

APPLICABLE CODES

- 2022 CALIFORNIA BUILDING CODE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

- 2022 CALIFORNIA GREEN BUILDING S 2022 CALIFORNIA ELECTRICAL CODE 2022 CALIFORNIA MECHANICAL CODE 2022 CALIFORNIA PLUMBING CODE 2022 CALIFORNIA FIRE CODE 2022 CALIFORNIA ENERGY CODE
- 2021 INTERNATIONAL BUILDING CODE W/ STATE AMENDMENTS

THE EVENT OF CONFLICT. THE MOST RESTRICTIVE CODE SHALL PREVAI

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. HANDICAPPED ACCESS REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH THE 2022 CALIFORNIA BUILDING CODE. 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 DEPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS

SITE INFORMATION

APPLICANT: AT&T MOBILITY

PACIFIC GAS & FLECTRIC PG&F PROPERTY OWNER: 245 MARKET ST. #N10D SAN FRANCISCO, CA 94105

STRUCTURE TYPE: LATTICE TOWER

121'-0" TOWER HEIGHT:

ASSESSORS PARCEL NUMBER: 157-171-17

LATITUDE: 38° 04'41.693"N 38.07825°

122 * 32 * 29.753" W = 122.5416 LONGITUDE:

LAT/LONG TYPE: NAD-83

ELEVATION:

EXISTING ZONING: C1-1

PROPOSED PROJECT AREA NO INCREASE IN S.F.

TYPE OF CONSTRUCTION: TYPE V-B OCCUPANCY GROUP

JURISDICTION: CITY OF NOVATO

PROJECT TEAM

CLIENT REPRESENTATIVE:
MASTEC NETWORK SOLUTIONS
3443 AIRPORT RD
SACRAMENTO, CA 95834
CONTACT: CHRISTOPHER DOWELL PH: (415) 230-9185 EMAIL: Christopher.Dowell@mastec.com

ENGINEERING: MASTEC NETWORK SOLUTIONS 125 KLUG CIRCLE CORONA, CA 92880 CONTACT: RAPHAEL MOHOMED

PH: (919) 674-5895 EMAIL: Raphael.Mohamed@mastec.com

SAN RAMON, CA 94583 CONTACT: TARUN SETHI EMAIL: ts458v@att.com

CONTACT: SHAWN MARTIN

CONSTRUCTION: MASTEC NETWORK SOLUTIONS 3443 AIRPORT RD SACRAMENTO, CA 95834 CONTACT: BEN BRODERICK

SCOPING ENGINEER:
MASTEC NETWORK SOLUTIONS
3443 AIRPORT RD
SACRAMENTO, CA 95834

PH: (206) 303-9666

RF ENGINEER: AT&T MOBILITY 5001 EXECUTIVE PKWY 4W750S SITE ACQUISITION: MASTEC NETWORK SOLUTIONS 3443 AIRPORT RD

344.3 AIRPORT RD SACRAMENTO, CA 95834 CONTACT: JAMES PHILLIPS PH: (530) 333–5786 EMAIL: James.Phillips@mastec.c

CCL00528 - 2022 5G NR RADIO

PA#: MRSFR086859 PTN#: 3701A10XD0 - 4TXRX ANTENNA RETROFIT

PA#: MRSFR086911 PTN#: 3701A10WSN - 5G NR CBAND

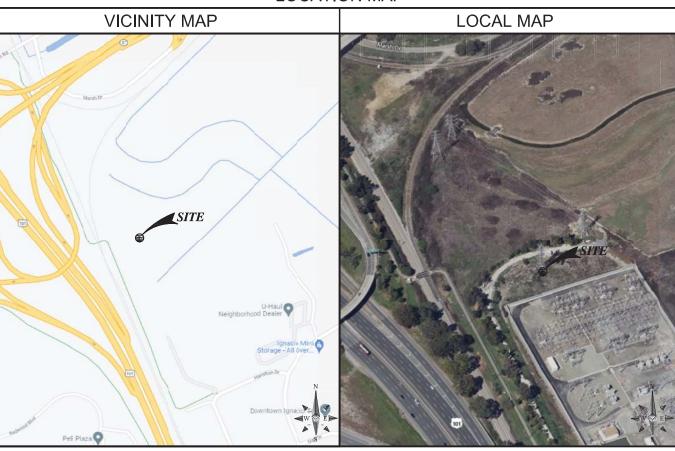
PA#: MRSFR086909 PTN#: 3701A10YJX - 5G NR CBAND

FA#: 10088152

HWY 101-IGNACIO

150 HAMILTON ROAD **NOVATO, CA 94945** MODIFICATION OF TELECOMMUNICATION SITE

LOCATION MAP



DRIVING DIRECTIONS

DIRECTIONS FROM: 5001 EXECUTIVE PARKWAY 4W750S,

CALL THE CONTRACTOR HELP DESK BEFORE ENTERING SITE @ 866-539-1483

- DEPART AND HEAD TOWARD SUNSET DR
- KEEP STRAIGHT TO GET ONTO SUNSET DR TURN RIGHT ONTO BOLLLINGER CANYON RD TAKE THE RAMP ON THE RIGHT FOR I-680 AND HEAD TOWARD SACRAMENTO
- 5. AT EXIT 46A, HEAD RIGHT ON THE RAMP FOR CA-24 TOWARD LAFAYETTE/OAKLAND
 TAKE THE RAMP ON THE RIGHT FOR I-580 AND
- HEAD TOWARD HAYWARD/SAN FRANCISCO KEEP STRAIGHT TO GET ONTO I-80 E/I-580 W
 TAKE THE RAMP ON THE LEFT FOR I-80 E/I-580 W
- KEEP RIGHT TO STAY ON I-580 W 11. TAKE THE RAMP ON THE LEFT FOR US-101 N 12. PASS DAYTON MONTGOMERY COUNTY ON THE RIGHT

13. AT EXIT 460A, HEAD RIGHT ON THE RAMP FOR

PROJECT DESCRIPTION

AT&T MOBILITY PROPOSES TO MODIFY AN EXISTING UNMANNED WIRELESS COMMUNICATIONS FACILITY. THIS MODIFICATION WILL CONSIST OF THE FOLLOWING

- **REMOVE (3) EXISTING RRUS-11 B12 (1 PER SECTOR)

 **REMOVE (3) EXISTING PANEL ANTENNAS © 118' RAD © BETA & GAMMA SECTOR FROM P2 TO P1

 **INSTALL (3) NEW PANEL ANTENNA © 118' RAD (© P2)

 **INSTALL (3) NEW RRUS-4478 B12A IN FOOTPRINT OF REMOVED RRUS-11 B12 (1 PER SECTOR)

- BELLOW CONDUCTOR

 RELOCATE (2) EXISTING H-FRAMES FROM 46' RAD TO 42' RAD (1 PER ALPHA/GAMMA) (1)

 FRAME @ GAMMA RELOCATED FROM C-LEG TO D-LEG

 RELOCATE (3) EXISTING RRUS-4478 B14 FROM EXISTING H-FRAME @ 46' RAD TO NEW H-FRAME @ 35' RAD (ADD JUMPERS FROM EXISTING 7/8' LINES)

 RELOCATE (3) EXISTING RRUS-4478 B5 FROM EXISTING H-FRAME @ 46' RAD TO NEW H-FRAME @ 35' RAD (ADD JUMPERS FROM EXISTING 7/8' LINES)

 INSTALL (2) NEW B144796 H-FRAMES @ NEW 35' RAD ON B/C LFG
- 35 RAD (ADD JUMPLERS FROM EXISING //8" LINES)
 INSTALL (2) NEW B144796 H-FRAMES @ NEW 35" RAD ON B/C LEG
 INSTALL (1) NEW B144796 H-FRAME W/ NEW (1) B139409 BRACKETS @ 42" RAD, A LEG
 INSTALL (3) NEW AR6449 B770 @ 42" RAD TO BE NEW P5
 INSTALL (3) NEW AR6419 B770 @ 42" RAD TO BE NEW P6
 INSTALL (1) NEW AR640 B770 W 42" RAD TO BE NEW P6
 INSTALL (1) NEW COS SOUID ON EXTENDED PIPE WITH ANTENNAS @ 42" RAD
 INSTALL (1) NEW ARM CO TENINGED

- INSTALL (1) NEW DC9 SQUID ON EX
 INSTALL (2) NEW 6AWG DC TRUNKS INSTALL (1) NEW 24 PAIR FIBER TRUNK

FOLIPMENT SHELTER

- UINTALL (1) GROUND TEST WELL FOR TEMP GENERATOR GROUNDING
 INSTALL (1) NEW DC12 IN EXISTING RACK
 INSTALL (5) NEW GE -48 RECTIFIERS IN EXISTING POWER PLANT (10 TOTAL)

- INSTALL (1) NEW BATTERY SHELF IN EXISTING POWER PLANT INSTALL (1) NEW BATLETY SHELF IN EXISTING POWER PLANT
 INSTALL (1) NEW 1854H BATTERY STRING IN NEW BATTERY SHELF (6 TOTAL)
 INSTALL (1) NEW 6648 UNIT IN EXISTING DATA RACK
 FINAL: (1) 5216, (2) XMU, (1) 6630 (MM) AND (1) 6648

- WEED ABATEMENT TO BE ASSESSED ON PRECON WALK, AROUND SHELTER AND CONDUIT STUB UPS AT BASE OF TOWER
- IF THERE IS ANY DISCREPANCY FOUND AT CIO25 ON THE RECTIFIER/BATTERY COUNT IN RELATION TO THE SPCT PLEASE CONTACT DAVE THOMAS IMMEDIATELY; SEE SHEET E-1

REFERENCE RFDS ID# 4496147, VERSION 3.00, DATED 06/29/2022

DRAWING INDEX

SHEET NO:	SHEET TITLE
T-1	TITLE SHEET
GN-1	GENERAL NOTES
A-0	OVERALL SITE PLAN
A-1	ENLARGED SITE PLAN
A-2	EQUIPMENT LAYOUT
A-3	EXISTING ANTENNA LAYOUT
A-3.1	PROPOSED ANTENNA LAYOUT
A-4	ELEVATIONS
A-5	DETAILS
A-6	DETAILS
A-7	DETAILS
G-1	GROUNDING DETAILS
E-1	ELECTRICAL DIAGRAM & LTE RET SCHEMATIC DIAGRAM
E-2	ELECTRICAL SITE PLAN

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS & AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT & MAY IMPOSE CHANGES OR MODIFICATIONS.

90% CDS	DATE:
100% CDS	DATE:
100% CDS WITH STRUCTURALS	
CONSTRUCTION:	
RF ENGINEER	DATE:
SCOPING ENGINEER	DATE:
PROJECT MANAGER:	DATE: -

SCALE

THE DRAWING SCALES SHOWN IN THIS SET REPRESENT THE CORRECT SCALE ONLY WHEN THESE DRAWINGS ARE PRINTED IN A 11"X17" OR 24"X36"



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FA CODE: FA # 10088152 DRAWN BY

30109

JOB #:

3	10/19/2023	JURISTICTION COMMENTS
2	08/09/2023	100% CD'S - UPDATED S&S
1	05/02/2022	100% CD'S - S&S
0	03/15/2022	95% CD'S FOR REVIEW
Α	02/16/2022	90% CD'S FOR REVIEW
REV	DATE	DESCRIPTION



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

CCL00528

HWY 101-IGNACIO 150 HAMILTON ROAD NOVATO, CA 94945

FA NUMBER 10088152

SHEET TITLE TITLE SHEET

SHEET NUMBER

T-1

LIMITS OF LIABILITY:

MNS HAS MADE EVERY EFFORT TO CREATE COMPLETE AND ACCURATE CONTRACT DOCUMENTS WITH THE BEST INFORMATION AVAILABLE AT THE TIME OF THEIR COMPLETION. CONTRACTORS ARE CAUTIONED THAT MINOR OMISSIONS OF THEIR COMPLETION. CONTRACTORS ARE CAUTIONED THAT MINIOUS OWNESS
OR ERRORS IN THE CONTRACT DOCUMENTS MAY OCCUR AND SHALL NOT
EXCUSE THE CONTRACTOR FROM COMPLETING THE PROJECT AND
IMPROVEMENTS IN ACCORDANCE WITH THE INTENT OF THE DOCUMENTS.
REFERENCE ADMINISTRATIVE REQUIREMENTS.

CONTRACT DOCUMENTS:

- 1. THE CONTRACT DOCUMENTS INCLUDE THE AGENCY APPROVED PROJECT SPECIFICATIONS, PLANS, AND THEIR LATEST REVISIONS, ADDENDA, AND CLARIFICATIONS. THE CONTRACT DOCUMENTS MAY ALSO INCLUDE
- THE CONTRACTOR SHALL KEEP A MINIMUM OF ONE SET OF CONTRACT DOCUMENTS ON FILE IN THE PROJECT OFFICE AT THE JOB SITE. COPIES OF THE PROJECT DOCUMENTS USED BY SITE STAFF SHALL BE UP TO DATE WITH THE PROJECT OFFICE COPY
- THE CONTRACTOR SHALL NOTIFY THE PROJECT TEAM OF ANY ERRORS, OMISSIONS, AND INCONSISTENCIES FOUND IN THE CONTRACT DOCUMENTS. THE NOTIFICATION SHALL BE GIVEN BOTH VERBALLY AND IN WRITING WITHIN 24 HOURS OF DISCOVERY.
- IF AN ERROR OR OMISSION IN THE PROJECT DOCUMENTS REQUIRES RECTIFICATION, THE CONTRACTOR SHALL SUBMIT A PROPOSAL TO THE PROJECT TEAM TO RECTIFY THE ISSUE. THE PROPOSAL MUST BE APPROVED PRIOR TO WORK
- THE CONTRACT DRAWINGS ARE PREPARED TO SCALE WITH THE BEST KNOWLEDGE OF THE SITE GIVEN TO MIS. WHERE DIMENSIONS ARE NOT SHOWN IN THE DRAWINGS, THE CONTRACTOR SHOULD CLARIFY WITH TH PROJECT TEAM WHEN THE INFORMATION IS CRITICAL TO PROPER
- THE CONTRACTOR SHALL DOCUMENT ALL CHANGES AND SUBSTITUTIONS ON THE PROJECT OFFICE COPY OF THE CONTRACT DOCUMENTS.
- WHEN EARRICATION OF STRUCTURAL ITEMS ARE REQUIRED IT MAY BE IECESSARY TO SUBMIT SHOP DRAWINGS FOR REVIEW BY MNS. SEE
- DEFERRED SUBMITTALS ARE REQUIRED FOR MATERIALS TO BE PROVIDED BY THE CONTRACTOR. WHERE MATERIALS IN THE PLANS ARE DESIGNATED AS PROVIDED BY CONTRACTOR, THE CONTRACTOR SHALL SUBMIT THE PREFERRED MATERIAL TO THE PROJECT TEAM FOR REVIEW AND APPROVAL

ADMINISTRATIVE REQUIREMENTS:

- ALL ACCESS TO THE SITE, FOR SITE VISITS AND CONSTRUCTION, SHALL BE DURING 7:00-3:30 AND MUST BE COORDINATED WITH THE PROPERTY OWNER
- AT THE COMPLETION OF THE PROJECT, THE AT&T PROPERTY MANAGER AND THE DISTRICT WILL DO A FINAL WALK THROUGH AND APPROVE ALL WORK PRIOR TO ACCEPTANCE.
- 3. THE PROPERTY OWNER WILL RECEIVE ONSET OF FULL SIZE AND 11X17 ASBUILTS AT THE COMPLETION OF THE PROJECT
- REQUIRED (INCLUDING FEES) TO COMPLETE THE WORK DESCRIBED BY THE CONSTRUCTION DOCUMENTS.
- PRIOR TO BIDDING, THE CONTRACTOR IS RESPONSIBLE FOR REVIEW OF THE PROJECT SITE AND CONTRACT DOCUMENTS TO UNDERSTAND THE DESIGN AND CONDITIONS AFFECTING THE WORK TO BE PERFORMED. AN ERRORS, OMISSIONS, AND DISCREPANCIES MUST BE SUBMITTED TO THE PROJECT TEAM VERBALLY AND IN WRITING.
- THE CONTRACTOR SHALL PROVIDE A WARRANTY FOR WORK FOR A PERIOD IHE CONTRACTOR SHALL PROVIDE A WARRANIY FOR WORK FOR A PER OF ONE YEAR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REMEDY ALL FAULTY, INFERIOR, AND/OR IMPROPER MATERIALS, DAMAGED GOODS, AND/OR FAULTY WORKMANSHIP. ALL ROOFING AND WATERPROPOING MUST BE WARRANTED FOR A PERIOD OF TWO YEARS. THE PERIOD BEGINS AT SUBSTANTIAL COMPLETION OF THE PROJECT.
- 7. THE CONTRACTOR SHALL PROVIDE A COPY OF LICENSE AND INSURANCE TO THE TELECOMMUNICATIONS CARRIER.

- THE CONTRACTOR SHALL PROVIDE OSHA COMPLIANT PROTECTION FOR THE SAFETY OF THE SITE STAFF AT ALL TIMES DURING THE CONSTRUCTION OF THE PROJECT.
- CONTRACTOR SHALL KEEP GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION. SITE SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM DIRT AND DEBRIS. SURFACES SHALL BE CLEANED OF
- THE CONTRACTOR IS TO PROVIDE PROTECTION FOR ADJOINING PROPERTIES FROM PHYSICAL HARM, NOISE, DUST, DIRT, AND FIRE AS REQUIRED BY THE GOVERNING AGENCIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIR OF ANY DAMAGE.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR THE SECURITY OF THE PROJECT
- WHERE WORK REQUIRES OPEN HAZARDS TO SITE STAFF, THE HAZARD SHALL BE TEMPORARILY MITIGATED TO OSHA STANDARD UNTIL THE HAZARD IS CLOSED.
- 6. SEE STRUCTURAL NOTES.

UTILITY REQUIREMENTS:

- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY AGENCIES PRIOR TO WORK WITH UTILITIES.
- 2. CONTRACTOR TO LOCATE ALL UTILITIES PRIOR TO WORK
- 3. CONTRACTOR TO PROTECT, REPLACE AND/OR REROUTE ANY EXISTING UTILITIES ENCOUNTERED DURING THE COURSE OF WORK

SPECIAL CONSIDERATIONS FOR WEATHERPROOFING:

- ALL PENETRATIONS TO EXISTING STRUCTURES MUST BE SEALED WITH APPROVED WEATHERPROOFING. IF WEATHERPROOFING IS OMITTED, CONTACT THE PROJECT TEAM FOR CLARIFICATION OR PROVIDE A WEATHERPROOFING PROPOSAL FOR APPROVAL.
- 2. CONTRACTOR SHALL COORDINATE WITH OWNER AND THE EXISTING

ROOFING CONTRACTOR OF RECORD FOR ANY AUGMENTATION TO THE ROOF MEMBRANE, AND HAVING THE WORK GUARANTEED UNDER THE ROOFING CONTRACTOR'S EXISTING WARRANTY.

- ALL WORK MUST BE PERFORMED DURING THE OWNERS PREFERRED
- 2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER
- ALL WORK PERFORMED ON THE PROJECT SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS. SEE STRUCTURAL NOTES.
- 4. IF INSPECTION OF WORK IS REQUIRED, THE CONTRACTOR SHALL NOTIF THE INSPECTION ENTITY 24 HOURS IN ADVANCE OF THE WORK TO BE
- 5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY AGENCIES PRIOR TO WORK WITH UTILITIES. REFERENCE UTILITIES SECTION.
- THE CONTRACTOR SHALL COORDINATE ON—SITE STORAGE WITH OWNER IN ADVANCE OF WORK. PERMITS MAY BE REQUIRED FOR STORAGE ON PUBLIC RICHTO F WAY.
- ALL NEW CONSTRUCTION SHALL MATCH EXISTING CONSTRUCTION IN FORM. TEXTURE, FINISH, AND IN MATERIALS EXCEPT AS NOTED IN THE CONSTRUCTION DOCUMENTS
- 8. THE CONTRACTOR SHALL MAKE EVERY EFFORT TO PROTECT EXISTING WORK FROM DAMAGE DURING THE COURSE OF WORK FOR THIS PROJECT.
- WITHIN TOLERANCES SPECIFIED BY CODES AND STANDARDS INCLUDED IN THE STRUCTURAL NOTES.
- 10. THE CONTRACTOR SHALL INSTALL ALL FOLIPMENT AND MATERIALS ACCORDING TO MANUFACTURER'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- 11. ANY SUBSTITUTIONS OF MATERIALS MUST BE APPROVED BY THE PROJECT TEAM IN WRITING.
- 12. THE CONTRACTOR SHALL SUPPLY ALL MATERIALS INCIDENTAL TO THE WORK DESCRIBED BY THE CONTRACT DOCUMENTS.
- 13. THE CONTRACTOR MUST RESTORE ALL PORTIONS OF THE PROJECT SITE TO IT'S PRE-WORK CONDITION. WHERE THE WORK PERFORMED DOES NOT ALLOW FOR PRE-WORK RESTORATION, WORK AREAS MUST BE REPAIRED OR REPLACED TO MATCH EXISTING FINISH AND SITE GRADING.
- 14. THE CONTRACTOR IS RESPONSIBLE FOR ALL DISPOSAL OF DEBRIS AND ITEMS WHICH ARE SPECIFIED TO BE REMOVED IN THE COURSE OF WORK

- 1. ALL CONCRETE DESIGN DESCRIBED BY THIS SET OF DRAWINGS IS BASED
- 2. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI. UNLESS SPECIFIED OTHERWISE.
- 3 FACH CONCRETE MIX DESIGN SHALL HAVE A CYLINDER TEST HISTORY OF TO CONCRETE MIX BESION SPALL HAVE A C'LINDER IEST HISTORY
 DAYS MINIMUM, TESTED IN ACCORDANCE WITH ASTM C39, TESTED
 ACI CERTIFIED STRENGTH TESTING TECHNICIAN, AND THE STRENGTH
 TISTICALLY DETERMINED IN ACCORDANCE WITH ACI 318. EACH MIX DESIGN USED ON SITE SHALL BE SUBMITTED TO, AND RECEIVED BY THE PROJECT TEAM BEFORE THE CONCRETE IS PLACED ON SITE.
- 4. RAW MATERIALS, MANUFACTURE, AND DELIVERY TO THE FORMWORK SHALL BE IN ACCORDANCE WITH ASTM C94 AND ACI 318.
- 5. EMBEDDED ITEMS ARE TO BE SECURELY FASTENED SO THAT THEY DO NOT MOVE DURING PLACEMENT OF THE CONCRETE. REFERENCE THE REINFORCING STEEL SECTION.
- 6. TWO CYLINDERS SHALL BE TAKEN FOR EACH LOAD DELIVERED TO FORMWORK. SAMPLES ARE TO BE TAKEN FROM THE CONCRETE AS IT IS PLACED IN THE FORMWORK IN ACCORDANCE WITH ASTM C172. CYLINDERS ARE TESTED PER ASTM C39 AND TESTED BY AN ACI
 CERTIFIED CSTT. CONCRETE SAMPLES ARE TO BE TESTED FOR AR
 CONTENT AND WATER CEMENT RATIO. ALL TEST RESULTS ARE SUBMITTED
 TO THE PROJECT TEAM WITHIN ONE MONTH OF PLACING THE CONCRETE
- THE CONTRACTOR SHALL FOLLOW GUIDELINES DESCRIBED IN ACI 306. WHEN AMBIENT TEMPERATURES RISE ABOVE 90 DEGREES FAHRENHEIT, THE CONTRACTOR SHALL FOLLOW GUIDELINES DESCRIBED IN ACI 305.
 THE CONCRETE SHALL BE PROTECTED FROM FREEZING OR FROM EXCESSIVE HEAT WITH TENTS OR BLANKETS TO PROVIDE FOR HEAT OR
- ALL CONCRETE SHALL BE PLACED AS CLOSE TO PRACTICAL TO THE FINAL DESTINATION IN THE FORM. CONCRETE SHALL NOT BE PLACE FROM A HEIGHT GREATER THAN 6 FEET FROM THE POINT OF DISCHARGE.
- 9. VIBRATION SHALL BE USED TO CONSOLIDATE CONVENTIONAL CONCRETE. VIBRATION STAILS SE USED TO CONSOLUTION CONTROLLY INTO FORMS EVERY 36 INCHES MAXIMUM AND FOR EACH LIFT. STINGER VIBRATORS SHALL BE INSERTED TO A VERTICAL DEPTH OF 12 INCHES INTO PREVIOUS LIFTS TO ENSURE CONSOLIDATION. FOLLOW GUIDELINE
- REPAIRS FOR MINOR DEFECTS MAY BE ADMINISTERED BY AN EXPERIENCED CRAFTSMAN WITHOUT AN APPROVED PROCEDURE. A MINOR DEFECT INCLUDES BUG HOLES, HONEYCOMBING, CHIPS, AND SPALLS THAT DO NOT EXCEED ½ INCH OF DEPTH INTO THE FACE OF THE CONCRETE. MAJOR REPAIRS EXTENDING BEYOND ½ INCH OF DEPTH AND UP TO THE REINFORCING MAY BE REPAIRED WITH AN APPROVED REPAIR PROCEDURE. REPAIR PROCEDURES MAY BE SUBMITTED TO THE PROJECT TEAM FOR APPROVAL IN ADVANCE OF FIELD WORK. DAMAGE EXTENDING BEYOND STEEL REINFORCING REQUIRES A RETROFIT DESIGN OR IS REJECTED
- 11. SEE ARCHITECTURAL NOTES FOR CONCRETE FINISH REQUIREMENTS

THE EXISTING FRAMING IS REPRODUCED FROM THE LATEST INFORMATION PROVIDED. SOME FRAMING AND MATERIALS ENCOUNTERED AT THE TIME OF CONSTRUCTION MAY VARY FROM THAT SHOWN IN THE PLANS. IF THE PLAN CONDITION, THE CONTRACTOR SHOULD CONSULT THE PROJECT TEAM FOR A REVISED OF THE PROJECT O DETAIL OR DIRECTION TO PROCEED.

CONCRETE SLABS ON GRADE:

- 1. SLAB-ON-GRADE CONSTRUCTION SHALL BE SUPPORTED ON A 6 INCH LAYER OF CLEAN 3/4 INCH MINUS SUBGRADE COMPACTED TO A DENSITY DETECTOR OF CLEAN OF THE MINIOS SUBGRADE COMPACTED TO A OF NO LESS THAN 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1557). SUBGRADE SHALL BE SUPPORTED ON UNDISTURBED NATIVE SOIL OR PROPERLY PLACED AND COMPACTED
- 2. INTERIOR SLABS-ON-GRADE SHALL BE CAST OVER A 4 MIL VAPOR
- PROVIDE CONTROL JOINTS IN ALL SLABS ON GRADE. JOINTS ARE TO BE INSTALLED AT 14 TO 16 FEET ON CENTER EACH WAY MAXIMUM UNLESS SHOWN OTHERWISE ON THE DRAWINGS. ALL SAW CUT JOINTS IN CONCRETE SLABS ARE TO BE MADE WITH AN EARLY CUT SAW AS SOON AS POSSIBLE AFTER POURING BUT NO LATER THAN ONE HOUR AFTER
- 4. PROVIDE ISOLATION JOINTS AROUND ALL COLUMNS/SPREAD FOOTINGS.
 JOINTS SHALL BE FORMED BY INSERTING PREFORMED JOINT FILLER FOR
 THE FULL DEPTH OF THE SLAB.
- 5. PROTECT CONCRETE FROM DAMAGE OR REDUCED STRENGTH DUE TO COLD OR HOT WEATHER IN ACCORDANCE WITH ACI 305 AND 306. CONTRACTOR SHALL TAKE SPECIAL CURING PRECAUTIONS TO MINIMIZE SHRINKAGE CRACKING OF CONCRETE SLABS
- THE CONTRACTOR SHALL TAKE CARE THAT HEAVY EQUIPMENT AND AREAS USED FOR STAGING DO NOT AND DAMAGE SLABS ON GRADE. DAMAGED SLABS ON SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
- 7. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI. UNLESS SPECIFIED OTHERWISE.

CONCRETE OR MASONRY ANCHORAGE:

EXPANSION BOLTS INTO CONCRETE SHALL BE "KWIK BOLT TZ" AS MANUFACTURED BY THE HILTI CORP., INSTALLED IN STRICT ACCORDANCE WITH ICC-ES REPORT ESR-1917. SPECIAL INSPECTION IS REQUIRED, EXPANSION ANCHORS EXPOSED TO WEATHER SHALL BE STAINLESS STEEL.

REINFORCING STEEL:

- 1 ALL DETAILING FARRICATION AND PLACEMENT OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE ACI MANUAL OF CONCRETE PRACTICE
- PRACTICE.

 REINFORCING BARS SHALL BE DEFORMED AND CONFORM TO ASTM A615
 OR A706, GRADE 60. REINFORCING TIE WIRE MAY BE GRADE 40.
 REINFORCING STEEL SPLICES SHALL BE 40 BAR DIAMETERS OR TWO
 TRANSVERSE WIRE SPACINGS FOR WIRE MATS.
- 4. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE IN
- ACCORDANCE WITH ACI 318.
- ACCORDANCE WITH ACI 318.

 5. NO.5. OR LARGER REINFORCING BARS SHALL NOT BE RE—BENT WITHOUT APPROVAL BY THE STRUCTURAL ENGINEER.

 6. WELDING OF REBAR IS NOT ALLOWED WITHIN THE MIDDLE THIRD OF THE BAR LENGTH. WELDING OF REBAR IS CONDUCTED IN ACCORDANCE WITH AWS D1.4. USE ONLY ASTM A706 REINFORCING.

 7. WIRE REINFORCING CONFORNS TO ASTM A82 OR A185.

 8. CONCRETE COVER FOR REINFORCING STEEL CONFORMS TO ACI 318.

ELECTRICAL:

- 1. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED. ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE W/DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS IF ANY PROBLEMS ARE ENCOUNTERED BY COMPYING WITH THESE REQUIREMENTS, CONTRACTOR SHALL NOTIFY 'CONSTRUCTION MANAGER' AS SOON AS POSSIBLE. AFTER THE DISCOVERY OF THE PROBLEMS, AND SHALL NOT PROCEED WITH THAT PORTION OF WORK, UNTIL THE CONSTRUCTION MANAGER' HAS DIRECTED THE CORRECTIVE ACTIONS TO
- 2. ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE HIMSELF WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF, ALL (E) CONDITIONS OF ELECTRICAL EQUIP., LIGHT FIXTURES. ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTING OF HIS BID. FALUURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER & TELEPHONE COMPANIES HAVING JURISDICTION AND SHALL INCLUDE BUT NOT BE LIMITED TO:

 - INCLUDE BUT NOT BE LIMITED TO:

 A. UL UNDERWRITERS LABORATORIES

 B. NEC NATIONAL ELECTRICAL CODE

 C. NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOC.

 D. OSHA OCCUPATIONAL SAFETY AND HEAL TH ACT

 E. SBC STANDARD BUILDING CODE
- 4. (E) SERVICES: CONTRACTOR SHALL NOT INTERRUPT (E) SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER. CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING EQUIPMENT.
- CONTRACTOR SHALL CONFIRM WITH LOCAL LITHLITY COMPANY ANY/AL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC ... ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER. PRIOR TO BEGINNING ANY
- MINIMUM WIRE SIZE SHALL BE #12 AWG. NOT INCLUDING CONTROL WIRING. UNLESS NOTED OTHERWISE. ALL CONDUCTORS SHALL BE COPPER WITH THWN INSULATION.
- 7. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- 8. IT IS NOT THE INTENT OF THESE PLANS TO SHOW EVERY MINOR DETAIL OF THE CONSTRUCTION. CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND PROVIDE ALL REQUIREMENTS FOR THE EQUIPMENT TO BE PLACED IN PROPER
- 9. ELECTRICAL SYSTEM SHALL BE AS COMPLETELY AND EFFECTIVELY GROUNDED, AS REQUIRED BY SPECIFICATIONS, SET FORTH BY AT&T.
- 10. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS. WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.

- 11. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
- 12. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
- 13. DITCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO NOTES AND REQUIREMENTS 'EXCAVATION, AND BACKFILLING.
- 14. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES. ALL ELECTRICAL WIRING SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- 15. DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE
- 16 ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING. EXPOOPER SURFACES, INCLUDING GROUND BARS. SHALL BE TREATED SUPERIOR OF THE PROTECTION OF THE PRO SUBSTITUTIONS.
- 17. RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OF RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC MEETING OR EXCEEDING NEMA TC2 — 1990. CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARTE PULL STRINGS — 200 LBS TEST POLYETHYLENE CORD. ALL CONDUIT BENDS SHALL BE A MINIMUM OF 2 FT. RADIUS. RGS CONDUITS WHEN SPECIFIED, SHALL MET UL—6 FOR GALVANIZED STEEL ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL STRINGS OF STR THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
- 18. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER WITH TYPE THINN INSULATION, 800 VOLT, COLOR CODED. USE SOLID CONDUCTORS FOR WIRE UP TO AND INCLUDING NO. 8 AWG. USE
- 19. CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. B AWG AND LARGER.
- 20. SERVICE: 240/120V, SINGLE PHASE, 3 WIRE CONNECTION AVAILABLE FROM UTILITY COMPANY. OWNER OR OWNERS AGENT WILL APPLY FOR
- 21. ELECTRICAL AND TELCO RACEWAYS TO BE BURIED A MINIMUM OF 2'
- 22. CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL AND TELCO SERVICE CONDUITS CAUTIONS TAPE TO READ "CAUTION BURIED FLECTRIC"
- 23. ALL BOLTS SHALL BE STAINLESS STEEL

GROUNDING:

- COMPRESSION CONNECTIONS (2), 2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUNDING BAR, ROUTE CONDUCTORS TO BURIED GROUNDING RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
- 2. EC SHALL USE PERMANENT MARKER TO DRAW THE LINES BETWEEN EACH SECTION AND LABEL EACH SECTION ("P", "A", "N", "I") WITH 1" HIGH
- ALL HARDWARE 18—8 STAINLESS STEEL, INCLUDING LOCK WASHERS. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8 INCH DIAMETER OR LARGER.
- 4. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDAN' COMPOUND BEFORE MATING
- 5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUNDING BAR AND BOLTED ON THE BACK SIDE. 6. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATION. AND CONNECTION ORIENTATION. PROVIDE AS
- 7. WHEN THE SCOPE OF WORK REQUIRES THE ADDITION OF A GROUNDING

8. ALL ELECTRICAL AND GROUNDING AT THE CELL SITE SHALL COMPLY WITH

THE NATIONAL FLECTRICAL CODE (NEC), NATIONAL FIRE PROTECTION

ASSOCIATION (NFPA) 780 (LATEST EDITION), AND MANUFACTURER.

ABBREVIATIONS:

AIR CONDITIONING

ABOVE GROUND LEVEL

APPROXIMATELY

AMERICAN WIRE GAGE

BARE COPPER WIRE

MANUFACTURE
MANAGER
MINIMUM
MISCELLANEOUS
NOT APPLICABLE
NOT IN CONTRACT
NOT TO SCALE
ON CENTER
OUTSIDE DIAMETER
PLYWOOD
PROJECT
PROPERTY
PRESSURE TREATED
REQUIRED
RADIO F

STEEL STRUCTURAL STANDARD

SUSPENDED

VERIFY IN FIELD

WATER PROOF

RADIO FREQUENCY

RADIO FREQUENCY
ROUGH OPENING
REMOTE RADIO HEAD
REMOTE RADIO UNIT
SHEET
SIMILAR
SPECIFICATION
SQUARE FOOT
STAINLESS STEEL
STEFL

TOWER MOUNTED AMPLIFIER

TYPICAL
UNLESS NOTED OTHERWISE
VERTICAL

ABOVE MEAN SEA LEVEL

```
BUILDING
                       BLOCKING
                       CLEAR
                               COAXIAL CABLE
            CONCCONCRETE
                       CONSTRUCTION
CONTINUOUS
                       DIAMETER
                        DRAWING
                       ELEVATION
                        ELECTRICAL
                       EQUIPMENT
                       EXTERIOR
                       FINISH
FLUORESCENT
                        FIBER-REINFORCED POLYMER
                                                                               MasTec
                       GALVANIZE
                       GALVANIZED

GENERAL CONTRACTOR

GLOBAL POSITIONING SYSTEM

GROUND

HORIZONTAL
                                                                                      Network Solutions
                       HEATING VENTILATION AIR CONDITIONING
                       INSIDE DIAMETER
                       INCH
INFORMATION
INSULATION
INT
IBC
LBS
LMU LC
LTE LONG
MAX MAXIMUs,
MECHMECHANICAL
MTL METAL
MANAGER
MANAGER
MINIMUM
"ISCELL"
                        INTERIOR
INTERNATIONAL BUILDING CODE
                       POUNDS
LOCATION MEASUREMENT UNIT
LONG TERM EVOLUTION
MAXIMUM
```

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FA CODE:

125 KLUG CIRCLE CORONA, CALIFORNIA 92880

Mobilitv

FA # 10088152

10/19/2023 JURISTICTION COMMENTS 100% CD'S - UPDATED S&S 08/09/2023 05/02/2022 100% CD'S - S&S 03/15/2022 95% CD'S FOR REVIEW A 02/16/2022 90% CD'S FOR REVIEW REV DATE DESCRIPTION



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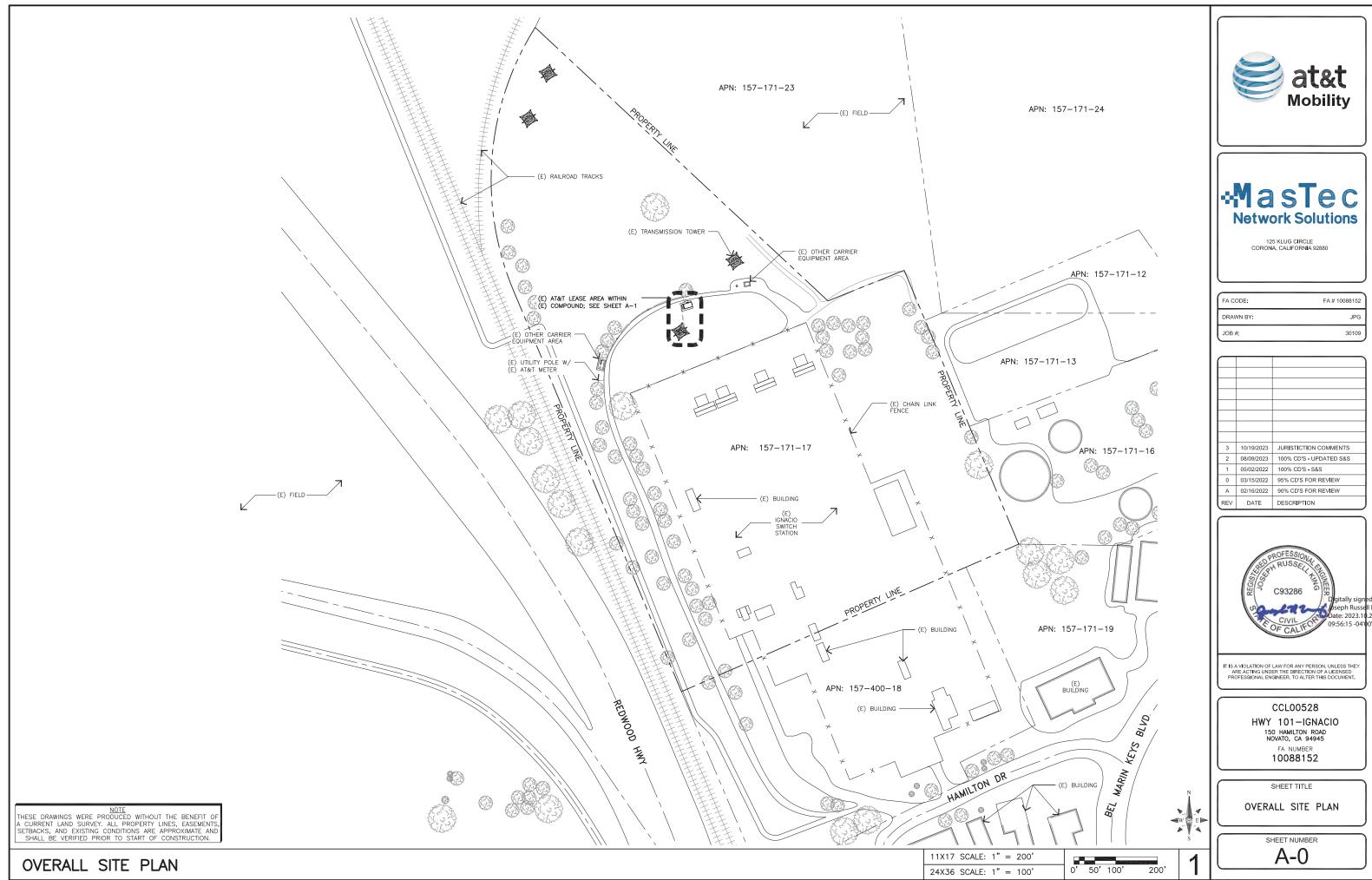
HWY 101-IGNACIO 150 HAMILTON ROAD NOVATO, CA 94945 FA NUMBER 10088152

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1



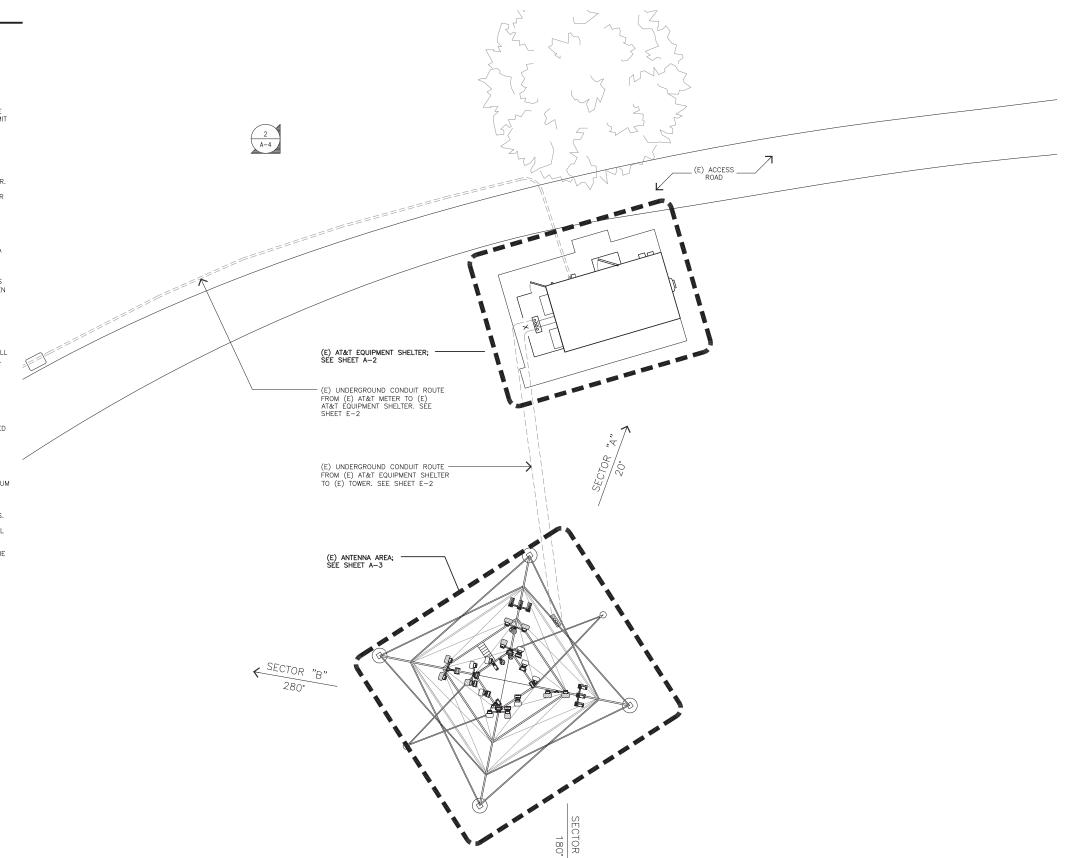


ENLARGED SITE PLAN GENERAL NOTES

- A. OTHER CARRIER ANTENNAS NOT SHOWN FOR CLARITY.
- B. GROUND ALL (N) EQUIPMENT AND COAX PER SHEET G-1.
- C. CONTRACTOR TO PROVIDE ALL LABOR TO INSTALL COAX, RETS AND
- D. CONTRACTOR TO PROVIDE ALL COAX, CONNECTORS, ANCILLARY EQUIPMENT (INCLUDING WEATHER STRIPPING, GROUND KITS, ETC.).
- E. CONTRACTOR TO COLOR CODE ALL COAX. COLORED BANDS OF TAPE ON COAX IDENTIFY SECTOR, FREQUENCY, TECHNOLOGY, AND TRANSMIT GROUP AS FOLLOWS ON ALL COAX MODIFIED OR INSTALLED ONLY.
- F. WHEN ANTENNA LINES ARE DIPLEXED, THE COLOR CODE OF THE HIGHEST FREQUENCY PREVAILS (I.E. UMTS DIPLEXED WITH TDMA SHOULD HAVE COLOR 4 BANDS).
- G. ALL ANTENNAS AND ANTENNA CABLE SHALL BE FURNISHED BY CONTRACTOR AND INSTALLED BY ANTENNA INSTALLATION CONTRACTOR.
- H. PRIOR TO PLACEMENT OF ANTENNA POLE MOUNTS, THE CONTRACTOR SHALL VERIFY THAT THE AZIMUTH AND DIMENSIONS SHOWN ON THE PLANS MATCH ACTUAL FIELD CONDITIONS. ALLOWABLE TOLERANCE: HORIZONTAL ALIGNMENT = ±5°; VERTICAL ALIGNMENT = ±1°.
- ANTENNA INSTALLATION CONTRACTOR SHALL PROVIDE ALL CONDUIT, CABLE TRAY, GROUNDS, ETC. FOR COMPLETE INSTALLATION OF ANTENNAS AND CABLES SHOWN AND INTENDED AS REQUIRED FOR A COMPLETE OPERATING SYSTEM IN ACCORDANCE WITH CONTRACTOR
- J. IN NO CASE SHALL THERE BE ANY MORE THAN TWO (2) 90° TURNS (OR EQUIVALENT) IN ANY CONTINUOUS LENGTH OF CONDUIT BETWEEN PULL BOXES OR SIMILAR FEATURES.
- K. ANTENNA CONDUIT SHALL ONLY INCLUDE FACTORY—MADE LARGE RADIUS SWEEPS AT ALL CHANGES IN DIRECTION. SWEEP RADIUS SHALL BE 18" MINIMUM ABOVE GROUND AND 36" MINIMUM BELOW
- L. CONDUIT SHALL BE 3"Ø MINIMUM. ALL UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC. ALL EXPOSED CONDUIT ABOVE GRADE LEVEL SHALL BE IMC OR RIGIO GALVANIZED. ALL EXPOSED CONDUIT PROTECTED IN A BUILDING OR ON A ROOF SHALL BE EMT OR UV STABILIZED PAINTED SCHEDULE 80 PVC.
- IN HIGH TRAFFIC AREAS OR WHERE SUSCEPTIBLE TO DAMAGE CONTRACTOR SHALL PROVIDE FORMED 14 GA. GALVANIZED SHEET METAL COVER OVER COAXIAL CABLE ROUTES. WHERE CABLE IS RUN ON THE WALL, ATTACH UNISTRUT TO WALL AND COVER WITH 14 GA. GALVANIZED FORMED SHEET METAL COVER OR MATERIAL AS DIRECTED BY CONTRACTOR CONSTRUCTION. MAMAGEME
- N. VERIFY ROUTE AND LENGTH OF CABLE PRIOR TO CUTTING. ADJUST INDICATED ROUTE AS REQUIRED TO CLEAR (E) EQUIPMENT AT
- O. MAXIMUM LENGTH OF 7/8" COAX CABLE SHALL BE 140'-0". MAXIMUM LENGTH OF 1-1/4" COAX CABLE SHALL BE 190'-0". MAXIMUM LENGTH OF 1-5/8" COAX CABLE SHALL BE 235'-0".
- P. VERIFY MODEL NUMBERS OF ANTENNAS WITH CONTRACTOR SERVICES.
- Q. THE CONTRACTOR SHALL PROVIDE TESTING OF ANTENNAS AND SHALL PROVIDE DOCUMENTATION TO THE CONTRACTOR PROJECT MANAGER.
- R. GENERAL CONTRACTOR TO VERIFY ALL TORQUE TOLERANCES PER THE MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.

NOTE:

1. WEED ABATEMENT TO BE ASSESSED ON PRECON WALK, AROUND SHELTER AND CONDUIT STUB UPS AT BASE OF TOWER







FA CODE:	FA # 10088152
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JOB #:	30109

3	10/19/2023	JURISTICTION COMMENTS
2	08/09/2023	100% CD'S - UPDATED S&S
1	05/02/2022	100% CD'S - S&S
0	03/15/2022	95% CD'S FOR REVIEW
Α	02/16/2022	90% CD'S FOR REVIEW
REV	DATE	DESCRIPTION



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HWY 101-IGNACIO 150 HAMILTON ROAD NOVATO, CA 94945 FA NUMBER 10088152

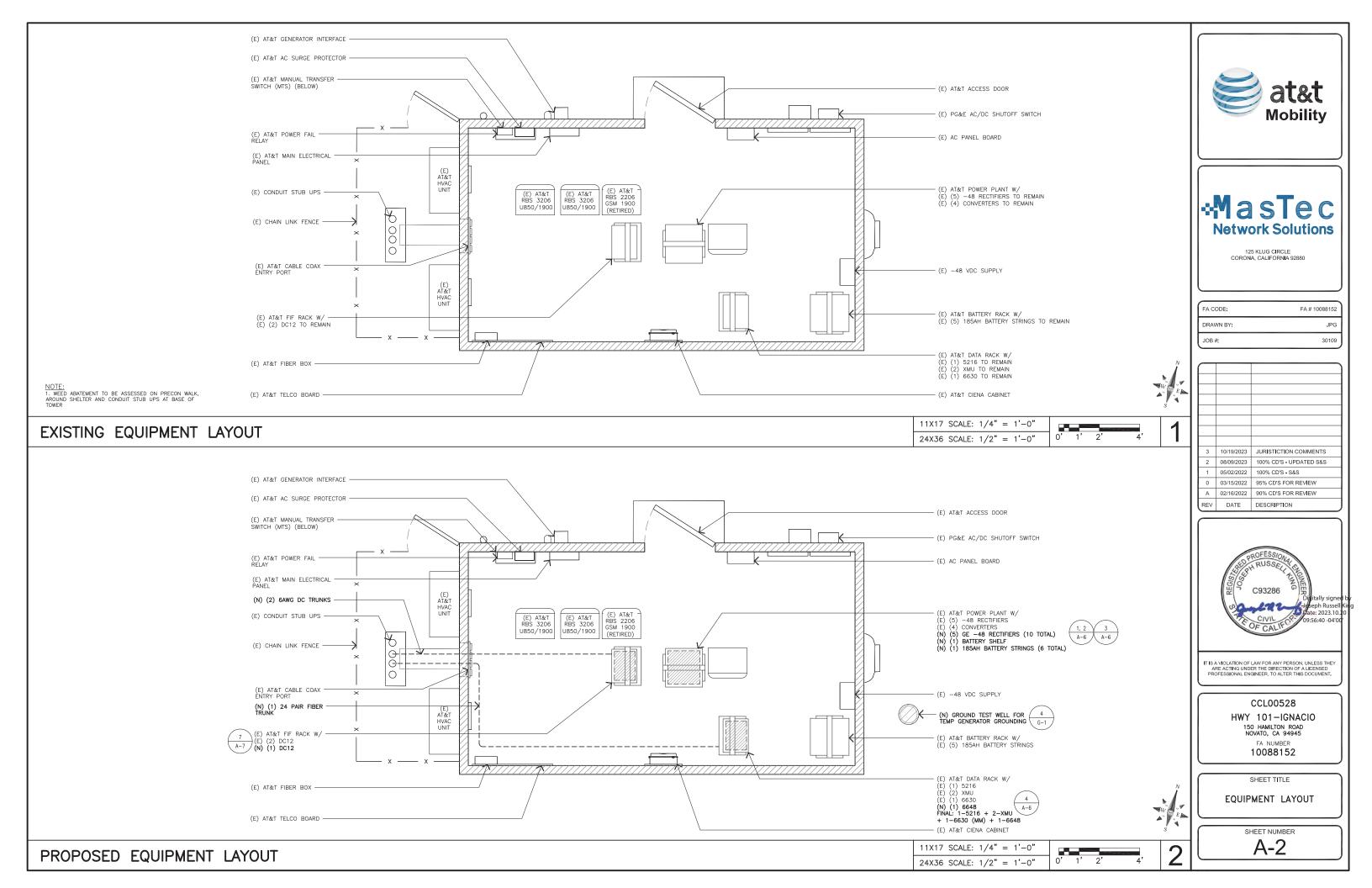
SHEET TITLE

ENLARGED SITE PLAN

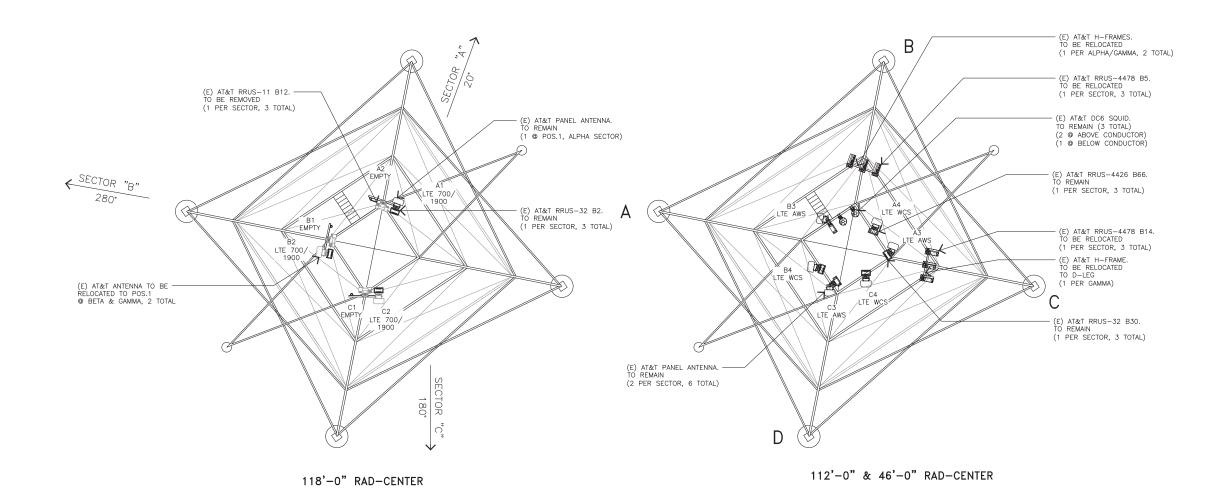
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SHEET NUMBER

11X17 SCALE: 1/16" = 1'-0"24X36 SCALE: 1/8" = 1'-0"



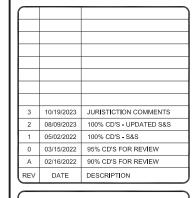
	EXISTING ANTENNA SCHEDULE									
SECTOR	POSITION	BAND TECH.	ANTENNA MODEL	ANTENNA AZIMUTH	RAD-CENTER	QTY./RRU MODEL	QTY./TMA MODEL	QTY./RAYCAP MODEL	CABLING	LENGTH
	A1	LTE 700/1900	CCI OPA-65R-LCUU-H4-K	20.	118'-0"	(1) RRUS-11 B12 (1) RRUS-32 B2	-	(2) DC6-48-60-18-8F		
	A2	-	-	-	-	_	_	-		
ALPHA	A3	LTE AWS	COMMSCOPE JAHH-65A-R3B	20*	112'-0"	(1) RRUS-4478 B5 (1) RRUS-4426 B66	-	-		
	A4	LTE WCS	COMMSCOPE JAHH-65A-R3B	20.	112'-0"	(1) RRUS-4478 B14 (1) RRUS-32 B30	-	-		
	B1	-	-	-	-	-	-	-		
	B2	LTE 700/1900	CCI OPA-65R-LCUU-H4-K	280⁴	118'-0"-	(1) RRUS-11 B12 (1) RRUS-32 B2	-	-	(6) POWER TRUNKS/ (2) FIBER TRUNKS	
BETA	В3	LTE AWS	COMMSCOPE JAHH-65A-R3B	280°	112'-0"	(1) RRUS-4478 B5 (1) RRUS-4426 B66	-	-		±75'
	B4	LTE WCS	COMMSCOPE JAHH-65A-R3B	280°	112'-0"	(1) RRUS-4478 B14 (1) RRUS-32 B30	=	=		
	C1	-	-	-	-	-	-	-		
	C2	LTE 700/1900	CCI OPA-65R-LCUU-H4-K	180*	118'-0"-	(1) RRUS-11 B12 (1) RRUS-32 B2	-	-		
GAMMA	C3	LTE AWS	COMMSCOPE JAHH-65A-R3B	180*	112'-0"	(1) RRUS-4478 B5 (1) RRUS-4426 B66	=	-		
	C4	LTE WCS	COMMSCOPE JAHH-65A-R3B	180*	112'-0"	(1) RRUS-4478 B14 (1) RRUS-32 B30	-	(1) DC6-48-60-18-8F		
TOTALS	ALS 9 TOTAL 18 TOTAL 0 TOTAL 3 TOTAL									
LEGEND /NOTES	(UP) UP ON TOWER (ON) DOWN NEAR COUPMENT AREA *VERIFY LATEST VERSION OF THE RFDS PRIOR TO CONSTRUCTION. *DO NOT USE CABLE LENGTHS FOR CUT LENGTHS — ESTIMATES ONLY — VERIFY IN FIELD PRIOR TO ORDERING MATERIAL.									







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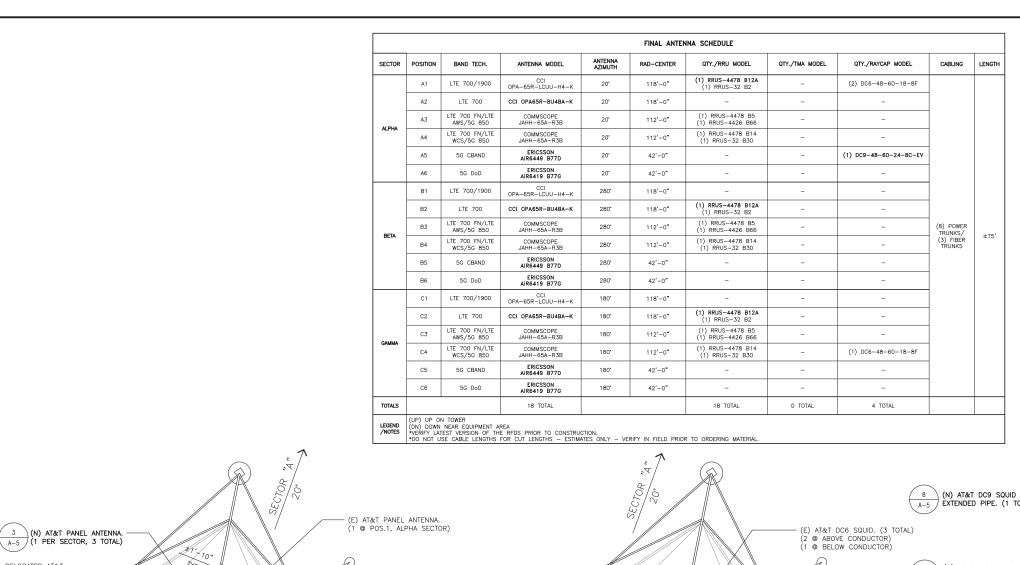
SHEET TITLE

ANTENNA LAYOUT

SHEET NUMBER

A-3

W E

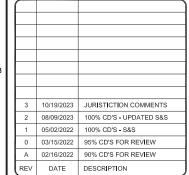






125 KLUG CIRCLE CORONA, CALIFORNIA 92880

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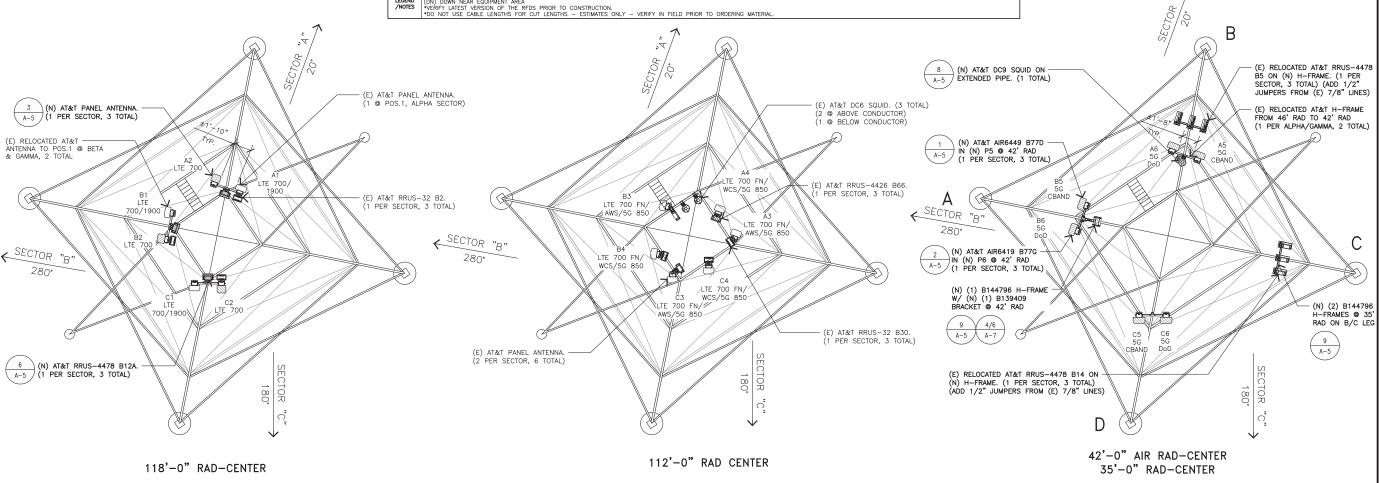
SHEET TITLE

ANTENNA LAYOUT

₩

SHEET NUMBER

A-3.1



NOTE:

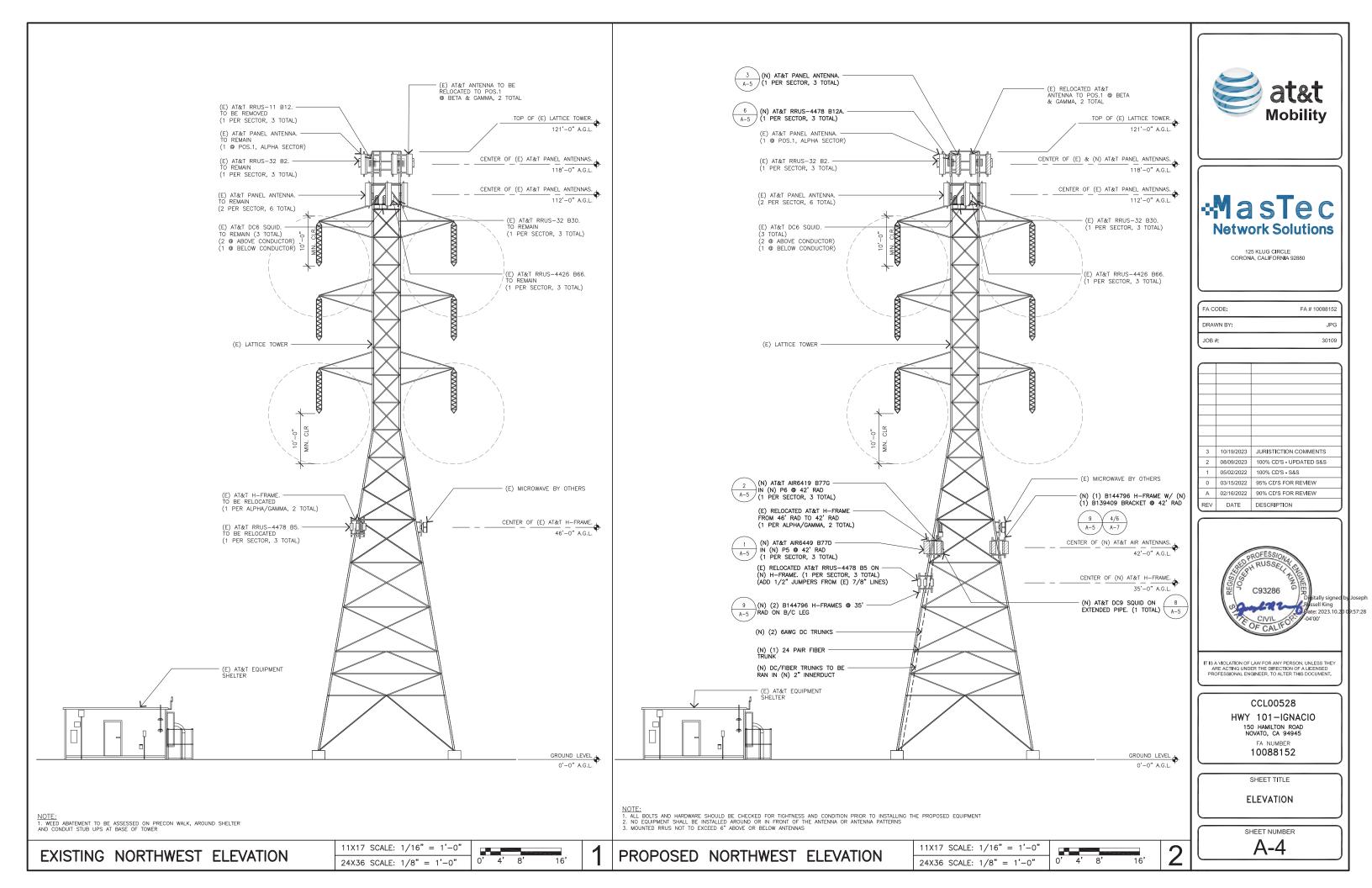
1. ALL BOLTS AND HARDWARE SHOULD BE CHECKED FOR TIGHTNESS AND CONDITION PRIOR TO INSTALLING THE PROPOSED EQUIPMENT 2. NO EQUIPMENT SHALL BE INSTALLED AROUND OR IN FRONT OF THE ANTENNA OR ANTENNA PATTERNS

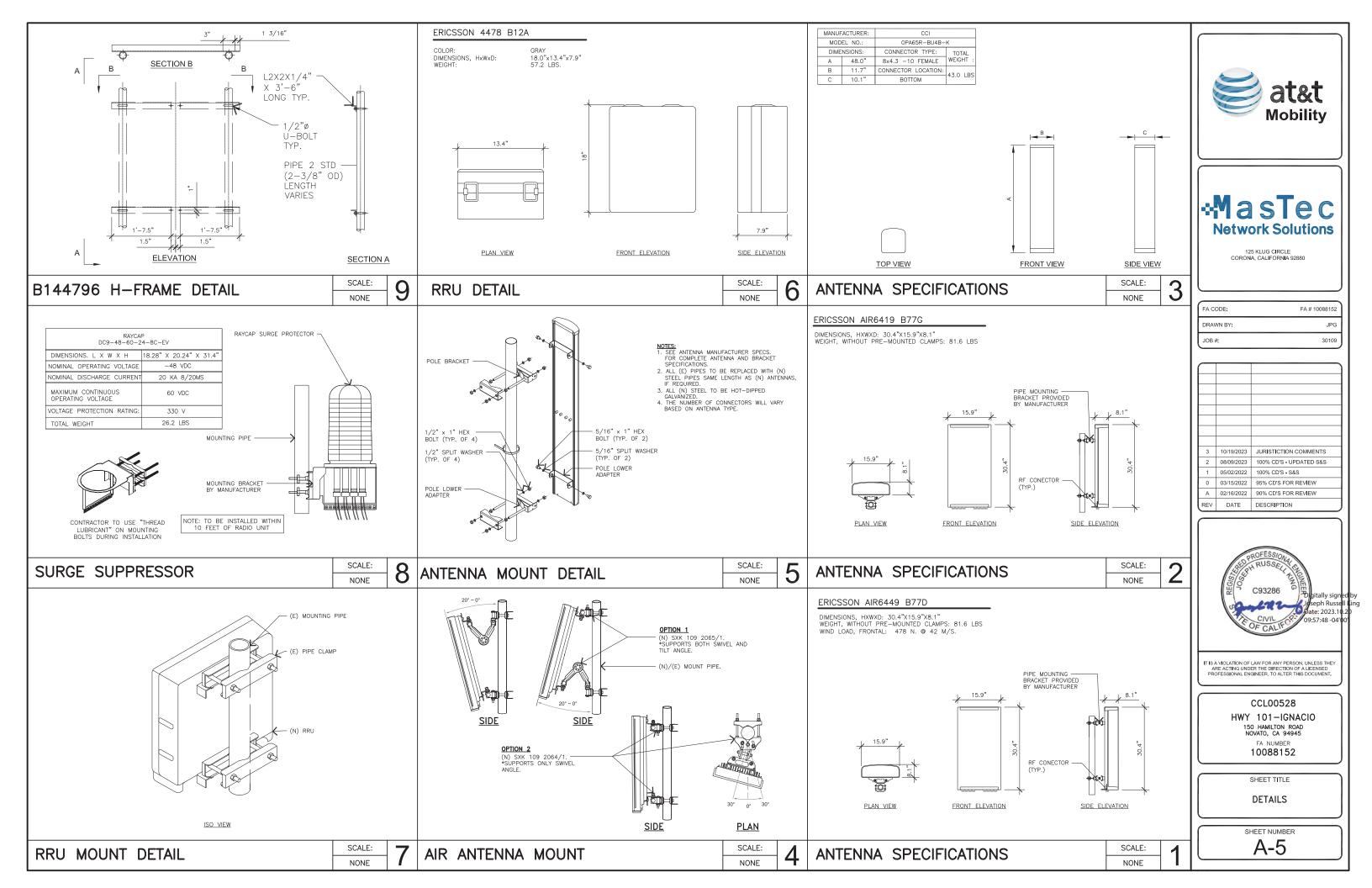
3. MOUNTED RRUS NOT TO EXCEED 6" ABOVE OR BELOW ANTENNAS

11X17 SCALE: 3/32" = 1'-0"

24X36 SCALE: 3/16" = 1'-0"

PROPOSED ANTENNA LAYOUT



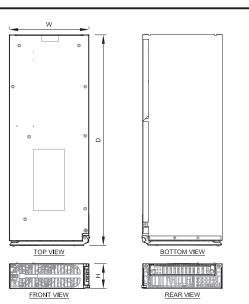




DIMENSIONS, HXWXD: 1.75"X19"X13.8" WEIGHT: 7.5 KG

FRONT VIEW

MAKE: INFINITY MODEL: NE050AC48ATEZ HEIGHT: 1.63" WIDTH: 5.23" DEPTH: 13.85" WEIGHT: 5.95 LBS



PYL SERIES SPECIFICATIONS

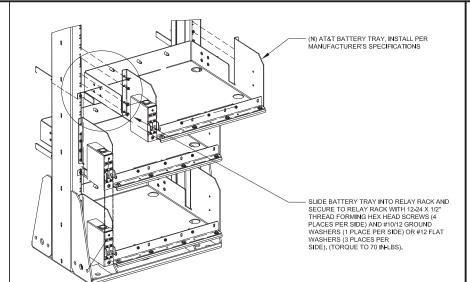
PYL12V140TT

PYL12V160FT

PYL12V175FT

PYL12V185FT

PYL12V200FT



NOTE: (1) BATTERY STRING = (4) BATTERY CELLS

BATTERY MODEL NUMBER

BATTERY TECHNOLOGY

QUANTITY OF EXISTING BATTERIES

EXISTING BATTERY STORAGE

TECHNOLOGY

ead-acid batteries, all types

Nickel-metal hydride (Ni-MH)

ithium-ion batteries

Other battery technologies

Nickel-cadmium batteries (Ni-Cd)

BATTERY VOLTAGE

SYSTEM CAPACITY

NEW BATTERY STORAGE SYSTEM CAPACITY

BATTERY STORAGE SYSTEM THRESHOLD QUANTITIES

* TOTAL VOLUME IS LESS THAN 70KWH, WHICH DOES NOT

EXCEED ENERGY CAPACITY THRESHOLD PER CFC SECTION 1207, THEREFORE NO ADDITIONAL ENERGY

CALIFORNIA FIRE CODE 2022

TABLE 1207.1.1 ENERGY STORAGE SYSTEM (ESS) THRESHOLD QUANTITIES

Other electrochemical ESS technologies 3 KWh (10.8 Megajoules)

amp-hour rating divided by 1000.

PYL12V185FT

LEAD ACID

185AH PER BATTERY

185AH PER BATTERY

ENERGY CAPACITY a

70 KWh (252 Megajoules

70 KWh (252 Megajoules)

70 KWh (252 Megajoules)

20 KWh (72 Megajoules)

20 KWh (72 Megajoules)

10 KWh (36 Megajoules) 3 KWh (10.8 Megajoules)

a. Energy capacity is the total energy capable of being stored (nameplate rating), not the usable

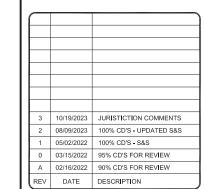
b. Shall include vanadium, zinc-bromine, polysulfide-bromide, and other flowing electrolyte type

c. 50 gallons of lead-acid battery electrolyte shall be considered equivalent to 70 KWh.

energy rating. For units rated in Amp-Hours, KWh shall equal rated voltage multiplied by the



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HWY 101-IGNACIO 150 HAMILTON ROAD NOVATO, CA 94945 FA NUMBER 10088152

SHEET TITLE

DETAILS

SHEET NUMBER

A-6

6648 BASEBAND UNIT

NONE

-48 RECTIFIERS

SCALE: NONE

13.40 6.80 11.00 341 173 281 108.0 49.0

21.90 4.90 11.00 556 125 280 116.2 52.7

21.90 4.90 12.50 556 125 317 123.5 56.0

21.90 4.90 12.50 556 125 317 133.8 60.7

23.80 4.80 12.60 604 123 320 147.7 67.0

TOP VIEW

SIDE VIEW

BATTERY SHELF

SCALE: NONE

PYL SERIES

HIGH TEMPERATURE SUPER LONG LIFE BATTERIES with HT Element X Alloy™

PYL SERIES

Proven in the real world, the PYL Series of telecom batteries provides security and long life in extremely hot climates where other VRLA batteries just don't survive. The PYL technology utilizes GS Battery's proprietary HT Element X Alloy™ and active material additives. The PYL Series is the most cost effective battery solution over the total life cycle and for initial installation in your network.

10+ YEAR DESIGN LIFE

- + Exceeds Telecordia GR-1200 criteria
- + Greater than 5 years at 35°C

CAPACITY RANGE

+ 45Ah - 200Ah



HIGH TEMPERATURE LONG LIFE DESIGN

- + HT Element X AlloyTM extends life in high temp applications
- + Additives to maintain compression
- + Designed to control charging current as temperature increases
- + No thermal runaway
- + Epoxy sealed terminals to prevent post leaks
- + Rugged ABS cases to minimize handling damage

FRONT VIEW

PYL SERIES SPECIFICATIONS

MODEL NUMBER	AMPERES TO FINAL VOLTAGE	INTERNAL RESISTANCE (mOhms)
PYL12V140TT	17.5	3.5
PYL12V160FT	20.0	3.5
PYL12V175FT	21.9	3.5
PYL12V185FT	23.1	3.5
PYL12V200FT	25.0	3.5

FLOAT CHARGE VOLTAGE:

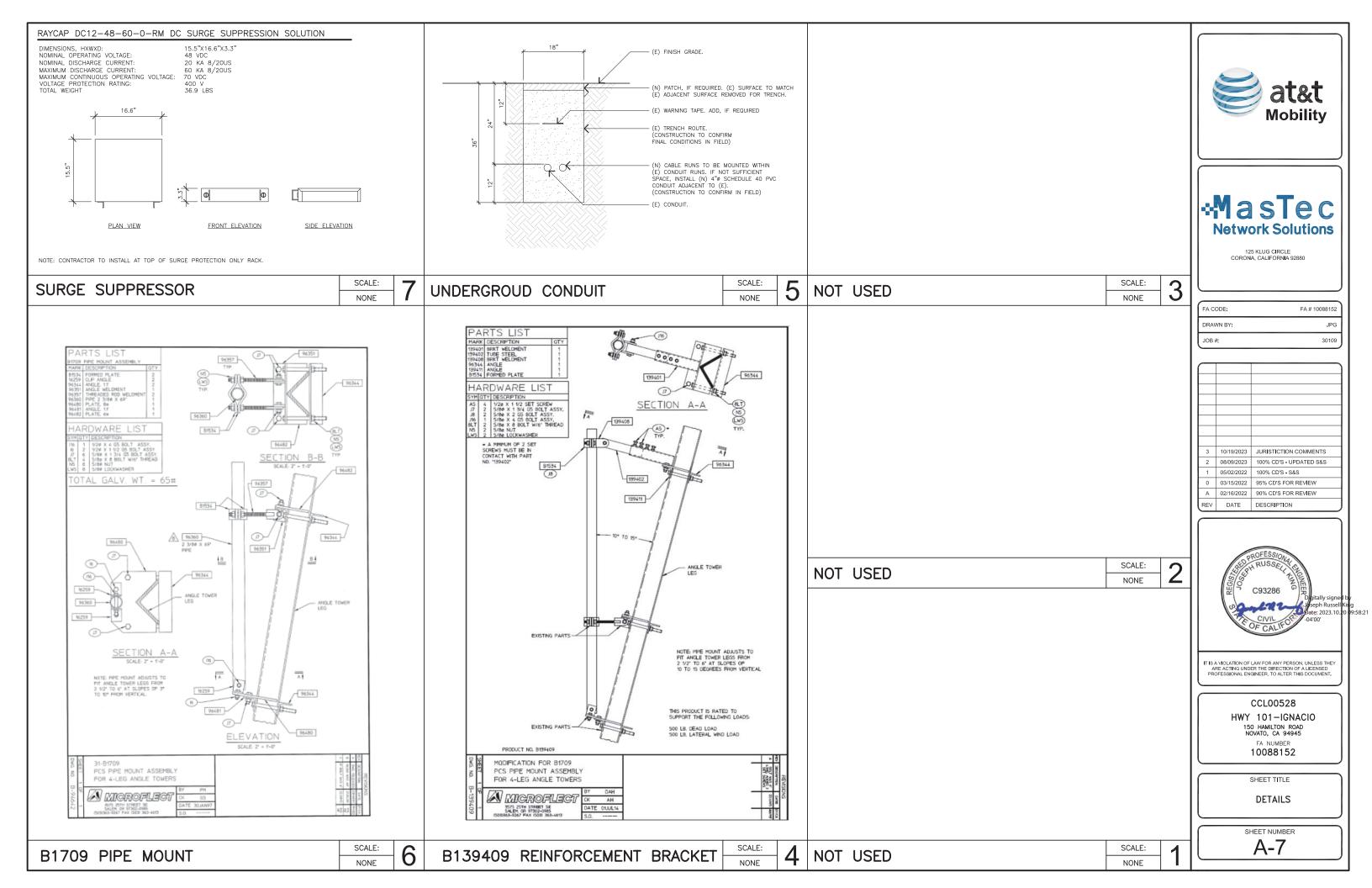
THE OLIVILLO OF LOW 10/VI					
MODEL NUMBER	AMPERES TO FINAL VOLTAGE	INTERNAL RESISTANCE (mOhms)			
PYL12V140TT	17.5	3.5			
PYL12V160FT	20.0	3.5			
PYL12V175FT	21.9	3.5			
PYL12V185FT	23.1	3.5			

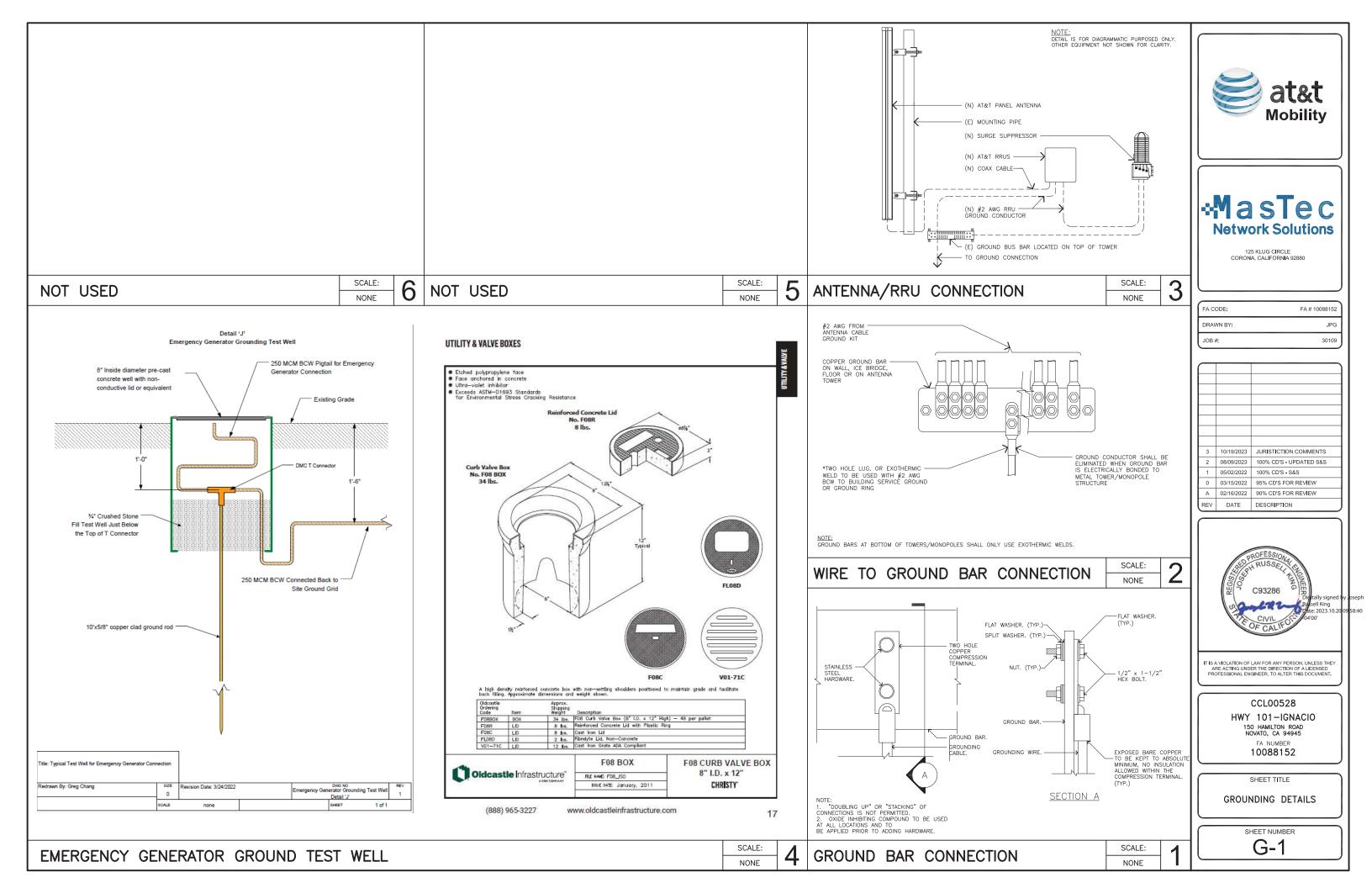
TEMPERATURE COMPENSATION: ADJUST FLOAT CHARGE VOLTAGE +3mV/°C/CELL FOR TEMPERATURES <25°C: -3m/°C/CELL FOR

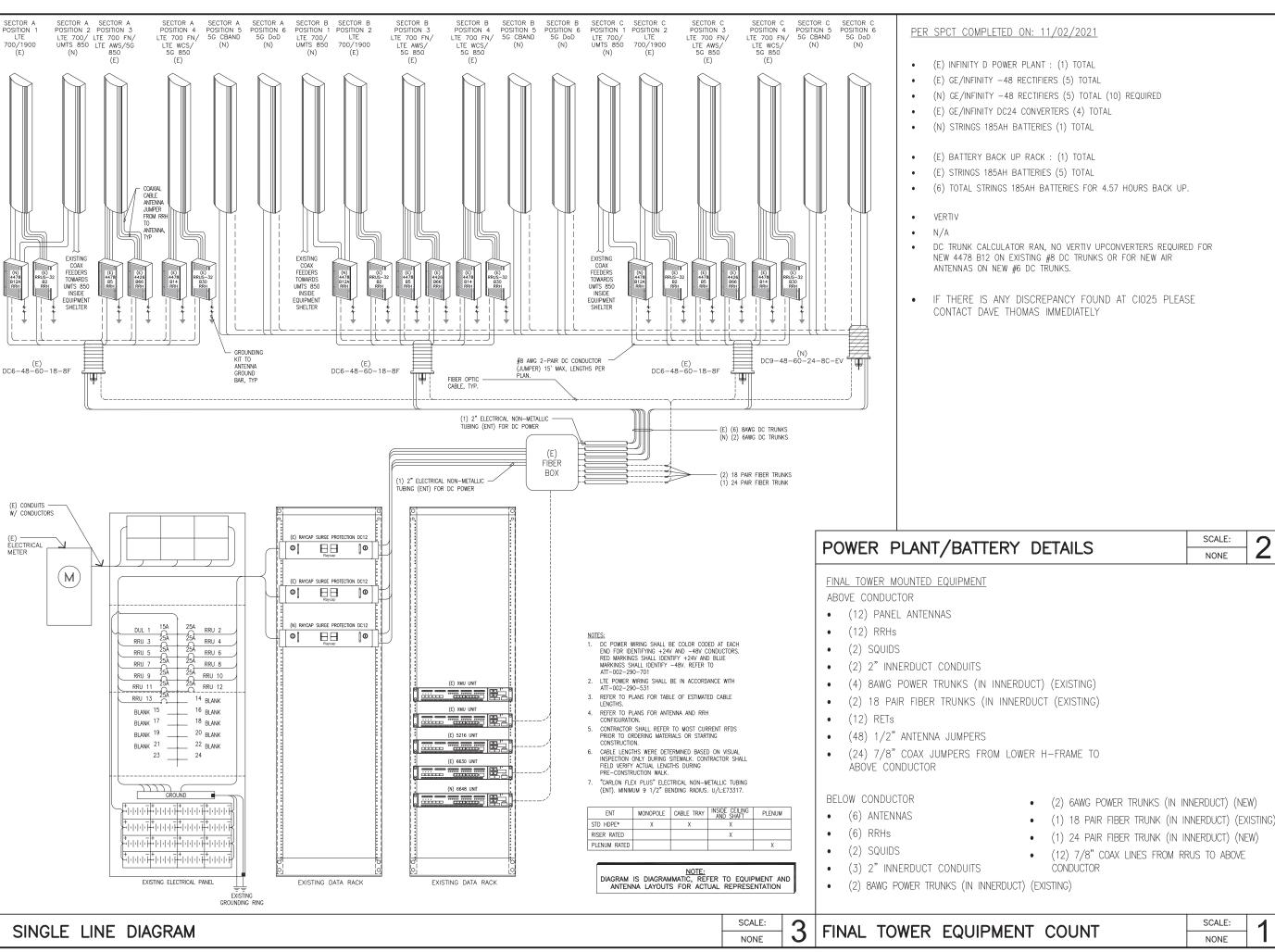
GSYUASA Creating the Future of Energy

SCALE:

BATTERY SPECIFICATIONS AND CAPACITIES









Mobility

FA CODE: FA # 10088152 DRAWN BY 30109

10/19/2023 JURISTICTION COMMENTS 08/09/2023 100% CD'S - UPDATED S&S 03/15/2022 95% CD'S FOR REVIEW A 02/16/2022 90% CD'S FOR REVIEW DATE DESCRIPTION



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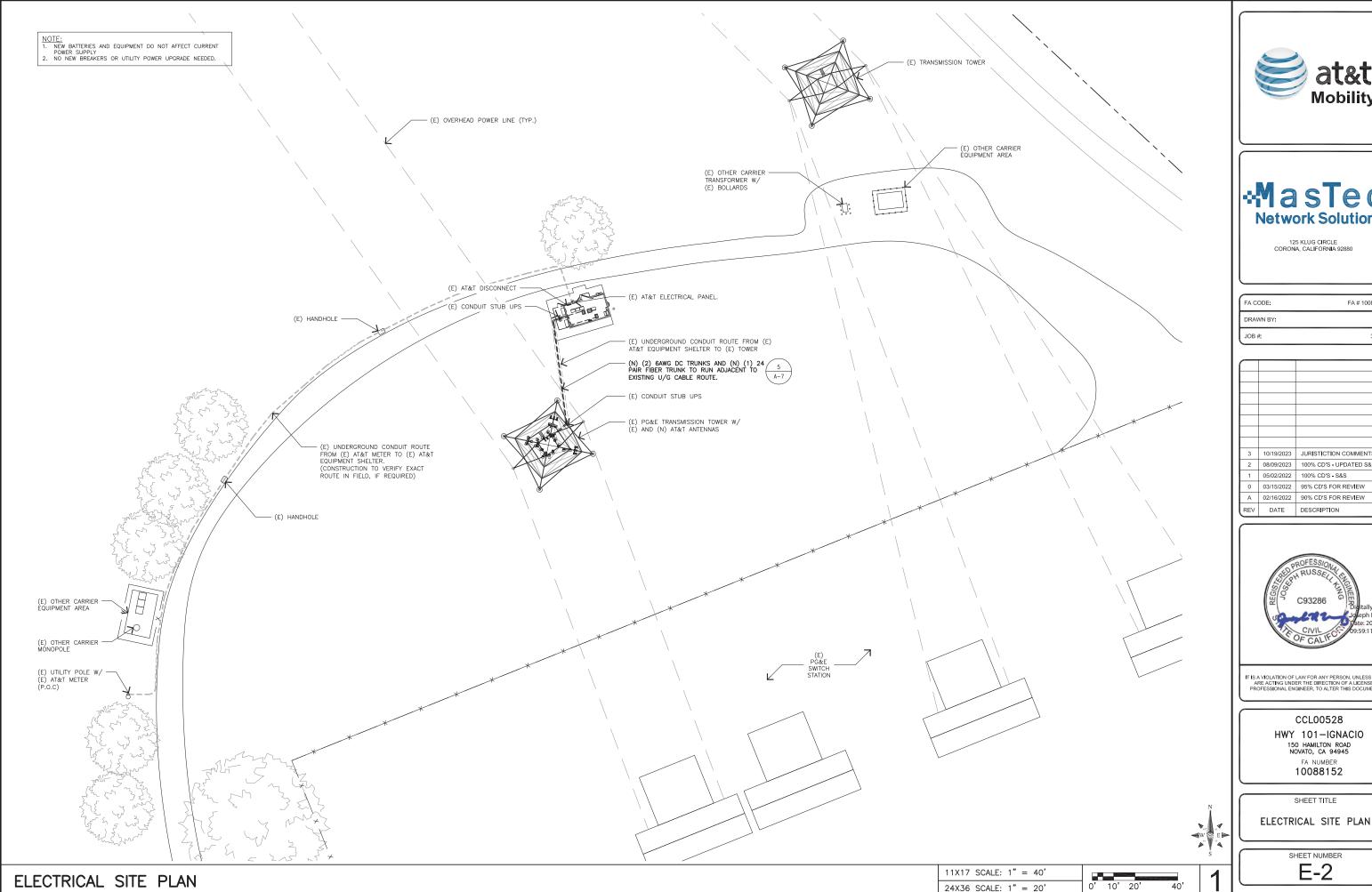
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HWY 101-IGNACIO 150 HAMILTON ROAD NOVATO, CA 94945 FA NUMBER 10088152

ELECTRICAL & LTE SCHEMATIC DIAGRAM

SHEET NUMBER

E-1







ı	FA CODE:	FA # 10088152
ı	DRAWN BY:	JPG
П	IOR #	30100

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3	10/19/2023	JURISTICTION COMMENTS
2	08/09/2023	100% CD'S - UPDATED S&S
1	05/02/2022	100% CD'S - S&S
0	03/15/2022	95% CD'S FOR REVIEW
А	02/16/2022	90% CD'S FOR REVIEW
REV	DATE	DESCRIPTION



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.

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