RIVIAN

ELECTRIC VEHICLE CHARGING STATIONS

TUMALO, OR

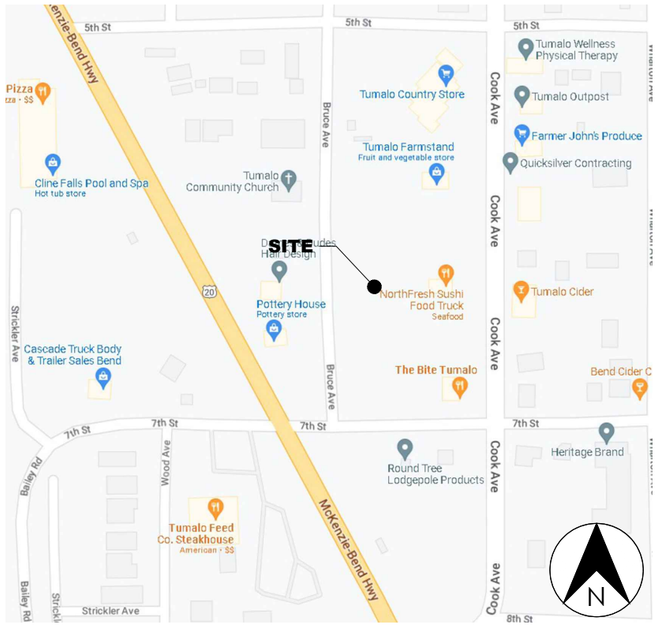
SAI PROJECT #: OR-279-22002

19860 7TH ST, BEND, OR 97703

SITE INFORMATION

SITE NAME:	TUMALO, OR
SAI PROJECT NUMBER:	OR-279-22002
SITE ADDRESS:	19860 7TH ST BEND, OR 97703
JURISDICTION:	CITY OF BEND
PARCEL ID:	161231A005401
SITE COORDINATES:	N44°08'50.3" (N44.147291°) (NAD83) W121°19'53.2" (W121.331448°) (NAD83)
GROUND ELEVATION:	3187'± (NAVD88)
PROPERTY OWNER NAME:	TAP YARD LLC
PROPERTY OWNER ADDRESS:	19944 BIRCH LN BEND OR 97703
PROJECT MANAGER:	SAI 12 INDUSTRIAL WAY SALEM, NEW HAMPSHIRE 03079
ENGINEER CONTACT:	RICHARD B. HALL, AIA, NCARB (425) 806-1869 RHALL@LDCCORP.COM
RIVIAN CONTACT DEPLOYMENT MANAGER:	ALEX GRANT (971) 275-7365 AGRANT@RIVIAN.COM
REAL ESTATE MANAGER:	CODY THORNTON (310) 704-9658 CTHORNTON@RIVIAN.COM

VICINITY MAP



SCALE: N.T.S.

AERIAL MAP

SCALE: N.T.S.

PROJECT DESCRIPTION

1. INSTALL (1) UTILITY TRANSFORMER
2. INSTALL (1) SWITCHGEAR ASSEMBLY
3. INSTALL (6) RIVIAN CHARGING STATIONS
4. INSTALL (2) RIVIAN L2 CHARGERS
5. INSTALL (2) LED LIGHT

CODE REVIEW

ALL WORK AND MATERIALS SHALL BE PERFORMED AND 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 THE LATEST EDITIONS OF THE FOLLOWING CODES:

BUILDING CODE:	2022 OREGON STRUCTURAL SPECIALTY CODE (OSSC)
ELECTRICAL CODE:	2021 OREGON ELECTRICAL SPECIALTY CODE (OESC)
FIRE SAFETY CODE:	2019 OREGON FIRE CODE
USE GROUP:	U (UTILITY)
CONSTRUCTION TYPE:	IIB

DRAWING INDEX

REFERENCE DRAWING

SURVEY
RIVIAN CHARGERS SPEC SHEET

CONTRACTOR NOTE

1. CONTRACTOR IS RESPONSIBLE FOR ANY NECESSARY REPAIRS OR REPLACEMENT DUE TO NEW CONSTRUCTION, OF EXISTING ELECTRICAL, PAVING, PVC CONDUITS, AND LIGHTS.

CALL BEFORE YOU DIG

811

Know what's **below.**
Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 22"x34". CONTRACTOR SHALL VERIFY ALL PLANS & EXISTING DIMENSIONS & CONDITIONS ON THE JOB SITE & SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

RIVIAN

SAI

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REGISTERED ARCHITECT
RICHARD B. HALL
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STATE OF OREGON
EXPIRES: 12-31-24

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
COVER SHEET

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

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GENERAL CONSTRUCTION NOTES

FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY

GENERAL CONTRACTOR: SAI CONSTRUCTION

OWNER: RIVIAN

1. ALL SITE WORK SHALL BE COMPLETED AS INDICATED ON THE DRAWINGS.
2. THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING THEMSELVES WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS, AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. GENERAL 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 WORK.
4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM REQUIRED CLEARANCE. THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM THE ENGINEER PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY THE ENGINEER PRIOR TO PROCEEDING WITH WORK.
7. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE ENGINEER PRIOR TO PROCEEDING.
9. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF WORK AREA, ADJACENT AREAS AND BUILDING OCCUPANTS THAT ARE LIKELY TO BE AFFECTED BY THE WORK UNDER THIS CONTRACT. WORK SHALL CONFORM TO ALL OSHA REQUIREMENTS AND THE LOCAL JURISDICTION.
10. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.
11. CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
12. WORK PREVIOUSLY COMPLETED IS REPRESENTED BY LIGHT SHADED LINES AND NOTES. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED BY DARK SHADED LINES AND NOTES. CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE DRAWINGS PRIOR TO BEGINNING CONSTRUCTION.
13. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
14. 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 THE OWNER.
15. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
16. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.
17. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
18. THE GENERAL CONTRACTOR SHALL MAINTAIN IN GOOD CONDITION ONE COMPLETE SET OF PLANS WITH ALL REVISIONS, ADDENDA, AND CHANGE ORDERS ON THE PREMISES AT ALL TIMES.
19. THE CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A:10-B:C AND SHALL BE WITHIN 25 FEET OF TRAVEL DISTANCE TO ALL PORTIONS OF WHERE THE WORK IS BEING COMPLETED DURING CONSTRUCTION.
20. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY THE ENGINEER. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS SHALL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION, B) CONFINED SPACE, C) ELECTRICAL SAFETY, AND D) TRENCHING & EXCAVATION.
22. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED, CAPPED, PLUGGED OR OTHERWISE DISCONNECTED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, AS DIRECTED BY THE ENGINEER, AND SUBJECT TO THE APPROVAL OF THE OWNER AND/OR LOCAL UTILITIES.
23. THE AREAS OF THE OWNER'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION.
24. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION AND SEDIMENT CONTROL.
25. 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.
26. THE SUBGRADE SHALL BE BROUGHT TO A SMOOTH UNIFORM GRADE AND COMPACTED TO 95 PERCENT STANDARD PROCTOR DENSITY UNDER PAVEMENT AND STRUCTURES AND 80 PERCENT STANDARD PROCTOR DENSITY IN OPEN SPACE. ALL TRENCHES IN PUBLIC RIGHT OF WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.
27. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.
28. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE GENERAL CONTRACTOR AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
29. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
30. THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION. 31. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE, AND IS NOT FOR HUMAN HABITATION (NO HANDICAP ACCESS REQUIRED).
32. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.
33. CONTRACTORS SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE GENERAL CONTRACTOR IMMEDIATELY.
34. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
35. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

ELECTRICAL NOTES

1. THE ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL ANY/ALL ELECTRICAL WORK INDICATED, ANY/ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH DRAWINGS AND ANY/ALL APPLICABLE SPECIFICATIONS. IF ANY PROBLEMS ARE ENCOUNTERED BY COMPLYING 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 BE TAKEN.
2. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND FAMILIARIZE THEMSELVES WITH ANY/ALL CONDITIONS AFFECTING ELECTRICAL AND COMMUNICATION INSTALLATION AND MAKE PROVISIONS AS TO THE COST THEREOF. THE CONDITION OF EXISTING ELECTRICAL EQUIP., LIGHT FIXTURES, ETC., THAT ARE PART OF THE FINAL SYSTEM, SHALL BE VERIFIED BY THE CONTRACTOR, PRIOR TO THE SUBMITTAL OF HIS BID. FAILURE TO COMPLY WITH THIS PARAGRAPH WILL IN NO WAY RELIEVE CONTRACTOR OF PERFORMING ALL WORK NECESSARY FOR A COMPLETE AND WORKING SYSTEM. 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL CODES AND LOCAL ORDINANCES OF THE LOCAL POWER COMPANIES HAVING JURISDICTION AND SHALL 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 HEALTH ACT
   E. SBC - STANDARD BUILDING CODE
   F. NFPA - NATIONAL FIRE PROTECTION ASSOCIATION
4. DO NOT SCALE ELECTRICAL DRAWINGS, REFER TO SITE PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, BUT CONFIRM WITH 'CONSTRUCTION MANAGER' ANY SIZES AND LOCATIONS WHEN NEEDED.
5. EXISTING SERVICES: THE CONTRACTOR SHALL NOT INTERRUPT EXISTING SERVICES WITHOUT WRITTEN PERMISSION OF THE OWNER.
6. THE CONTRACTOR SHALL PAY FOR ANY/ALL PERMITS, FEES, INSPECTIONS AND TESTING. THE CONTRACTOR IS TO OBTAIN PERMITS AND APPROVED SUBMITTALS PRIOR TO THE WORK BEGINNING OR ORDERING THE EQUIPMENT.
7. THE TERM "PROVIDE" USED IN CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, INDICATES THAT THE CONTRACTOR SHALL FURNISH AND INSTALL.
8. THE CONTRACTOR SHALL CONFIRM WITH LOCAL UTILITY COMPANY ANY/ALL 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 WORK.
9. CONDUCTORS: CONTRACTOR SHALL USE 98% CONDUCTIVITY COPPER OR ALUMINUM WITH TYPE (THWN-2) INSULATION, 600 VOLT, COLOR CODED UNLESS SPECIFIED DIFFERENTLY ON DRAWINGS.
10. ALL (THWN-2) WIRING INSTALLATIONS TO FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.
11. 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.
12. 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 WORKING ORDER. CONTRACTOR IS TO PROVIDE ALL ELECTRICAL EQUIPMENT UNLESS OTHERWISE DIRECTED.
13. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS, WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIONAL AND SUBJECT TO REGULATORY INSPECTION AND APPROVAL BY CONSTRUCTION MANAGER.
14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION.
15. CONTRACTOR SHALL GUARANTEE ANY/ALL MATERIALS AND WORK FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE YEAR FROM DATE OF ACCEPTANCE.
16. THE CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ANY ADDITIONAL CHARGE AND SHALL INCLUDE THE REPLACEMENT OR THE REPAIR OF ANY OTHER PHASE OF THE INSTALLATION, WHICH MAY HAVE BEEN DAMAGED THEREIN.
17. ADEQUATE AND REQUIRED LIABILITY INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION OF WORK.
18. PROVIDE AND INSTALL CONDUIT, CONDUCTORS, PULL WIRES, BOXES, COVER PLATES AND DEVICES FOR ALL OUTLETS AS INDICATED.
19. TRENCHING AND BACKFILL: THE CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND INSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND COMPACTION. REFER TO GENERAL SITE WORK NOTES.
20. MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL BE NEW AND SHALL APPEAR ON THE LIST OF U.L. APPROVED ITEMS AND SHALL MEET OR EXCEED THE REQUIREMENTS OF THE NEC, NEMA AND IEEE.
21. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR MANUFACTURES CATALOG INFORMATION OF ANY/ALL LIGHTING FIXTURES, SWITCHES AND ALL OTHER ELECTRICAL ITEMS FOR APPROVAL BY THE CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
22. ANY CUTTING OR PATCHING DEEMED NECESSARY FOR ELECTRICAL WORK IS THE ELECTRICAL CONTRACTORS RESPONSIBILITY AND SHALL BE INCLUDED IN THE COST FOR WORK AND PERFORMED TO THE SATISFACTION OF THE 'CONSTRUCTION MANAGER' UPON FINAL ACCEPTANCE.
23. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS WITH ONLY TYPEWRITTEN DIRECTORIES.
24. DISCONNECT SWITCHES SHALL BE H.P. RATED HEAVY-DUTY, QUICK-MAKE AND QUICK-BREAK ENCLOSURES, AS REQUIRED BY EXPOSURE TYPE.
25. ALL CONNECTIONS EXCEPT THE EV CHARGE CABLE TERMINATION IN THE CHARGE POST SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NOALOX" BY IDEAL INDUSTRIAL INC., COAT ALL WIRE SURFACES BEFORE CONNECTING, EXPOSED ALUMINUM & COPPER SURFACES, INCLUDING GROUND BARS, SHALL BE TREATED - NO SUBSTITUTIONS.
26. ALL EXTERIOR AND INTERIOR ABOVE GROUND CONDUIT SHALL BE RIGID UNLESS SPECIFIED OTHERWISE. ALL BURIED CONDUITS SHALL BE SCH 40 PVC UNLESS SPECIFIED OTHERWISE.
27. RACEWAYS: CONDUIT SHALL BE SCHEDULE 40 PVC, MEETING OR EXCEEDING NEMA TC2 - 1990. THE CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS - 200 LBS TEST POLYETHYLENE CORD, ALL CONDUIT BENDS SHALL BE A MINIMUM OF 3 FT. RADIUS, RGS CONDUITS WHEN SPECIFIED, SHALL MEET UL-6 FOR GALVANIZED STEEL. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH 'BRITE ZINC' OR 'GOLD GALV'.
28. SUPPORT OF ALL ELECTRICAL WORK SHALL BE AS REQUIRED BY NEC.
29. 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. 8 AWG AND LARGER.
30. THE CONTRACTOR SHALL PLACE WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTION TAPE TO READ "CAUTION BURIED ELECTRIC".
31. WHEN DIRECTIONAL BORING IS REQUIRED, CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.
32. ALL BOLTS SHALL BE STAINLESS STEEL.

33. ALL MATERIALS AND EQUIPMENT SUPPLIED AND INSTALLED BY THE CONTRACTOR SHOULD BE NEW AND UNUSED.

GENERAL SITE NOTES

PART 1 - GENERAL

CLEARING, GRUBBING, STRIPPING, EROSION CONTROL, SURVEY, LAYOUT, SUBGRADE PREPARATION AND FINISH GRADING AS REQUIRED TO COMPLETE THE PROPOSED WORK SHOWN IN THESE PLANS.

1. REFERENCES:
   A. LOCAL DOT TRANPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (CURRENT EDITION)

   B. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).

   C. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).

2. INSPECTION AND TESTING:
   A. GENERAL CONTRACTOR SHALL PERFORM ALL WORK IN CONFORMANCE WITH THE PLANS AND SPECIFICATIONS. PERFORM INSPECTIONS BEFORE CONCEALING WORK WITH FOLLOW-ON ACTIVITIES (BACKFILL, CONCRETE POUR, ETC).

3. SITE MAINTENANCE AND PROTECTION:
   A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE CONTRACT.

   B. AVOID DAMAGE TO THE SITE AND TO EXISTING FACILITIES, STRUCTURES, TREES, AND SHRUBS DESIGNATED TO REMAIN. TAKE PROTECTIVE MEASURES TO PREVENT EXISTING FACILITIES THAT ARE NOT DESIGNATED FOR REMOVAL FROM BEING DAMAGED BY THE WORK.

   C. KEEP SITE FREE OF ALL PONDING WATER.

   D. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.

   E. PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION. REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE WORK.

   F. EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING BY THE CONSTRUCTION MANAGER AND THEN ONLY AFTER ACCEPTABLE TEMPORARY UTILITY SERVICES HAVE BEEN PROVIDED.

   G. PROVIDE A MINIMUM 48-HOUR NOTICE TO THE CONSTRUCTION MANAGER AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

   H. SOD PLANTED IN THE FALL MUST ESTABLISH ITS ROOTS BEFORE THE FIRST WINTER FROST. DETERMINE WHEN THE FIRST FROST USUALLY OCCURS, AND PLANT THE SOD NO LATER THAN ONE MONTH BEFORE THE FIRST FROST. IF THE CONSTRUCTION IS FINISHED LATER THAN ONE MONTH BEFORE THE FIRST FROST, USE STRAW UNTIL SOD CAN BE INSTALLED.

PART 2 - PRODUCTS

1. SUITABLE MATERIAL – SUITABLE MATERIAL ARE TO BE USED FOR GRADING AND BACKFILL. SUITABLE MATERIALS ARE ON SITE SOILS REMOVED FROM EXCAVATIONS THAT EXCLUDE FROZEN SOIL, ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZE GREATER THAN 3-INCH. SUITABLE SOILS HAVE MOISTURE CONTENTS THAT ALLOW THEM TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS.
2. UNSUITABLE MATERIAL – SOILS THAT ARE FROZEN, CONTAIN ROOTS OR ORGANIC MATERIAL, DEBRIS, TRASH, REFUSE, OR PARTICLES SIZES GREATER THAN 3-INCH. SOILS THAT ARE TOO WET OR TOO DRY TO BE COMPACTED TO THE SAME DENSITY AS THE NATIVE SOILS ARE UNSUITABLE.
3. GRANULAR BACKFILL – SHALL MEET THE FOLLOWING GRADATION

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
NO. 4 (4.75 MM)	30 TO 60
NO 200 (0.075 MM)	3 TO 15

4. GRANULAR BEDDING – WELL-GRADED SAND MEETING THE GRADATION REQUIREMENT OF ASTM C 33 FINE AGGREGATE.
5. CONTROLLED LOW STRENGTH MATERIAL (CLSM)– A SELF LEVELING AND SELF COMPACTING CEMENTITIOUS MATERIAL COMPOSED OF SAND, COARSE AGGREGATE, CEMENT, FLY ASH, WATER AND ADMIXTURES. CLSM SHALL BE EXCAVATABLE AND SHALL HAVE A DESIGNED UNCONFINED COMPRESSIVE STRENGTH OF BETWEEN 50 TO 100 PSI.
6. BACKFILL – PRODUCTS MEETING THE REQUIREMENTS OF SUITABLE MATERIAL, GRANULAR BEDDING, GRANULAR BACKFILL OR CLSM.
7. TOPSOIL – SOIL WITH AN ORGANIC CONTENT SUFFICIENT TO ALLOW VEGETATIVE GROWTH.

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REGISTERED ARCHITECT
RICHARD B. HALL
5008
STATE OF OREGON
EXPIRES: 12-31-24
6-23-23

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
GENERAL NOTES

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

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GENERAL SITE WORK NOTES CONT.

PART 3 - EXECUTION

1. GENERAL:

A. BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.

B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK. CONDUCT UTILITY LOCATE IN ACCORDANCE WITH THE ONE-CALL NOTIFICATION

C. CLEAR AND GRUB THE AREA WITHIN THE LIMITS OF THE SITE. REMOVE TREES, BRUSH, STUMPS, RUBBISH AND OTHER DEBRIS AND VEGETATION RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE SITE AREA TO BE CLEARED.

D. REMOVE THE FOLLOWING MATERIALS TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE ORIGINAL GROUND SURFACE: ROOTS, STUMPS, AND OTHER DEBRIS, BRUSH, AND REFUSE EMBEDDED IN OR PROTRUDING THROUGH THE GROUND SURFACE. RAKE, DISK OR PLOW THE AREA TO A DEPTH OF NO LESS THAN 6 INCHES, AND REMOVE TO A DEPTH OF 12 INCHES ALL ROOTS AND OTHER DEBRIS THEREBY EXPOSED.

E. REMOVE TOPSOIL MATERIAL COMPLETELY FROM THE SURFACE UNTIL THE SOIL NO LONGER MEETS THE DEFINITION OF TOPSOIL. AVOID MIXING TOPSOIL WITH SUBSOIL OR OTHER UNDESIRABLE MATERIALS. SUFFICIENT TOPSOIL MAY BE STOCKPILED ON SITE FOR USE DURING FINAL SITE GRADING.

F. EXCEPT WHERE EXCAVATION TO GREATER DEPTH IS INDICATED, FILL DEPRESSIONS RESULTING FROM CLEARING, GRUBBING AND DEMOLITION WORK COMPLETELY WITH SUITABLE MATERIAL.

G. REMOVE FROM THE SITE AND DISPOSE IN AN AUTHORIZED LANDFILL ALL DEBRIS RESULTING FROM CLEARING AND GRUBBING OPERATIONS. BURNING WILL NOT BE PERMITTED.

H. PRIOR TO EXCAVATING, THOROUGHLY EXAMINE THE AREA TO BE EXCAVATED AND/OR TRENCHED TO VERIFY THE LOCATIONS OF FEATURES INDICATED ON THE DRAWINGS AND TO ASCERTAIN THE EXISTENCE AND LOCATION OF ANY STRUCTURE, UNDERGROUND STRUCTURE, OR OTHER ITEM NOT SHOWN THAT MIGHT INTERFERE WITH THE PROPOSED CONSTRUCTION. NOTIFY THE CONSTRUCTION MANAGER OF ANY OBSTRUCTIONS THAT WILL PREVENT ACCOMPLISHMENT OF THE WORK AS INDICATED ON THE DRAWINGS.

I. SEPARATE AND STOCK PILE ALL EXCAVATED MATERIALS SUITABLE FOR BACKFILL. ALL EXCESS EXCAVATED AND UNSUITABLE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.

J. DURING EXCAVATION, THE CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF EXCAVATION.

2. BACKFILL:

A. AS SOON AS PRACTICAL, AFTER COMPLETING CONSTRUCTION OF THE RELATED STRUCTURE, INCLUDING EXPIRATION OF THE SPECIFIED MINIMUM CURING PERIOD FOR CAST-IN-PLACE CONCRETE, BACKFILL THE EXCAVATION WITH APPROVED MATERIAL TO RESTORE THE REQUIRED FINISHED GRADE.

B. PRIOR TO PLACING BACKFILL AROUND STRUCTURES, ALL FORMS SHALL BE REMOVED AND THE EXCAVATION CLEANED OF ALL TRASH, DEBRIS, AND UNSUITABLE MATERIALS.

C. DO NOT PLACE FROZEN MATERIAL IN AS BACKFILL.

D. PLACE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 8-INCHES LOOSE THICKNESS AND COMPACT TO THE SAME DENSITY AS NATIVE SOIL. WHERE HAND OPERATED COMPACTORS ARE USED, THE FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 4 INCHES IN LOOSE DEPTH AND COMPACTED.

E. WHENEVER TESTING INDICATES THAT THE CONTRACTOR HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE CONSTRUCTION MANAGER. THE CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE COMPACTION REQUIREMENTS.

3. TRENCH EXCAVATION:

A. UTILITY TRENCHES SHALL BE EXCAVATED TO THE LINES AND GRADES SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE GENERAL CONTRACTOR, PROVIDE SHORING, SHEETING AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF THE TRENCH WALLS.

B. EXTEND THE TRENCH WIDTH A MINIMUM OF 6 INCHES BEYOND THE OUTSIDE EDGE OF THE OUTERMOST CONDUIT.

C. WHEN SOFT YIELDING, OR OTHERWISE UNSTABLE SOIL CONDITIONS ARE ENCOUNTERED, EXCAVATE THE REQUIRED TRENCH TO A DEPTH OF NO LESS THAN 12 INCHES BELOW THE REQUIRED ELEVATION, THEN BACKFILL WITH 12" OF GRANULAR BEDDING MATERIAL.

4. TRENCH BACKFILL:

A. PROVIDE GRANULAR BEDDING MATERIAL OR FLOWABLE FILL IN ACCORDANCE WITH THE DRAWINGS AND THE UTILITY REQUIREMENTS.

B. NOTIFY THE GENERAL CONTRACTOR 24 HOURS IN ADVANCE OF BACKFILLING.

C. CONDUCT UTILITY CHECK TESTS BEFORE BACKFILLING. BACKFILL AND COMPACT TRENCH BEFORE ACCEPTANCE TESTING.

D. PLACE GRANULAR TRENCH BACKFILL UNIFORMLY ON BOTH SIDES OF THE CONDUITS IN 6-INCH UNCOMPACTED LIFTS UNTIL 12 INCHES OVER THE CONDUITS. SOLIDLY RAM AND TAMP BACKFILL INTO SPACE AROUND CONDUITS.

E. PROTECT CONDUIT FROM LATERAL MOVEMENT, IMPACT DAMAGE, OR UNBALANCED LOADING.

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 8-INCH MAXIMUM LOOSE THICKNESS LIFTS TO RESTORE THE REQUIRED FINISHED SURFACE GRADE.

G. COMPACT FINAL TRENCH BACKFILL TO A DENSITY EQUAL TO OR GREATER THAN THAT OF THE EXISTING UNDISTURBED MATERIAL IMMEDIATELY ADJACENT TO THE TRENCH.

5. FINISH GRADING:

A. PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION. GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE SATISFACTORY FILL MATERIAL RESULTING FROM THE EXCAVATION WORK IN THE CONSTRUCTION OF FILLS, EMBANKMENTS AND FOR REPLACEMENT OF REMOVED UNSUITABLE MATERIALS.

C. REPAIR ALL ACCESS ROADS AND SURROUNDING AREAS USED DURING THE COURSE OF THIS WORK TO THEIR ORIGINAL CONDITION.

6. ASPHALT PAVING ROAD:

A. CONTRACTOR RESPONSIBLE FOR RE-STRIPING AND APPLYING SEALCOATING, UNLESS OTHERWISE NOTED.

B. OREGON DOT STANDARD SPECIFICATION, CURRENT EDITION.

7. STAGING:

A. WORK / STAGING AREA TO BE CONFIRMED AT PRE-CONSTRUCTION SITE MEETING AND SURROUNDED BY TEMPORARY FENCE (SEE DETAIL BELOW) DURING CONSTRUCTION.

B. POSSIBLE LOCATION FOR TEMPORARY DRIVE AISLE CLOSURE DURING CONSTRUCTION.

C. CONTRACTOR TO PROVIDE TEMPORARY SIGNS TO DIRECT TRAFFIC FLOW.

D. SHORT TERM FENCING TO BE PROVIDED OUTSIDE OF TEMPORARY FENCE FOR ANY OPEN TRENCHES LEFT OVER NIGHT OR UNATTENDED.

E. TEMPORARY FENCE SHALL BE CLOSED AND LOCKED AT ALL TIMES. IF GATE MUST BE OPEN FOR MOVING EQUIPMENT OR MATERIALS, A SPOTTER SHALL BE PROVIDED TO TO PREVENT UNAUTHORIZED ENTRY.

F. NO EQUIPMENT OR MATERIALS SHALL BE STORED OUTSIDE THE TEMPORARY FENCE FOR ANY AMOUNT OF TIME.

FIBER OPTIC NOTES

USE CABLE WITH THE FOLLOWING MINIMUM PROPERTIES:

1. HIGH TENSILE STRENGTH >150 LB
2. TIGHT BUFFERED
3. INDOOR / OUTDOOR UV AND MOISTURE RESISTANT "RISER" CABLE
4. CONNECTOR TYPE: ST-ST
5. FIBER TYPE: MULTI-MODE 6-FIBER (3 PAIR) 62.5UM. 6 CONNECTORS ON BOTH ENDS.
6. JACKET: INDOOR/OUTDOOR RISER, BLACK
7. BREAKOUT: SIDE A: INNER END - 24 INCHES WITH 2MM FURCATION

   7.A. SIDE B: OUTER END - 24 INCHES - 2MM FURCATION - STAGGERED EVERY 1"
8. WITH PULLING EYE ON SIDE B (OUTER END) AND SPOOL REEL

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REQUIREMENTS, UNLESS NOTED OTHERWISE: WIDE FLANGE SHAPE: A992, 50KSI ANGLE AND CHANNEL SHAPE: ASTM A36, 36 KSI PLATE: ASTM A36, 36KSI PIPE: ASTM A53 GRADE B, 35 KSI HSS: ASTM A500 GRADE B, 46KSI
2. HIGH-STRENGTH BOLTS SHALL CONFORM TO ASTM A325: ONE HIGH-STRENGTH BOLT ASSEMBLY SHALL CONSIST OF A HEAVY HEX STRUCTURAL BOLT, A HEAVY NUT, A HARDENED WASHER CONFORMING TO ASTM F436. THE HARDENED WASHER SHALL BE INSTALLED AGAINST ELEMENT TURNED IN TIGHTENING. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL CONNECTIONS SHALL BE BEARING TYPE CONNECTIONS.
3. WELDING ELECTRODES SHALL COMPLY WITH AWS D1.1 USING A5.1 OR A5.5 E70XX AND SHALL BE COMPATIBLE WITH THE WELDING PROCESS SELECTED. WELDERS SHALL BE QUALIFIED AS PRESCRIBED IN AWS D1.1.
4. UNLESS NOTED OTHERWISE ON THE DRAWING, ALL ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 WITH HEAVY HEXAGONAL NUT.
5. FABRICATE ITEMS OF STRUCTURAL STEEL IN ACCORDANCE WITH AISC SPECIFICATION.
6. ALL EXPOSED STRUCTURAL STEEL AND BOLTS SHALL BE HOT DIP GALVANIZED PER ASTM A123.
7. SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS, MATERIAL DESIGNATIONS, AND TOP STEEL ELEVATIONS FOR APPROVAL. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL CONFORMANCE TO THE CONTRACT DRAWINGS. SUCH APPROVAL SHALL NOT RELIEVE THE FABRICATOR/CONTRACTOR OF THE RESPONSIBILITY FOR EITHER THE ACCURACY OF THE DETAILED DIMENSIONS IN THE SHOP AND ERECTION DRAWINGS OR THE GENERAL FIT-UP OF PARTS THAT ARE TO BE ASSEMBLED IN THE FIELD.
8. PRIMER SHALL BE RED OXIDE-CHROMATE PRIME COMPLYING WITH STEEL STRUCTURES PAINTING COUNCIL (SSPC) PAINT SPECIFICATION NUMBER 11

ANCHORAGE INSTALLATION NOTES

1. DRILLING THROUGH EXISTING SLAB REBAR DURING POST-INSTALLED ANCHOR BOLTS INSTALLATION IS NOT PERMITTED.
2. POST-INSTALLED ANCHOR BOLT INSTALLATION SHALL BE PERFORMED BY PERSONNEL TRAINED TO INSTALL THE SYSTEM PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), AS INCLUDED IN THE ANCHOR PACKAGING.
3. EXPANSION AND ADHESIVE ANCHORS SHALL BE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS USING STANDARD EMBEDMENTS AND EDGE DISTANCES UNLESS NOTED OTHERWISE ON THE DRAWINGS.

REINFORCED CONCRETE NOTES

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".
2. DO NOT USE RETEMPERED CONCRETE, OR ADD WATER TO READY-MIX CONCRETE AT THE JOB SITE. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 2500 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
4. MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
5. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 615, GRADE 60
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING

6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH "DETAILING MANUAL-2004 PUBLICATION SP-66" AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", ACI-318-08.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B"; ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH:	3 IN.	
CONCRETE EXPOSED TO EARTH OR WEATHER:	#6 AND LARGER	2 IN.
	#5 AND SMALLER & WWF	1-1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:	SLAB AND WALL	3/4 IN.
	BEAMS AND COLUMNS	1-1/2 IN.

9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE ANCHOR, SHALL BE PER MANUFACTURERS WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
12. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
15. LOCATE ADDITIONAL EXPANSION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. MAINTAIN TEMPERATURE OF CAST IN PLACE CONCRETE BETWEEN 50 DEGREES AND 90 DEGREES FARENHEIT. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.
21. UNLESS INDICATED OTHERWISE ON THE DRAWINGS, REINFORCEMENT SPLICES SHALL MEET CLASS B, TENSION LAP REQUIREMENTS IN ACCORDANCE WITH ALL PROVISIONS OF ACI 318 LATEST EDITION, UNLESS NOTED OTHERWISE.
22. PROVIDE ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING.

GROUNDING NOTES

1. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
4. ALL BELOW GRADE BONDS TO BE EXOTHERMIC WELDS OR IRREVERSIBLE COMPRESSION-TYPE CONNECTIONS LISTED FOR USE IN THE APPLICATION WHICH THEY ARE INSTALLED.
5. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
6. 2014 NEC 250.121 EXCEPTION: A WIRE-TYPE EQUIPMENT GROUNDING CONDUCTOR INSTALLED IN COMPLIANCE WITH 250.6(A) AND THE APPLICABLE REQUIREMENTS FOR BOTH THE EQUIPMENT GROUNDING CONDUCTOR AND THE GROUNDING ELECTRODE CONDUCTOR IN PARTS II, III, AND VI OF THIS ARTICLE SHALL BE PERMITTED TO SERVE AS BOTH AN EQUIPMENT GROUNDING CONDUCTOR AND A GROUNDING ELECTRODE CONDUCTOR.

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EXPIRES: 12-31-24

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SHEET TITLE
GENERAL NOTES

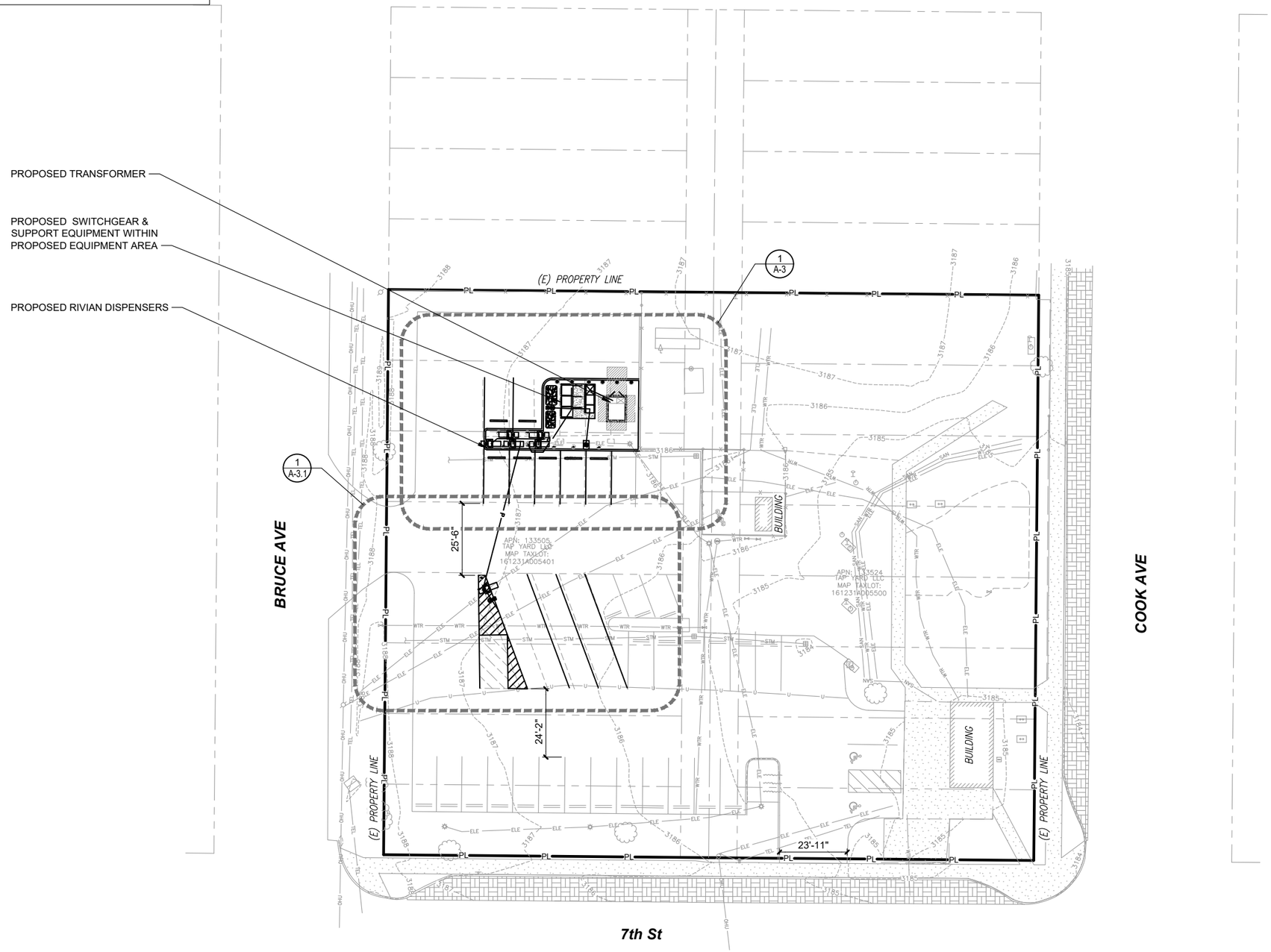
REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

GN-2

NOTES:

1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.



1 A-1 OVERALL SITE PLAN

22" x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'

20' 0' 10' 20' 40'

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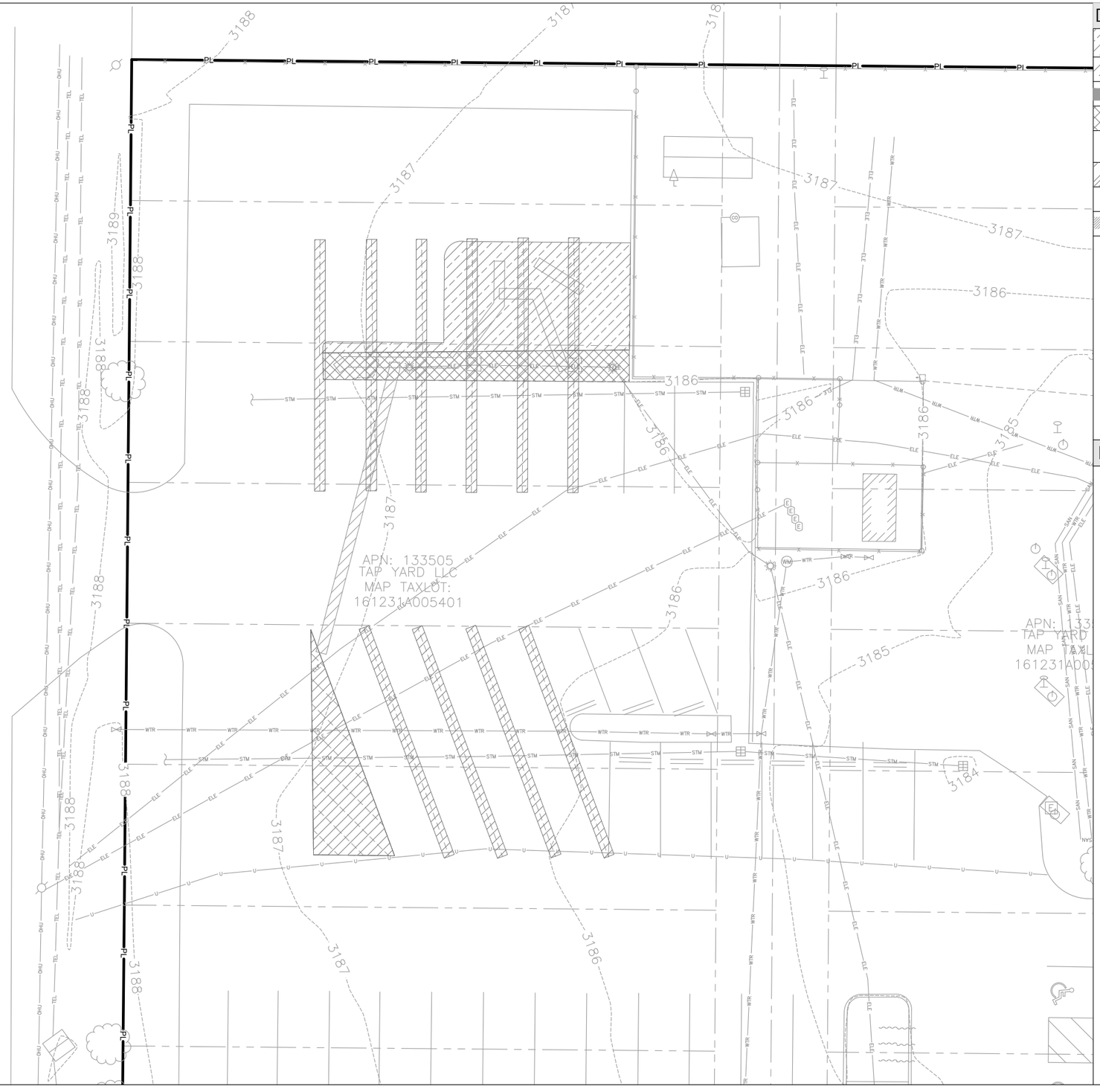

DEMO QUANTITIES TABLE

	ASPHALT	679	± SQ FT
	PARKING LINES	439	± LINEAR FT
	CURB/GUTTER	N/A	± LINEAR FT
	LANDSCAPING	312	± SQ FT
	LANDSCAPING SHRUB REMOVAL AND REPLANTING	N/A	
	CONCRETE	N/A	± SQ FT
N/A	BORING	N/A	± LINEAR FT
	TRENCHING	115	± SQ FT

NOTES

DEMOLITION NOTES:

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2. CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE IN PLACE WITHIN THE AREA OF IMPROVEMENTS, AND RETURN SIDEWALKS, CURBING, ASPHALT, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER, AND ROOT SYSTEMS TO THE MAXIMUM EXTENT POSSIBLE.
4. CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
5. QUANTITIES LISTED ARE ONLY APPROXIMATIONS. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO BIDDING.
6. TRENCHING IS TO BE USED EXCEPT IN HEAVY TRAFFIC AREAS, MAIN DRIVE AISLES, AND ACROSS STORE ENTRANCES.

1 / A-2 DEMOLITION PLAN

22" x 34" SCALE: 1" = 10' 11" x 17" SCALE: 1" = 20'

10' 0' 5' 10' 20'

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3. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER, ROOT GROUND COVER AND DECORATIVE ROCKERIES TO THE MAXIMUM EXTENT POSSIBLE.
4. CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
5. DISTURBED AREAS AROUND TRANSFORMER AND EQUIPMENT PAD SHALL BE COVERED WITH MULCH AND FILTER FABRIC UNDERLAYMENT.
6. CONTRACTOR TO PROVIDE KEYSAFE PRO S7 KEYBOX MOUNTED TO TREX FENCE (OR SWITCHGEAR IF NO TREX FENCE) FINAL LOCATION AT DISCRETION OF SAI CONSTRUCTION MANAGER.
7. HAND DIG AROUND EXISTING UTILITIES. CONTACT ARCHITECT/ENGINEER IF UNDERGROUND CONDITIONS CONFLICT WITH PROPOSED INSTALLATION.
8. CONTRACTOR SHALL VERIFY LOCATION AND COORDINATE RELOCATION WITH UTILITY OWNER AND PROPERTY OWNER PRIOR TO CONSTRICTION.

CURB LEGEND:

= TYPE A, CATCH GUTTER

=TYPE B, SPILL GUTTER

=TYPE C, HEADER CURB

PARKING STALL SCHEDULE	
EXISTING STANDARD STALLS (TO BE MODIFIED):	11
EXISTING STANDARD STALLS TO REMAIN:	8
PROPOSED STALLS FOR XFMR & VAULT	4
PROPOSED INITIAL DCFC STALLS:	6
PROPOSED EXPANSION DCFC STALLS:	0
PROPOSED LEVEL 2 STALLS:	2
NET STALL CHANGE:	3

PROPOSED DIRT (TO MATCH, SEE NOTE #5)
PROPOSED BOLLARD (TYPE 2) (TYP OF 4)
PROPOSED CONCRETE PAD
EXISTING ASPHALT (SEE NOTE #2)
EXISTING CHAIN LINK FENCE (SEE NOTE #2)
PROPOSED REMOVABLE UTILITY BOLLARD (SEE UTILITY SPEC, TYP OF 1)
PROPOSED UTILITY BOLLARD (SEE UTILITY SPEC, TYP OF 2)
EXISTING ELECTRICAL VAULT
PROPOSED RIVIAN POWER CABINET (TYP OF 3)
PROPOSED SHRUB TO MARTCH EXISTING SHRUBS (TYP OF 2)
PROPOSED LED LIGHT FIXTURE (TYP OF 1)
EXISTING UNDERGROUND POWER LINE (SEE NOTE #8)
PROPOSED TRANSFORMER
EXISTING PAINT STRIPE (TYP, TO BE REMOVED)
PROPOSED RIVIAN L2 DISPENSERS ON CONCRETE FOUNDATIONS (TYP OF 2)
EXISTING UNDERGROUND POWER LINE (SEE NOTE #8)
PROPOSED GC START POINT AT CORNER OF ASPHALT
PROPOSED CURB (TYPE C, HEADER CURB)
PROPOSED RIVIAN DCFC DISPENSERS ON CONCRETE FOUNDATIONS (TYP OF 6)
PROPOSED WHEEL STOP (TYP OF 7)
EXISTING 4" STORM DRAIN (SEE NOTE #7)
PROPOSED PARKING STRIPING
EXISTING ASPHALT (SEE NOTE #2)
PROPOSED POLE MOUNTED SIGN ON EXISTING LED LIGHT FIXTURE
PROPOSED SINGLE POST MOUNTED SIGN (TYP OF 6)
EXISTING L2 DISPENSERS (TO BE REMOVED, TYP OF 2)
EXISTING LIGHT POLE (TO REMAIN)
EXISTING STORM DRAIN (SEE NOTE #7)
EXISTING PAINT STRIPE (TYP, TO REMAIN)
TYPICAL 9'-0" X 19'-0"
PC1
PC2
PC3
1A
1B
2A
2B
3A
3B
4A
4B
FRONT
10'-2"
10'-2"
34'-2"
6'-8"
12'-1"
4'-2"
7'-0"
4'-3"
5'-4"
5'-3"
6'-0"
2'-0"
R3'-6"
10'-6"
3'-8"
12'-2"
5'-11"
9'-4"
25'-7"
10'-4"
18'-0"
19'-0"
7'-7"
24'-2"
2'-2" TYP
R1'-0" TYP
9'-2"
10'-9"
2'-1" TYP
3'-2"
9" TYP
2'-6" TYP
4'-6"
4'-6"
9'-0"
2'-0"
8'-1"
16'-0"
45'-0"
31'-5"
3187
3186

1 A-3 PROPOSED LAYOUT
22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'

N

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DRAWN BY: MAZ
CHECKED BY: RBH

A-3

NOTES:

1. SURVEY AND TOPOGRAPHICAL FEATURES SHOWN FOR REFERENCE ONLY. SEE INCLUDED SURVEY (BY OTHERS) PERFORMED FOR THIS PROJECT.
2. CONTRACTOR SHALL PROTECT EXISTING INFRASTRUCTURE IN PLACE WITHIN THE AREA OF IMPROVEMENTS, AND RETURN SIDEWALKS, CURBING, ASPHALT, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITIONS PRIOR TO THE COMMENCEMENT OF WORK.
3. CONTRACTOR SHALL PROTECT EXISTING LANDSCAPING, TREES, GROUND COVER, ROOT GROUND COVER AND DECORATIVE ROCKERIES TO THE MAXIMUM EXTENT POSSIBLE.
4. CONTRACTOR TO NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO PERFORMING WORK.
5. DISTURBED AREAS AROUND TRANSFORMER AND EQUIPMENT PAD SHALL BE COVERED WITH MULCH AND FILTER FABRIC UNDERLAYMENT.
6. CONTRACTOR TO PROVIDE KEYSAFE PRO S7 KEYBOX MOUNTED TO TREX FENCE (OR SWITCHGEAR IF NO TREX FENCE) FINAL LOCATION AT DISCRETION OF SAI CONSTRUCTION MANAGER.
7. HAND DIG AROUND EXISTING UTILITIES. CONTACT ARCHITECT/ENGINEER IF UNDERGROUND CONDITIONS CONFLICT WITH PROPOSED INSTALLATION.

PARKING STALL SCHEDULE	
EXISTING STANDARD STALLS (TO BE MODIFIED):	11
EXISTING STANDARD STALLS TO REMAIN:	8
PROPOSED STALLS FOR XFMR & VAULT	4
PROPOSED INITIAL DCFC STALLS:	6
PROPOSED EXPANSION DCFC STALLS:	0
PROPOSED LEVEL 2 STALLS:	2
NET STALL CHANGE:	3

(E) PROPERTY LINE

PROPOSED SIGN-IN-BOLLARD (TYPE 3) (TYP OF 1)

PROPOSED RIVIAN DCFC DISPENSERS ON CONCRETE FOUNDATIONS (TYP OF 6)

EXISTING UNDERGROUND POWER LINE (SEE NOTE #7)

EXISTING UNDERGROUND WATER LINE (SEE NOTE #7)

EXISTING UNDERGROUND STORM DRAIN (SEE NOTE #7)

PROPOSED PAINT STRIPING (TYP)

EXISTING ASPHALT (SEE NOTE #2)

EXISTING UNDERGROUND POWER LINE (SEE NOTE #7)

EXISTING PAINT STRIPE (TYP, TO BE REMOVED)

PROPOSED LED LIGHT FIXTURE W/ 3' FOUNDATION AND POLE MOUNTED SIGN (TYP OF 1)

NON-EV PULL THRU STALL 9'-7" X 42'-10"

NON-EV PULL THRU STALL 9'-7" X 42'-10"

TYPICAL 9'-2" X 15'-11"

TYPICAL 9'-3" X 20'-5"

NON-EV STALL 10'-0" X 18'-10"

EXISTING PAINT STRIPE (TYP, TO BE REMOVED)

PROPOSED 4" STRIPING W/ 45° HATCH @ 24" OC

EXISTING UNKNOWN UTILITY (SEE NOTE #7)

EXISTING ASPHALT (SEE NOTE #2)

24'-7"
2'-5"
3'-0"
3'-2"
2'-8"
2'-1"
39'-11"
18'-10"
42'-10" TYP
14'-0"
9'-7"
9'-7"
23'-7"
10'-0"
6'-11"
16'-11"
3187
3186
3188

1 A-3.1 PROPOSED LAYOUT
22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'

N

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REGISTERED ARCHITECT
RICHARD B. HALL
5008
STATE OF OREGON
EXPIRES: 12-31-24
6-23-23

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
PROPOSED LAYOUT

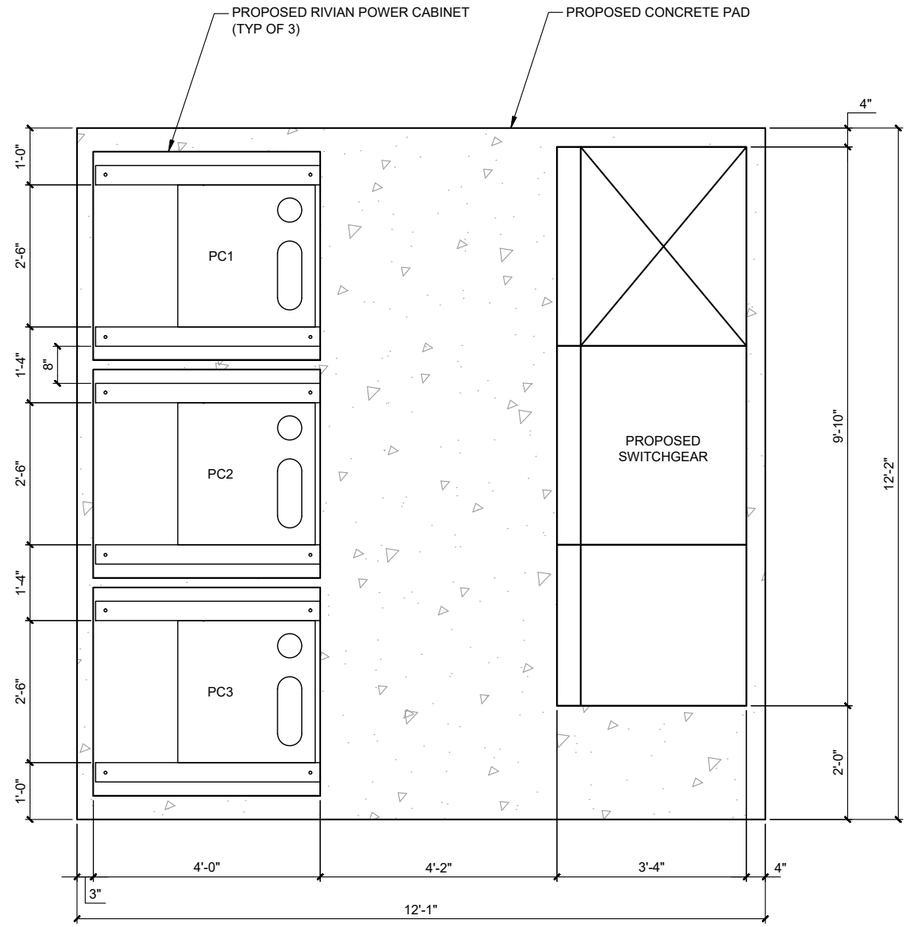
REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

A-3.1

NOTES:

1. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.
2. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



1 A-4 EQUIPMENT PAD LAYOUT

22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"

1' 0' 6" 1' 2' 3'

N

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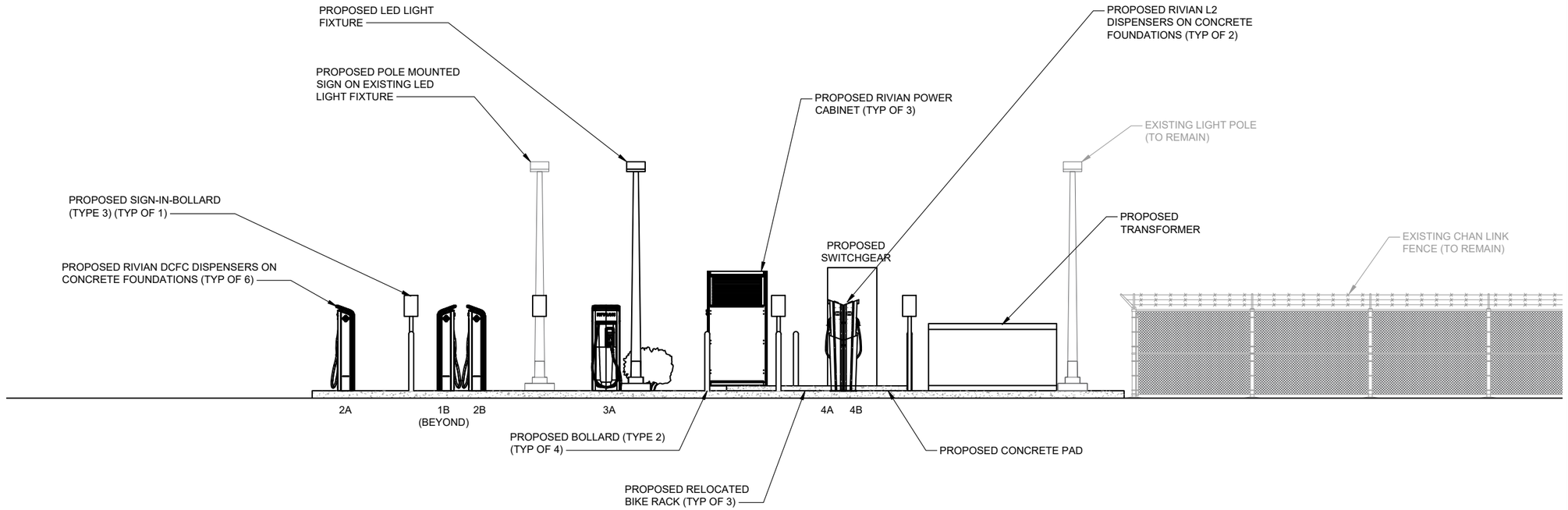
EQUIPMENT PAD LAYOUT

REV.	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ

CHECKED BY: RBH

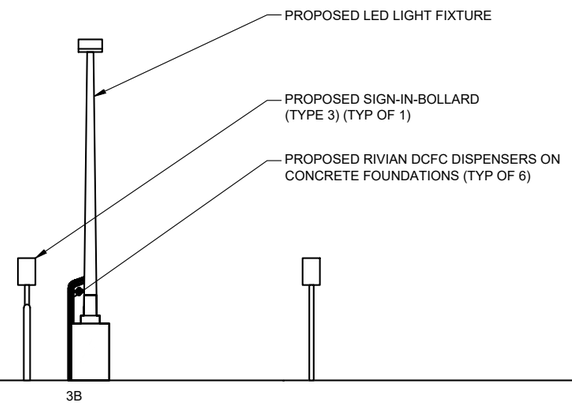
A-4



1 A-4.1 ELEVATION

22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'



2 A-4.1 ELEVATION @ TRAILER DISPENSER

22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'

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SHEET TITLE

ELEVATION

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

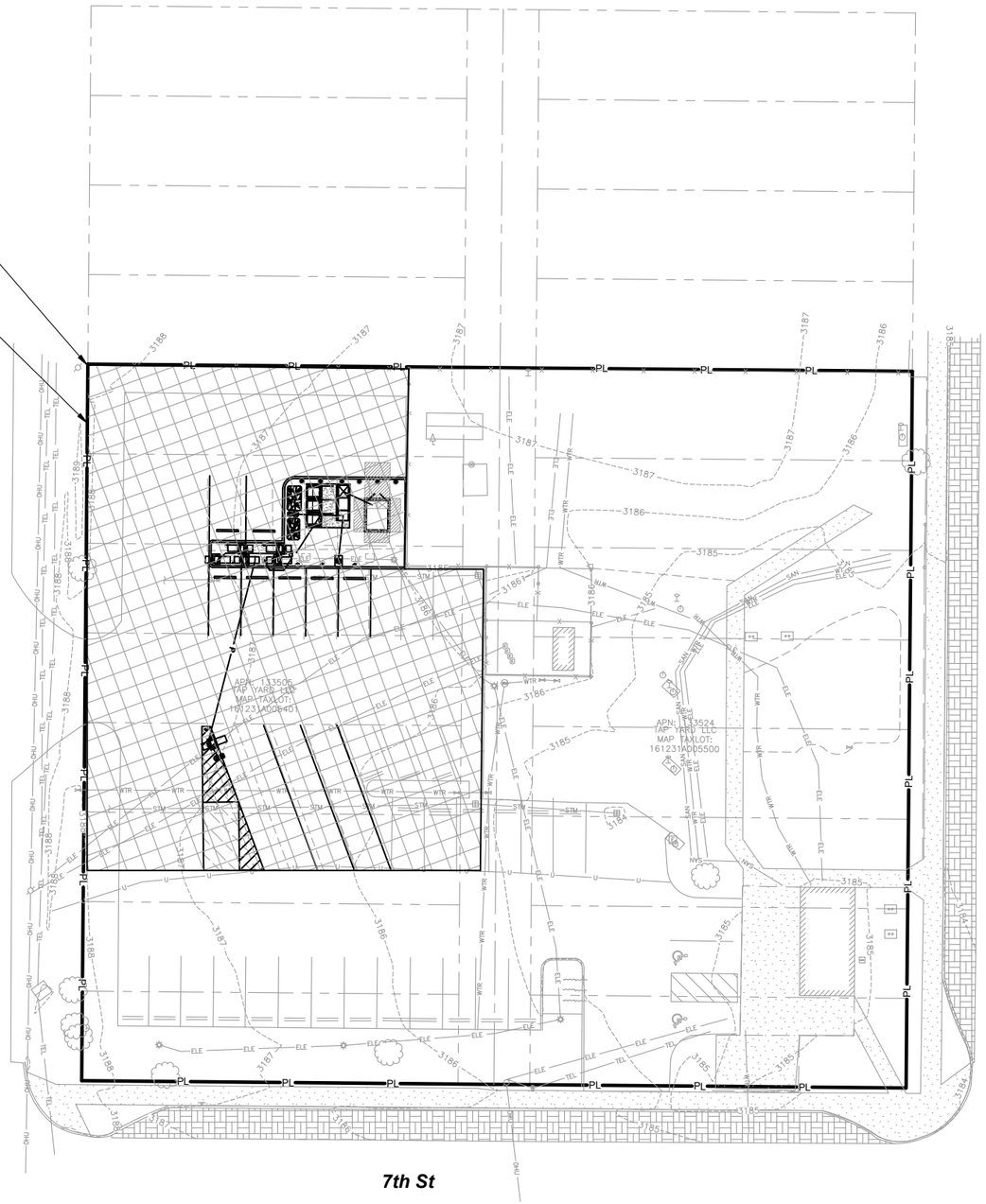
A-4.1

LEGEND

	WORK/STAGING AREA
	DRIVE AISLE CLOSURE
	UTILITY LINE TO BE BORED
	UTILITY LINE TO BE TRENCHED

PROPOSED STAGING AREA. AREA TO BE CONFIRMED AT PRE-CONSTRUCTION SITE MEETING. STAGING AREA TO BE SURROUNDED BY TEMPORARY FENCE DURING CONSTRUCTION

TEMPORARY ENCLOSED FENCED CONSTRUCTION AND STAGING AREAS AS SHOWN



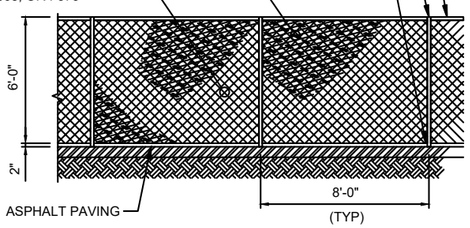
TOP RAIL 1.66 IN OD, 2.27 LB/FT GALVANIZED STEEL PIPE (TYP)

POST 1.90 IN OD, 2.70 LB/FT GALVANIZED STEEL PIPE (TYP)

TEMPORARY FENCE TO BE WEIGHTED DOWN (NOT TO USE SANDBAGS)

ENDURO SHADE CLOTH BY HENDEE ENTERPRISES, INC. (OR EQUAL) TEL: 1-800-231-7275

NO. 9 GAGE, 0.148" ± 0.00", FINISHED SIZE GALVANIZED STEEL WIRES. 2" MESH, TOP AND BOTTOM SELVAGES TWISTED AND BARBED CONFORMING TO ASTM A392, A491, F668, OR F573



2 / A-5 TEMPORARY FENCE DETAIL
SCALE: N.T.S.

1 / A-5 STAGING PLAN
22" x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'

20' 0' 10' 20' 40'

N

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REGISTERED ARCHITECT • STATE OF OREGON • RICHARD B. HALL 5008 EXPIRES: 12-31-24

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BEND, OR 97703

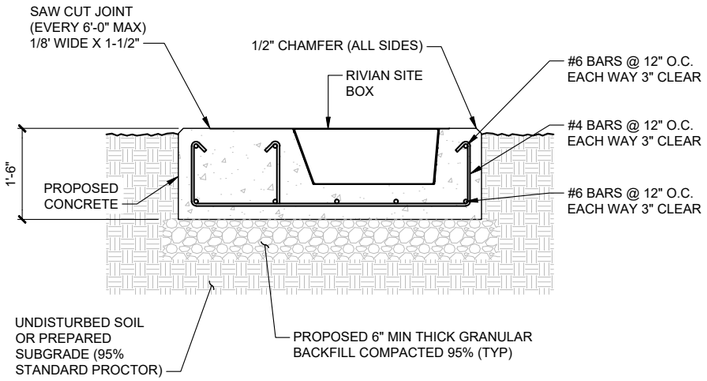
SHEET TITLE
STAGING PLAN

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

A-5

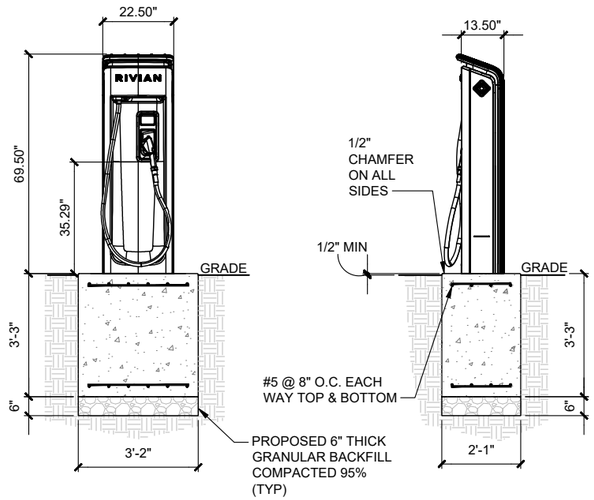
NOTES:
1. FOUNDATION AREA SHALL BE EXCAVATED TO THE DEPTH AND DIMENSIONS SHOWN ON THE PLANS. OTHER UNSUITABLE MATERIAL SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE. THE SUBGRADE SHALL BE ROLLED WITH A 1-TON, VIBRATORY, WALK-BEHIND ROLLER AT A SPEED OF LESS THAN 2 FPS, 6 PASSES MINIMUM, TO PROVIDE UNYIELDING SURFACE.
2. UNDERCUT SOFT OR "WEAVING" AREAS A MINIMUM OF 12 INCHES DEEP. BACKFILL UNDERCUT AREA WITH FILL MEETING THE SPECIFICATIONS OF STRUCTURAL FILL.
3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=2500 psi.
4. REINFORCING BAR TO BE ASTM A615 GRADE 60.
5. ALL REINFORCING TO HAVE MINIMUM CONCRETE COVER PER ACI SPECIFICATIONS.
6. ALL CONCRETE MATERIALS AND WORKMANSHIP SHALL CONFORM TO ACI 318-14 AND APPLICABLE STATE BUILDING
7. 100% TIES FOR REBAR OVERLAP. NO COLD JOINTS SHALL BE PERMITTED



1 D-1 POWER UNIT & SWITCHGEAR FOUNDATION DETAIL

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

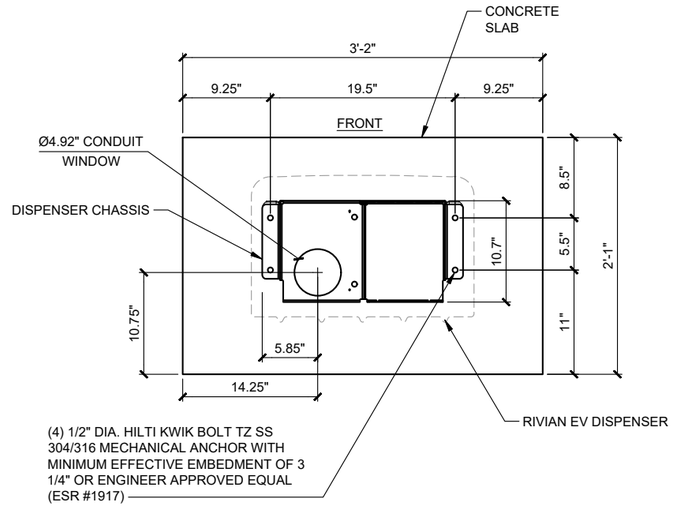
NOTE:
1. OPERABLE PARTS OF DISPENSER TO FRONT OF CURB SHALL BE 10" MAX.
2. OPERABLE PARTS OF DISPENSER SHALL NOT EXCEED 48" ABOVE PARKING SURFACE.
3. CONCRETE TO HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH (f'c)=2500 psi.



2 D-1 DISPENSER SLAB SECTION/ELEVATION DETAIL

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

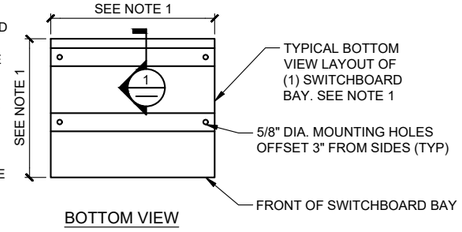
NOTE:
1. MINIMUM CONCRETE EDGE DISTANCE FOR PROPOSED ANCHORS SHALL BE 6".
2. MINIMUM CLEAR SPACING BETWEEN ANCHOR AND CONDUIT SHALL BE 3 INCHES.
3. CONTRACTOR TO FIELD VERIFY THE ANCHOR SPACING PER MANUFACTURER'S INSTALLATION MANUAL.



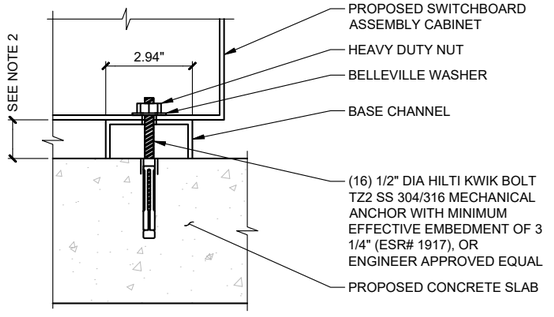
3 D-1 DISPENSER ANCHORAGE AND CONDUIT ENTRY DETAIL

SCALE: N.T.S.

NOTES
1. SEE FLOOR PLAN IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR MOUNTING HOLE LOCATION AND SWITCHBOARD BAY DIMENSIONS.
2. SEE ELEVATION IN REFERENCED SWITCHBOARD ASSEMBLY DRAWINGS FOR BASE CHANNEL DIMENSION.
3. MINIMUM 10 1/2" CONCRETE EDGE DISTANCE REQUIRED FOR PROPOSED ANCHORAGE.



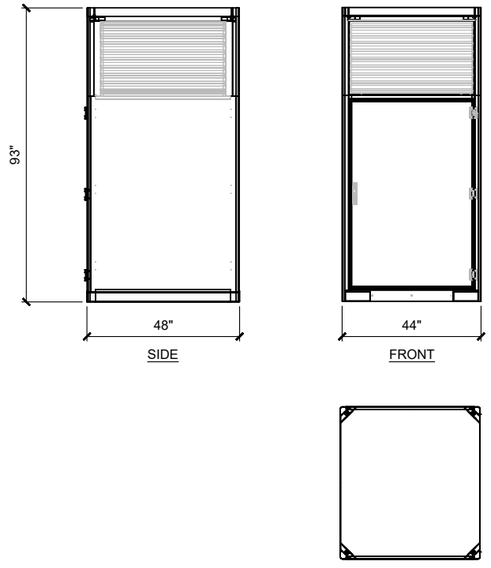
BOTTOM VIEW



SECTION 1

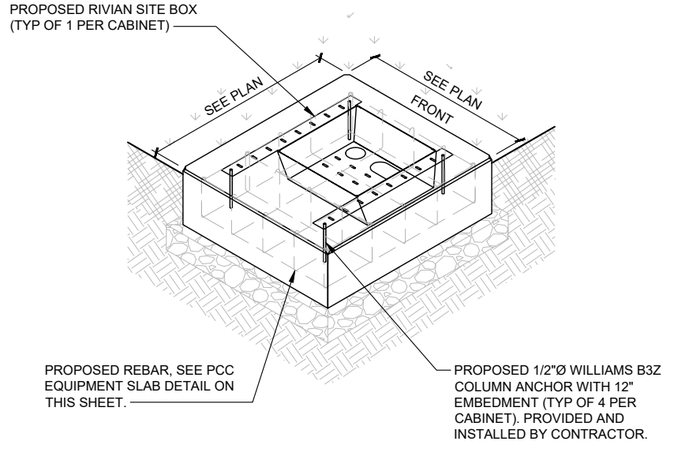
4 D-1 SWITCHGEAR MOUNTING DETAIL

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



5 D-1 POWER UNIT DETAIL

SCALE: N.T.S.



6 D-1 POWER UNIT ANCHORAGE AND CONDUIT ENTRY DETAIL

SCALE: N.T.S.

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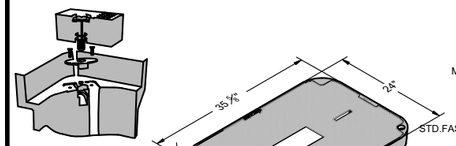
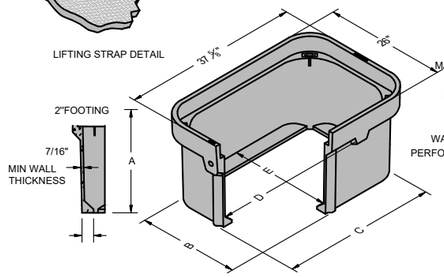
SHEET TITLE
CONSTRUCTION DETAILS

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

D-1





	A	B	C	D	E
2436-18	18	23-5/8	35-1/4	33-3/15	21-9/16

COVER:	
STYLE:	FLUSH SOILD
MATERIAL:	POLYMER CONCRETE
MODEL:	24"X30"
WEIGHT:	TIER 15:150 LBS TIER 22:204 LBS
STD.FASTENERS:	1/2-13 STAINLESS STEEL HEX HEAD BOLT,WASHER AND FLOATING NUT
OPTIONS:	LOGOS AND SPECIAL MARKINGS
SURFACE:	SLIP RESISTANT & MARKED*
COEFFICIENT OF FRICTION:	>0.6ASTM 1028
PERFORMANCE:	ANSI/SCTE-77 TIER 15,WUC 3.6 ASTM C857A-12 ANSI/SCTE-77 TIER22,WUC3.6, ASTM C857A-16
BODY:	
MATERIAL:	POLYMER CONCRETE
MODEL:	24"X36"
WEIGHT:	18"DEPTH:142LBS 24"DEPTH:175LBS 36"DEPTH:242LBS
WALL TYPE:	STRAIGHT
PERFORMANCE:	ANSI/SCTE-77 TIER22,WUC3.6, ASTM C857A-16

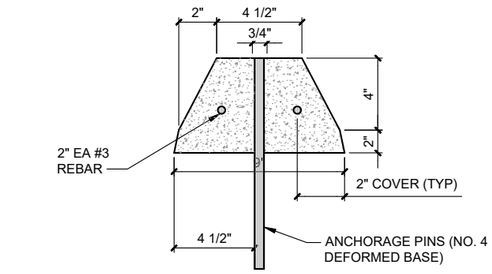
MEDIUM DUTY:
NON-DELIBERATE TRAFFIC

HEAVY DUTY:INCIDENTA,
NON-DELIBERATE TRAFFIC

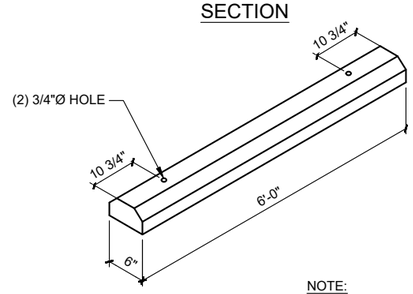
FOR USE IN NON-VEHICULAR TRAFFIC

1 D-2 HANDHOLE DETAIL

SCALE: N.T.S.



SECTION



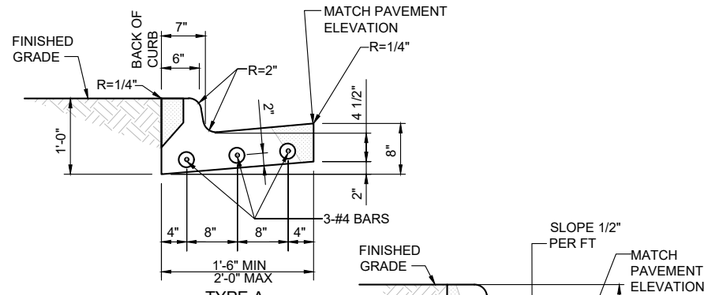
(2) 3/4"Ø HOLE

3-D VIEW

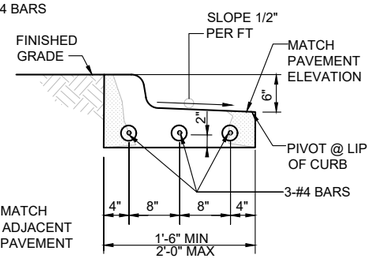
NOTE:
1. REBAR AMERICAN GRADE 60 SIZE #3
2. 3,000 PSI CONCRETE OR GREATER

2 D-2 WHEEL STOP DETAIL

SCALE: N.T.S.



TYPE A
CATCH GUTTER



TYPE B
SPILL GUTTER

TYPE C
HEADER CURB

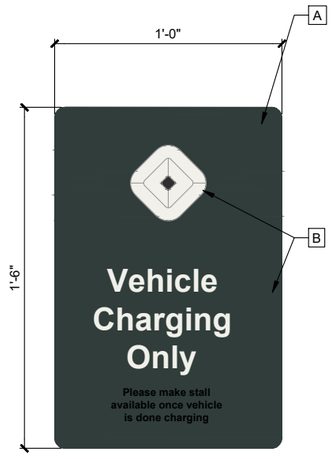
NOTE
1. 1/2" PRE MOLDED EXPANSION JOINTS SHALL BE PLACED AT POINTS OF CURVATURE, CURB RETURNS, CURB INLETS, AND AT 250' CENTERS. CONTRACTION JOINTS SHALL BE 2" DEEP, 3/16" WIDE, AND PLACED AT 15' INTERVALS EQUALLY SPACED BETWEEN EXPANSION JOINTS.

3 D-2 CONCRETE CURB DETAIL

SCALE: N.T.S.

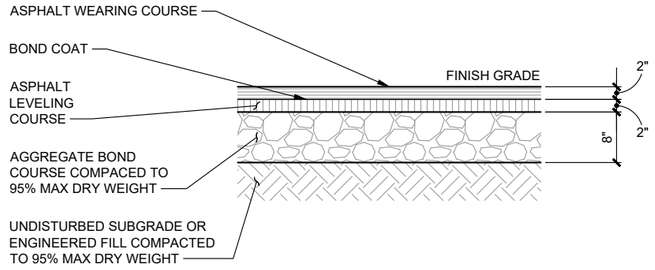
NOTE:
A. 1/8" THICK POWDER COATED ALUMINUM PLANEL, TO MATCH RAL 6012, SATIN FINISH. MECHANICALLY ATTACHED TO POST WITH CONCEALED STUDS/FASTENERS.

B. APPLIED BINYLE OR DIRECT PRINTED EXTERIOR-GRADE GRAPHICS. COLORS AS INDICATED TO MATCH RAL 9016 "TRAFFIC WHITE".



4 D-2 NO PARKING DETAIL

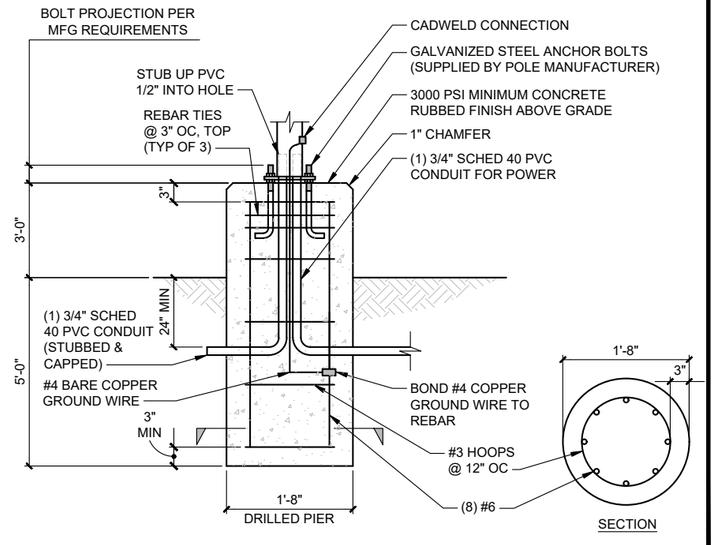
22" x 34" SCALE: 3" = 1'-0" 11" x 17" SCALE: 1 1/2" = 1'-0"



5 D-2 ASPHALT DETAIL

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

NOTES:
1. GENERIC LOADING: V= 115 MPH. EXP C. K.ZT =1.3.
2. 15' POLE MAX 36" ABOVE GRADE MAX WITH 4" MAX ROUND POLE. MAX WEIGHT OF POLE AND LIGHT: 160 LBS MAX EPA OF LIGHT FIXTURE: 1.7 SF.
3. LIGHT POLE AND ANCHORAGE DESIGNED AND PROVIDED BY OTHERS.



SECTION

6 D-2 LIGHT FOUNDATION DETAIL

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

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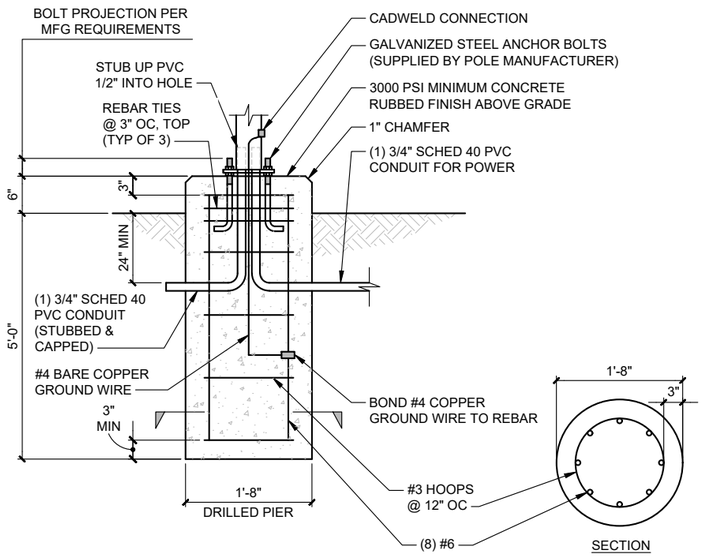
SHEET TITLE
CONSTRUCTION
DETAILS

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

D-2

NOTES:
1. GENERIC LOADING: V= 115 MPH. EXP C. K.ZT =1.3.
2. 15' POLE MAX 6" ABOVE GRADE MAX WITH 4" MAX ROUND POLE. MAX WEIGHT OF POLE AND LIGHT: 160 LBS MAX EPA OF LIGHT FIXTURE: 1.7 SF.
3. LIGHT POLE AND ANCHORAGE DESIGNED AND PROVIDED BY OTHERS.

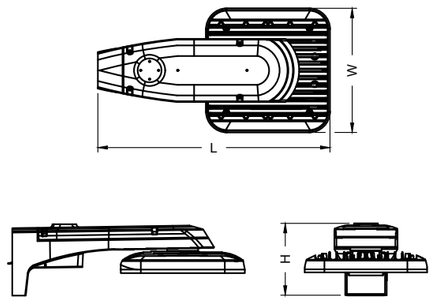


1 D-3 LIGHT FOUNDATION DETAIL

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

SPECIFICATIONS

EPA:	0.7 FT² (0.07M²)
LENGTH:	25" (64CM)
WIDTH:	13-1/4" (34CM)
HEIGHT	7-3/4" (20CM)
WEIGHT (MAX):	26 LBS (11.8KG)



FIXTURE:	LTH KAX1 LED P1 50K R3 MVOLT RPA PER DBLXD
POLE:	RSS 15 4-5B DM19AS FDL11-6B DBLXD
PHOTOCELL:	DLL 127F 1.5 JU

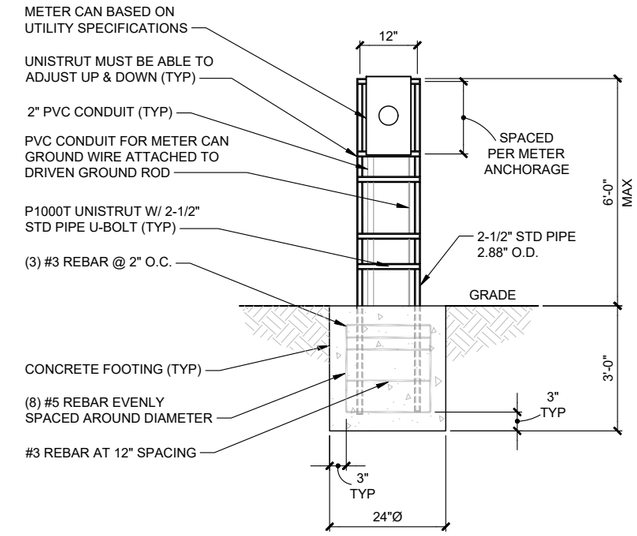
NOTES:
1. FIXTURE TO BE LED, FULL CUT-OFF, SINGLE FIXTURE AS MANUFACTURED BY LITHONIA LIGHTING.
2. POLE TO BE 15 FOOT, ROUND STRAIGHT STEEL AS MANUFACTURED BY LITHONIA LIGHTING.
3. PHOTOCELL TO BE DLL ELITE AS MANUFACTURED BY ACUITY CONTROLS.
4. FIXTURE AND POLE COLOR BLACK.
5. CONTRACTOR TO SUPPLY AND INSTALL METAL BIRD SPIKES TO TOP OF HORIZONTAL SURFACES.

2 D-3 LIGHTING FIXTURE, POST, PHOTOCELL DETAIL

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

STANDALONE CUSTOMER PROVIDED TUV INSTRUMENT RATED METER CAN ON UNISTRUT SUPPORT

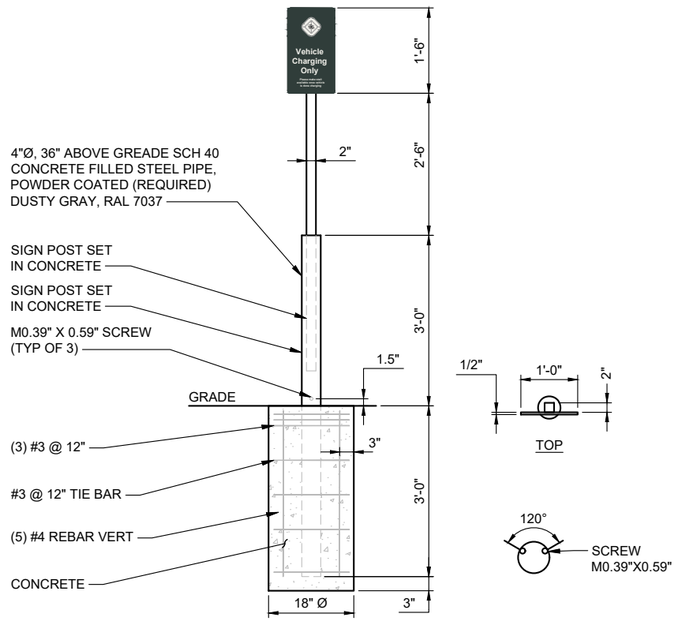
NOTE:
1. GENERIC LOADING: V=115 MPH, EXP C, KZ=0.85, SS=3.73g, SITE CLASS=D, SDS=2.64, (2) 1-1/4" CONDUIT, METER MAX WIND AREA = 540 SQ IN.



3 D-3 METER H-FRAME DETAIL

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

NOTES:
1. BOLLARD IS FOR WARNING PURPOSES ONLY.
2. BOLLARD DETAIL FOR BOLLARDS AROUND RIVIAN EQUIPMENT.
3. CONTRACTOR TO PROVIDE (2) 6' LONG, 1/2" THICK FOAM STRIPS CROSSED OVER TOP OF STEEL PIPE TO STABILIZE SLIP COVER.

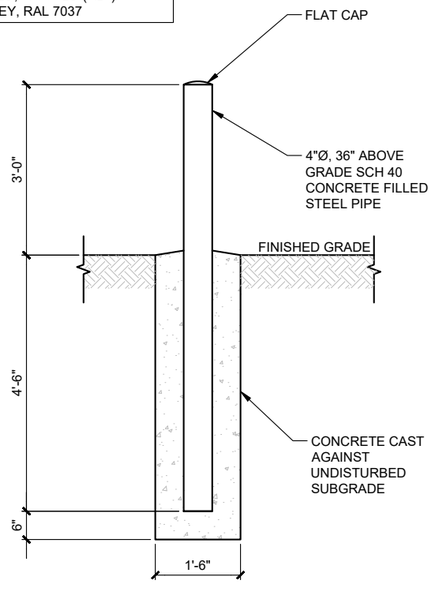


4 D-3 WARNING BOLLARD WITH SIGN DETAIL

22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"

NOTE:

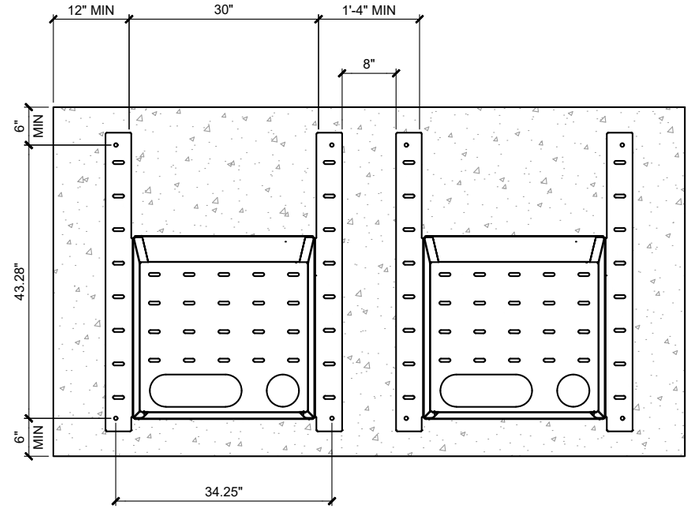
MATERIAL:	STEEL
FINISH:	POWDER COATED (REQUIRED) GALVANIZED, PAINTED (ALT)
COLOR:	DUSTY GREY, RAL 7037



5 D-3 WARNING BOLLARD DETAIL

22" x 34" SCALE: 3/4" = 1'-0" 11" x 17" SCALE: 3/8" = 1'-0"

NOTE
1. INSET PART OF SITE BOX SHALL BE 12" FROM SWITCHGEAR OR OTHER HARDWARE WHEN SHARING A SLAB



FRONT

6 D-3 SITE BOX DETAIL

SCALE: N.T.S.

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REGISTERED ARCHITECT
RICHARD B. HALL
5008
STATE OF OREGON
EXPIRES: 12-31-24

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
CONSTRUCTION DETAILS

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

D-3

1 D-4

NOT USED

SCALE: N.T.S.

NOTE:

A. 1/8" THICK POWDER COATED ALUMINUM PANEL, TO MATCH RAL 6012, SATIN FINISH. MECHANICALLY ATTACHED TO POST WITH CONCEALED STUDS/FASTENERS.

B. APPLIED BINYLE OR DIRECT PRINTED EXTERIOR-GRADE GRAPHICS. COLORS AS INDICATED TO MATCH RAL 9016 "TRAFFIC WHITE".

C. SIGN TO BE INSTALLED NO LESS THAN 66" ABOVE GRADE.

2 D-4

TRAILER PRIORITY SIGN DETAIL

SCALE: N.T.S.

3 D-4

NOT USED

SCALE: N.T.S.

NOTES:

1. REFER TO PEDESTAL FOUNDATION DETAIL AND DETERRENT BOLLARD DETAIL FOR FOUNDATION REINFORCEMENT AND ANCHORING.

4 D-4

NOT USED

SCALE: N.T.S.

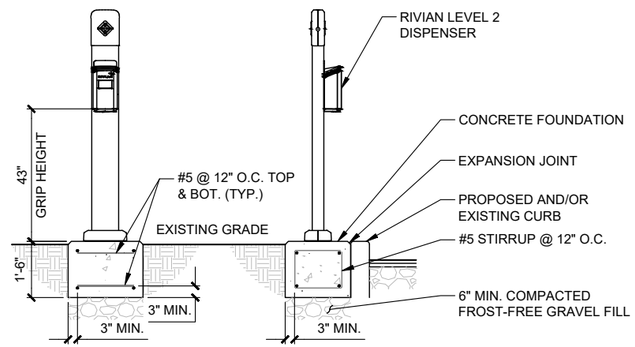
PLAN VIEW

SEE DETAIL 11 FOR FOUNDATION SIZE AND ANCHOR HOLE LOCATIONS

ANCHORING NOTES:

ANCHORS: (4) 1/2" DIAMETER HILTI KWIK BOLT TZ-SS304 ANCHOR WITH 3-1/4" MINIMUM EFFECTIVE EMBEDMENT, 2-1/2" MINIMUM EXPOSED ABOVE CONCRETE.

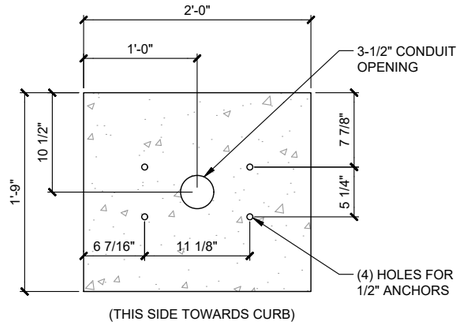
FASTENERS: (2) TOTAL 1/2" NUTS AND (2) TOTAL 1/2" WASHERS PER ANCHOR NUT AND WASHER MATERIAL TYPE TO MATCH ANCHOR MATERIAL (2) 1/2" NUT AND WASHER ABOVE FLANGE, (1) BELOW



5 D-4

LEVEL 2 PEDESTAL FOUNDATION DETAIL

SCALE: N.T.S.



6 D-4

LEVEL 2 & DETERRENT BOLLARD FOUNDATION DETAIL

SCALE: N.T.S.

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SHEET TITLE

CONSTRUCTION DETAILS

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

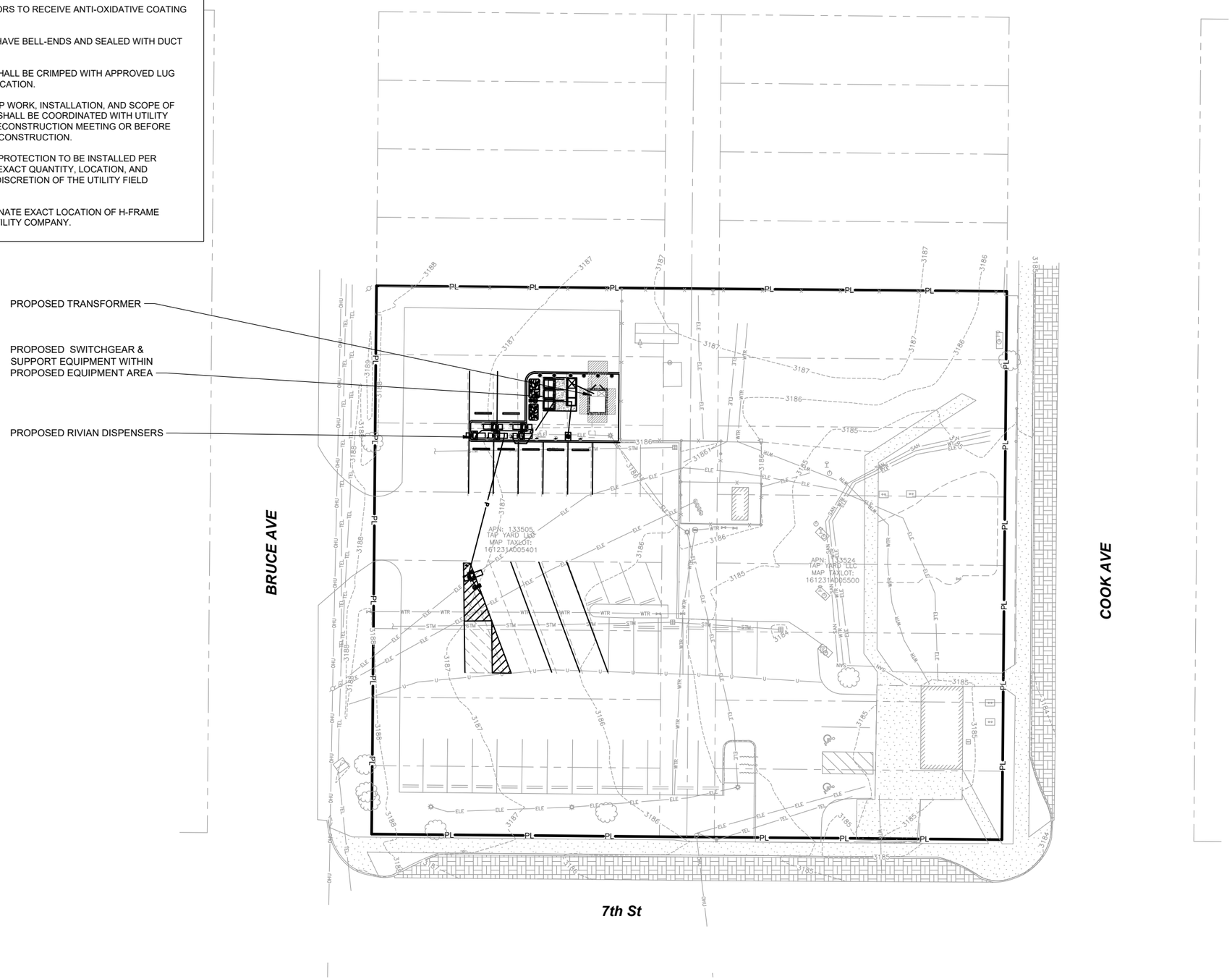
DRAWN BY: MAZ

CHECKED BY: RBH

D-4

NOTES:

1. ALL ELECTRICAL WORK AND RELATED ACTIVITIES ON-SITE SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) STANDARDS AND ENFORCED BY ALL APPLICABLE JURISDICTIONAL REQUIREMENTS AT THE TIME OF CONSTRUCTION.
2. ALL ALUMINUM CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
3. ALL PVC CONDUIT SHALL HAVE BELL-ENDS AND SEALED WITH DUCT SEAL.
4. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.
5. UTILITY EQUIPMENT , PREP WORK, INSTALLATION, AND SCOPE OF WORK RESPONSIBILITIES SHALL BE COORDINATED WITH UTILITY ENGINEER AT TIME OF PRECONSTRUCTION MEETING OR BEFORE THE COMMENCEMENT OF CONSTRUCTION.
6. TRANSFORMER BOLLARD PROTECTION TO BE INSTALLED PER UTILITY SPECIFICATIONS. EXACT QUANTITY, LOCATION, AND SPACING MAY BE AT THE DISCRETION OF THE UTILITY FIELD ENGINEER/INSPECTOR.
7. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.



1 / E-1 UTILITY PLAN

22" x 34" SCALE: 1" = 20' 11" x 17" SCALE: 1" = 40'

20' 0' 10' 20' 40'

N

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MICHAEL S CASE
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6/23/23

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SHEET TITLE

UTILITY PLAN

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-1

NOTE:

1. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. LENGTHS ARE BASED ON DIAGRAMMATICAL MEASUREMENTS AND APPROXIMATED BURIED DEPTHS. THE EXACT ROUTING PATH AND CONDUCTOR RUN LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS.
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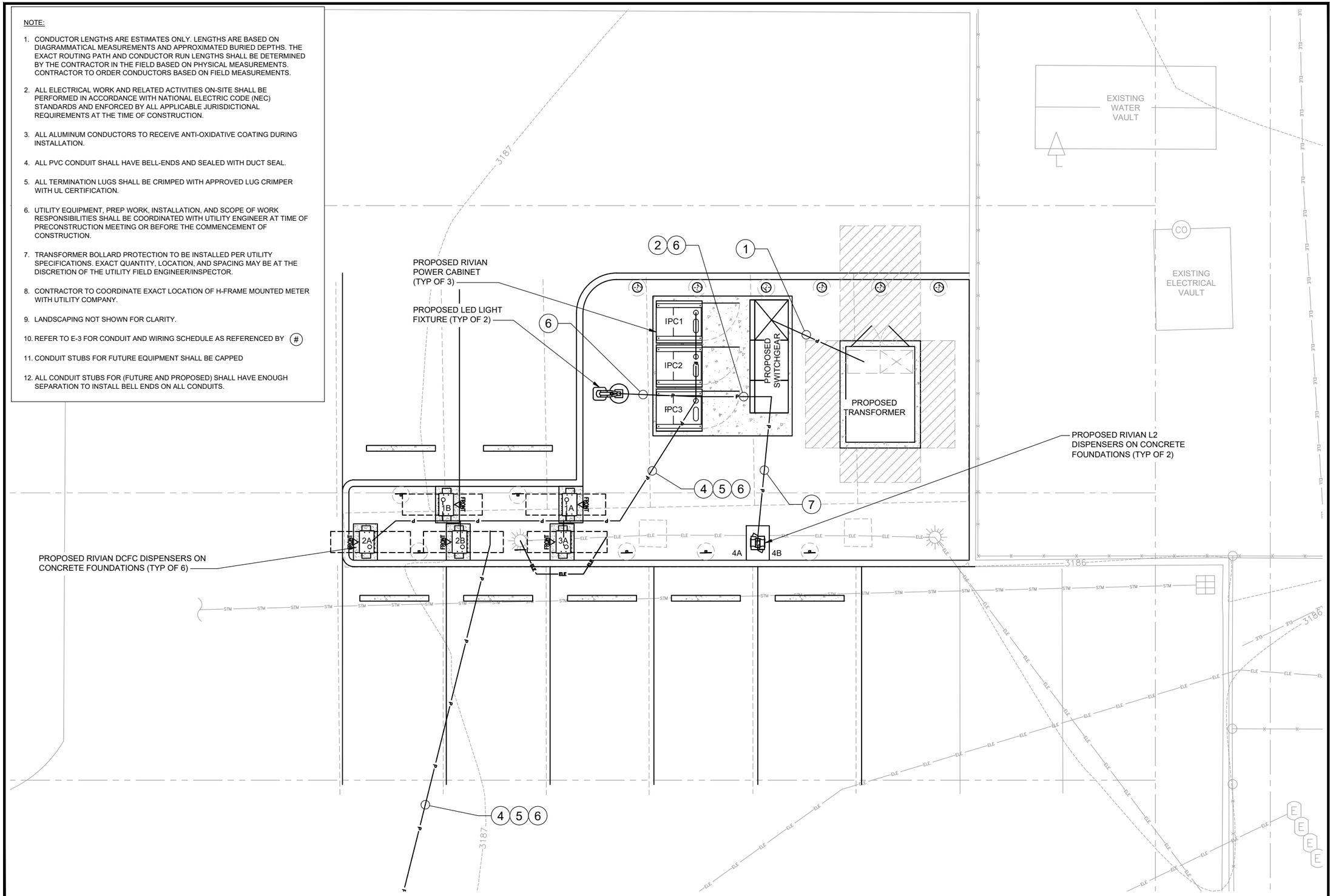
8. CONTRACTOR TO COORDINATE EXACT LOCATION OF H-FRAME MOUNTED METER WITH UTILITY COMPANY.
9. LANDSCAPING NOT SHOWN FOR CLARITY.
10. REFER TO E-3 FOR CONDUIT AND WIRING SCHEDULE AS REFERENCED BY (#)
11. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED
12. ALL CONDUIT STUBS FOR (FUTURE AND PROPOSED) SHALL HAVE ENOUGH SEPARATION TO INSTALL BELL ENDS ON ALL CONDUITS.



1 / E-2 ELECTRICAL PLAN

22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'

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6/23/23

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SHEET TITLE
ELECTRICAL PLAN

REV.	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-2

NOTE:

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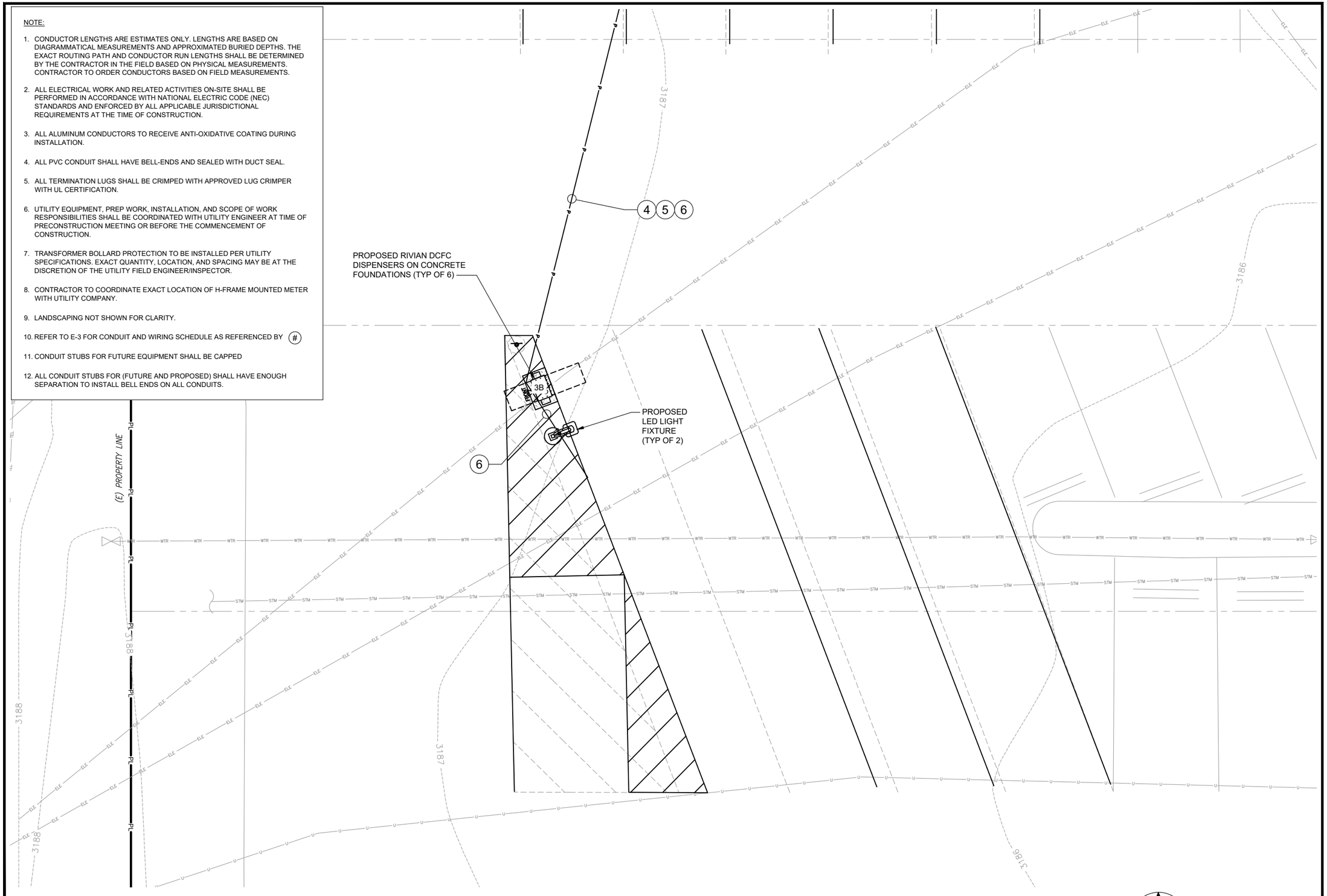

1 / E-2.1 ELECTRICAL PLAN

22" x 34" SCALE: 1/4" = 1'-0" 11" x 17" SCALE: 1/8" = 1'-0"

2' 0' 2' 4' 8'

N

RIVIAN

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6/23/23

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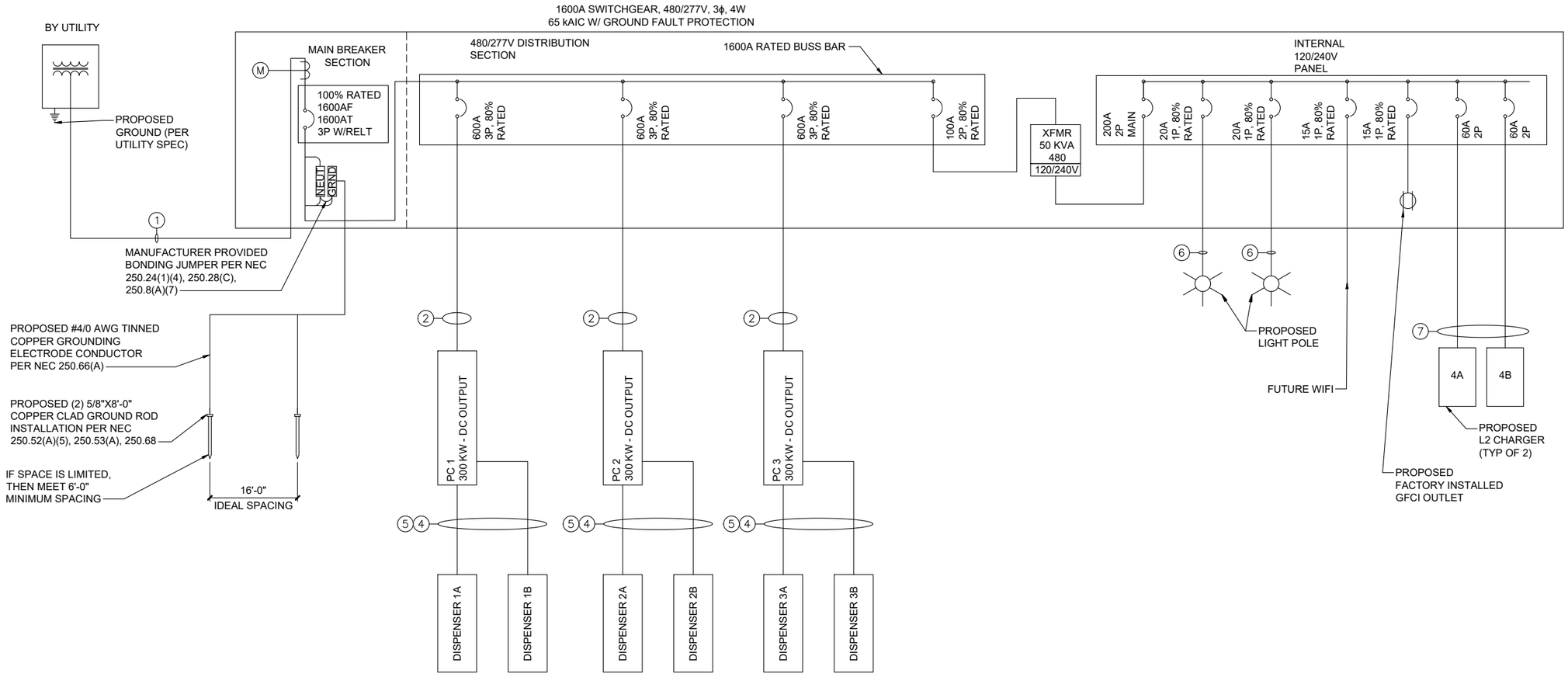
BEND, OR 97703

SHEET TITLE
ELECTRICAL PLAN

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-2.1



RIVIAN CABINET & POST ELECTRICAL SPECS

EQUIPMENT	AC INPUT VOLTAGE TO CABINET	KVA INPUT TO CABINET	AC INPUT CURRENT TO CABINET	DC OUTPUT VOLTAGE TO CHARGE POST	DC OUT CURRENT TO CHARGE POST	SHORT CIRCUIT CURRENT RATING
POWER CABINETS	480V	374 KVA	448A	200VDC – 1000VDC	500A	65 KAIC

BREAKER SETTING – BEND, OR

BREAKER USE	BREAKER SIZE	LONG DELAY	LONG DELAY TIME	SHORT DELAY	SHORT DELAY TIME	INSTANTANEOUS	GROUND SETTING	GROUND TIME
MCB	1600A	1	24	3	0.2	M1	1	0.5
CHARGER BRANCH CIRCUIT	600A	X	X	X	X	2	X	X

NOTES:
1. POWER UNITS AND DISPENSERS MANUFACTURED BY RIVIAN.
2. PROPOSED CTs/PTs SHALL BE LOCATED AS APPROVED BY THE UTILITY COMPANY.
3. MAIN BREAKER IS EQUIPPED WITH REDUCED ENERGY LET THROUGH (RELT) MAINTENANCE SWITCH WITH LOCAL STATUS INDICATION.

LOAD SUMMARY

kVA			QTY	TOTAL kVA
POWER UNIT	374	kVA	3	1122
	50 kVA TRANSFORMER			50
	TOTAL			1172
	AMPS (480V, 3–PH)			1411

CONDUIT & WIRING SCHEDULE

NO	FROM	TO	CONFIGURATION
①	PROPOSED TRANSFORMER	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED (4) 4" CONDUITS (BY CONTRACTOR) WIRE BY UTILITY
②	PROPOSED SWITCHBOARD 480/277V MAIN DISTRIBUTION SECTION	PROPOSED POWER UNIT	PROPOSED (6) 500 MCM AL XHHW–2 90° "C" (1) #1 CU GND (1) 4" PVC CONDUIT
③	NOT USED		
④	PROPOSED POWER UNIT	PROPOSED DISPENSER (DC POWER)	PROPOSED (2) PARALLEL SETS OF 500 MCM AL XHHW–2 90° "C" 1000V RATED (1) #1 CU GND (1) 4" PVC CONDUIT (1) 4/C #14 1000V RATED (1) 2/C #16 TSP 1000V RATED
⑤	PROPOSED POWER UNIT	PROPOSED DISPENSER (COMM)	PROPOSED (1) CAT 6 (1) 1/2" INNER DUCT (IN THE 4" PVC CONDUIT)
⑥	PROPOSED SWITCHBOARD 120/240V MAIN	PROPOSED LED LIGHT	PROPOSED (2) #10 AWG CU (1) #10 AWG CU GND (1) 3/4" CONDUIT
⑦	PROPOSED SWITCHBOARD 120/240V MAIN	PROPOSED L2 DISPENSERS	PROPOSED (2) #6 XHHW–2 CU 90°C 600V RATED (1) #8 XHHW–2 CU GND 90°C 600V RATED (1) 1" PVC CONDUIT

1 E-3 ONE-LINE DIAGRAM
SCALE: N.T.S.

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SHEET TITLE
ONE-LINE DIAGRAM

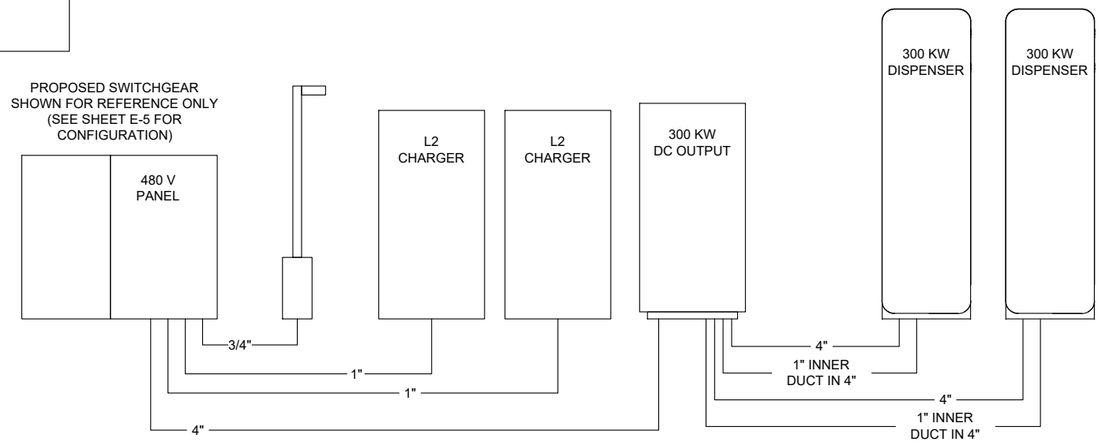
REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-3

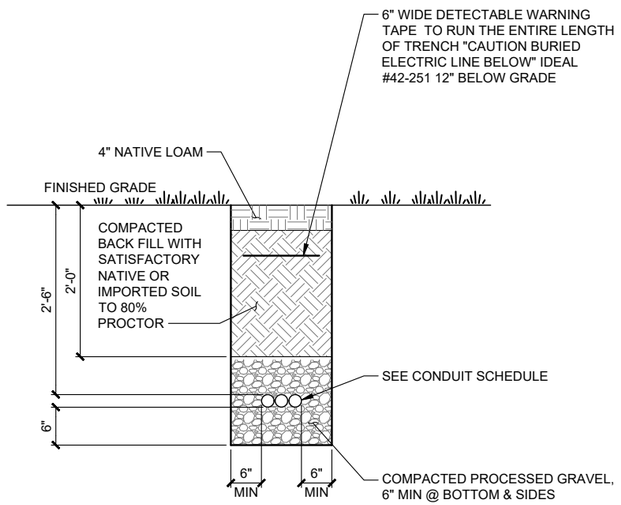
NOTES:

1. ELEVATION VIEW IS FOR REVIEW REFERENCE AND NOT TO BE USED FOR CONSTRUCTION. REFER TO LAYOUTS AND DETAIL SHEETS FOR CONSTRUCTION.
2. CONDUIT STUBS FOR FUTURE EQUIPMENT SHALL BE CAPPED.

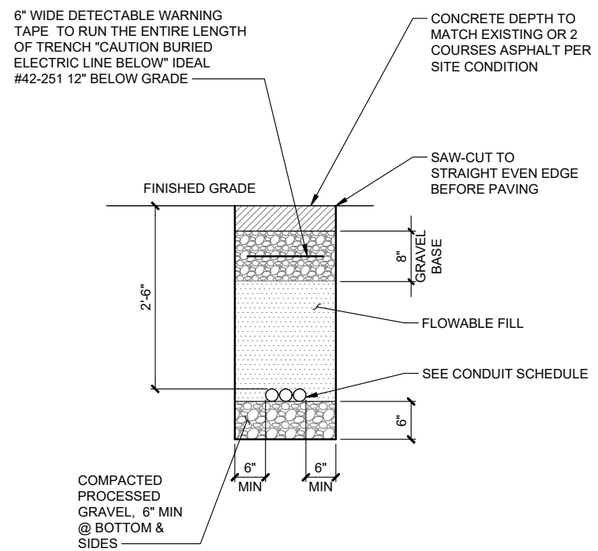


1 / E-4 ELECTRICAL CONDUIT ELEVATION (FOR REFERENCE ONLY)
SCALE: N.T.S.

2 / E-4 NOT USED
SCALE: N.T.S.



3 / E-4 NON-UTILITY CONDUIT TRENCHING SOIL DETAIL
SCALE: N.T.S.



4 / E-4 NON-UTILITY CONDUIT TRENCHING PAVEMENT DETAIL
SCALE: N.T.S.

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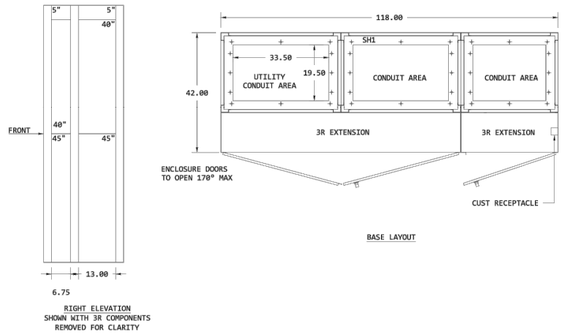
SHEET TITLE
ELECTRICAL DETAIL

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

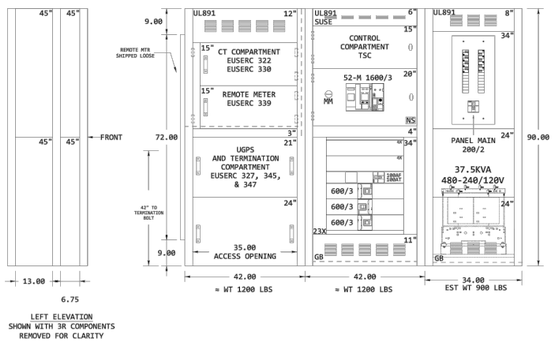
DRAWN BY: MAZ
CHECKED BY: RBH

E-4



RIGHT ELEVATION
SHOWN WITH 3R COMPONENTS
REMOVED FOR CLARITY

BASE LAYOUT



LEFT ELEVATION
SHOWN WITH 3R COMPONENTS
REMOVED FOR CLARITY

1600A SWITCHBOARD

PRIMARY DISTRIBUTION

SPECIFICATIONS	
CONSTRUCTION:	UL TYPE 3R OUTDOOR
FINISH PAINT:	CARDINAL T807-NH121 WHITE, 70% GLOSS
SERVICE VOLTAGE:	480Y/277VAC
PHASE:	3
WIRE:	4
CURRENT RATING:	1600 Amp
BUS MATERIAL:	PLATED ALUMINUM 750A PER SQ IN
BUS BRACED:	65 KAIC
DEV MIN, SC RATING:	65 KAIC
EQUIPMENT RATED:	EQUIPMENT SHALL BEAR THE UL 891 LABEL
COMPLIANCE:	SUITABLE FOR USE AS SERVICE EQUIPMENT
SEISMIC COMPLIANCE:	OSHPD #OSP-0308-10
BASE PARTS MADE OF:	10 GAUGE GALV. STEEL

UL FILE E337533

SECONDARY DISTRIBUTION

SECONDARY VOLTAGE:	240/120V
SECONDARY PHASE:	1
SECONDARY WIRE:	3
CURRENT RATING:	200 Amp
BUS MATERIAL:	PLATED ALUMINUM 750A PER SQ IN
BUS BRACED:	10KAIC
DEV MIN, SC RATING:	10KAIC
EQUIPMENT RATED:	EQUIPMENT SHALL BEAR THE UL 891 LABEL
INTERIOR RATED:	PANEL SHALL BEAR THE UL 67 LABEL
COMPLIANCE:	SUITABLE FOR USE AS SERVICE EQUIPMENT
SEISMIC COMPLIANCE:	OSHPD #OSP-0308-10
BASE PARTS MADE OF:	10 GAUGE GALV. STEEL

UL FILE E337533 UL FILE E475911

POWER COMPANY: PACIFIC POWER

	ELECTRIC SERVICE REQUIREMENTS	EUSERC
CONSTRUCTION	95,96	326, 354
UGPS	98	345, 327
UGPS TERMINATIONS	-	347
CT COMPARTMENT	102	322, 330
REMOTE METER	97	339
PAD LOCKABLE CIRCUIT BREAKER		
X-BUX TO FOLLOW EUSERC SECT. 300, METTERING & SERVICING EQUIPMENT, FIG. 1 ON SHEET 12 OF 19		

SHOP NOTE: WHITE PAINT INSIDE AND OUT

POWER & DISTRIBUTION
16450 PHOEBE AVENUE
LA MIRADA, CA 90638
PHONE: (714)-307-9198

CUSTOMER APPROVAL:

SITE NAME/LOCATION:
RIVIAN
TUMALO, OR
19860 7TH ST
BEND, OR 97703

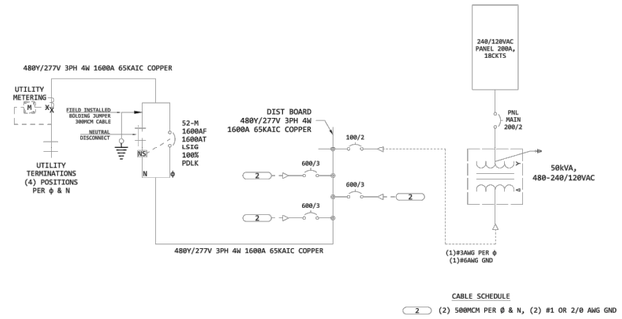
#	REVISION	DATE
0	ISSUED FOR APPROVAL	04/11/23
1	1600A SERVICE	05/23/23

DRAWING: 2204-3-16027

SHEET DESCRIPTION: FRONT ELEVATIONS/ SPECIFICATIONS

DRAWN BY:	SHEET:
CG	1
REV:	PAPER:
1	8.5"X 11"

PLOT DATE: 5/23/2023 9:43 AM BY: CHRISGARZA Y:\Z-Power_Projects\Rivian_ALL\19860 7th St Bend OR 16027

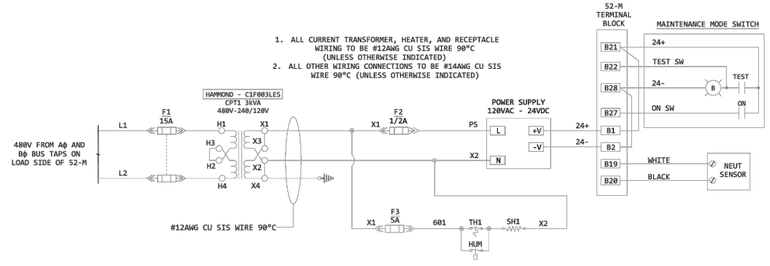


CABLE SCHEDULE

2 (2) 500MCM PER Ø & N, (2) #1 OR 2/0 AWG GND

SINGLE LINE DIAGRAM

1. ALL CURRENT TRANSFORMER, HEATER, AND RECEPTACLE WIRING TO BE #12AWG CU SIS WIRE 90°C (UNLESS OTHERWISE INDICATED)
2. ALL OTHER WIRING CONNECTIONS TO BE #14AWG CU SIS WIRE 90°C (UNLESS OTHERWISE INDICATED)



CONTROL WIRING

POWER & DISTRIBUTION
16450 PHOEBE AVENUE
LA MIRADA, CA 90638
PHONE: (714)-307-9198

CUSTOMER APPROVAL:

SITE NAME/LOCATION:
RIVIAN
TUMALO, OR
19860 7TH ST
BEND, OR 97703

#	REVISION	DATE
0	ISSUED FOR APPROVAL	04/11/23

DRAWING: 2204-3-16027

SHEET DESCRIPTION: SINGLE LINE/ CONTROL WIRING

DRAWN BY:	SHEET:
CG	2
REV:	PAPER:
1	8.5"X 11"

PLOT DATE: 5/23/2023 9:43 AM BY: CHRISGARZA Y:\Z-Power_Projects\Rivian_ALL\19860 7th St Bend OR 16027

RIVIAN

SAI
12 INDUSTRIAL WAY
SALEM, NEW HAMPSHIRE 03079

LDC | Surveying Engineering Planning
Kent Woodinville Olympia
20210 142nd Avenue NE
Woodinville, WA 98072
T 425.806.1869 www.LDCcorp.com F 425.482.2893

FOR REFERENCE ONLY

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
SWITCHGEAR

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-5

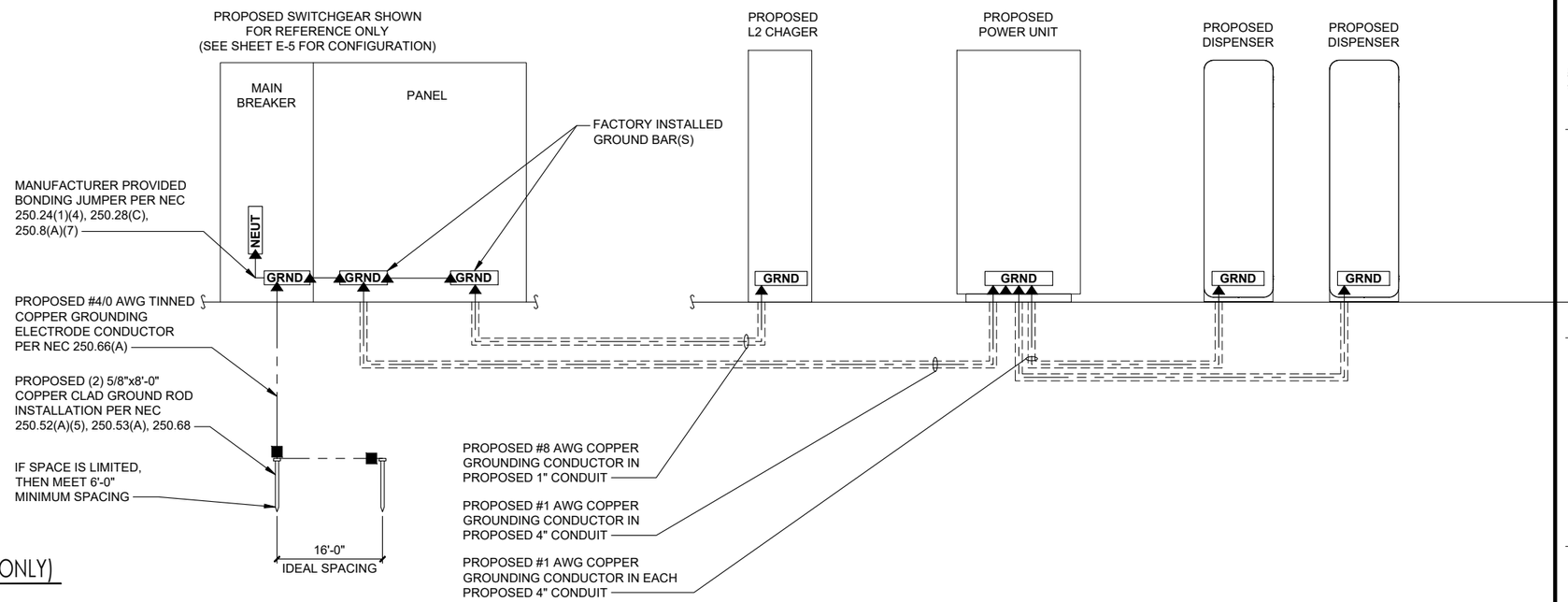
LEGEND

▲ MECHANICAL CONNECTION

■ CADWELD CONNECTION

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. 2014 NEC 250.121 EXCEPTION: A WIRE-TYPE EQUIPMENT GROUNDING CONDUCTOR INSTALLED IN COMPLIANCE WITH 250.6(A) AND THE APPLICABLE REQUIREMENTS FOR BOTH THE EQUIPMENT GROUNDING CONDUCTOR AND THE GROUNDING ELECTRODE CONDUCTOR IN PARTS II, II, AND VI OF THIS ARTICLE SHALL BE PERMITTED TO SERVE AS BOTH AN EQUIPMENT GROUNDING CONDUCTOR AND A GROUNDING ELECTRODE CONDUCTOR.
4. ALL TERMINATION LUGS SHALL BE CRIMPED WITH APPROVED LUG CRIMPER WITH UL CERTIFICATION.



1 E-6 GROUNDING SCHEMATIC (FOR REFERENCE ONLY)

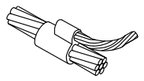
SCALE: N.T.S.

CADWELD CONNECTIONS
(OR APPROVED EQUAL)

CABLE TO REBAR
TEE CONNECTION HORIZONTAL CABLE TAP TO VERTICAL REBAR TYPE RJ

PARALLEL HORIZONTAL CONDUCTORS
PARALLEL THROUGH CONNECTION OF HORIZONTAL TYPE PT

VERTICAL STEEL SURFACE
CABLE DOWN AT 45° TO VERTICAL STEEL SURFACE INCLUDING PIPE TYPE VS



PARALLEL HORIZONTAL CONDUCTORS
PARALLEL DEAD END TAP OR HORIZONTAL THRU CONDUCTOR TYPE PC

THROUGH CABLE TO GROUND ROD
THROUGH CABLE TO TOP OF GROUND ROD TYPE GT

VERTICAL PIPE
CABLE DOWN AT 45° TO RANGE OF VERTICAL PIPES TYPE VS

HORIZONTAL STEEL SURFACE
TO FLAT STEEL SURFACE OR HORIZONTAL PIPE TYPE HS

HORIZONTAL SPLICE
SPLICE OF HORIZONTAL CABLES

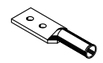
2 E-6 CADWELD CONNECTION DETAIL

SCALE: N.T.S.

BURNDY CONNECTIONS
(OR APPROVED EQUAL)

"C" CONNECTOR
HYPRESS TYPE YGHC

BOND JUMPER
FIELD FABRICATED GREEN STRANDED INSULATED TYPE 2-YA-2



COPPER LUGS
TWO HOLE - LONG BARREL LENGTH TYPE YA-2

3 E-6 MECHANICAL CONNECTION DETAIL

SCALE: N.T.S.

4 E-6 NOT USED

SCALE: N.T.S.

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REGISTERED PROFESSIONAL ENGINEER
91256PE
OREGON
MAY 10, 2016
MICHAEL S CASE
EXPIRES 12/31/2023
6/23/23

JOB NAME

TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE

GROUNDING DETAILS

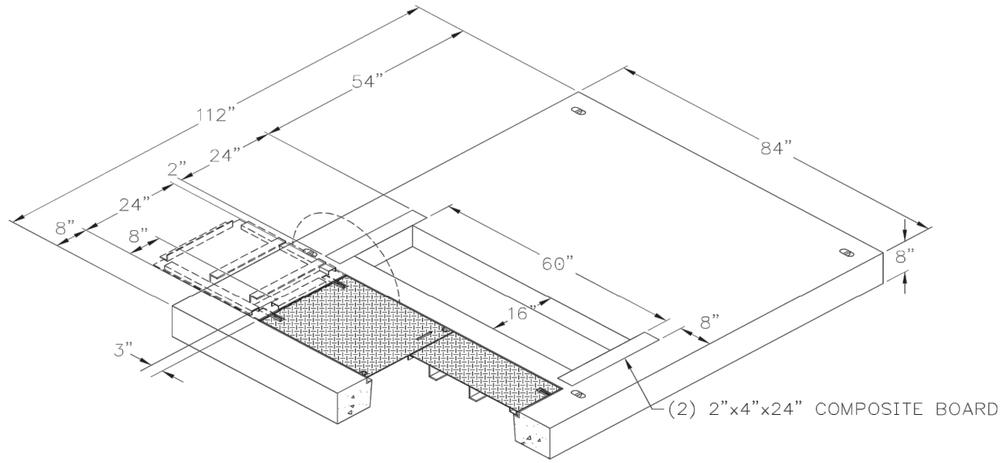
REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ

CHECKED BY: RBH

E-6

GV 151 Padvault, Three-Phase Transformer



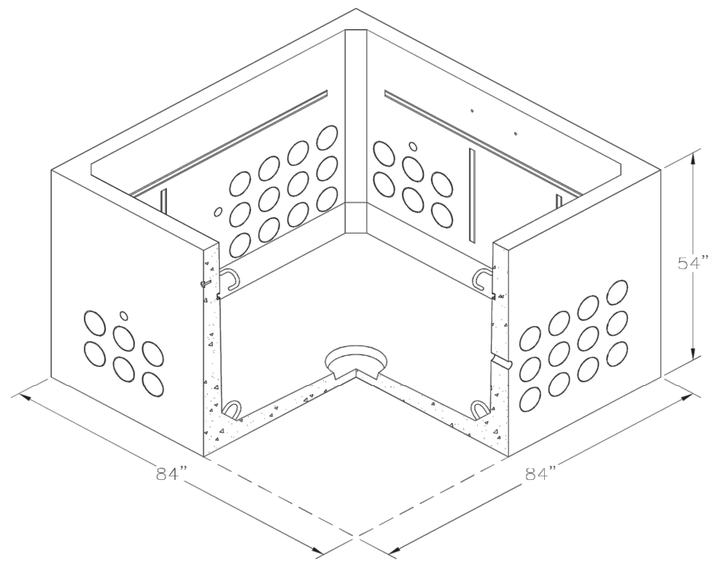


Figure 2—112" × 84" Radial-Feed Transformer Padvault, 1000-2500 kVA (SI# 7992958)

ROCKY MOUNTAIN POWER PACIFIC POWER

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FOR REFERENCE ONLY

JOB NAME
TUMALO, OR
19860 7TH ST,
BEND, OR 97703

SHEET TITLE
UTILITY DETAIL

REV	DATE	DESCRIPTION	BY
1	6-23-23	S&S	MAZ

DRAWN BY: MAZ
CHECKED BY: RBH

E-7