CITY OF SCOTTSDALE

SA Reports

Development Review (Minor) Staff Approval

279-SA-2021

Aps Ev @ Fairmont Scottsdale Princess

APPLICATION INFORMATION			
LOCATION:	7575 E Princess Dr	APPLICANT:	Pamela Smith
PARCEL:	215-08-694	COMPANY:	Pamela Smith
Q.S.:	37-45	ADDRESS:	8310 Miramar Mall, Suite A San Diego, CA 92121
ZONING:	C-2 PCD	PHONE:	(760) 298-9023
Request:	Request by applicant for Installation of electric vehicle charging stations including: (4) Level 2 charging ports and (1) 200A Meter		

STIPULATIONS

1. The location and configuration of all site improvements shall be consistent with the site plan submitted by C2 Group, with a city staff date of 10/11/21.

2. Charging station shall not display advertising or sponsorship.

CONSTRUCTION DOCUMENT PLAN REVIEW SUBMITTAL REQUIREMENTS

Follow the online steps to apply for a Minimum Permit, using the City's e-Services:
https://eservices.scottsdaleaz.gov/bldgresources/MinimumPermit

PERMIT APPLICATION: ☒ **Completed Permit Application**
The permit application may be filled-out and submitted online at:
https://eservices.scottsdaleaz.gov/bldgresources/plans or obtained for printing at:
- Commercial/Multi-family
http://www.scottsdaleaz.gov/assets/ScottsdaleAZ/Building/APP_Permit_Commercial.pdf

Expiration of Development Review (Minor) Approval

This approval expires two (2) years from date of approval if a permit has not been issued, or if no permit is required, work for which approval has been granted has not been completed.

Staff Signature: _____ Date: 10/11/21

Casey Steinke, 480-312-2611

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

APS PROJECT 165552
FAIRMONT SCOTTSDALE PRINCESS
INSTALLATION OF 26.62kVA ELECTRIC VEHICLE LEVEL 2 CHARGING EQUIPMENT
7575 E PRINCESS DR
SCOTTSDALE, AZ 85255

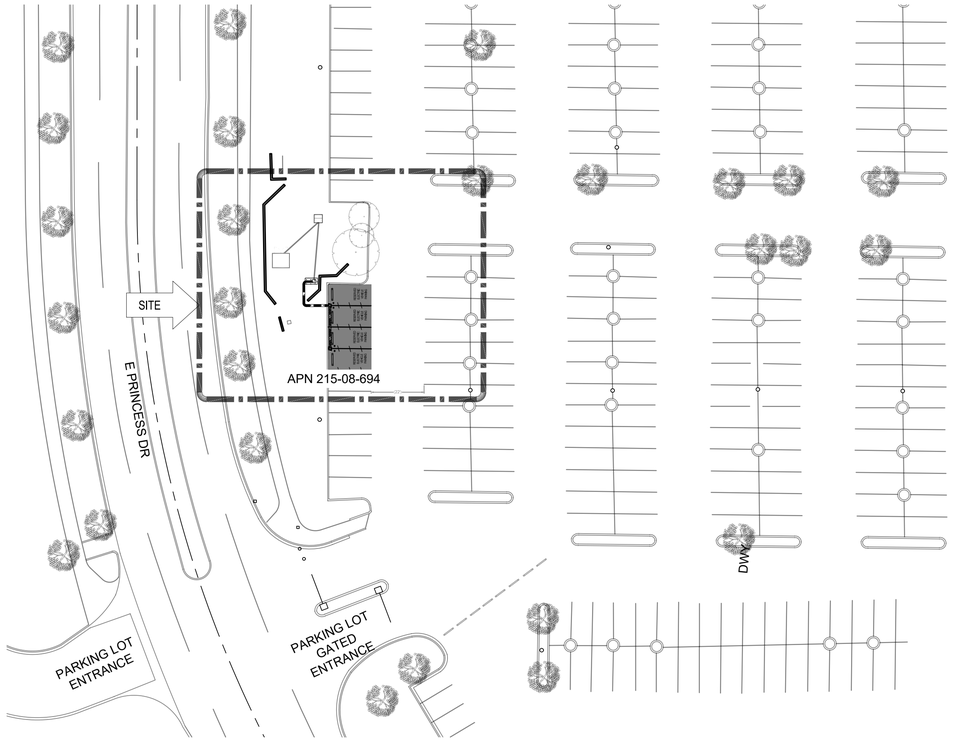
APPROVED
Stip Set PLANNING
10/11/2021 tsimke
DATE APPROVED BY

ABBREVIATIONS

1P	ONE POLE (2,3,4 APPLICABLE)
A	AMPERE
AB	AGGREGATE BASE
AC	ALTERNATING CURRENT
AC	ASPHALT CONCRETE
AIC	AVAILABLE INTERRUPTING CAPACITY
AT	AMPERE TRIP (RATING)
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BB	BOTTOM OF BASIN
BC	BACK OF CURB
BIL	BASIC IMPULSE LEVEL
C	CONDUIT
CF	CURB FACE
CL	CENTERLINE
CMIL	CIRCULAR MIL
CT	CURRENT TRANSFORMER
DC	DIRECT CURRENT
E	EAST
EGC	EQUIPMENT GROUNDING CONDUCTOR
E'LY	EASTERLY
EMT	ELECTRICAL METALLIC TUBING
EP	EDGE OF PAVEMENT
EPR	ETHYLENE PROPYLENE RUBBER
EVCS	ELECTRIC VEHICLE CHARGING STATION
EX.	EXISTING
FBO	FURNISHED BY OTHERS
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FLA	FULL LOAD AMPS
FO	FIBER OPTIC
FS	FINISHED SURFACE
FT	FEET
FWE	FURNISHED WITH EQUIPMENT
G	GROUND FAULT TRIP
G, GND	GROUND
GB	GRADE BREAK
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HI PT	HIGH POINT
I	INSTANTANEOUS
IE	INVERT ELEVATION
IMC	INTERMEDIATE METAL CONDUIT
INV	INVERT
ISC	INTERRUPTING SHORT CIRCUIT
KV	KILO VOLT
KVA	KILOVOLTAMPERE
KW	KILO WATTS
KWH	KILOWATTHOUR
L	LONG TIME TRIP
LB	POUND
L-G	LINE TO GROUND VOLTAGE
L-L	LINE TO LINE VOLTAGE
L-N	LINE TO NEUTRAL VOLTAGE
LSIG	ELECTRONIC TRIP DEVICE
M	METER
MBJ	MAIN BONDING JUMPER

ABBREVIATIONS CON'T

MCB	MAIN CIRCUIT BREAKER
MH	MANHOLE
MLO	MAIN LUG ONLY
MVA	MEGA VOLT AMPERE
N	NEUTRAL
N	NORTH
NEC	NATIONAL ELECTRICAL CODE
NTS	NOT TO SCALE
OC	ON CENTER
OH	OVERHEAD
PB	PULLBOX
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (FOR CONDUIT)
R	RELAY
R	RADIUS
R/W	RIGHT-OF-WAY
RGS	RIGID STEEL CONDUIT
RL	RIDGE LINE
S	SHORT TIME TRIP
S	SEWER OR SOUTH
SCCR	SHORT-CIRCUIT CURRENT RATING
SCH	SCHEDULE (FOR CONDUIT)
SES	SERVICE ENTRANCE SECTION
SLD	SINGLE LINE DIAGRAM
SPD	SURGE PROTECTIVE DEVICE
SSBJ	SUPPLY SIDE BONDING JUMPER
STD	STANDARD
SW	SWITCH
SWGR	SWITCHGEAR
TB	TOP OF BASIN
TC	TOP OF CURB
TG	TOP OF GRATE
TYP	TYPICAL
UG	UNDERGROUND
V	VOLT
W	WATER OR WEST
W'LY	WESTERLY
XXX.XX	PROPOSED ELEVATION
(XXX.XX)	EXISTING ELEVATION



OVERALL SITEPLAN
SCALE: 1"=30'

30 15 0 30 60
1"=30'

PROJECT DESCRIPTION

- INSTALL (4) LEVEL 2 CHARGING PORTS
- INSTALL (1) 200A, (208Y/120V), 3-PHASE SES

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

LOCAL CODES
2018 INTERNATIONAL BUILDING CODE
2020 NATIONAL ELECTRICAL CODE

IN THE EVENT OF CONFLICT, THE MOST RECENT OR RESTRICTIVE CODE SHALL PREVAIL

SITE INFORMATION

EV SITE ADDRESS:
7575 E PRINCESS DR
SCOTTSDALE, AZ 85255

PROPERTY OWNER:
FMT SCOTTSDALE OWNER LLC
19200 VON KARMAN AVE STE 1000
IRVINE, CA 92612

ELECTRICAL
HENRY PEREZ
PE # 69617
C2 GROUP

APS PROJECT MANAGER
JOE BRYANT
907-414-7079 PHONE
PROJECT MANAGER
CUSTOMER TO GRID SOLUTIONS

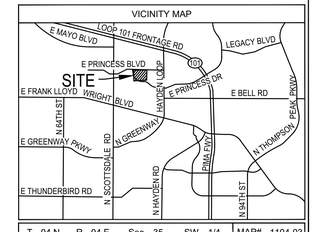
CONTRACTOR

HARMON ELECTRIC, INC.
MICHAEL TOOMB
(623) 879-0010

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

T1.0 TITLE SHEET

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **T1.0**

CALL BEFORE YOU DIG
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-263-1100
OR
1-800-STAKE IT
(OUTSIDE MARICOPA COUNTY)

CONTRACTOR NOTE

CONTRACTOR SHALL COMPLETE INSTALL PER THE SIGNED AND THE 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.

DO NOT SCALE DRAWINGS

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.

SHEET INDEX

STAMP LOCATION

EXPIRES: 9-30-2022

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

GENERAL CONSTRUCTION NOTES

1. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE NEW, FREE OF DEFECTS AND 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.

2. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.

3. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

4. 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.

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

6. 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.

7. 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.

8. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.

9. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

10. 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.

11. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

12. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.

13. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

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. 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.

16. 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.

17. 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.

18. 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.

19. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

20. 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.

21. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT. SERIAL NUMBER SHALL BE INCLUDED FOR SPONSOR SITES.

22. THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

23. 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.

24. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

25. WHERE TUNNELING IS USED UNDER EXISTING PCC OR EXISTING CURB, AREA UNDER MUST BE BACKFILLED WITH FLOWABLE SLURRY TO OBTAIN 100% COMPACTION TO PREVENT CRACKING OF PCC.

26. CURB REMOVAL TO NEAREST JOINT AND MIN. 5FT AND NEW JOINT SHOULD NOT BE CLOSER THAN 5FT AWAY.

27. A/C REPLACEMENT 1-INCH OVER EXISTING, MATCH EXISTING AGGREGATE SIZE, SEAL TO MATCH EXISTING FINISH WHERE APPLICABLE.

ELECTRICAL NOTES

28. CODES & REQUIREMENTS
    - 28.1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND AMENDMENTS AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
    - 28.2. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE GENERAL SUPPLEMENTAL CONDITIONS OF THE PROJECT SPECIFICATIONS.
    - 28.3. ALL ELECTRICAL CONDUIT, DEVICES AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY. DO NOT SCALE PRECISE DETAILS FROM THE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ACTUAL LOCATIONS WITH OWNER PRIOR TO ANY ROUGH IN.

29. EQUIPMENT
    - 29.1. ALL EQUIPMENT SHALL BE NEW EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS. ALL EQUIPMENT PROVIDED SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY, NRTL. LISTED FOR THE TYPE OF EQUIPMENT BEING FURNISHED AND SHALL BE ACCEPTABLE FOR INSTALLATION BY THE LOCAL BUILDING SAFETY AND FIRE DEPARTMENT AUTHORITIES.

30. CONDUIT
    - 30.1. ALL CONDUCTORS SHALL BE ENCLOSED BY CONDUIT SIZED IN ACCORDANCE WITH THE PROPER TABLES CONTAINED IN THE NATIONAL ELECTRICAL CODE FOR THE INSULATION USED.
    - 30.2. ELECTRIC METAL TUBING (EMT) SHALL BE USED FOR ALL DRY AND WET LOCATIONS, ABOVE GRADE OR ABOVE FLOOR APPLICATIONS IN ACCORDANCE WITH ARTICLE 358 OF THE NEC. COUPLINGS AND CONNECTORS SHALL BE COMPRESSION-TYPE, STEEL, WATERTIGHT FITTINGS. PROVIDE GROUND CONDUCTOR FOR EVERY RUN OF EMT CONDUIT.
    - 30.3. FLEXIBLE METAL CONDUIT SHALL BE UTILIZED FOR ALL CONNECTIONS TO VIBRATING EQUIPMENT SUCH AS MOTORS AND TRANSFORMERS (MIN. 2'-0", MAX. 6'-0").
    - 30.4. ALL EXPOSED CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO THE BUILDING WALLS. SUPPORT CONDUIT PER NEC.
    - 30.5. PROVIDE EXPANSION FITTINGS FOR ALL CONDUIT(S) THAT CROSS EXPANSION JOINTS.

31. CONDUCTORS
    - 31.1. CONDUCTOR INSULATION SHALL BE OF A TYPE RECOGNIZED BY THE NEC AND AS APPROVED FOR ITS PARTICULAR APPLICATION OR AS REQUIRED BY THE LOCAL BUILDING SAFETY AUTHORITIES WHICHEVER IS MORE STRINGENT.
    - 31.2. ALL WIRING THROUGHOUT SHALL BE COLOR CODED AS FOLLOWS:

	480V SYSTEM	208V/240V SYSTEM
A PHASE	BROWN	BLACK
B PHASE	ORANGE	RED
C PHASE	YELLOW	BLUE
NEUTRAL	GREY	WHITE
GROUND	GREEN	GREEN
ISOLATED GROUND	---------	GREEN W/ YELLOW STRIPE

    - 31.3. THERE SHALL BE NO SPLICING OF CONDUCTOR.

32. FEEDERS & BRANCH CIRCUITS
    - 32.1. RISER DIAGRAMS, ONE-LINE DIAGRAMS AND CIRCUIT RUNS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF FEEDERS AND BRANCH CIRCUITS SO AS TO BEST FIT THE LAYOUT OF THE JOB.
    - 32.2. CIRCUITS MAY BE ARRANGED IN 3-WIRE FEEDS (2 HOT AND A COMMON NEUTRAL) IN COLOR CODE AS NOTED IN SECTION 31.2; AND EACH CIRCUIT IS PROTECTED BY AN OVER CURRENT PROTECTION DEVICE (OCPD) PER NEC. MORE THAN 3 CIRCUITS IN A CONDUIT BY SPECIFIC APPROVAL OR WHERE SHOWN IN DRAWINGS.

33. GROUNDING
    - 33.1. FURNISH AND INSTALL GROUNDING AND GROUNDING CONDUCTORS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.
    - 33.2. ALL PANELBOARD CABINETS, EQUIPMENT, ENCLOSURES, AND CONDUIT SYSTEMS SHALL BE GROUNDED SECURELY IN ACCORDANCE WITH PERTINENT SECTIONS OF ARTICLE 250 OF THE NEC, AS AMENDED BY ANY LOCAL CODES. CONDUCTORS SHALL BE COPPER. ALL ELECTRICALLY OPERATED EQUIPMENT SHALL BE BONDED TO THE GROUNDED CONDUIT SYSTEM. ALL NON-CURRENT CARRYING CONDUIT SURFACES THAT ARE LIKELY TO BECOME ENERGIZED AND SUBJECT TO CONTACT BY A PERSON SHALL BE GROUNDED BY ONE OR MORE OF THE METHODS DETAILED IN ARTICLE 250 OF THE NEC. ALL GROUND CONNECTIONS SHALL HAVE CLEAN CONTACT SURFACES . INSTALL ALL GROUNDING CONDUCTORS IN CONDUIT AND MAKE CONNECTIONS READILY ACCESSIBLE FOR INSPECTION. FURNISH AND INSTALL GROUNDING ELECTRODES AS DESCRIBED ON THE DRAWINGS.
    - 33.3. GROUNDING OF METAL RACEWAYS SHALL BE ASSURED BY MEANS OF GROUNDING BUSHING ON FEEDER CONDUIT TERMINATIONS AT THE SERVICE ENTRANCE, DISTRIBUTION SWITCHBOARDS AND PANELBOARDS , AND BY MEANS OF A CONTINUOUS, STRANDED, COPPER GROUNDING WIRE EXTENDED FROM THE GROUND BUS IN THE ENCLOSURE TO THE CONDUIT GROUNDING BUSHINGS.

34. PANELBOARDS
    - 34.1. FURNISH AND INSTALL BRANCH CIRCUIT PANELBOARDS AS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS.
    - 34.2. PANELBOARDS SHALL BE EQUIPPED WITH FULL NEUTRAL AND GROUND BUSSES, SEPARATE ISOLATED GROUND BUSSES SHALL BE PROVIDED FOR ISOLATED GROUND PANELBOARDS.
    - 34.3. PROVIDE NEMA TYPE PANELBOARDS AS INDICATED ON DRAWINGS.
    - 34.4. MINIMUM INTERRUPTING RATING OF CIRCUIT BREAKERS SHALL BE AS INDICATED ON DRAWINGS AND FAULT CALCULATIONS.
    - 34.5. ACCEPTABLE MANUFACTURERS ARE GENERAL ELECTRIC, WESTINGHOUSE/CUTLER HAMMER, EATON, SIEMENS OR SQUARE-D. CONTRACTOR SHALL PROVIDE MATCHING MANUFACTURERS OF EXISTING EQUIPMENT WHEN APPLICABLE .

35. LABELING
    - 35.1. LABEL EQUIPMENT WITH NAME, AMPERAGE, VOLTAGE, PHASE AND WIRES (I.E . PANEL " A", 400A, 120/208V, 3Ø, 4W)
    - 35.2. ALL JUNCTION BOXES SHALL BE LABELED WITH CIRCUITS INSTALLED (I.E. 'LB1' - 1,3,5) WITH INDELIBLE BLACK INK ON THE BOX COVER.
    - 35.3. PROVIDE ARC FLASH SIGNAGE ON ALL ELECTRICAL EQUIPMENT PER NEC 110.16.
    - 35.4. LABEL BREAKERS WITH CORRESPONDING CIRCUITS.

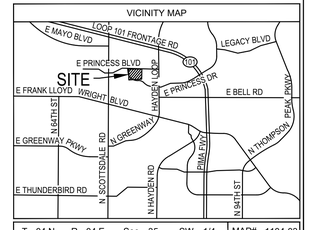
36. DRAWINGS OF RECORD (AS-BUILT)
    - 36.1. AS-BUILT DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH APS ELECTRIC DISTRIBUTION REQUIREMENTS TO PROJECT CONTACT FROM APS CUSTOMER GRID SOLUTIONS DEPARTMENT.

37. AVAILABLE FAULT CURRENT
    - 37.1. PER NEC 110.24, FIELD MARKING. SERVICE EQUIPMENT AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM. SEE ALSO NEC 408.6 AND NEC 110.21(B)(3).

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

T2.0 **NOTE SHEET**

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

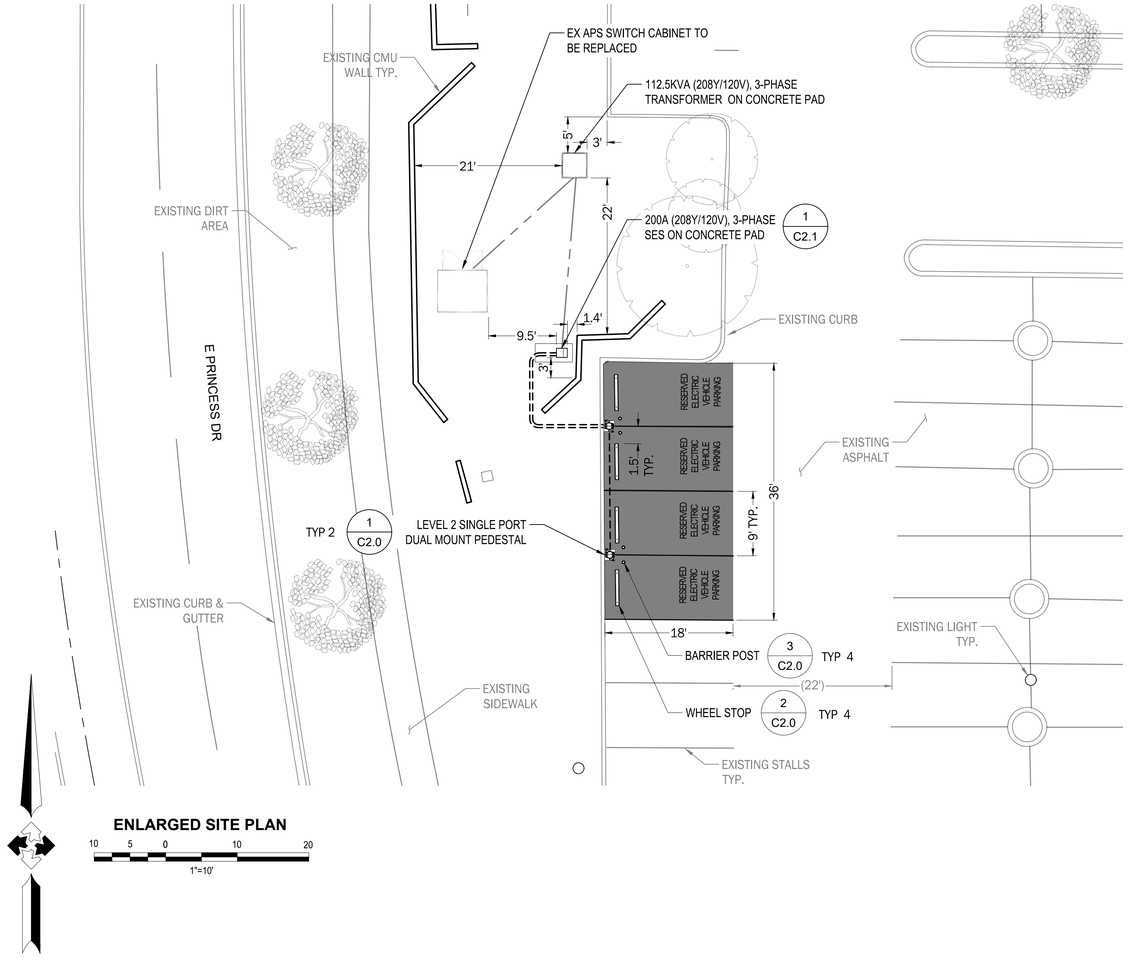
NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **T2.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



ENLARGED SITE PLAN

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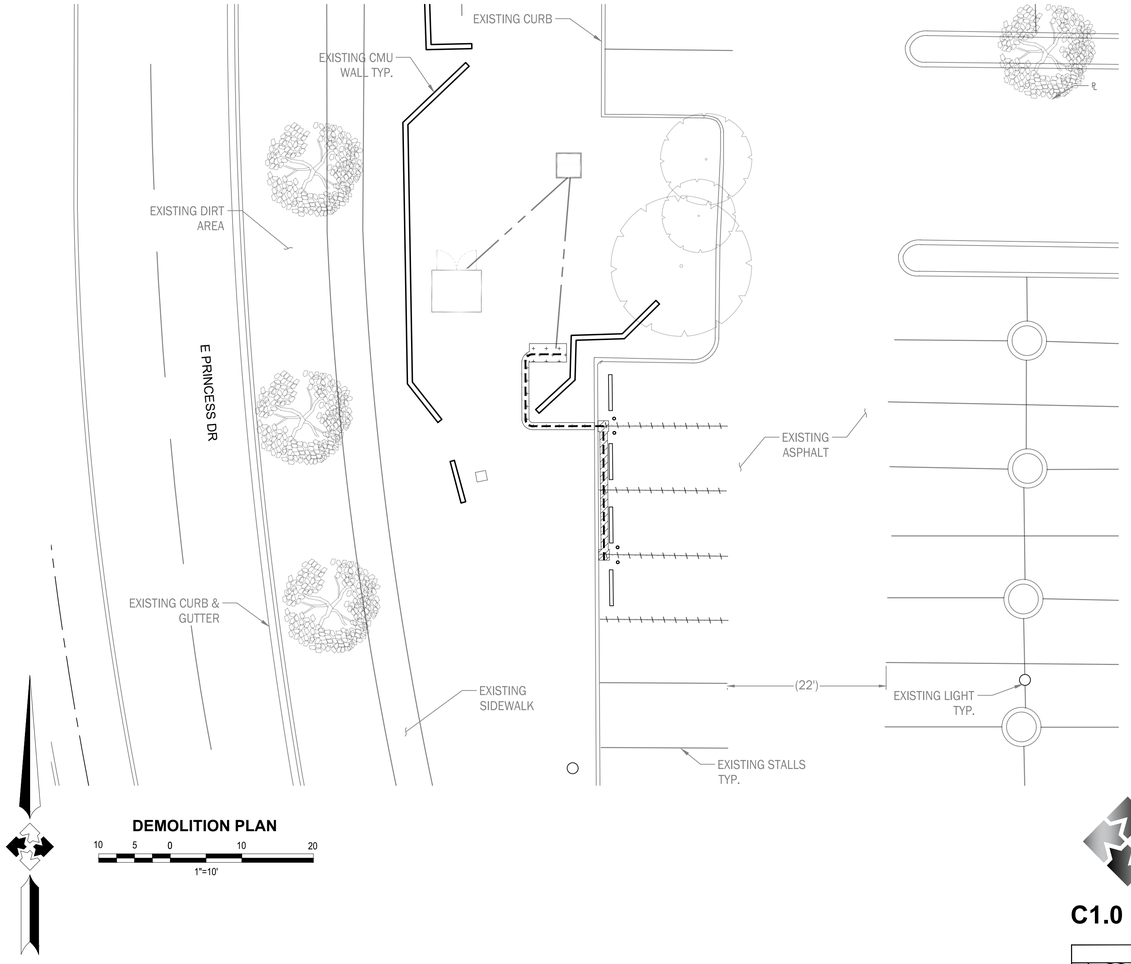
1"=10'



DEMOLITION PLAN

10 5 0 10 20
1"=10'

1. THE CONTRACTOR SHALL RETURN SIDEWALKS, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF THE WORK.

BILL OF MATERIALS		
MATERIAL	UNIT	QUANTITY
EQUIPMENT		
METER PEDESTAL	EACH	1
BARRIER POST	EACH	4
CLIPPER CREEK HCS-40R	EACH	4
PROMOUNT DUO PMD-10 PEDESTAL	EACH	2
EVCS FOUNDATION	EACH	2
WHEEL STOP	EACH	4
EQUIPMENT FOUNDATION	SF	20

1. THE CONTRACTOR SHALL REPLACE A/C 1"-OVER EXISTING WITH 95% COMPACTION. MATCH EXISTING FINISHES INCLUDING SLURRY WHERE APPLICABLE.

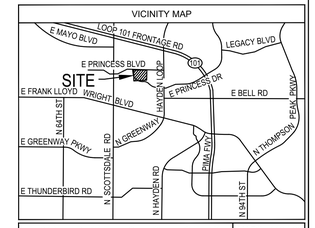
DEMO QUANTITIES TABLE		
	ASPHALT	21 SQ FT
	CURB	1.2 LFT
	PARKING LINES	REMOVAL
	GRAVEL AREA	0 SQ FT
	CONCRETE	0 SQ FT
	LANDSCAPING	0 SQ FT
	DIRT	33 SQ FT
	TRENCHING	44 LFT

APPROVED
Stip Set PLANNING
10/11/2021 DATE
APPROVED BY

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C1.0 ENLARGED SITEPLAN DEMOLITION PLAN

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE
PHONE: 619-518-1101 PGR/MOBILE:
INSPECTOR: JEFF TURNER
PHONE: 928-581-9754 PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

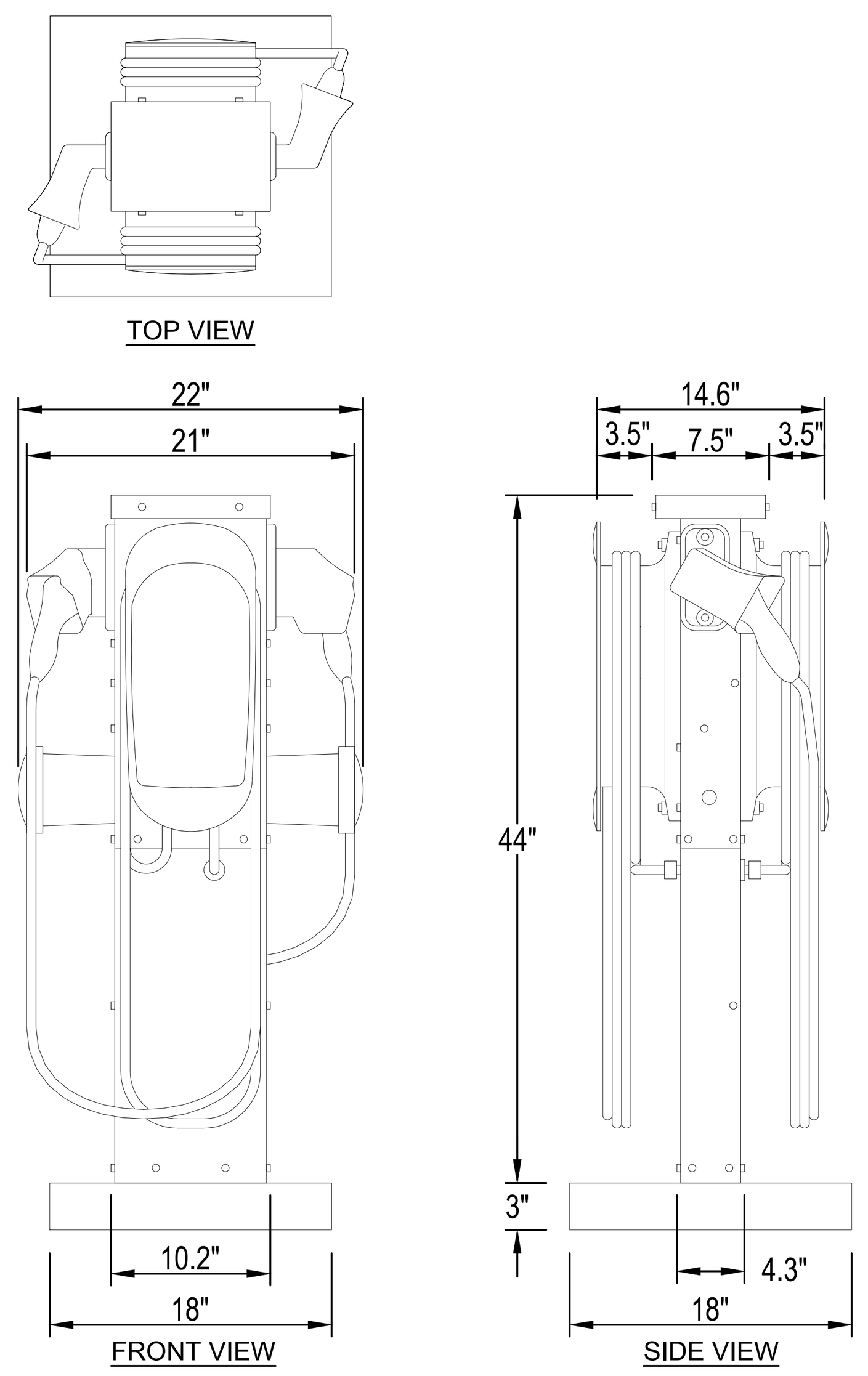
WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **C1.0**

STAMP LOCATION

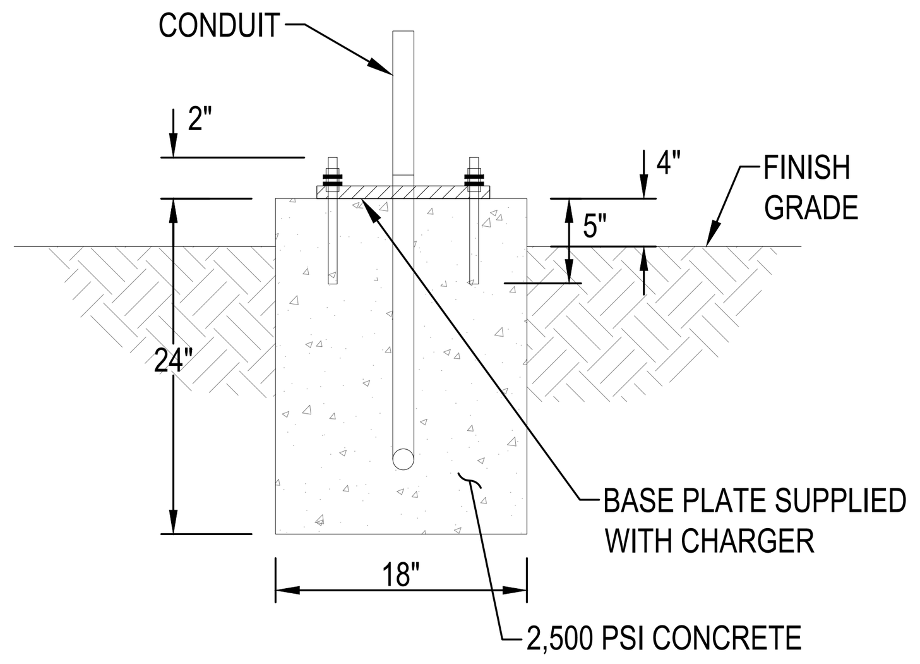
Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



HCS-40R (FOR REF. ONLY)



FOUNDATION DETAILS

NOTES:

1. CONCRETE BLOCK MUST MEASURE AT LEAST 18" ON ALL SIDES.
2. THE BOLT THREADS MUST EXTEND 2" ABOVE THE CONCRETE.
3. THE CONDUIT MUST BE AT LEAST 1 1/2" IN DIAMETER AND EXTEND 12"-24" ABOVE THE CONCRETE.
4. REFER TO THE CLIPPER CREEK INSTALLATION GUIDE FOR DETAILED INSTALLATION INSTRUCTIONS.
5. FOUR HILTI 1/2" DIAMETER KB-TZ CARBON STEEL ANCHORS, 7" TO BE INSTALLED. CONTRACTOR TO SUBMIT DATA SHEETS AND REPORTS IF PROPOSING TO NOT USE THE PRODUCT.

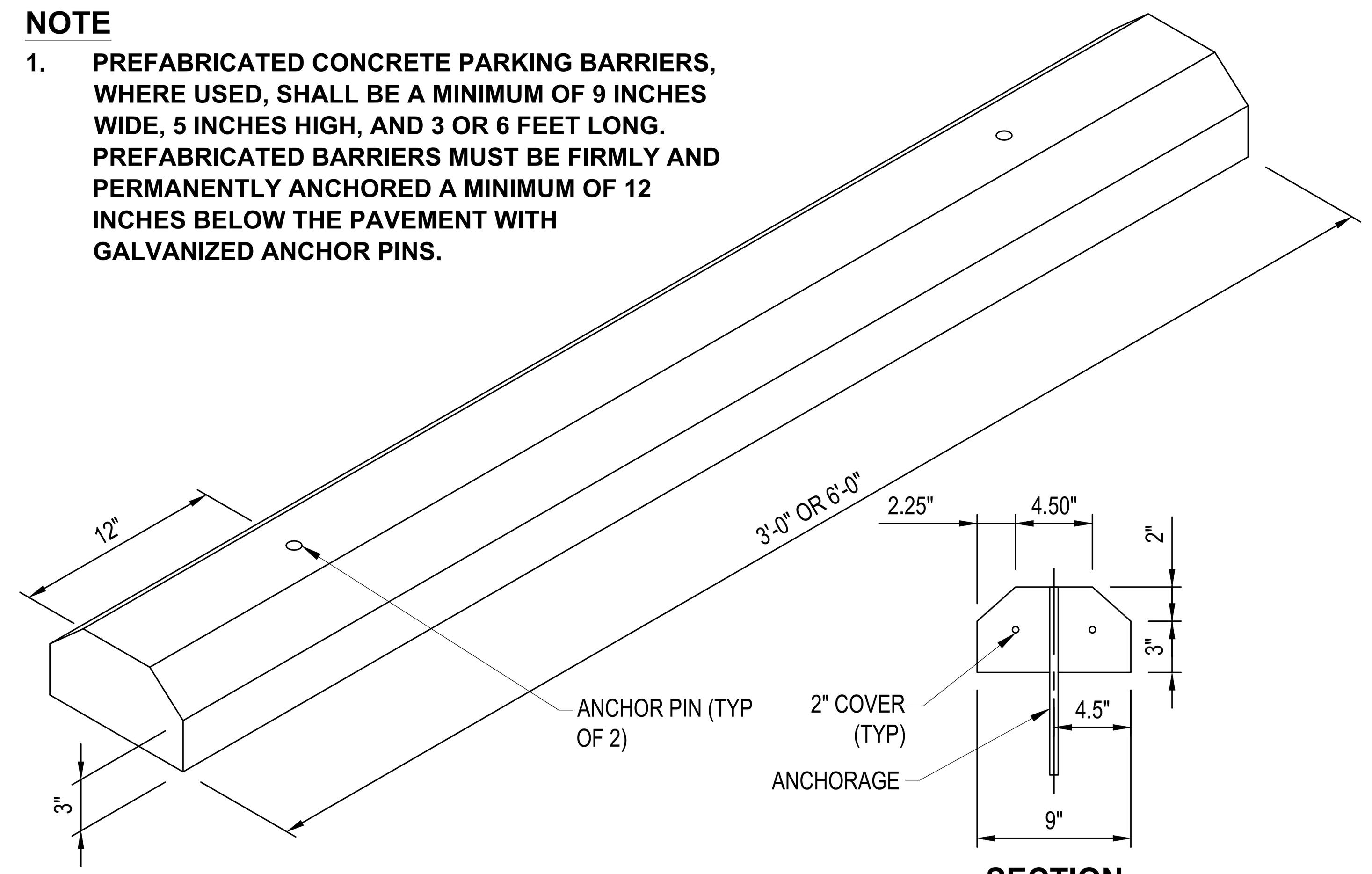
1 / --

DUAL PORT DISPENSER DETAIL (CLIPPER CREEK HCS-40R)

NO SCALE

NOTE

1. **PREFABRICATED CONCRETE PARKING BARRIERS, WHERE USED, SHALL BE A MINIMUM OF 9 INCHES WIDE, 5 INCHES HIGH, AND 3 OR 6 FEET LONG. PREFABRICATED BARRIERS MUST BE FIRMLY AND PERMANENTLY ANCHORED A MINIMUM OF 12 INCHES BELOW THE PAVEMENT WITH GALVANIZED ANCHOR PINS.**

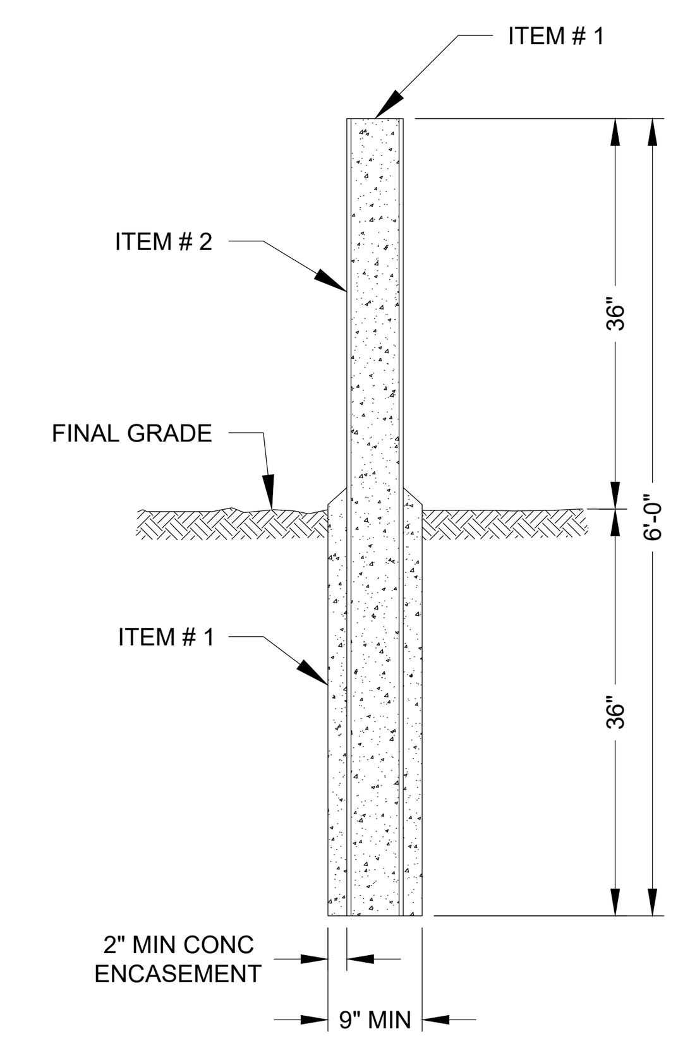


SECTION

2 / --

TYPICAL PARKING BARRIER (WHEEL STOP) DETAIL

NO SCALE



SECTION

NOTES:

1. A 2-INCH MINIMUM CONCRETE ENCASEMENT IS REQUIRED AROUND THE BARRIER POST BELOW GRADE.
2. USE ADDITIONAL BARRIER POSTS AS REQUIRED TO PREVENT TRAFFIC PENETRATION INTO AREA.
3. A 36-INCH MINIMUM CLEARANCE IS REQUIRED FROM THE PAD TO THE OPTIONAL FRONT AND SIDE BARRIER POSTS FOR OPENING EQUIPMENT DOORS.
4. CAUTION MUST BE TAKEN WHEN INSTALLING POSTS SO THAT POSTS DO NOT MAKE CONTACT WITH CONDUIT SYSTEM.
5. PREMIX CONCRETE IS ONLY AVAILABLE IN 60 LB SACKS. WHEN 90 LB SACKS ARE WANTED, THEY MUST BE SPECIAL ORDERED.

CODE	2990	2995	MATERIAL LIST	
ITEM	QTY	QTY	DESCRIPTION	APN
1	3	6	CONCRETE PRE-MIX 60#	71301280
2	-	1	POST FIXED BARRIER	70006120

3 / --

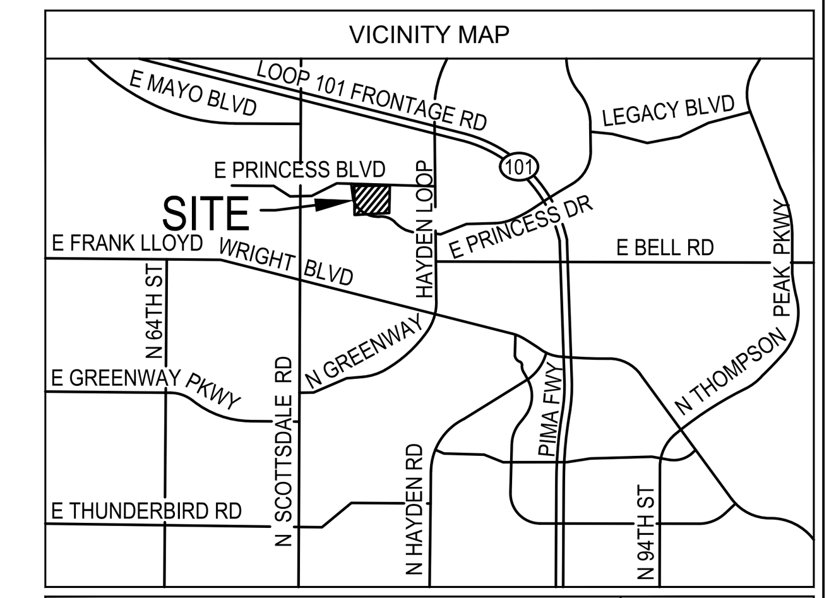
FIXED BARRIER POST DETAIL

NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C2.0 **DETAILS SHEET**

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

STAMP LOCATION

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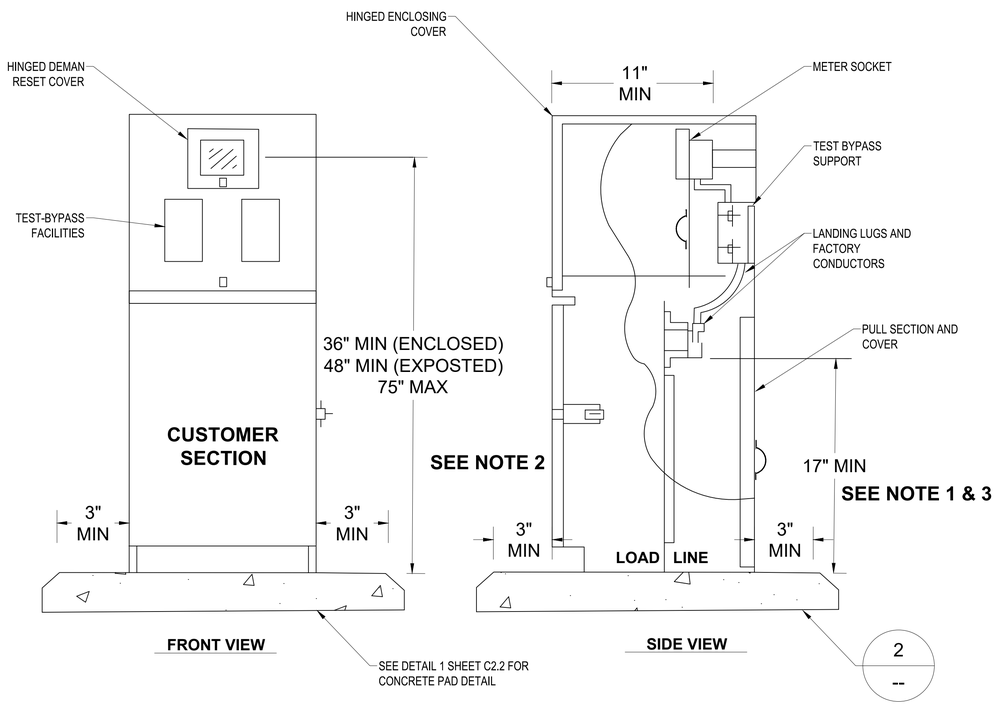
TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

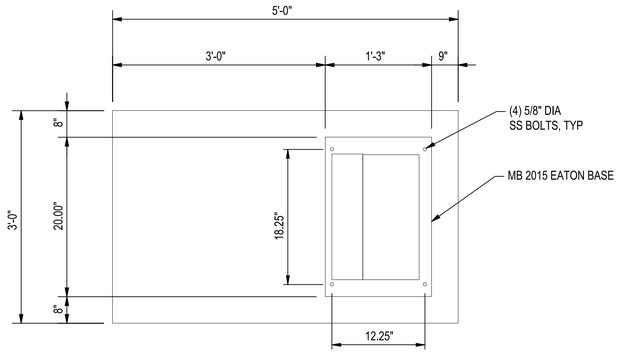
WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: C2.0

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



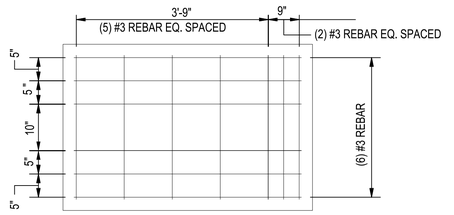
NOTE	PART NUMBER	DESCRIPTION	QTY.
1	3IN SCH40 CONDUIT	CONDUIT (XFMR TO METER)	1
2	CMP4421MCH-1	PAD MOUNT METER PEDESTAL	1
3	1.5IN CONDUIT	CONDUIT (DP TO CHARGER)	2

1 -- **METER PEDESTAL DETAILS**
NO SCALE

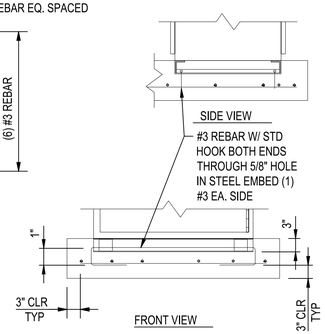


NOTE:
CONDUITS SHALL BE CAST INTO THE FOUNDATION PER ELECTRICAL REQUIREMENTS METHOD:

1. USE PRE-FABRICATED MOUNTING BRACE ASSEMBLY INSTALL MOUNTING BASE ASSEMBLY FLUSH WITH TOP SURFACE OF CONCRETE PAD, ALLOWING MOUNTING STUDS TO REACH ABOVE PAD. LOCATE LINE AND LOAD CONDUITS IN THE DESIGNATED AREAS AS SHOWN ON DRAWINGS BELOW.
2. USE ANCHOR BOLTS (5/8" DIA.) PRE-CAST IN CONCRETE. MOUNTING HOLE DIMENSION AS AS SHOWN ABOVE



REINFORCEMENT PLAN



NOTES:
1. REBAR SHALL HAVE A 1 1/2" MINIMUM COVER FROM CONDUITS.
2. STEEL BASE CHANNEL EMBED SHALL HAVE A 1 1/2" MINIMUM COVER FROM CONDUITS.
3. DISTANCE FROM BOLTS TO CONDUIT EDGES SHALL BE A MINIMUM OF 6".

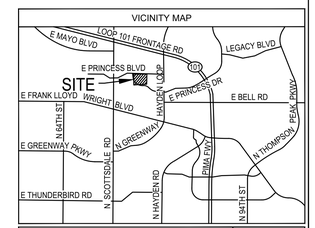
CONCRETE PAD DETAIL

2 -- **3-PHASE METER PAD DETAIL**
NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C2.1 DETAILS SHEET

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
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7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

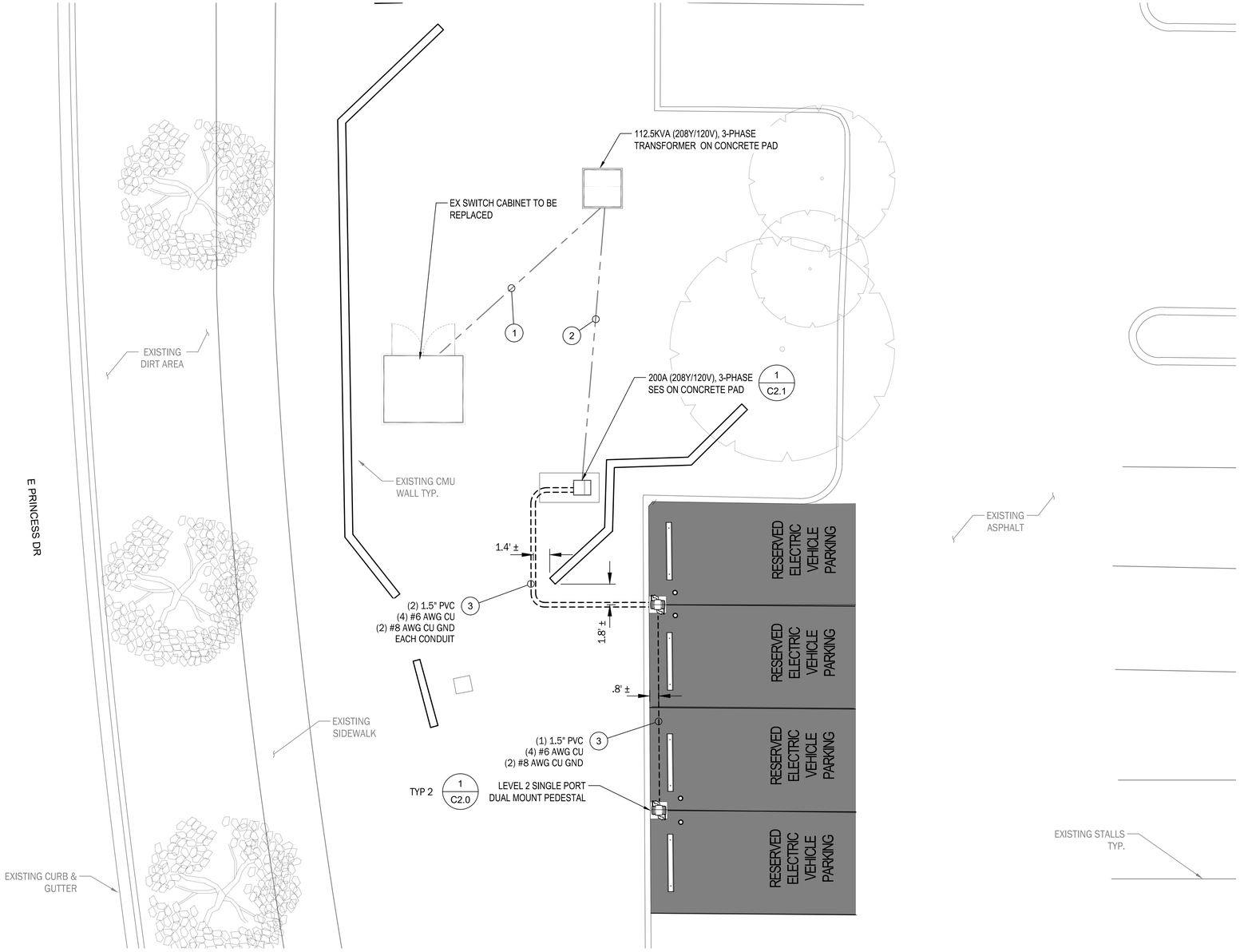
WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **C2.1**

NOTES

ALL UTILITY RELATED SCOPE OF WORK (TO THE POINT OF SERVICE) IS DETAILED IN THE APS UTILITY DESIGN DRAWING "WA622585"

1. CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING PATHS SHALL BE FIELD VERIFIED AND INSTALLED PER JURISDICTIONAL REQUIREMENTS.
2. ALL EQUIPMENT, FEEDERS AND DEVICES PROVIDED UNDER THIS SCOPE OF WORK IS NEW AND SHOWN IN BOLD UNLESS OTHERWISE NOTED.
3. PERFORM GROUND PENETRATING RADAR SURVEY PRIOR TO DIGGING.

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



ELECTRICAL SITE PLAN

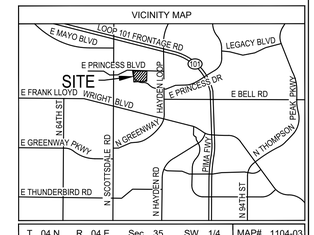
1. PROPOSED 4" UNDERGROUND ELECTRIC CONDUIT TO PROPOSED TRANSFORMER (TtM PER APS WO# WA622585).
2. PROPOSED 3" UNDERGROUND ELECTRIC CONDUIT FROM PROPOSED TRANSFORMER TO PROPOSED METER & DISTRIBUTION PANEL. (TtM PER APS WO# WA622585).
3. PROPOSED 1 1/2" PVC CONDUIT FROM 200A (280Y/120V) 3Ø DISTRIBUTION PANEL TO LEVEL 2 CHARGING STATIONS.

BRANCH CIRCUIT LENGTHS
(FROM DISTRIBUTION PANEL TO EV CHARGERS)

LEVEL 2 EV CHARGER	LENGTH (FT)	WIRE SIZE	CIRCUIT #
1	60	#6	1 & 3
2	60	#6	5 & 7
3	77	#6	2 & 4
4	77	#6	6 & 8

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

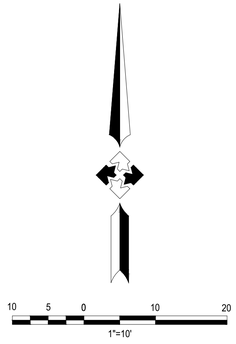
E1.0 ELECTRICAL SITE PLAN



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY



STAMP LOCATION

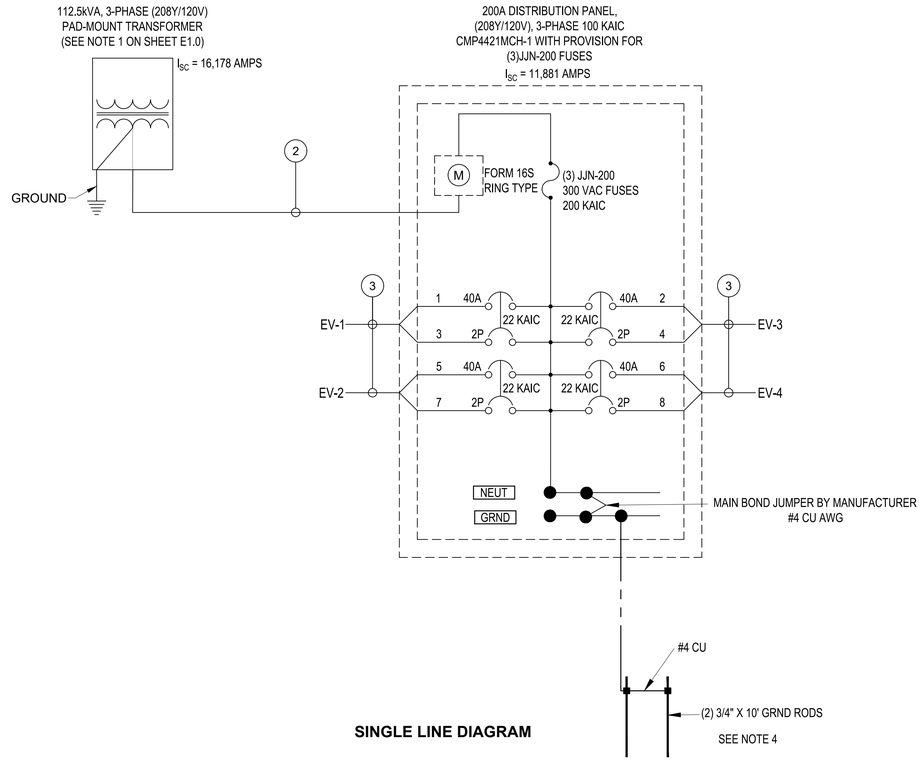
EXPIRES: 9-30-2022

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **E1.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



SINGLE LINE DIAGRAM

Panel:	EV					Model Number:		**EATON CMP4421MCH-1**		
Voltage:		208Y/ 120V	Volts AC			Enclosure Type:		NEMA 3R		
Bus Rating:		200	Amps per Phase			Mount:		Pedestal		
Main Fuse JJN:		200	Amps			Panel Status:		New		
Phase:	3		Wire:	4						
Location:	WEST SIDE OF PARKING LOT									

CKT	Description	Trip	Load	Phase A (VA)	Phase B (VA)	Phase C (VA)	Load	Trip	Description	CKT
1	**EV-1**	40A	3,328	**6,656**			3,328	40A	**EV-3**	2
3		2P	3,328		**6,656**		3,328	2P		4
5	**EV-2**	40A	3,328			**6,656**	3,328	40A	**EV-4**	6
7		2P	3,328	**6,656**			3,328	2P		8
9	Space	40A						40A	Space	10
11	Space	40A						2P	Space	12
				13,312	**6,656**	**6,656**	VA			

Total VA	**39,936.00**
Total KVA	**49.92** **(HIGHEST LEG X 3) WITH 125% DF**
Total AMPS	**138.56** **≤ 100% OF OCPD**

PANEL SCHEDULE

TABLE A - DUAL CHARGERS (2 CIRCUITS)			
<180'	180' - 290'	290' - 400'	400' >
(4) #6 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #4 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #3 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #2 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT

* SEE NOTE 2

NOTES

1. CONTRACTOR TO FIELD VERIFY MAIN FEED OVER CURRENT PROTECTION DEVICE SUPPORTING DISTRIBUTION PANEL IS APPROPRIATELY SIZED TO SUPPORT THE LOAD. CONTRACTOR SHALL CONTACT THE ENGINEERING TEAM IMMEDIATELY IF BREAKER IS FOUND TO BE INSUFFICIENT.
2. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. LENGTHS ARE BASED ON DIAGRAMMATICAL MEASUREMENTS AND APPROXIMATED BURIED DEPTHS. THE EXACT ROUTING PATH, CONDUCTOR RUN LENGTHS AND INSTALLATION SHALL BE DETERMINED BY THE CONTRACTOR IN THE FILED BASED ON EXISTING SITE CONDITIONS AND PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTOR BASED ON FIELD MEASUREMENTS.
3. CHARGING UNITS ARE EQUIPPED WITH AN INTEGRATED CONTACTOR TO PREVENT BACK FEEDING OF POWER TO THE SOURCE.
4. FOR ADDITIONAL GROUNDING INFORMATION, SEE GROUNDING DETAIL ON SHEET E3.0.
5. SEE CUSTOMIZATION FORM ON SHEET R1.1 FOR ADDITIONAL REQUIREMENTS.
6. INSTALL CLASS 16S METER SOCKET.

CIRCUIT SCHEDULE			
NO	FROM	TO	CONFIGURATION
1	UTILITY TRANSFORMER	AC PANELBOARD	SEE APS UTILITY DRAWINGS WO# WA622585
2	AC PANELBOARD	EV CHARGER	SEE TABLE B FOR VOLTAGE DROP CONSIDERATIONS DUE TO CONDUCTOR LENGTH

AC RUN MAXIMUM LENGTHS IS 400' INCLUDING BURIED DEPTH. ANY AC RUN LENGTHS BEYOND THIS MAXIMUM SHALL BE ADDRESSED WITH THE APPROPRIATE ENGINEERING TEAMS AS SOON AS THE SITUATION ARISES.

TABLE B	
MAXIMUM AC VOLTAGE DROP (%)	1.14%
AVERAGE AC VOLTAGE DROP (%)	1.02%

STAMP LOCATION

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CERTIFICATE NO.
69617
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Expires: 09-30-2022
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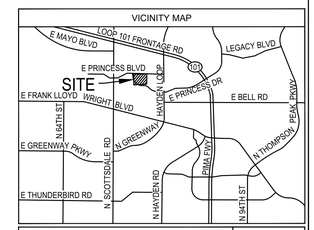
E2.0 **SINGLE LINE DIAGRAM**
PANEL SCHEDULE



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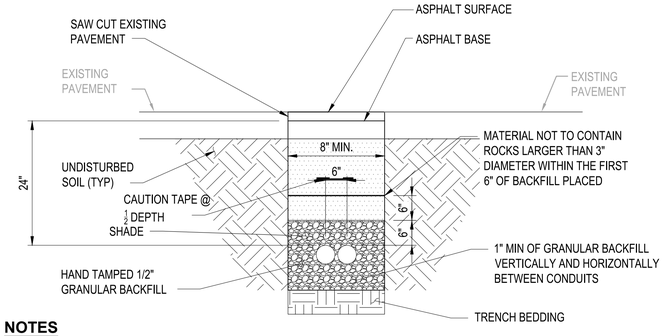
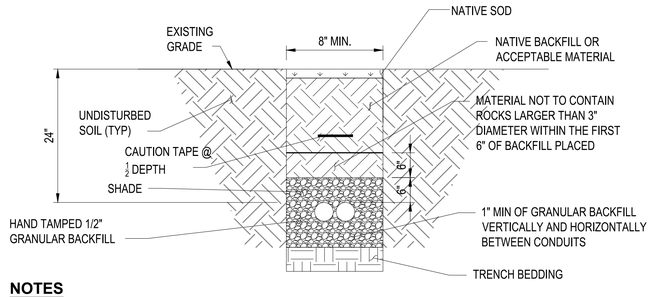


NOTES

1. TRENCHING REQUIREMENTS SHALL MEET THE STANDARDS PER THE APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.
2. ASPHALT SHALL COMPLY WITH STANDARD DOT OR LOCAL JURISDICTION SPEC. FOR HMA SURFACE COURSE.
3. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
4. ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
5. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E1.0 & E2.0, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.
6. CLEAN GRANULAR BACKFILL SHALL BE PLACED IN LOOSE, LEVEL LIFTS NOT TO EXCEED 6-INCHES THICKNESS.
7. COMPACTION SHALL BE BY MECHANICAL VIBRATORY PLATE COMPACTORS UNLESS OTHERWISE SPECIFIED.
8. COMPACT TO THE SAME DENSITY AS THE UNDISTURBED SOIL. COMPACT EACH LAYER UNTIL THERE IS NO EVIDENCE OF CONSOLIDATION.
9. FINAL LIFT BENEATH PAVEMENTS SHALL BE COMPACTED A MINIMUM OF FOUR COMPLETE PASSES.
10. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE USED IN PLACE OF CLEAN GRANULAR BACKFILL. CLSM SHALL CONFORM TO THE REQUIREMENTS OF THE DOT STANDARD SPECIFICATIONS.
11. SHADE MATERIAL SHALL NOT CONTAIN ROCKS LARGER THAN 1-1/2 INCHES IN THEIR GREATEST DIMENSION AND SHALL CONFORM TO APS SERVICE REQUIREMENTS MANUAL SECTION 600.05.
12. TRENCH BEDDING SHALL MEET THE STANDARDS PER APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.03.
13. ALL UTILITY CROSSINGS SHALL PROVIDE A MINIMUM OF 12 INCHES CLEAR VERTICAL SEPARATION FROM THE APS ELECTRIC FACILITIES AS OUTLINED IN THE APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.02.

UNDER PAVEMENT APS TRENCH DETAIL
NO SCALE



NOTES

1. TRENCHING REQUIREMENTS SHALL MEET THE STANDARDS PER APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.
2. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
3. ANY LANDSCAPE DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
4. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E1.0 & E2.0, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.
5. BACKFILL SHALL BE PLACED IN LOOSE, LEVEL LIFTS NOT TO EXCEED 6-INCHES THICKNESS.
6. COMPACTION SHALL BE BY MECHANICAL VIBRATORY PLATE COMPACTORS UNLESS OTHERWISE SPECIFIED.
7. COMPACT TO THE SAME DENSITY AS THE UNDISTURBED SOIL. COMPACT EACH LAYER UNTIL THERE IS NO EVIDENCE OF CONSOLIDATION.
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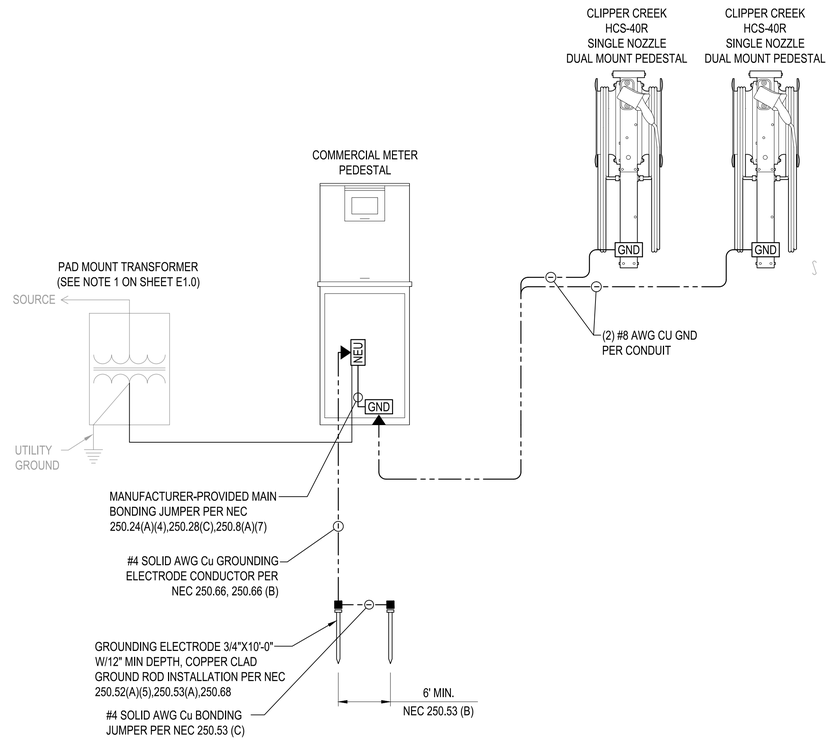
9. SHADE MATERIAL SHALL NOT CONTAIN ROCKS LARGER THAN 1-1/2 INCHES IN THEIR GREATEST DIMENSION AND SHALL CONFORM TO APS SERVICE REQUIREMENTS MANUAL SECTION 600.05.
10. TRENCH BEDDING SHALL MEET THE STANDARDS PER APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.03.
11. ALL UTILITY CROSSINGS SHALL PROVIDE A MINIMUM OF 12 INCHES CLEAR VERTICAL SEPARATION FROM THE APS ELECTRIC FACILITIES AS OUTLINED IN THE APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.02.

UNDER SOIL APS TRENCH DETAIL
NO SCALE

GROUNDING NOTES

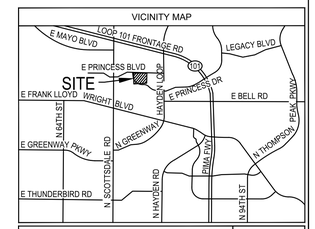
1. COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
2. FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
4. ALL BELOW GRADE BONDS TO BE EXOTHERMIC WELDS OR IRREVERSIBLE COMPRESSION-TYPE CONNECTIONS LISTED FOR USE IN THE APPLICATION WHICH THEY ARE INSTALLED.
5. GROUNDING CONDUCTORS ARE GENERALLY NOT SHOWN. GROUND AND BOND ALL EQUIPMENT, RACEWAYS, MOTORS, PANELBOARDS AND SWITCHBOARDS, ETC. IN ACCORDANCE WITH 2017 NEC, ARTICLE 250.
6. 25Ω RESISTANCE OR LESS.



C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

E3.0 ELECTRICAL DETAILS

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **E3.0**

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

A REAL PRODUCT, FOR THE REAL WORLD. ClipperCreek's HCS charging stations come in a variety of power levels, as hardwired and plug-in units, and with multiple pedestal mount options. Recent additions to the HCS product line include the HCS-60R and HCS-80R, 'ruggedized' versions of our most powerful HCS models, offering up to 64 Amp charging; and the ChargeGuard®, a simple key-based access control option.

- **FAST CHARGING** - Up to 15.4kW of power to charge your vehicle quickly
- **QUALITY** - Technology that works for the life of your current plug-in vehicle and then some
- **CONVENIENT** - 25 feet of charging cable for installation flexibility and superior vehicle reach
- **DURABLE** - Rugged, fully sealed NEMA 4 enclosure for installation anywhere
- **RELIABLE** - Backed by ClipperCreek's exceptional warranty and outstanding customer service

CLIPPERCREEK
RELIABLE. POWERFUL. MADE IN AMERICA.
ClipperCreek.com

20190211

HCS SERIES
PRODUCT OVERVIEW

Call ClipperCreek Today!
877-694-4194
www.clippercreek.com
Wall Mount Connector Holster included

ELECTRICAL SPECIFICATIONS
- **Certifications** - ETL, cETL Listed
- **Service** - 208V to 240V - 20A to 80A, single phase, 2 wire w/ground
- **Charge Current Output Power** - 208V to 240V-16A to 64A continuous (3.3kW to 15.4kW)
- **Service Ground Monitor** - Constantly checks for presence of proper safety ground
- **Automatic Circuit Reclosure** - After minor power faults
- **Charge Circuit Interruption Device** - Ground fault protection with fully automated self-test, eliminates manual user testing

MATERIAL SPECIFICATIONS
- 25 foot charging cable
- Three year warranty
- Install hardwired or plug-in
- Indoor/outdoor rated fully sealed (NEMA 4) enclosure
- Operating temperatures: -22°F to 122°F (-30°C to 50°C)
- Wall mount holster included

ACCESS CONTROL OPTION AVAILABLE $78 additional
ChargeGuard® Reliable key-based access control designed for fleet, workplace, multi-tenant, hospitality and residential charging.

MULTIPLE CONFIGURATIONS

MODEL:	HCS-20	HCS-30	HCS-40*	HCS-50*	HCS-60	HCS-80
CIRCUIT BREAKER RATING:	20A	30A	40A	50A	60A	80A
MAXIMUM CURRENT:	16A	24A	32A	40A	48A	64A
PRICES STARTING AT:	$565	$565	$565	$635	$899	$969

*Plug-in options are available at an additional charge.

RUGGEDIZED OPTION AVAILABLE $100 additional
HCS-40R, HCS-40PR, HCS-60R and HCS-80R
- 5-year warranty
- Impact and crush-resistant SAE-J1772™ connector
- Type 4X watertight and corrosion resistant rubber overmolded EV connector
- Available for plug-in installations with NEMA 14-50 or NEMA 6-50 plugs (HCS-40 only)

Share2® OPTION Maximize your Infrastructure Investment
- Turn one charging spot into two with HCS Share2®
- Full power charging for one vehicle, split power charging for two vehicles
- Compatible with ChargeGuard® enabled and Ruggedized HCS stations
- Power Sharing from a single circuit between two charging stations

20190211

RUGGED, UNIVERSAL, ECONOMICAL. Mount one or two ClipperCreek electric vehicle charging stations on our ProMountDuo™ pedestal for a cost effective mounting solution.

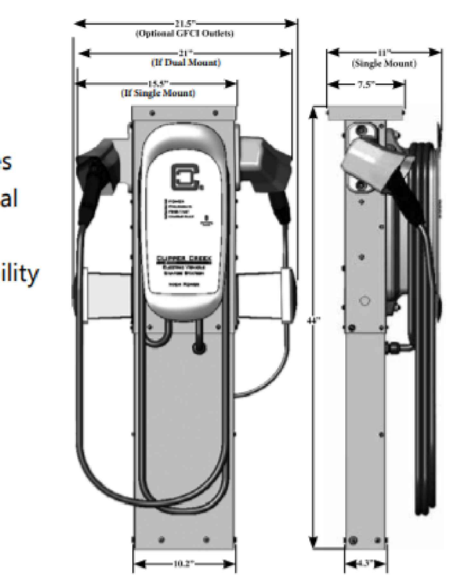
- **LOW COST** - Minimize installation costs and mount one or two units on a single pedestal
- **UNIVERSAL** - Ready for multiple ClipperCreek EVSE product lines
- **RUGGED** - Powder coated galvanized or stainless steel pedestal paired with NEMA 4 fully sealed charging stations ensure protection from the environment
- **FLEXIBLE** - Can accommodate two ClipperCreek or Tesla® EVSEs plus two 120V convenience outlets
- **RELIABLE** - Backed by ClipperCreek's excellent warranty and customer service team

CLIPPERCREEK
RELIABLE. POWERFUL. MADE IN AMERICA.
ClipperCreek.com

20190510

ProMountDuo PMD-10 UNIVERSAL PEDESTAL
PRODUCT OVERVIEW

FEATURES
- Slim, modern profile
- Supports two stations and two 120V outlets per pedestal
- Compatible with ClipperCreek ACS, HCS and LCS product lines
- Operates as a single or dual mount pedestal with no additional kit necessary for two stations
- Galvanized and powder coated steel for environmental durability
- ADA height and reach compliant



OPTIONS AVAILABLE
- 120V Ground Fault Receptacle Kit Optional (0300-06-000)

PARTS INCLUDED
- Pedestal
- All the hardware needed to mount up to two EVSEs

More Options Now Available!

PMD-10R with HCS -60

The PMD-10R is an affordable solution designed for fleet, parking lot, or any harsh environment. Designed to accommodate ClipperCreek HCS, LCS, ACS products as well as the Tesla® Wall Connector. This "ruggedized" mounting solution is an excellent value at **$695.**
- 100% stainless steel construction
- Powder coated for a lasting finish
- Stainless steel machined hardware
- No knockouts
- Plastic bushings for ease of installation
- Backed by a three year warranty

HCS/TESLA® Combo PMD-10T

The PMD-10T has all the same features as the PMD-10, but comes equipped to mount ClipperCreek and/or Tesla® charging stations. Available for just **$434**

MADE IN AMERICA

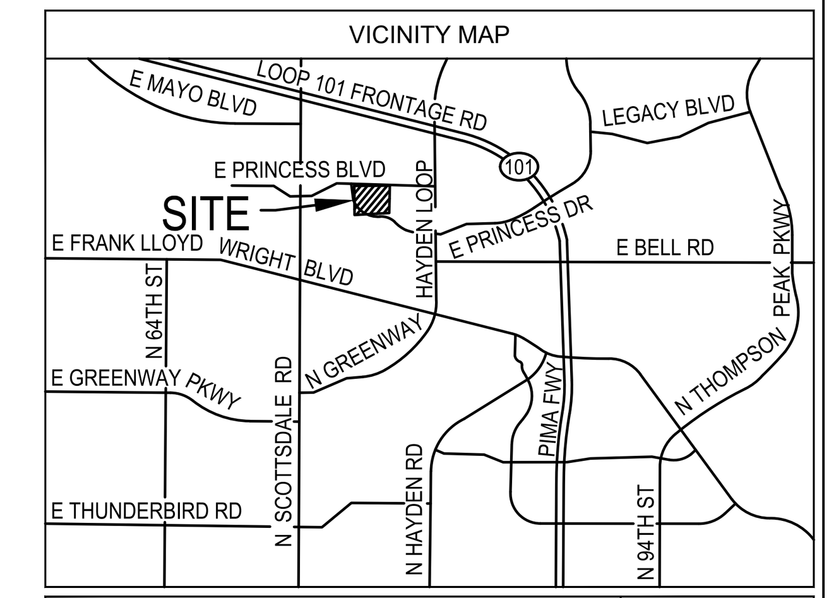
20190510

CLIPPER CREEK REFERENCE DRAWINGS

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

R1.0 REFERENCE DRAWING

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE
PHONE: 619-518-1101 PGR/MOBILE:
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TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **R1.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

Commercial Meter Pedestals - Pad Mounted

CMP4111MC-1

Application
- Utility meter, main disconnect and distribution panel
- Receive ANSI C12.10 watthour meters

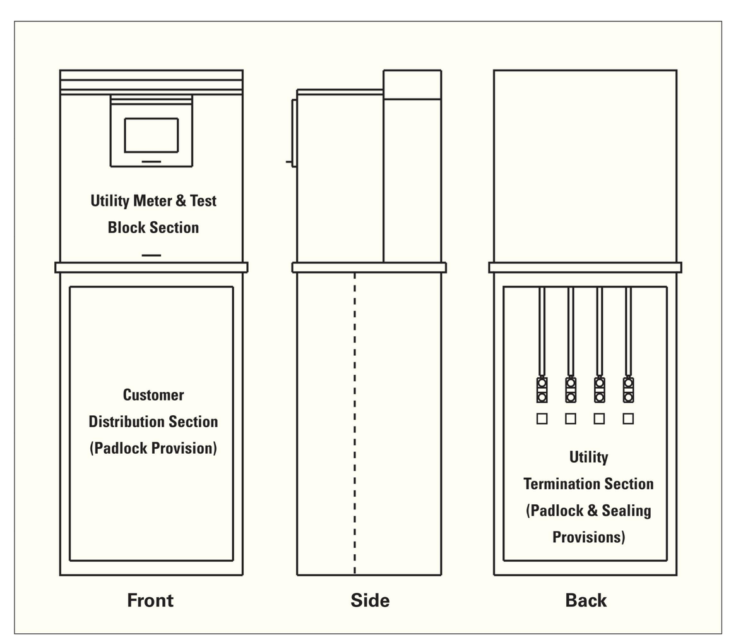
Construction
- Ring type
- NEMA Type 3R
- ANSI 61 gray painted finish
- Separate sealable utility termination and meter compartments
- Padlockable disconnect and distribution section
- Underground feed

Standards
- UL Listed
- ANSI C12.7
- EUSERC #308

Accessories
- 5th jaw kit - 50365 (single phase)
- Filler plate kit - 25139
- Class T fusible pullouts
- Controls, see page 106

Commercial Meter Pedestals

Catalog Number	Amp Rating	Jaws	Service Type	Bypass	Voltage	Distribution Main Breaker	Distribution Branches	Type	Mounting Pad	Dimensions Width	Dimensions Depth	Dimensions Height
CMP4111MC-1	100	4	1Ø,3W	TB	240	100A,2P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4111MCH-1	100	4	1Ø,3W	TB	480	100A,2P	14	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4121MC-1	200	4	1Ø,3W	TB	240	200A,2P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4121MCH-1	200	4	1Ø,3W	TB	480	200A,2P	18	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4411MC-1	100	7	3Ø,4W	TB	240	100A,3P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4411MCH-1	100	7	3Ø,4W	TB	480	100A,3P	12	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4421MC-1	200	7	3Ø,4W	TB	240	200A,3P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4421MCH-1	200	7	3Ø,4W	TB	240	200A,3P	18	Bolt-On	MB2015	20″	17 1/2″	54″



Data subject to change without notice. Consult local utility for area acceptance. All dimensions are in inches.

Instruction Sheet
IL307018EN
Effective April 2018
B-LINE SERIES

Commercial Meter Pedestals -
Mounting Base Details

Installation Instructions
CMP-4000 Series

Meter pedestals are designed for pad-mount installation.
Two methods can be used to install pedestals on a concrete pad.

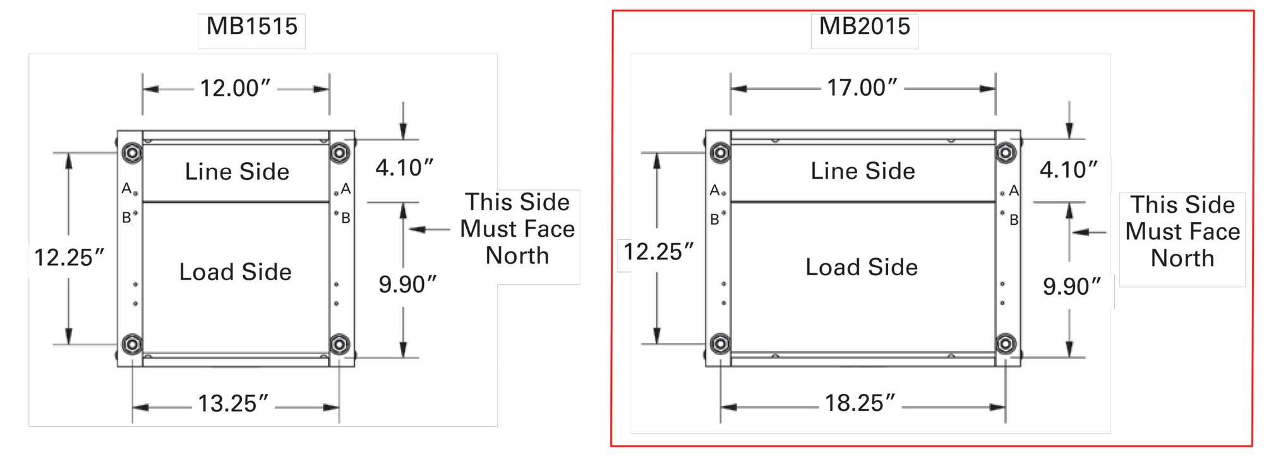
Method 1. Use pre-fabricated mounting base assembly.

Cat. No. MB1515 - Suitable for 15″ wide x 15″ deep pedestals.

Cat. No. MB2015 - Suitable for 20″ wide x 15″ deep pedestals.

Install mounting base assembly flush with top surface of concrete pad, allowing mounting studs to reach above pad. Locate line and load conduits in the designated areas as shown on drawings below.
Note: Barrier position 'B' for legacy B-Line series CMP alignment.

Caution:
Pedestals with photo-electric controls - right hand side must be facing to the North.(See drawings below)



Method 2. Use anchor bolts (5/8″ dia.) pre-cast in concrete pad. Mounting hole dimensions are shown above for MB1515 (15″ x 15″) and MB2015 (20″ x 15″) pedestals. Locate line and load conduits the same as in Method 1.

Data subject to change wothout notice. Consult local utility for area acceptance. All dimensions are in inches.

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Publication No. IL307018EN
April 2018

Customization options

Common items

Switching
- Hand-Off-Auto
- Test switch

Timer Clocks
- 24 hour mechanical
- 7 day programmable

Photo Cells
- Installed in window
- Remote mount

Contactors
- 30A per pole standard
- Up to 200A options available

Customization Form

Frame:

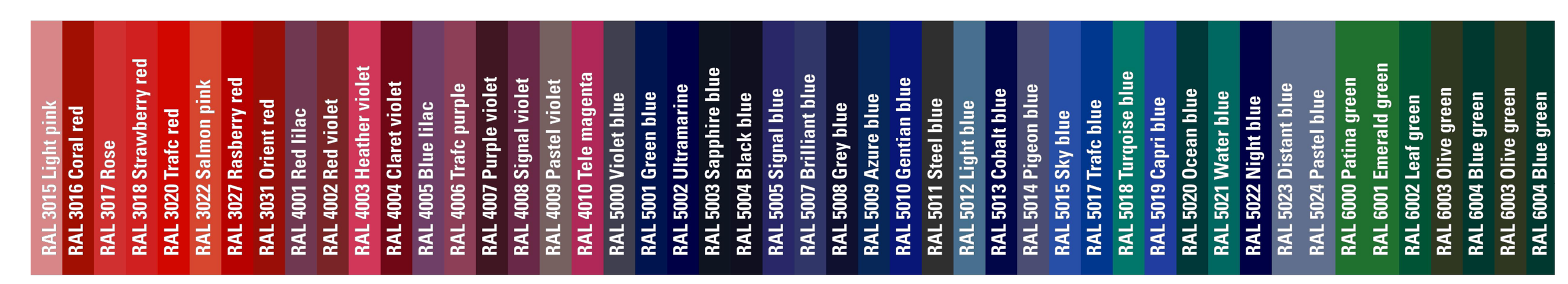
Type	☑ Pad Mount Yes *	☐ Wall Mount n/a	☐ Pad Mount, Unmetered*	
Width	☐ 15" n/a *	☑ 20" Yes *	☐ 24" n/a	☐ 30" n/a
Service	☐ Single Phase n/a *	☑ Three Phase Yes *		
Bypass	☑ Safety Socket Yes *	☐ Lever n/a *	☐ MCC (1Ø, 320A) n/a *	☐ None n/a *
Material	☑ Painted Galv. Yes *	☐ Aluminum n/a	☐ 304 SS n/a	☐ 316 SS n/a
Paint Color	☑ ANSI 61 Grey Yes *	☐ Other RAL Number n/a		

Distribution:

Main Fuse Pull-Out	Voltage: 208Y/120V, 3P, 4W	Amperage: 200A	☐ SCCR: 10k n/a *	☐ SCCR: Other n/a

Note:
Bypass Safety Socket shall be EUSERC 311

* Denotes 5 day factory lead time
** Please provide panel schedule if branch breakers are to be factory populated



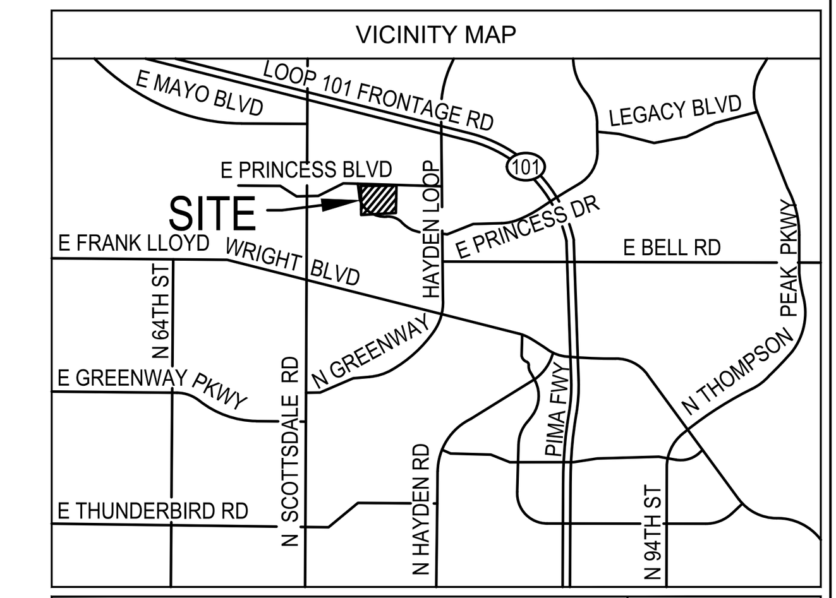
1
--
200A (208Y/120V) EATON COMMERCIAL METER PEDESTAL (CMP4421MC-1)
SEE CUSTOMIZATION FORM ON THIS SHEET
NO SCALE

2
--
METER PEDESTAL CUSTOMIZATION FORM
NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

R1.2 REFERENCE DRAWING

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE
PHONE: 619-518-1101 PGR/MOBILE:
INSPECTOR: JEFF TURNER
PHONE: 928-581-9754 PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#:	WA622585	DATE:	8-13-2021
BY:	TR-C2	SCALE:	AS NOTED
APS DWG #:	165552	VENDOR #:	**R1.2**

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

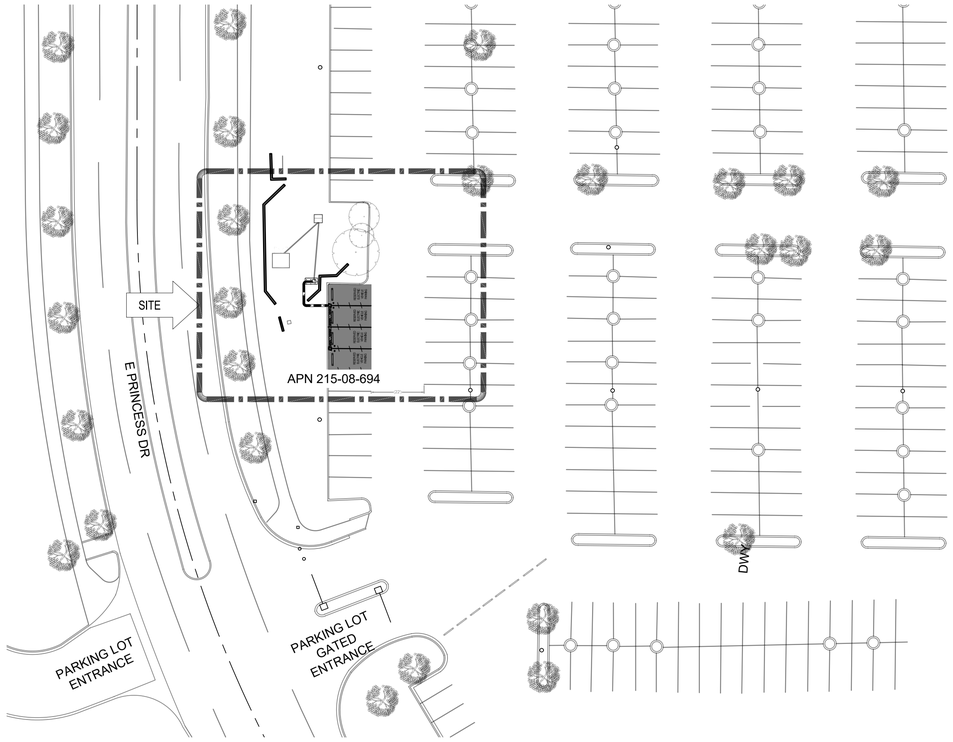
APS PROJECT 165552
FAIRMONT SCOTTSDALE PRINCESS
INSTALLATION OF 26.62kVA ELECTRIC VEHICLE LEVEL 2 CHARGING EQUIPMENT
7575 E PRINCESS DR
SCOTTSDALE, AZ 85255

ABBREVIATIONS

1P	ONE POLE (2,3,4 APPLICABLE)
A	AMPERE
AB	AGGREGATE BASE
AC	ALTERNATING CURRENT
AC	ASPHALT CONCRETE
AIC	AVAILABLE INTERRUPTING CAPACITY
AT	AMPERE TRIP (RATING)
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BB	BOTTOM OF BASIN
BC	BACK OF CURB
BIL	BASIC IMPULSE LEVEL
C	CONDUIT
CF	CURB FACE
CL	CENTERLINE
CMIL	CIRCULAR MIL
CT	CURRENT TRANSFORMER
DC	DIRECT CURRENT
E	EAST
EGC	EQUIPMENT GROUNDING CONDUCTOR
E'LY	EASTERLY
EMT	ELECTRICAL METALLIC TUBING
EP	EDGE OF PAVEMENT
EPR	ETHYLENE PROPYLENE RUBBER
EVCS	ELECTRIC VEHICLE CHARGING STATION
EX.	EXISTING
FBO	FURNISHED BY OTHERS
FF	FINISHED FLOOR
FG	FINISHED GRADE
FL	FLOW LINE
FLA	FULL LOAD AMPS
FO	FIBER OPTIC
FS	FINISHED SURFACE
FT	FEET
FWE	FURNISHED WITH EQUIPMENT
G	GROUND FAULT TRIP
G, GND	GROUND
GB	GRADE BREAK
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HI PT	HIGH POINT
I	INSTANTANEOUS
IE	INVERT ELEVATION
IMC	INTERMEDIATE METAL CONDUIT
INV	INVERT
ISC	INTERRUPTING SHORT CIRCUIT
KV	KILO VOLT
KVA	KILOVOLTAMPERE
KW	KILO WATTS
KWH	KILOWATTHOUR
L	LONG TIME TRIP
LB	POUND
L-G	LINE TO GROUND VOLTAGE
L-L	LINE TO LINE VOLTAGE
L-N	LINE TO NEUTRAL VOLTAGE
LSIG	ELECTRONIC TRIP DEVICE
M	METER
MBJ	MAIN BONDING JUMPER

ABBREVIATIONS CON'T

MCB	MAIN CIRCUIT BREAKER
MH	MANHOLE
MLO	MAIN LUG ONLY
MVA	MEGA VOLT AMPERE
N	NEUTRAL
N	NORTH
NEC	NATIONAL ELECTRICAL CODE
NTS	NOT TO SCALE
OC	ON CENTER
OH	OVERHEAD
PB	PULLBOX
PCC	PORTLAND CEMENT CONCRETE
PL	PROPERTY LINE
PT	POTENTIAL TRANSFORMER
PVC	POLYVINYL CHLORIDE (FOR CONDUIT)
R	RELAY
R	RADIUS
R/W	RIGHT-OF-WAY
RGS	RIGID STEEL CONDUIT
RL	RIDGE LINE
S	SHORT TIME TRIP
S	SEWER OR SOUTH
SCCR	SHORT-CIRCUIT CURRENT RATING
SCH	SCHEDULE (FOR CONDUIT)
SES	SERVICE ENTRANCE SECTION
SLD	SINGLE LINE DIAGRAM
SPD	SURGE PROTECTIVE DEVICE
SSBJ	SUPPLY SIDE BONDING JUMPER
STD	STANDARD
SW	SWITCH
SWGR	SWITCHGEAR
TB	TOP OF BASIN
TC	TOP OF CURB
TG	TOP OF GRATE
TYP	TYPICAL
UG	UNDERGROUND
V	VOLT
W	WATER OR WEST
W'LY	WESTERLY
XXX.XX	PROPOSED ELEVATION
(XXX.XX)	EXISTING ELEVATION



OVERALL SITEPLAN
SCALE: 1"=30'

30 15 0 30 60
1"=30'

PROJECT DESCRIPTION

- INSTALL (4) LEVEL 2 CHARGING PORTS
- INSTALL (1) 200A, (208Y/120V), 3-PHASE SES

APPLICABLE CODES

ALL WORK SHALL COMPLY WITH THE FOLLOWING APPLICABLE CODES:

LOCAL CODES
2018 INTERNATIONAL BUILDING CODE
2020 NATIONAL ELECTRICAL CODE

IN THE EVENT OF CONFLICT, THE MOST RECENT OR RESTRICTIVE CODE SHALL PREVAIL

SITE INFORMATION

EV SITE ADDRESS:
7575 E PRINCESS DR
SCOTTSDALE, AZ 85255

PROPERTY OWNER:
FMT SCOTTSDALE OWNER LLC
19200 VON KARMAN AVE STE 1000
IRVINE, CA 92612

ELECTRICAL
HENRY PEREZ
PE # 69617
C2 GROUP

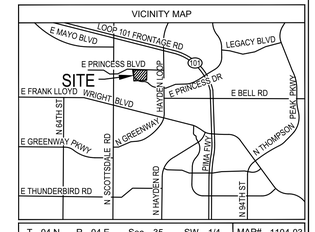
APS PROJECT MANAGER
JOE BRYANT
907-414-7079 PHONE
PROJECT MANAGER
CUSTOMER TO GRID SOLUTIONS

CONTRACTOR
HARMON ELECTRIC, INC.
MICHAEL TOOMB
(623) 879-0010

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

T1.0 TITLE SHEET

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
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NO.	DATE	DESCRIPTION	BY

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7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
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ARIZONA, U.S.A.

EXPIRES: 9-30-2022

CALL BEFORE YOU DIG
Avoid cutting underground utility lines. It's costly.
CALL 811
OR
1-800-263-1100
OR
1-800-STAKE IT
(OUTSIDE MARICOPA COUNTY)

CONTRACTOR NOTE

CONTRACTOR SHALL COMPLETE INSTALL PER THE SIGNED AND THE 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.

DO NOT SCALE DRAWINGS

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.

SHEET INDEX

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

GENERAL CONSTRUCTION NOTES

1. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE NEW, FREE OF DEFECTS AND 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.

2. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES, AND APPLICABLE REGULATIONS.

3. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

4. 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.

5. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

6. 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.

7. 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.

8. THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES WITH OTHER DISCIPLINES.

9. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE CONSTRUCTION MANAGER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.

10. 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.

11. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

12. THE GENERAL CONTRACTOR SHALL COORDINATE AND MAINTAIN ACCESS FOR ALL TRADES AND CONTRACTORS TO THE SITE AND/OR BUILDING.

13. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY OF THE SITE FOR THE DURATION OF CONSTRUCTION UNTIL JOB COMPLETION.

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. 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.

16. 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.

17. 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.

18. 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.

19. ALL NECESSARY RUBBISH, STUMPS, DEBRIS, STICKS, STONES, AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A LAWFUL MANNER.

20. 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.

21. THE CONTRACTOR SHALL SUBMIT A COMPLETE SET OF AS-BUILT REDLINES TO THE GENERAL CONTRACTOR UPON COMPLETION OF PROJECT AND PRIOR TO FINAL PAYMENT. SERIAL NUMBER SHALL BE INCLUDED FOR SPONSOR SITES.

22. THE CONTRACTOR SHALL LEAVE PREMISES IN A CLEAN CONDITION.

23. 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.

24. THE CONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

25. WHERE TUNNELING IS USED UNDER EXISTING PCC OR EXISTING CURB, AREA UNDER MUST BE BACKFILLED WITH FLOWABLE SLURRY TO OBTAIN 100% COMPACTION TO PREVENT CRACKING OF PCC.

26. CURB REMOVAL TO NEAREST JOINT AND MIN. 5FT AND NEW JOINT SHOULD NOT BE CLOSER THAN 5FT AWAY.

27. A/C REPLACEMENT 1-INCH OVER EXISTING, MATCH EXISTING AGGREGATE SIZE, SEAL TO MATCH EXISTING FINISH WHERE APPLICABLE.

ELECTRICAL NOTES

28. CODES & REQUIREMENTS
    - 28.1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND AMENDMENTS AS ADOPTED BY THE AUTHORITY HAVING JURISDICTION.
    - 28.2. THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE GENERAL SUPPLEMENTAL CONDITIONS OF THE PROJECT SPECIFICATIONS.
    - 28.3. ALL ELECTRICAL CONDUIT, DEVICES AND EQUIPMENT ARE SHOWN DIAGRAMMATICALLY. DO NOT SCALE PRECISE DETAILS FROM THE DRAWINGS. THE CONTRACTOR SHALL FIELD VERIFY ACTUAL LOCATIONS WITH OWNER PRIOR TO ANY ROUGH IN.

29. EQUIPMENT
    - 29.1. ALL EQUIPMENT SHALL BE NEW EXCEPT AS OTHERWISE NOTED ON THE DRAWINGS. ALL EQUIPMENT PROVIDED SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING LABORATORY, NRTL. LISTED FOR THE TYPE OF EQUIPMENT BEING FURNISHED AND SHALL BE ACCEPTABLE FOR INSTALLATION BY THE LOCAL BUILDING SAFETY AND FIRE DEPARTMENT AUTHORITIES.

30. CONDUIT
    - 30.1. ALL CONDUCTORS SHALL BE ENCLOSED BY CONDUIT SIZED IN ACCORDANCE WITH THE PROPER TABLES CONTAINED IN THE NATIONAL ELECTRICAL CODE FOR THE INSULATION USED.
    - 30.2. ELECTRIC METAL TUBING (EMT) SHALL BE USED FOR ALL DRY AND WET LOCATIONS, ABOVE GRADE OR ABOVE FLOOR APPLICATIONS IN ACCORDANCE WITH ARTICLE 358 OF THE NEC. COUPLINGS AND CONNECTORS SHALL BE COMPRESSION-TYPE, STEEL, WATERTIGHT FITTINGS. PROVIDE GROUND CONDUCTOR FOR EVERY RUN OF EMT CONDUIT.
    - 30.3. FLEXIBLE METAL CONDUIT SHALL BE UTILIZED FOR ALL CONNECTIONS TO VIBRATING EQUIPMENT SUCH AS MOTORS AND TRANSFORMERS (MIN. 2'-0", MAX. 6'-0").
    - 30.4. ALL EXPOSED CONDUIT SHALL BE ROUTED PARALLEL OR PERPENDICULAR TO THE BUILDING WALLS. SUPPORT CONDUIT PER NEC.
    - 30.5. PROVIDE EXPANSION FITTINGS FOR ALL CONDUIT(S) THAT CROSS EXPANSION JOINTS.

31. CONDUCTORS
    - 31.1. CONDUCTOR INSULATION SHALL BE OF A TYPE RECOGNIZED BY THE NEC AND AS APPROVED FOR ITS PARTICULAR APPLICATION OR AS REQUIRED BY THE LOCAL BUILDING SAFETY AUTHORITIES WHICHEVER IS MORE STRINGENT.
    - 31.2. ALL WIRING THROUGHOUT SHALL BE COLOR CODED AS FOLLOWS:

	480V SYSTEM	208V/240V SYSTEM
A PHASE	BROWN	BLACK
B PHASE	ORANGE	RED
C PHASE	YELLOW	BLUE
NEUTRAL	GREY	WHITE
GROUND	GREEN	GREEN
ISOLATED GROUND	---------	GREEN W/ YELLOW STRIPE

    - 31.3. THERE SHALL BE NO SPLICING OF CONDUCTOR.

32. FEEDERS & BRANCH CIRCUITS
    - 32.1. RISER DIAGRAMS, ONE-LINE DIAGRAMS AND CIRCUIT RUNS ARE INDICATIVE ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT ROUTING OF FEEDERS AND BRANCH CIRCUITS SO AS TO BEST FIT THE LAYOUT OF THE JOB.
    - 32.2. CIRCUITS MAY BE ARRANGED IN 3-WIRE FEEDS (2 HOT AND A COMMON NEUTRAL) IN COLOR CODE AS NOTED IN SECTION 31.2; AND EACH CIRCUIT IS PROTECTED BY AN OVER CURRENT PROTECTION DEVICE (OCPD) PER NEC. MORE THAN 3 CIRCUITS IN A CONDUIT BY SPECIFIC APPROVAL OR WHERE SHOWN IN DRAWINGS.

33. GROUNDING
    - 33.1. FURNISH AND INSTALL GROUNDING AND GROUNDING CONDUCTORS AS SPECIFIED HEREIN AND SHOWN ON THE DRAWINGS.
    - 33.2. ALL PANELBOARD CABINETS, EQUIPMENT, ENCLOSURES, AND CONDUIT SYSTEMS SHALL BE GROUNDED SECURELY IN ACCORDANCE WITH PERTINENT SECTIONS OF ARTICLE 250 OF THE NEC, AS AMENDED BY ANY LOCAL CODES. CONDUCTORS SHALL BE COPPER. ALL ELECTRICALLY OPERATED EQUIPMENT SHALL BE BONDED TO THE GROUNDED CONDUIT SYSTEM. ALL NON-CURRENT CARRYING CONDUIT SURFACES THAT ARE LIKELY TO BECOME ENERGIZED AND SUBJECT TO CONTACT BY A PERSON SHALL BE GROUNDED BY ONE OR MORE OF THE METHODS DETAILED IN ARTICLE 250 OF THE NEC. ALL GROUND CONNECTIONS SHALL HAVE CLEAN CONTACT SURFACES . INSTALL ALL GROUNDING CONDUCTORS IN CONDUIT AND MAKE CONNECTIONS READILY ACCESSIBLE FOR INSPECTION. FURNISH AND INSTALL GROUNDING ELECTRODES AS DESCRIBED ON THE DRAWINGS.
    - 33.3. GROUNDING OF METAL RACEWAYS SHALL BE ASSURED BY MEANS OF GROUNDING BUSHING ON FEEDER CONDUIT TERMINATIONS AT THE SERVICE ENTRANCE, DISTRIBUTION SWITCHBOARDS AND PANELBOARDS , AND BY MEANS OF A CONTINUOUS, STRANDED, COPPER GROUNDING WIRE EXTENDED FROM THE GROUND BUS IN THE ENCLOSURE TO THE CONDUIT GROUNDING BUSHINGS.

34. PANELBOARDS
    - 34.1. FURNISH AND INSTALL BRANCH CIRCUIT PANELBOARDS AS SPECIFIED HEREIN AND AS INDICATED ON THE DRAWINGS.
    - 34.2. PANELBOARDS SHALL BE EQUIPPED WITH FULL NEUTRAL AND GROUND BUSSES, SEPARATE ISOLATED GROUND BUSSES SHALL BE PROVIDED FOR ISOLATED GROUND PANELBOARDS.
    - 34.3. PROVIDE NEMA TYPE PANELBOARDS AS INDICATED ON DRAWINGS.
    - 34.4. MINIMUM INTERRUPTING RATING OF CIRCUIT BREAKERS SHALL BE AS INDICATED ON DRAWINGS AND FAULT CALCULATIONS.
    - 34.5. ACCEPTABLE MANUFACTURERS ARE GENERAL ELECTRIC, WESTINGHOUSE/CUTLER HAMMER, EATON, SIEMENS OR SQUARE-D. CONTRACTOR SHALL PROVIDE MATCHING MANUFACTURERS OF EXISTING EQUIPMENT WHEN APPLICABLE .

35. LABELING
    - 35.1. LABEL EQUIPMENT WITH NAME, AMPERAGE, VOLTAGE, PHASE AND WIRES (I.E . PANEL " A", 400A, 120/208V, 3Ø, 4W)
    - 35.2. ALL JUNCTION BOXES SHALL BE LABELED WITH CIRCUITS INSTALLED (I.E. 'LB1' - 1,3,5) WITH INDELIBLE BLACK INK ON THE BOX COVER.
    - 35.3. PROVIDE ARC FLASH SIGNAGE ON ALL ELECTRICAL EQUIPMENT PER NEC 110.16.
    - 35.4. LABEL BREAKERS WITH CORRESPONDING CIRCUITS.

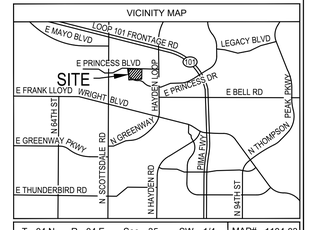
36. DRAWINGS OF RECORD (AS-BUILT)
    - 36.1. AS-BUILT DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH APS ELECTRIC DISTRIBUTION REQUIREMENTS TO PROJECT CONTACT FROM APS CUSTOMER GRID SOLUTIONS DEPARTMENT.

37. AVAILABLE FAULT CURRENT
    - 37.1. PER NEC 110.24, FIELD MARKING. SERVICE EQUIPMENT AT OTHER THAN DWELLING UNITS SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE AVAILABLE FAULT CURRENT. THE FIELD MARKING(S) SHALL INCLUDE THE DATE THE FAULT CURRENT CALCULATION WAS PERFORMED AND BE OF SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. THE CALCULATION SHALL BE DOCUMENTED AND MADE AVAILABLE TO THOSE AUTHORIZED TO DESIGN, INSTALL, INSPECT, MAINTAIN, OR OPERATE THE SYSTEM. SEE ALSO NEC 408.6 AND NEC 110.21(B)(3).

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

T2.0 **NOTE SHEET**

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

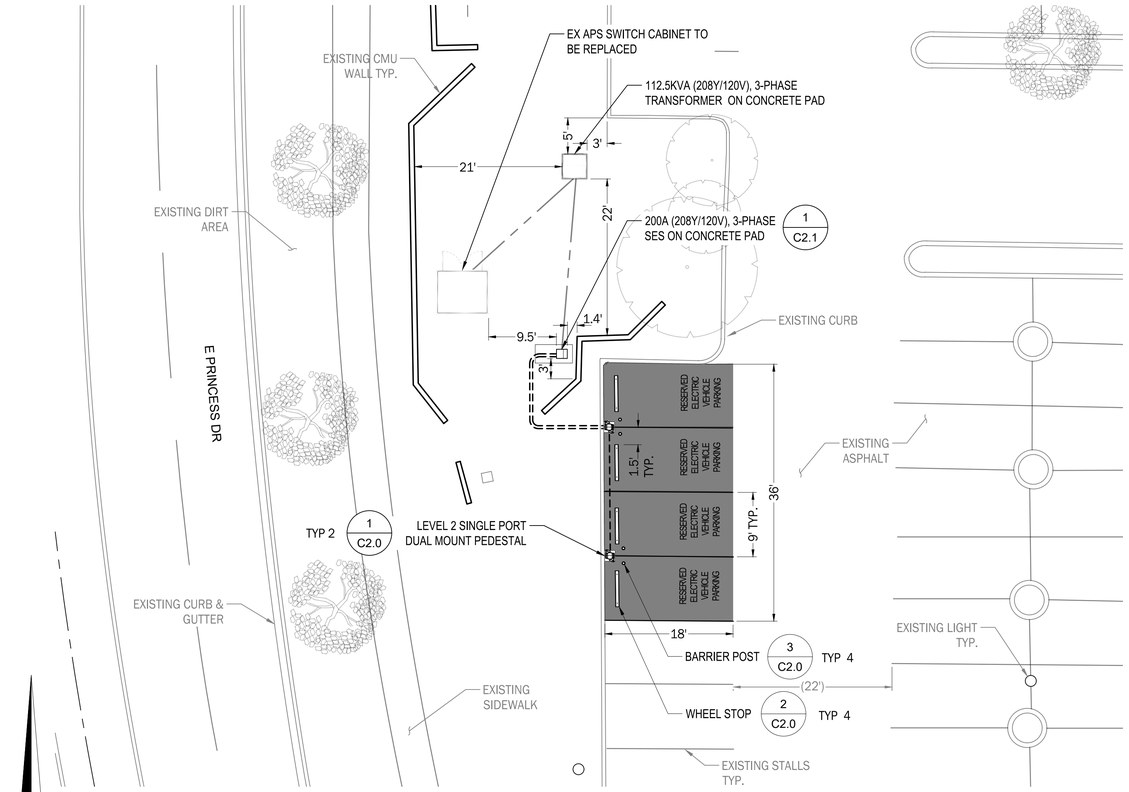
NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **T2.0**

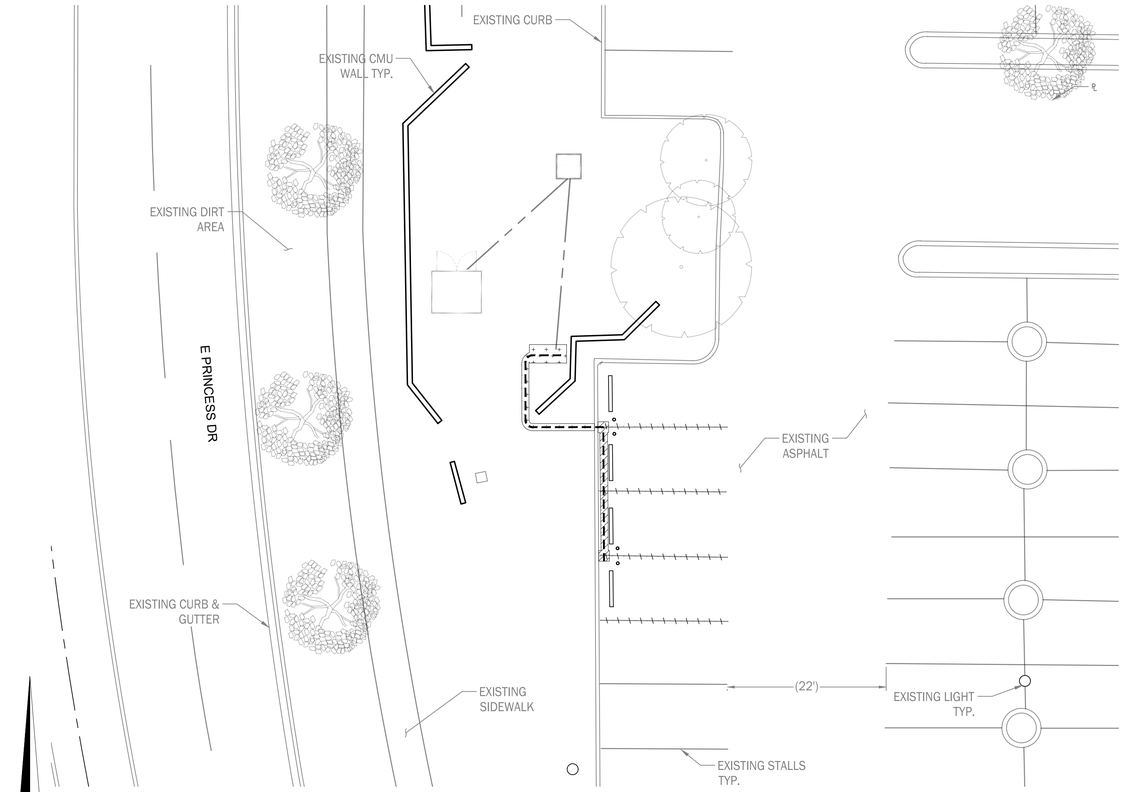
TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



ENLARGED SITE PLAN

10 5 0 10 20

1"=10'



DEMOLITION PLAN

10 5 0 10 20

1"=10'

1. THE CONTRACTOR SHALL RETURN SIDEWALKS, LANDSCAPING, PLANTERS, IRRIGATION SYSTEMS, AND ANY OTHER FACILITIES DISTURBED BY THE WORK TO THE SAME OR BETTER CONDITION THAN EXISTED PRIOR TO THE COMMENCEMENT OF THE WORK.

BILL OF MATERIALS		
MATERIAL	**UNIT**	**QUANTITY**
EQUIPMENT		
METER PEDESTAL	EACH	1
BARRIER POST	EACH	4
CLIPPER CREEK HCS-40R	EACH	4
PROMOUNT DUO PMD-10 PEDESTAL	EACH	2
EVCS FOUNDATION	EACH	2
WHEEL STOP	EACH	4
EQUIPMENT FOUNDATION	SF	20

1. THE CONTRACTOR SHALL REPLACE A/C 1"-OVER EXISTING WITH 95% COMPACTION. MATCH EXISTING FINISHES INCLUDING SLURRY WHERE APPLICABLE.

DEMO QUANTITIES TABLE		
	ASPHALT	21 SQ FT
	CURB	1.2 LFT
	PARKING LINES	REMOVAL
	GRAVEL AREA	0 SQ FT
	CONCRETE	0 SQ FT
	LANDSCAPING	0 SQ FT
	DIRT	33 SQ FT
	TRENCHING	44 LFT

STAMP LOCATION

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69617
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ARIZONA, U.S.A.

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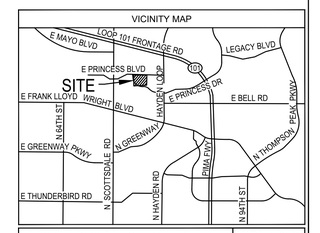
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C1.0 ENLARGED SITEPLAN
DEMOLITION PLAN

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

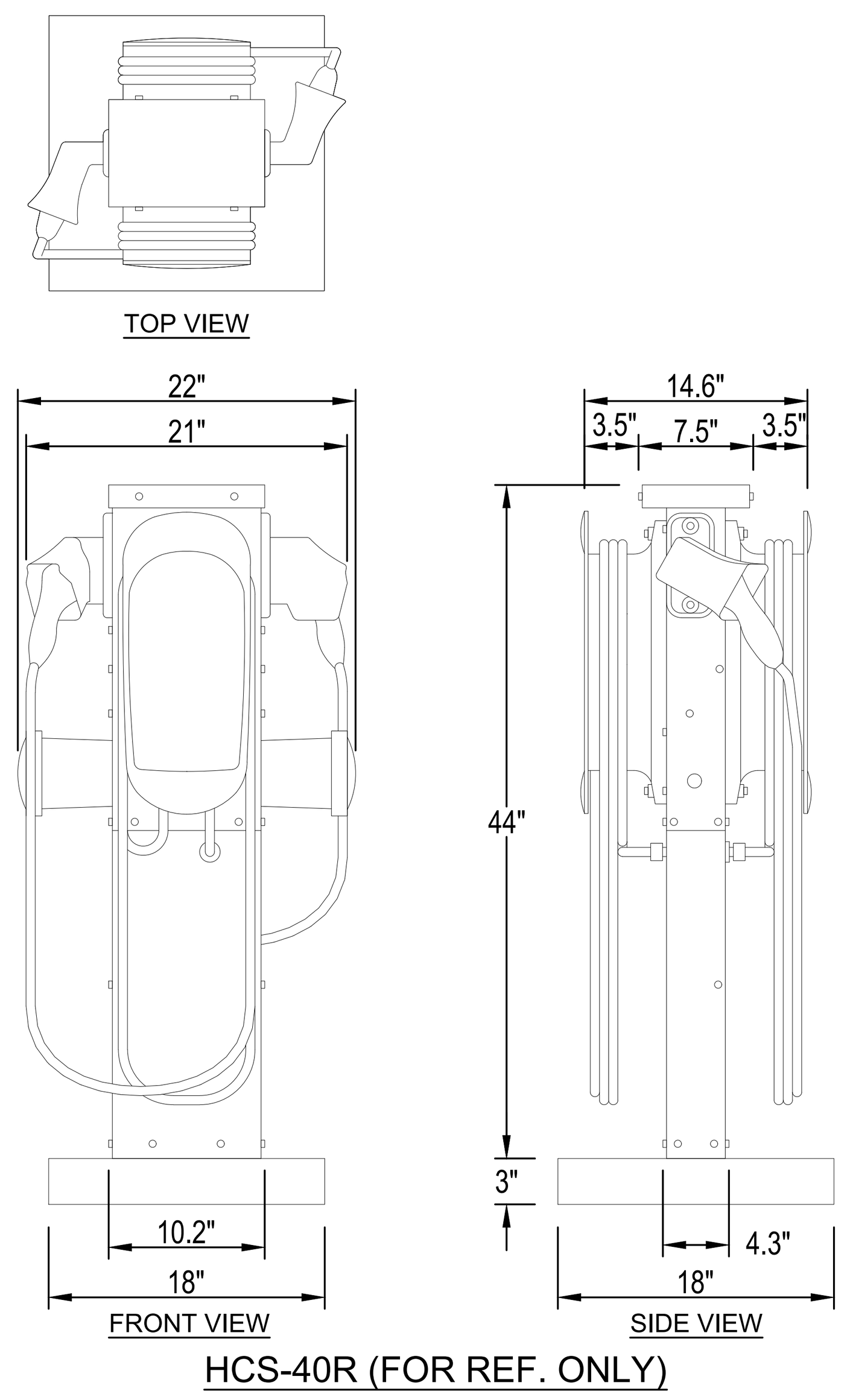
NO.	DATE	DESCRIPTION	BY

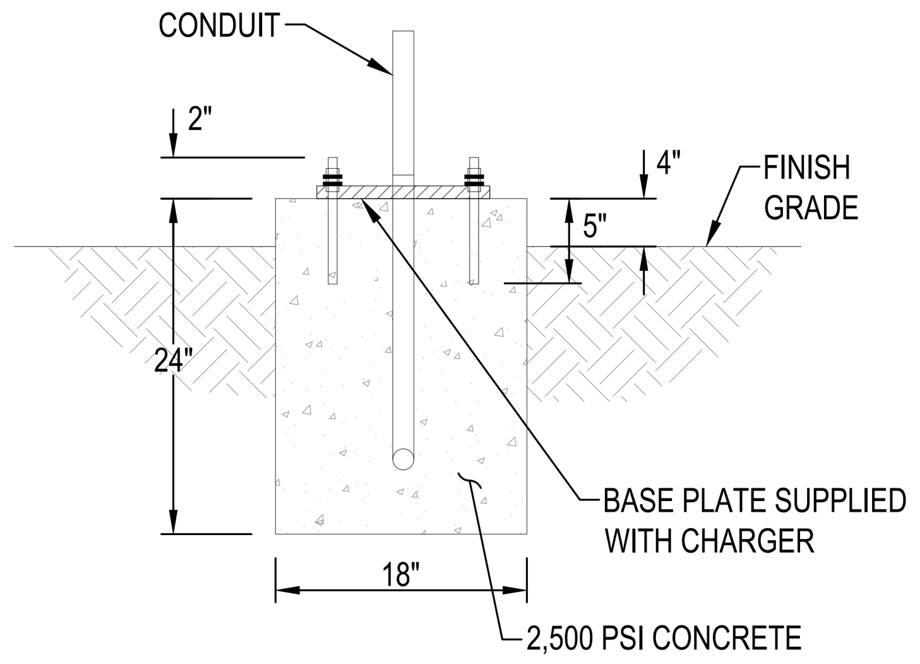
TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **C1.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585





FOUNDATION DETAILS

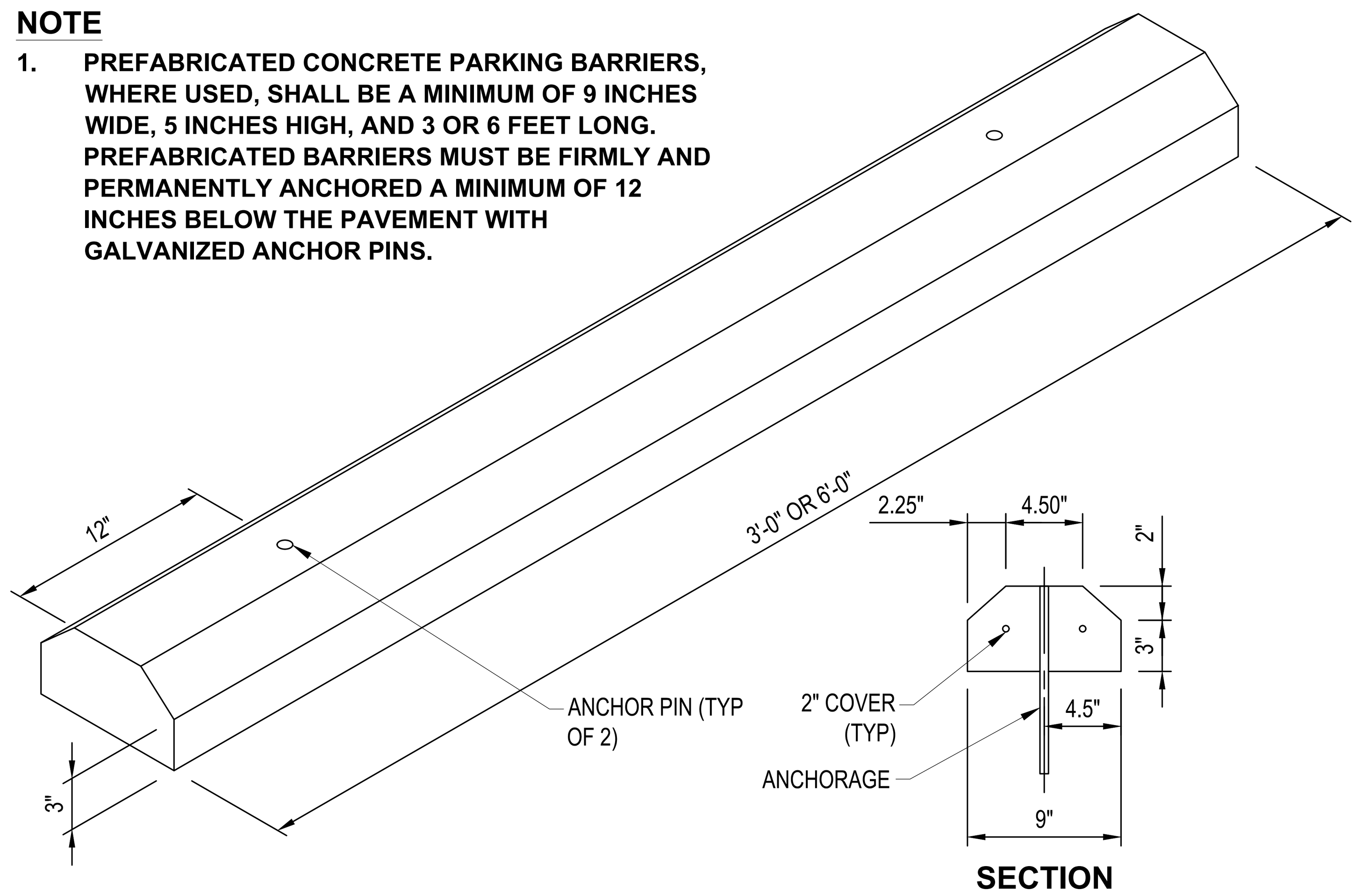
NOTES:

1. CONCRETE BLOCK MUST MEASURE AT LEAST 18" ON ALL SIDES.
2. THE BOLT THREADS MUST EXTEND 2" ABOVE THE CONCRETE.
3. THE CONDUIT MUST BE AT LEAST 1 1/2" IN DIAMETER AND EXTEND 12"-24" ABOVE THE CONCRETE.
4. REFER TO THE CLIPPER CREEK INSTALLATION GUIDE FOR DETAILED INSTALLATION INSTRUCTIONS.
5. FOUR HILTI 1/2" DIAMETER KB-TZ CARBON STEEL ANCHORS, 7" TO BE INSTALLED. CONTRACTOR TO SUBMIT DATA SHEETS AND REPORTS IF PROPOSING TO NOT USE THE PRODUCT.

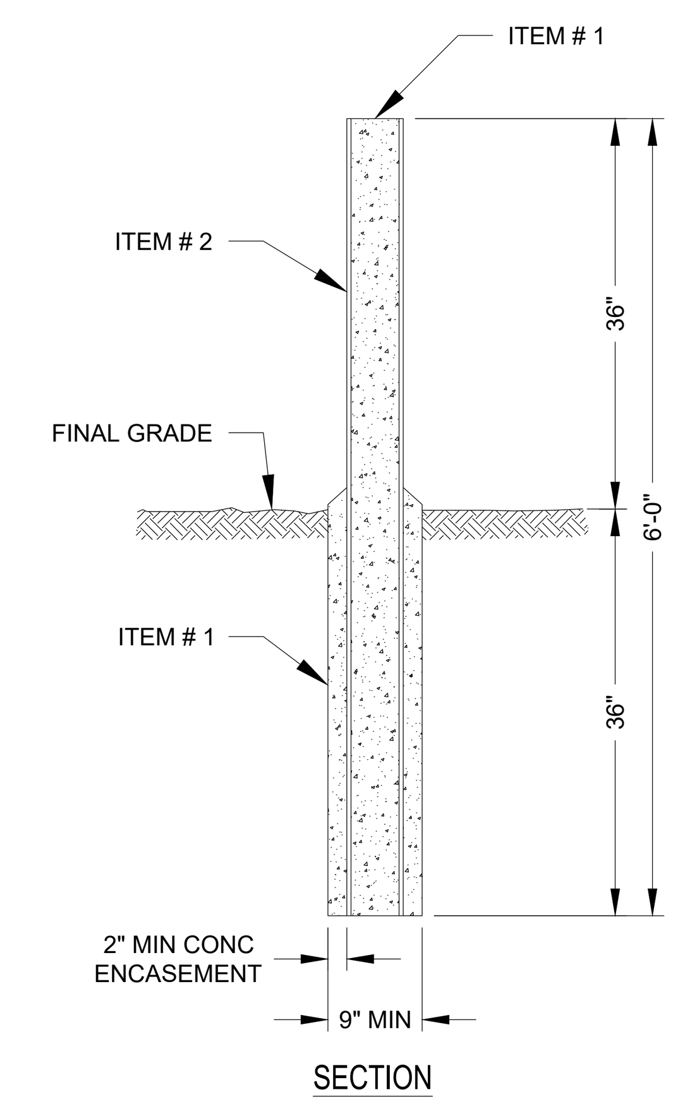
1 / --
DUAL PORT DISPENSER DETAIL (CLIPPER CREEK HCS-40R)
NO SCALE

NOTE

1. **PREFABRICATED CONCRETE PARKING BARRIERS, WHERE USED, SHALL BE A MINIMUM OF 9 INCHES WIDE, 5 INCHES HIGH, AND 3 OR 6 FEET LONG. PREFABRICATED BARRIERS MUST BE FIRMLY AND PERMANENTLY ANCHORED A MINIMUM OF 12 INCHES BELOW THE PAVEMENT WITH GALVANIZED ANCHOR PINS.**



2 / --
TYPICAL PARKING BARRIER (WHEEL STOP) DETAIL
NO SCALE



NOTES:

1. A 2-INCH MINIMUM CONCRETE ENCASEMENT IS REQUIRED AROUND THE BARRIER POST BELOW GRADE.
2. USE ADDITIONAL BARRIER POSTS AS REQUIRED TO PREVENT TRAFFIC PENETRATION INTO AREA.
3. A 36-INCH MINIMUM CLEARANCE IS REQUIRED FROM THE PAD TO THE OPTIONAL FRONT AND SIDE BARRIER POSTS FOR OPENING EQUIPMENT DOORS.
4. CAUTION MUST BE TAKEN WHEN INSTALLING POSTS SO THAT POSTS DO NOT MAKE CONTACT WITH CONDUIT SYSTEM.
5. PREMIX CONCRETE IS ONLY AVAILABLE IN 60 LB SACKS. WHEN 90 LB SACKS ARE WANTED, THEY MUST BE SPECIAL ORDERED.

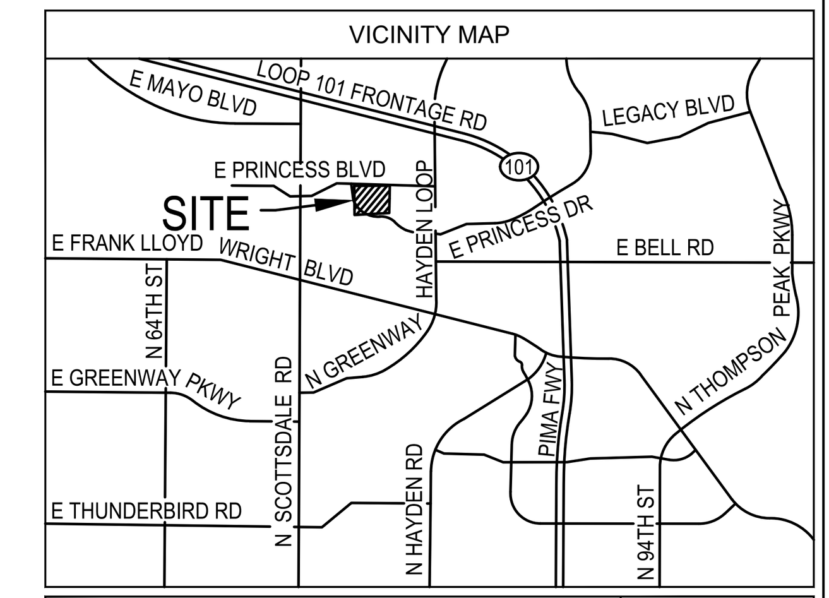
CODE	2990	2995	MATERIAL LIST	
ITEM	QTY	QTY	DESCRIPTION	APN
1	3	6	CONCRETE PRE-MIX 60#	71301280
2	-	1	POST FIXED BARRIER	70006120

3 / --
FIXED BARRIER POST DETAIL
NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C2.0 **DETAILS SHEET**

VICINITY MAP

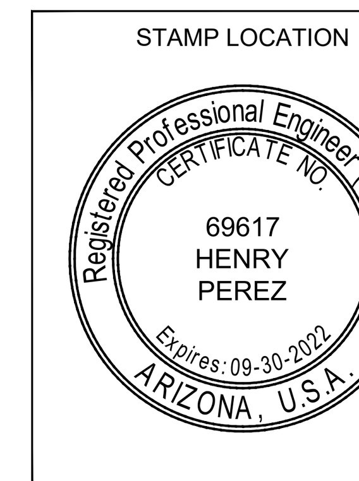


T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE
PHONE: 619-518-1101 PGR/MOBILE:
INSPECTOR: JEFF TURNER
PHONE: 928-581-9754 PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

STAMP LOCATION



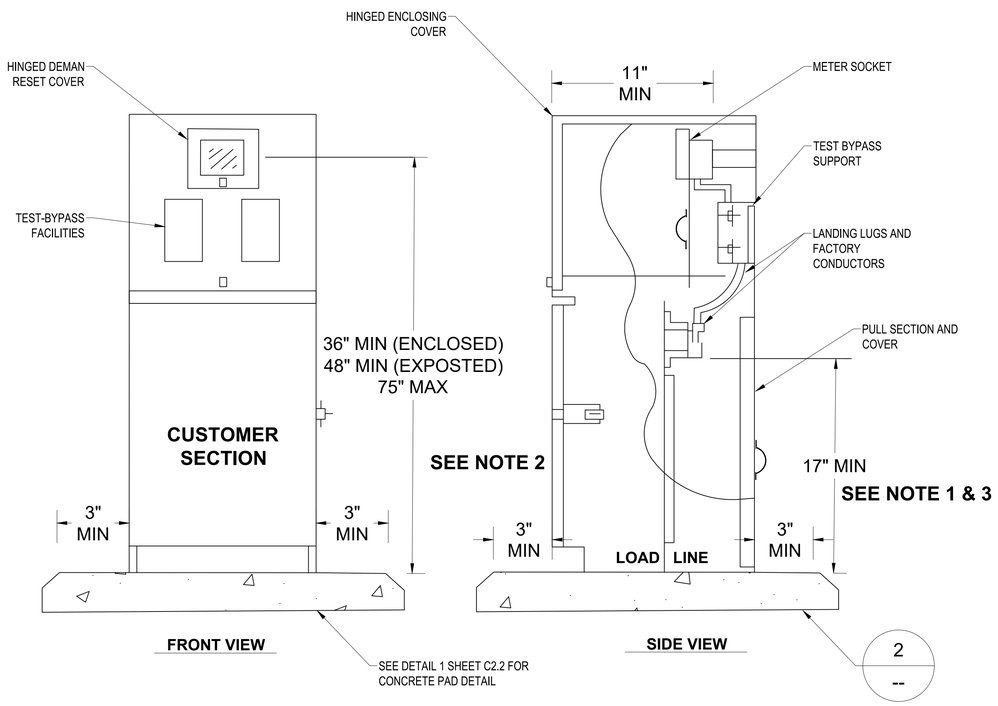
EXPIRES: 9-30-2022

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

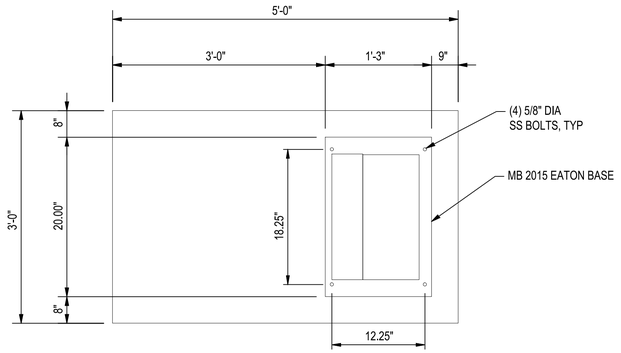
WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **C2.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



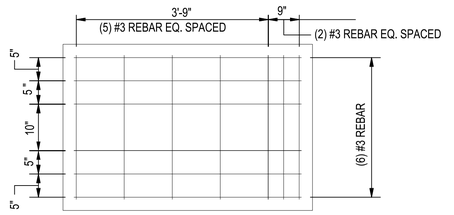
NOTE	PART NUMBER	DESCRIPTION	QTY.
1	3IN SCH40 CONDUIT	CONDUIT (XFMR TO METER)	1
2	CMP4421MCH-1	PAD MOUNT METER PEDESTAL	1
3	1.5IN CONDUIT	CONDUIT (DP TO CHARGER)	2

1 -- **METER PEDESTAL DETAILS**
NO SCALE

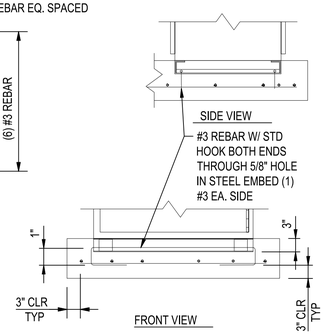


NOTE:
CONDUITS SHALL BE CAST INTO THE FOUNDATION PER ELECTRICAL REQUIREMENTS METHOD:

1. USE PRE-FABRICATED MOUNTING BRACE ASSEMBLY INSTALL MOUNTING BASE ASSEMBLY FLUSH WITH TOP SURFACE OF CONCRETE PAD, ALLOWING MOUNTING STUDS TO REACH ABOVE PAD. LOCATE LINE AND LOAD CONDUITS IN THE DESIGNATED AREAS AS SHOWN ON DRAWINGS BELOW.
2. USE ANCHOR BOLTS (5/8" DIA.) PRE-CAST IN CONCRETE. MOUNTING HOLE DIMENSION AS AS SHOWN ABOVE



REINFORCEMENT PLAN



NOTES:
1. REBAR SHALL HAVE A 1 1/2" MINIMUM COVER FROM CONDUITS.
2. STEEL BASE CHANNEL EMBED SHALL HAVE A 1 1/2" MINIMUM COVER FROM CONDUITS.
3. DISTANCE FROM BOLTS TO CONDUIT EDGES SHALL BE A MINIMUM OF 6".

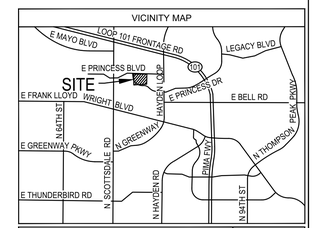
CONCRETE PAD DETAIL

2 -- **3-PHASE METER PAD DETAIL**
NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

C2.1 DETAILS SHEET

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

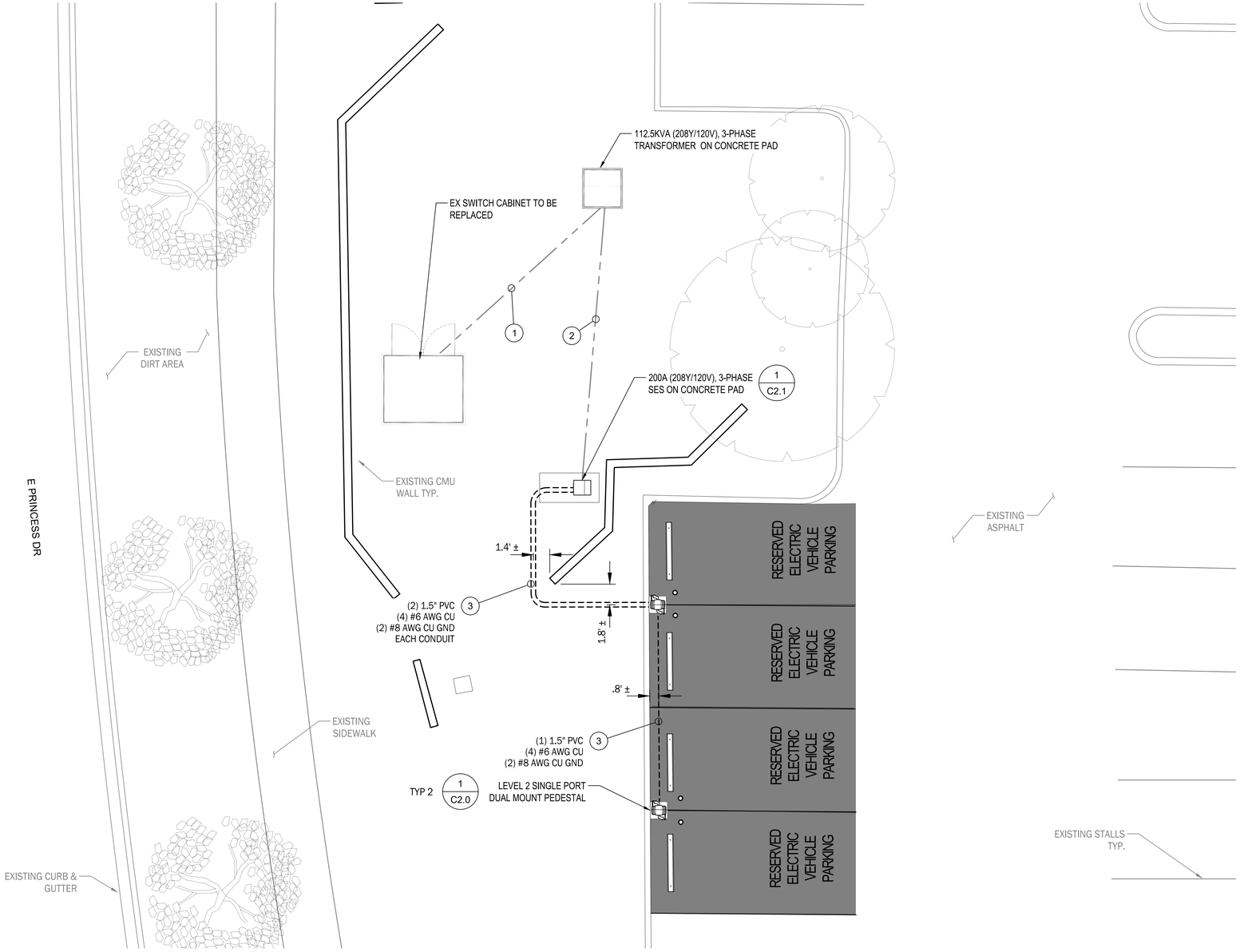
WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **C2.1**

NOTES

ALL UTILITY RELATED SCOPE OF WORK (TO THE POINT OF SERVICE) IS DETAILED IN THE APS UTILITY DESIGN DRAWING "WA622585"

1. CONDUIT ROUTING IS DIAGRAMMATICALLY SHOWN ON PLANS AND ARE ONLY APPROXIMATIONS. THE EXACT LOCATION AND ROUTING PATHS SHALL BE FIELD VERIFIED AND INSTALLED PER JURISDICTIONAL REQUIREMENTS.
2. ALL EQUIPMENT, FEEDERS AND DEVICES PROVIDED UNDER THIS SCOPE OF WORK IS NEW AND SHOWN IN BOLD UNLESS OTHERWISE NOTED.
3. PERFORM GROUND PENETRATING RADAR SURVEY PRIOR TO DIGGING.

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



ELECTRICAL SITE PLAN

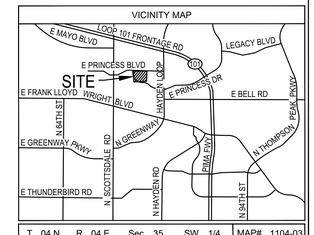
1. PROPOSED 4" UNDERGROUND ELECTRIC CONDUIT TO PROPOSED TRANSFORMER (TtM PER APS WO# WA622585).
2. PROPOSED 3" UNDERGROUND ELECTRIC CONDUIT FROM PROPOSED TRANSFORMER TO PROPOSED METER & DISTRIBUTION PANEL. (TtM PER APS WO# WA622585).
3. PROPOSED 1 1/2" PVC CONDUIT FROM 200A (280Y/120V) 3Ø DISTRIBUTION PANEL TO LEVEL 2 CHARGING STATIONS.

BRANCH CIRCUIT LENGTHS
(FROM DISTRIBUTION PANEL TO EV CHARGERS)

LEVEL 2 EV CHARGER	LENGTH (FT)	WIRE SIZE	CIRCUIT #
1	60	#6	1 & 3
2	60	#6	5 & 7
3	77	#6	2 & 4
4	77	#6	6 & 8

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

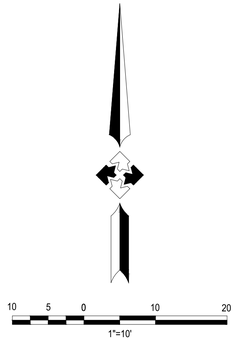
E1.0 ELECTRICAL SITE PLAN



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY



STAMP LOCATION

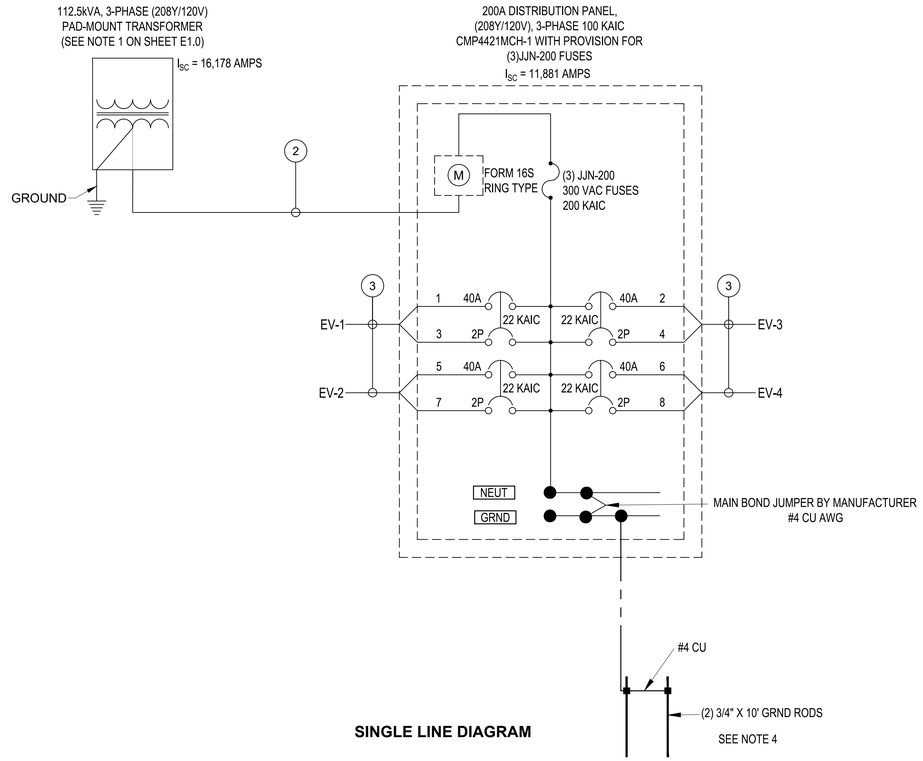
EXPIRES: 9-30-2022

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **E1.0**

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



SINGLE LINE DIAGRAM

Panel:	EV					Model Number:		**EATON CMP4421MCH-1**		
Voltage:		208Y/ 120V	Volts AC			Enclosure Type:		NEMA 3R		
Bus Rating:		200	Amps per Phase			Mount:		Pedestal		
Main Fuse JJN:		200	Amps			Panel Status:		New		
Phase:	3		Wire:	4						
Location:	WEST SIDE OF PARKING LOT									

CKT	Description	Trip	Load	Phase A (VA)	Phase B (VA)	Phase C (VA)	Load	Trip	Description	CKT
1	**EV-1**	40A	3,328	**6,656**			3,328	40A	**EV-3**	2
3		2P	3,328		**6,656**		3,328	2P		4
5	**EV-2**	40A	3,328			**6,656**	3,328	40A	**EV-4**	6
7		2P	3,328	**6,656**			3,328	2P		8
9	Space	40A						40A	Space	10
11	Space	40A						2P	Space	12
				13,312	**6,656**	**6,656**	VA			

Total VA	**39,936.00**
Total KVA	**49.92** **(HIGHEST LEG X 3) WITH 125% DF**
Total AMPS	**138.56** **≤ 100% OF OCPD**

PANEL SCHEDULE

TABLE A - DUAL CHARGERS (2 CIRCUITS)			
<180'	180' - 290'	290' - 400'	400' >
(4) #6 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #4 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #3 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT	(4) #2 AWG THWN-2 CU + (2) #8 AWG THWN-2 CU EGC IN 1 ½" PVC CONDUIT

* SEE NOTE 2

NOTES

1. CONTRACTOR TO FIELD VERIFY MAIN FEED OVER CURRENT PROTECTION DEVICE SUPPORTING DISTRIBUTION PANEL IS APPROPRIATELY SIZED TO SUPPORT THE LOAD. CONTRACTOR SHALL CONTACT THE ENGINEERING TEAM IMMEDIATELY IF BREAKER IS FOUND TO BE INSUFFICIENT.
2. CONDUCTOR LENGTHS ARE ESTIMATES ONLY. LENGTHS ARE BASED ON DIAGRAMMATICAL MEASUREMENTS AND APPROXIMATED BURIED DEPTHS. THE EXACT ROUTING PATH, CONDUCTOR RUN LENGTHS AND INSTALLATION SHALL BE DETERMINED BY THE CONTRACTOR IN THE FILED BASED ON EXISTING SITE CONDITIONS AND PHYSICAL MEASUREMENTS. CONTRACTOR TO ORDER CONDUCTOR BASED ON FIELD MEASUREMENTS.
3. CHARGING UNITS ARE EQUIPPED WITH AN INTEGRATED CONTACTOR TO PREVENT BACK FEEDING OF POWER TO THE SOURCE.
4. FOR ADDITIONAL GROUNDING INFORMATION, SEE GROUNDING DETAIL ON SHEET E3.0.
5. SEE CUSTOMIZATION FORM ON SHEET R1.1 FOR ADDITIONAL REQUIREMENTS.
6. INSTALL CLASS 16S METER SOCKET.

CIRCUIT SCHEDULE			
NO	FROM	TO	CONFIGURATION
1	UTILITY TRANSFORMER	AC PANELBOARD	SEE APS UTILITY DRAWINGS WO# WA622585
2	AC PANELBOARD	EV CHARGER	SEE TABLE B FOR VOLTAGE DROP CONSIDERATIONS DUE TO CONDUCTOR LENGTH

AC RUN MAXIMUM LENGTHS IS 400' INCLUDING BURIED DEPTH. ANY AC RUN LENGTHS BEYOND THIS MAXIMUM SHALL BE ADDRESSED WITH THE APPROPRIATE ENGINEERING TEAMS AS SOON AS THE SITUATION ARISES.

TABLE B	
MAXIMUM AC VOLTAGE DROP (%)	1.14%
AVERAGE AC VOLTAGE DROP (%)	1.02%

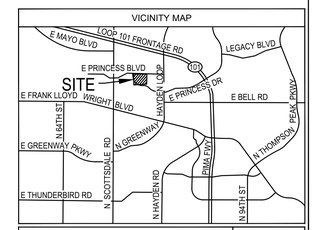
STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

E2.0 **SINGLE LINE DIAGRAM**
PANEL SCHEDULE



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

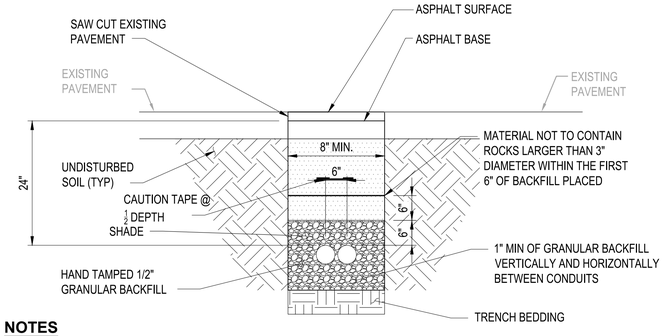
NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **E2.0**

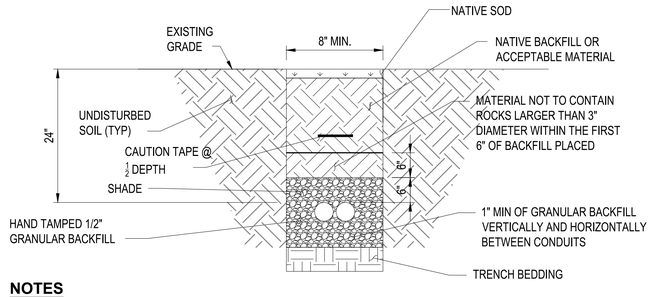
TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585



NOTES

1. TRENCHING REQUIREMENTS SHALL MEET THE STANDARDS PER THE APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.
2. ASPHALT SHALL COMPLY WITH STANDARD DOT OR LOCAL JURISDICTION SPEC. FOR HMA SURFACE COURSE.
3. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
4. ANY PAVEMENT DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
5. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E1.0 & E2.0, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.
6. CLEAN GRANULAR BACKFILL SHALL BE PLACED IN LOOSE, LEVEL LIFTS NOT TO EXCEED 6-INCHES THICKNESS.
7. COMPACTION SHALL BE BY MECHANICAL VIBRATORY PLATE COMPACTORS UNLESS OTHERWISE SPECIFIED.
8. COMPACT TO THE SAME DENSITY AS THE UNDISTURBED SOIL. COMPACT EACH LAYER UNTIL THERE IS NO EVIDENCE OF CONSOLIDATION.
9. FINAL LIFT BENEATH PAVEMENTS SHALL BE COMPACTED A MINIMUM OF FOUR COMPLETE PASSES.
10. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE USED IN PLACE OF CLEAN GRANULAR BACKFILL. CLSM SHALL CONFORM TO THE REQUIREMENTS OF THE DOT STANDARD SPECIFICATIONS.
11. SHADE MATERIAL SHALL NOT CONTAIN ROCKS LARGER THAN 1-1/2 INCHES IN THEIR GREATEST DIMENSION AND SHALL CONFORM TO APS SERVICE REQUIREMENTS MANUAL SECTION 600.05.
12. TRENCH BEDDING SHALL MEET THE STANDARDS PER APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.03.
13. ALL UTILITY CROSSINGS SHALL PROVIDE A MINIMUM OF 12 INCHES CLEAR VERTICAL SEPARATION FROM THE APS ELECTRIC FACILITIES AS OUTLINED IN THE APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.02.

UNDER PAVEMENT APS TRENCH DETAIL
NO SCALE



NOTES

1. TRENCHING REQUIREMENTS SHALL MEET THE STANDARDS PER APS ELECTRIC SERVICE REQUIREMENTS MANUAL SECTION 600.
2. ANY EXCAVATION LEFT OPEN NEEDS TO BE FENCED, BARRICADED, OR TRENCH PLATED TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
3. ANY LANDSCAPE DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO PRE CONSTRUCTION CONDITIONS OR BETTER.
4. EXACT NUMBER OF CONDUITS SHALL BE DETERMINED BY SHEET E1.0 & E2.0, EXACT CONDUIT PLACEMENT IN TRENCH SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD BASED ON PHYSICAL MEASUREMENTS AND JURISDICTIONAL REQUIREMENTS.
5. BACKFILL SHALL BE PLACED IN LOOSE, LEVEL LIFTS NOT TO EXCEED 6-INCHES THICKNESS.
6. COMPACTION SHALL BE BY MECHANICAL VIBRATORY PLATE COMPACTORS UNLESS OTHERWISE SPECIFIED.
7. COMPACT TO THE SAME DENSITY AS THE UNDISTURBED SOIL. COMPACT EACH LAYER UNTIL THERE IS NO EVIDENCE OF CONSOLIDATION.
8. CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE USED IN PLACE OF GRANULAR BACKFILL. CLSM SHALL CONFORM TO THE REQUIREMENTS OF THE DOT STANDARD SPECIFICATIONS.
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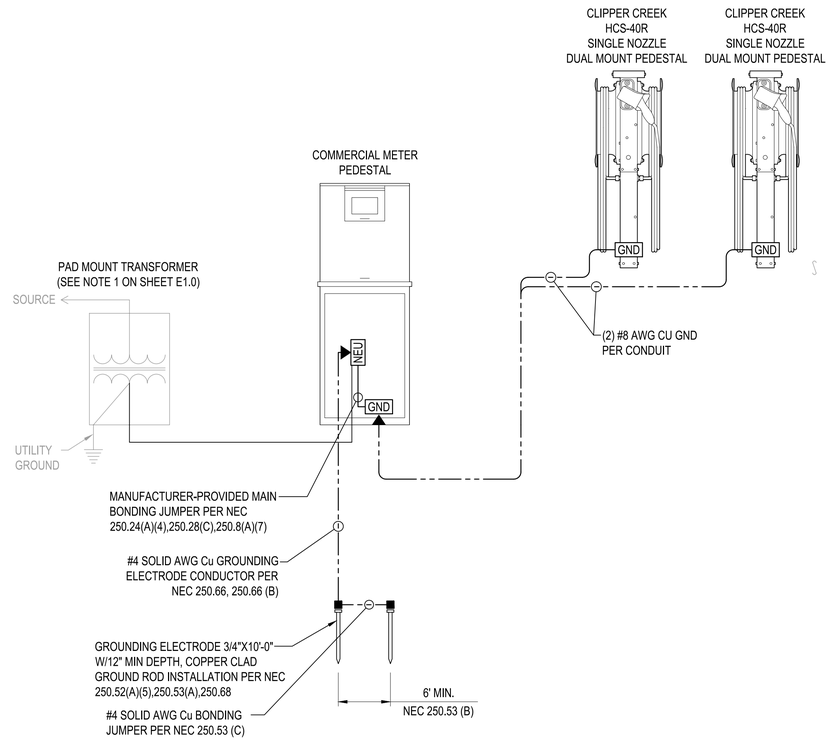
UNDER SOIL APS TRENCH DETAIL
NO SCALE

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. GROUNDING CONDUCTORS ARE GENERALLY NOT SHOWN. GROUND AND BOND ALL EQUIPMENT, RACEWAYS, MOTORS, PANELBOARDS AND SWITCHBOARDS, ETC. IN ACCORDANCE WITH 2017 NEC, ARTICLE 250.
6. 25Ω RESISTANCE OR LESS.



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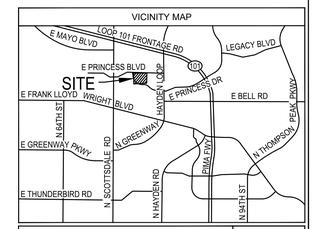
SAN DIEGO, CA 92121
(619) 880-9797

E3.0 ELECTRICAL DETAILS

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **E3.0**

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

HCS SERIES

A REAL PRODUCT, FOR THE REAL WORLD. ClipperCreek's HCS charging stations come in a variety of power levels, as hardwired and plug-in units, and with multiple pedestal mount options. Recent additions to the HCS product line include the HCS-60R and HCS-80R, 'ruggedized' versions of our most powerful HCS models, offering up to 64 Amp charging; and the ChargeGuard®, a simple key-based access control option.

- **FAST CHARGING -** Up to 15.4kW of power to charge your vehicle quickly
- **QUALITY -** Technology that works for the life of your current plug-in vehicle and then some
- **CONVENIENT -** 25 feet of charging cable for installation flexibility and superior vehicle reach
- **DURABLE -** Rugged, fully sealed NEMA 4 enclosure for installation anywhere
- **RELIABLE -** Backed by ClipperCreek's exceptional warranty and outstanding customer service

CLIPPERCREEK
RELIABLE. POWERFUL. MADE IN AMERICA.
ClipperCreek.com

20190211

HCS SERIES
PRODUCT OVERVIEW

Call ClipperCreek Today!
877-694-4194
www.clippercreek.com

Wall Mount Connector Holster included

ELECTRICAL SPECIFICATIONS

- **Certifications -** ETL, cETL Listed
- **Service -** 208V to 240V - 20A to 80A, single phase, 2 wire w/ground
- **Charge Current Output Power -** 208V to 240V-16A to 64A continuous (3.3kW to 15.4kW)
- **Service Ground Monitor -** Constantly checks for presence of proper safety ground
- **Automatic Circuit Reclosure -** After minor power faults
- **Charge Circuit Interruption Device -** Ground fault protection with fully automated self-test, eliminates manual user testing

MATERIAL SPECIFICATIONS

- 25 foot charging cable
- Three year warranty
- Install hardwired or plug-in
- Indoor/outdoor rated fully sealed (NEMA 4) enclosure
- Operating temperatures: -22°F to 122°F (-30°C to 50°C)
- Wall mount holster included

ACCESS CONTROL OPTION AVAILABLE $78 additional

ChargeGuard® Reliable key-based access control designed for fleet, workplace, multi-tenant, hospitality and residential charging.

MULTIPLE CONFIGURATIONS

MODEL:	HCS-20	HCS-30	HCS-40*	HCS-50*	HCS-60	HCS-80
CIRCUIT BREAKER RATING:	20A	30A	40A	50A	60A	80A
MAXIMUM CURRENT:	16A	24A	32A	40A	48A	64A
PRICES STARTING AT:	$565	$565	$565	$635	$899	$969

*Plug-in options are available at an additional charge.

RUGGEDIZED OPTION AVAILABLE $100 additional
HCS-40R, HCS-40PR, HCS-60R and HCS-80R

- 5-year warranty
- Impact and crush-resistant SAE-J1772™ connector
- Type 4X watertight and corrosion resistant rubber overmolded EV connector
- Available for plug-in installations with NEMA 14-50 or NEMA 6-50 plugs (HCS-40 only)

Share2® OPTION Maximize your Infrastructure Investment

- Turn one charging spot into two with HCS Share2®
- Full power charging for one vehicle, split power charging for two vehicles
- Compatible with ChargeGuard® enabled and Ruggedized HCS stations
- Power Sharing from a single circuit between two charging stations

20190211

ProMountDuo™
UNIVERSAL CHARGING STATION PEDESTAL

PEDESTAL
Starting at $434
As low as $813 with station
$999 as shown

RUGGED, UNIVERSAL, ECONOMICAL. Mount one or two ClipperCreek electric vehicle charging stations on our ProMountDuo™ pedestal for a cost effective mounting solution.

- **LOW COST -** Minimize installation costs and mount one or two units on a single pedestal
- **UNIVERSAL -** Ready for multiple ClipperCreek EVSE product lines
- **RUGGED -** Powder coated galvanized or stainless steel pedestal paired with NEMA 4 fully sealed charging stations ensure protection from the environment
- **FLEXIBLE -** Can accommodate two ClipperCreek or Tesla® EVSEs plus two 120V convenience outlets
- **RELIABLE -** Backed by ClipperCreek's excellent warranty and customer service team

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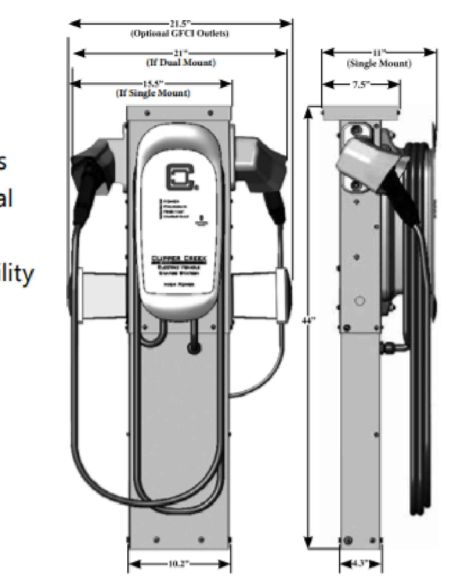
RELIABLE. POWERFUL. MADE IN AMERICA.
ClipperCreek.com

20190510

ProMountDuo PMD-10 UNIVERSAL PEDESTAL
PRODUCT OVERVIEW

FEATURES

- Slim, modern profile
- Supports two stations and two 120V outlets per pedestal
- Compatible with ClipperCreek ACS, HCS and LCS product lines
- Operates as a single or dual mount pedestal with no additional kit necessary for two stations
- Galvanized and powder coated steel for environmental durability
- ADA height and reach compliant



OPTIONS AVAILABLE

- 120V Ground Fault Receptacle Kit Optional (0300-06-000)

PARTS INCLUDED

- Pedestal
- All the hardware needed to mount up to two EVSEs

More Options Now Available!

PMD-10R with HCS -60

The PMD-10R is an affordable solution designed for fleet, parking lot, or any harsh environment. Designed to accommodate ClipperCreek HCS, LCS, ACS products as well as the Tesla® Wall Connector. This "ruggedized" mounting solution is an excellent value at **$695.**

- 100% stainless steel construction
- Powder coated for a lasting finish
- Stainless steel machined hardware
- No knockouts
- Plastic bushings for ease of installation
- Backed by a three year warranty

HCS/TESLA® Combo PMD-10T

The PMD-10T has all the same features as the PMD-10, but comes equipped to mount ClipperCreek and/or Tesla® charging stations. Available for just **$434**

MADE IN AMERICA

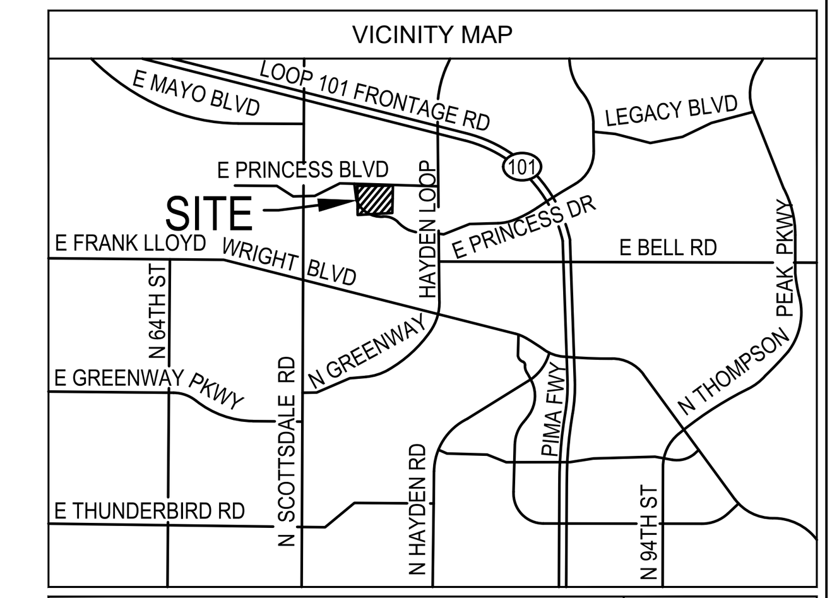
20190510

CLIPPER CREEK REFERENCE DRAWINGS

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

R1.0 REFERENCE DRAWING

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE	
PHONE: 619-518-1101	PGR/MOBILE:
INSPECTOR: JEFF TURNER	
PHONE: 928-581-9754	PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

STAMP LOCATION

Registered Professional Engineer (Electrical)
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TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **R1.0**

DATE: Aug 25, 2021 8:58 PM BY: Tony Real

TAKE CHARGE
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR
WA622585

Commercial Meter Pedestals - Pad Mounted

Application
- Utility meter, main disconnect and distribution panel
- Receive ANSI C12.10 watthour meters

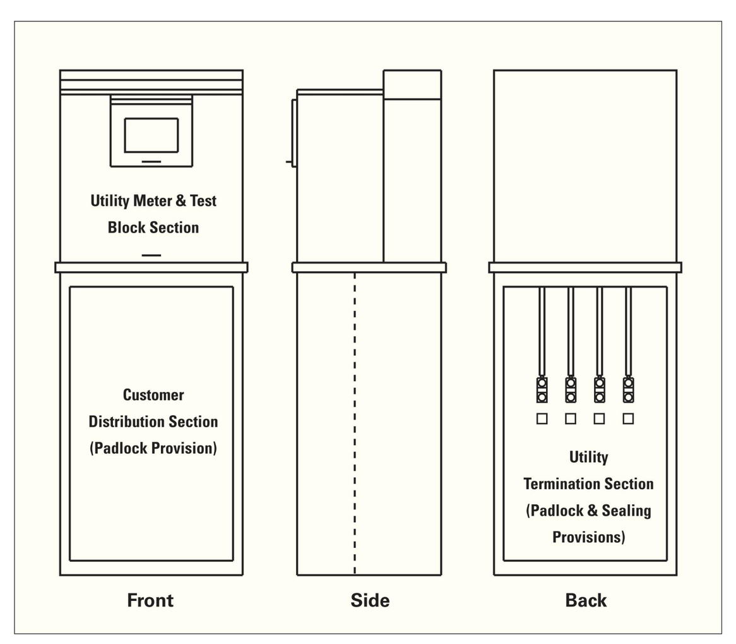
Construction
- Ring type
- NEMA Type 3R
- ANSI 61 gray painted finish
- Separate sealable utility termination and meter compartments
- Padlockable disconnect and distribution section
- Underground feed

Standards
- UL Listed
- ANSI C12.7
- EUSERC #308

Accessories
- 5th jaw kit - 50365 (single phase)
- Filler plate kit - 25139
- Class T fusible pullouts
- Controls, see page 106

Commercial Meter Pedestals

Catalog Number	Amp Rating	Jaws	Service Type	Bypass	Voltage	Distribution Main Breaker	Distribution Branches	Type	Mounting Pad	Dimensions Width	Dimensions Depth	Dimensions Height
CMP4111MC-1	100	4	1Ø,3W	TB	240	100A,2P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4111MCH-1	100	4	1Ø,3W	TB	480	100A,2P	14	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4121MC-1	200	4	1Ø,3W	TB	240	200A,2P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4121MCH-1	200	4	1Ø,3W	TB	480	200A,2P	18	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4411MC-1	100	7	3Ø,4W	TB	240	100A,3P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4411MCH-1	100	7	3Ø,4W	TB	480	100A,3P	12	Bolt-On	MB2015	20″	17 1/2″	54″
CMP4421MC-1	200	7	3Ø,4W	TB	240	200A,3P	12	Plug-In	MB1515	15″	17 1/2″	54″
CMP4421MCH-1	200	7	3Ø,4W	TB	240	200A,3P	18	Bolt-On	MB2015	20″	17 1/2″	54″



Data subject to change without notice. Consult local utility for area acceptance. All dimensions are in inches.

Instruction Sheet
IL307018EN
Effective April 2018
B-LINE SERIES

Commercial Meter Pedestals - Mounting Base Details

Installation Instructions
CMP-4000 Series

Meter pedestals are designed for pad-mount installation.
Two methods can be used to install pedestals on a concrete pad.

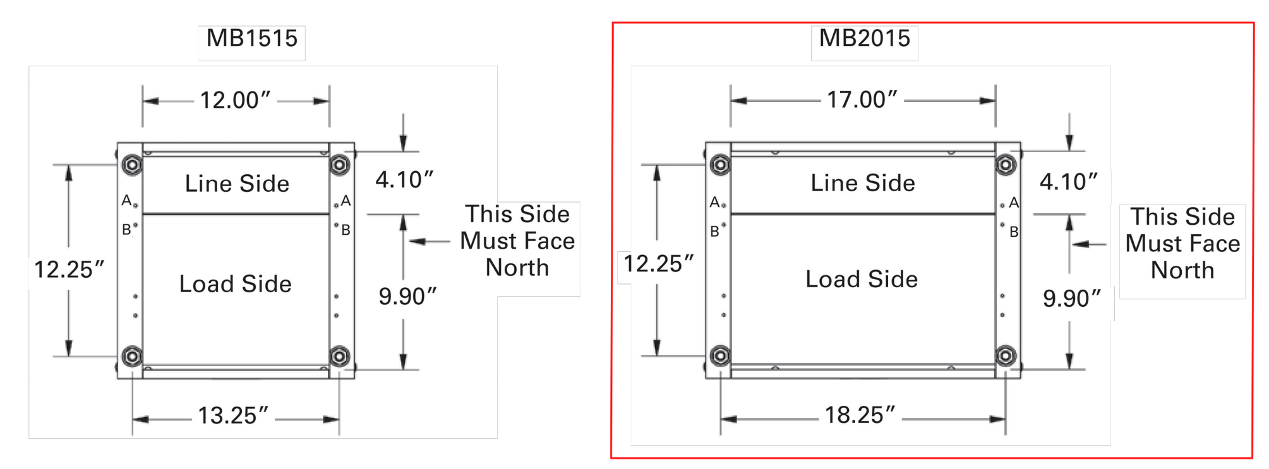
Method 1. Use pre-fabricated mounting base assembly.

Cat. No. MB1515 - Suitable for 15″ wide x 15″ deep pedestals.

Cat. No. MB2015 - Suitable for 20″ wide x 15″ deep pedestals.

Install mounting base assembly flush with top surface of concrete pad, allowing mounting studs to reach above pad. Locate line and load conduits in the designated areas as shown on drawings below.
Note: Barrier position 'B' for legacy B-Line series CMP alignment.

Caution:
Pedestals with photo-electric controls - right hand side must be facing to the North.(See drawings below)



Method 2. Use anchor bolts (5/8″ dia.) pre-cast in concrete pad. Mounting hole dimensions are shown above for MB1515 (15″ x 15″) and MB2015 (20″ x 15″) pedestals. Locate line and load conduits the same as in Method 1.

Data subject to change wothout notice. Consult local utility for area acceptance. All dimensions are in inches.

EATON
Powering Business Worldwide

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122
United States
Eaton.com

Customization options

Common items

Switching
- Hand-Off-Auto
- Test switch

Photo Cells
- Installed in window
- Remote mount

Timer Clocks
- 24 hour mechanical
- 7 day programmable

Contactors
- 30A per pole standard
- Up to 200A options available

Customization Form

Frame:

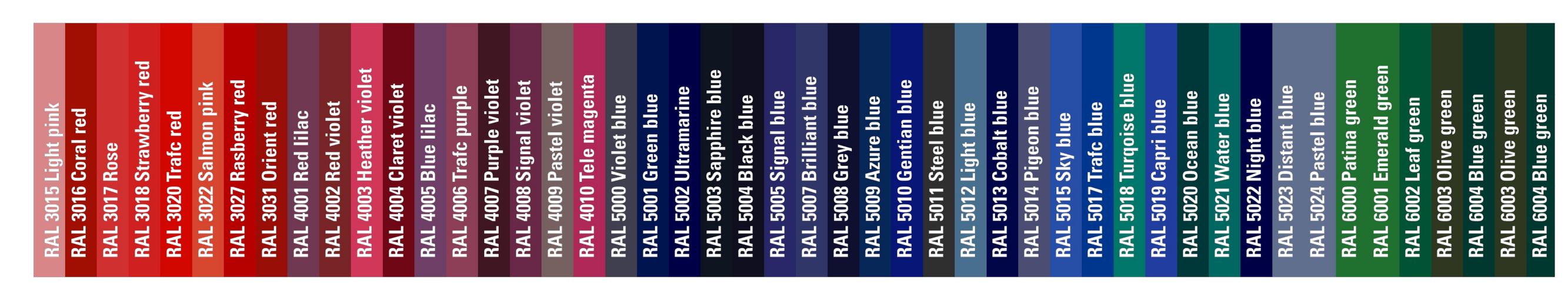
Type	☑ Pad Mount Yes *	❑ Wall Mount n/a	❑ Pad Mount, Unmetered*	
Width	❑ 15" n/a *	☑ 20" Yes *	❑ 24" n/a	❑ 30" n/a
Service	❑ Single Phase n/a *	☑ Three Phase Yes *		
Bypass	☑ Safety Socket Yes *	❑ Lever n/a *	❑ MCC (1Ø, 320A) n/a *	❑ None n/a *
Material	☑ Painted Galv. Yes *	❑ Aluminum n/a	❑ 304 SS n/a	❑ 316 SS n/a
Paint Color	☑ ANSI 61 Grey Yes *	❑ Other RAL Number n/a		

Distribution:

Main Fuse Pull-Out	Voltage: 208Y/120V, 3P, 4W	Amperage: 200A	❑ SCCR: 10k n/a *	❑ SCCR: Other n/a

Note:
Bypass Safety Socket shall be EUSERC 311

* Denotes 5 day factory lead time
** Please provide panel schedule if branch breakers are to be factory populated



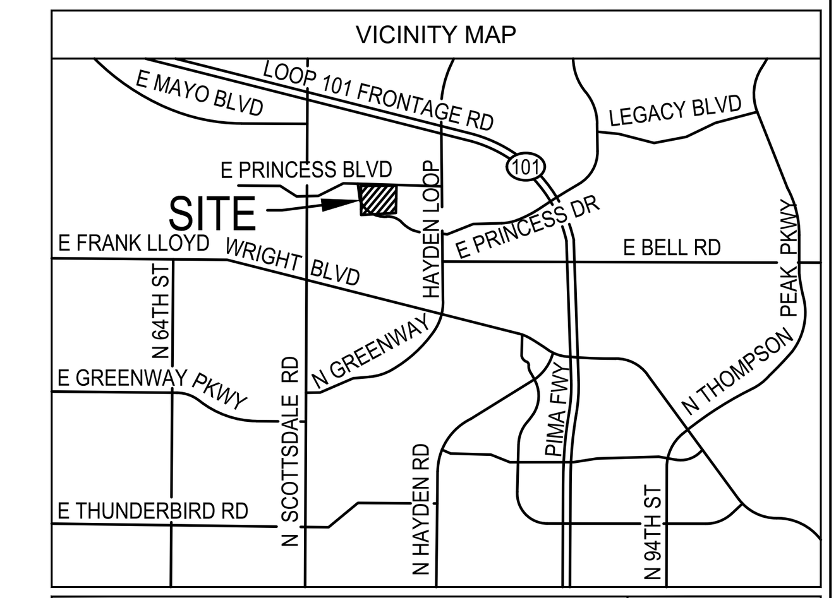
1 / --
200A (208Y/120V) EATON COMMERCIAL METER PEDESTAL (CMP4421MC-1)
SEE CUSTOMIZATION FORM ON THIS SHEET
NO SCALE

2 / --
METER PEDESTAL CUSTOMIZATION FORM
NO SCALE

C2 GROUP
8310 MIRAMAR MALL, SUITE A
SAN DIEGO, CA 92121
(619) 880-9797

R1.2 REFERENCE DRAWING

VICINITY MAP



T 04 N	R 04 E	Sec 35	SW 1/4	MAP# 1104-03

CONTACT: JASON PAQUETTE
PHONE: 619-518-1101 PGR/MOBILE:
INSPECTOR: JEFF TURNER
PHONE: 928-581-9754 PGR/MOBILE:

NO.	DATE	DESCRIPTION	BY

STAMP LOCATION

Registered Professional Engineer (Electrical)
CERTIFICATE NO.
69617
HENRY
PEREZ
Expires: 09-30-2022
ARIZONA, U.S.A.

EXPIRES: 9-30-2022

TAKE CHARGE [26.62KW, 208V 3-PHASE]
FAIRMONT SCOTTSDALE PRINCESS
7575 E PRINCESS DR, SCOTTSDALE, AZ 85255
FINAL ENGINEERING

aps

WO#: WA622585	DATE: 8-13-2021
BY: TR-C2	SCALE: AS NOTED
APS DWG #: 165552	VENDOR #: **R1.2**

DATE: Aug. 25, 2021 8:58 PM BY: Tony Real