

FARR WEST CITY PLANNING COMMISSION AGENDA

November 9, 2023 at 6:30 p.m.
City Council Chambers
1896 North 1800 West
Farr West, UT 84404

Notice is hereby given that the Planning Commission of Farr West City will hold a 6:00 pm work session and their regular meeting at 7:00 pm on Thursday, November 9, 2023

6:00 pm Work Session – Finalize amendments to the M-1 zone

1. Call to Order – Chairwoman Genneva Blanchard
2. Opening Ceremony
 - a. Pledge of Allegiance
 - b. Prayer
3. Comments/Reports
 - a. Public Comments (2 minutes)
 - b. Report from City Council
4. Business Items
 - a. Public hearing to consider the request of a conditional use permit for a 2,552 square foot accessory building for Steven Sexton, located at 2841 West 3375 North
 - b. Recommend to the City Council approval or denial of the conditional use permit for a 2,552 square foot accessory building for Steven Sexton, located at 2841 West 3375 North
 - c. Recommend to the City Council approval or denial of the site plan for Tesla, Inc. for a charging station located at 1750 West 2700 North
 - d. Set a public hearing for December 14, 2023 to consider approval of the amendments to the M-1 zone
5. Consent Items
 - a. Approval of minutes dated October 26, 2023
6. Chairman/Commission Follow-up
 - a. Report on Assignments
7. Adjournment

In compliance with the American with Disabilities Act, individuals needing special accommodations (including auxiliary communicative aids and services) during this meeting should notify the City Recorder at 801-731-4187, at least three working days prior to the meeting. Notice of time, place and agenda of the meeting was mailed to each member of the Planning Commission, posted in the City Hall, and posted on the Utah Public Meeting Notice Website on November 3, 2023.

Lindsay Afuvai
Recorder



Farr West City

APPLICATION FOR ISSUANCE OF CONDITIONAL USE PERMIT

The Municipal Code 17.48.020 requires that the following be considered to obtain a Conditional Use Permit.

Application Date 10-13-23 Applicant Name Steven Sexton

Mailing Address

Phone Number 8

Property address of proposed conditional use 2851 w 3375 n Current Zoning: R15

Please list the requested conditional use as listed within the city zoning ordinance 17.48.020

A) Explain how the proposed use of the particular location is necessary or desirable to provide a service or facility which will contribute to the general well-being of the community.

Residential

For private use

B) Explain how such use will not be detrimental to the health, safety and general welfare of persons nor injurious to property or improvements in the community, but will be compatible with and complementary to the existing surrounding uses.

Residential shop to store RV trailer

C) Explain how the proposed use will comply with the regulations and conditions specified in this title for such use.

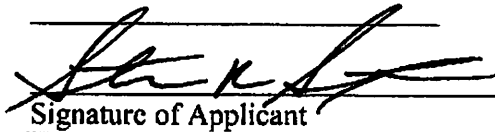
Will be built in accordance to Farr West city and building codes

D) Explain how the proposed use conforms to the goals, policies and governing principles and land use of the Farr West City General Plan.

Residential shop for private use.

E) Explain how the proposed use will not lead to the deterioration of the environment, or ecology of the immediate vicinity, the general area, or the community as a whole.

Will be built in accordance to Farr West city and Building codes


Signature of Applicant

Property Owner? ☒ Y ☐ N

Date Application & \$100.00 Processing Fee received 10/16/23

Received by Mckinzie Tams

Date of public hearing: _____

Date application was _____ Approved _____ Denied by Planning Commission _____

Conditions/Reasons

Date application was _____ Approved _____ Denied by City Council: _____

Conditions/Reasons

Planning Commission Chair

Mayor



PROFESSIONAL CONSTRUCTION SERVICES

Project: Steve Sexton

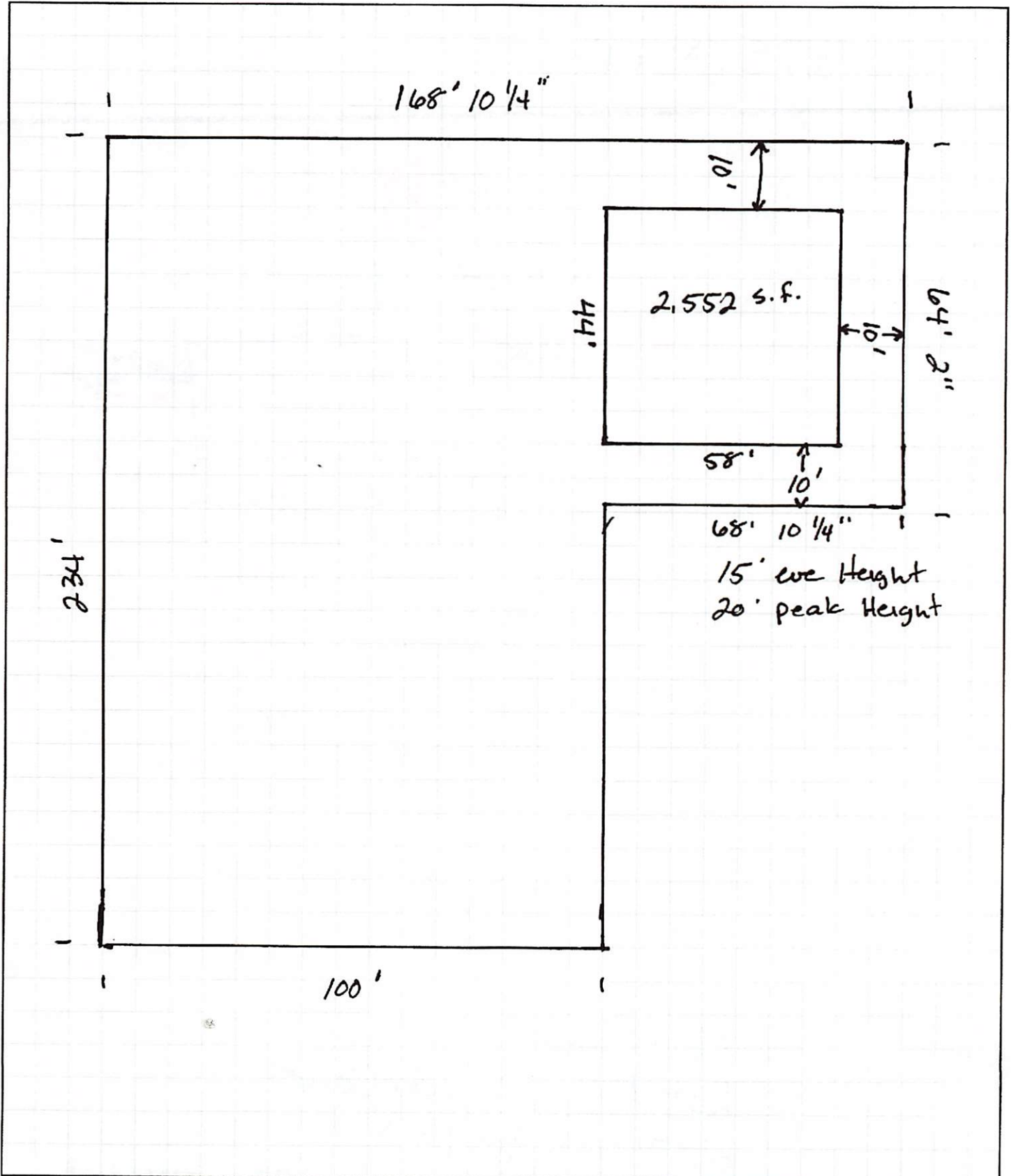
Date: 10-10-23

Job: Accessory Building

Page: of

RE: (Shop)

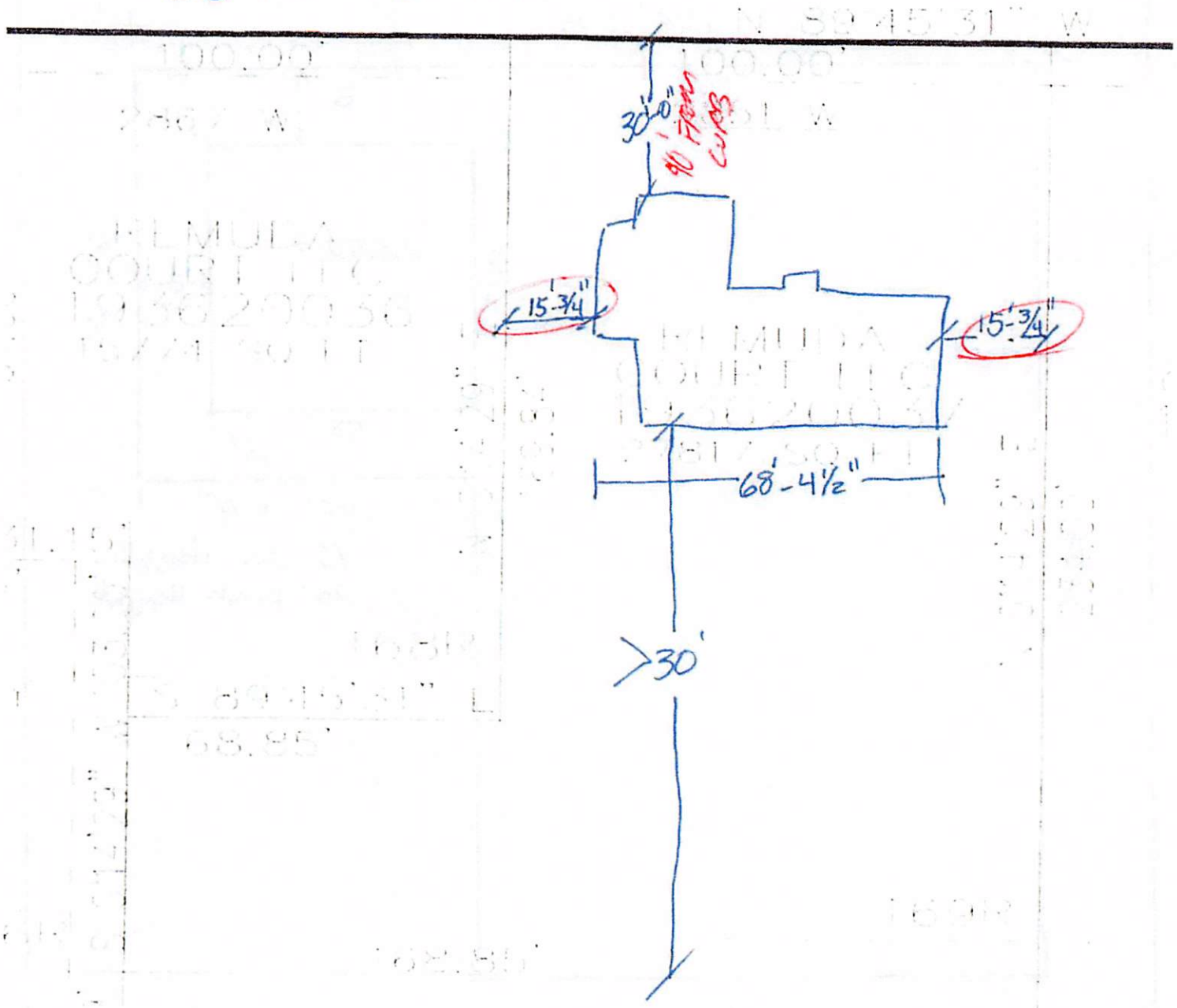
By:



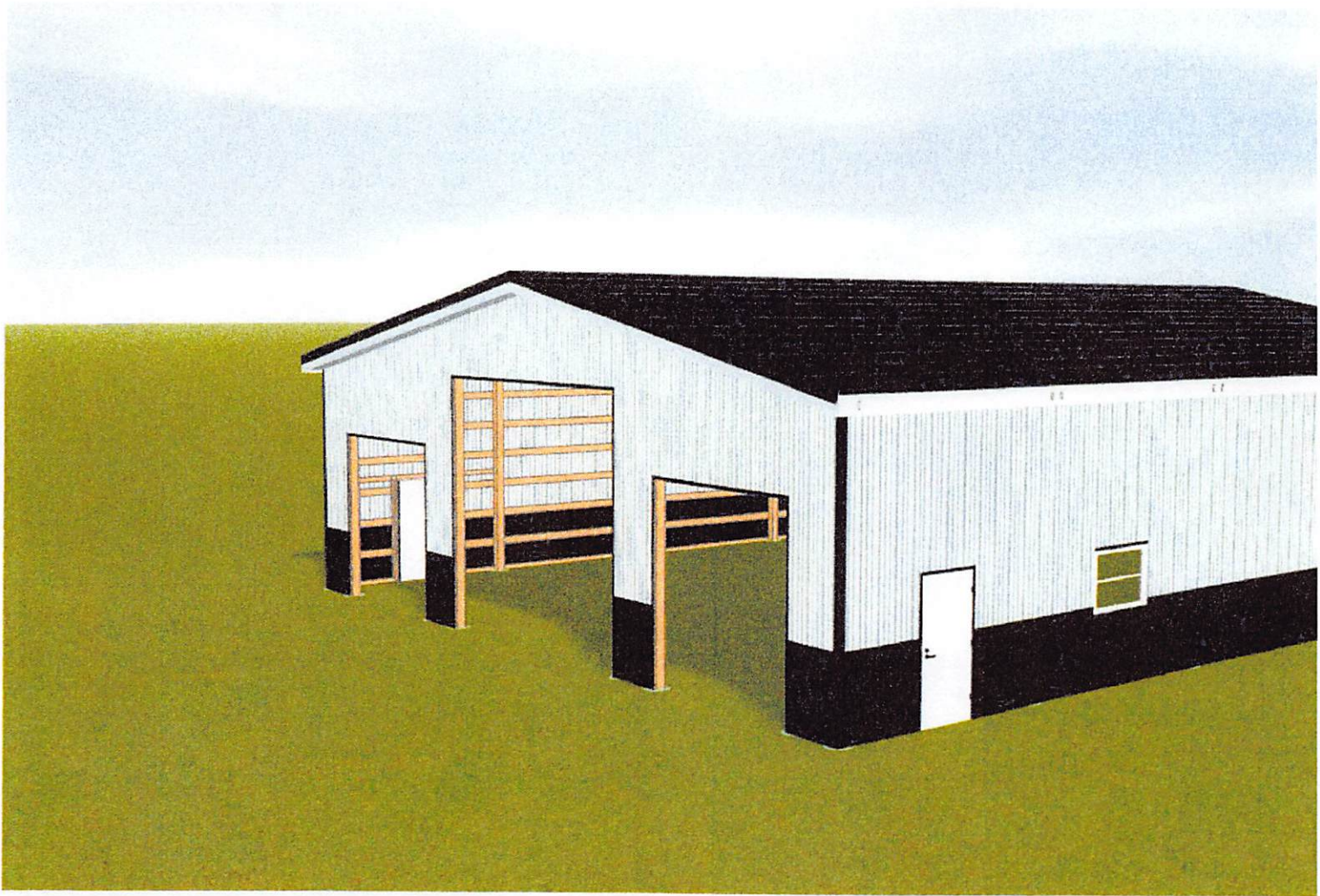
✓
9/27/18



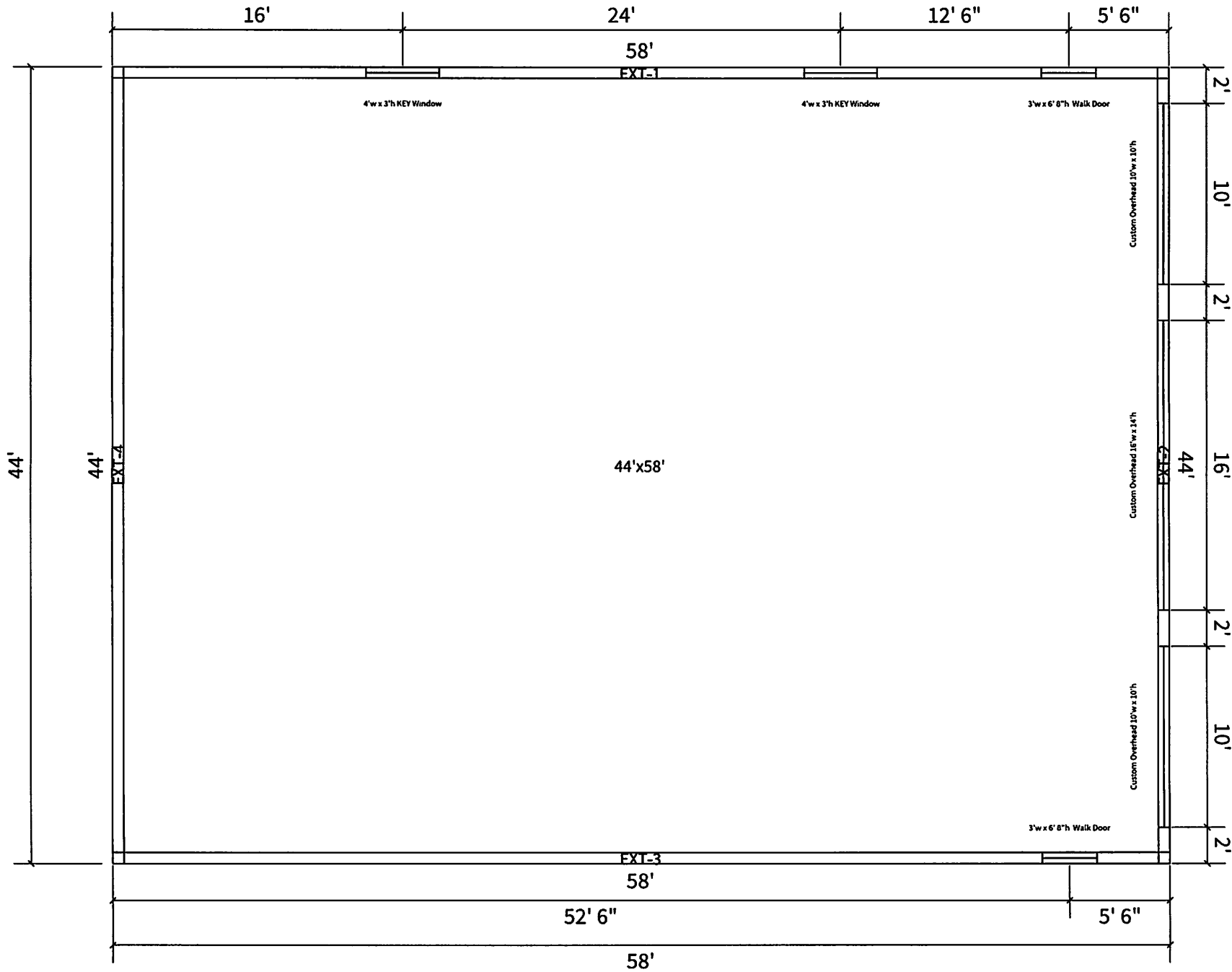
3375 North



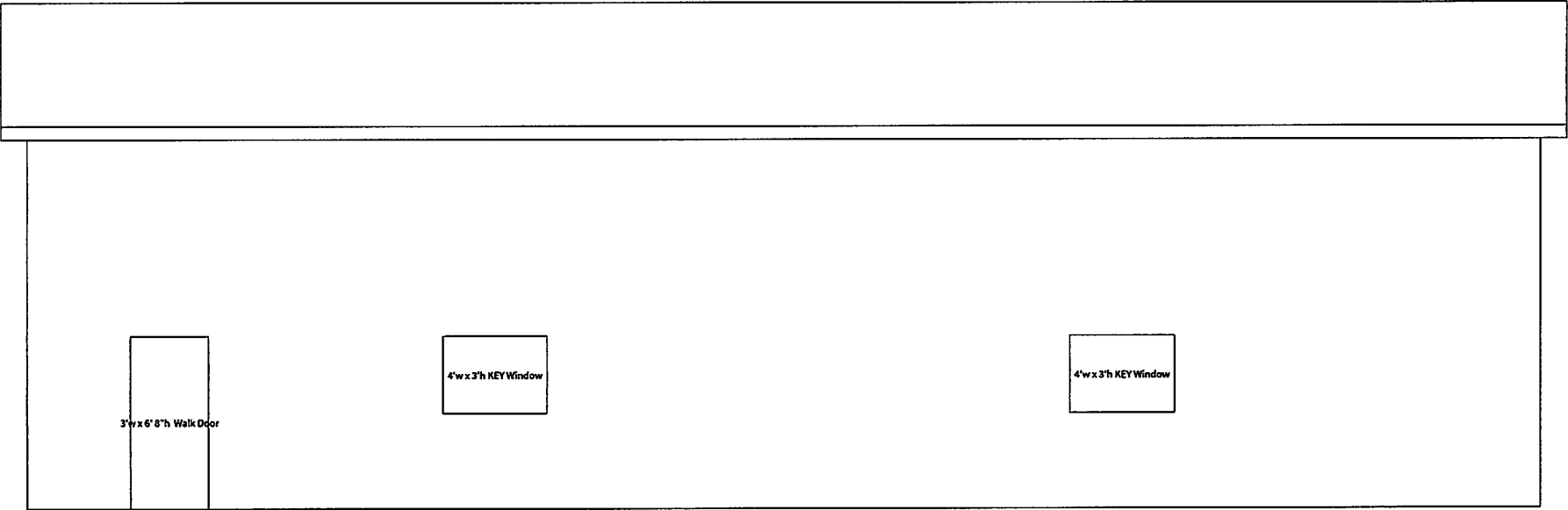
* Plot Plan
Lot 169 Remuda Court
2851 W 3375 N
Farr West City, UT 84404



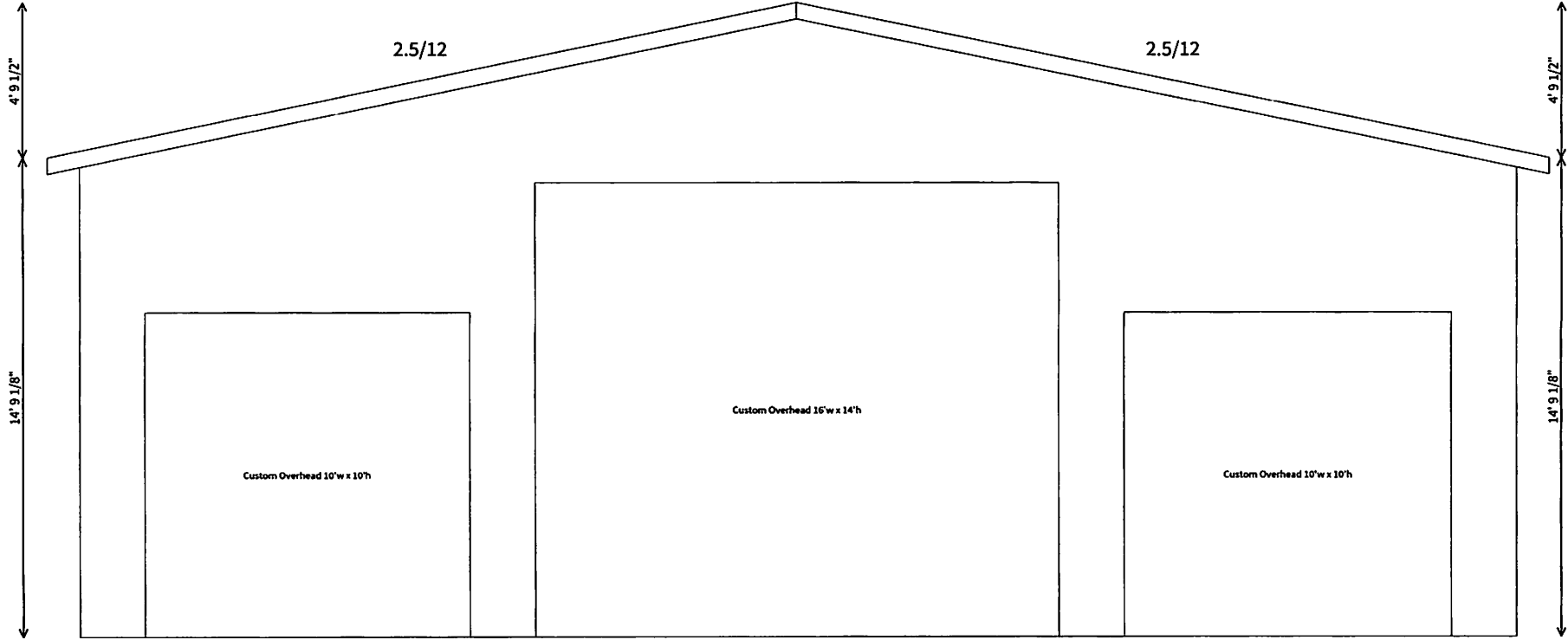
Wall Layout



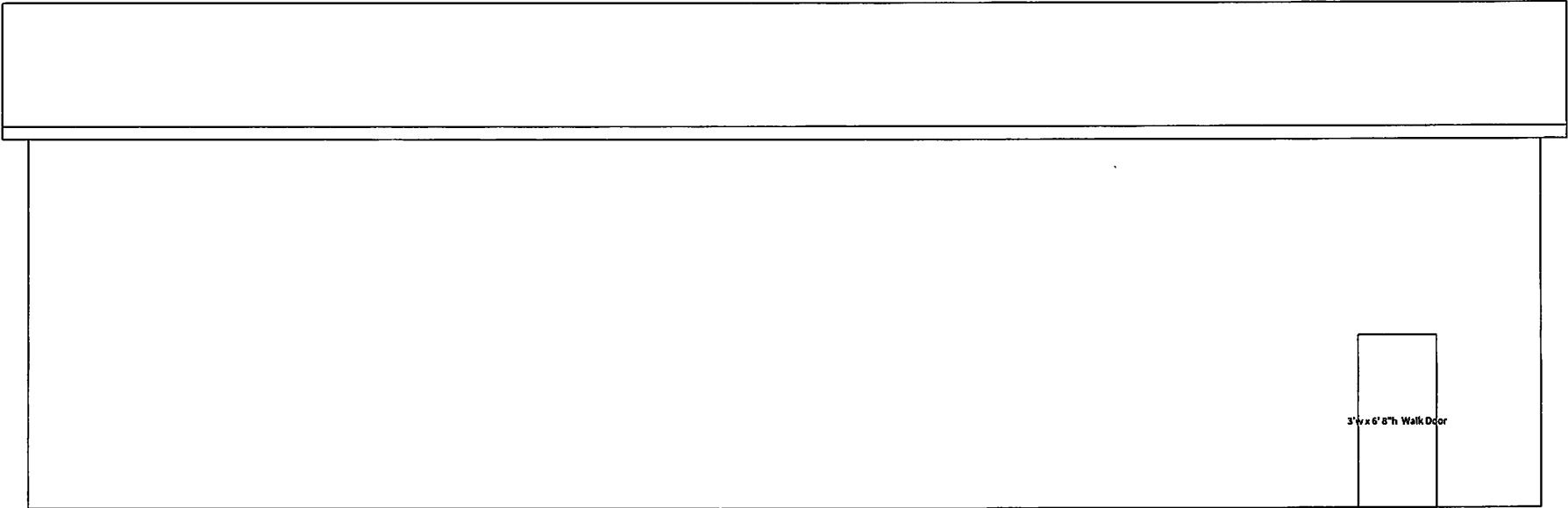
Left Elevation



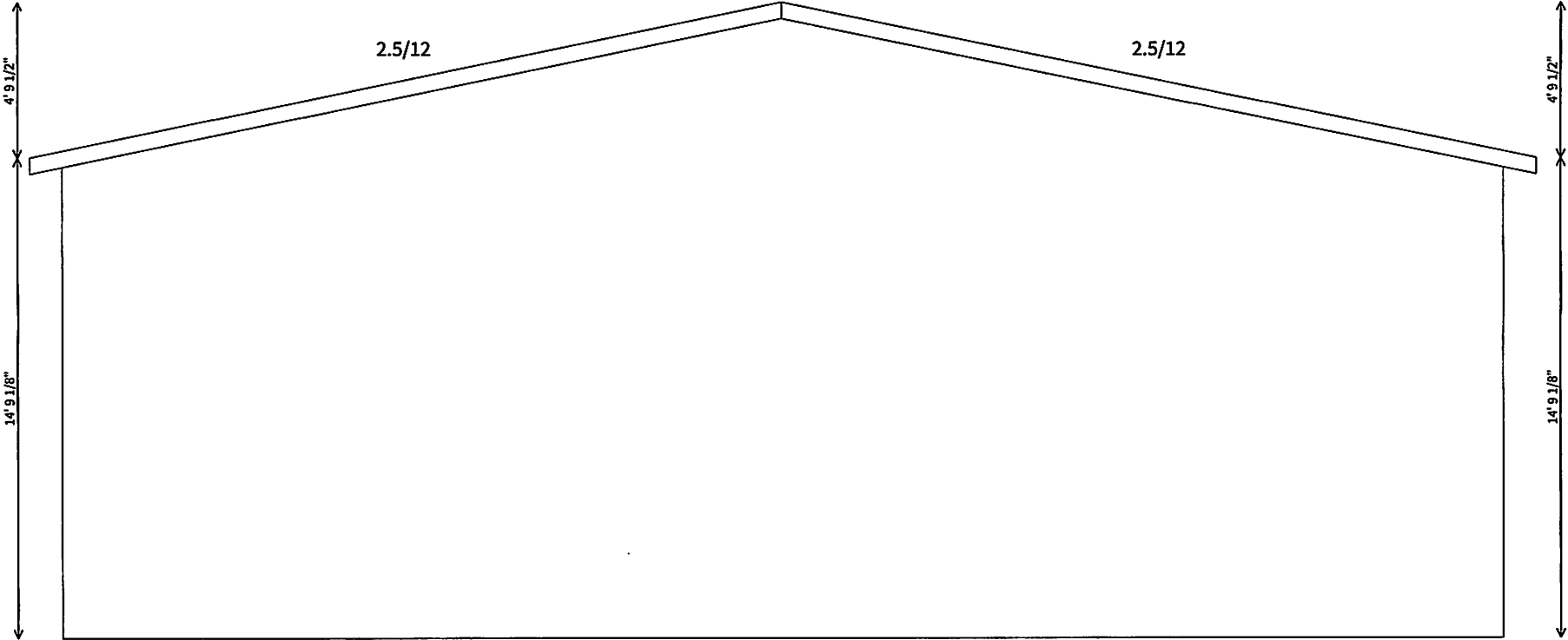
Front Elevation



Right Elevation



Back Elevation



Application for Site Plan Approval



1896 North 1800 West
Farr West, UT 84404
Phone – (801)731-4187
Fax – (801) 731-7732

Date Submitted: _____

Applicant Name: _____

Phone: _____

Business Name: Richard L Miller Properties LLC Application Number: _____

Business Address: 2455 W Main St. Tremonton, UT 84337 Phone: _____

Address and description of site being considered: 1750 West 2700 North, Farr West, UT 84404

Tax ID number of site being considered: 19-146-0005

Current zoning of site: C-2-Commercial

FEE SCHEDULE

Application: \$100.00 Engineering Deposit: \$1,000.00

Site Plan approval is required for the following conditions. Please indicate all conditions associated with this application:

- ☐ All proposed new development except single-family detached residences.
- ☐ All additions of alterations to nonconforming structures (see chapter 17.52 of the Farr West City municipal code for reference to nonconforming buildings).
- ☐ Issuance of a conditional use permit for new construction.
- ☐ New signs
- ☒ Modified site plan review shall be required for any change of use in a existing structure or site or addition, except single-family detached residences.
- ☐ All plans for earth sheltered dwellings.

The following information is required for site plan approval (check box next to all items submitted with application):

(Note: Not providing the required information will result in a delay of approval by the planning commission)

- ☐ A site plan (or set of plans as needed) showing all the required information listed below drawn accurately to an engineering scale. The plan needs to be submitted on 11x17, or larger paper, **and** in an electronic PDF format.
- ☐ Lot dimensions and orientations: North arrow, etc.
- ☐ Existing and proposed buildings with their dimensions and the locations of all opening in exterior walls.
- ☐ Height of all buildings and other proposed or existing structures; type and slope of roof construction.
- ☐ Indication of proposed use of buildings.
- ☐ All off street parking, locations and size of points of entry and exists, loading facilities, internal traffic circulation patterns, location of handicapped parking and handicapped access to building(s).
- ☐ Height of all existing and proposed walls and fences and type of construction.
- ☐ Location and type of landscaping.
- ☐ All existing easements (dedicated and prescriptive), irrigation ditches, alleys and street rights of ways. Locations and height of any overhead power and communication and transmission lines, and all utility easements which may affect the property.
- ☐ All existing and proposed improvements. Improvements include: curb and gutter, sidewalks, sanitary and storm sewer lines, fire hydrants and driveway approaches. Grades must be shown for curb and gutter, sidewalks, sanitary and storm sewer lines.
- ☐ Location, type, lighting and size of proposed and existing signs.
- ☐ Location, type and size of proposed and existing light poles.
- ☐ A method for controlling storm drainage so that storm runoff will not enter adjoining property must be shown.
- ☐ One copy of a current county ownership plat showing the property and adjacent properties.
- ☐ Approval letter from Weber Fire District (801-782-3580).
- ☐ Approval letter from Bona Vista Water (801-621-0474).

If any of the above information is not being provided please indicate reasoning:

Approval letter from Bona Vista Water is not needed due to no proposed water connections.

Answer the following questions as applicable: (Attach additional paper if needed.)

1. State in detail what is intended to be done on or with the property? _____

Tesla is proposing to expand the existing parking area to provide EV charging as an accessory use to the existing multi-use fueling station and quick service restaurant.

2. How will the proposed use be compatible with existing surrounding uses, buildings, and structures, when considering traffic generation, parking, building design, location and landscaping?

The use of the parcel is not proposed to change. Tesla should be considered compatible as a fueling station for electric vehicles similar to the existing petroleum fueling station.

Signature of Applicant:

Applicant acknowledges they are responsible for all engineering fees associated with this application.

In issuing this application the signer(s) certifies the information provided is correct and they agree to the conditions set by the members of the planning commission and city council. **All** property owners must sign below in the presence of the city recorder/clerk or have their signatures notarized in order to be valid.


Owner Signature


Print Name

Owner Signature

Print Name

I/We authorize _____ to act as my/our agent in all matters relating to this application.
(Print name)

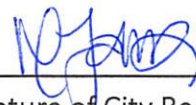
Owner Signature

Print Name

Owner Signature

Print Name

Authorized Agent Signature


Signature of City Recorder/Clerk
(Not Required if Notarized)

State of Utah)

§

Count of _____)

On this _____ day of _____, in the year _____, before me _____,
a notary public, personally appeared _____, proved
on the basis of satisfactory evidence to be the person(s) whose name(s) (is/are) subscribed to this instrument,
and acknowledge (he/she/they) executed the same. Witness my hand and official seal.

NOTARY PUBLIC

E
A
L

State of Utah)

§

County of _____)

On this _____ day of _____, in the year _____, before me _____, a notary public, personally appeared _____, proved on the basis of satisfactory evidence to be the person(s) whose name(s) (is/are) subscribed to this instrument, and acknowledge (he/she/they) executed the same. Witness my hand and official seal.

NOTARY PUBLIC

S
E
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For City Use:

Fee received by: A. Zweifel Date received: 9.6.2023
Receipt number: 2.013471 Cash/Check (circle one) (cc)
Date site plan received: 9.5.2023 (Building permit) Received by: Nate
Date met with city engineer: _____ Signed: _____
Date engineer approved plan: _____ Signed: _____
Date planning commission approved: _____
Date city council approved (conditional use permit only): _____

MEMORANDUM



CONSULTING ENGINEERS

TO: Farr West City Planning Commission and City Council

FROM: Matt Robertson, P.E.
City Engineer

RE: **TESLA CHARGING STATION SITE PLAN**
Site Plan Review

Date: November 3, 2023

Our office has completed a review of the site plan for the Tesla Charging Station located at 1750 West 2700 North (behind the Subway and Wendy's buildings). The project includes about 14,000 SF of asphalt and 3,100 SF of landscaping between the new parking lot and the Subway parking lot. We recommend approval of the site plan with the following comments:

1. We recommend connecting an overflow pipe from the underground stormwater detention system to the existing storm drain on the site.
2. A Long-Term Stormwater Management Agreement will need to be signed and recorded on the property to ensure that the private, on-site stormwater system is maintained and to give the City permission to inspect the system.
3. A pre-construction conference with the Developer and their Contractor should be held with the City and utility providers prior to beginning any construction.

Please let me know if you have any further questions.



FARR WEST, UT

TRT ID: 27285
SITE ADDRESS:
1750 W 2700 N
FARR WEST, UT 84404



3500 DEER CREEK ROAD
PALO ALTO CA 94304
(650) 681-5000



Dewberry Engineers Inc.
990 SOUTH BROADWAY
SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

SITE INFORMATION	APPLICABLE CODES	PROJECT DESCRIPTION	STRUCTURAL DESIGN CRITERIA	DRAWING INDEX																																																		
PROPOSED TESLA EV SITE ADDRESS: 1750 W 2700 N FARR WEST, UT 84404 PROPERTY OWNER: RICHARD L MILLER PROPERTIES LLC 2455 W MAIN ST TREMONTON, UT 84337 PARCEL ID: PARCEL ID: 19-146-0005 POWER COMPANY: ROCKY MOUNTAIN POWER BRIAN HERRSCHER (385) 249-4790 brian.herrscher@pacifiCorp.com WORK ORDER: TBD COUNTY: WEBER COUNTY LATITUDE*: 41° 18' 26.92" N LONGITUDE*: 112° 01' 18.85" W *BASED ON GOOGLE EARTH CONTACT ENGINEER: STEPHEN STOUT DEWBERRY ENGINEERS INC. 973.434.1354 sstout@Dewberry.com	ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES: UTAH BUILDING & ENERGY CODES, CONSISTENT WITH THE FOLLOWING CODES: BUILDING CODE 2018 OF UTAH. COMMERCIAL ENERGY CONSERVATION CODE 2018 OF UTAH. NATIONAL ELECTRICAL CODE 2020 OF UTAH. CITY CODE OF FARR WEST, UT ORD. 2023-02, PASSED 02-02-2023 AND RES. 2023-01, PASSED 01-19-2023. IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.	- INSTALL PAD MOUNTED UTILITY TRANSFORMER - PAVE ±14,050 SF PARKING AREA - INSTALL (1) TESLA STANDALONE SUPERCHARGER CABINET - INSTALL (4) TESLA STANDALONE CHARGE POSTS - INSTALL (2) TESLA PRE-ASSEMBLED SUPERCHARGER UNITS - INSTALL (1) 2500A, 277/480V SWITCHBOARD - INSTALL (4) WASTE MANAGEMENT BINS - INSTALL (3) 20' LIGHT POST W/ DUAL-HEADED LIGHT FIXTURE - PROVISIONS FOR (2) FUTURE TESLA PRE-ASSEMBLED SUPERCHARGER UNITS	WIND DESIGN DATA: - ULTIMATE WIND SPEED = 115 MPH - OCCUPANCY CATEGORY: II - WIND IMPORTANCE FACTOR: I = 1.0 - WIND EXPOSURE CATEGORY: C SEISMIC DESIGN DATA: - OCCUPANCY CATEGORY: II - SEISMIC IMPORTANCE FACTOR: I = 1.0 - SITE CLASS: D (ASSUMED) - MAPPED SPECTRAL RESPONSE COEFFICIENTS: $S_s = 1.235$ $S_1 = 0.447$ - DESIGN SPECTRAL RESPONSE COEFFICIENTS: $S_{DS} = 0.828$ $S_{D1} = 0.462$ - SEISMIC DESIGN CATEGORY: D ASSUMED SOIL PROPERTIES: - ALLOWABLE BEARING PRESSURE: 2,000 PSF - ALLOWABLE LATERAL BEARING PRESSURE: 150 PSF/FT	<table><thead><tr><th>SHT. NO.</th><th>SHEET TITLE</th></tr></thead><tbody><tr><td>T-1</td><td>TITLE SHEET</td></tr><tr><td>GN-1</td><td>GENERAL NOTES I</td></tr><tr><td>GN-2</td><td>GENERAL NOTES II</td></tr><tr><td>C-1</td><td>DETAILED SITE PLAN</td></tr><tr><td>C-2</td><td>EXISTING CONDITIONS PLAN</td></tr><tr><td>C-3</td><td>EQUIPMENT/PARKING PLAN</td></tr><tr><td>C-3A</td><td>LANDSCAPE & IRRIGATION PLAN</td></tr><tr><td>C-4</td><td>GRADING PLAN</td></tr><tr><td>C-5</td><td>AUTOTURN CLEARANCE DIAGRAM</td></tr><tr><td>C-6</td><td>CONSTRUCTION DETAILS I</td></tr><tr><td>C-7</td><td>CONSTRUCTION DETAILS II</td></tr><tr><td>C-8</td><td>CONSTRUCTION DETAILS III</td></tr><tr><td>C-9</td><td>CONSTRUCTION DETAILS IV</td></tr><tr><td>C-10</td><td>CONSTRUCTION DETAILS V</td></tr><tr><td>C-11</td><td>EXISTING DRAINAGE PLAN</td></tr><tr><td>C-11.1</td><td>EXISTING DRAINAGE CALCULATIONS</td></tr><tr><td>C-12</td><td>PROPOSED DRAINAGE PLAN</td></tr><tr><td>C-12.1</td><td>PROPOSED DRAINAGE CALCULATIONS</td></tr><tr><td>C-12.2</td><td>STORMWATER MANAGEMENT DETAILS</td></tr><tr><td>E-1</td><td>ELECTRICAL ONE-LINE DIAGRAM</td></tr><tr><td>E-2</td><td>ELECTRICAL DETAILS</td></tr><tr><td>E-3</td><td>UTILITY DETAILS</td></tr><tr><td>E-4</td><td>ARC FLASH LABELS & BREAKER SETTINGS</td></tr><tr><td>G-1</td><td>GROUNDING SCHEMATIC & DETAILS</td></tr></tbody></table>	SHT. NO.	SHEET TITLE	T-1	TITLE SHEET	GN-1	GENERAL NOTES I	GN-2	GENERAL NOTES II	C-1	DETAILED SITE PLAN	C-2	EXISTING CONDITIONS PLAN	C-3	EQUIPMENT/PARKING PLAN	C-3A	LANDSCAPE & IRRIGATION PLAN	C-4	GRADING PLAN	C-5	AUTOTURN CLEARANCE DIAGRAM	C-6	CONSTRUCTION DETAILS I	C-7	CONSTRUCTION DETAILS II	C-8	CONSTRUCTION DETAILS III	C-9	CONSTRUCTION DETAILS IV	C-10	CONSTRUCTION DETAILS V	C-11	EXISTING DRAINAGE PLAN	C-11.1	EXISTING DRAINAGE CALCULATIONS	C-12	PROPOSED DRAINAGE PLAN	C-12.1	PROPOSED DRAINAGE CALCULATIONS	C-12.2	STORMWATER MANAGEMENT DETAILS	E-1	ELECTRICAL ONE-LINE DIAGRAM	E-2	ELECTRICAL DETAILS	E-3	UTILITY DETAILS	E-4	ARC FLASH LABELS & BREAKER SETTINGS	G-1	GROUNDING SCHEMATIC & DETAILS
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ZONING INFORMATION PERMITTING JURISDICTION: CITY OF FARR WEST APN: 19-146-0005	CONTRACTOR NOTE CONTRACTOR SHALL COMPLETE INSTALL PER THE SIGNED AND SEALED SET OF DRAWINGS. ANY NECESSARY DEVIATIONS FROM THE DRAWINGS MUST BE SUBMITTED THROUGH AN RFI REQUEST PROCESS WITH ENGINEERING FOR AN APPROVAL PRIOR TO CONTRACTOR PROCEEDING WITH A DEVIATION OF THE SIGNED AND SEALED SET OF DRAWINGS.	AERIAL MAP	LOCATION MAP	BEFORE SCALING CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE TESLA REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.																																																		
CALL BEFORE YOU DIG  BLUE STAKES OF UTAH 811 OR (801) 208-2100				SUBMITTALS <table><thead><tr><th>REV.</th><th>DATE</th><th>DESCRIPTION</th></tr></thead><tbody><tr><td>1</td><td>10/20/23</td><td>CITY COMMENTS</td></tr><tr><td>0</td><td>09/01/23</td><td>ISSUE FOR S&S</td></tr><tr><td>A</td><td>04/13/23</td><td>FOR REVIEW</td></tr></tbody></table>	REV.	DATE	DESCRIPTION	1	10/20/23	CITY COMMENTS	0	09/01/23	ISSUE FOR S&S	A	04/13/23	FOR REVIEW																																						
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GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
GENERAL CONTRACTOR(S) OR SUB-CONTRACTOR(S) – CIVIL CONTRACTOR AND/OR ELECTRICIAN CONTRACTOR
PROJECT OWNER/CONSTRUCTION MANAGER – TESLA
PROJECT HOST – LEGAL PROPERTY OWNER
ENGINEER – DEWBERRY ENGINEERS INC.
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING THE GENERAL CONTRACTOR SHALL VISIT THE SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF PROJECT OWNER PRIOR TO THE COMMENCEMENT OF WORK.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. THE 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 THE 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 THE INSTALLATION AS INDICATED ON THE DRAWINGS FOR A FULLY FUNCTIONAL CHARGING STATION AND COMPLETE PROJECT.
6. THE SUB-CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON DRAWINGS, THE GENERAL CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE PROJECT ENGINEER. ONLY WRITTEN APPROVALS SHALL BE DEEMED TO CONFIRM ANY SUCH CHANGES AS BEING APPROVED.
8. 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 GENERAL 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 UNIQUE JOB DIMENSIONS OR CONDITIONS AND SUCH MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK.
9. THE GENERAL CONTRACTOR SHALL REVIEW ROUTING OF CONDUIT, POWER AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING PLAN DRAWING. THE GENERAL CONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONSTRUCTION MANAGER AND PROJECT HOST.
10. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE PROJECT HOST. THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTIONS REQUIRED FOR CONSTRUCTION. IF GENERAL CONTRACTOR CANNOT OBTAIN A PERMIT, THEY MUST NOTIFY THE CONSTRUCTION MANAGER IMMEDIATELY.
12. APPLICABLE BUILDING CODES:
THE GENERAL CONTRACTORS WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
THE GENERAL CONTRACTOR WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION
13. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.
14. 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.
15. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER GENERAL CONTRACTOR(S) AND/OR SUB-CONTRACTOR(S).
16. CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMEN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST ACCEPTED PRACTICE.
17. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND GENERAL CONTRACTOR(S) AND/OR SUB-CONTRACTOR(S) TO THE SITE AND/OR BUILDING.
18. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.
19. THE GENERAL CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
20. THE GENERAL CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE PROJECT HOST 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
21. THE GENERAL CONTRACTOR AND SUB-CONTRACTORS 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.
22. THE GENERAL CONTRACTOR SHALL PROVIDE PORTABLE FIRE EXTINGUISHERS WITH A RATING OF NOT LESS THAN 2-A OR 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.
23. ALL BROCHURES, OPERATING AND MAINTENANCE MANUALS, CATALOGS, SHOP DRAWINGS, AND OTHER DOCUMENTS SHALL BE TURNED OVER TO THE PROJECT OWNER AT COMPLETION OF CONSTRUCTION AND PRIOR TO PAYMENT.
24. GENERAL CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES AND ALL SPECIFIED CLOSE-OUT DOCUMENTATION TO THE PROJECT OWNER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT.
25. THE GENERAL CONTRACTOR SHALL LEAVE THE WORK AREA AND SURROUNDING PREMISES IN A CLEAN CONDITION.
26. 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).
27. NO OUTDOOR STORAGE OR SOLID WASTE CONTAINERS ARE PROPOSED.

SITE WORK NOTES:

PART 1 – GENERAL

- 1.1 REFERENCES:
A. DOT (STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGH-WAY CONSTRUCTION–CURRENT EDITION).
B. AASHTO (AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS)
C. ASTM (AMERICAN SOCIETY FOR TESTING AND MATERIALS).
D. OSHA (OCCUPATION SAFETY AND HEALTH ADMINISTRATION).
- 1.2 INSPECTION AND TESTING:
A. FIELD TESTING OF EARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK IS TO BE COORDINATED BY THE GENERAL CONTRACTOR.

B. ALL WORK SHALL BE INSPECTED AND VERIFIED FOR CONFORMANCE AND RELEASED BY THE ENGINEER WHO SHALL CARRY OUT THE GENERAL INSPECTION OF THE WORK WITH SPECIFIC CONCERN TO PROPER PERFORMANCE OF THE WORK AS SPECIFIED AND/OR CALLED FOR ON THE DRAWINGS. IT IS THE GENERAL CONTRACTOR(S) RESPONSIBILITY TO REQUEST TIMELY INSPECTIONS PRIOR TO PROCEEDING WITH FURTHER WORK THAT WOULD MAKE PARTS OF WORK INACCESSIBLE OR DIFFICULT TO INSPECT.
- 1.3 SITE MAINTENANCE AND PROTECTION:
A. PROVIDE ALL NECESSARY JOB SITE MAINTENANCE FROM COMMENCEMENT OF WORK UNTIL COMPLETION OF THE CONTRACT.

B. AVOID DAMAGE AND TAKE PROTECTIVE MEASURES TO THE SITE AND TO EXISTING FACILITIES, IMPROVEMENTS, STRUCTURES, PAVEMENTS, CURBS, AND LANDSCAPING DESIGNATED TO REMAIN. ANY DAMAGED PART SHALL BE REPAIRED AT SUB-CONTRACTOR(S) EXPENSE TO THE SATISFACTION OF THE PROJECT HOST.

C. KEEP SITE FREE OF ALL PONDING OR STANDING WATER.

D. PROVIDE EROSION CONTROL MEASURES, IF REQUIRED, SHALL BE 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. 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 SUB-CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. THE GENERAL 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.

G. 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 PROJECT OWNER AND/OR LOCAL UTILITIES.

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

I. PROVIDE A MINIMUM 48-HOUR NOTICE TO THE PROJECT HOST AND RECEIVE WRITTEN NOTICE TO PROCEED BEFORE INTERRUPTING ANY UTILITY SERVICE.

J. 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.

K. THE GENERAL CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS, RUBBISH, DEBRIS, STUMPS, STICKS, AND STONES.

L. THE GENERAL CONTRACTOR SHALL REMOVE ALL TRASH DEBRIS FROM THE SITE ON A DAILY BASIS.

M. CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO PROTECT TREES, VEGETATION, AND ROOT SYSTEMS DURING CONSTRUCTION.

N. CONTRACTOR TO COORDINATE POST CONSTRUCTION LANDSCAPING FINISHES WITH OWNER AND TESLA.

PART 2 – PRODUCTS

2.1 GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION:

SIEVE SIZE	TOTAL PERCENT PASSING
1-1/2 INCH	100
1 INCH	75 TO 100
3/4 INCH	80 TO 100
3/8 INCH	35 TO 75
NO. 4	30 TO 60
NO. 30	7 TO 30
NO. 200	3 TO 15

2.2 GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).

2.3 ALL STRUCTURAL BACKFILL AND SUBBASE UNDER SLABS SHALL BE SELECT STRUCTURAL FILL MEETING THE GRADATION AND SOUNDNESS REQUIREMENTS IN ACCORDANCE WITH THE FOLLOWING:

SIEVE SIZE	TOTAL PERCENT PASSING
4 INCH	100
NO. 40	0 TO 70
NO. 200	0 TO 40

2.4 MATERIALS SHALL BE SUBSTANTIALLY FREE OF SHALE OR OTHER SOFT, POOR DURABILITY PARTICLES. IF TESTING IS ELECTED BY PROJECT OWNER, MATERIAL WITH A MAGNESIUM SULFATE SOUNDNESS LOSS EXCEEDING 30% WILL BE REJECTED.

2.5 COARSE AGGREGATE FOR SUBBASE COURSE SHALL CONFORM TO ASTM D2940.

2.6 UNSUITABLE MATERIAL: HIGH AND MODERATELY PLASTIC SILTS AND CLAYS (LL>45). MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL, VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE ENGINEER. TYPICALLY THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.

PART 3 – EXECUTION

3.1 GENERAL:

- A. BEFORE STARTING GENERAL SITE PREPARATION ACTMITIES, INSTALL EROSION AND SEDIMENT CONTROL MEASURES. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF A RAIN EVENT, NO SEDIMENT WILL LEAVE THE WORK SITE.
- B. BEFORE ALL SURVEY, LAYOUT, STAKING, AND MARKING, ESTABLISH AND MAINTAIN ALL LINES, GRADES, ELEVATIONS AND BENCHMARKS NEEDED FOR EXECUTION OF THE WORK.
- 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 UNDESIRABLE MATERIALS.

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

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 ENGINEER 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 SUB-CONTRACTOR SHALL PROVIDE SHORING, SHEETING, AND BRACING AS REQUIRED TO PREVENT CAVING OR SLOUGHING OF EXCAVATION.

K. WHEN DIRECTIONAL BORING IS REQUIRED, SUB-CONTRACTOR SHALL INSTALL A LOOSE TONING WIRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND CONDUITS.

3.2 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 SPECIFIED 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. 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.
- D. BACKFILL BY PLACING AND COMPACTING SUITABLE BACKFILL MATERIAL OR SELECT GRANULAR BACKFILL MATERIAL WHEN REQUIRED IN UNIFORM HORIZONTAL LAYERS OF NO GREATER THAN 12-INCHES LOOSE THICKNESS AND COMPACTED. WHERE HAND OPERATED COMPACTORS ARE USED, FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 12-INCHES IN LOOSE DEPTH AND COMPACTED.
- E. THOROUGHLY COMPACT EACH LAYER OF BACKFILL TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY THE STANDARD PROCTOR TEST, ASTM D 698.
- F. WHENEVER THE DENSITY TESTING INDICATES THAT THE SUB-CONTRACTOR(S) HAS NOT OBTAINED THE SPECIFIED DENSITY, THE SUCCEEDING LAYER SHALL NOT BE PLACED UNTIL THE SPECIFICATION REQUIREMENTS ARE MET UNLESS OTHERWISE AUTHORIZED BY THE CONSTRUCTION MANAGER. THE SUB-CONTRACTOR SHALL TAKE WHATEVER APPROPRIATE ACTION IS NECESSARY, SUCH AS DISKING AND DRYING, ADDING WATER, OR INCREASING THE COMPACTIVE EFFORT TO MEET THE MINIMUM COMPACTION REQUIREMENTS.
- G. THE SUB-CONTRACTOR SHALL OBTAIN GRAB SAMPLES OF SUFFICIENT QUANTITY TO PROVIDE TO LAB FOR PURPOSE OF DETERMINING MAX DRY DENSITY. ALL LOOSE AND/OR ORGANIC MATERIAL SHALL BE REMOVED PRIOR TO PREPARATION OF THE AREA FOR PLACEMENT OF STRUCTURAL BACKFILL. OVERALL PLAN AREA OF WORK SHALL EXTEND 3'-0" MINIMUM BEYOND THE FINAL DIMENSIONS.

H. SCARIFY THE EXISTING SOILS TO A DEPTH OF 6" AND RE-COMPACT USING A VIBRATING PLATE OR TAMPER, ANY SOFT AREAS SHALL BE OVEREXCAVATED 12" AND BACKFILLED WITH MATERIALS AND COMPACTION REQUIREMENTS SHOWN ON THE DRAWINGS.

I. PLACEMENT AND COMPACTION OF STRUCTURAL BACKFILL AND SUBBASE SHALL BE IN 12" LIFTS. EXCAVATE FOR THE FOOTING EDGE AS SHOWN ON THE DRAWINGS.

3.3 TRENCHING EXCAVATION:

J. 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.

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

L. 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 MATERIAL.

3.4 TRENCHING BACKFILL:

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

B. NOTIFY THE ENGINEER 24 HOURS IN ADVANCE OF BACKFILLING.

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

D. PLACE GRANULAR 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 AND HAUNCHES.

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

F. ABOVE THE CONDUIT EMBEDMENT ZONE, PLACE AND COMPACT SATISFACTORY BACKFILL MATERIAL IN 12-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 BUT NO LESS THAN A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY THE STANDARD PROCTOR TEST, ASTM D 698.

H. PER LOCAL REGULATORY AUTHORITY AND AS APPLICABLE, ALL TRENCHES IN PUBLIC RIGHT-OF-WAY SHALL BE BACKFILLED WITH FLOWABLE FILL OR OTHER MATERIAL PRE-APPROVED BY THE LOCAL JURISDICTION.

3.5 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 MATCH SURROUNDING TOPOGRAPHY AND STRUCTURES.

B. UTILIZE GRANULAR FILL 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 OR BETTER CONDITION.

D. AREAS OF THE PROJECT HOST'S PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE EQUIPMENT OR PARKING/DRIVING AREAS SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION.

3.6 ASPHALT PAVING ROAD:

- A. AASHTO
B. STATE SPECIFIC ASPHALT SPECIFICATIONS FOR HIGHWAYS
C. THE SUB-CONTRACTOR IS RESPONSIBLE FOR RE-STRIPING AND APPLYING SEALCOATING, UNLESS OTHERWISE SPECIFIED.



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MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

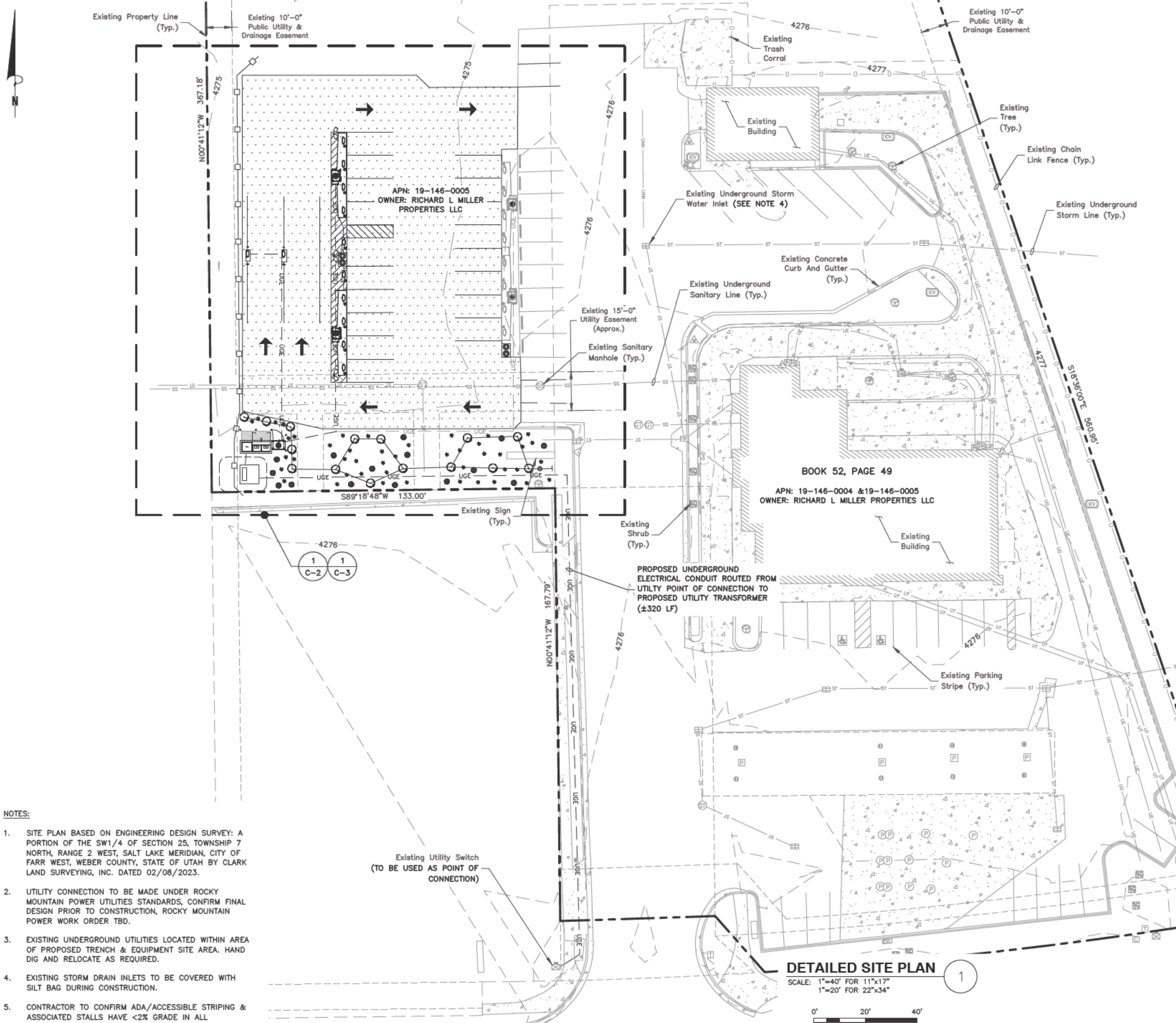
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

GENERAL NOTES I

SHEET NUMBER

GN-1



LEGEND

- SITE BENCHMARK
- SANITARY MANHOLE
- GREASE TRAP
- STORM MANHOLE
- STORM INLET (RECTANGLE)
- FIRE HYDRANT
- WATER VALVE
- IRRIGATION CONTROL VALVE
- WATER METER
- WATER MANHOLE
- SPRINKLER HEAD / WATER PUMP
- ELECTRIC METER
- ELECTRIC TRANSFORMER
- ELECTRIC CABINET
- ELECTRIC VAULT
- TELEPHONE PEDESTAL
- CABLE TV PEDESTAL
- PETROLEUM PUMP
- PETROLEUM MANHOLE
- GAS METER
- AIR PUMP
- HANDICAP PARKING
- PILLAR
- DECIDUOUS TREE W/ DRIP LINES
- SHRUB
- LANDSCAPED AREA
- BOLLARD
- SIGN
- FENCE, GATE
- CHAIN LINK FENCE
- STORM LINE (UNDERGROUND)
- SANITARY LINE (UNDERGROUND)
- GAS LINE (UNDERGROUND)
- ELECTRIC LINE (UNDERGROUND)
- TELEPHONE LINE (UNDERGROUND)
- UNKNOWN LINE (UNDERGROUND)
- CONCRETE AREA

NOTES:

- SITE PLAN BASED ON ENGINEERING DESIGN SURVEY: A PORTION OF THE SW1/4 OF SECTION 25, TOWNSHIP 7 NORTH, RANGE 2 WEST, SALT LAKE MERIDIAN, CITY OF FARR WEST, WEBER COUNTY, STATE OF UTAH BY CLARK LAND SURVEYING, INC. DATED 02/08/2023.
- UTILITY CONNECTION TO BE MADE UNDER ROCKY MOUNTAIN POWER UTILITIES STANDARDS, CONFIRM FINAL DESIGN PRIOR TO CONSTRUCTION, ROCKY MOUNTAIN POWER WORK ORDER TBD.
- EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
- EXISTING STORM DRAIN INLETS TO BE COVERED WITH SILT BAG DURING CONSTRUCTION.
- CONTRACTOR TO CONFIRM ADA/ACCESSIBLE STRIPING & ASSOCIATED STALLS HAVE <2% GRADE IN ALL DIRECTIONS.

DETAILED SITE PLAN

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"



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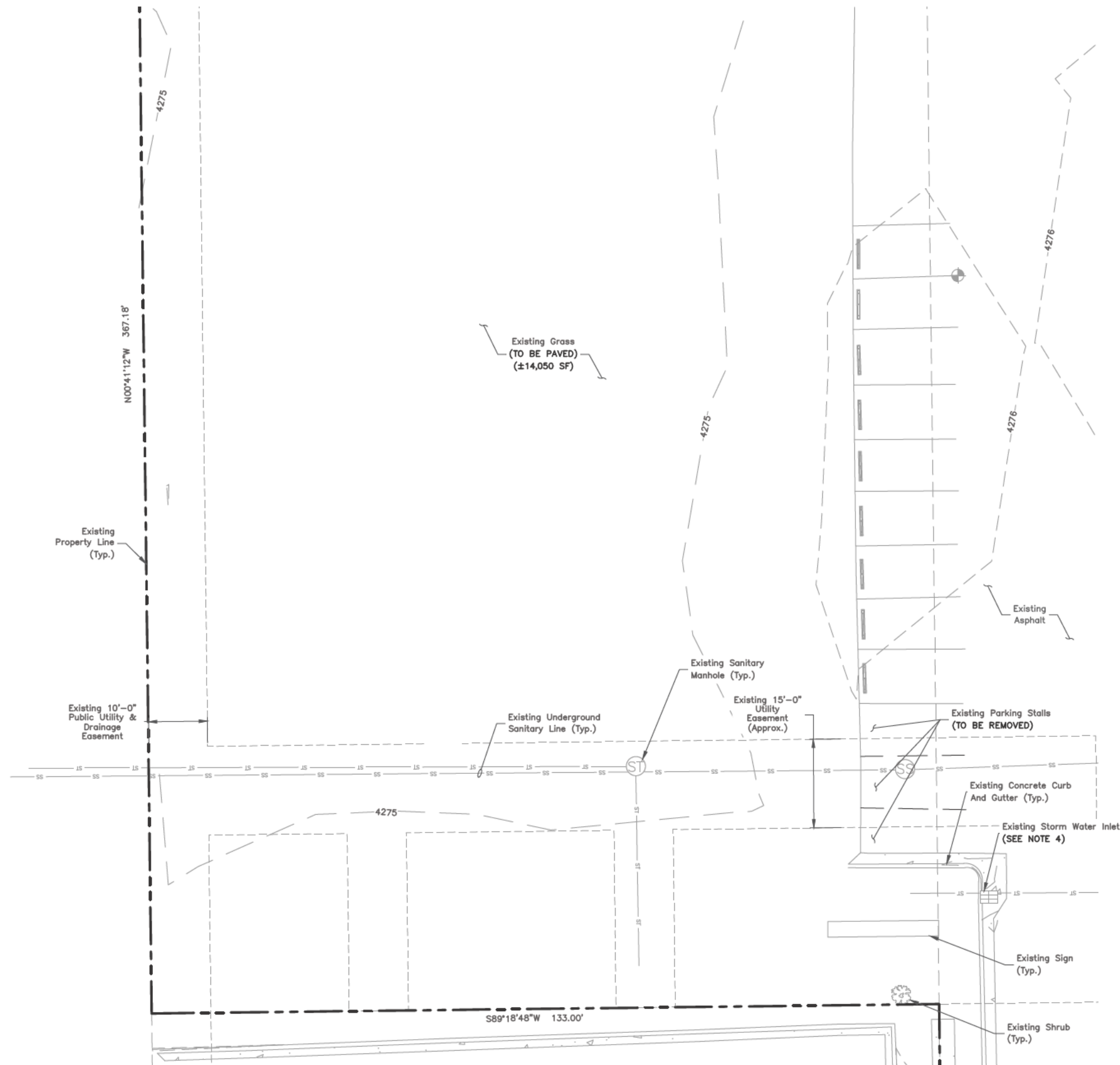
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

DETAILED SITE PLAN

SHEET NUMBER

C-1



EXISTING CONDITIONS PLAN 1
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

0' 10' 20'

NOTES:

1. SITE PLAN BASED ON ENGINEERING DESIGN SURVEY: A PORTION OF THE SW1/4 OF SECTION 25, TOWNSHIP 7 NORTH, RANGE 2 WEST, SALT LAKE MERIDIAN, CITY OF FARR WEST, WEBER COUNTY, STATE OF UTAH BY CLARK LAND SURVEYING, INC. DATED 02/08/2023.
2. UTILITY CONNECTION TO BE MADE UNDER ROCKY MOUNTAIN POWER UTILITIES STANDARDS, CONFIRM FINAL DESIGN PRIOR TO CONSTRUCTION, ROCKY MOUNTAIN POWER WORK ORDER TBD.
3. EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
4. EXISTING STORM DRAIN INLETS TO BE COVERED WITH SILT BAG DURING CONSTRUCTION.
5. CONTRACTOR TO CONFIRM ADA/ACCESSIBLE STRIPING & ASSOCIATED STALLS HAVE <2% GRADE IN ALL DIRECTIONS.



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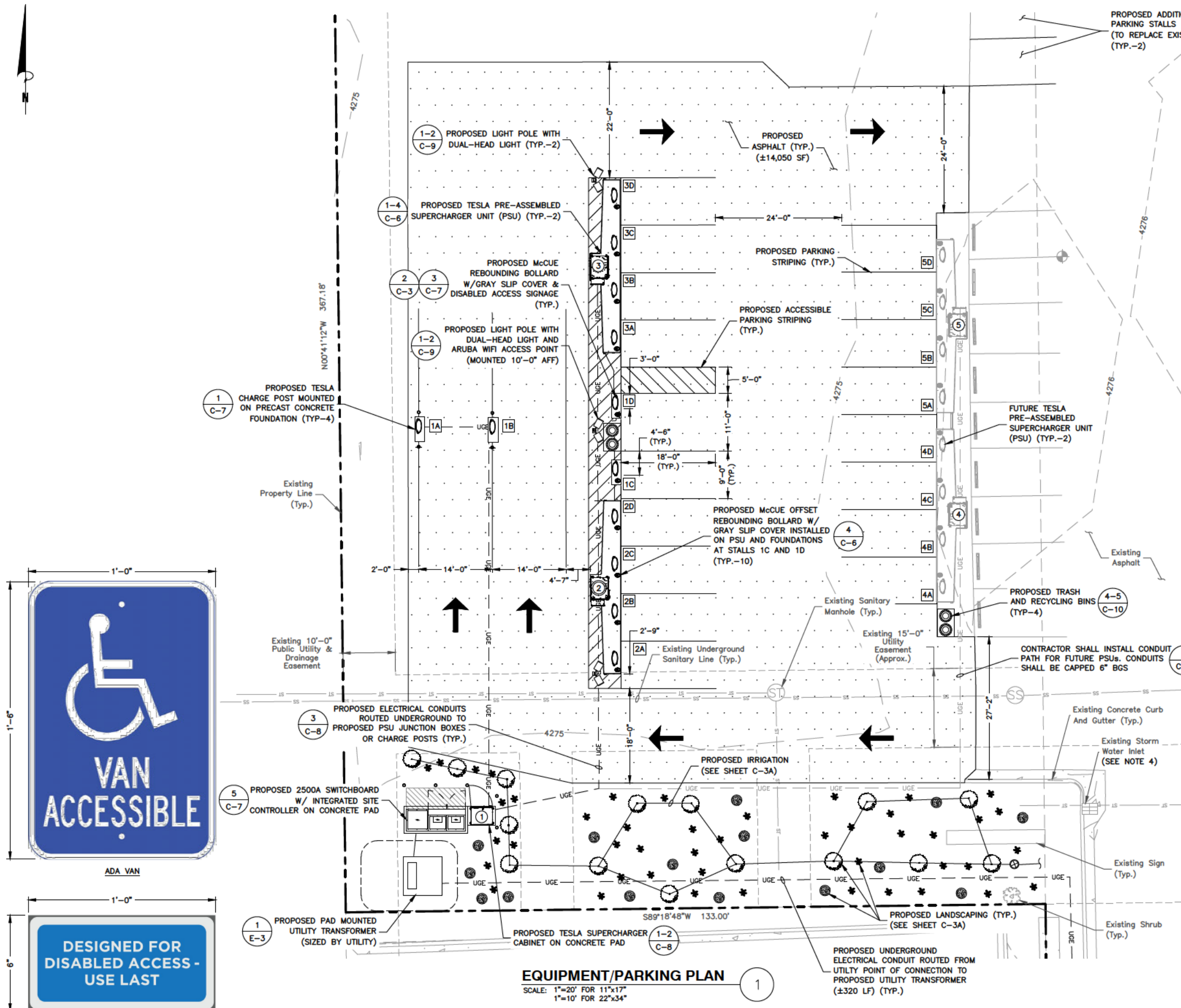
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

**EXISTING CONDITIONS
PLAN**

SHEET NUMBER

C-2



EQUIPMENT/PARKING PLAN
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

LEGEND	
Ⓜ	TESLA SUPERCHARGER #
Ⓜ	TESLA 'STAR CENTER' SUPERCHARGER #
1A	TESLA CHARGE POST

PARKING STALL SCHEDULE		
DESCRIPTION	QUANTITY	
EXISTING STALLS (TO BE MODIFIED)	3	
PROPOSED TESLA STALLS	12	
FUTURE TESLA STALLS	8	
ADDITIONAL STANDARD STALLS	2	
NET PARKING STALL CHANGE	19	

- NOTES:
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 - CONTRACTOR TO CONFIRM ADA/ACCESSIBLE STRIPING & ASSOCIATED STALLS HAVE <2% GRADE IN ALL DIRECTIONS.

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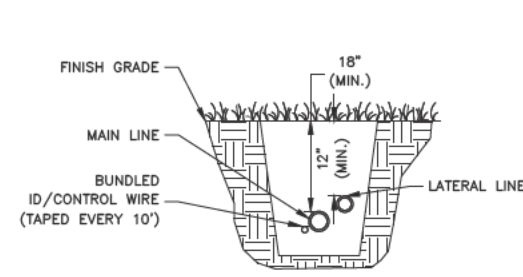
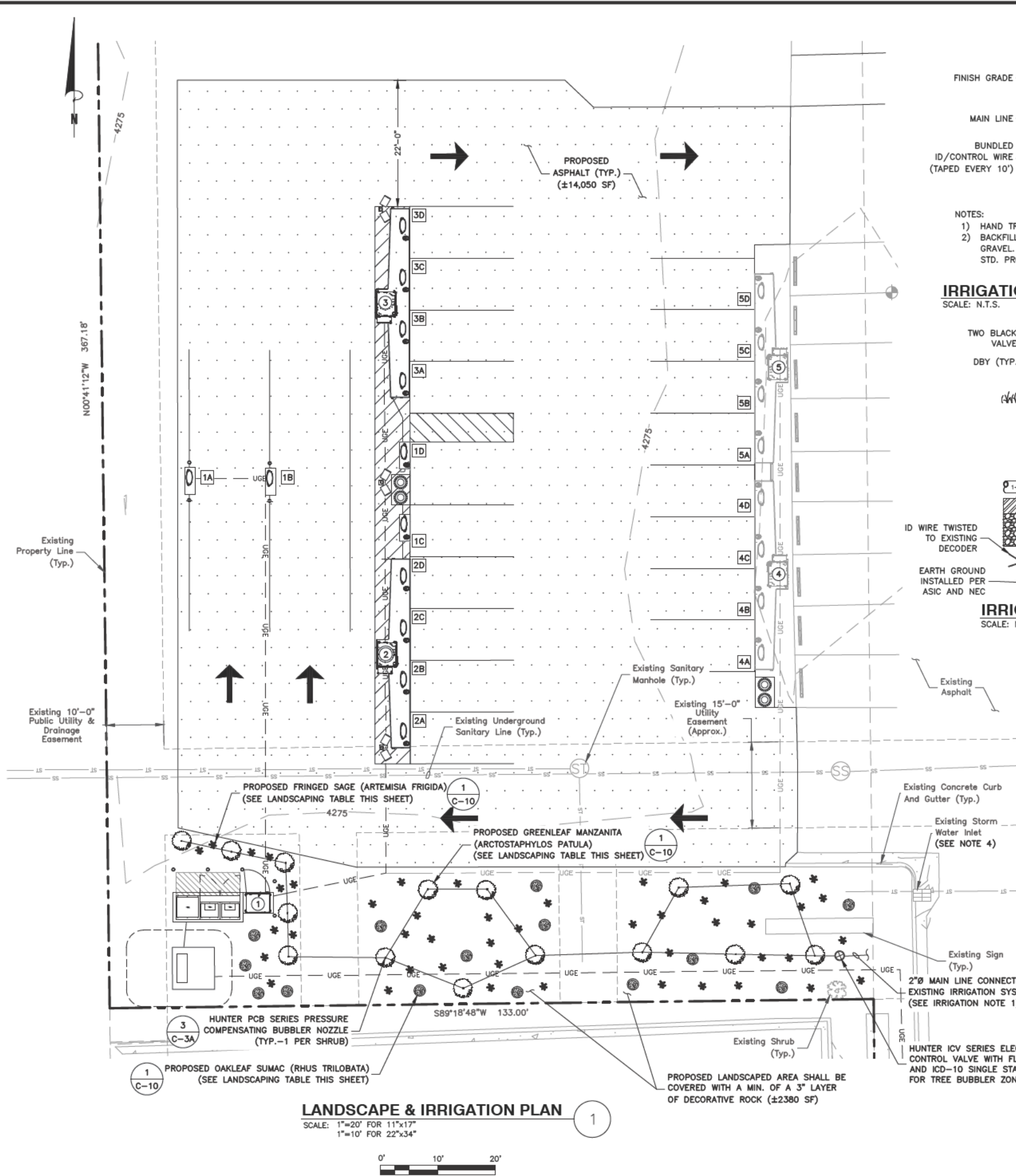
REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:
FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:
1750 W 2700 N
FARR WEST, UT 84404

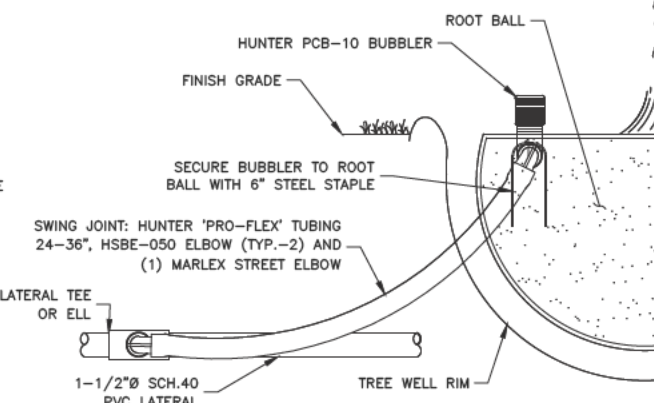
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EQUIPMENT/PARKING
PLAN

SHEET NUMBER
C-3

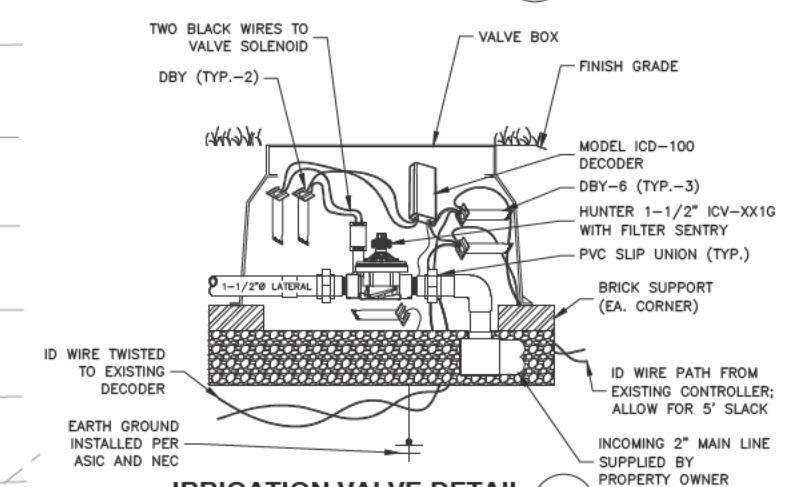


NOTES:
1) HAND TRENCH IN ALL ROOT ZONES
2) BACKFILL TO BE FREE OF ROCKS AND LOOSE GRAVEL. COMPACT IN 6" LIFTS TO 95% MAX STD. PROCTOR DENSITY (ASTM D-698)

IRRIGATION TRENCH DETAIL
SCALE: N.T.S.



TREE BUBBLER DETAIL
SCALE: N.T.S.



IRRIGATION VALVE DETAIL
SCALE: N.T.S.

- LANDSCAPING NOTES:
- CRITICAL ROOT ZONE: EXTENDS IN ALL DIRECTIONS FROM TRUNK OF TREE TO A DISTANCE EQUAL TO ONE FOOT PER INCH OF TRUNK DIAMETER AT BREAST HEIGHT.
 - INSTALL ALL TREE PROTECTION PRIOR TO COMMENCEMENT OF CONSTRUCTION AND REMOVE WHEN DIRECTED BY THE ENGINEER. MAINTAIN PROTECTION AT ALL TIMES.
 - ALL TRIMMING UNDERTAKEN ON A TREE PROTECTED BY THE PROVISIONS OF THE LAND DEVELOPMENT CODE SHALL BE IN ACCORDANCE WITH THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A-300 PRUNING STANDARDS.
 - ALL TREE ROOTS EXISTING WITHIN APPROVED IMPROVEMENT AREAS AND ORIGINATING FROM A PROTECTED TREE, SHALL BE SEVERED CLEAN AT THE LIMITS OF THE PRESERVED AREA. ROOT PRUNING SHALL BE COMPLETED WITH A DOSKO ROOT CUTTER, OR APPROVED EQUAL.
 - THE CRITICAL ROOT ZONE MAY BE REDUCED, IN THE FIELD, BY A CERTIFIED ARBORIST OF LANDSCAPE ARCHITECT.
 - ANY TREES OR LANDSCAPING DAMAGED DURING CONSTRUCTION TO BE REPLACED IN KIND BY CONTRACTOR.

- IRRIGATION CONSTRUCTION NOTES:
- CONTRACTOR SHALL COORDINATE WITH LANDLORD TO TIE PROPOSED IRRIGATION INTO EXISTING AS REQUIRED.
 - CONTRACTOR SHALL COORDINATE WITH LANDLORD FOR DAMAGED, REPLACED, OR RELOCATED IRRIGATION.
 - PRIOR TO COMMENCEMENT OF CONSTRUCTION, L.I.C. SHALL CONTACT LOCAL 811 AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
 - ALL MAIN LINES TO BE INSTALLED 18" MIN BELOW FINISHED GRADE. ALL LATERAL LINES TO BE INSTALLED 12" MIN BELOW FINISHED GRADE.
 - WITHIN EXISTING ROOT ZONES ONLY HAND TRENCHING SHALL BE PERMITTED. MACHINE TRENCHING PROHIBITED WITHIN EXISTING ROOT ZONES.
 - ANY LINES ROUTED BENEATH PAVED SURFACES SHALL BE SLEEVED IN SCH. 40 PVC SLEEVES.
 - VALVE WIRE SHALL BE MINIMUM OF 24V, #14 AWG, SINGLE CONDUCTOR "IRRIGATION VALVE" WIRE U.F. APPROVED FOR DIRECT BURIAL. WIRE SPLICING SHALL INCLUDE DBY CONNECTORS AS RECOMMENDED BY 3M. ALL SPLICES SHALL BE LOCATED IN VALVE BOXES FOR FIELD INSPECTION.
 - A GROUND ROD SHALL BE INSTALLED WITHIN PROPOSED VALVE BOX FOR DECODER GROUNDING.
 - PROPOSED VALVE BOX(ES) SHALL BE INSTALLED FLUSH WITH FINISH GRADE.
 - TREE BUBBLERS DEPICTED ON PLAN WITHOUT LATERAL PIPE FOR CLARITY; REFER TO INSTALLATION DETAIL.
 - ALL HEADS TO BE INSTALLED 6" MIN. FROM EDGE OF CURBING.
 - IT IS ASSUMED LANDLORD PROVIDED INCOMING MAINLINE IS EQUIPPED WITH A BACKFLOW PREVENTER. IF NO BACKFLOW PREVENTER IS PRESENT CONTRACTOR SHALL CONTACT CLIENT AND GENERAL CONTRACTOR.

PROPOSED LANDSCAPING TABLE				
SYMBOL	SPECIES	QUANTITY	MIN. SPACING	SIZE
	GREENLEAF MANZANITA (ARCTOSTAPHYLOS PATULA)	15	5'-0" C-C	5-GALLON
	OAKLEAF SUMAC (RHUS TRILOBATA)	15	5'-0" C-C	2-GALLON
	FRINGED SAGE (ARTEMISIA FRIGIDA)	45	2'-0" C-C	1-GALLON

NOTE: ALL LANDSCAPING INSTALLED SHALL BE OF A DROUGHT RESISTANT SPECIES.

LANDSCAPE & IRRIGATION PLAN
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

3500 DEER CREEK ROAD
PALO ALTO, CA 94304
(650) 681-5000

Dewberry Engineers Inc.
990 SOUTH BROADWAY
SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802

MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM
CHECKED BY: SES
APPROVED BY: MJM/JG
PROJECT #: 50123704
JOB #: 50159192

SUBMITTALS

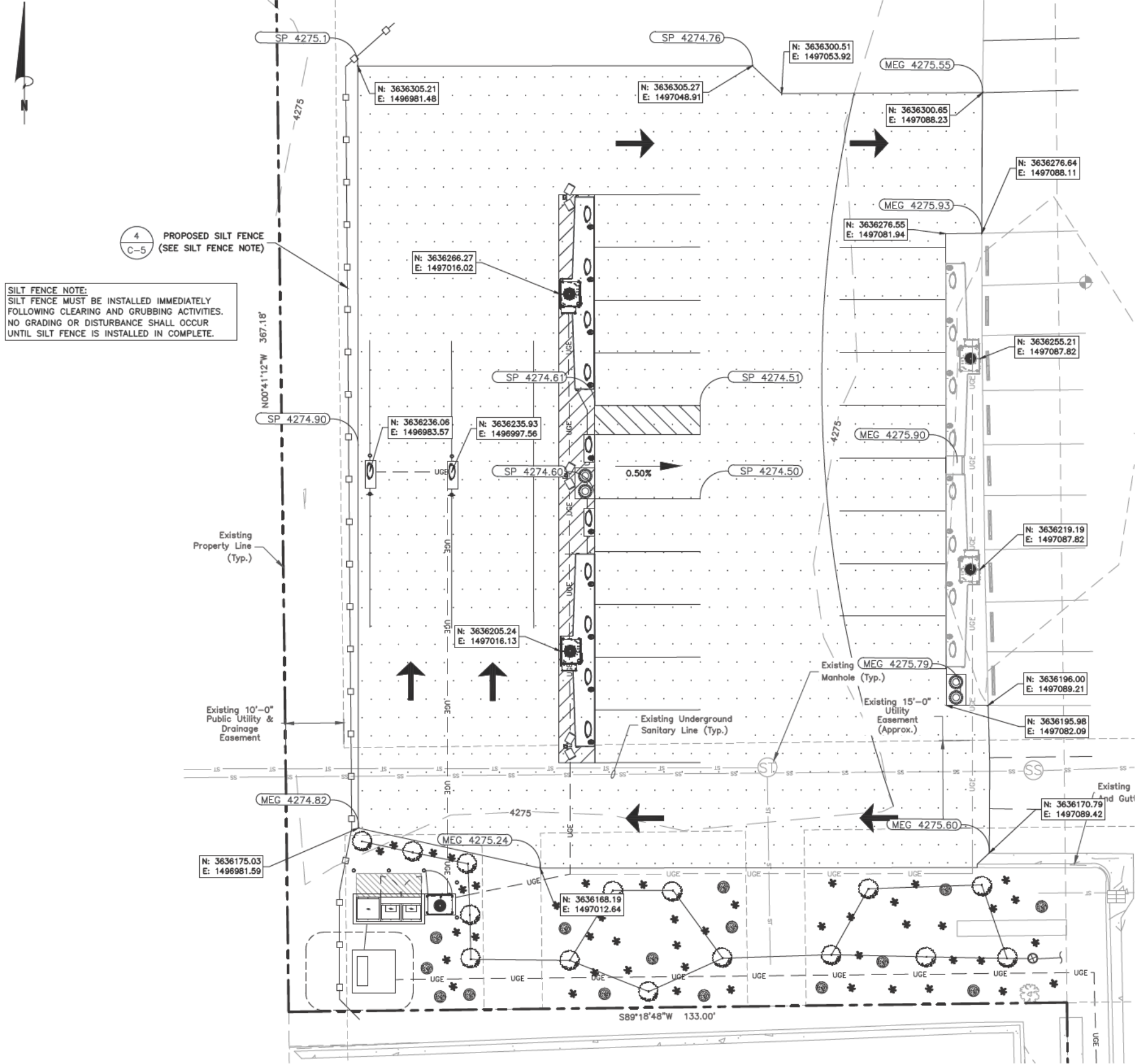
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SHEET TITLE
LANDSCAPE &
IRRIGATION PLAN

SHEET NUMBER
C-3A



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SHEET TITLE

GRADING PLAN

SHEET NUMBER

C-4



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PROJECT #: 50123704

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SHEET TITLE

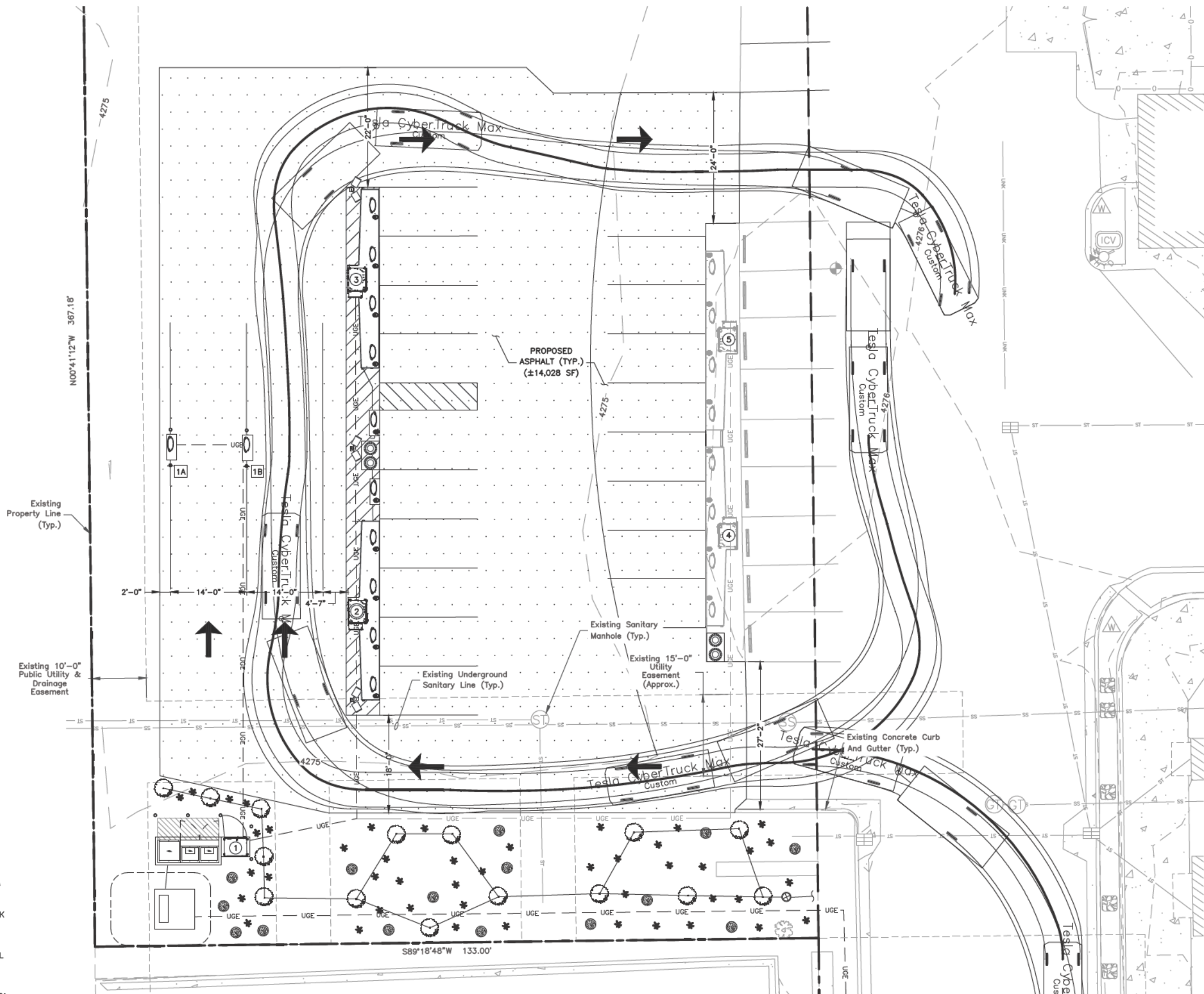
AUTOTURN CLEARANCE
DIAGRAM

SHEET NUMBER

C-5

NOTES:

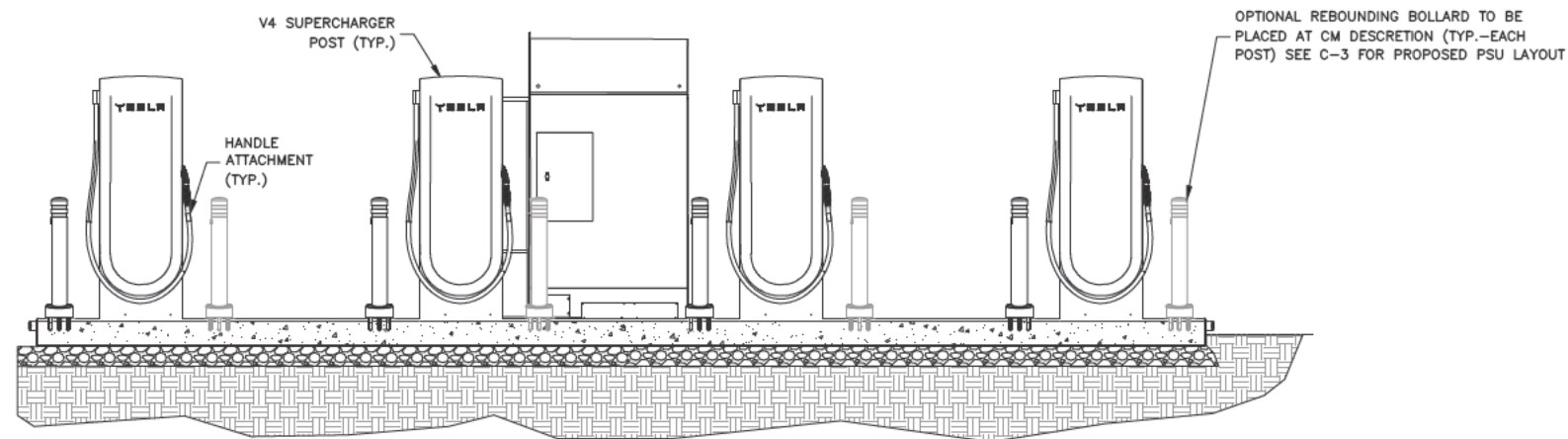
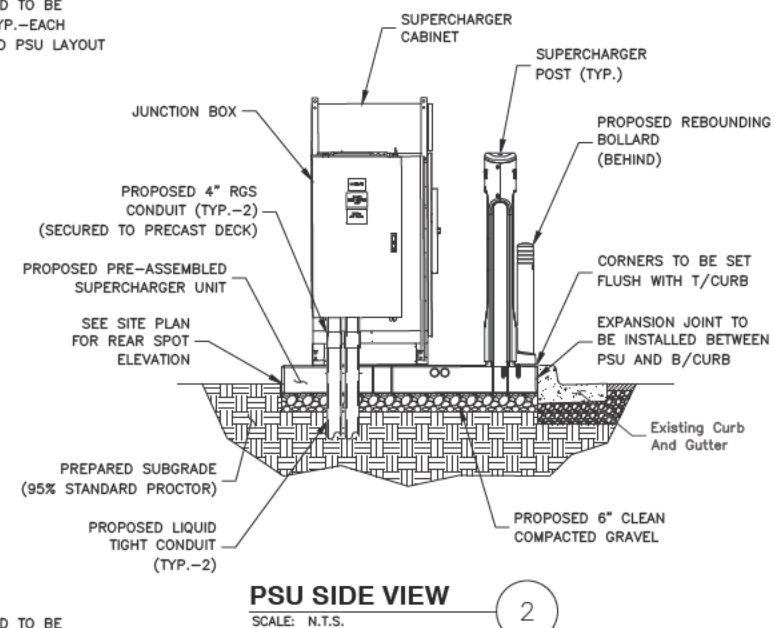
1. SITE PLAN BASED ON ENGINEERING DESIGN SURVEY: A PORTION OF THE SW1/4 OF SECTION 25, TOWNSHIP 7 NORTH, RANGE 2 WEST, SALT LAKE MERIDIAN, CITY OF FARR WEST, WEBER COUNTY, STATE OF UTAH BY CLARK LAND SURVEYING, INC. DATED 02/08/2023.
2. UTILITY CONNECTION TO BE MADE UNDER ROCKY MOUNTAIN POWER UTILITIES STANDARDS, CONFIRM FINAL DESIGN PRIOR TO CONSTRUCTION, ROCKY MOUNTAIN POWER WORK ORDER TBD.
3. EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
4. EXISTING STORM DRAIN INLETS TO BE COVERED WITH SILT BAG DURING CONSTRUCTION.
5. CONTRACTOR TO CONFIRM ADA/ACCESSIBLE STRIPING & ASSOCIATED STALLS HAVE <2% GRADE IN ALL DIRECTIONS.



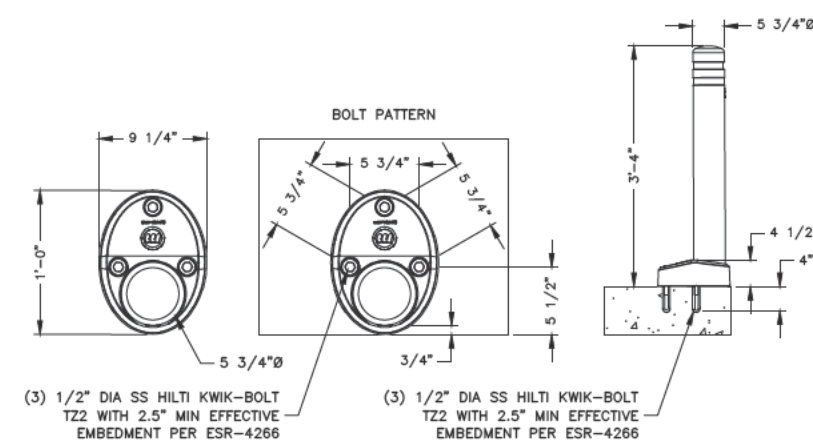
AUTOTURN CLEARANCE DIAGRAM

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

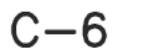


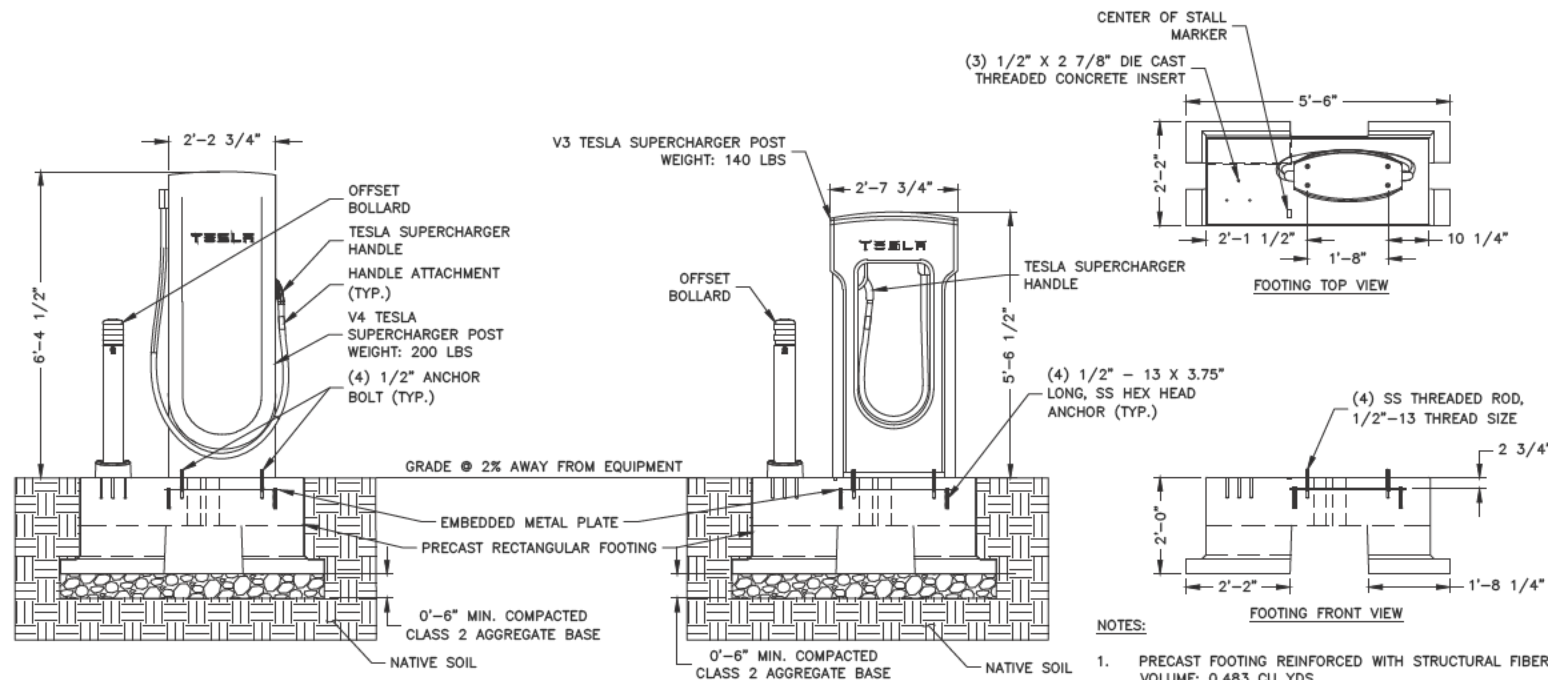


1



4





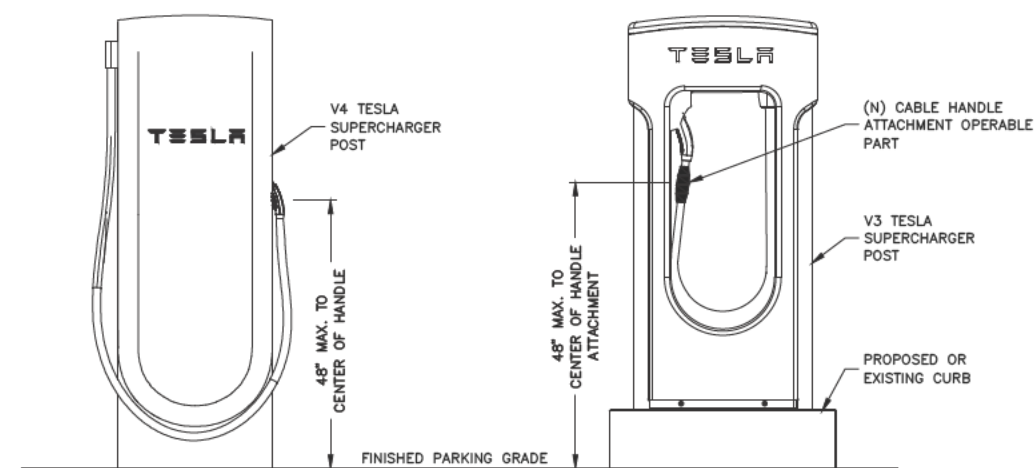
TESLA SUPERCHARGER POST PRECAST FOUNDATION DETAIL

SCALE: N.T.S.

1

NOTES:

1. PRECAST FOOTING REINFORCED WITH STRUCTURAL FIBER VOLUME: 0.483 CU YDS WEIGHT: 1,990 LBS SEE CUTSHEETS FOR ADDITIONAL INFORMATION
2. S501.1333 SUPERCHARGER POST CENTER ON CENTER PRECAST FOOTING DETAIL RA WIND RATING (WITHOUT SIGN) = 134 MPH WIND RATING (WITH SIGN) = 120 MPH



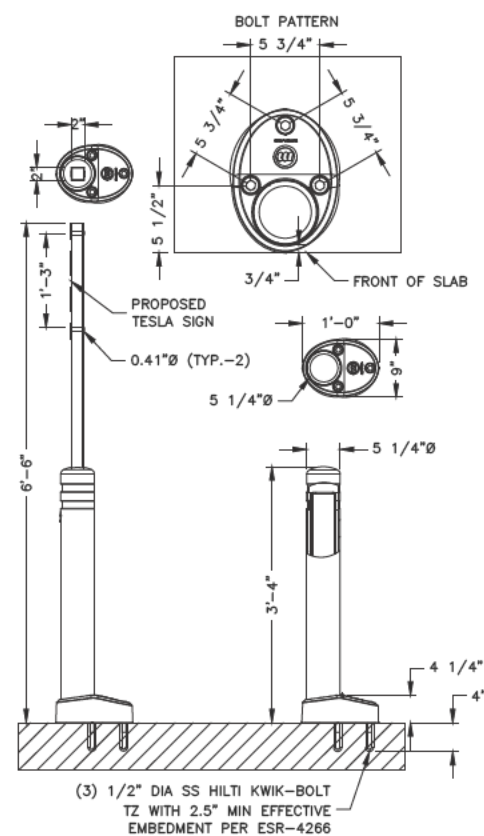
NOTE:

1. 48\"/>

CABLE HANDLE ACCESSIBILITY ATTACHMENT DETAIL

SCALE: N.T.S.

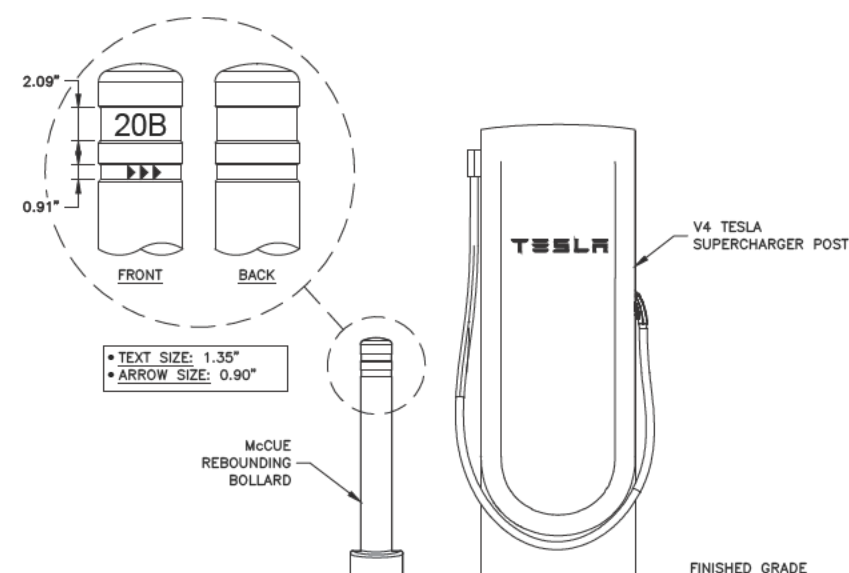
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McCUE REBOUNTING BOLLARD & SIGN

SCALE: N.T.S.

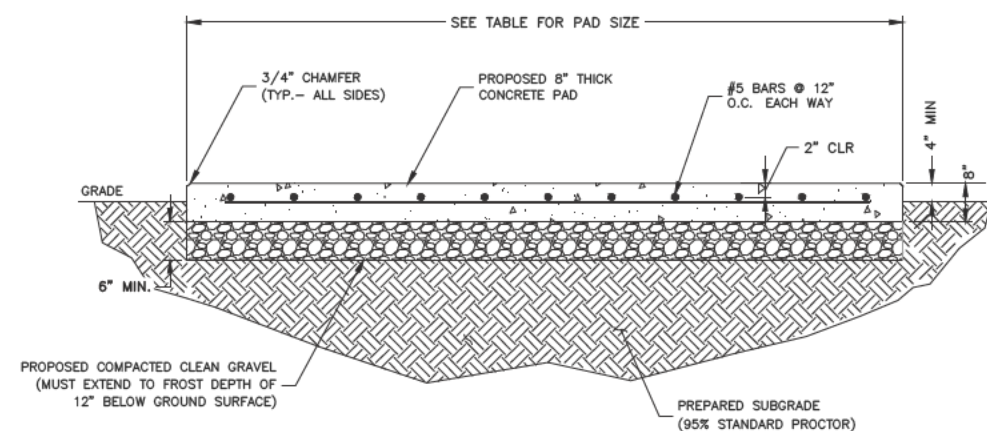
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BOLLARD SIGNAGE ELEVATION DETAIL

SCALE: N.T.S.

4



CONCRETE PAD DIMENSIONS					
PAD TYPE	CONCRETE	L	W	t (THICKNESS)	AREA
SWITCHGEAR*	4000 PSI	12'-6"	5'-3"	8"	66.0 S.F.

NOTE:

1. SEE CONCRETE NOTES ON SHEET GN-2.
- * SWITCHGEAR ANCHORS SHALL BE: (12) 1/2\"/>

CAST IN PLACE CONCRETE PAD

SCALE: N.T.S.

5



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UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

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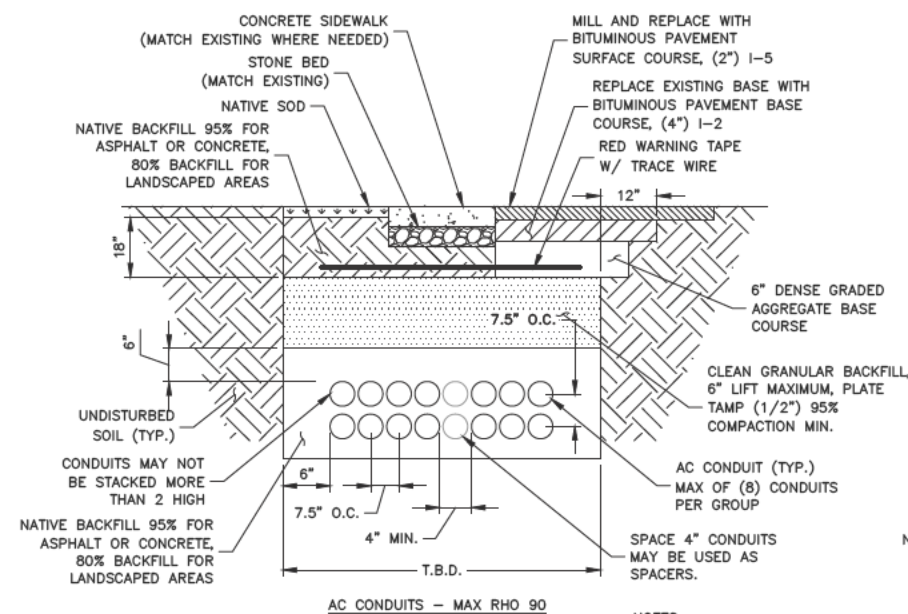
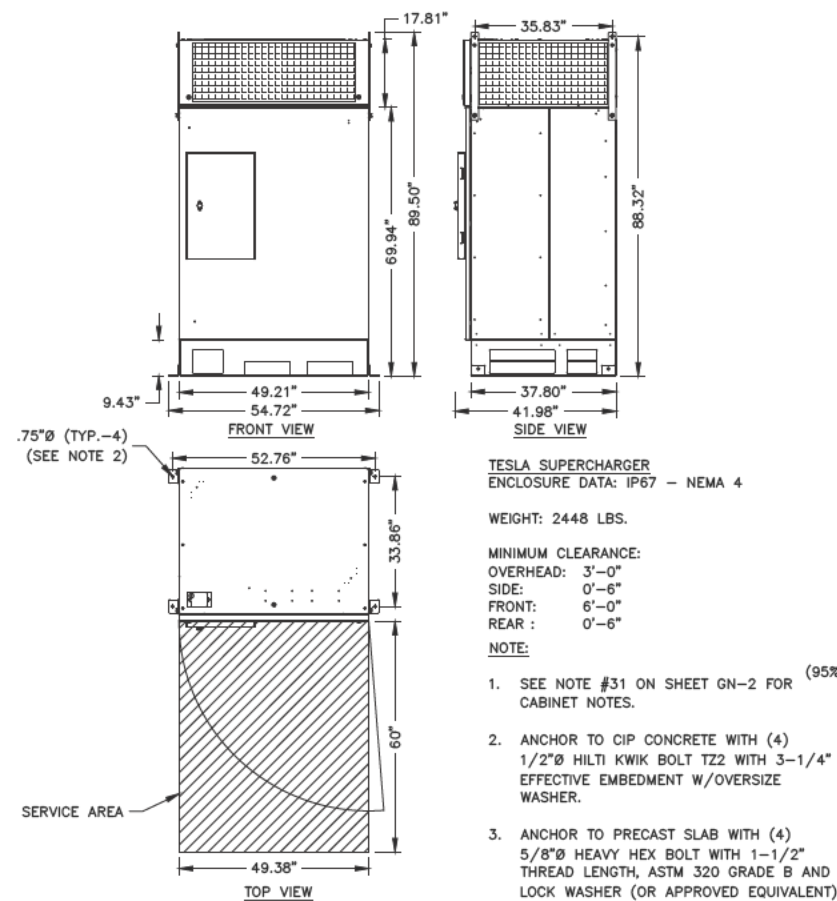
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

CONSTRUCTION
DETAILS II

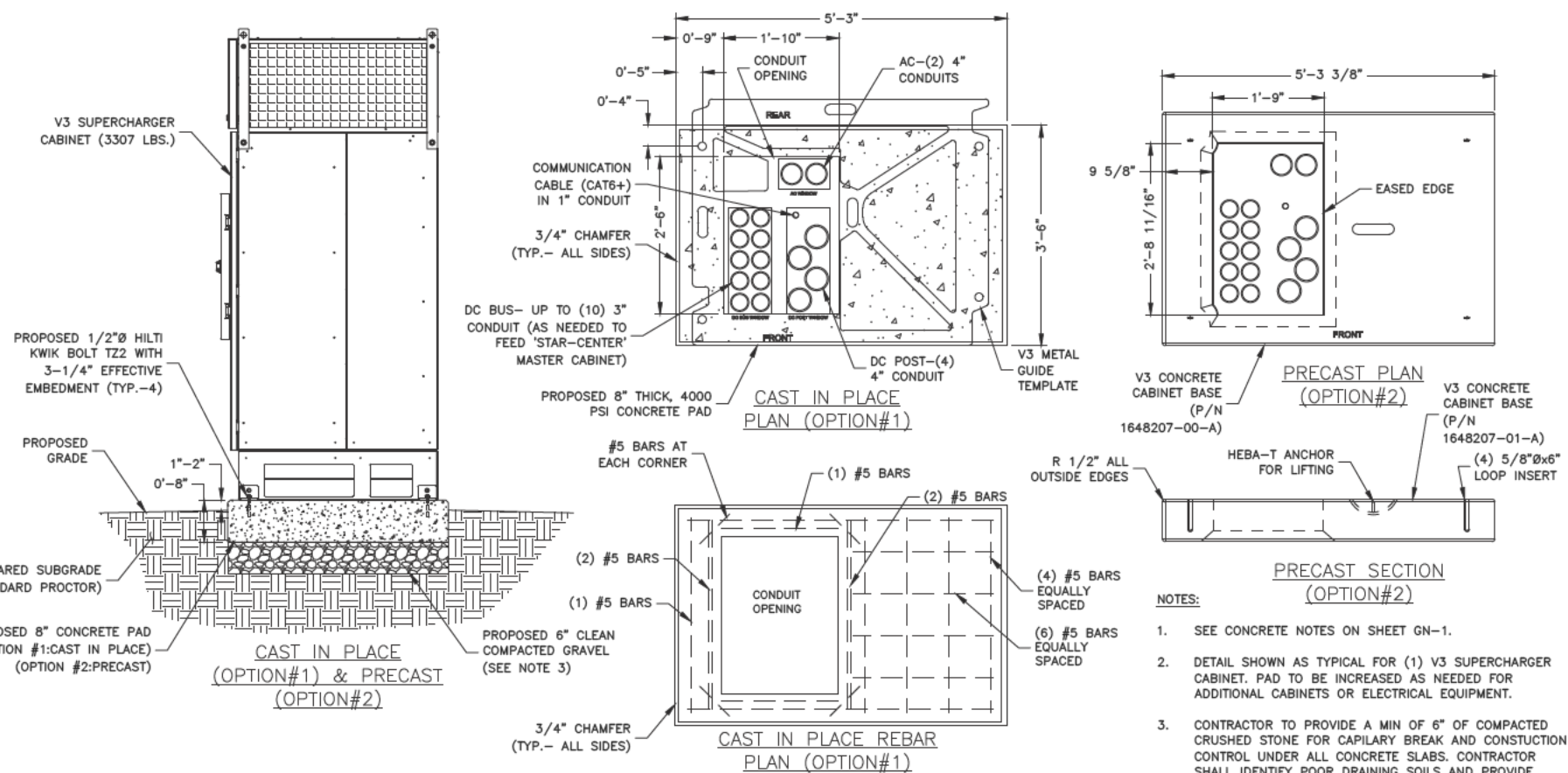
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C-7

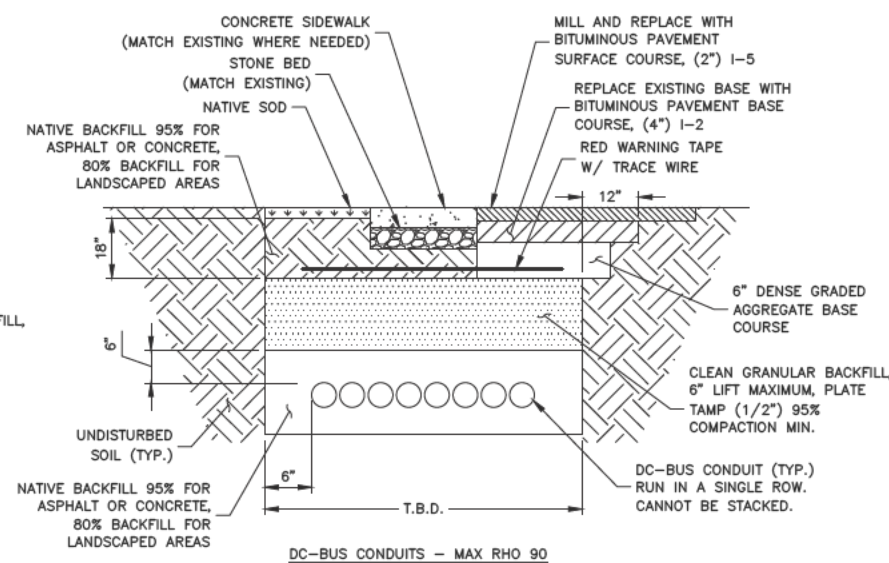


- NOTES:
- IF FREE OF ORGANIC OR OTHER DELETERIOUS MATERIAL, EXCAVATED MATERIAL MAY BE USED FOR BACKFILL.
 - IF NOT, PROVIDE CLEAN, COMPACTIBLE MATERIAL. COMPACT IN 8" LIFTS. REMOVE ANY LARGE ROCKS PRIOR TO BACKFILLING. CONTRACTOR TO VERIFY LOCATION OF EXISTING U/G UTILITIES PRIOR TO DIGGING.
 - CONCRETE ENCASE CONDUIT WHEN TRENCHING UNDER SITE ACCESS ROAD.
 - ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
 - MAINTAIN 12" SEPARATION MIN. BETWEEN AC OR DC CONDUCTORS AND COMMUNICATION CABLES.

TYP. BURIED CONDUIT TRENCH DETAILS
SCALE: N.T.S.

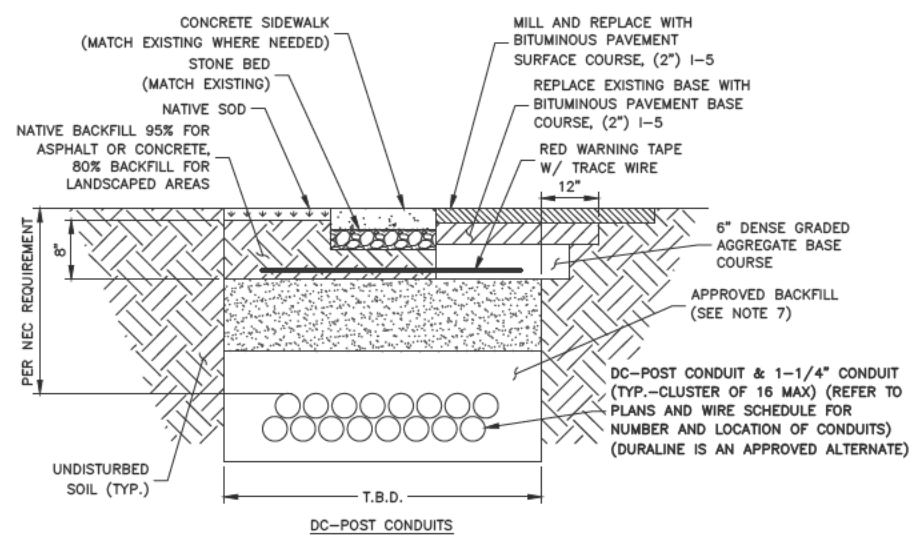


V3 CABINET FOUNDATION PLAN
SCALE: N.T.S.



- CONFIRM ALL DEPTHS W/UTILITY & NEC PRIOR TO CONSTRUCTION.
- FOR TRENCHES WITH MIXED CIRCUIT TYPES, APPLY THE CONDUIT SPACING FOR THE CIRCUIT TYPE WITH THE LARGER SPACING REQUIREMENT.
- APPROVED BACKFILL IS REQUIRED TO MEET THE DESIGNED RHO VALUES. USE THE SPECIFIED BACKFILL LISTED BELOW OR TEST NATIVE SOIL CONDITIONS TO CONFIRM MAX DEFINED RHO VALUES. MINIMUM 2" OF APPROVED BACKFILL COVERAGE AROUND CONDUITS IS REQUIRED.
- RHO 90 BACKFILL - LOW STRENGTH FLUIDIZED THERMAL (SLURRY) BACKFILL WITH MIN 28 DAY COMPRESSIVE STRENGTH OF 150 PSI MUST BE USED TO ACHIEVE MAX RHO 90.

TYP. BURIED CONDUIT TRENCH DETAILS
SCALE: N.T.S.



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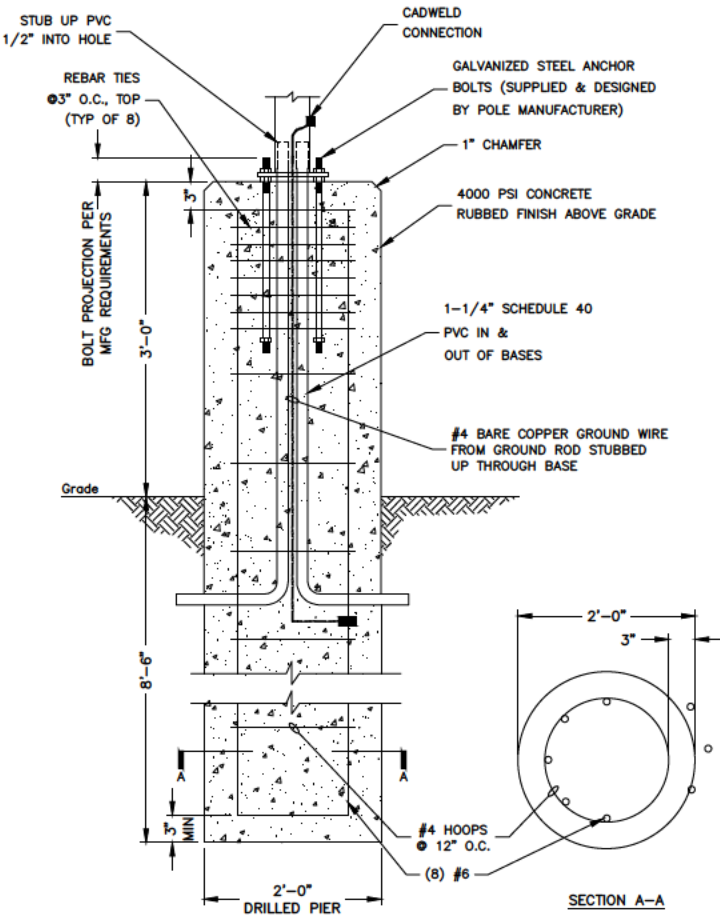
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SHEET TITLE
CONSTRUCTION
DETAILS III

SHEET NUMBER
C-8



PEDESTRIAN LIGHT POLE BASE DETAIL
SCALE: N.T.S.

1



PROJECT NAME: _____ DATE: _____
OFF NUMBER: _____
NOTES: _____

SPEC SHEET

Site Lighter (SL1)
EXTERIOR LED FIXTURE



KEY FEATURES

- Up to 174 LPW
- 8,500 to 62,000 lumens
- Up to 95°C
- 200-480V high-voltage driver (optional)
- Dimmable 0-10V
- Calculated L70 > 193,000 hours
- Patented Rapid Mount Bracket (optional)
- Turbo-friendly lighting option available



Guaranteed Performance

Performance of the light fixture is guaranteed for 10 years, including lumen output (L70), color temperature, and LED driver.



Superior Heat Dissipation

Extruded aluminum body is exceptional at moving thermal energy. Plus, the aesthetics are modern and attractive.



Controls and Sensors

LinmoreLED driver with 0-10V dimming. Plus motion and dimming sensors, photocell and wireless controls available.

TECHNICAL SPECS

Housing	Watts	TYPE				FRONT VIEW		FL/END	
		T2	T3	T4	T5	FR	FL	FR	FL/END
SM	50	8,676	8,676	8,676	8,676	8,676	8,676	8,429	8,535
SM	75	12,284	12,284	12,284	12,284	12,284	12,284	11,916	11,793
SM	100	16,739	16,739	16,739	16,739	16,739	16,739	16,227	16,090
MD	125	21,176	21,176	21,176	21,176	21,176	21,176	20,541	20,289
MD	150	24,367	24,367	24,367	24,367	24,367	24,367	23,605	23,421
MD	200	32,980	32,980	32,980	32,980	32,980	32,980	32,001	31,741
LD	250	38,035	38,035	37,054	38,035	38,035	38,035	36,894	36,514
LD	300	46,995	46,995	46,995	46,995	46,995	46,995	45,527	45,057
XL	400	62,341	62,341	61,718	62,341	62,341	62,341	60,471	59,847

Lumen Multipliers

Allows to calculate the actual lumen output for your application.

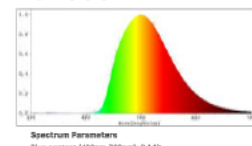
Color Temp	Multiplier
6000	1.000
4000	1.000
3000	0.900
2800	~
2700	0.875
2200	0.700

Bug Ratings

Housing	Watts	Optic	Bug Rate	Optic	Bug Rate	Optic	Bug Rate	Optic	Bug Rate
SM	50	T5	81 LD 01	T4	81 LD 01	T3	81 LD 01	T2	81 LD 01
SM	75	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
SM	100	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
MD	125	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
MD	150	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
MD	200	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
LD	250	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
LD	300	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01
XL	400	T5	81 LD 02	T4	81 LD 02	T3	81 LD 02	T2	81 LD 01

Turbo-Friendly Lighting Available (2800K CCT)

Our 2800K CCT option provides an optimized spectrum for turtles, based on long-wavelength lighting with minimal to zero amount of blue content.



Spectrum Parameters
Blue content (445nm-480nm): 0.14%
Peak wavelength: 670nm

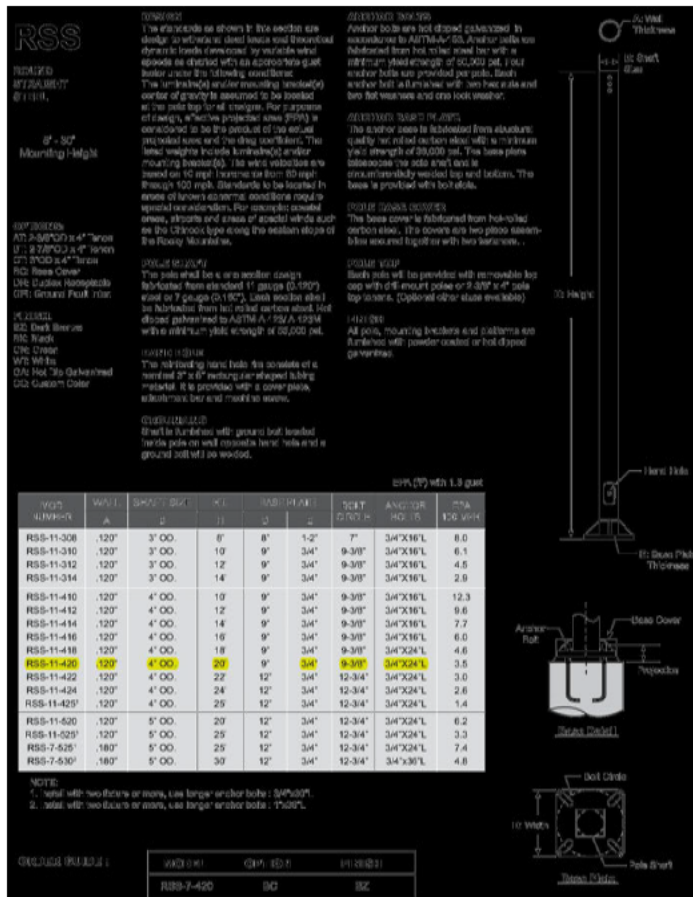
ORDERING

ORDER MODEL	HOUSING SIZE	MATERIALS	FINISH	OPTIC	WATT
LL-SL1	SM	6061	2007	10	50W
	MD	6061	2007	10	125W
	LD	6061	2007	10	250W
	XL	6061	2007	10	400W
	MD	6061	2007	10	125W
	LD	6061	2007	10	250W
	XL	6061	2007	10	400W
	MD	6061	2007	10	125W
	LD	6061	2007	10	250W
	XL	6061	2007	10	400W

HOUSING	HOUSING COLOR	HOUSING FINISH	OPTIC
SM	6061	2007	10
MD	6061	2007	10
LD	6061	2007	10
XL	6061	2007	10
MD	6061	2007	10
LD	6061	2007	10
XL	6061	2007	10
MD	6061	2007	10
LD	6061	2007	10
XL	6061	2007	10

ORDERING EXAMPLES

Standard: LL-SL1-400-150W-50K-T5-UNV-02-BRN-0A
With Options: LL-SL1-400-150W-50K-T5-UNV-02-BRN-0A-ULTRABRIGHT-005



ORDER INFORMATION:
RSS-11-420-DR-BZ - 20FT POLE

LIGHT FIXTURE AND POLE DETAIL
SCALE: N.T.S.

2



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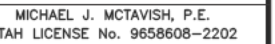
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FARR WEST, UT 84404

SHEET TITLE
CONSTRUCTION
DETAILS IV

SHEET NUMBER
C-9



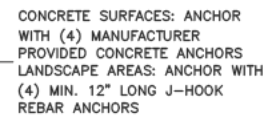
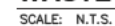
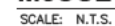
Dewberry Engineers Inc.
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SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



JOB #: 50159192

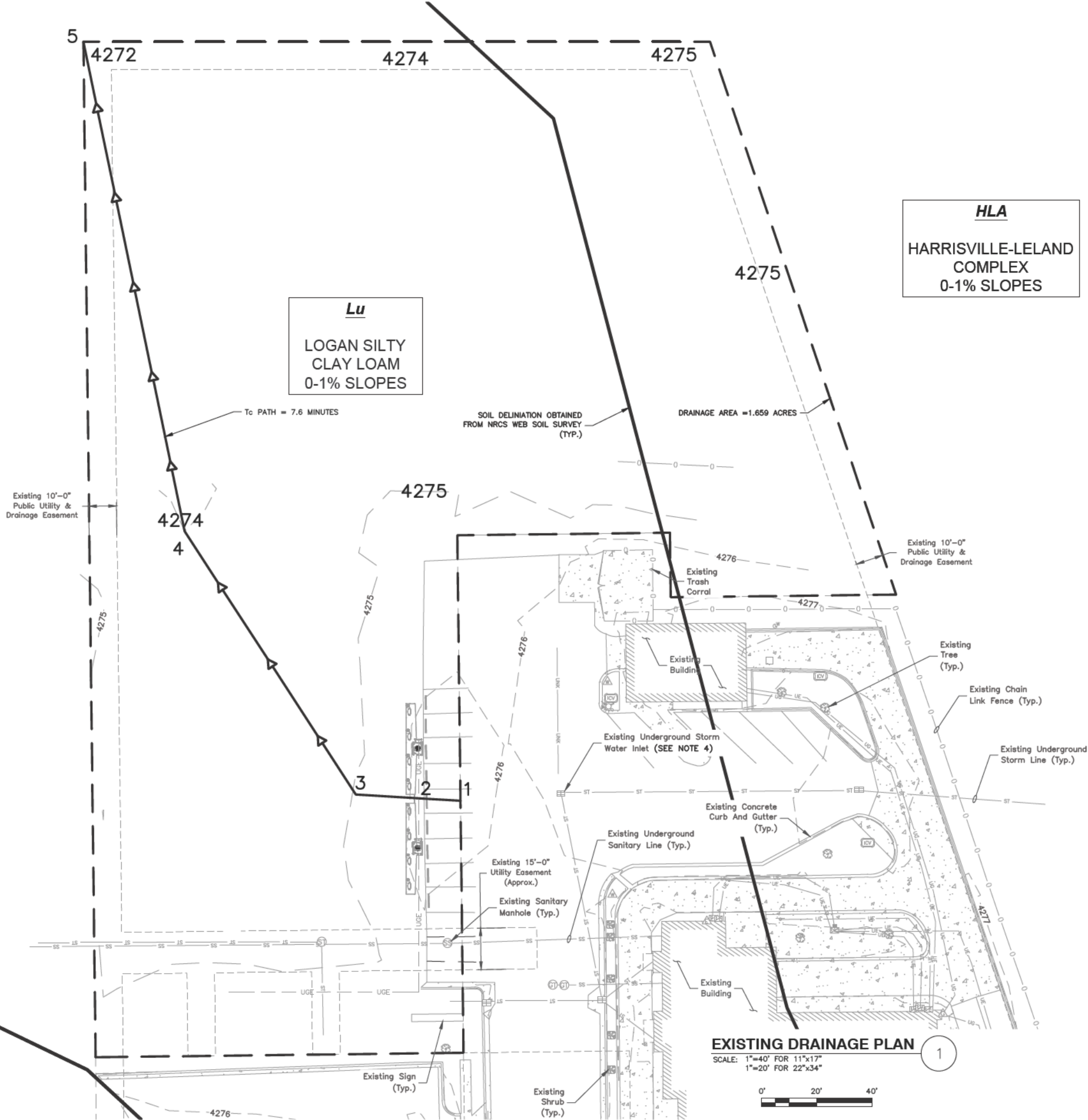
EV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

C-10



EV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

C-10



3500 DEER CREEK ROAD
PALO ALTO CA 94304
(650) 681-5000



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SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

EXISTING DRAINAGE
PLAN

SHEET NUMBER

C-11

Farr West EXISTING DRAINAGE
Prepared by Dewberry Engineers Inc.
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Type III 24-hr 10-YEAR Rainfall=2.14"
Printed 8/24/2023
Page 5

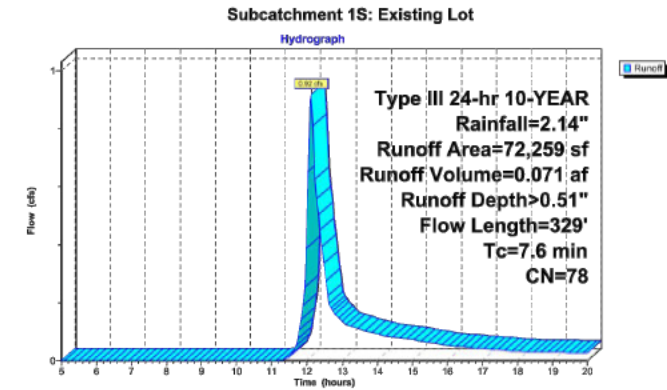
Summary for Subcatchment 1S: Existing Lot

Runoff = 0.92 cfs @ 12.12 hrs, Volume= 0.071 af, Depth> 0.51"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=2.14"

Area (sf)	CN	Description
70,189	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
72,259	78	Weighted Average
70,189		97.14% Pervious Area
2,070		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	14	0.0300	0.61		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
0.3	25	0.0400	1.40		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
2.8	110	0.0090	0.66		Shallow Concentrated Flow, 3-4
					Short Grass Pasture Kv= 7.0 fps
4.1	180	0.0110	0.73		Shallow Concentrated Flow, 4-5
					Short Grass Pasture Kv= 7.0 fps
7.6	329	Total			



Farr West EXISTING DRAINAGE
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Type III 24-hr 25-YEAR Rainfall=2.49"
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Page 8

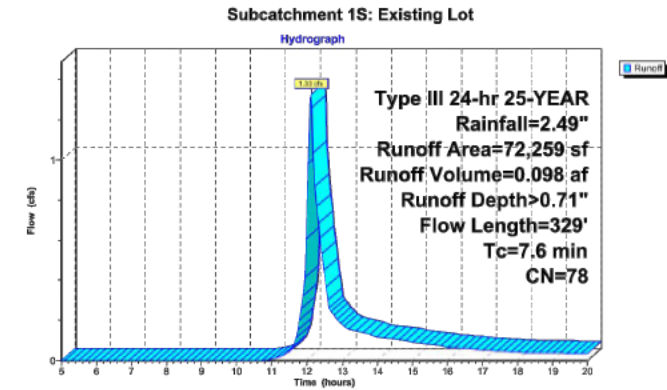
Summary for Subcatchment 1S: Existing Lot

Runoff = 1.33 cfs @ 12.12 hrs, Volume= 0.098 af, Depth> 0.71"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=2.49"

Area (sf)	CN	Description
70,189	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
72,259	78	Weighted Average
70,189		97.14% Pervious Area
2,070		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	14	0.0300	0.61		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
0.3	25	0.0400	1.40		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
2.8	110	0.0090	0.66		Shallow Concentrated Flow, 3-4
					Short Grass Pasture Kv= 7.0 fps
4.1	180	0.0110	0.73		Shallow Concentrated Flow, 4-5
					Short Grass Pasture Kv= 7.0 fps
7.6	329	Total			



Farr West EXISTING DRAINAGE
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Type III 24-hr 100-YEAR Rainfall=3.04"
Printed 8/24/2023
Page 14

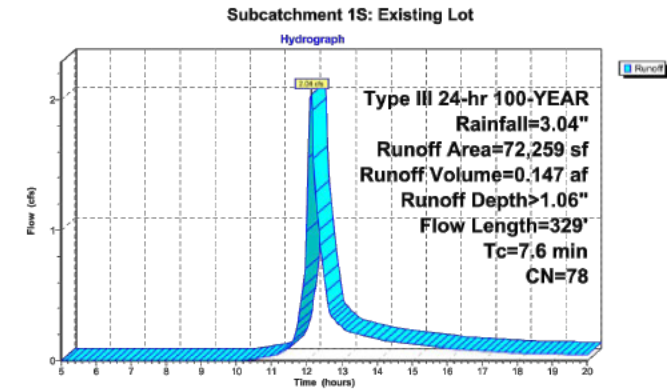
Summary for Subcatchment 1S: Existing Lot

Runoff = 2.04 cfs @ 12.12 hrs, Volume= 0.147 af, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YEAR Rainfall=3.04"

Area (sf)	CN	Description
70,189	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
72,259	78	Weighted Average
70,189		97.14% Pervious Area
2,070		2.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.4	14	0.0300	0.61		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
0.3	25	0.0400	1.40		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
2.8	110	0.0090	0.66		Shallow Concentrated Flow, 3-4
					Short Grass Pasture Kv= 7.0 fps
4.1	180	0.0110	0.73		Shallow Concentrated Flow, 4-5
					Short Grass Pasture Kv= 7.0 fps
7.6	329	Total			



EXISTING RUNOFF CALCS

SCALE: N.T.S.

1



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MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

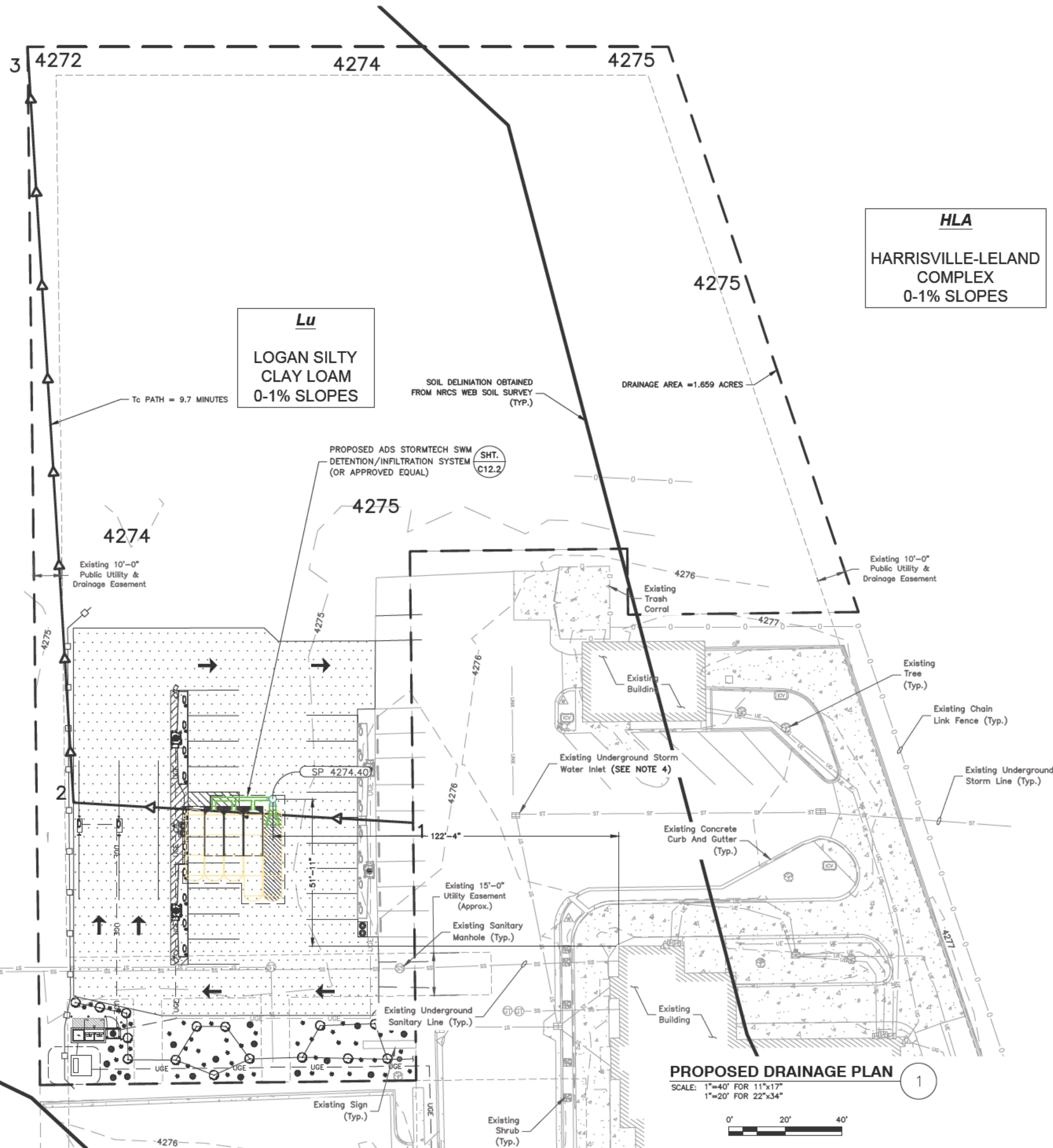
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

EXISTING DRAINAGE
CALCULATIONS

SHEET NUMBER

C-11.1



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(650) 681-5000



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MICHAEL J. MCTAVISH, P.E.
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SUBMITTALS

REV.	DATE	DESCRIPTION
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A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

PROPOSED DRAINAGE
PLAN

SHEET NUMBER

C-12

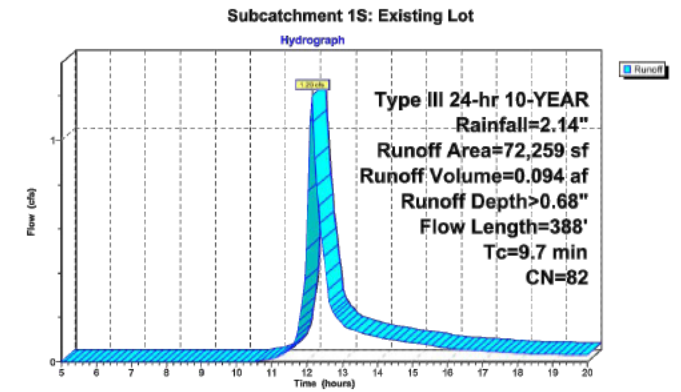
Summary for Subcatchment 1S: Existing Lot

Runoff = 1.20 cfs @ 12.15 hrs, Volume= 0.094 af, Depth> 0.68"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YEAR Rainfall=2.14"

Area (sf)	CN	Description
56,051	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
13,366	98	Proposed Paved parking, HSG D
772	98	Unconnected roofs, HSG D
72,259	82	Weighted Average
56,051		77.57% Pervious Area
16,208		22.43% Impervious Area
772		4.78% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.5	120	0.0200	0.80		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
7.2	268	0.0078	0.62		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
9.7	388	Total			



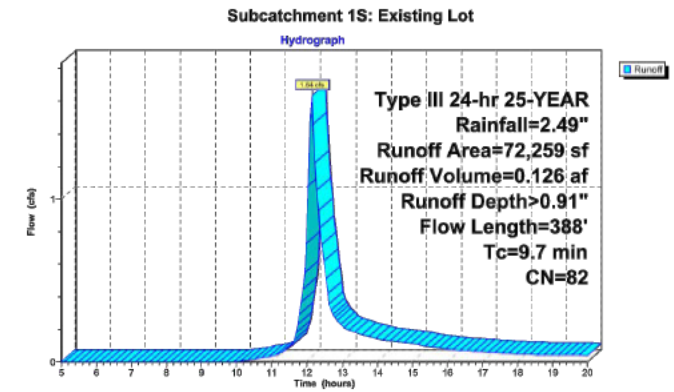
Summary for Subcatchment 1S: Existing Lot

Runoff = 1.64 cfs @ 12.15 hrs, Volume= 0.126 af, Depth> 0.91"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YEAR Rainfall=2.49"

Area (sf)	CN	Description
56,051	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
13,366	98	Proposed Paved parking, HSG D
772	98	Unconnected roofs, HSG D
72,259	82	Weighted Average
56,051		77.57% Pervious Area
16,208		22.43% Impervious Area
772		4.78% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.5	120	0.0200	0.80		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
7.2	268	0.0078	0.62		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
9.7	388	Total			



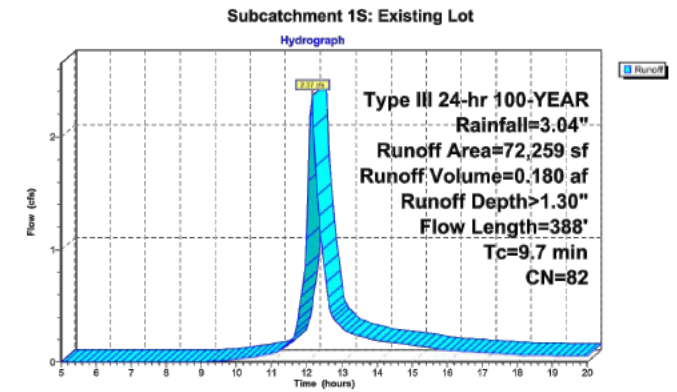
Summary for Subcatchment 1S: Existing Lot

Runoff = 2.37 cfs @ 12.14 hrs, Volume= 0.180 af, Depth> 1.30"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-YEAR Rainfall=3.04"

Area (sf)	CN	Description
56,051	77	Brush, Fair, HSG D
2,070	98	Paved parking, HSG D
13,366	98	Proposed Paved parking, HSG D
772	98	Unconnected roofs, HSG D
72,259	82	Weighted Average
56,051		77.57% Pervious Area
16,208		22.43% Impervious Area
772		4.78% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.5	120	0.0200	0.80		Sheet Flow, 1-2
					Smooth surfaces n= 0.011 P2= 1.00"
7.2	268	0.0078	0.62		Shallow Concentrated Flow, 2-3
					Short Grass Pasture Kv= 7.0 fps
9.7	388	Total			



PROPOSED RUNOFF CALCS

SCALE: N.T.S.

1



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PALO ALTO CA 94304
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SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

PROPOSED DRAINAGE
CALCULATIONS

SHEET NUMBER

C-12.1

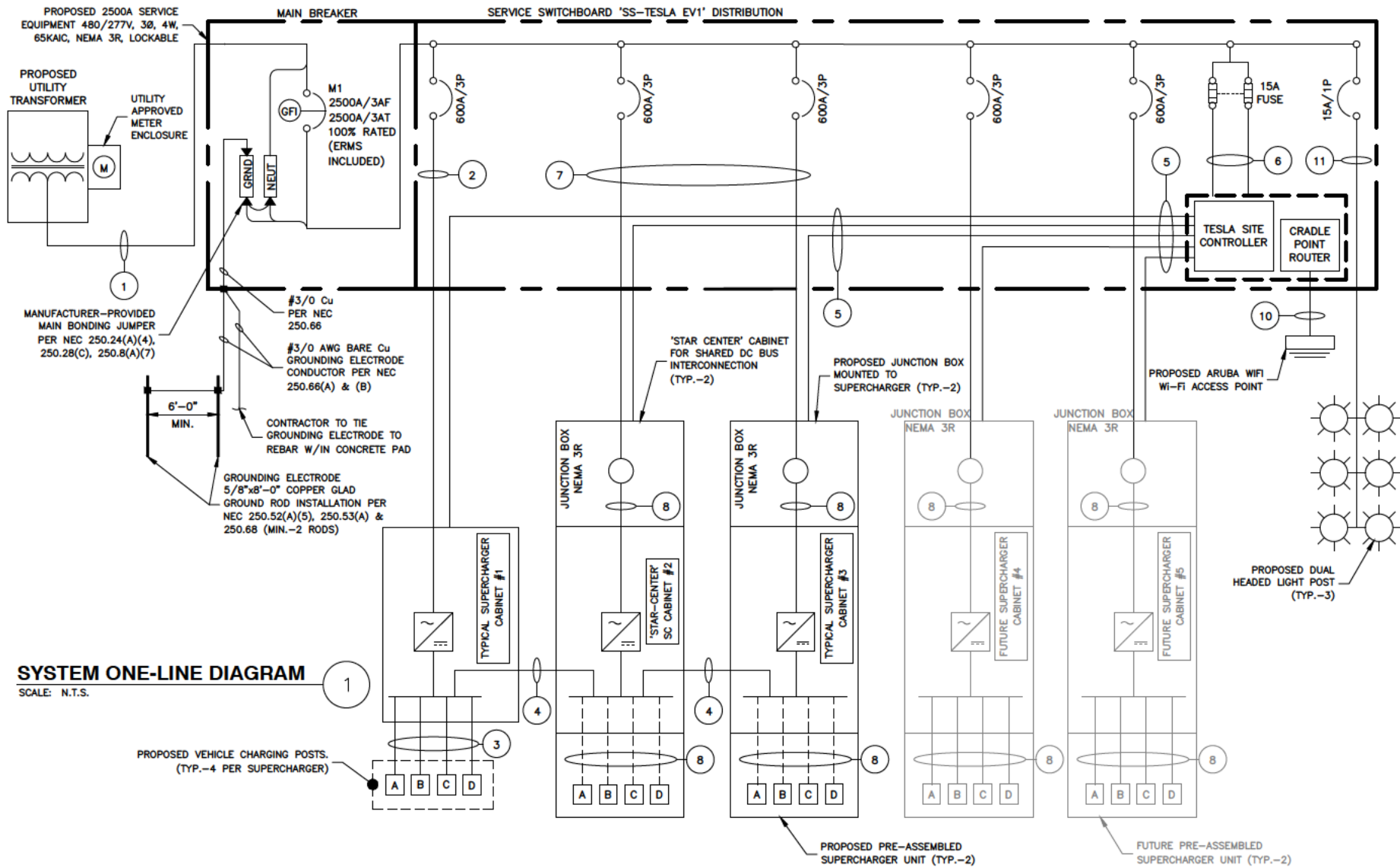
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10/20/03

MICHAEL J. MCTAVISH, P.E.
UTAH LICENSE No. 9658608-2202

SUBMITTALS		
REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SHEET TITLE STORMWATER MANAGEMENT DETAILS
SHEET NUMBER C-12.2



NOTES:

- NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS.
- ALL CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION.
- CONDUCTOR LENGTHS ARE ESTIMATES ONLY. FINAL CONDUCTOR ROUTING PATH AND LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR IN THE FILED BASED ON PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTORS BASED ON FIELD MEASUREMENTS (MUST BE APPROVED BY TESLA INSTALLATION MANAGER).
- ALL ELECTRICAL WORK AND RELATED ACTIVITIES PERFORMED ON-SITE SHALL BE DONE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE (NEC) AND UTILITY COMPANY STANDARDS.
- DC RUN LENGTH MAXIMUM IS 340' INCLUDING BURIED DEPTH. ANY DC RUN LENGTHS OVER THE MAXIMUM SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF TESLA.
- UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER AT TIME OF PRE CONSTRUCTION MEETING TO ENSURE ACCURACY OF INSTALLATION.
- UTILITY CONDUITS, CONNECTORS, TRANSFORMER PAD & TRANSFORMER FOUNDATION TO BE INSTALLED PER UTILITY SPECIFICATION. CONFIRM LATEST SPECIFICATIONS PRIOR TO CONSTRUCTION.
- EXISTING UNDERGROUND UTILITIES LOCATED WITHIN AREA OF PROPOSED TRENCH & EQUIPMENT SITE AREA. HAND DIG AND RELOCATE AS REQUIRED.
- CONTRACTOR RESPONSIBLE FOR ALL TRAFFIC SAFETY MEASURES THROUGHOUT DURATION OF CONSTRUCTION. COORDINATE ANY ACCESS ROAD CLOSURES W/OWNER.
- ALL OUTDOOR ELECTRICAL EQUIPMENT SHALL BE IN NEMA 3R RATED UNLESS OTHERWISE NOTED.

NOTE:

- THE DC BUS SHALL BE CONFIGURED IN A RADIAL FASHION WHERE ALL CONDUCTORS ROUTE FROM EACH 'TYPICAL' SUPERCHARGER CABINET, TO THE ONE, 'STAR CENTER' SUPERCHARGER CABINET.
- USE OF DURALINE FOR SUPERCHARGER TO CHARGE POST DC CONDUITS IS AN APPROVED ASSEMBLY. SEE TUV CERTIFICATION ON SHEET E-2

SERVICE SWITCHBOARD 'SS-TESLA' LOAD SCHEDULE

CKT NO.	TRIP AMPS	DESCRIPTION	KVA			KVA			DESCRIPTION	TRIP AMPS	CKT NO.
			A	B	C	A	B	C			
1	600A	SUPERCHARGER #1	129.00	—	—	129.00	—	—	SUPERCHARGER #2	600A	2
3			—	129.00	—	—	129.00	—			4
5			—	—	129.00	—	—	129.00			6
7	600A	SUPERCHARGER #3	129.00	—	—	129.00	—	—	SUPERCHARGER #4 (FUTURE)	600A	8
9			—	129.00	—	—	129.00	—			10
11			—	—	129.00	—	—	129.00			12
13	600A	SUPERCHARGER #5 (FUTURE)	129.00	—	—	0.10	—	—	CONTROLLER	15A	14
15			—	129.00	—	—	0.10	—			16
17			—	—	129.00	—	—	0.25			SITE LIGHTING
TOTALS		PHASE	A	B	C						
		APPARENT POWER	645.10 KVA	645.10 KVA	645.25 KVA						
		TOTAL CURRENT	2330 A								

SERVICE ELECTRICAL CIRCUIT SCHEDULE

NO:	FROM	TO	CONFIGURATION
1	PROPOSED TRANSFORMER	PROPOSED SERVICE EQUIPMENT PANEL	[8 SETS:] (3) 600KCMIL AL (THWN-2) (1) 600KCMIL AL (THWN-2) NEUT IN 4" CONDUIT
2	PROPOSED SERVICE BREAKER (600A) 80% RATED (TYP.-1)	PROPOSED STANDALONE TESLA SUPERCHARGER (TYP.-1)	[2 SETS:] (3) 500KCMIL AL (THWN-2) (1) 500KCMIL AL (THWN-2) NEUT (1) #1 CU OR 2/0 AL EGC* IN 4" PVC/HDPE CONDUIT**
3A	PROPOSED TESLA SUPERCHARGER (TYP.-1)	PROPOSED STANDALONE V3 TESLA POST*** (TYP.-4)	[1 SET PER CHARGE POST:] (4) 350KCMIL AL (XHHW-2) (1000V RATED) (1) #1 CU EGC OR (1) 2/0 AWG AL EGC* & SHIELDED 600V COMM CABLE (PER TESLA) IN 4" PVC/HDPE CONDUIT** (DURALINE ACCEPTABLE)
3B	PROPOSED TESLA SUPERCHARGER (TYP.-1)	PROPOSED STANDALONE V4 TESLA POST*** (TYP.-4)	[1 SET PER CHARGE POST:] (4) 600KCMIL AL (XHHW-2) (1000V RATED) (1) 2/0 AWG CU EGC (1000V RATED) (2) #8 CU LVDC & 1000V RATED COMM CABLE**** IN 4" CONDUIT** (DURALINE ACCEPTABLE)
4	'STAR CENTER' SUPERCHARGER CABINET DC BUS	DC BUS OF EACH TYPICAL SUPERCHARGER CABINET	[2 SETS:] (2) 600MCM AL (XHHW-2) (1) 1/0 AWG CU EGC & (1) 3/0 AWG AL DC MID (1000V RATED) IN 3" PVC/HDPE CONDUIT**
5	INTEGRATED SITE CONTROLLER	SUPERCHARGER (TYP.-3)	SHIELDED 600V RATED CAT6 COMM CABLE IN 1" PVC/HDPE CONDUIT**
6	PROPOSED SERVICE EQUIPMENT: PANEL (15A)	TESLA CONTROLLER	FACTORY INSTALLED WIRING (BY MANUFACTURER)
7	PROPOSED SERVICE BREAKER (600A) (TYP.-2)	PROPOSED PSU JUNCTION BOX (TYP.-2)	[2 SETS:] (3) 500KCMIL AL (THWN-2) (1) 500KCMIL AL (THWN-2) NEUT (1) #1 CU OR 2/0 AL EGC* IN 4" PVC/HDPE CONDUIT**
8	PROPOSED PSU JUNCTION BOX (TYP.-2)	PROPOSED PSU TESLA SUPERCHARGER (TYP.-2)	[2 SETS:] (3) 500KCMIL AL (THWN-2) (1) 500KCMIL AL (THWN-2) NEUT (1) #1 CU OR 2/0 AL EGC*
9A	PROPOSED PSU TESLA SUPERCHARGER (TYP.-5)	PROPOSED V3 TESLA POST*** (TYP.-4)	[1 SET PER CHARGE POST:] (4) 350KCMIL AL (XHHW-2) (1000V RATED) (1) #1 CU EGC OR (1) 2/0 AWG AL EGC* & SHIELDED 600V COMM CABLE (PER TESLA)
9B	PROPOSED PSU TESLA SUPERCHARGER (TYP.-5)	PROPOSED V4 TESLA POST*** (TYP.-4)	[1 SET PER CHARGE POST:] (4) 600KCMIL AL (XHHW-2) (1000V RATED) (1) 2/0 AWG CU EGC (1000V RATED) (2) #8 CU LVDC & 1000V RATED COMM CABLE
10	PROPOSED CRADLEPOINT ROUTER	PROPOSED ARUBA WIFI ACCESS POINT	(1) CAT5e OR CAT6 COMM CABLE IN 1" PVC/HDPE CONDUIT**
11	PROPOSED SERVICE EQUIPMENT: PANEL (15A)	PROPOSED SITE LIGHTING	(2) #10 CU (1) #10 CU GND IN 1" PVC/HDPE CONDUIT**

* MODIFIED PER NEC 250.64(A)(2)

** PER UL 615A AND NEC 253, LISTED HDPE CONDUIT PERMITTED. CONTRACTOR TO CONFIRM USE W/ TESLA CM

*** INSTALL APPLICABLE WIRING CONFIGURATION CORRESPONDING WITH CHARGE POST TYPE INSTALLED.

**** COMM CABLE TO BE ROUTED W/IN 4" CONDUIT. 1.25" CONDUIT CAN BE USED FOR RUNS OVER ±200FT.

SYSTEM PLACARD:

PLACARDS SHALL BE COLOR RED WITH 1" HEIGHT, CARDINAL WHITE LETTERING. INSTALL (1) SCREW EACH CORNER.

TESLA SUPERCHARGER
1750 W. 2700 N.
FARR WEST, UT 84404
2500A, 480/277, 3P, 4W
(877) 798-3752

PLACE ON SWITCHBOARD

TESLA EV SYSTEM
DISCONNECT

PLACE ON SWITCHBOARD MAIN DISCONNECT



3500 DEER CREEK ROAD
PALO ALTO CA 94304
(650) 681-5000



Dewberry Engineers Inc.

990 SOUTH BROADWAY
SUITE 400
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PHONE: 303.825.1802



JOSEPH GIGANTIELLO, P.E.
UTAH LICENSE No. 13236761-2022

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

ELECTRICAL ONE-LINE
DIAGRAM

SHEET NUMBER

E-1

AC SUPERCHARGER LENGTHS		
SUPERCHARGER	LINEAR LENGTH BREAKER PANEL TO SUPERCHARGER	ESTIMATED LENGTH*
1	5'	30'
LENGTH OF AC AL WIRE PER CONDUIT**:		120'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE ***:		240'
2	65'	90'
LENGTH OF AC AL WIRE PER CONDUIT**:		360'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE***:		720'
3	125'	150'
LENGTH OF AC AL WIRE PER CONDUIT**:		600'
TOTAL NUMBER OF CONDUITS:		2
LENGTH OF AC AL WIRE***:		1200'
TOTAL LENGTH OF AC AL WIRE****:		2160'
TOTAL LENGTH OF EGC*****:		540'
NOTES: 1. SEE SHEET E-1 FOR WIRE CONFIGURATION. * AC CONDUCTORS: 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS. ** ESTIMATED LENGTH OF AI WIRE = SUM OF ESTIMATED LENGTH X 4 WIRES PER SUPERCHARGER *** LENGTH = LENGTH OF AC AL WIRE PER CONDUIT X # OF CONDUITS **** TOTAL LENGTH = SUM OF AC LENGTHS ***** TOTAL LENGTH OF EGC = LENGTH X # SETS		

CONDUCTOR LENGTHS

SCALE: N.T.S.

SECONDARY SERVICE LENGTHS		
	LINEAR LENGTH	ESTIMATED LENGTH*
TRANSFORMER TO SWITCHGEAR	10'	35'
TOTAL LENGTH OF AL WIRE**:		BY UTILITY
NUMBER OF WIRE FILLED CONDUITS:		8
TOTAL LENGTH OF AC AL WIRE***:		BY UTILITY
NOTES: 1. SEE SHEET E-1 FOR WIRE CONFIGURATION. * AC CONDUCTORS: 25 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS. ** ESTIMATED LENGTH OF AI WIRE = SUM OF ESTIMATED LENGTH X 4 WIRES PER SET *** LENGTH OF AL WIRE PER DISCONNECT = ESTIMATED TOTAL LENGTH OF AL WIRE X # WIRE SETS		

DC CHARGING POST LENGTHS			
SUPERCHARGER	CHARGE POST	LINEAR LENGTH	ESTIMATED DC WIRE LENGTH*
1	1A	90'	112'
	1B	75'	97'
	1C	90'	112'
	1D	100'	122'
		CONDUIT LENGTH:	443'
		TOTAL CONDUCTOR LENGTH**:	1772'
		TOTAL LENGTH OF EGC & COMM CABLE:	443'
NOTES: 1. SEE SHEET E-1 FOR WIRE CONFIGURATION. 2. ANY DC RUN OVER 330' SHALL BE BROUGHT TO THE ATTENTION OF TESLA CM. * 22 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR BURIED DEPTH & TRANSITIONS. ** ESTIMATED LENGTH OF DC AL WIRE = SUM OF ESTIMATED LENGTH X 4 WIRES PER SUPERCHARGER			



Letter Report

TUV Rheinland of North America, Inc.
295 Foster St. #100
Littleton, MA 01460, USA
www.tuv.com

11/19/2021

Report No. 32195766.001
Project No. 234176170

Mr. Mark Edwards
Tesla, Inc.
3500 Deer Creek Rd
Palo Alto, CA 94304, USA

Tel: (678) 438 9475
Email: Markedwards@tesla.com

Subject: Duraline Conduits 2", 3" and 4" Testing

Dear Mr. Mark Edwards:

This letter report is to present the results of testing results of Duraline flexible conduit for Tesla supercharger station installation in accordance with the following standards:

- ANSI/CAN/UL1660 Liquid-tight Flexible Nonmetallic Conduit, 6th Ed. dated 01/30/2019
- UL 651A Schedule 40 and 80 High Density Polyethylene (HDPE) Conduit, 5th Ed. dated 03/10/2017
- UL 1990 Nonmetallic Underground Conduit with Conductors, 3rd Ed. dated 01/20/2017

The project was authorized by the signed PO #4900294467, dated 08/07/2021 for the project proposal # 234041515, the following tests have been completed by 11/02/2021 in the Duraline lab on Knoxville TN.

The following table lists completed tests in accordance with the standards UL 1990, UL 651A and UL 1660.

No.	UL 1990 Clause	UL 651A Clause	UL 1660 Clause	Test description	Test Result
1	10	11.3	--	Water absorption test	Pass
2	11	9.3	--	Low temperature handling test	Pass
3	--	--	5.6	Tension	Pass
4	--	--	5.5	Deflection test	Pass
5	--	--	5.4	Cold Impact	Pass
6	15	11.2	5.11	Moisture penetration	Pass
8	17	--	5.16	Direct burial crush test	Note

Note

- As discussed with Duraline engineers, conduit stiffness varies with wall thickness per Table 5 in the standard ASTM F2160 - 16 Solid Wall High Density Polyethylene (HDPE) Conduit based on Controlled Outside Diameter (OD). The stiffness calculated for conduit 2", 3" and 4" are 101+/22 psi, 92+/2 psi

M50009914 Attachment 1

Page 1 of 2

Rev. 0



Letter Report

TUV Rheinland of North America, Inc.
295 Foster St. #100
Littleton, MA 01460, USA
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and 61+/2 psi. The test has been performed per ASTM 2412 as required by both UL 1990 and UL 1660. All samples were visually inspected and no any cracks observed on samples after the test. Those stiffness test data are reference for Tesla engineers to determine conduit burial depth for Tesla supercharger station installation.

The Duraline conduit test report is enclosed.

The above Duraline conduits can be used in the field installation of charge post C3-350-A2 per NEC with adequate depth calculation.

If there are any questions regarding the results contained in this report, or any of the other services offered by TUV Rheinland of North America, Inc., please do not hesitate to contact the undersigned.

Please note, this letter report does not represent authorization for the use of any TUV Rheinland certification marks.

Evaluated by:

Zhiyong Hu

Principal Test Engineer
Email: zhu@us.tuv.com

Reviewed by:

Howard Liu

Manager, Power Electronics Segment - Americas
Email: hliu@us.tuv.com

SPECIALTY

SMOOTH-COR FLEX

- Flexible: Reduces/eliminates the need for sweeps and bends
- Crush resistant: Equivalent to Schedule 40 PVC
- Lightweight: Easier installation, 40% lighter than PVC
- Compatibility: Easily adapts to other conduit materials
- Glueless coupling: Safe, quick assembly
- Gasketed: Air and watertight
- Low COF: Longer cable pulls with lower cable stress

INSTALLATION TYPES

Underground
Direct Bury
Concrete Encasement

SIZE RANGE AVAILABLE

2.0"
3.0"
4.0"

STANDARD COLORS

Outer Wall: ■ ■ ■
Inner Wall: ■

STANDARD

DETAILS Manufactured from flexible HDPE (High Density Polyethylene)

SPECIFICATIONS All Smooth-Cor Flex dimensions meet or exceed one or more of the following: ASTM D-3350, ASTM D-638, ASTM D-792, ASTM D-1238, ASTM D-1693

CONDUIT MARKINGS Permanent marking along conduit includes: material, relevant standards, production info, and sequential feet or meter markings.

CO-EXTRUDED LINING Corrugated exterior with a smooth, co-extruded inner layer

PRE-INSTALLED TAPE Factory pre-installed Bull-Line™ 1250lb Pull Tape comes standard in Smooth-Cor Flex on steel reels. Smooth-Cor Flex coils are only available as empty.

OPTIONS

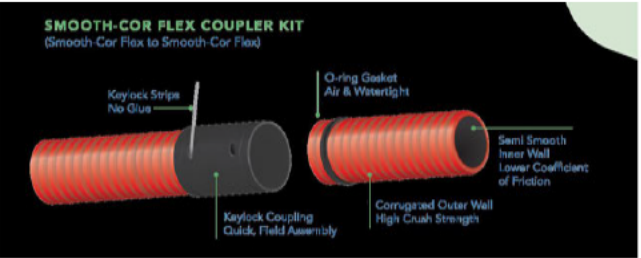
PACKAGING Available on steel reels or 250' coils

dur-line

+1 800 847 7641
WWW.DURALINE.COM

UL 1990/UL 651A/UL 1660

orbis



NOTES:

- DURALINE SMOOTH-COR FLEX CONDUIT HAS BEEN CERTIFIED AS CRITICAL COMPONENT OF THE SUPERCHARGER TO TUV.
- PRODUCT WILL BE USED TO CONNECT THE TESLA SUPERCHARGER CABINET TO TESLA CHARGE POST.
- DURALINE SMOOTH-COR FLEX CONDUIT SHALL NOT BE INSTALLED WITHIN SUPERCHARGER CABINETS OR POST. CONTRACTOR SHALL TRANSITION SMOOTH-COR FLEXIBLE CONDUIT TO PVC CONDUIT AND SWEEP PVC CONDUIT INTO THE SUPERCHARGER CABINETS OR POST.

DURALINE SMOOTH-COR FLEX DETAILS

SCALE: N.T.S.



3500 DEER CREEK ROAD
PALO ALTO CA 94304
(650) 681-5000



Dewberry Engineers Inc.

990 SOUTH BROADWAY
SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



JOSEPH GIGANTIELLO, P.E.
UTAH LICENSE No. 13236761-2022

DRAWN BY: KFM

CHECKED BY: SES

APPROVED BY: MJM/JG

PROJECT #: 50123704

JOB #: 50159192

SUBMITTALS		
REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

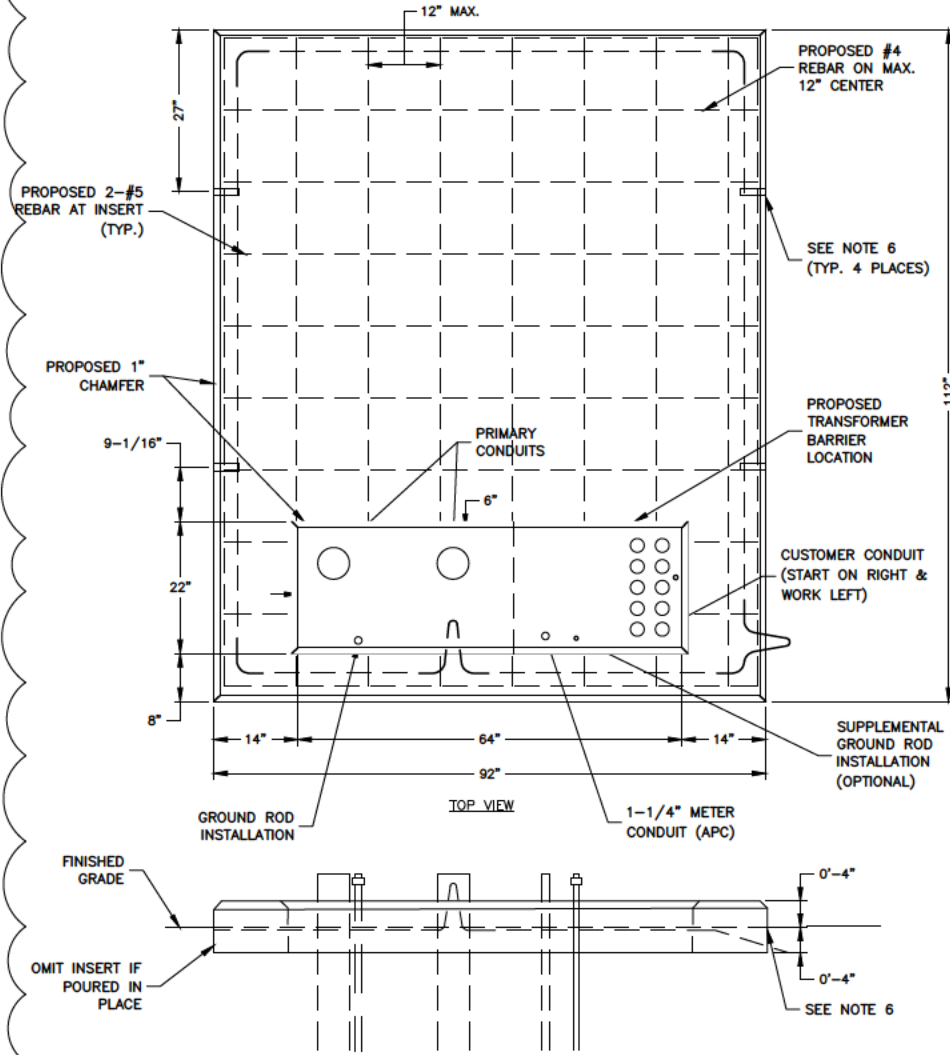
E-2

SCOPE OF WORK			
UTILITY	ROCKY MOUNTAIN POWER		
CATEGORY	ITEMS	TESLA	UTILITY
PRIMARY	PRIMARY TRENCHING	X	
	INSTALL PRIMARY CONDUIT	X	
	INSTALL PULL ROPE	X	
	INSTALL PRIMARY FEEDERS		X
	PROVIDE PRIMARY FEEDERS		X
TRANSFORMER	PROVIDE ROAD CUTS/ROAD BORES (IF NECESSARY)	X	
	INSTALL TRANSFORMER PAD	X	
	PROVIDE TRANSFORMER	X	
	INSTALL TRANSFORMER		X
SWITCHBOARD	INSTALL CONNECTIONS-PRIMARY		X
	INSTALL CONNECTIONS-SECONDARY		X
	PROVIDE METER		X
SECONDARY	INSTALL METER		X
	LAND SECONDARY FEEDERS	X	
	SECONDARY TRENCHING	X	
	INSTALL SECONDARY CONDUIT	X	
	INSTALL PULL ROPE	X	
	PROVIDE SECONDARY FEEDERS		X
	INSTALL SECONDARY FEEDERS		X
	PROVIDE ROAD CUTS/ROAD BORES (IF NECESSARY)	X	
	PAVEMENT REPLACEMENT (IF NECESSARY)	X	

UTILITY SOW TABLE
SCALE: N.T.S.

1

DETAIL IS FOR DIAGRAMATIC REFERENCE.
PENDING TRANSFORMER PAD SPECIFICATION
FROM ROCKY MOUNTAIN POWER



PRECAST OR POURED IN PLACE CONCRETE PAD FOR 3 PHASE
PAD-MOUNTED TRANSFORMER, 12 KV THRU 25 KV PRIMARY VOLTAGE,
500 KVA TO 2500 KVA RADIAL STEP-UP/DOWN, 500-3750 KVA LOOP FEED

TRANSFORMER PAD

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



2



3500 DEER CREEK ROAD
PALO ALTO, CA 94304
(650) 681-5000



Dewberry Engineers Inc.
990 SOUTH BROADWAY
SUITE 400
DENVER, CO 80209-4275
PHONE: 303.825.1802



JOSEPH GIGANTIELLO, P.E.
UTAH LICENSE No. 13236761-2022

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SUBMITTALS

REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:

FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:

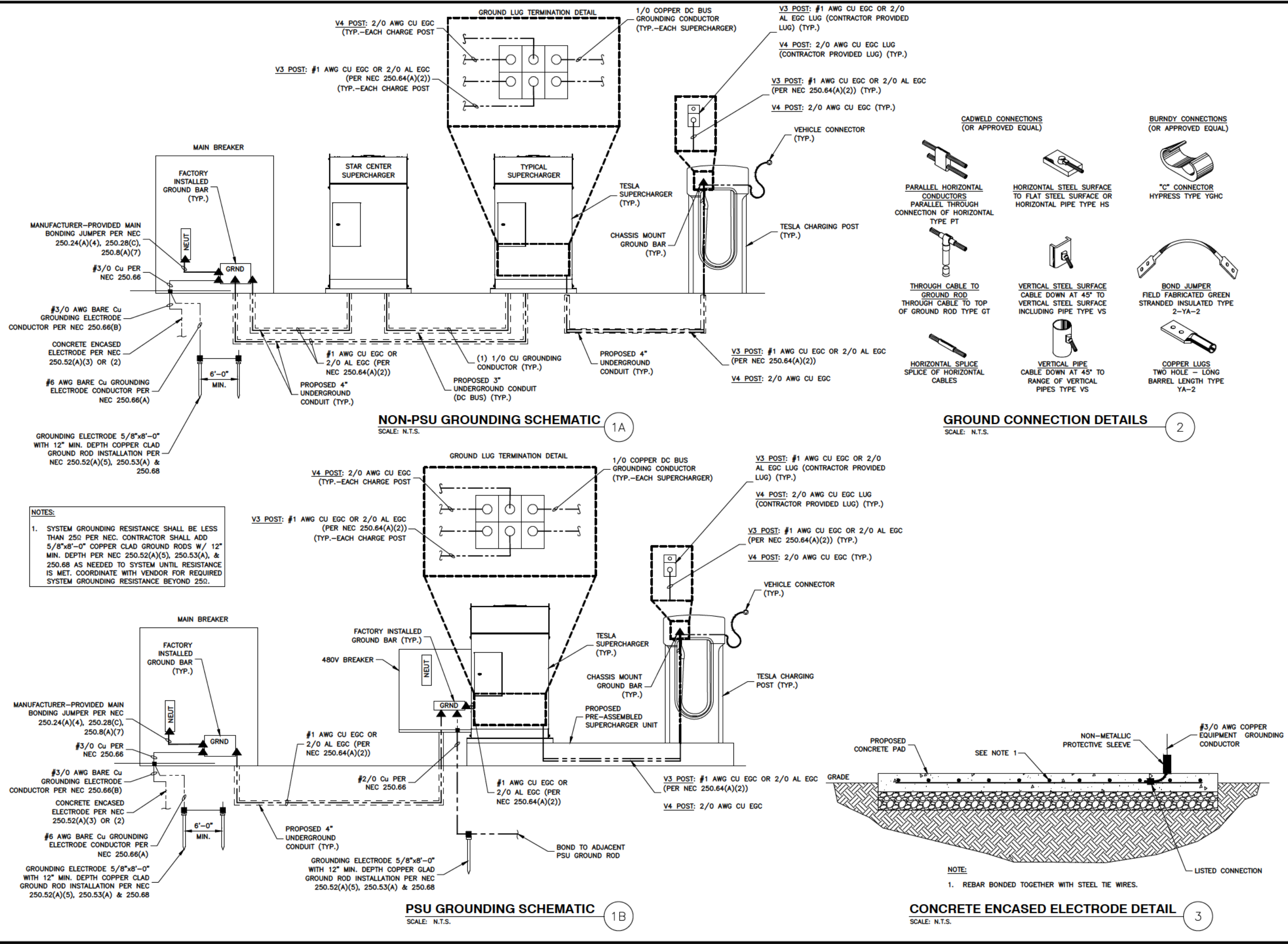
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE

UTILITY DETAILS

SHEET NUMBER

E-3





3500 DEER CREEK ROAD
PALO ALTO, CA 94304
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SUBMITTALS		
REV.	DATE	DESCRIPTION
1	10/20/23	CITY COMMENTS
0	09/01/23	ISSUE FOR S&S
A	04/13/23	FOR REVIEW

SITE NAME:
FARR WEST, UT
(TRT ID: 27285)

SITE ADDRESS:
1750 W 2700 N
FARR WEST, UT 84404

SHEET TITLE
GROUNDING SCHEMATIC
& DETAILS

SHEET NUMBER
G-1