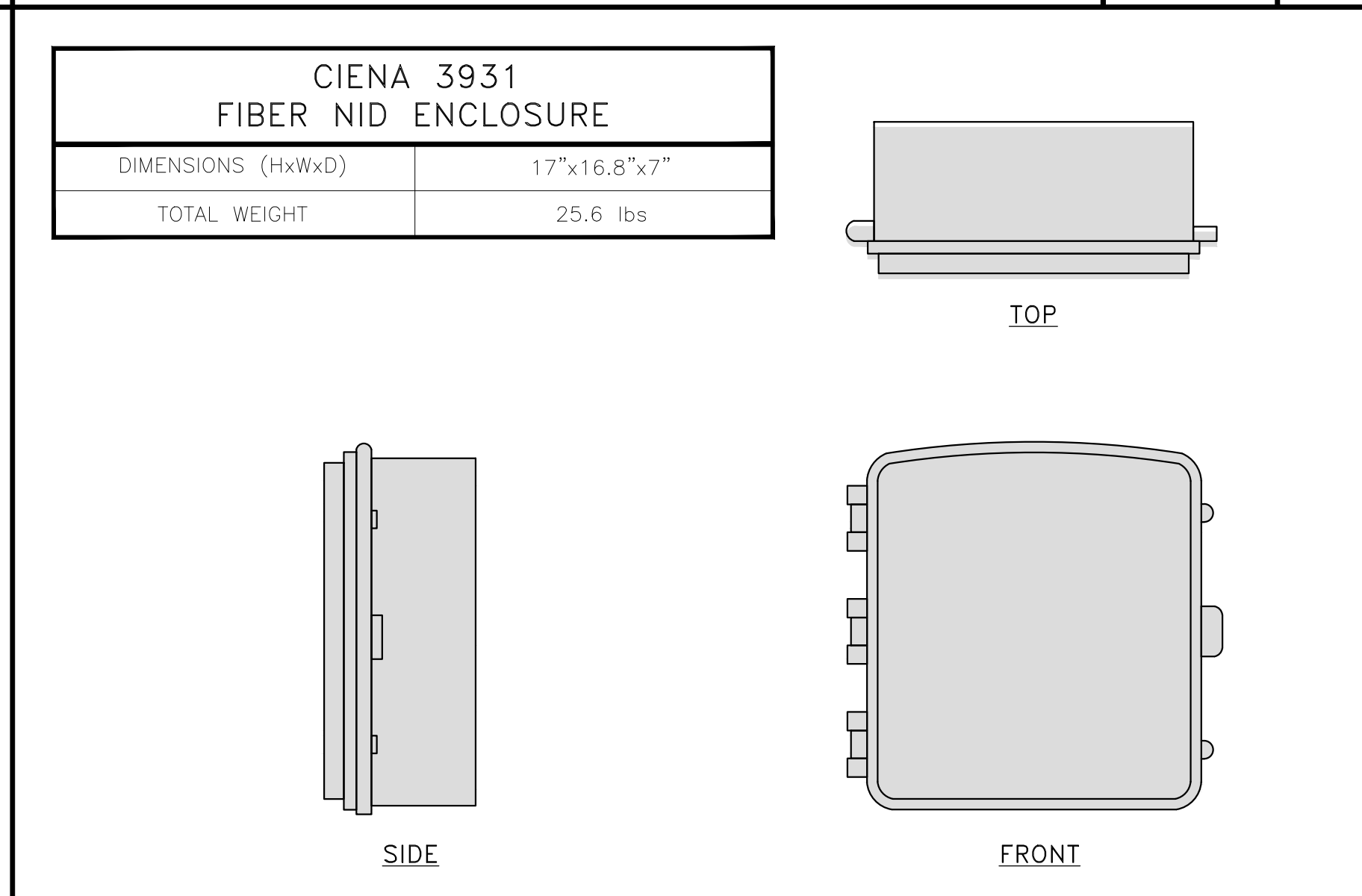
TYPICAL ICE BRIDGE CONCRETE PIER DETAIL

NO SCALE 4



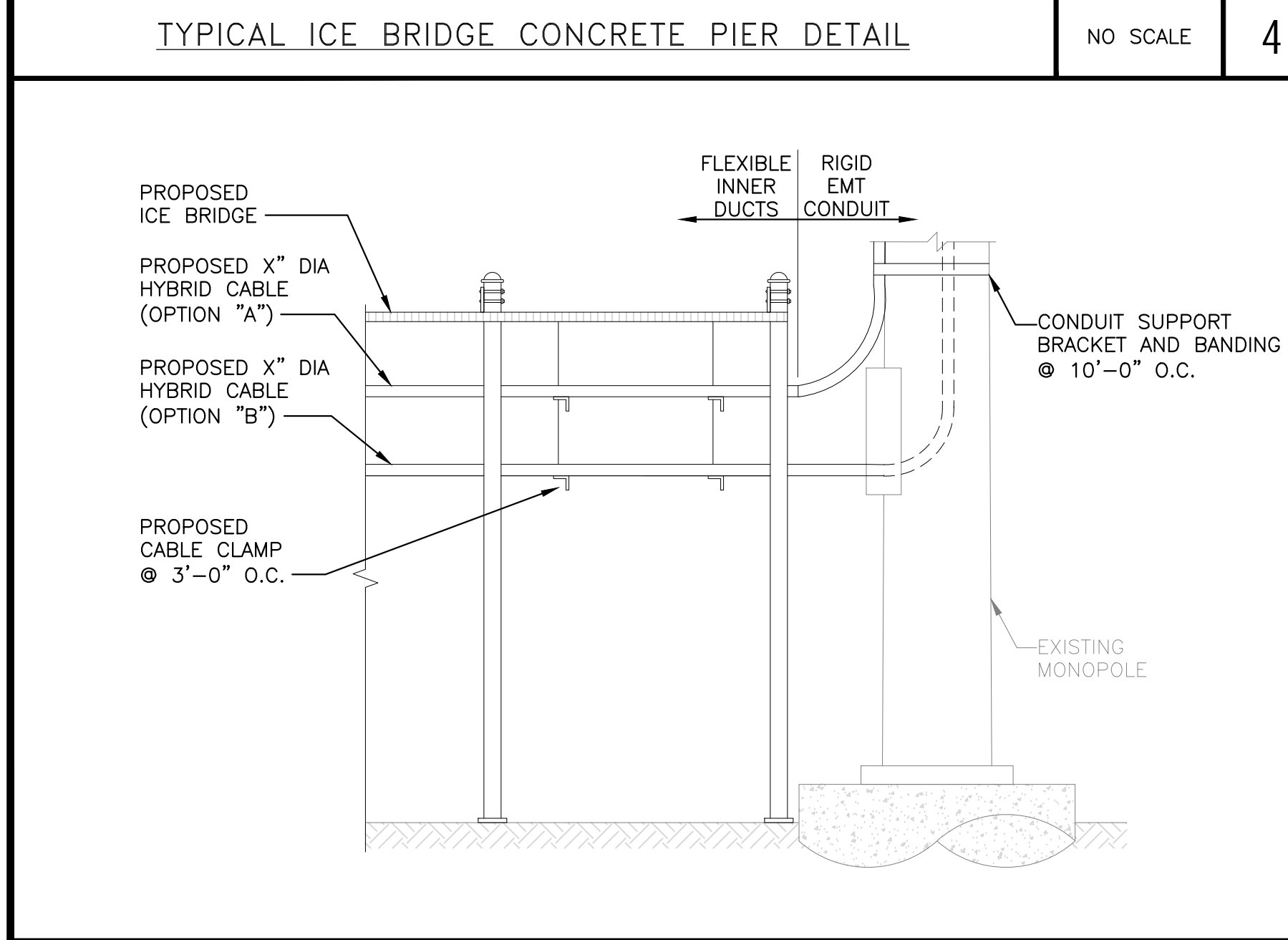
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NO SCALE 5



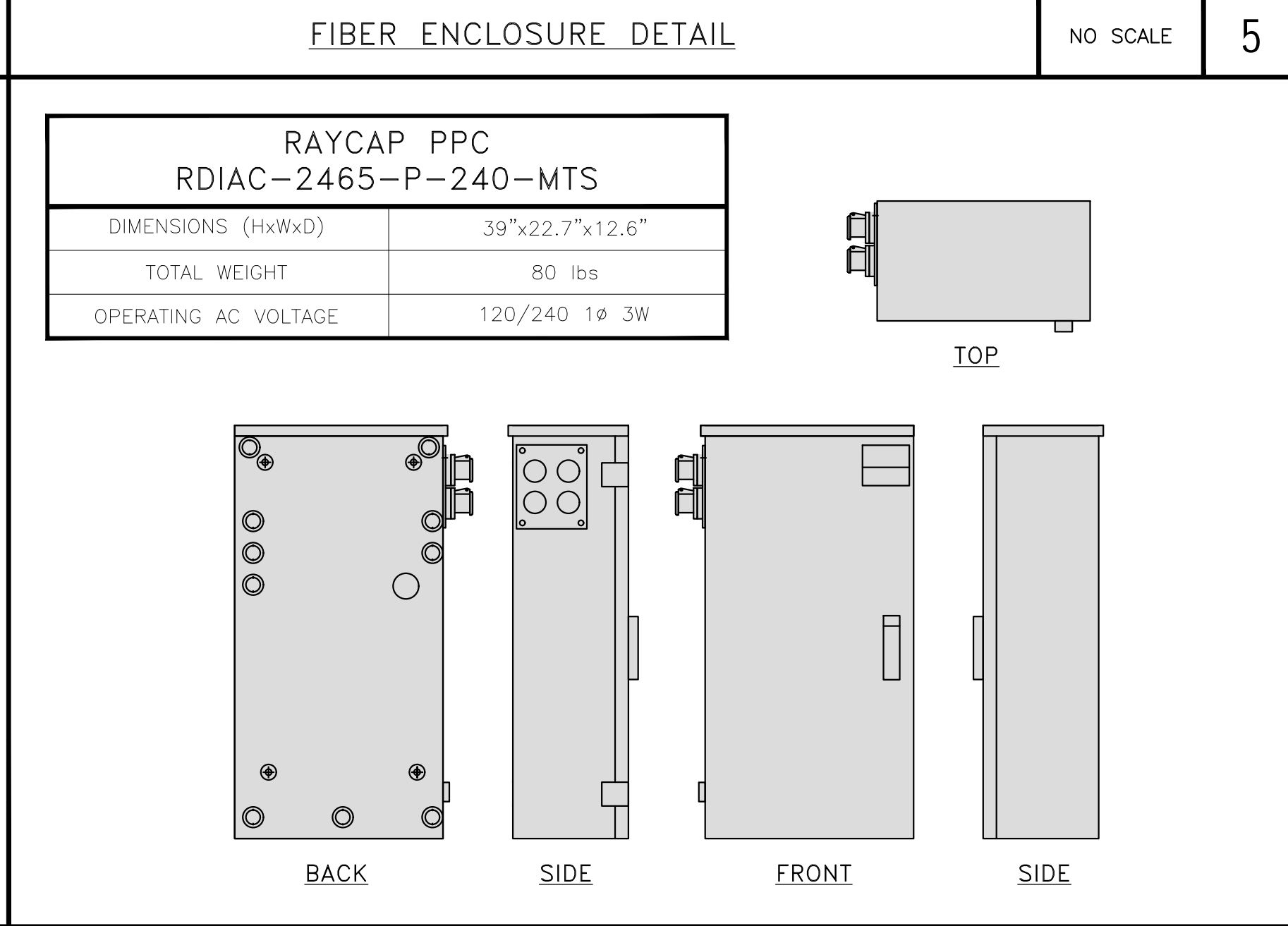
FIBER NID DETAIL

NO SCALE 6



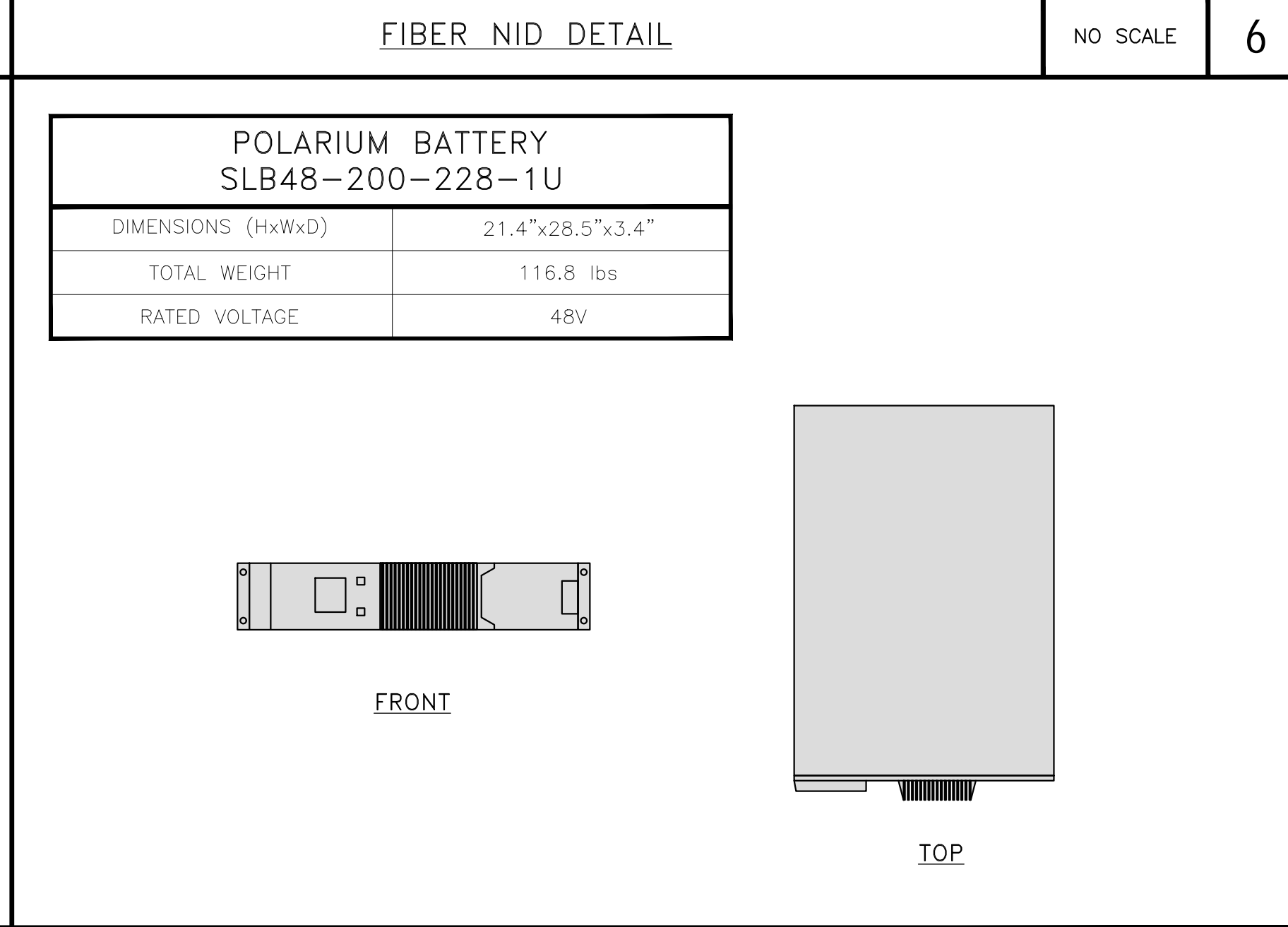
HYBRID CABLE RUN

NO SCALE 7



POWER PROTECTION CABINET (PPC) DETAIL

NO SCALE 8



BATTERY DETAIL

NO SCALE 9

5701 SOUTH SANTA FE DRIVE
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SFSF00005A

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SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
D-3

dish wireless RF DESIGN SHEET

| | | | |
|------------|------------|------------|-------------|
| Issue Date | 12/19/2022 | RFD Status | Preliminary |
| Revision | 3 | Created By | Yadav, Rita |

| SITE INFORMATION | |
|--------------------|-------------------------|
| DISH Site Number | SFSF00005A |
| DISH Site Name | |
| Prequal Asset ID | CA-ANT-T-ANTCAD41375 |
| RFI | SFD |
| PEA | 004 |
| Latitude | 37.317811 |
| Longitude | -121.757355 |
| Address | 3830 Aborn Road |
| City | San Jose |
| State | CA |
| ZIP Code | 95135 |
| County | Santa Clara |
| Rad Center (R) | 87 |
| RAD Confirmed | NO Confirmed RAD |
| Structure Type | Monopole |
| LEASE AREA | |
| Dimensions (Lx) | 5x7 |
| Type | Concrete Pad |
| Baseband Cabinet | Charles(Ampheno)-H/EX |
| Dimensions (in) | 52" x 32.1" x 74" |
| Baseband | 895-CJ |
| Generator Required | No |
| Make/Model | |

| PROJECT ASSIGNMENTS | |
|-------------------------------------|---|
| Market Manager | Mark Sika |
| Site Development Mgr. | Jake Woolen |
| RF Engineer | Ritu Yadav |
| Site Act Specialist/Develop. Coord. | Jacqueline Smart-Steinberg / Ellen Evans |
| SAQ Vendor/A&E Vendor | BUTLER AMERICA TELECOM INC / BUTLER AMERICA TELECOM INC |
| Asset Owner/Asset # | Anthem Telecom / ANT-CA-0413.75 |
| Construction Mgr. (Lead/Field) | Curtis Gardner / Curtis Gardner |
| Contractor (General/Tower/Civil) | / / |
| Power Company / Transport Provider | PG&E - CA / AT&T INTERNET SERVICES |

| EMERGENCY CONTACT INFORMATION | |
|-------------------------------|--------------------------|
| Name | Temporary Emergency Line |
| Phone | 855-624-6874 |

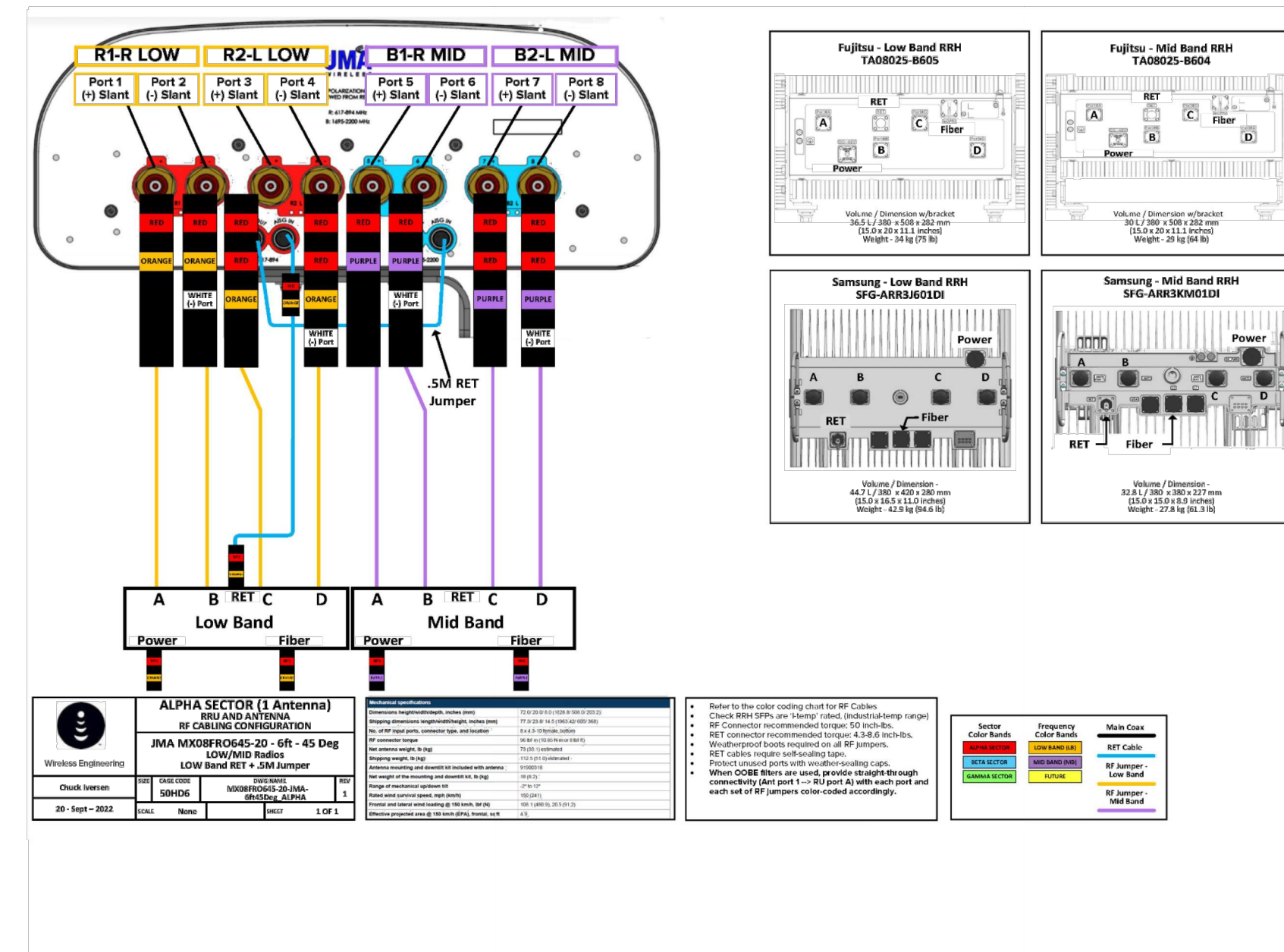
| DESIGN COMMENTS | |
|-----------------|--|
| | |

dish wireless RF EQUIPMENT INFORMATION

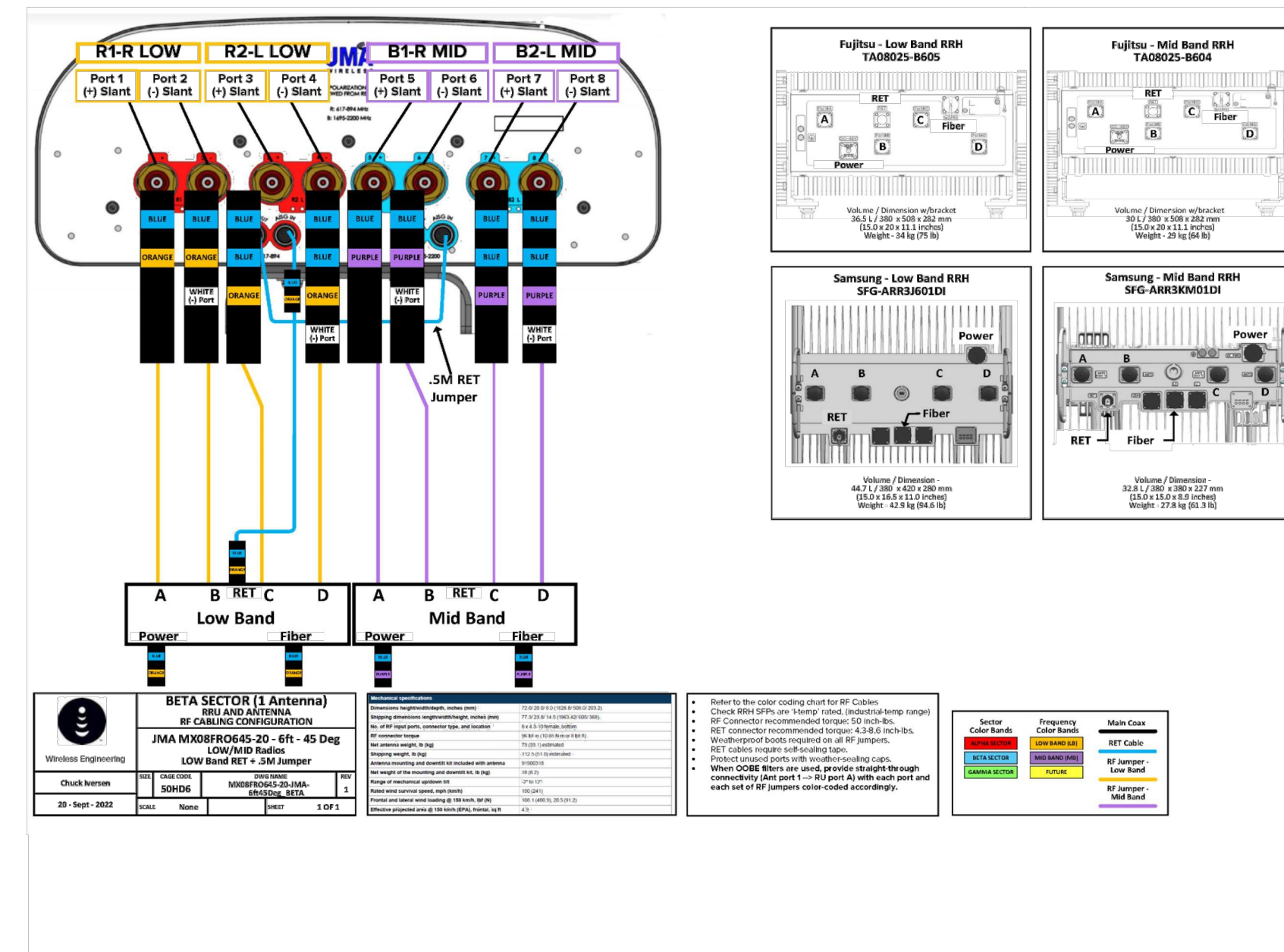
| | | | | | | | |
|---------------------|------------|------------------|----------------------|--------------|-------------------------------------|-----------|-------------|
| Issue Date/Revision | 12/19/2022 | Revision | 3 | Latitude | 37.317811 | Longitude | -121.757355 |
| Site ID | SF000005A | Prequal Asset ID | CA-ANT-T-ANTCAD41375 | Site Address | 3830 Aborn Road, San Jose, CA 95135 | | |
| Structure Type | Monopole | Comments | | | | | |

| ANTENNA | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | | |
|---------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Antenna Mount Position | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | |
| Manufacturer | JMA | JMA | JMA | JMA | JMA | JMA | JMA | JMA | JMA | |
| Model Number | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | MMXPROG-20 | |
| Dimensions H x W x D (in) | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | 22.0" x 20.0" x 8.0" | |
| Weight (lbs.) | 73 | 73 | 73 | 73 | 73 | 73 | 73 | 73 | 73 | |
| RF Power Output (watts) | 40000 | 40000 | 40000 | 40000 | 40000 | 40000 | 40000 | 40000 | 40000 | |
| ERP (dBm) | 76.02 | 76.02 | 76.02 | 76.02 | 76.02 | 76.02 | 76.02 | 76.02 | 76.02 | |
| RF Cable Length (ft) | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | |
| Admittance (True North) | 215° | 285° | 285° | 215° | 285° | 285° | 215° | 285° | 285° | |
| Back Down (in) | 0" | 0" | 0" | 0" | 0" | 0" | 0" | 0" | 0" | |
| Default Mount | Generic | Generic | Generic | Generic | Generic | Generic | Generic | Generic | Generic | |
| Low Band/Port #1 | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| Manufacturer | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung |
| Model Number | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A |
| Dimensions H x W x D (in) | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" |
| Weight (lbs.) | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 |
| Location | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna |
| Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Band | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 |
| Port Assignment | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 | Port 3-4 |
| Use Down (in) | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" |
| Mid Band/Port #2 | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| Manufacturer | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung | Samsung |
| Model Number | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A | RF4450-71A |
| Dimensions H x W x D (in) | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" | 16.0" x 15.0" x 8.0" |
| Weight (lbs.) | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 | 84.58 |
| Location | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna | Antenna |
| Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Band | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 | 471.1 |
| Port Assignment | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 | Port 5-8 |
| Use Down (in) | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" | 2" |
| RF Junction Box | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| Manufacturer | Sioux | Sioux | Sioux | Sioux | Sioux | Sioux | Sioux | Sioux | Sioux | Sioux |
| Model Number | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 | RJ20C-RB1-48 |
| Dimensions H x W x D (in) | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" | 18.0" x 18.0" x 4.0" |
| Weight (lbs.) | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 |
| Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| RF Cable | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| Cable Type | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid | Hybrid |
| Manufacturer | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics | Cabletronics |
| Model Number | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 | 1013P30000-8000 |
| Dimensions (Dx) (in) | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" | 1.413" |
| Weight (lbs. per ft.) | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft | 1.458 lbs/ft |
| Quantity | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Exposure Cable Length | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| Other Equipment | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| Part of Equipment | | | | | | | | | | |
| Manufacturer | | | | | | | | | | |
| Model Number | | | | | | | | | | |
| Dimensions H x W x D (in) | | | | | | | | | | |
| Weight (lbs.) | | | | | | | | | | |
| Equipment Location | | | | | | | | | | |
| Quantity | | | | | | | | | | |
| Antenna (E) | | Sector 1 (Alpha) | | | Sector 2 (Beta) | | | Sector 3 (Gamma) | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

PLUMBING DIAGRAM ANTENNA



PLUMBING DIAGRAM ANTENNA



RFD5 Template V1 DISH Network Confidential



22431 ANTONIO PKWY
SUITE B160-131
RANCHO SANTA MARGARITA CA 92688
dconnell@connelldesigngroup.com
949-306-4644



DATE STAMPED: 01/12/2023

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| | | |
|-----------|-------------|--------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: |
| LE | JPC | DC |

RFD5 REV #2 DATED 12/16/2021

CONSTRUCTION DOCUMENTS

SUBMITTALS

| REV | DATE | DESCRIPTION |
|-----|------------|--------------------------|
| A | 03/30/2022 | ISSUED FOR 90% CD REVIEW |
| 0 | 05/19/2022 | ISSUED FOR 100% CD |
| 1 | 12/22/2022 | ISSUED FOR 100% CD |
| 2 | 01/04/2023 | ISSUED FOR 100% CD |
| 3 | 01/12/2023 | ISSUED FOR 100% CD |

(VENDOR) PROJECT NUMBER
SFSF00005A

DISH WIRELESS PROJECT NUMBER
SFSF00005A

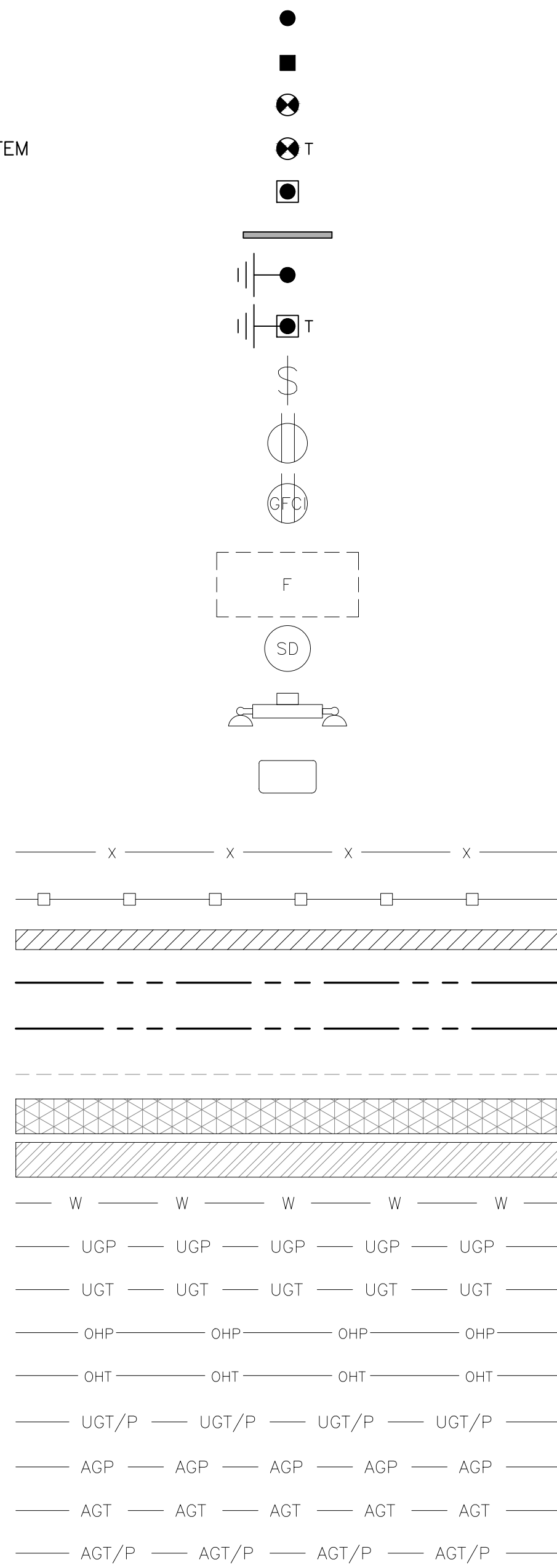
3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE
RF DATA

SHEET NUMBER

RF-1

EXOTHERMIC CONNECTION
 MECHANICAL CONNECTION
 CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
 TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM
 EXOTHERMIC WITH INSPECTION SLEEVE
 GROUNDING BAR
 GROUND ROD
 TEST GROUND ROD WITH INSPECTION SLEEVE
 SINGLE POLE SWITCH
 DUPLEX RECEPTACLE
 DUPLEX GFCI RECEPTACLE
 FLUORESCENT LIGHTING FIXTURE
 (2) TWO LAMPS 48-T8
 SMOKE DETECTION (DC)
 EMERGENCY LIGHTING (DC)
 SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
 LED-1-25A400/51K-SR4-120-PE-DBBTXD



LEGEND

| | |
|--|--|
| AB ANCHOR BOLT | IN INCH |
| ABV ABOVE | INT INTERIOR |
| AC ALTERNATING CURRENT | LB(S) POUND(S) |
| ADDL ADDITIONAL | LF LINEAR FEET |
| AFF ABOVE FINISHED FLOOR | LTE LONG TERM EVOLUTION |
| AFG ABOVE FINISHED GRADE | MAS MASONRY |
| AGL ABOVE GROUND LEVEL | MAX MAXIMUM |
| AIC AMPERAGE INTERRUPTION CAPACITY | MB MACHINE BOLT |
| ALUM ALUMINUM | MECH MECHANICAL |
| ALT ALTERNATE | MFR MANUFACTURER |
| ANT ANTENNA | MGB MASTER GROUND BAR |
| APPROX APPROXIMATE | MIN MINIMUM |
| ARCH ARCHITECTURAL | MISC MISCELLANEOUS |
| ATS AUTOMATIC TRANSFER SWITCH | MTL METAL |
| AWG AMERICAN WIRE GAUGE | MTS MANUAL TRANSFER SWITCH |
| BATT BATTERY | MW MICROWAVE |
| BLDG BUILDING | NEC NATIONAL ELECTRIC CODE |
| BLK BLOCK | NM NEWTON METERS |
| BLKG BLOCKING | NO. NUMBER |
| BM BEAM | # NUMBER |
| BTC BARE TINNED COPPER CONDUCTOR | NTS NOT TO SCALE |
| BOF BOTTOM OF FOOTING | OC ON-CENTER |
| CAB CABINET | OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION |
| CANT CANTILEVERED | OPNG OPENING |
| CHG CHARGING | P/C PRECAST CONCRETE |
| CLG CEILING | PCS PERSONAL COMMUNICATION SERVICES |
| CLR CLEAR | PCU PRIMARY CONTROL UNIT |
| COL COLUMN | PRC PRIMARY RADIO CABINET |
| COMM COMMON | PP POLARIZING PRESERVING |
| CONC CONCRETE | PSF POUNDS PER SQUARE FOOT |
| CONSTR CONSTRUCTION | PSI POUNDS PER SQUARE INCH |
| DBL DOUBLE | PT PRESSURE TREATED |
| DC DIRECT CURRENT | PWR POWER CABINET |
| DEPT DEPARTMENT | QTY QUANTITY |
| DF DOUGLAS FIR | RAD RADIUS |
| DIA DIAMETER | RECT RECTIFIER |
| DIAG DIAGONAL | REF REFERENCE |
| DIM DIMENSION | REINF REINFORCEMENT |
| DWG DRAWING | REQ'D REQUIRED |
| DWL DOWEL | RET REMOTE ELECTRIC TILT |
| EA EACH | RF RADIO FREQUENCY |
| EC ELECTRICAL CONDUCTOR | RMC RIGID METALLIC CONDUIT |
| EL ELEVATION | RRH REMOTE RADIO HEAD |
| ELEC ELECTRICAL | RRU REMOTE RADIO UNIT |
| EMT ELECTRICAL METALLIC TUBING | RWY RACEWAY |
| ENG ENGINEER | SCH SCHEDULE |
| EQ EQUAL | SHT SHEET |
| EXP EXPANSION | SIAD SMART INTEGRATED ACCESS DEVICE |
| EXT EXTERIOR | SIM SIMILAR |
| EW EACH WAY | SPEC SPECIFICATION |
| FAB FABRICATION | SQ SQUARE |
| FF FINISH FLOOR | SS STAINLESS STEEL |
| FG FINISH GRADE | STD STANDARD |
| FIF FACILITY INTERFACE FRAME | STL STEEL |
| FIN FINISH(ED) | TEMP TEMPORARY |
| FLR FLOOR | THK THICKNESS |
| FDN FOUNDATION | TMA TOWER MOUNTED AMPLIFIER |
| FOC FACE OF CONCRETE | TN TOE NAIL |
| FOM FACE OF MASONRY | TOA TOP OF ANTENNA |
| FOS FACE OF STUD | TOC TOP OF CURB |
| FOW FACE OF WALL | TOF TOP OF FOUNDATION |
| FS FINISH SURFACE | TOP TOP OF PLATE (PARAPET) |
| FT FOOT | TOS TOP OF STEEL |
| FTG FOOTING | TOW TOP OF WALL |
| GA GAUGE | TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION |
| GEN GENERATOR | TYP TYPICAL |
| GFCI GROUND FAULT CIRCUIT INTERRUPTER | UG UNDERGROUND |
| GLB GLUE LAMINATED BEAM | UL UNDERWRITERS LABORATORY |
| GLV GALVANIZED | UNO UNLESS NOTED OTHERWISE |
| GPS GLOBAL POSITIONING SYSTEM | UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM |
| GND GROUND | UPS UNINTERRUPTIBLE POWER SYSTEM (DC POWER PLANT) |
| GSM GLOBAL SYSTEM FOR MOBILE | VIF VERIFIED IN FIELD |
| HDG HOT DIPPED GALVANIZED | W WIDE |
| HDR HEADER | W/ WITH |
| HGR HANGER | WD WOOD |
| HVAC HEAT/VENTILATION/AIR CONDITIONING | WP WEATHERPROOF |
| HT HEIGHT | WT WEIGHT |
| IGR INTERIOR GROUND RING | |

ABBREVIATIONS



CDG

22431 ANTONIO PKWY
 SUITE B160-131
 RANCHO SANTA MARGARITA CA 92688
 dconnel@connelldesigngroup.com
 949-306-4644



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 OF A LICENSED PROFESSIONAL ENGINEER,
 TO ALTER THIS DOCUMENT.

| | | |
|-----------|-------------|--------------|
| DRAWN BY: | CHECKED BY: | APPROVED BY: |
| LE | JPC | DC |

RFDS REV #2 DATED 12/16/2021

CONSTRUCTION DOCUMENTS

| SUBMITTALS | | |
|------------|------------|--------------------------|
| REV | DATE | DESCRIPTION |
| A | 03/30/2022 | ISSUED FOR 90% CD REVIEW |
| 0 | 05/19/2022 | ISSUED FOR 100% CD |
| 1 | 12/22/2022 | ISSUED FOR 100% CD |
| 2 | 01/04/2023 | ISSUED FOR 100% CD |
| 3 | 01/12/2023 | ISSUED FOR 100% CD |

(VENDOR) PROJECT NUMBER
SFSF00005A

DISH WIRELESS PROJECT NUMBER
SFSF00005A

3830 ABORN RD.
 SAN JOSE, CA 95135
 WINDMILL TOWER

SHEET TITLE
LEGEND AND ABBREVIATIONS

SHEET NUMBER

GN-1

SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED – NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH WIRELESS AND TOWER OWNER NOC & THE DISH WIRELESS AND TOWER OWNER CONSTRUCTION MANAGER.

2. "LOOK UP" – DISH WIRELESS AND TOWER OWNER SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH WIRELESS AND DISH WIRELESS AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.

4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH WIRELESS AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).

5. ALL SITE WORK TO COMPLY WITH DISH WIRELESS AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH WIRELESS AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."

6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH WIRELESS AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.

10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.

11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.

12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF DISH WIRELESS AND TOWER OWNER, AND/OR LOCAL UTILITIES.

14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.

15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.

16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.

17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.

18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.

19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1.FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR:GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

CARRIER:DISH WIRELESS

TOWER OWNER:TOWER OWNER

2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.

3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.

4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.

5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.

6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CARRIER POC AND TOWER OWNER.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.

12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF DISH WIRELESS AND TOWER OWNER

13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

DISCLAIMER NOTE:

THE DESIGN SHOWN IN THESE PLANS ASSUME THAT ALL EXISTING STRUCTURAL ITEMS ARE IN "LIKE NEW" CONDITION AND THAT THE STRUCTURES HAVE BEEN PROPERLY MAINTAINED BY THE OWNER, INCLUDING ALL TOWER AND BUILDING COMPONENTS.

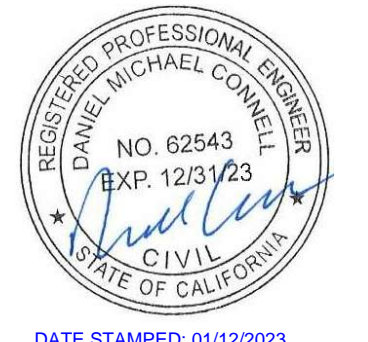
INSTALLATION PROCEDURES AND RELATED LOADINGS ARE NOT WITHIN THE SCOPE OF THIS DESIGN/DRAWING. A CONTRACTOR EXPERIENCED IN SIMILAR WORK SHOULD PERFORM ALL INSTALLATION WORK. THE ENGINEERING SERVICES PROVIDED BY CDG ARE LIMITED TO THE DESIGN OF THE STRUCTURE WITH THE PROPOSED AND EXISTING LOADS. THESE DRAWINGS ARE CONSIDERED VOID IF THE LOADING MENTIONED IN THESE DRAWINGS IS CHANGED OR IS DIFFERENT AS INSTALLED. IT IS ASSUMED THAT THE EXISTING STRUCTURE IS PROPERLY MAINTAINED AND IS IN GOOD CONDITION FREE OF ANY DEFECTS. ALSO THE VERIFICATION OF ANCHORAGE, PLATE AND BOLTS ARE NOT CHECKED AS COMPLETE ENGINEERING DATA IN NOT AVAILABLE FOR VERIFICATION. THE SCOPE OF THESE DRAWINGS DOES NOT INCLUDE EXISTING CONNECTIONS, EXCEPT AS NOTED. ALL EXISTING & PROPOSED ANTENNA/STRUCTURE DATA WAS PROVIDED BY OWNER. CDG IS NOT RESPONSIBLE FOR THE ACCURACY OF ANY EXISTING DATA.

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DATE STAMPED: 01/12/2023

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DRAWN BY: CHECKED BY: APPROVED BY:

LE JPC DC

RFDS REV #2 DATED 12/16/2021

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(VENDOR) PROJECT NUMBER

SFSF00005A

DISH WIRELESS PROJECT NUMBER
SFSF00005A

3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-2

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°F AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
 #4 BARS AND SMALLER 40 ksi
 #5 BARS AND LARGER 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
 - CONCRETE EXPOSED TO EARTH OR WEATHER:
 - #6 BARS AND LARGER 2"
 - #5 BARS AND SMALLER 1-1/2"
 - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
 - SLAB AND WALLS 3/4"
 - BEAMS AND COLUMNS 1-1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
 - 4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
 - 4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. TIE WRAPS ARE NOT ALLOWED.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH WIRELESS AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH WIRELESS".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.



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RFDS REV #2 DATED 12/16/2021

CONSTRUCTION DOCUMENTS

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(VENDOR) PROJECT NUMBER
SFSF00005A

DISH WIRELESS PROJECT NUMBER
SFSF00005A

**3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER**

SHEET TITLE
GENERAL NOTES

SHEET NUMBER

GN-3

GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.



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**3830 ABORN RD.
SAN JOSE, CA 95135
WINDMILL TOWER**

SHEET TITLE
GENERAL NOTES

SHEET NUMBER

GN-4