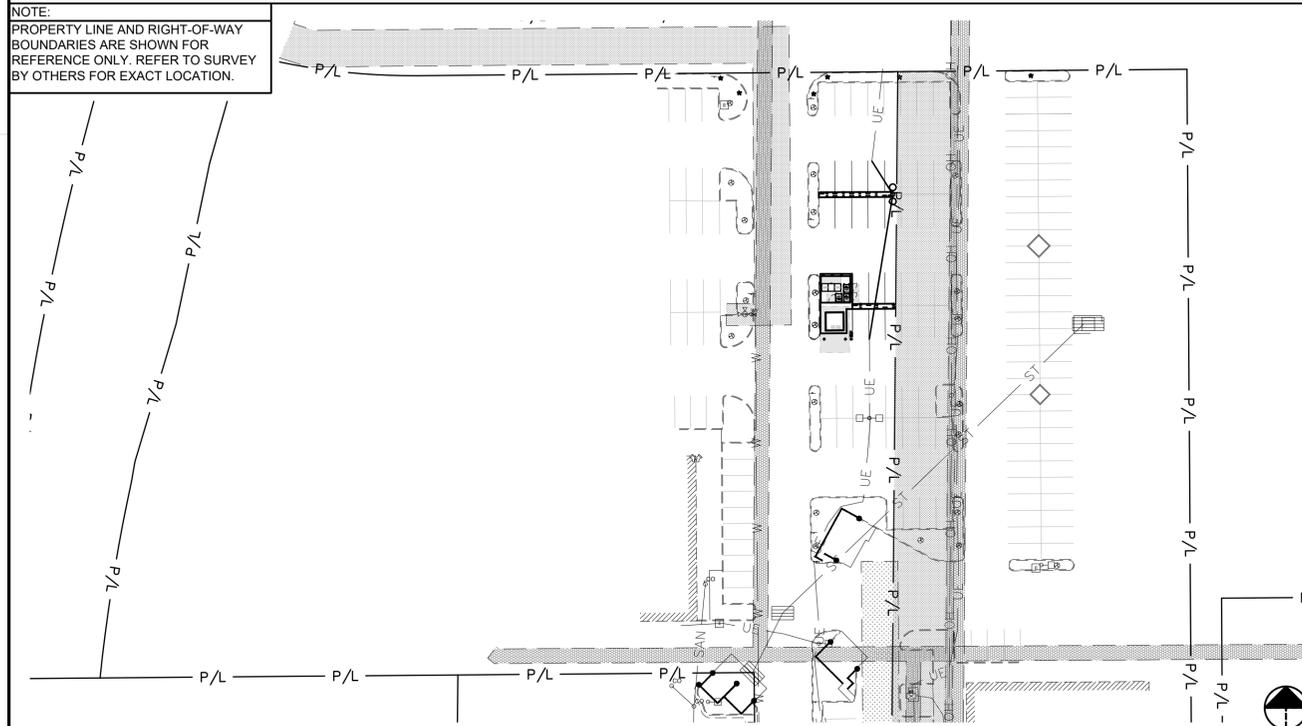


TESLA

CHARGING STATION
 1859 S. STAPLEY DR. (TESLA STATION)
 MESA, AZ 85204
 TRT 26827



SITE LAYOUT



AERIAL MAP



REV.	DATE	DESCRIPTION
A	04/05/22	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

1859 S. STAPLEY DR.
 (TESLA STATION) - TRT26827
 MESA, AZ 85204

TITLE SHEET & PROJECT DATA

SITE INFORMATION

ADDRESS:
 1859 S. STAPLEY DR.
 (TESLA STATION)
 MESA, AZ 85204

POWER COMPANY:
 SRP
 CONTACT: STEVEN RICE
 (602) 236-6313
 WORK ORDER #: 888232

PROPERTY OWNER:
 T.B.D.
 CONTACT: T.B.D.
 T.B.D.

EQUIPMENT SUPPLIER:
 TESLA, INC.
 3500 DEER CREEK ROAD
 PALO ALTO, CA 94304
 (650) 681-5000

LATITUDE (NAVD88)
 N 33°22'50.1096"
 33.380286°

LONGITUDE (NAVD88)
 W 111°48'20.5992"
 -111.805722°

PERMITTING JURISDICTION:
 CITY OF MESA
 55 N. CENTER ST.
 MESA, AZ 85201
 CONTACT: ROBERT APODACA
 ROBERT.APODACA@MESAAZ.GOV
 (480) 644-4273

COUNTY:
 MARICOPA

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:
 2018 INTERNATIONAL BUILDING CODE
 2017 NATIONAL ELECTRICAL CODE
 IN THE EVENT OF CONFLICT, THE MOST RESTRICTIVE CODE SHALL PREVAIL.



Arizona 811
 811 or 800-782-5348

DESIGN LOADING

SNOW LOADS:
 GROUND SNOW LOAD (P_g) 0 PSF

LATERAL LOAD DESIGN DATA:
 WIND DESIGN DATA (ASCE 7-16):
 BASIC WIND SPEED (V_{ult}): 102 MPH
 RISK CATEGORY II
 EXPOSURE CATEGORY C

SEISMIC DESIGN DATA (ASCE 7-16):
 1.0 SEISMIC IMPORTANCE FACTOR (I) 1.0
 RISK CATEGORY II
 SITE CLASS (ASSUMED) D
 MAPPED SPECTRAL RESPONSE
 SHORT PERIODS (S_s) 0.187
 1 SEC. PERIODS (S_1) 0.066
 SPECTRAL RESPONSE COEFF.
 SHORT PERIODS (S_{ps}) 0.199
 1 SEC. PERIODS (S_{p1}) 0.106

SEISMIC DESIGN CATEGORY B

FROST DEPTH: 10"

DRAWING INDEX

T-1	TITLE SHEET & PROJECT DATA
	TESLA DATASHEET
CIVIL SHEET TITLE	
GN-1	GENERAL NOTES
-	TOPOGRAPHIC SURVEY
C-1	DEMOLITION PLAN
C-2	SITE PLAN
C-3	CIVIL DETAILS
C-4	CIVIL DETAILS
ELECTRICAL SHEET TITLE	
EN-1	ELECTRICAL GENERAL NOTES
E-1	ELECTRICAL EQUIPMENT PLAN
E-2	ONE-LINE DIAGRAM & PANEL SCHEDULE
E-3	ELECTRICAL DETAILS

GPD GROUP PROFESSIONAL CORPORATION CONTACTS:

PROJECT MANAGER:
 ZACHERY SHEETS, PE - OH# 77870
 (330) 572-2148
 ZSHEETS@GPDGROUP.COM

UTILITY COORDINATOR:
 NICHOLAS TAMBURRINO
 (330) 564-2362
 NTAMBURRINO@GPDGROUP.COM

PROJECT COORDINATOR:
 BRIAN GUTHRIDGE
 (330) 572-2249
 BGUTHRIDGE@GPDGROUP.COM

PERMIT COORDINATOR:
 IAN RUSSELL
 (330) 572-3536
 GPDCHARGEPERMITS@GPDGROUP.COM

PROJECT DESCRIPTION

- INSTALL (3) V3 SUPERCHARGER CABINETS
- INSTALL (12) V3 CHARGING POSTS
- INSTALL (1) SWITCHGEAR ASSEMBLY W/ INTEGRATED MASTER CONTROLLER
- INSTALL (1) UTILITY TRANSFORMER

FLOOD HAZARD AREA NOTE

THE SITE IS LOCATED IN FLOOD ZONE "X" (0.2 PCT ANNUAL CHANCE FLOOD HAZARD) PER FLOOD INSURANCE MAP NUMBER 04013C2270M, EFFECTIVE DATE - 11/04/2015.

BEFORE SCALING & PLAN REPRODUCTION WARNING

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND FIELD CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY TESLA IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

REFERENCED DOCUMENTS

- SUPERCHARGER INSTALLATION MANUAL
- SUPERCHARGER POST INSTALLATION MANUAL
- UTILITY DESIGN DOCUMENTS
- ELECTRICAL EQUIPMENT CUTSHEETS

ISSUED FOR:

PERMIT	xxx
BID	xxx
CONSTRUCTION	xxx
RECORD	xxx

INSTALL MANAGER	DESIGNER
ELIZABETH SORENSEN	KSB

JOB NO.
2021141.55

T-1

DC CHARGING POST LENGTHS			
CABINET	POST	LF	**EST**
1	1A	30	52
	1B	15	37
	1C	23	45
	1D	34	56
2	2A	79	101
	2B	70	92
	2C	73	95
	2D	63	85
3	3A	60	82
	3B	64	86
	3C	59	81
	3D	73	95
EST CONDUIT LENGTH		907	

AC CHARGING CABINET LENGTHS			
CIRCUIT	CABINET	LF	**EST**
1	1	12	28
2	2	17	33
3	3	9	25
TOTAL LENGTH OF AC WIRE		688	
TOTAL LENGTH OF GND Cu WIRE		172	

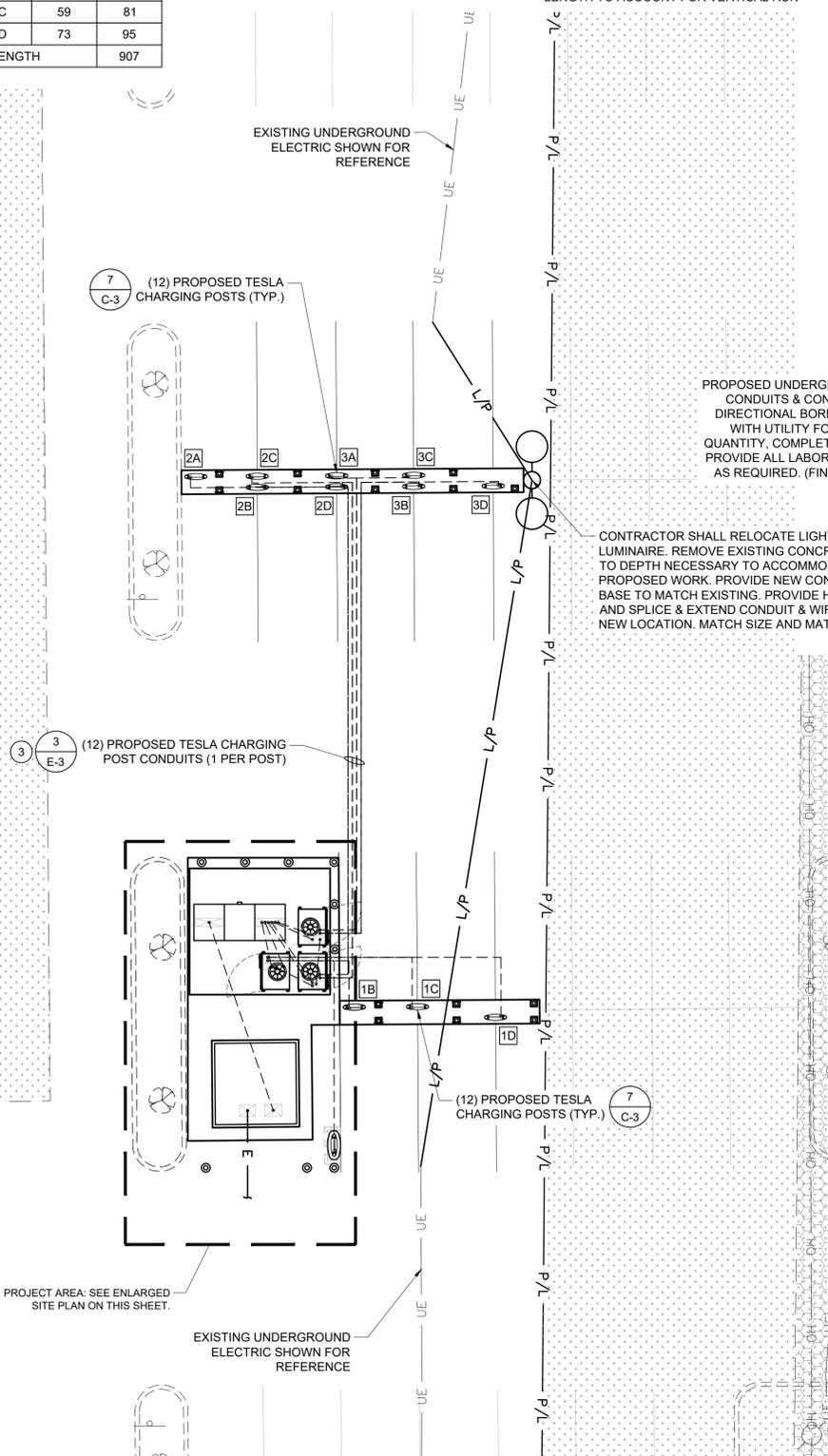
UTILITY SERVICE LENGTHS		
UTILITY TRANSFORMER TO SWITCHGEAR	LF	*EST*
	23	45
TOTAL LENGTH OF WIRE PER CONDUIT	180	
NUMBER OF WIRE FILLED CONDUIT	7	
TOTAL LENGTH OF WIRE	1260	

*AC UTILITY SERVICE CONDUCTORS
22 FT IS ADDED TO THE HORIZONTAL RUN TO ACCOUNT FOR BURIED DEPTH

**AC CONDUCTORS
16 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR THE VERTICAL RUN

***DC CONDUCTORS
22 FT IS ADDED TO THE HORIZONTAL RUN LENGTH TO ACCOUNT FOR VERTICAL RUN

SEE SHEET E-3 FOR FEEDER SCHEDULE
TOTAL LENGTH OF AC WIRE
SUM OF EST LENGTH x 8 WIRES PER CABINET
TOTAL LENGTH OF GND Cu
SUM OF EST LENGTHS x (2) SETS

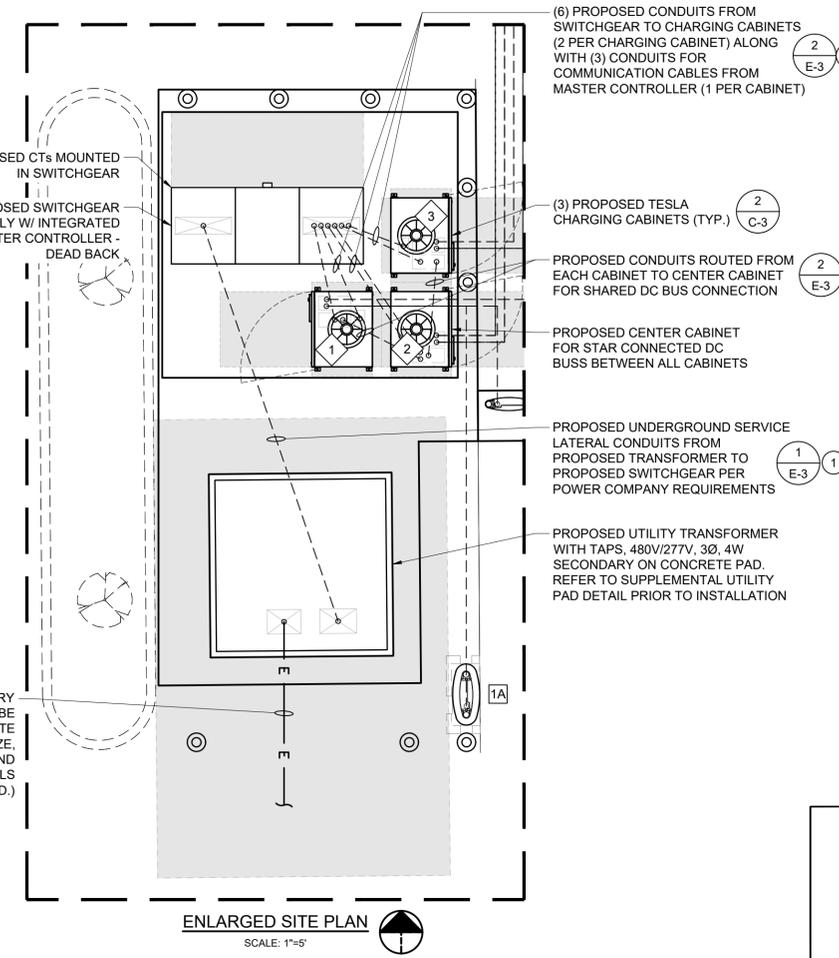


PROPOSED CTs MOUNTED IN SWITCHGEAR

PROPOSED SWITCHGEAR ASSEMBLY W/ INTEGRATED MASTER CONTROLLER - DEAD BACK

PROPOSED UNDERGROUND PRIMARY CONDUITS & CONDUCTORS TO BE DIRECTIONAL BORED. COORDINATE WITH UTILITY FOR CONDUIT SIZE, QUANTITY, COMPLETE ROUTING AND PROVIDE ALL LABOR AND MATERIALS AS REQUIRED. (FINAL ROUTE T.B.D.)

CONTRACTOR SHALL RELOCATE LIGHT POLE AND LUMINAIRE. REMOVE EXISTING CONCRETE BASE TO DEPTH NECESSARY TO ACCOMMODATE PROPOSED WORK. PROVIDE NEW CONCRETE BASE TO MATCH EXISTING. PROVIDE HANDHOLE AND SPLICE & EXTEND CONDUIT & WIRING TO NEW LOCATION. MATCH SIZE AND MATERIAL.



ENLARGED SITE PLAN
SCALE: 1"=5'

- (6) PROPOSED CONDUITS FROM SWITCHGEAR TO CHARGING CABINETS (2 PER CHARGING CABINET) ALONG WITH (3) CONDUITS FOR COMMUNICATION CABLES FROM MASTER CONTROLLER (1 PER CABINET)
- (3) PROPOSED TESLA CHARGING CABINETS (TYP.)
- PROPOSED CONDUITS ROUTED FROM EACH CABINET TO CENTER CABINET FOR SHARED DC BUS CONNECTION
- PROPOSED CENTER CABINET FOR STAR CONNECTED DC BUSES BETWEEN ALL CABINETS
- PROPOSED UNDERGROUND SERVICE LATERAL CONDUITS FROM PROPOSED TRANSFORMER TO PROPOSED SWITCHGEAR PER POWER COMPANY REQUIREMENTS
- PROPOSED UTILITY TRANSFORMER WITH TAPS, 480V/277V, 3Ø, 4W SECONDARY ON CONCRETE PAD. REFER TO SUPPLEMENTAL UTILITY PAD DETAIL PRIOR TO INSTALLATION

GENERAL SHEET NOTES

- "# " DENOTES FEEDER REFERENCE. REFER TO SHEET E-2 FOR FEEDER/CIRCUIT SCHEDULE.
- CONTRACTOR SHALL REFER TO CIVIL SHEETS FOR EXISTING LANDSCAPING TO REMAIN AND PROPOSED LANDSCAPING.
- CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES.
- CONDUIT ELBOWS SHALL BE SIZED PER NEC. CONTRACTOR SHALL VERIFY MANUFACTURER ALLOWABLE FILL AND MINIMUM CONDUCTOR BENDING RADIUS. SEE FEEDER SCHEDULE FOR CONDUIT & CONDUCTOR SPECIFICATIONS.
- ALL CONDUITS ACCESSIBLE TO THE PUBLIC OR WHICH CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
- PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY BY OTHERS FOR EXACT LOCATION.
- UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER TO ENSURE ACCURACY OF INSTALLATION.
- ALL PROPOSED CONDUITS MUST MEET MINIMUM DEPTH REQUIREMENTS AS OUTLINED IN TRENCH DETAILS, AS WELL AS MAINTAIN A MINIMUM OF 18" CLEAR OF ALL EXISTING OBSTRUCTIONS INCLUDING (BUT NOT LIMITED TO) STORM PIPES, SANITARY PIPES, WATER LINES AND OTHER UNDERGROUND UTILITIES.
- PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY BY OTHERS FOR EXACT LOCATION.
- FOR TRAFFIC CONTROL PROCEDURES (IF APPLICABLE), SEE TRAFFIC CONTROL NOTES ON SHEET GN-1.

ELECTRICAL SCOPE OF WORK RESPONSIBILITIES		
SCOPE	BY UTILITY	BY CONTRACTOR
PROVIDE & INSTALL PRIMARY SIDE OVERHEAD CONDUCTORS	X	
PROVIDE PRIMARY SIDE TRENCHING		X
PROVIDE & INSTALL PRIMARY SIDE CONDUITS W/ PULLWIRE		X
PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS	X	
PROVIDE & INSTALL UTILITY POLE (RISER BY CONTRACTOR)	X	
PROVIDE & INSTALL UTILITY TRANSFORMER PAD		X
PROVIDE UTILITY TRANSFORMER	X	
INSTALL UTILITY TRANSFORMER	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY)	X	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY)	X	
PROVIDE METER	X	
INSTALL METER	X	
PROVIDE CTs	X	
INSTALL CTs (INSIDE SWITCHGEAR)		X
PROVIDE SECONDARY SIDE TRENCHING		X
PROVIDE & INSTALL SECONDARY SIDE CONDUITS W/ PULLWIRE		X
PROVIDE & INSTALL SECONDARY SIDE CONDUCTORS	X	
PROVIDE ROAD CUTS / ROAD BORES		X
PROVIDE & INSTALL PAVEMENT REPLACEMENT		X

NOTE: SCOPE SHOWN ABOVE WAS PROVIDED BY SRP. FIELD VERIFY PRIOR TO CONSTRUCTION.

POWER COMPANY CONTACTS

SRP
ATTN: STEVEN RICE
(602) 236-6313
STEVEN.RICE@SRPNET.COM



REV.	DATE	DESCRIPTION
A	04/05/22	ISSUED FOR 90% REVIEW

NOT FOR CONSTRUCTION

1859 S. STAPLEY DR.
(TESLA STATION) - TR126827
MESA, AZ 85204

ELECTRICAL EQUIPMENT PLAN

ISSUED FOR:	
PERMIT	xxx
BID	xxx
CONSTRUCTION	xxx
RECORD	xxx

INSTALL MANAGER	DESIGNER
ELIZABETH SORENSEN	KSB

JOB NO.
2021141.55

E-1