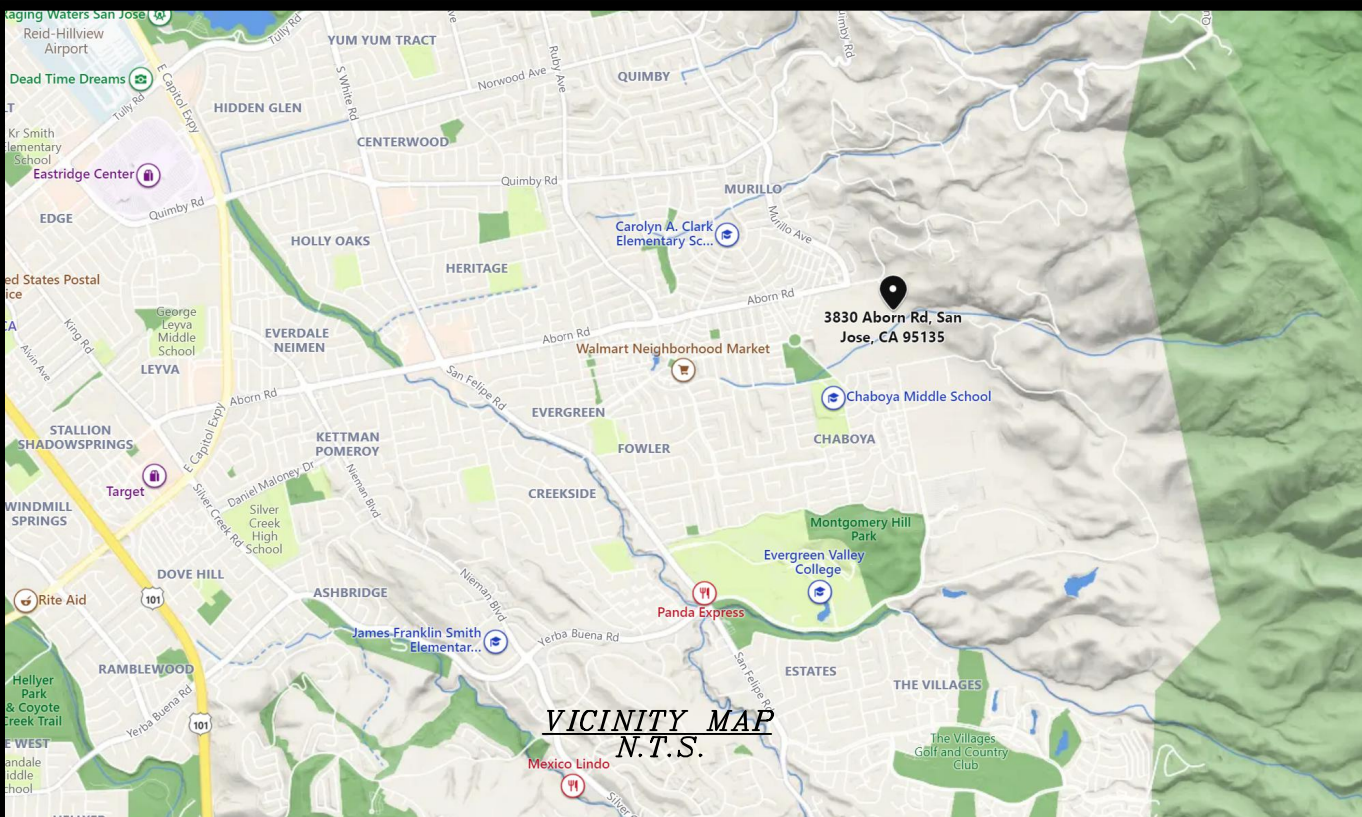


SITE ADDRESS:  
**3830 ABORN RD.**  
**SAN JOSE, CA. 95135**

# T-1





**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. HORIZONTAL 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 A 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 DUODIED 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;

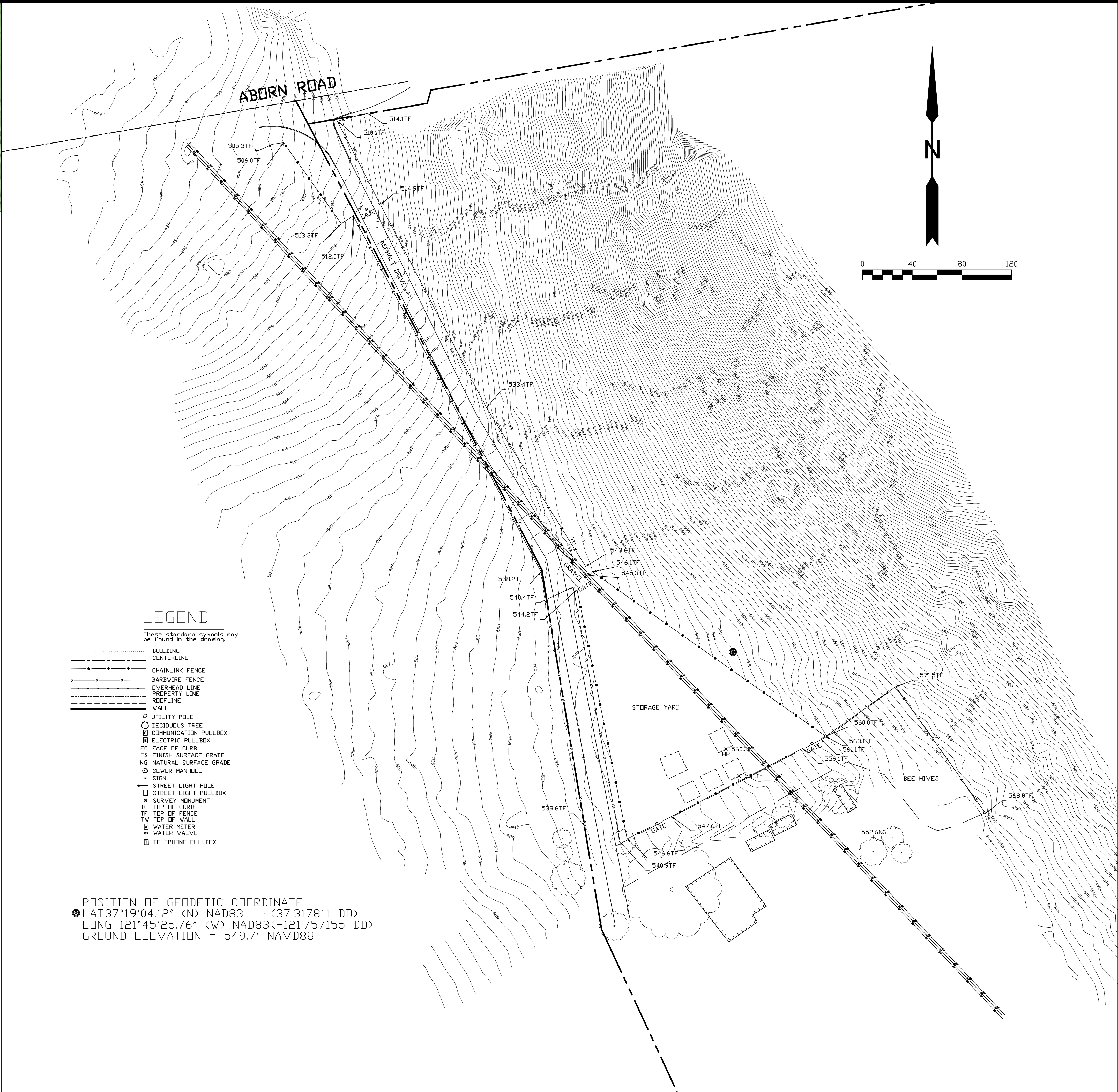
THENCE LEAVING SAID LINE OF ABORN ROAD SOUTH 28° 35' EAST 405.40 FEET TO AN IRON PIPE; THENCE SOUTH 10° 21' 30" EAST 293.89 FEET TO AN IRON PIPE; THENCE SOUTH 25° 48' EAST 253.16 FEET TO AN IRON PIPE; THENCE NORTH 72° 33' EAST 274.76 FEET TO AN IRON PIPE, AND SOUTH 52° 10' 30" EAST 1381.86 FEET TO AN 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.
- DECREE 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;



POSITION OF GEODETIC COORDINATE  
● LAT37°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:		
1	12/23/21	TOWER RELOCATION
0	11/22/21	SUBMITTAL
REV	DATE	DESCRIPTION



**PROJECT INFORMATION:**

**SFSFO00005A**

**3830 ABORN RD.  
SAN JOSE, CA. 95135  
SANTA CLARA COUNTY**

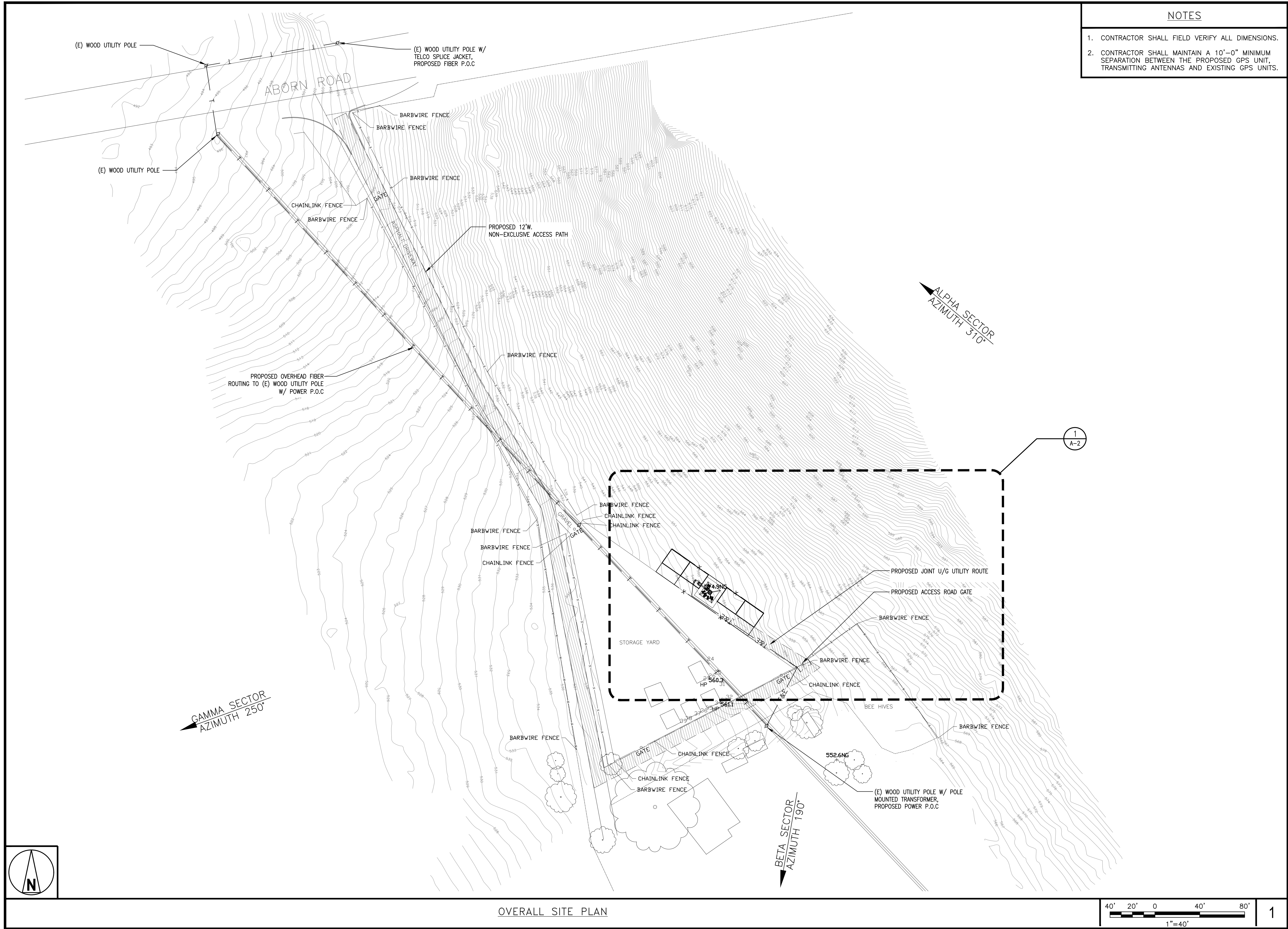
**SHEET TITLE:**

**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

500 WEST 2ND STREET  
AUSTIN, TX 78701

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

22431 ANTONIO PKWY  
SUITE 8160-131  
RANCHO SANTA MARGARITA CA 92688  
dconnell@connelldesigngroup.com  
949-306-4644

NOT TO BE USED FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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

RFDS REV #2 DATED 12/16/2021

ZONING DOCUMENTS

REV	DATE	DESCRIPTION
A	12/01/2021	ISSUED FOR 90% ZD REVIEW
0	12/21/2021	ISSUED FOR 100% ZD
1	02/21/2022	ISSUED FOR 100% ZD
2	02/28/2022	ISSUED FOR 100% ZD

(VENDOR) PROJECT NUMBER  
SFSF00005A

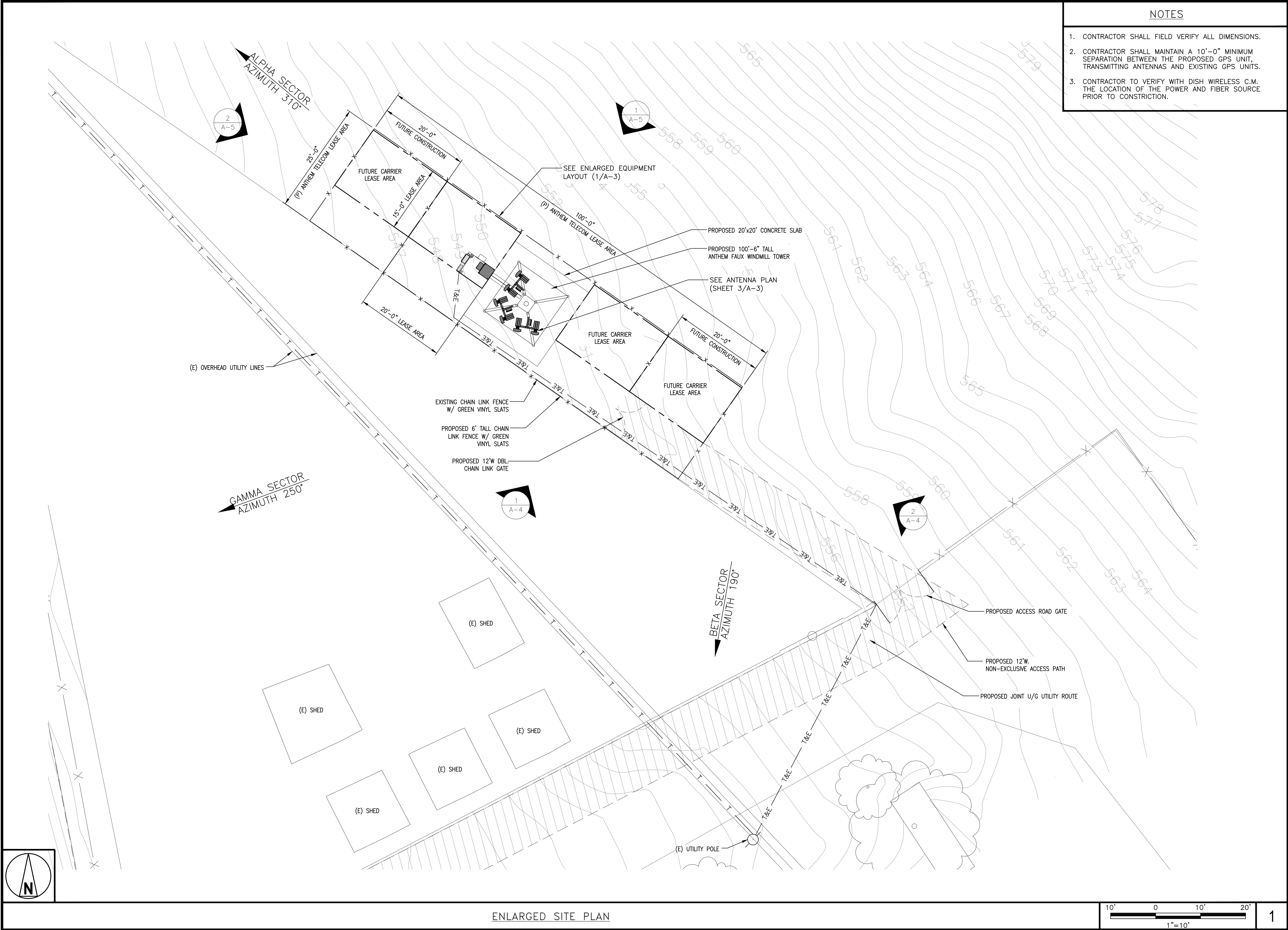
DISH WIRELESS PROJECT NUMBER  
SFSF00005A

3830 ABORN RD.  
CA JOSE, CA 95135  
WINDMILL TOWER

SHEET TITLE  
OVERALL  
SITE PLAN

SHEET NUMBER  
A-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.
  3. CONTRACTOR TO VERIFY WITH DISH WIRELESS C.M. THE LOCATION OF THE POWER AND FIBER SOURCE PRIOR TO CONSTRUCTION.

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LITTLETON, CO 80120

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LE	JPC	DC

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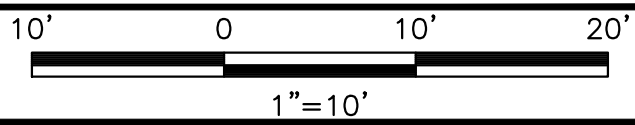
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SFSF00005A

DISH WIRELESS PROJECT NUMBER  
SFSF00005A

3830 ABORN RD.  
SAN JOSE, CA 95135  
WINDMILL TOWER

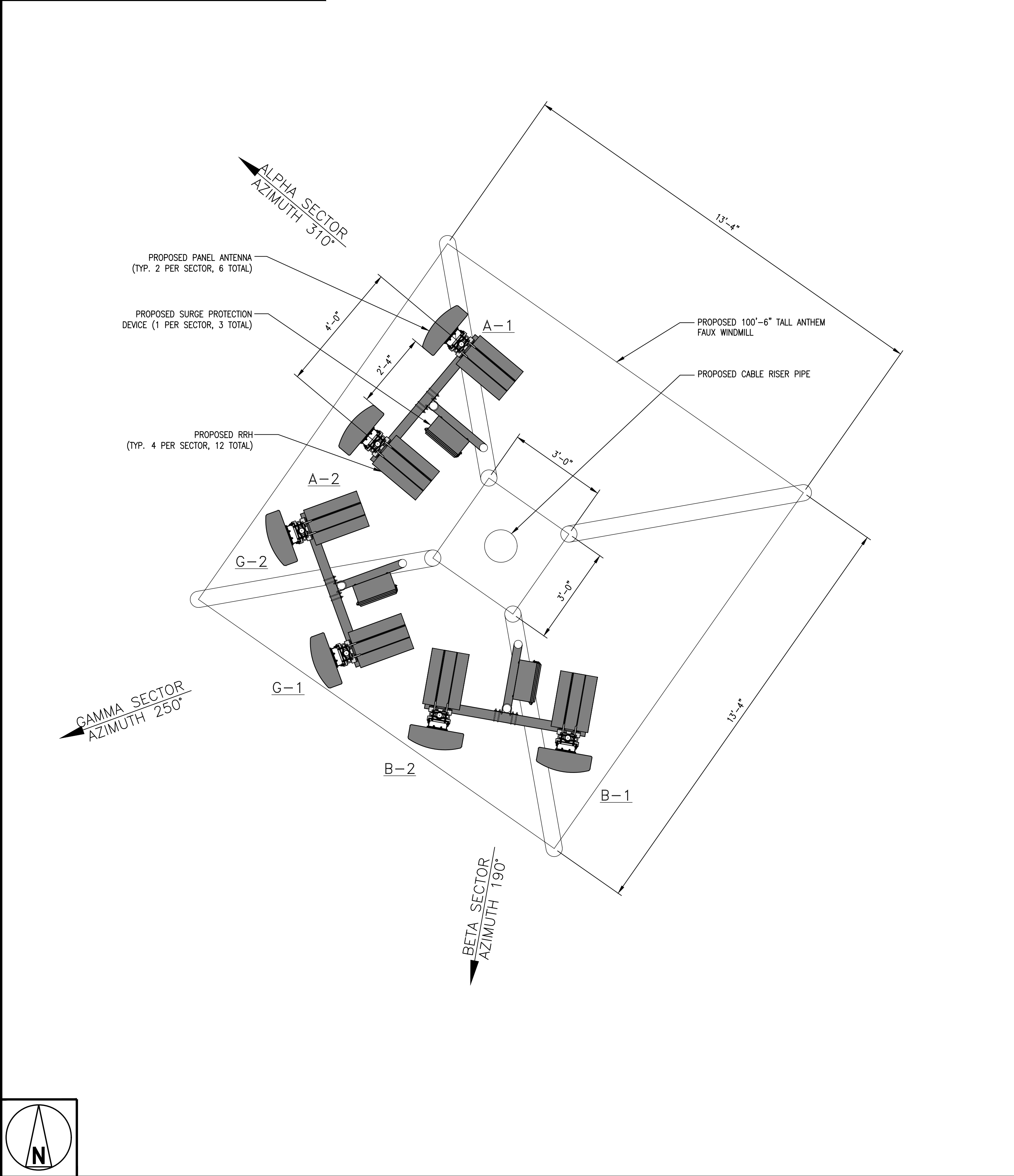
SHEET TITLE  
ENLARGED SITE PLAN

SHEET NUMBER  
A-2





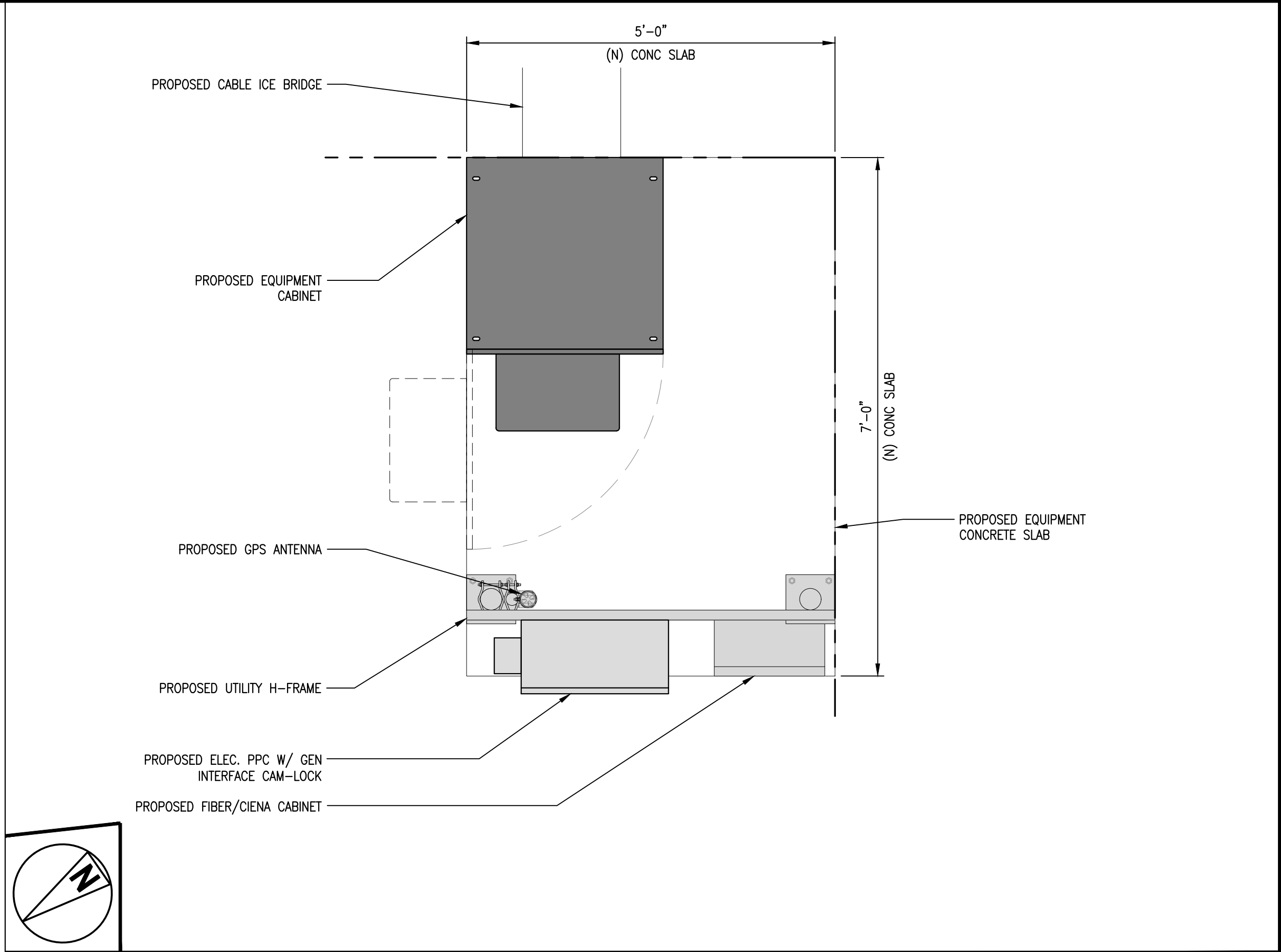
- NOTES
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
  2. ANTENNA AND MW DISH SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS



ANTENNA LAYOUT

12" 9" 6" 3" 0 1" 2"  
1"=1'-0"

3



EQUIPMENT LAYOUT

12" 6" 0 1" 2" 3"  
3/4"=1'-0"

1

SECTOR	ANTENNA						RADIO		
	POSITION	EXISTING OR PROPOSED	SIZE (HxWxD)	AZIMUTH	RAD CENTER	TRANSMISSION CABLE FEED LINE TYPE AND LENGTH	POSITION	EXISTING OR PROPOSED	TRANSMISSION CABLE FEED LINE TYPE AND LENGTH
ALPHA	A1	PROPOSED	72" x 19.6" x 8.2"	310°	87'-0"	COAX JUMPERS (±6' LONG)	A1	PROPOSED	(1) HIGH-CAPACITY HYBRID CABLE (110' LONG)
	A2	PROPOSED	72" x 19.6" x 8.2"	310°	87'-0"		A2	PROPOSED	
BETA	B1	PROPOSED	72" x 19.6" x 8.2"	190°	87'-0"	COAX JUMPERS (±6' LONG)	B1	PROPOSED	(1) HIGH-CAPACITY HYBRID CABLE (110' LONG)
	B2	PROPOSED	72" x 19.6" x 8.2"	190°	87'-0"		B2	PROPOSED	
GAMMA	C1	PROPOSED	72" x 19.6" x 8.2"	250°	87'-0"	COAX JUMPERS (±6' LONG)	C1	PROPOSED	(1) HIGH-CAPACITY HYBRID CABLE (110' LONG)
	C2	PROPOSED	72" x 19.6" x 8.2"	250°	87'-0"		C2	PROPOSED	

- NOTES
1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
  2. 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

5701 SOUTH SANTA FE DRIVE  
LITTLETON, CO 80120

500 WEST 2ND STREET  
AUSTIN, TX 78701

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CHECKED BY: JPC  
APPROVED BY: DC

RFDS REV #2 DATED 12/16/2021

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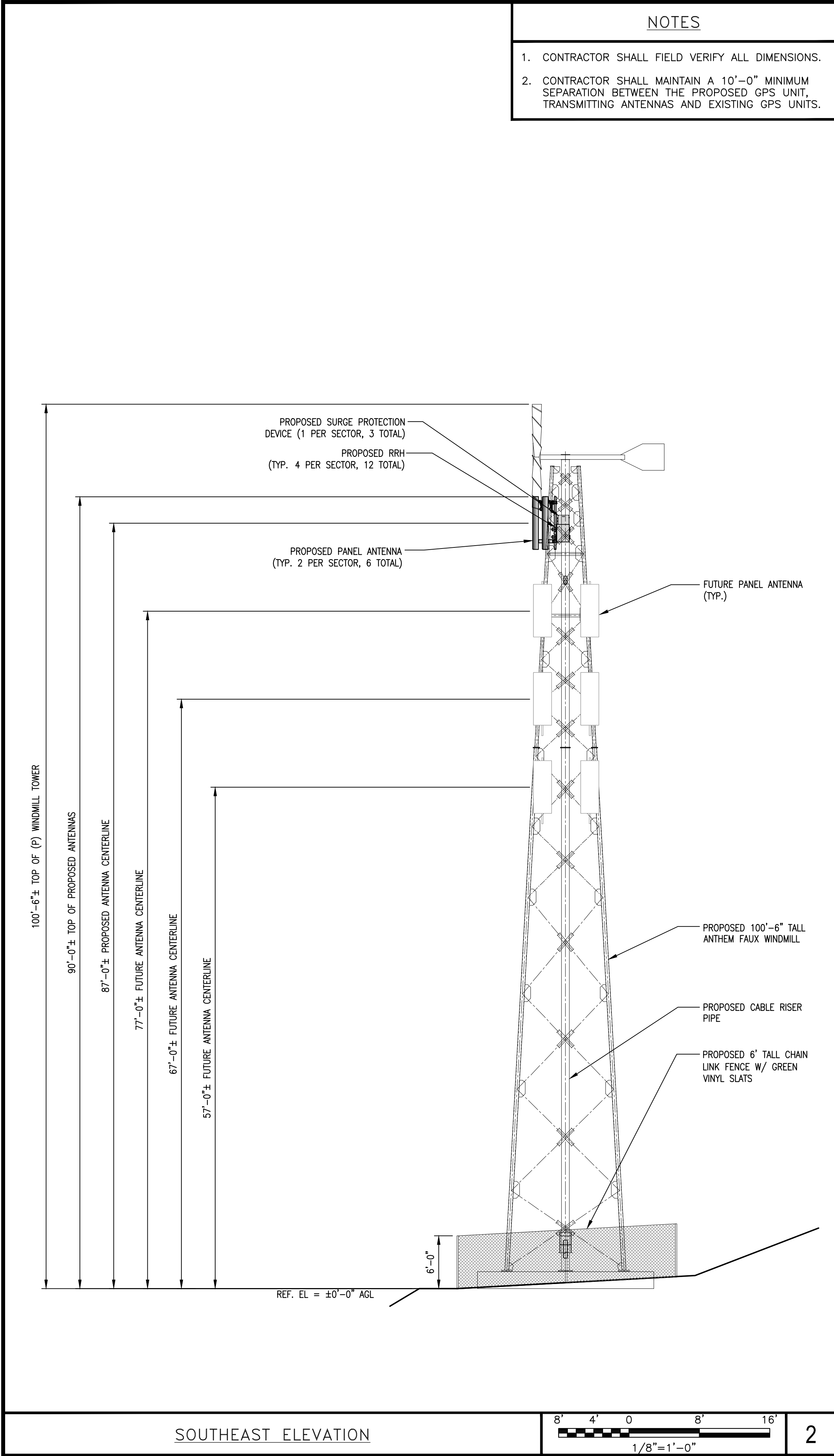
(VENDOR) PROJECT NUMBER  
SFSF00005A

DISH WIRELESS PROJECT NUMBER  
SFSF00005A

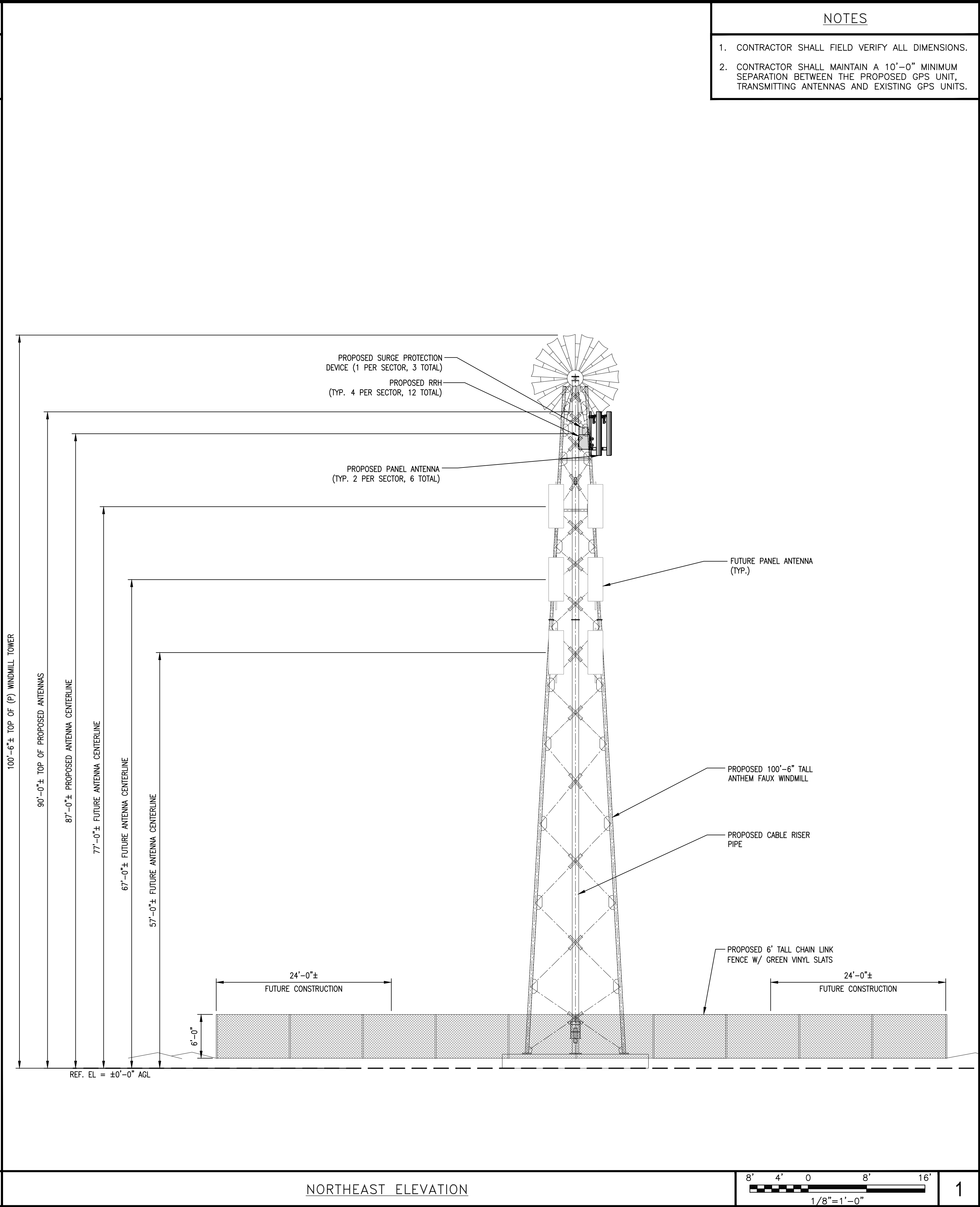
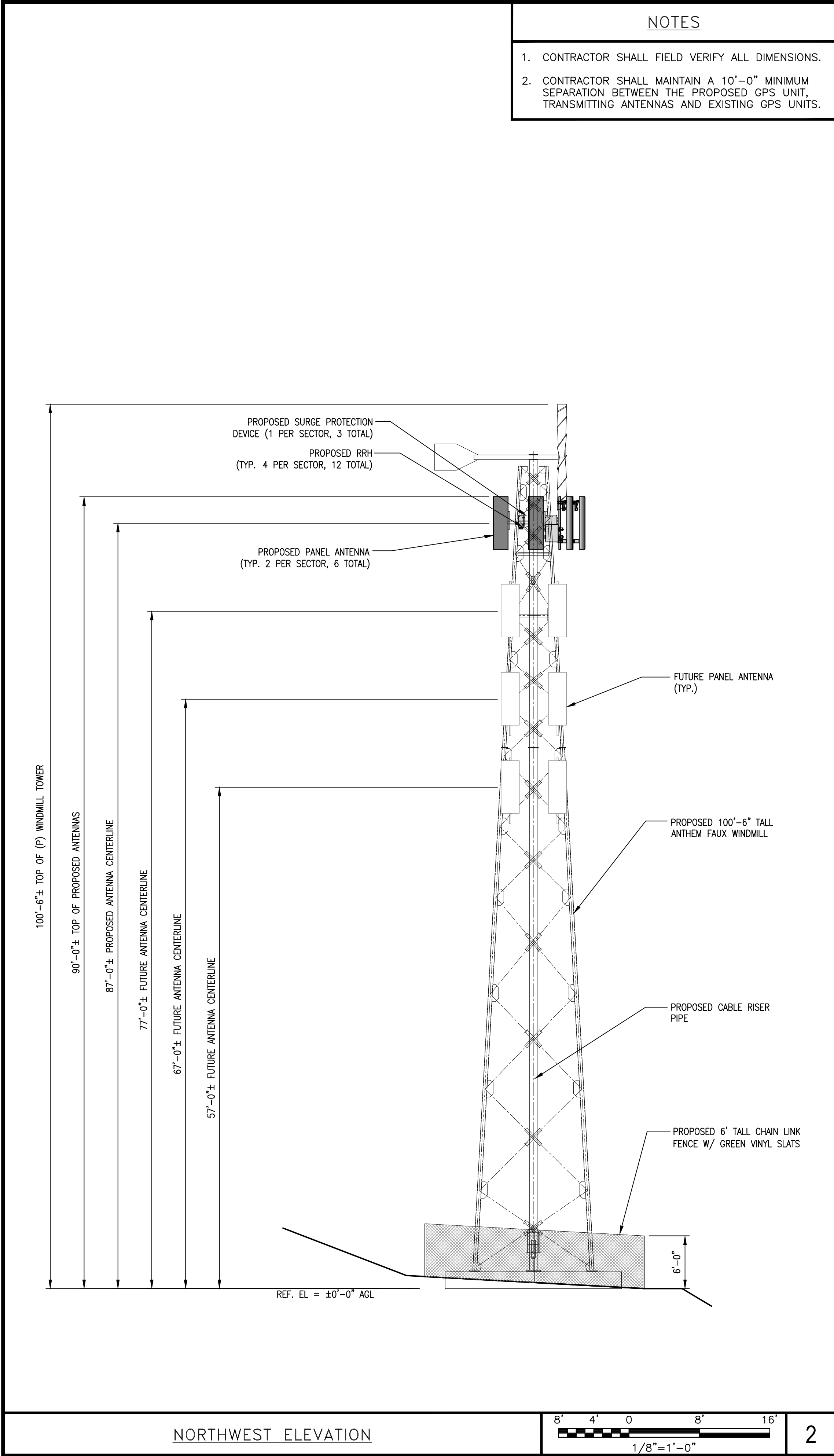
3830 ABORN RD.  
SAN JOSE, CA 95135  
WINDMILL TOWER

SHEET TITLE  
EQUIP / ANTENNA PLANS,  
AND SCHEDULE

SHEET NUMBER  
A-3







dish

WIRELESS

5701 SOUTH SANTA FE DRIVE

LITTLETON, CO 80120

ANTHEMNET

500 WEST 2ND STREET

AUSTIN, TX 78701

BUTLER

America Telecom

LLC

1511 E. ORANGETHORPE AVE., SUITE D

FULLERTON, CA 92831

CDG

22431 ANTONIO PKWY

SUITE B160-131

RANCHO SANTA MARGARITA CA 92688

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CHECKED BY: JPC

APPROVED BY: DC

RFDS REV #2 DATED 12/16/2021

ZONING DOCUMENTS

REV

DATE

DESCRIPTION

A

12/01/2021

ISSUED FOR 90% ZD REVIEW

0

12/21/2021

ISSUED FOR 100% ZD

1

02/21/2022

ISSUED FOR 100% ZD

2

02/28/2022

ISSUED FOR 100% ZD

(VENDOR) PROJECT NUMBER

SFSF00005A

DISH WIRELESS PROJECT NUMBER

SFSF00005A

3830 ABORN RD.

SAN JOSE, CA 95135

WINDMILL TOWER

SHEET TITLE

ELEVATIONS

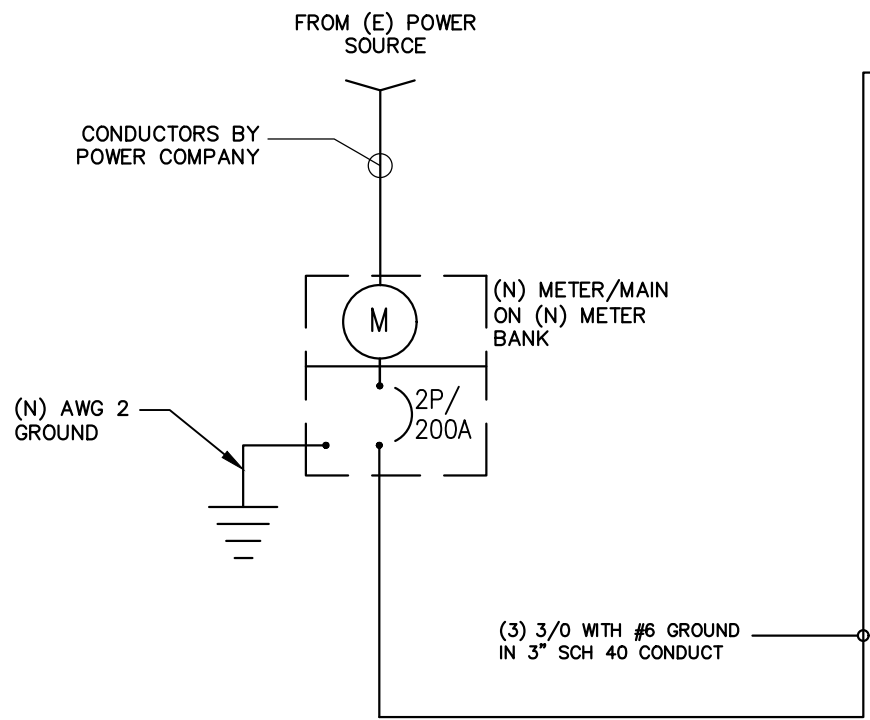
SHEET NUMBER

A-5



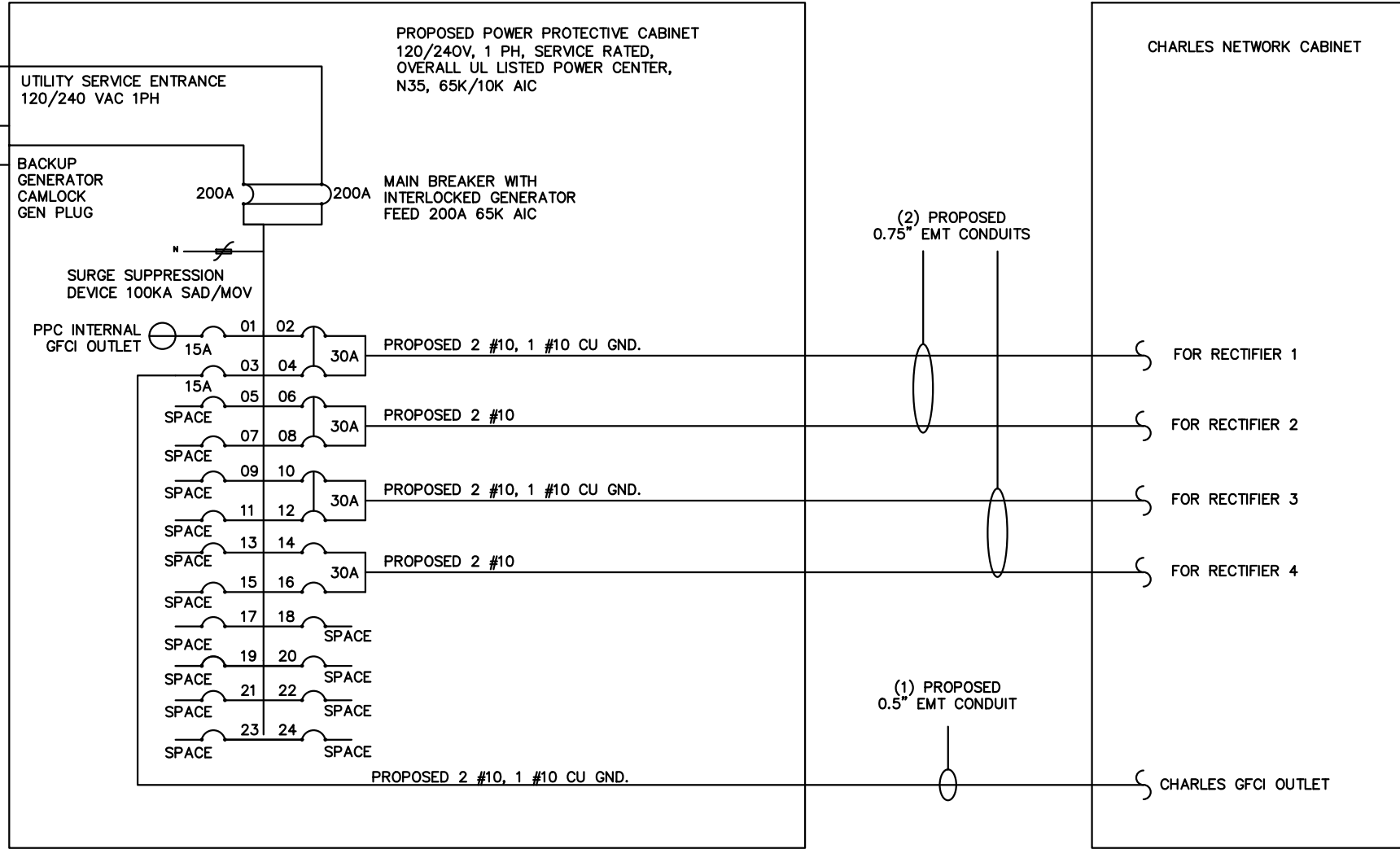
ELECTRICAL NOTES

- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL LOCAL AND STATE CODE, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
- CONTRACTOR SHALL COORDINATE WITH LOCAL POWER COMPANY FOR REQUIREMENTS OF POWER SERVICE LINE TO THE METER BASE. POWER SERVICE REQUIREMENT IS COMMERCIAL AC NOMINAL 120/208 VOLT OR 120/240 VOLT, SINGLE PHASE WITH 200 AMP RATING.
- CONTRACTOR SHALL COORDINATE WITH LOCAL TELEPHONE COMPANY FOR REQUIREMENTS OF "T1" SERVICE LINE TO TERMINATE AT THE PPC CABINET.
- CONTRACTOR SHALL FURNISH AND INSTALL ELECTRIC METER BASE AND 200A DISCONNECT SWITCH PER SITE PLAN AND DETAIL DRAWINGS. THE METER BASE SHOULD BE LOCATED IN A MANNER WHERE ACCESSIBLE BY THE LOCAL POWER COMPANY.
- LOCAL POWER COMPANY SHALL PROVIDE 200 AMP ELECTRIC METER. CONTRACTOR SHALL COORDINATE INSTALLATION OF METER WITH LOCAL POWER COMPANY.
- UNDERGROUND POWER AND TELCO SERVICE LINES SHALL BE ROUTED IN A COMMON TRENCH. ALL UNDERGROUND CONDUIT SHALL BE PVC SCHEDULE 40 AND CONDUIT EXPOSED ABOVE GROUND SHALL BE RIGID GALVANIZED STEEL UNLESS OTHERWISE INDICATED.
- ALL TELCO CONDUIT LINES SHALL BE 4" SCH. 40 PVC CONDUIT UNLESS OTHERWISE INDICATED. THE TELCO CONDUIT FROM THE PPC SHALL BE ROUTED AND TERMINATED AT DESIGNATED TELCO DEMARCATION OR 2-FEET OUTSIDE FENCED AREA, NEAR UTILITY POLE (IN FENCED AREA), OR END CAP OFF AND PROVIDE MARKER STAKE PAINTED BRIGHT ORANGE WITH DESIGNATION FOR TELCO SERVICE.
- CONDUITS INSTALLED AT PCS EQUIPMENT ENDS PRIOR TO THE EQUIPMENT INSTALLATION SHALL BE STUBBED AND CAPPED AT 6" ABOVE GRADE OR PLATFORM. IF SERVICE LINES CAN'T BE INSTALLED INITIALLY, PROVIDE NYLON PULL CORD IN CONDUITS.
- THE DISH WIRELESS CABINET, INCLUDING 200 AMP LOAD PANEL AND TELCO PANEL, SHALL BE PROVIDED BY OWNER AND INSTALLED BY THE CONTRACTOR. CONTRACTOR IS TO INSTALL BREAKER(S) NOT PROVIDED BY MANUFACTURER. SEE PANEL SCHEDULE ON THIS SHEET FOR BREAKER REQUIREMENTS.
- LOCATION OF ELECTRIC METER AND DISCONNECT SWITCH TO BE COORDINATED BY ELECTRICAL CONTRACTOR AND FIELD CONSTRUCTION MANAGER.
- #2 WIRE TO BE UTILIZED IN ELECTRIC SERVICE RUNS EXCEEDING 100'.
- CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTORS FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
- LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO ROUGH-IN.
- THE CONDUIT RUNS AS SHOWN ON THE PLANS ARE APPROXIMATE. EXACT LOCATION AND ROUTING SHALL BE PER EXISTING FIELD CONDITIONS.
- PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR REQUIRED BY NEC.
- ALL CONDUITS SHALL BE MET WITH BENDS MADE IN ACCORDANCE WITH NEC TABLE 346-10. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.
- ALL CONDUIT TERMINATIONS SHALL BE PROVIDED WITH PLASTIC THROAT INSULATING GROUNDING BUSHINGS.
- ALL WIRE SHALL BE TYPE THWN, SOLID, ANNEALED COPPER UP TO SIZE #10 AWG (#8 AND LARGER SHALL BE CONCENTRIC STRANDED) 75 DEGREE C, (167 DEGREES F), 98% CONDUCTIVITY, MINIMUM #12.
- ALL WIRES SHALL BE TAGGED AT ALL PULL BOXES, J-BOXES, EQUIPMENT BOXES AND CABINETS WITH APPROVED PLASTIC TAGS, ACTION CRAFT, BRADY, OR APPROVED EQUAL.
- ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
- CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION TO CONFLICTS. VERIFY WITH MECHANICAL CONTRACTOR AND COMPLY AS REQUIRED.
- ALL PANEL DIRECTORIES SHALL BE TYPEWRITTEN NOT HAND WRITTEN.
- INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, STARTERS, AND EQUIPMENT CABINETS.
- THE CONTRACTOR SHALL PREPARE AS-BUILT DRAWINGS, DOCUMENT ANY AND ALL WIRING AND EQUIPMENT CONDITIONS AND CHANGES WHILE COMPLETING THIS CONTRACT. SUBMIT AT SUBSTANTIAL COMPLETION.
- ALL DISCONNECT SWITCHES AND OTHER CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM (NO EXCEPTIONS.)
- ALL ELECTRICAL DEVICES AND INSTALLATIONS OF THE DEVICES SHALL COMPLY WITH (ADA) AMERICANS WITH DISABILITIES ACT AS ADOPTED BY THE APPLICABLE STATE.
- PROVIDE CORE DRILLING AS NECESSARY FOR PENETRATIONS OR RISERS THROUGH BUILDING. DO NOT PENETRATE STRUCTURAL MEMBERS WITHOUT CONSTRUCTION MANAGERS APPROVAL. SLEEVES AND/OR PENETRATIONS IN FIRE RATED CONSTRUCTION SHALL BE PACKED WITH FIRE RATED MATERIAL WHICH SHALL MAINTAIN THE FIRE RATING OF THE WALL OR STRUCTURE. FILL FOR FLOOR PENETRATIONS SHALL PREVENT PASSAGE OF WATER, SMOKE, FIRE AND FUMES. ALL MATERIAL SHALL BE UL APPROVED FOR THIS PURPOSE.
- ELECTRICAL CHARACTERISTICS OF ALL EQUIPMENT (NEW AND EXISTING) SHALL BE FIELD VERIFIED WITH THE OWNER'S REPRESENTATIVE AND EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN OF CONDUIT AND WIRE. ALL EQUIPMENT SHALL BE PROPERLY CONNECTED ACCORDING TO THE NAMEPLATE DATA FURNISHED ON THE EQUIPMENT (THE DESIGN OF THESE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AT THE TIME OF DESIGN AND SOME EQUIPMENT CHARACTERISTICS MAY VARY FROM DESIGN AS SHOWN ON THESE DRAWINGS).
- LOCATION OF ALL OUTLET, BOXES, ETC., AND THE TYPE OF CONNECTION (PLUG OR DIRECT) SHALL BE CONFIRMED WITH THE OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN.



NOTE:  
REFER TO SHEET A-1  
FOR UTILITY ROUTING PLAN

- GENERAL NOTES:
- GENERAL CONTRACTOR TO NOTIFY CDG IF THERE ARE ANY DISCREPANCIES BETWEEN THE ACTUAL SITE CONDITIONS AND THE DRAWINGS
  - ALL WORK TO BE COMPLIED WITH NFPA 70E AND OSHA TITLE 29
  - ALL BOXES AND ENCLOSURES (INCLUDING TRANSFER SWITCHES, GENERATORS AND POWER PANELS) FOR EMERGENCY CIRCUITS SHALL BE PERMANENTLY MARKED SO THEY WILL BE READILY IDENTIFIABLE AS A COMPONENT OF AN EMERGENCY CIRCUIT OR SYSTEM.



NOTE:  
BRANCH CIRCUIT WIRING SUPPLYING RECTIFIERS ARE TO BE RATED UL1015, 105°C, 600V, AND PVC INSULATED, IN THE SIZE SHOWN IN THE ONE-LINE DIAGRAM. CONTRACTOR MAY SUBSTITUTE UL1015 WIRE FOR THWN-2 FOR CONVENIENCE OUTLET BRANCH CIRCUIT

BREAKERS REQUIRED:  
(4) 30A, 2P BREAKER - SQUARE D P/N: 00230  
(2) 15A, 1P BREAKER - SQUARE D P/N: 00115

SINGLE LINE DIAGRAM

NO SCALE

1

PROPOSED PANEL SCHEDULE RAYCAP PPC CABINET 200A, 120/240V, 1Ø, 3W, 65kA											
LOAD SERVED	VOLT AMPS (WATTS)		TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS)		LOAD SERVED	
	L1	L2						L1	L2		
PPC GFCI	180		15A	1	A	2	30A	2880		RECTIFIER #1	
SPACE				3	B	4			2880		
				5	A	6	30A	2880		RECTIFIER #2	
				7	B	8			2880		
				9	A	10	30A	2880		RECTIFIER #3	
				11	B	12			2880		
				13	A	14	30A	2880		RECTIFIER #3	
				15	B	16			2880		
				17	A	18	15A	180		CHARLES GFCI	
				19	B	20					
				21	A	22					
				23	B	24					
				25	A	26					
				27	B	28					
				29	A	30					
VOLT AMPS	180	0						11700	11520		
200A MCB, 1Ø, 3W, 120/240V				L1	L2						
MB RATING: 22,000 AIC				11880	11520			VOLT AMPS			
				49.5	48			AMPS			
					97.5			MAX AMPS			
					121.9			MAX 125%			

PANEL SCHEDULE

NO SCALE

2

NOTES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATING FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUIT AND FEEDERS COMPLY WITH NEC (LISTED ON T-1) ARTICLE 210.19(A)(1) FPN NO. 4.

THE (2) CONDUITS WITH (4) CURRENT CARRYING CONDUCTORS EACH, SHALL APPLY THE ADJUSTMENT FACTOR OF 80% PER 2014/17 NEC TABLE 310.15(B)(3)(A) OR 2020 NEC TABLE 310.15(C)(1) FOR UL1015 WIRE

#12 FOR 15A-20A/1P BREAKER: 0.8 X 30A = 24.0A  
#10 FOR 25A-30A/2P BREAKER: 0.8 X 40A = 32.0A  
#8 FOR 35A-40A/2P BREAKER: 0.8 X 55A = 44.0A  
#6 FOR 45A-60A/2P BREAKER: 0.8 X 75A = 60.0A

CONDUIT SIZING: AT 40% FILL PER NEC CHAPTER 9, TABLE 4, ARTICLE 358

0.5" CONDUIT - 0.122 SQ. IN AREA  
0.75" CONDUIT - 0.213 SQ. IN AREA  
2.0" CONDUIT - 1.316 SQ. IN AREA  
3.0" CONDUIT - 2.907 SQ. IN AREA

CABINET CONVENIENCE OUTLET CONDUCTORS (1 CONDUIT): USING THWN-2, CU.

#10 - 0.0211 SQ. IN X 2 - 0.0422 SQ. IN  
#10 - 0.0211 SQ. IN X 1 - 0.0211 SQ. IN <GROUND  
TOTAL - 0.0633 SQ. IN

0.5" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (3) WIRES, INCLUDING GROUND WIRES, AS INDICATED ABOVE.

RECTIFIER CONDUCTORS (2 CONDUITS): USING UL1015, CU.

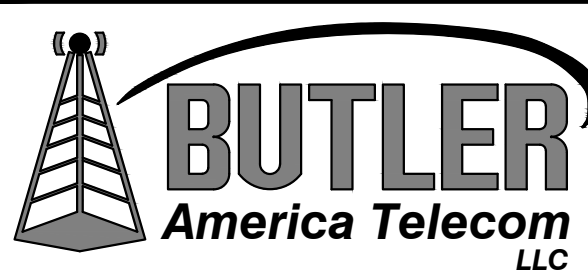
#10 - 0.0266 SQ. IN X 4 - 0.1064 SQ. IN  
#10 - 0.0082 SQ. IN X 1 - 0.0082 SQ. IN <BARE GROUND  
TOTAL - 0.1146 SQ. IN

0.75" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (5) WIRES, INCLUDING GROUND WIRES, AS INDICATED ABOVE.

PPC FEED CONDUCTORS (1 CONDUIT): USING THWN, CU.

3/0 - 0.2679 SQ. IN X 3 - 0.8037 SQ. IN  
#6 - 0.0507 SQ. IN X 1 - 0.0507 SQ. IN <GROUND  
TOTAL - 0.8544 SQ. IN

3.0" SCH 40 PVC CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (4) WIRES INCLUDING GROUND WIRE, AS INDICATED ABOVE.



NOT TO BE USED FOR CONSTRUCTION

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

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

RFDS REV #2 DATED 12/16/2021

ZONING DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	12/01/2021	ISSUED FOR 90% ZD REVIEW
0	12/21/2021	ISSUED FOR 100% ZD
1	02/21/2022	ISSUED FOR 100% ZD
2	02/28/2022	ISSUED FOR 100% ZD

(VENDOR) PROJECT NUMBER

SFSF00005A

DISH WIRELESS PROJECT NUMBER  
SFSF00005A

3830 ABORN RD.  
SAN JOSE, CA 95135  
WINDMILL TOWER

SHEET TITLE  
PRELIMINARY  
ELECTRICAL PLAN

SHEET NUMBER

E-1

ELECTRICAL NOTES

NO SCALE

3

PANEL SCHEDULE

NO SCALE

2