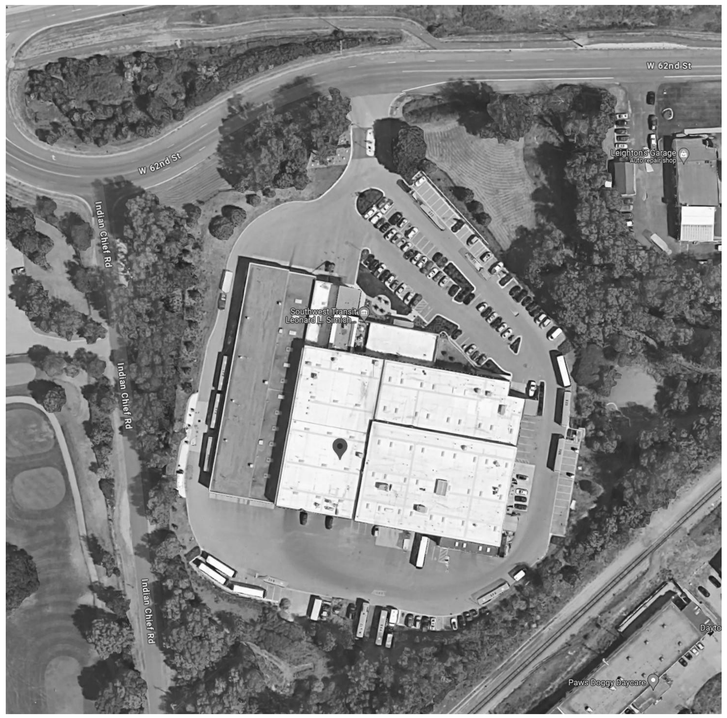
SOUTHWEST TRANSIT
EV CHARGING STATION ADDITION



ELECTRICAL SHEET LIST	
SHEET NUMBER	SHEET NAME
E0.0	ELECTRICAL TITLE SHEET
E1.0	ELECTRICAL BUILDING OVERALL PLAN
E2.0	ELECTRICAL POWER PLAN
E3.0	ELECTRICAL ONE-LINE DIAGRAM
E4.0	ELECTRICAL DETAILS

SHEET TOTAL: 5

ELECTRICAL ABBREVIATIONS

A, AMP	AMPERES	M	METER
ABV	ABOVE	MC	MOMENTARY CONTACT OR MECHANICAL CONTRACTOR
AG	ABOVE GRADE		
AA	AUDIBLE ALARM	MCB	MAIN CIRCUIT BREAKER
AC	ABOVE COUNTER	MCC	MOTOR CONTROL CENTER
ACH	ABOVE COUNTER HEIGHT	MH	MAN HOLE
ADD	ADDENDUM	MLO	MAIN LUG ONLY
AFC	AVAILABLE FAULT CURRENT	MMFO	MULTI MODE FIBER OPTIC
AFCI	ARC FAULT CIRCUIT INTERRUPTER	MRS	MOTOR RATED SWITCH
AFF	ABOVE FINISHED FLOOR	MSB	MAIN SWITCHBOARD
AHU	AIR HANDLING UNIT	MT	EMPTY
AL	ALUMINUM	MTR	MOTOR
ANT	ANTENNA	N	NEUTRAL
ATS	AUTOMATIC TRANSFER SWITCH	NC	NORMALLY CLOSED
AV	AUDIO VISUAL	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GUAGE	NIC	NOT IN CONTRACT
BAS	BUILDING AUTOMATION SYSTEM	NO	NORMALLY OPEN
BFC	BELOW FINISHED CEILING	NTS	NOT TO SCALE
BPS	BOLTED PRESSURE SWITCH	OC	ON CENTER
C	CONDUIT OR CONTROLLED RECEPT	PB	PULL BOX OR PUSHBUTTON
CAB	CABINET	PE	PNEUMATIC ELECTRIC
CB	CIRCUIT BREAKER	PF	POWER FACTOR
CCTV	CLOSED CIRCUIT TV	PH	PHASE
CKT	CIRCUIT	PNL	PANEL
CLG	CEILING	PRI	PRIMARY
COMM	COMMUNICATIONS	PT	POTENTIAL TRANSFORMER
CT	CURRENT TRANSFORMER	R	RACEWAY
CTRL	CONTROL	RECEPT	RECEPTACLE
CU	COPPER	REFG	REFRIGERATOR
DAS	DISTRIBUTED ANTENNA SYSTEM	RTU	ROOF TOP UNIT
DED	DEDICATED	SEC	SECONDARY
DN	DOWN	SGB	SERVICE GROUND BAR
EC	ELECTRICAL CONTRACTOR	SMFO	SINGLE MODE FIBER OPTIC
EGB	ELECTRICAL GROUND BAR	SPKR	SPEAKER
ELEC	ELECTRIC OR ELECTRICAL	STP	SHIELDED TWISTED PAIR
EM	EMERGENCY	SUB	SUBSTATION
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
ENCL	ENCLOSURE	SWBD	SWITCHBOARD
EP	ELECTRIC PNEUMATIC	TEL	TELEPHONE
EPO	EMERGENCY POWER OFF	TELCOM	TELECOMMUNICATIONS
EWC	ELECTRIC WATER COOLER	TGB	TELECOMMUNICATIONS GROUND BAR
F	FUSE OR FUSED	TMGB	TELECOMMUNICATIONS MAIN GROUND BAR
FA	FIRE ALARM	TR	TAMPER RESISTANT
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TSTAT	THERMOSTAT
FACP	FIRE ALARM CONTROL PANEL	TYP	TYPICAL
FB	FLOOR BOX	UC	UNDER COUNTER
FO	FIBER OPTIC	UF	UNDER FLOOR
FSD	FIRE-SMOKE DAMPER	UG	UNDER GROUND
FV	FILM VIEWER	UH	UNIT HEATER
G, GND	GROUND	UNO	UNLESS NOTED OTHERWISE
GC	GENERAL CONTRACTOR	USB	UNIVERSAL SERIAL BUS
GFEP	GROUND FAULT EQUIPMENT PROTECTION	UTP	UNSHIELDED TWISTED PAIR
GFI, GFCI	GROUND FAULT CIRCUIT INTERRUPTER	V	VOLT OR VOLTAGE
HH	HAND HOLE	VA	VOLT-AMP
HOA	HAND OFF AUTO	VAC	VOLTS ALTERNATING CURRENT
IG	ISOLATED GROUND	VDC	VOLTS DIRECT CURRENT
JBOX	JUNCTION BOX	W	WATT, WIRE OR WALL PHONE
KV	KILOVOLT	WAP	WIRELESS ACCESS POINT
KVA	KILOVOLT-AMP	WP	WEATHERPROOF
KW	KILOWATT	X	EXISTING
KWH	KILOWATT-HOUR	XFMR	TRANSFORMER

ELECTRICAL SYMBOLS LEGEND

SYMBOL SCHEDULE NOTES

A. THESE SYMBOLS COMPRISE A STANDARD LIST, NOT ALL SYMBOLS MAY APPEAR ON THESE DRAWINGS.

B. MOUNTING HEIGHTS INDICATED ARE STANDARD. DIMENSIONAL NUMBERS INDICATED AT DEVICES SHALL OVERRIDE THESE STANDARDS. MOUNTED HEIGHTS ARE TO THE CENTER OF THE DEVICE, UNLESS NOTED OTHERWISE.

C. MOUNTING HEIGHTS INDICATED ARE FOR STUD WALL CONSTRUCTION. WHEN BLOCK OR BRICK CONSTRUCTION IS USED, ADJUST MOUNTING HEIGHTS TO ALIGN DEVICE PLATES WITH RUNNING JOINT.

D. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION.

GENERAL

SYMBOL	DESIGNATIONS
	HEAVY DASHED LINE WEIGHT INDICATES EXISTING ITEM TO BE REMOVED.
	LIGHT SOLID LINE WEIGHT INDICATES EXISTING ITEM TO REMAIN.
	HEAVY SOLID LINE WEIGHT INDICATES NEW ITEM OR NEW LOCATION.
R	REMOVE EXISTING ITEM
RL	REMOVE EXISTING ITEM AND RELOCATE AS INDICATED
X	EXISTING ITEM TO REMAIN
NL	NEW LOCATION FOR RELOCATED ITEM

NOTES & TAGS

SYMBOL	DESIGNATIONS
XX / ##	EQUIPMENT IDENTIFICATION TAG - SEE EQUIPMENT SCHEDULES
XXX-X	FEEDER SIZE TAG - SEE POWER RISER SCHEDULE
#	KEYNOTE

RACEWAYS

SYMBOL	DESIGNATIONS
	CONDUIT CONCEALED IN CEILING OR WALLS
	CONDUIT CONCEALED IN THE FLOOR OR BELOW
	CONDUIT EXPOSED ON THE CEILING OR WALLS
UG - #	CONDUIT BURIED UNDERGROUND (# = DEPTH)
	CONDUIT WITH BEND DOWN
	CONDUIT WITH BEND UP
	CONDUIT WITH BUSHED END
	CONDUIT WITH BREAK OR CONTINUATION
L1 1,3,5	CIRCUIT HOME RUN - L1 INDICATES PANEL - NUMBER
	JUNCTION BOX - WALL/CEILING MOUNT

POWER

SYMBOL	DESIGNATIONS	MTG HT
	BRANCH CIRCUIT PANEL	VERIFY
	EQUIPMENT CABINET	VERIFY
	TRANSFORMER	VERIFY
	MOTOR OR MOTOR CONNECTION	VERIFY
	MOTOR CONTROLLER, STARTER OR VFD	VERIFY
	COMBINATION STARTER & DISCONNECT SWITCH	VERIFY
	FUSED DISCONNECT SWITCH	VERIFY
	DISCONNECT SWITCH	VERIFY
MR	MOTOR RATED TOGGLE	VERIFY
MMS	MANUAL MOTOR STARTER SWITCH WITH THERMAL OVERLOAD	VERIFY
	DUPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	EMERGENCY DUPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	SPLIT DUPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	EMERGENCY SPLIT DUPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	SIMPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	EMERGENCY SIMPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	QUADPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	EMERGENCY QUADPLEX RECEPTACLE - WALL/CEILING MOUNT	18"
	GFI RECEPTACLE, DUPLEX/QUADPLEX - WALL MOUNT	18"
	GFI RECEPTACLE, DUPLEX/QUADPLEX - CEILING MOUNT	
C	GFI RECEPTACLE, DUPLEX/QUADPLEX - CONTROLLED - CEILING MOUNT	
C	DUPLEX RECEPTACLE - CONTROLLED - WALL/CEILING MOUNT	18"
	GFI DEAD FRONT DEVICE, NORMAL/EMERGENCY - WALL MOUNT	18"
	SPECIAL PURPOSE RECEPTACLE - WALL/CEILING MOUNT	18"
	EMERGENCY SPECIAL PURPOSE RECEPTACLE - WALL/CEILING MOUNT	
	FLOOR BOX - DEVICES AS INDICATED	
P	POWER POLE - DEVICES AS INDICATED	VERIFY
G	GROUND REFERENCE BUS - AS NOTED - WALL/CEILING MOUNT	VERIFY

ONE LINE AND RISER

SYMBOL	DESIGNATIONS	MTG HT
ID V, Ø, W	UTILITY SERVICE: EQUIPMENT ID VOLTAGE, PHASE, 3 OR 4 WIRE	
ID KW/KVA V, Ø, W PF	ENGINE GENERATOR: EQUIPMENT ID KW/KVA RATING OF GENERATOR VOLTAGE, PHASE, 3 OR 4 WIRE, POWER FACTOR	
XX AF/AT	600 VOLT MOLDED CASE CIRCUIT BREAKER: AF = AMP FRAME, AT = AMP TRIP XX = OPTIONS TO BE PROVIDED, MAY BE BLANK	
XX AF/AT	600 VOLT INSULATED CASE CIRCUIT BREAKER: AF = AMP FRAME, AT = AMP TRIP XX = OPTIONS TO BE PROVIDED, MAY BE BLANK	
XX AS	DISCONNECT SWITCH: AS = AMP SWITCH XX = OPTIONS TO BE PROVIDED, MAY BE BLANK	
XX AF	FUSE: AF = AMP FUSE XX = OPTIONS TO BE PROVIDED, MAY BE BLANK	
XX AS/AF	FUSED DISCONNECT SWITCH: AS = AMP SWITCH, AF = AMP FUSE XX = OPTIONS TO BE PROVIDED, MAY BE BLANK	
ID KVA V	TRANSFORMER: EQUIPMENT ID KVA RATING OF TRANSFORMER PRIMARY VOLTAGE SECONDARY VOLTAGE	
ID KVA V	TRANSFORMER WITH SPECIAL CORE: EQUIPMENT ID KVA RATING OF TRANSFORMER PRIMARY VOLTAGE SECONDARY VOLTAGE	
ID V, Ø, W A MCB SPACES KAIC	PANELBOARD: EQUIPMENT ID VOLTAGE, PHASE, 3 OR 4 WIRE, AMP RATING MCB OR MLO SPACES AVAILABLE CALCULATED FAULT CURRENT	
ID V, Ø, W A XX KAIC	TRANSFER SWITCH: EQUIPMENT ID VOLTAGE, PHASE, 3 OR 4 WIRE, AMP RATING OPEN/CLOSED/DELAYED CALCULATED FAULT CURRENT	
ID HP Ø	MOTOR: EQUIPMENT ID HORSEPOWER, PHASE	
MF	MULTIFUNCTION RELAY: NUMBERS INDICATE ANSI DEVICE NUMBERS	

ONE LINE AND RISER

SYMBOL	DESIGNATIONS
XX	FEEDER DESCRIPTION: SEE ELECTRICAL ONE LINE SHEET FOR SCHEDULE
	MOTOR OVERLOAD PROTECTION DEVICE
ID TR:XX	POTENTIAL TRANSFORMER: TR = TURNS RATIO
ID TR:XX	CURRENT TRANSFORMER: TR = TURNS RATIO
	GROUND CONNECTION
	BATTERY
NO	CONTACTOR - NORMALLY OPEN
NC	CONTACTOR - NORMALLY CLOSED
M A V	METER: M = WATTHOUR METER, A = AMMETER, V = VOLT METER
	LINEWORK:
	EQUIPMENT ENCLOSURE LINE
	SWITCHGEAR BUS LINE
	BUSWAY
	NEW WORK
	EXISTING WORK
	DEMO WORK
	FUTURE WORK

PROJECT

SOUTHWEST TRANSIT

SOUTHWEST TRANSIT

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Signature
Name Jiue Yin Kam, P.E.
Date 8/30/24
Registration Number 51923

REVISIONS

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	08/30/2024	CD ISSUE

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Date: 8/30/24
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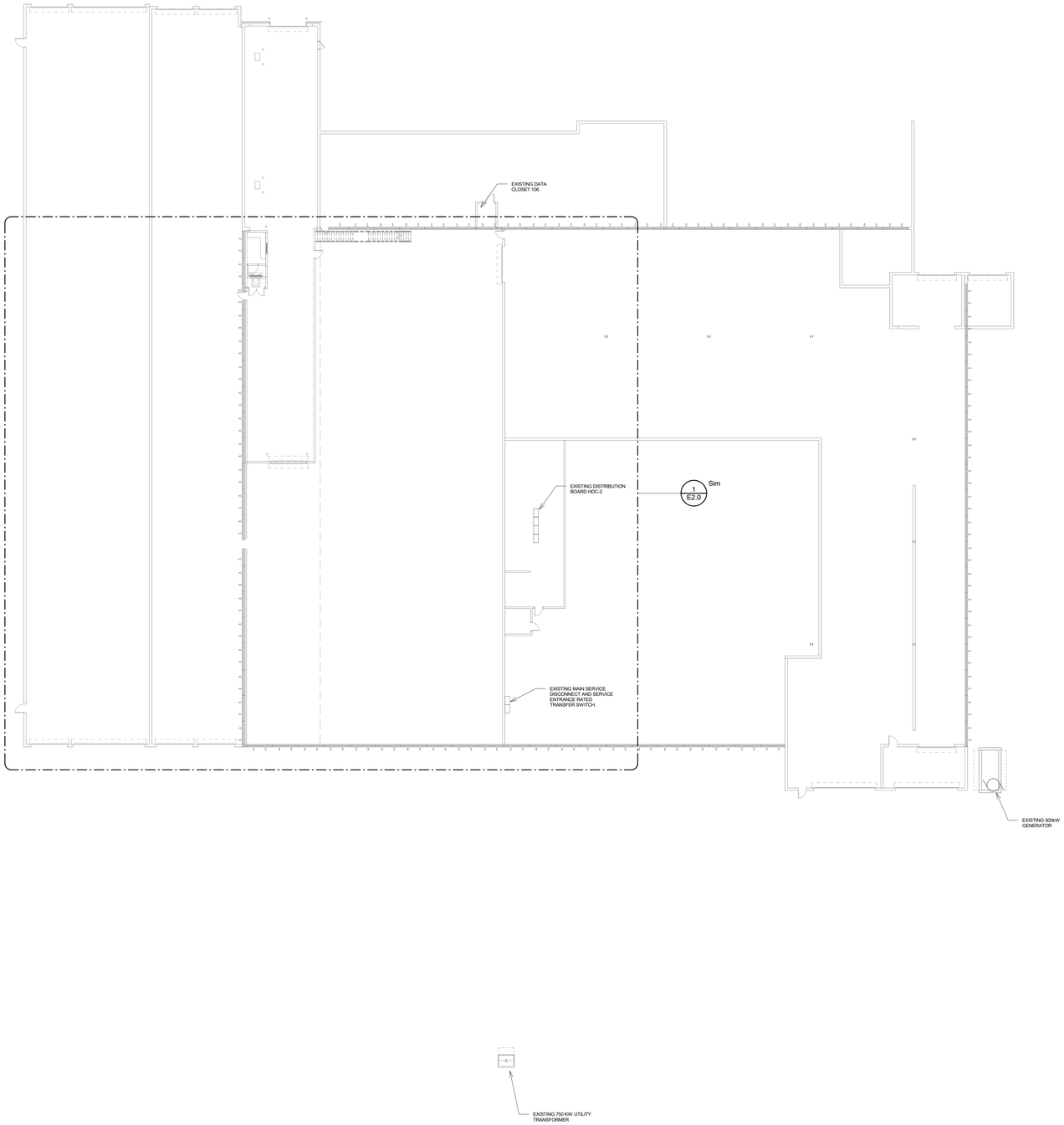
Checked: DS

SHEET TITLE

ELECTRICAL TITLE SHEET

Sheet Number:
E0.0

Project Number:
0425099-000-00



1 ELECTRICAL BUILDING OVERALL PLAN
1" = 20'-0"

PROJECT

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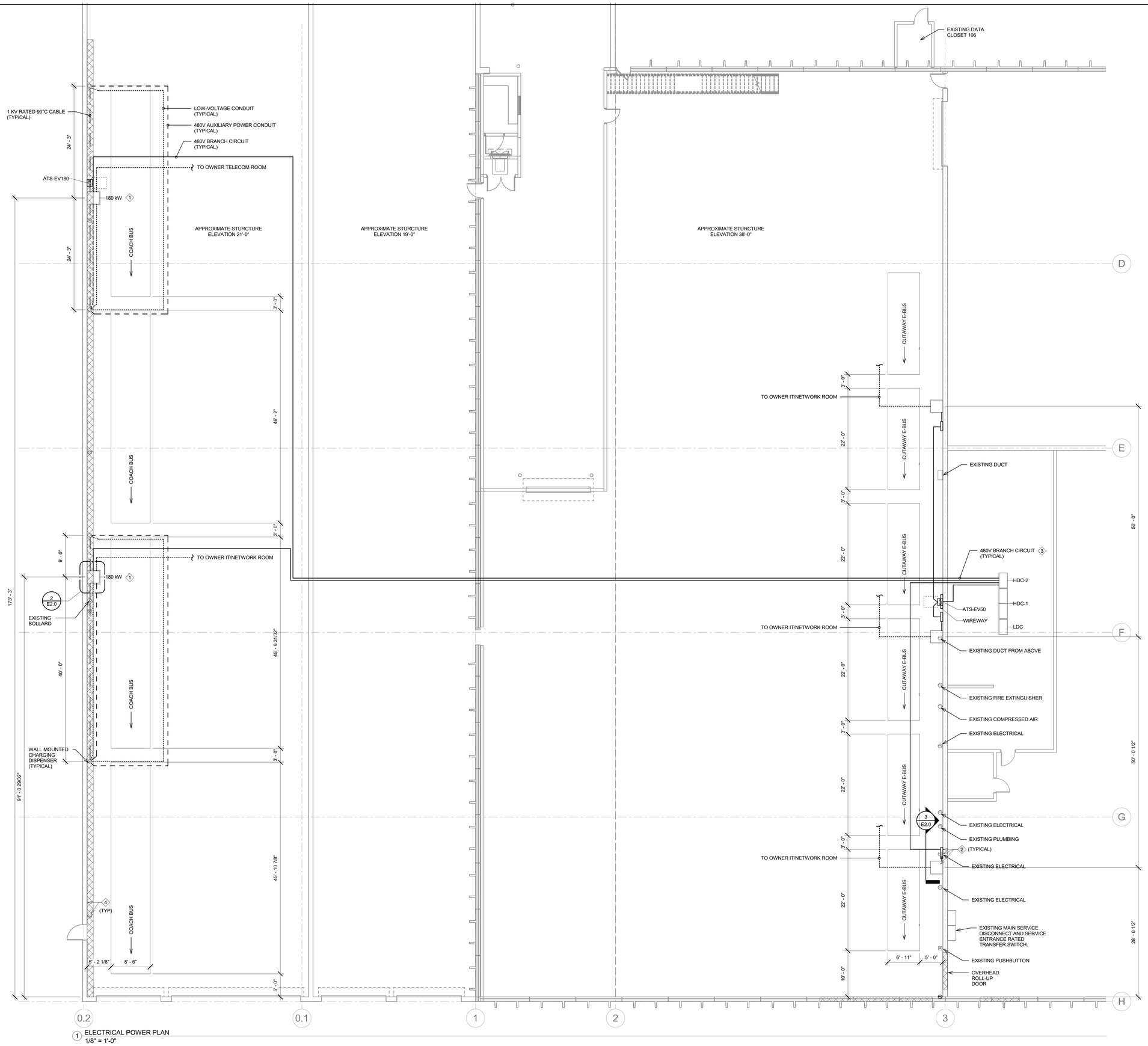
ELECTRICAL BUILDING OVERALL PLAN

Sheet Number:
E1.0

Project Number:
0425099-000-00



1 ELECTRICAL POWER PLAN
1/8" = 1'-0"

GENERAL NOTES:

A. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR CONDUIT AND FEEDER SIZING

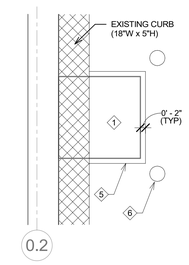
B. CIRCUIT EV CHARGERS TO HDC-2 (480V/3Ø)

C. THE OWNER HAS AGREEMENTS FOR ACQUIRING THE 180KW EV CHARGERS AND ASSOCIATED COACH STYLE BUSES. CHARGERS ANTICIPATED TO BE INSTALLED BY OWNER, AT TIME OF PROJECT CONSTRUCTION.

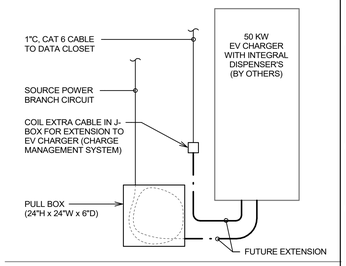
D. THE OWNER IS IN PROCESS OF DETERMINING EXACT 50KW CHARGER AND ASSOCIATED CUTAWAY STYLE BUSES THEY WILL BE ACQUIRING. THIS PROJECTIS INSTALLING INFRASTRUCTURE FOR FUTURE CHARGERS. CHARGER INSTALL TIME IS STILL TO BE DETERMINED.

KEY NOTES:

1. OWNER FURNISHED & INSTALLED HELIOX FLEX 180KW EV CHARGING SYSTEM (HE9821001-01). ROUTE BRANCH CIRCUIT FROM HDC-2 TO CHARGER LOCATION AND MAKE FINAL CONNECTION TO CHARGER. PROVIDE 3" EMT RACEWAY FROM FLEX CHARGER TO WALL MOUNT DISPENSER FOR SUPPLY POWER. REFER TO DETAIL 1/SHEET E4.0 FOR ADDITIONAL WIREING REQUIREMENTS. DIMENSIONS SHOWN FOR PRICING PURPOSES ONLY. COORDINATE FINAL LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
2. 50KW EV CHARGING SYSTEM IS OWNER FURNISHED & INSTALLED (WALL MOUNTED). EXACT CHARGER TO BE DETERMINED. FINAL CHARGER LOCATION TO BE CENTERED BETWEEN TWO CHARGE PORTS ON CUTAWAY STYLE BUS.
PROVIDE BRANCH CIRCUIT FROM HDC-2 TO PULL BOX NEAR CHARGER LOCATION AND COIL 12' OF EXTRA WIRING IN WITHIN PULLBOX FOR FUTURE CONNECTION TO CHARGER.
3. ALL RACEWAYS TO BE ROUTED OVERHEAD AND TIGHT TO CEILING STRUCTURE. PROVIDE MEANS FOR TRANSITIONING TO INDIVIDUAL STRUCTURAL ELEVATIONS WITH-IN EACH SPECIFIC AREA.
4. EXISTING RECEPTACLE(S) ON THIS WALL TO REMAIN, FIELD VERIFY EXACT LOCATION. MODIFY AND EXTEND EXISTING BRANCH CIRCUIT TO RISE IN ELEVATION TO 10'-0" AFF AT EV CHARGER OR DISPENSER LOCATION AND RECONNECT TO PREVIOUS OR NEXT DEVICE.
5. CONCRETE CURB FOR SUPPORT AND MOUNTING OF EV CHARGING STATION (BY OTHERS). CURB TO BE 2" WIDER THAN ACTUAL EQUIPMENT. VERIFY DIMENSIONS PRIOR TO INSTALLATION.
6. CONCRETE BOLLARDS (BY OTHERS) FOR EV CHARGING STATION PROTECTION.



2 HELIOX FLEX 180 KW - CURB DETAIL
1/2" = 1'-0"



3 50 KW - TYPICAL WALL DETAIL
1/2" = 1'-0"

PROJECT

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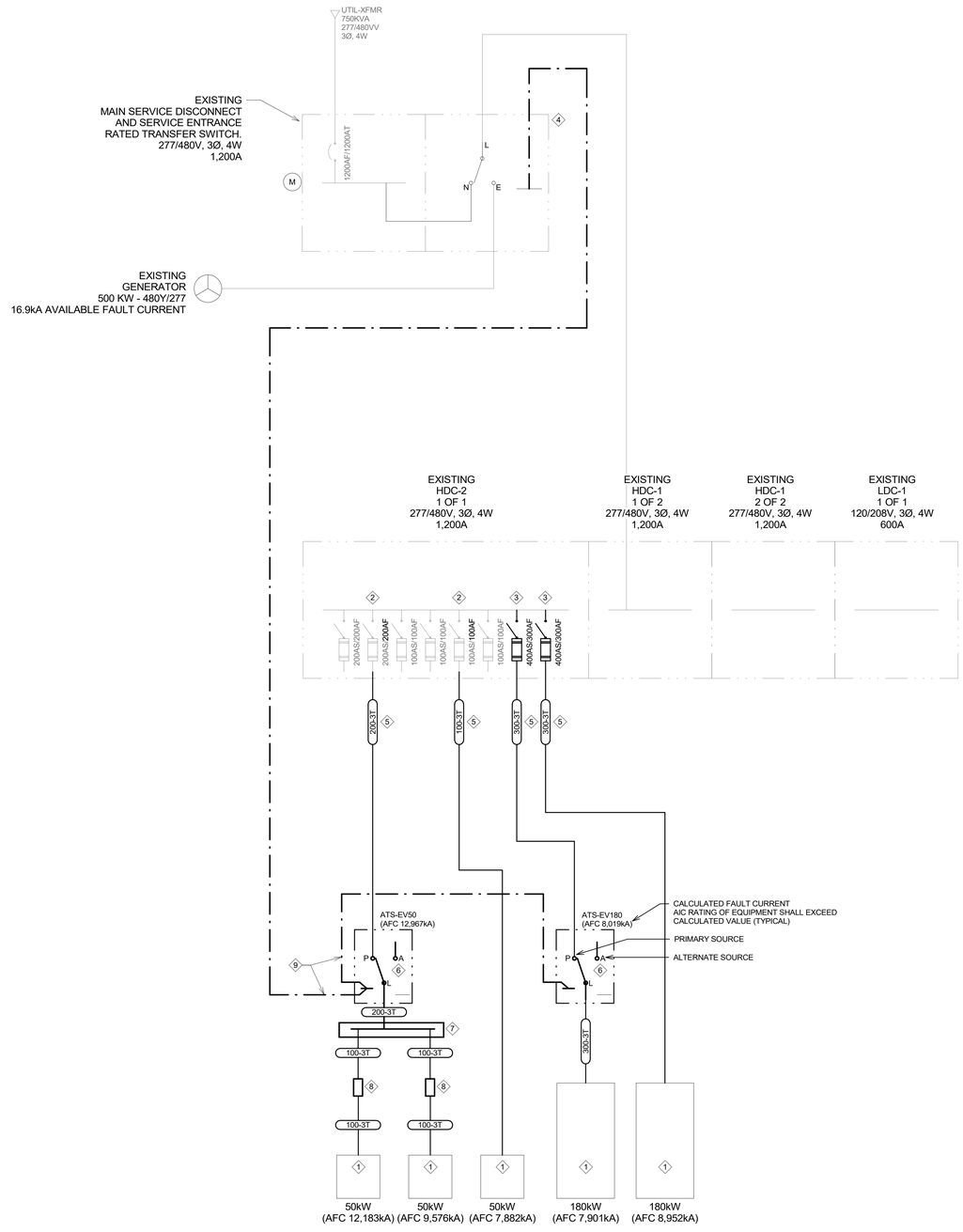
SHEET TITLE

ELECTRICAL POWER PLAN

Sheet Number:
E2.0

Project Number:
0425099-000-00



1 ELECTRICAL ONE-LINE DIAGRAM
NO SCALE

TRANSFER SWITCH SCHEDULE

ATS NAME	VOLTAGE	SIZE	SWITCH TYPE	TRANSFER POLES	TRANSITION	MOUNTING	ACCESS	OPTIONS	NOTES
ATS-EV50	480 V	300 A	AUTOMATIC	3	OPEN	WALL	FRONT	LSR	1
ATS-EV180	480 V	300 A	AUTOMATIC	3	OPEN	WALL	FRONT	LSR	1

TRANSFER SWITCH OPTIONS:

BI - BYPASS ISOLATION
DO - DRAW OUT
ECC - ELEVATOR CONTROL CONTACTS
ECM - ETHERNET COMMUNICATIONS MODULE
ESR - ELEVATOR/ESCALATOR PRE-TRANSFER
IPM - IN-PHASE MONITOR
LSR - LOAD SHED RELAY
MDR - MOTOR DISCONNECT RELAY
ON - OVERSIZED NEUTRAL
PM - POWER MANAGER
RA - REMOTE ANNUNCIATOR
SCM - SERIAL COMMUNICATION MODULE
SMDR - SEQUENTIAL MOTOR DISCONNECT RELAY

GENERAL NOTES
A. SEE RISER DIAGRAM FOR CALCULATED AVAILABLE FAULT CURRENT. TRANSFER SWITCH SHALL HAVE HIGHER SHORT-CIRCUIT CURRENT RATING THAN CALCULATED VALUE SHOWN ON RISER DIAGRAM.

ELECTRICAL NOTES:
1. PROVIDE NEMA 3R ENCLOSURE WITH INTERNAL STRIP HEATER.

FEEDER SCHEDULE

XXXX

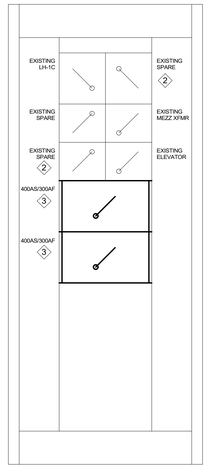
FEEDER	FEEDER DESCRIPTION	CONDUIT	NOTES
100-3T	1-1/4"C, 3#3 + #8 G	EMT	1
200-3T	2"C, 3#3/0 + #6 G	EMT	
300-3T	3"C, 3#350KCMIL + #4 G	EMT	

-2 SINGLE PHASE
-3 THREE PHASE

SE SERVICE ENTRANCE
S SECONDARY (LV TRANSFORMER)
D SIZED FOR VOLTAGE DROP
P PVC
U UNDERGROUND
L ALUMINUM
N ADDED NEUTRAL
T THREE WIRE ONLY, NO NEUTRAL

GENERAL NOTES:
A. NOMENCLATURE DEFAULTS WITH A SINGLE NEUTRAL AND A GROUND.

NOTES:
1. FEEDER SIZE INCREASED DUE TO UNKNOWN CHARGER MANUFACTURE AND EXACT CHARGER TO BE FURNISHED BY OWNER.



2 EXISTING HDC-2
NO SCALE

3 MDS LINEUP PHOTO
NO SCALE

4 HDC FRONT PHOTO
NO SCALE

KEY NOTES:

1. OWNER FURNISHED AND INSTALLED EV CHARGER. CONTRACTOR TO MAKE FINAL CONNECTIONS.
2. PROVIDE NEW FUSES IN EXISTING SWITCH.
3. PROVIDE 400AS/300AF SWITCH IN EXISTING SWITCHBOARD.
4. EXISTING TRANSFER SWITCH IS ZENITH/STATES ELECTRIC. INCLUDE COSTS FOR ANY REQUIRED PROGRAMMING/EQUIPMENT MODIFICATIONS TO SEND TRANSFER SIGNAL TO ATS-EV50 AND ATS-EV180
5. ALL FEEDERS SHALL BE ROUTED OVERHEAD, TIGHT TO CEILING STRUCTURE TO MAINTAIN MAXIMUM CLEARANCES.
6. ALTERNATE BUS TO BE OPEN/NOT CONNECTED FOR LOAD SHEDDING DURING GENERATOR OPERATION.
7. PROVIDE 8"x8"x48" WIREWAY.
8. PROVIDE 100A FUSED SWITCH AND SIZE FUSES PER EV CHARGER MANUFACTURES RECOMMENDATION.
9. PROVIDE 3/4"C, 2#12 CABLING TO RECEIVE SIGNAL FROM SERVICE ENTRANCE ATS TO ATS-EV50 AND ATS-EV180.

GENERATOR OPERATION SEQUENCE

1. UPON GENERATOR STARTING AND SERVICE ENTRANCE TRANSFER SWITCH SWITCHING TO ALTERNATE SOURCE, TRANSFER SWITCH SHALL SEND SIGNAL TO ATS-EV50 AND ATS-EV180 THAT THE BUILDING IS OPERATING ON ALTERNATE POWER SOURCE.
2. UPON RECEIVING SIGNAL THAT BUILDING IS OPERATING ON ALTERNATE POWER SOURCE, ATS-EV50 AND ATS-EV180 SHALL TRANSFER TO ALTERNATE SOURCE (LOAD SHED MODE).
3. AFTER UTILITY POWER IS RESTORED AND SERVICE ENTRANCE ATS HAS TRANSFERED BACK TO PRIMARY POWER SOURCE, ALTERNATE SOURCE SIGNAL IS LOST, AND ATS-EV50 AND ATS-EV180 SHALL TRANSFER BACK AUTOMATICALLY TO PRIMARY SOURCE.

ELECTRICAL LOAD CALCULATION

SWT BLDG MAX DEMAND PER OWNERS LOAD STUDY:	221.00KW
DEMAND FACTOR PER NEC 220.87:	1.25%
DESIGN MAXIMUM DEMAND:	276.25KW
ADDED EV CHARGER LOAD:	510KW
TOTAL BUILDING DESIGN LOAD:	786.25KW
BUILDING SERVICE SIZE:	1200A
TOTAL BUILDING DESIGN:	946A
BUILDING SERVICE SPARE CAPACITY:	254A

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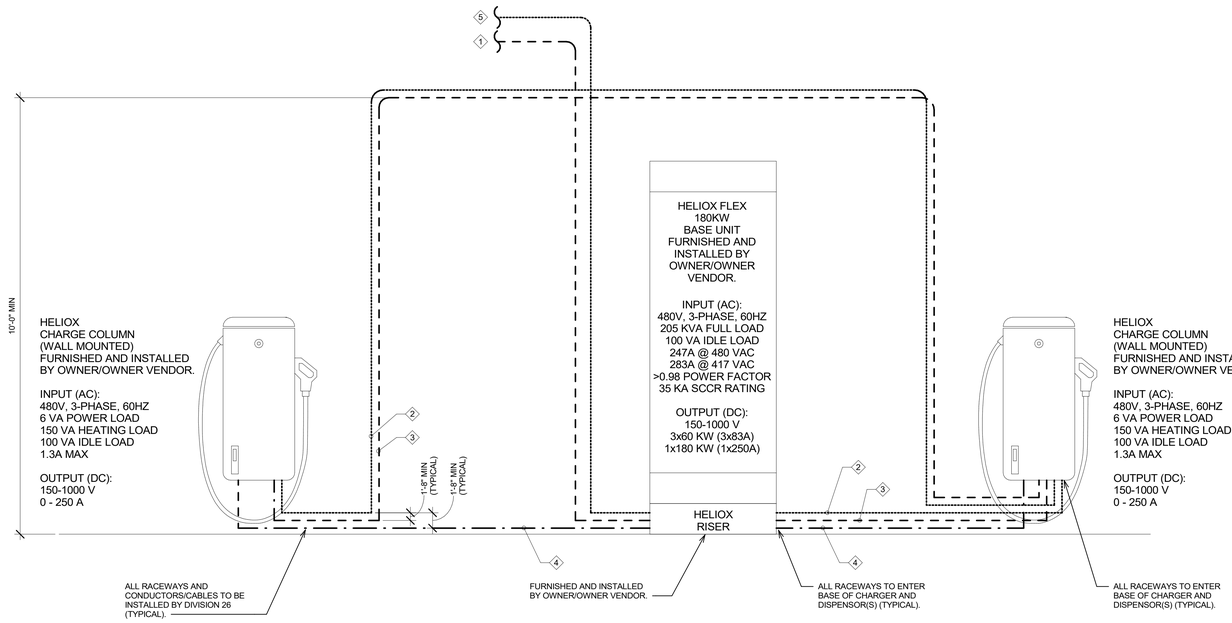
SHEET TITLE

ELECTRICAL
ONE-LINE DIAGRAM

Sheet Number:
E3.0

Project Number:
0425099-000-00



FEEDER SCHEDULE

TAG	FROM	TO	CONDUIT/CABLE SPECIFICATIONS	NOTES
1	CUSTOMER FEEDER BREAKER	180KW FLEX BASE STATION	• SEE ONE-LINE DIAGRAM	
2	180KW FLEX BASE STATION OR CHARGE COLUMN	CHARGE COLUMN	• 1" CONDUIT • 480VAC, 3-PHASE + GROUND • 600V RATED 90°C CABLE • #12 AWG CU THWN	
3	180KW FLEX BASE STATION OR CHARGE COLUMN	CHARGE COLUMN	• 1 1/2" CONDUIT • DOOR INTERLOCK: 2#18 AWG • E-STOP: 2#18 AWG • CAN: #22 AWG 2-WIRE TWISTED SHIELDED PAIR WITH 120 OHM CHARACTERISTIC IMPEDANCE • EITHERNET: CAT 6 S/FTP CABLE	RIGID METAL CONDUIT OR SEPARATE FROM AC AND DC POWER CONDUITS BY 20" MINIMUM. TOTAL DISTANCE LIMITED TO 250 METERS FROM BASE STATION TO LAST CHARGE COLUMN WITH SINGLE RUNS LIMITED TO 100 METERS.
4	180KW FLEX BASE STATION	CHARGE COLUMN	• 3" CONDUIT • 1 KV RATED 90°C CABLE • (2 SETS) 3/0	
5	180KW FLEX BASE STATION	DATA CLOSET 106 (CUSTOMER CHARGE MANAGEMENT SYSTEM)	• 1" CONDUIT • CAT 6 SHIELDED CABLE	CONNECTION TO CUSTOMER CHARGE MANAGEMENT SYSTEM.

NOTES:

1. ALL COPPER CONDUCTORS SHALL BE USED.
2. ALL CONDUCTORS UL LISTED AND RATED FOR 90°C AND WET LOCATIONS. FLEXIBLE CABLE RECOMMENDED FOR AC AND DC CABLE.
3. COMMUNCATION AND CONTROL CABLE DAISY CHAIN TERMINATIONS SHALL FOLLOW ORDER OF DC POWER TERMINCATION (DC OUTPUT 1 FIRST, DC OUTPUT 2 SECOND, DC OUTPUT 3 THIRD IN DAISY CHAIN).

1 HE100 - HELIOX FLEX 180KW - BASE UNIT
NO SCALE

PROJECT

SOUTHWEST TRANSIT

SOUTHWEST TRANSIT

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CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Signature
Name Jiuli Yu Kam, P.E.
Date 8/30/24
Registration Number 51923

REVISIONS

No.	Date	Description
	08/30/2024	CD ISSUE

THIS SHEET MAY BE A REDUCED COPY. THE BAR ABOVE IS 1" LONG ON A FULL SIZE SHEET. DRAWING SCALES APPLY TO FULL SIZE SHEETS.

Date: 8/30/24
Drawn: CG
Checked: DS

SHEET TITLE

ELECTRICAL DETAILS

Sheet Number:
E4.0

Project Number:
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