Contract: 23-P00288

Memorandum of Agreement

Between

Park City Municipal Corporation

High Valley Transit

And Utah Transit Authority

This Memorandum of Agreement ("MOA") is entered into this _____ day of _____, 2023 (the "Effective Date"), by and among the UTAH TRANSIT AUTHORITY ("UTA"), PARK CITY MUNICIPAL CORPORATION ("PC"), and HIGH VALLEY TRANSIT DISTRICT ("HVT"). Each is individually referred to as a "Party" and collectively as the "Parties."

RECITALS

1. UTA, Summit County, and PC entered an Interlocal Agreement on or about August 24, 2011, ("2011 ILA") regarding joint participation in the funding and operation of transit service between Salt Lake City and Park City. The 2011 ILA noted that PC would contribute funding toward a vehicle replacement account. UTA provided the vehicles for service on the PC connect route to get the service started. To date UTA has received $1,491,249.
2. UTA and PC entered into a 2nd Interlocal Agreement on or about September 11, 2020 ("2020 ILA") regarding collaboration in the procurement and operation of buses, charging equipment and charging stations. UTA and PC were awarded a grant for $2,290,000.00 from the 2018 FTA No/Low program for two electric buses. As part of the grant UTA secured a commitment from Rocky Mountain Power to provide $500,000 in funding for local match. PC was also awarded six (6) electric buses to replace diesel buses in the Volkswagen ("VW") settlement and an additional six (6) buses with federal section 5311 grant funds (the fourteen (14) buses together, the "2020 ILA Buses").
3. HVT and PC entered into an Interlocal Agreement on or about July 10, 2021 ("2021 ILA"), which transferred responsibility for operating a public transit system in unincorporated Summit County, including to and from Kimball Junction to Salt Lake City, from PC to HVT.
4. PC and Summit County issued a notice of intent to terminate the 2011 ILA to UTA on September 21, 2021.
5. HVT and UTA entered into a Memorandum of Agreement on December 28, 2021, which recognized HVT as the successor-in-interest to PC and Summit County under the 2011 ILA and provided for continuation of services under such ILA until the first to occur of execution of a new agreement or December 31, 2022.
6. HVT and UTA entered into a Memorandum of Understanding ("MOU") on December 8, 2022, which granted HVT permission to operate transit service between Kimball Junction and Salt Lake Central Station at its own cost until at least January 1, 2024, and furthermore recognized that all obligations under the 2011 ILA were extinguished, except for the amounts owed by UTA for bus replacement costs and the amounts owed to UTA for Operational Costs. The MOU did not affect the Party's rights and obligations under the 2020 ILA.
7. The Parties recognize the need to delineate the remaining rights and obligations of each Party under the 2011 and 2020 ILAs which have now been overcome by events.

NOW THEREFORE UTA, PC, and HVT AGREE AS FOLLOWS:

All rights and obligations of any Party described in the 2011 and 2020 Interlocal Cooperation Agreements are deemed to have been fulfilled and/or extinguished as the case may be **EXCEPT FOR THE FOLLOWING SPECIFICALLY DESCRIBED COMMITMENTS AND OBLIGATIONS:**

1. **Current Funds Owed Between the Parties**
    a. HVT owes UTA the amount of $131,795.24 for Operation Costs due and owing under Section 3 of the 2011 ILA.
    b. UTA paid the sum of $524,130 to PC and owes the sum of $524,130 to HVT as reimbursement for bus replacement costs under Section 3 of the 2011 ILA.
    c. UTA owes the amount of $442,989 to PC as the Local Match for the No/Low Grant. This payment shall be paid within 30 days of execution of this MOA.
    d. UTA owes the amount of $500,000 to PC from the Rocky Mountain Power local match for the No/Low Grant. This payment shall be made within 30 days of the execution of this MOA.

2. **Kimball Junction Charging Station Project**
    a. UTA shall award and manage the design and construction contract(s) for an overhead charging station to be built at Kimball Junction according to the specifications contained in Exhibit A (the "Project").
    b. UTA assisted HVT in obtaining any required environmental clearance or permit but shall not assume HVT's obligation.
    c. HVT grants UTA and its contractor(s) a temporary construction easement to access the property on which the Charging Station will be built as shown in the diagram in Exhibit B.
    d. Once completed, the Charging Station will be turned over to HVT. HVT will own the station and be responsible for maintenance and all other associated expenses of operating the Charging Station. UTA shall provide a copy of all contract documents, maintenance agreements, and supporting documentation setting forth all maintenance and associated operation of the Charging Station.
    e. PC shall reimburse UTA for the full cost of design and construction of the Project from Grant and local matching funds .
    f. UTA shall provide Park City with invoices and supporting documentation on a monthly basis regarding construction.

3. **Other Charging Stations**
    a. Salt Lake Central Station
        i. UTA constructed an overhead Charging Station at Salt Lake Central which may be used by HVT buses on a cost reimbursement basis.
        ii. UTA paid for the design, construction, maintenance, and operation of such Charging Station. PC shall reimburse UTA the amount of $835,607 from No/Low grant funding which represents the actual design and construction costs.
        iii. Sego Lily Facility
        The Parties will amend the No/Low grant to reflect two depot chargers to be built at Sego Lily Facility by HVT instead of at UTA Depot District.

c. UTA and HVT may, by mutual agreement, change the location of chargers or charging stations described above, if circumstances so warrant.

d. HVT and PC may, by mutual agreement with UTA, purchase additional chargers, and/or vehicles from Gillig by using purchase options from UTA's base contract via an assignment of contract rights by UTA and with the consent of Gillig.

4. Bus Donation for Destruction

a. UTA donated two diesel buses which PC is obligated to destroy under the terms of the VW Settlement.
b. UTA delivered said vehicles and respective titles to PC on March 10, 2023. PC shall be responsible for actual destruction of the vehicles according to FTA and EPA requirements. Vehicle id numbers are: 1M8PDMPA06P057017, and 1M8PDMPA76P057015.

5. Acquisition of Vehicles

UTA issued a request for proposal on July 20, 2020 for electric buses and charging infrastructure. PC was invited to review the scope and participate in the process. On October 23, UTA received 4 proposals. PC was invited to participate in the evaluation committee. Based on technical and price review Gillig was selected as the vendor for the project. The contract contains a base order as well as options. Each entity will be responsible for the final design and configuration of their vehicles.

In the case of future purchases made by PC or HVT through assignment of contract rights, that party will be responsible to administer and manage such procurement action. Any procurement through an assignment of UTA contract rights will require UTA and contractor concurrence.

Pursuant to the 2021 ILA, PC will transfer title of eight (8) of the 2020 ILA Buses to HVT.

HOLD HARMLESS/INDEMNITY

Each Party to this MOA shall hold the other Parties harmless from and shall indemnify the other Parties for any damages or injuries caused by the Party causing the injury or damage. However, nothing in this MOA waives any defenses or limitations under the Utah Governmental Immunity Act, Utah Code §63G-7-101, *et. seq.*, as amended.

6. FORCE MAJEURE:

Any delay in or failure by any Party in performance of this MOA shall be excused if and to the extent such delay or failure is caused by occurrences beyond the control of the affected Party including, but not limited to, decrees or restraints of government, acts of God, strikes, work stoppage or other labor disturbances, war or sabotage (each being a "Force Majeure Event"). The affected Party will promptly notify the other Parties upon becoming aware that any Force Majeure Event has occurred or is likely to occur and will use its best efforts to minimize any resulting delay in or interference with the performance of its obligations under this MOA.

7. TERM:

This MOA shall be in effect until July 21, 2026 unless otherwise terminated by the Parties by mutual written agreement.

8. REMEDIES:

Any of the following events will constitute cause for a Party to declare another Party in default of this MOA: (a) Party's non-performance of its contractual requirements and obligations under this MOA; or (b) Party's material breach of any term or condition of this MOA. The non-defaulting Party may issue a "Default Notice" providing a ten (10) day period in which the defaulting Party will have an opportunity to cure. Time allowed for cure will not diminish or eliminate Party's liability for damages. If the default remains after defaulting Party has been provided the opportunity to cure, the non-defaulting Party may do one or more of the following: (i) exercise any remedy provided by law or equity; (ii) institute legal action to cure, correct, or remedy any default or breach; (iii) specifically enforce any terms set forth in the MOA; or (iv) enjoin any threatened or attempted violation of the MOA.

9. LAWS AND REGULATIONS:

a. This MOA shall be governed by and construed in accordance with the laws of the Utah without regard to its conflict of law's provisions

b. PC, HVT and UTA each agree to comply with all applicable Federal, state and local laws, ordinances and regulations in providing transportation service with the 2020 ILA Buses. All Third-Party Contracts must be solicited, awarded and administered in accordance with FTA Circular 4220.1F.

10. ENTIRE AGREEMENT:

This MOA and the Exhibits attached hereto contain the full and complete understanding and agreement between the Parties relating to the subject matter hereof and supersede all prior and contemporary understandings and agreements, whether oral or written, relating such subject matter

hereof. This MOA may be executed in one or more counterparts and by exchange of signed counterparts transmitted by facsimile or electronic means, each of which shall be deemed an original and all of which, when taken together, shall constitute one and the same original instrument.

IN WITNESS WHEREOF, the Parties have executed this MOA the day and year first above written.

UTAH TRANSIT AUTHORITY

By: _____
Lorin Simpson
Title: Special Project Manager – Fleet
Date: _____

By: _____
Mary DeLoretto
Title: Chief Capital Services Officer
Date: _____

By: _____
Jay Fox
Title: Executive Director
Date: _____

Approved As To Form and Content:

DocuSigned by:
Mike Bell 9/2023
70E33A415BA44F6...
UTA Legal Counsel

PARK CITY MUNICIPAL CORP

By: _____
Matt Diaz
Title: City Manager
Date: _____

DocuSigned by:
By: Cate Brabson
386F31B71A2243C...
Title: Deputy City Attorney
Date: 6/29/2023

HIGH VALLEY TRANSIT

DocuSigned by:
By: C Rod
9052A1D0273642F...driguez
Title: Executive Director
Date: 7/18/2023

DocuSigned by:
By: David L. Thomas
F03042E2EE4143F...
Title: Summit County, Deputy County Attorney
Date: 6/29/2023

EXHIBIT A

KIMBALL JUNCTION

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

SPECTRUM ENGINEERS PROJECT#: 220184

CONSTRUCTION DOCUMENTS - 08/16/2022

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
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UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

Mark:	Date:	Description:

ISSUE:	CONSTRUCTION DOCUMENTS
DATE:	08/16/2022
PROJECT NO:	220184
DRAWN BY:	IBC
CHECKED BY:	LSK
DESIGNED BY:	LSK
RECORD DRAWING DATE:	
SIGNATURE:	

SHEET TITLE

COVER SHEET

E001

SHEET INDEX

SYMBOLS LEGEND

SYMBOL	DESCRIPTION
WIRING METHODS	
	WIRING.
A-1,3,5	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN THE ELECTRICAL SPECIFICATIONS.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
1	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	JUNCTION BOX.
	EARTH GROUND (ONE-LINE DIAGRAM).
	MECHANICAL EQUIPMENT CONNECTION. REFER TO EQUIPMENT SCHEDULE FOR REQUIREMENTS.
REFERENCE AND LINE SYMBOLS	
A5 / E-501	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
1	KEYNOTE INDICATOR.
1	REVISION INDICATOR.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING
	BREAK, ROUND
SITE ELECTRICAL AND COMMUNICATIONS UTILITIES	
	UTILITY POLE.
PB	UTILITY PULLBOX, REFER TO SCHEDULE FOR SIZE AND TYPE.
ELECTRICAL POWER AND DISTRIBUTION	
	CIRCUIT BREAKER, MOLDED CASE (ONE-LINE DIAGRAM).
	CIRCUIT BREAKER, SOLID STATE (ONE-LINE DIAGRAM).
GFP	CIRCUIT BREAKER, SOLID STATE WITH GROUND FAULT PROTECTION (ONE-LINE DIAGRAM).
	TRANSFORMER (ONE-LINE DIAGRAM).
	TRANSFORMER, CURRENT (ONE-LINE DIAGRAM).
AC / DC	AC TO DC CONVERTER (ONE-LINE & RISER DIAGRAMS).
M	METER.
PG	PANTOGRAPH ARM ASSOCIATED EQUIPMENT AND ACS (ONE-LINE & RISER DIAGRAMS).
DP#	DISTRIBUTION PANEL OR SWITCHBOARD.
	PANTOGRAPH ARM
	CCTV CAMERA/ENCLOSURE WITH LENS, TYPICAL. SEE SCHEDULE.
X	OUTLET, DATA COMMUNICATION ("X" INDICATES QUANTITY OF CABLES).
EV	ELECTRIC VEHICLE CHARGING STATION.
	SITE PLAN: (EX) 600V - MEDIUM VOLTAGE POWER UNDERGROUND/OVERHEAD.
	SITE PLAN: (EX) UNDERGROUND WATER LINE.
	SITE PLAN: (EX) UNDERGROUND TELECOM/LOW VOTLAGE LINE.
	SITE PLAN: (EX) UNDERGROUND SEWER.
	SITE PLAN: (EX) UNDERGROUND GAS LINE.
	SITE PLAN: (EX) UNDERGROUND STORM DRAIN.

ABBREVIATIONS

NOTE: ALL ABBREVIATIONS MAY NOT BE USED.

1P	SINGLE POLE
1PH	SINGLE-PHASE
1WAY	ONE-WAY
2/C	TWO-CONDUCTOR
3/C	THREE-CONDUCTOR
4W	FOUR-WIRE
4WAY	FOUR-WAY
A	ABOVE COUNTER
AC	ARMORED CABLE
ADA	AMERICANS WITH DISABILITIES ACT
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ALUM	ALUMINUM
AMP	AMPERE
ANN	ANNUNCIATOR
AP	ACCESS POINT (WIRELESS DATA)
AR	AS REQUIRED
ASC	AMPS SHORT CIRCUIT
ATS	AUTOMATIC TRANSFER SWITCH
AV	AUDIO VISUAL
AWG	AMERICAN WIRE GAGE
BAA	BUY AMERICA ACT
BB XFMR	BUCK-BOOST TRANSFORMER
BEB	BATTERY ELECTRIC BUS
C	CEILING MOUNTED
CATV	COMMUNITY ANTENNA TELEVISION
CB	CIRCUIT BREAKER
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT
CCTV	CLOSED CIRCUIT TELEVISION
CF/CI	CONTRACTOR FURNISHED/ CONTRACTOR INSTALLED
CF/OI	CONTRACTOR FURNISHED/ OWNER INSTALLED
CFBA	CUSTOM FINISH AS SELECTED BY ARCHITECT
CKT	CIRCUIT
CM	CONSTRUCTION MANAGER
CND	CONDUIT
CO	CONVENIENCE OUTLET
COR	CONTRACTING OFFICER'S REPRESENTATIVE
CP	CONTROL PANEL
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CU	COPPER
dBA	UNIT OF SOUND LEVEL
DPDT	DOUBLE POLE, DOUBLE THROW
DS	DISCONNECT SWITCH
EA	EACH
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENT	ELECTRIC NONMETALLIC TUBING
EPO	EMERGENCY POWER OFF
EQUIP	EQUIPMENT
EV	ELECTRIC VEHICLE
EX	EXISTING
F	FURNITURE MOUNTED
FA	FIRE ALARM
FCP	FIRE ALARM CONTROL PANEL
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT
FOB	FREIGHT ON BOARD
FVNR	FULL VOLTAGE NON-REVERSING
FVR	FULL VOLTAGE REVERSING
GEN	GENERATOR
GFCI	GROUND FAULT INTERRUPTER
GFP	GROUND FAULT PROTECTION
GND	GROUND
HD	HEAVY DUTY
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTOMATIC
HP	HORSE POWER
HPF	HIGH POWER FACTOR
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HZ	HERTZ
I/O	INPUT/ OUTPUT
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
IN/IS	INSULATED/ ISOLATED
IR	INFRARED
J-BOX	JUNCTION BOX
kV	KILOVOLT
kVA	KILOVOLT AMPERE
kVAR	KILOVOLT AMPERE REACTIVE
kW	KILOWATT
kWh	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
LFNC	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
LPS	LOW PRESSURE SODIUM
LRA	LOCKED ROTOR AMPS
LTG	LIGHTING
LV	LOW VOLTAGE
MATV	MASTER ANTENNA TELEVISION SYSTEM
MAX	MAXIMUM
MC	METAL CLAD
MCA	MINIMUM CIRCUIT AMPS
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTION
MDP	MAIN DISTRIBUTION PANEL
MG	MOTOR GENERATOR
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTS	MANUAL TRANSFER SWITCH
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFC	NATIONAL FIRE CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OC	ON CENTER
OCP	OVER CURRENT PROTECTION
OF/CI	OWNER FURNISHED/ CONTRACTOR INSTALLED
OF/OI	OWNER FURNISHED/ OWNER INSTALLED
OFP	OBTAIN FROM PLANS
OH DR	OVERHEAD (COILING) DOOR
OL	OVERLOAD
PB	PUSHBUTTON
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PT	POTENTIAL TRANSFORMER
PTZ	PAN/TILT/ZOOM
QTY	QUANTITY
R	REMOVE
RCP	REFLECTED CEILING PLAN
RMC	RIGID METAL CONDUIT
RNC	RIGID NONMETAL CONDUIT
RPM	REVOLUTIONS PER MINUTE
RR	REMOVE AND RELOCATE
S/S	START/STOP
SCA	SHORT CIRCUIT AMPS
SCBA	STANDARD COLOR AS SELECTED BY ARCHITECT
SF	SQUARE FOOT (FEET)
SFBA	STANDARD FINISH AS SELECTED BY ARCHITECT
SPD	SURGE PROTECTIVE DEVICE
SPDT	SINGLE POLE, DOUBLE THROW
SPEC	SPECIFICATION
SPST	SINGLE POLE, SINGLE THROW
ST	SINGLE THROW
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TL	TWIST LOCK
TP	TELEPHONE POLE
TP	TWISTED PAIR
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
TYP	TYPICAL
UF	UNDERFLOOR
UGND	UNDERGROUND
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS
VA	VOLT AMPERE
VFC/VFD	VARIABLE FREQUENCY MOTOR CONTROLLER
W/	WITH
W/O	WITHOUT
WP	WEATHERPROOF
XFMR	TRANSFORMER

GENERAL ELECTRICAL NOTES

1. CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.

2. OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.
   A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.
   B. CONTRACTOR SHALL DELIVER OWNER FURNISHED EQUIPMENT FROM OWNERS WAREHOUSE TO JOB SITE. THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.
   C. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.

3. EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.

4. SUBMITTALS: PROVIDE ORIGINAL ELECTRONIC PDF FORMAT, BOUND, BOOKMARKED (EACH SECTION AND PRODUCT), AND HIGHLIGHTED. JOB NAME AND SUBCONTRACTOR SHALL BE ON THE FRONT COVER. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.

5. REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.

6. ALL WORK SHALL BE DONE ACCORDING TO THE CURRENT NATIONAL ELECTRIC CODE (NEC), IBC, NFPA, AND IFC. COMPLIANCE AND FINAL APPROVAL IS SUBJECT TO THE ON SITE FIELD INSPECTION OF THE AHJ.

7. ALL MATERIALS PROVIDED FOR PROJECT SHALL MEET THE FTA BUY AMERICA ACT. CONTRACTOR SHALL SUBMIT CERTIFICATION TO ENGINEER AND OWNER FOR REVIEW FOR ALL MATERIALS.

8. CONTRACTOR IS RESPONSIBLE TO SUBMIT AND PAY FOR ALL PERMITS REQUIRED TO PREFORM WORK.

DEFINITIONS

NOTE: ALL DEFINITIONS MAY NOT BE USED.

INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.

DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED", AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.

APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.

FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."

INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."

PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."

INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.

TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...

PROJECT DESCRIPTION:

THE PROJECT CONSIST OF BUT IS NOT LIMITED TO PROVIDING NEW TRANSFORMER PAD AND DISTRUBUTION TO NEW CHARGING CABINETS AND PANTOGRAPH.

SPECTRUM ENGINEERS
324 S. State St., Suite 400
Salt Lake City, UT 84111
800-678-7077
801-328-5151
fax: 801-328-5155
www.spectrum-engineers.com

UTA

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

Mark:	Date:	Description:

ISSUE: CONSTRUCTION DOCUMENTS
DATE: 08/16/2022

PROJECT NO:	220184
DRAWN BY:	IBC
CHECKED BY:	LSK
DESIGNED BY:	LSK

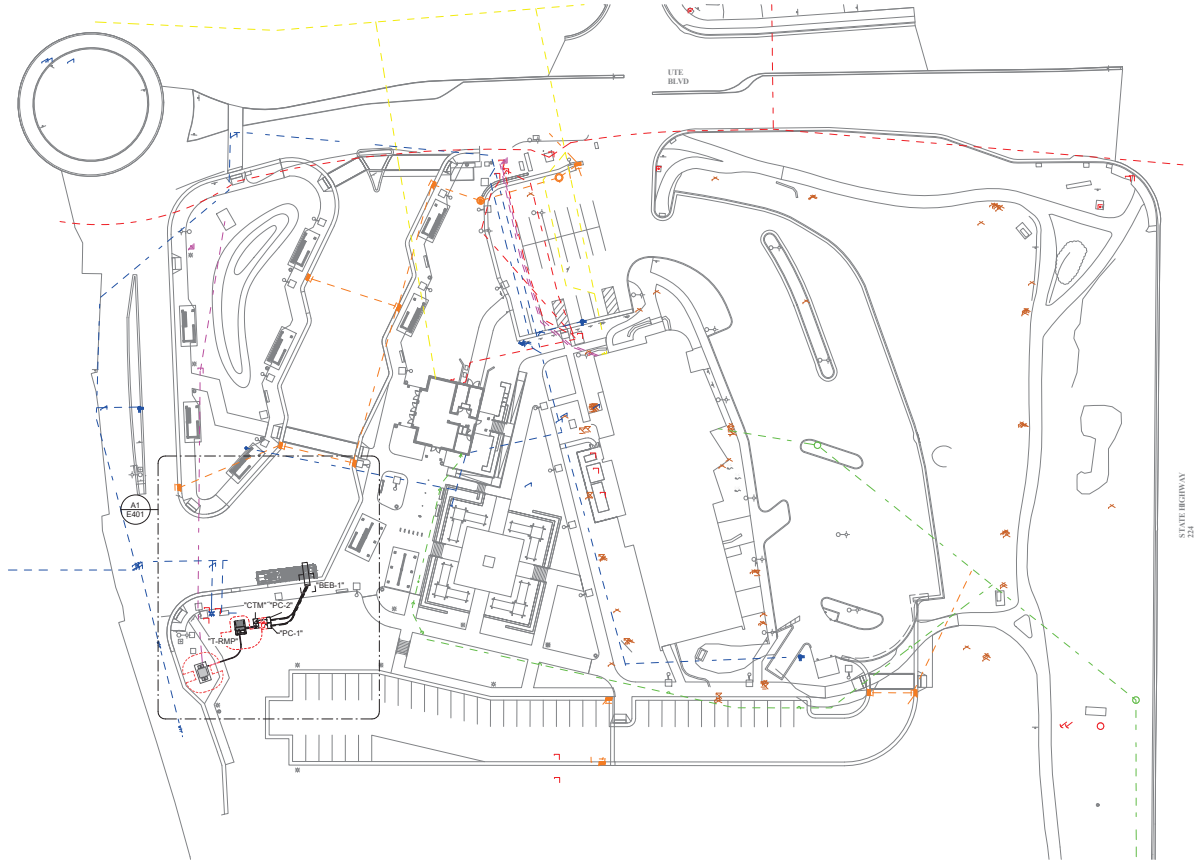
RECORD DRAWING DATE:

SIGNATURE:

SHEET TITLE

SHEET INDEX, ABBREVIATIONS, AND GENERAL NOTES

E002



A1 ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

NORTH

GENERAL SHEET NOTES

1 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILL, AND COMPACTION ASSOCIATED TO ALL ELECTRICAL UNDERGROUND RACEWAYS AND CABLES. SEE UNDERGROUND RACEWAY DETAILS FOR REQUIREMENTS FOR EACH TRENCH.

2 THE CONTRACTOR IS RESPONSIBLE FOR ALL CONCRETE/ASPHALT CUTTING AND REPLACEMENT OF CONCRETE/ASPHALT TO MATCH EXISTING ASSOCIATED WITH UNDERGROUND RACEWAYS PROVIDED AS PART OF THIS PROJECT.

3 ALL MATERIALS PROVIDED FOR PROJECT SHALL MEET THE FTA BUY AMERICA ACT. CONTRACTOR SHALL SUBMIT CERTIFICATION TO ENGINEER AND OWNER FOR REVIEW FOR ALL MATERIALS.

4 CONTRACTOR IS RESPONSIBLE FOR BECOMING FAMILIAR WITH EXISTING CONDITIONS AND VERIFYING THE CONDITIONS PRIOR TO BIDDING PROJECT. IF ANY DISCREPANCIES OCCUR BETWEEN THE EXISTING PHYSICAL CONDITIONS ON SITE AND THE CONDITIONS DESCRIBED IN THE DRAWINGS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

5 UNLESS NOTED OTHERWISE, ELECTRICAL ITEMS SHOWN IN DARK AND SOLID LINES ARE NEW AND THE CONTRACTOR SHALL PROVIDE THEM. ITEMS SHOWN IN SOLID LIGHT LINES ARE TO REMAIN.

6 TYPICAL FOR ALL OPEN TO STRUCTURE CEILING AREAS - POWER CABLING AND CONTROLS CABLING SHALL BE INSTALLED IN CONDUIT IN A NEAT AND PROFESSIONAL MANNER, PARALLEL AND PERPENDICULAR TO STRUCTURE WITH CONDUIT UP IN STRUCTURE AND PAINTED TO MATCH SURFACE. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN TRAY OR CONDUIT. INSTALLATION SHALL COMPLY WITH NECA STANDARDS.

7 CONTRACTOR SHALL CONTACT BLUE STAKES AND LOCATE ALL UNDERGROUND UTILITIES.

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UTA

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

Mark:	Date:	Description:

ISSUE: CONSTRUCTION DOCUMENTS
DATE: 08/16/2022

PROJECT NO:	220184
DRAWN BY:	IBC
CHECKED BY:	LSK
DESIGNED BY:	LSK

RECORD DRAWING DATE:

SIGNATURE:

SHEET TITLE
ELECTRICAL SITE PLAN

E101

MARKS AND SYMBOLS LEGEND

SECTION MARK / SHEET NUMBER	FCx.x	INDICATES CONTINOUS FOOTING, SEE SCHEDULE
FOOTING DESIGNATION / TOP OF FOOTING ELEVATION (ft-in)	CWx	INDICATES CONCRETE FOUNDATION WALL TYPE AND WIDTH, SEE SCHEDULE
	CC-x	INDICATES COLUMN, SEE SCHEDULE

GENERAL SHEET NOTES

1 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILL, AND COMPACTION ASSOCIATED TO ALL ELECTRICAL UNDERGROUND RACEWAYS AND CABLES. SEE UNDERGROUND RACEWAY DETAILS FOR REQUIREMENTS FOR EACH TRENCH.

2 THE CONTRACTOR IS RESPONSIBLE FOR ALL CONCRETE/ASPHALT CUTTING AND REPLACEMENT OF CONCRETE/ASPHALT TO MATCH EXISTING ASSOCIATED WITH UNDERGROUND RACEWAYS PROVIDED AS PART OF THIS PROJECT.

3 ALL MATERIALS PROVIDED FOR PROJECT SHALL MEET THE FTA BUY AMERICA ACT. CONTRACTOR SHALL SUBMIT CERTIFICATION TO ENGINEER AND OWNER FOR REVIEW FOR ALL MATERIALS.

4 CONTRACTOR IS RESPONSIBLE FOR BECOMING FAMILIAR WITH EXISTING CONDITIONS AND VERIFYING THE CONDITIONS PRIOR TO BIDDING PROJECT. IF ANY DISCREPANCIES OCCUR BETWEEN THE EXISTING PHYSICAL CONDITIONS ON SITE AND THE CONDITIONS DESCRIBED IN THE DRAWINGS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

5 UNLESS NOTED OTHERWISE, ELECTRICAL ITEMS SHOWN IN DARK AND SOLID LINES ARE NEW AND THE CONTRACTOR SHALL PROVIDE THEM. ITEMS SHOWN IN SOLID LIGHT LINES ARE TO REMAIN.

6 TYPICAL FOR ALL OPEN TO STRUCTURE CEILING AREAS - POWER CABLING AND CONTROLS CABLING SHALL BE INSTALLED IN CONDUIT IN A NEAT AND PROFESSIONAL MANNER, PARALLEL AND PERPENDICULAR TO STRUCTURE WITH CONDUIT UP IN STRUCTURE AND PAINTED TO MATCH SURFACE. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN TRAY OR CONDUIT. INSTALLATION SHALL COMPLY WITH NECA STANDARDS.

7 CONTRACTOR SHALL CONTACT BLUE STAKES AND LOCATE ALL UNDERGROUND UTILITIES.

SHEET KEYNOTES

1 CONTRACTOR SHALL COORDINATE EXACTLY LOCATION TO INSTALL PANTOGRAPH WITH OWNER PROVIDED ABB REPRESENTATIVE.

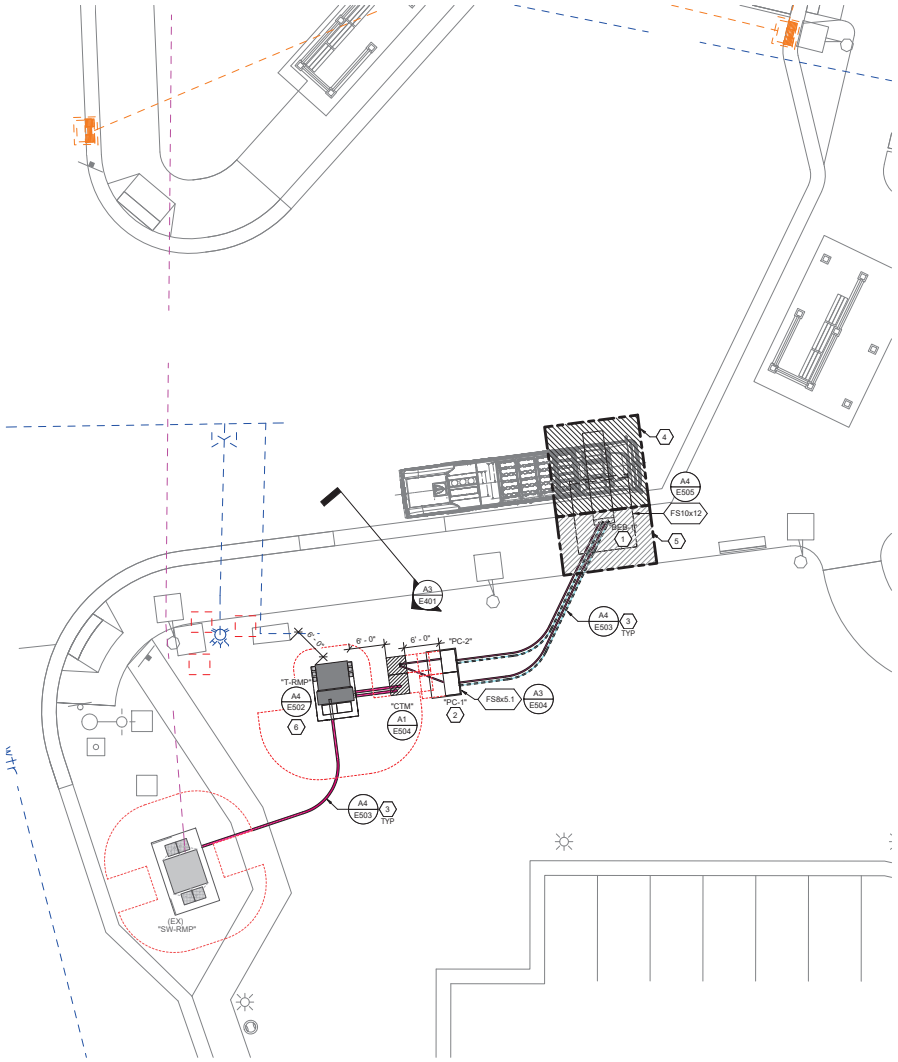
2 CONTRACTOR SHALL INSTALL OWNER PROVIDED ABB POWER CABINETS. CONTRACTOR SHALL ASSIST ABB WITH COMMISSIONING OF SYSTEM.

3 CONTRACTOR SHALL SAW CUT, TRENCH, INSTALL CONDUIT, BACKFILL, COMPACT SOIL AND REPLACE/REPAIR ALL, LANDSCAPE, ASPHALT, CURBING, HARDSCAPE PAINTING AND PARKING STRIPING TO MATCH EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

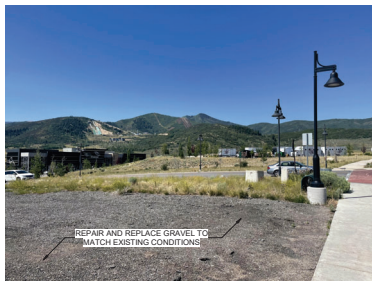
4 DEMOLISH EXISTING CONCRETE CURBING AND ROADWAY FROM EXPANSION JOINT TO EXPANSION JOINT. PROVIDE NEW CURBING AND ROADWAY MATCHING EXISTING AND PARK CITY STANDARDS. NEW CONCRETE MEETING UDOT/UTA SPEC TO MITIGATE HARDSCAPE MOVING WITH HEAVY BUSES AND CURVED CONCRETE TO MATCH GUTTER AND ALLOW WATER TO FLOW DOWN HILL.

5 DEMOLISH EXISTING CONCRETE SIDEWALK FROM EXPANSION JOINT TO EXPANSION JOINT. PROVIDE NEW SIDEWALK MATCHING EXISTING AND PARK CITY STANDARDS.

6 RMP FURNISHED AND INSTALLED TRANSFORMER. CONTRACTOR TO FURNISH AND INSTALL PRECAST VAULT MEETING RMP STANDARDS, COORDINATE EXACT LOCATION WITH RMP PRIOR TO INSTALLATION.



A1 ENLARGED ELECTRICAL SITE PLAN
SCALE: 1" = 10'-0"



A3 SITE PHOTO
SCALE: NTS

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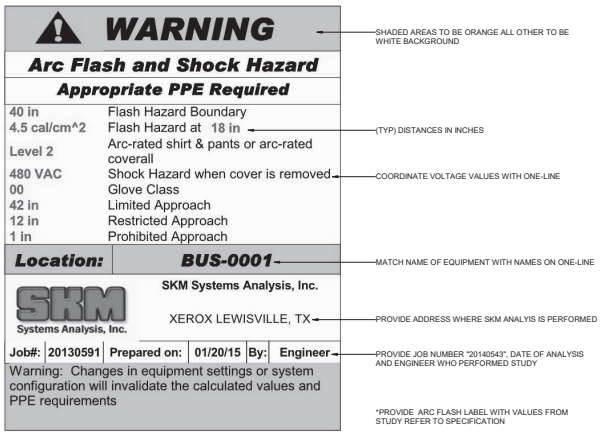
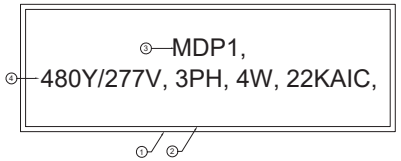
ENLARGED ELECTRICAL SITE PLAN

E401



B1 TYPICAL ARC FLASH LABEL
SCALE: NTS



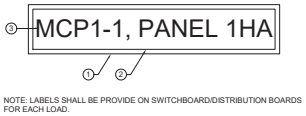
① PLABEL TO BE PROVIDED THAT IS TO BE 4" X REQUIRED LENGTH X 1/16" LAMINATED 2-PLY PLASTIC LAMACOID. LETTERS SHALL BE FORMED BY ENGRAVING OUTER WHITE PLY, EXPOSING BLACK PLY BENEATH.

② LABEL IS TO BE MOUNTED USING DOUBLE SIDED ADHESIVE TAPE COVERING THE BACK OF THE LABEL.

③ FIRST LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, WITH THE EQUIPMENT ID MATCHING PLANS.

④ SECOND LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. THE FOLLOWING SHALL BE PROVIDED, VOLTAGE, PHASE, NUMBER OF WIRES, AND AIC RATING OF GEAR.

A1 TYPICAL MAIN SERVICE EQUIPMENT/GEAR LABEL
SCALE: NTS



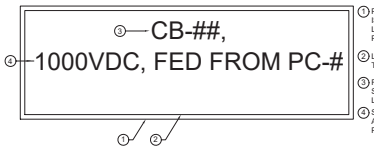
① PANELBOARD LABEL TO BE PROVIDED AT EACH PANELBOARD. LABEL IS TO BE 1.5" X REQUIRED LENGTH X 1/16" LAMINATED 2-PLY PLASTIC LAMACOID. LETTERS SHALL BE FORMED BY ENGRAVING OUTER WHITE PLY, EXPOSING BLACK PLY BENEATH.

② LABEL IS TO BE MOUNTED USING DOUBLE SIDED ADHESIVE TAPE COVERING THE BACK OF THE LABEL.

③ PROVIDE NAME OF SWITCHBOARD WITH BREAKER NUMBER AND DEVICE BEING FED FROM BREAKER/FUSE. LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS AS SEEN ON THE ONE-LINE DIAGRAM.

NOTE: LABELS SHALL BE PROVIDE ON SWITCHBOARD/DISTRIBUTION BOARDS FOR EACH LOAD.

C4 TYPICAL SWITCHBOARD LOAD LABEL
SCALE: NTS



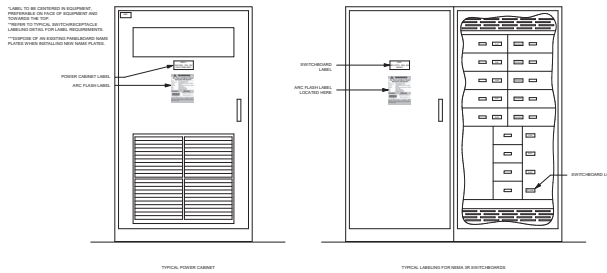
① PANELBOARD LABEL TO BE PROVIDED AT EACH PANELBOARD. LABEL IS TO BE 2" X REQUIRED LENGTH X 1/16" LAMINATED 2-PLY PLASTIC LAMACOID. LETTERS SHALL BE FORMED BY ENGRAVING OUTER WHITE PLY, EXPOSING BLACK PLY BENEATH.

② LABEL IS TO BE MOUNTED USING DOUBLE SIDED ADHESIVE TAPE COVERING THE BACK OF THE LABEL.

③ FIRST LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. REPLACE THE LETTER/NUMBER WITH THOSE FOUND ON THE ONE-LINE DIAGRAM OR PLAN VIEWS.

④ SECOND LINE: LETTERING IS TO BE 3/8" HIGH, CENTERED, AND FORMATTED AS SHOWN. THE FOLLOWING SHALL BE PROVIDED, VOLTAGE, AND NAME OF POWER CABINET IT IS FED FROM.

C3 TYPICAL DEPOT CHARGER BOX LABEL
SCALE: NTS



TYPICAL POWER CABINET

TYPICAL LABELING FOR NEMA 3R SWITCHBOARDS

A4 TYPICAL LABELING LOCATION DETAIL
SCALE: NTS

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SHEET TITLE

TYPICAL LABELING DETAILS

E501

GENERAL SHEET NOTES

1. SCOPE

THIS MATERIAL SPECIFICATION OUTLINES THE MINIMUM REQUIREMENTS FOR PADVAULTS TO BE USED IN CONJUNCTION WITH PACIFICORP- OWNED THREE-PHASE TRANSFORMERS (SEE FIGURE 1). THE MATERIAL SPECIFICATION APPLIES WHETHER THE PADVAULT IS TO BE INSTALLED BY COMPANY PERSONNEL, CONTRACTOR, CUSTOMER, OR THE SUPPLIER.

2. APPLICABLE DOCUMENTS

THE LATEST REVISIONS OF THE DOCUMENTS, STANDARDS, CODES, AND REQUIREMENTS LISTED IN 2.1, PACIFICORP, AND 2.2, CODES AND STANDARDS, IN EFFECT ON THE DATE OF INVITATION TO BID APPLY TO THE EXTENT SPECIFIED HEREIN.

2.1 PACIFICORP

ZG 301 GENERAL EQUIPMENT BASE AND ENCLOSURE REQUIREMENTS

ZG 311 CONCRETE REQUIREMENTS

2.2 CODES AND STANDARDS

WESTERN UNDERGROUND COMMITTEE GUIDE 2.13, SECURITY FOR PADMOUNTED EQUIPMENT ENCLOSURES

APPLICABLE CODES

ANSI STANDARDS

IEEE STANDARDS

NEMA STANDARDS

3. GENERAL

3.1 APPLICATION INFORMATION

THIS MATERIAL SPECIFICATION STATES MATERIAL AND CONSTRUCTION REQUIREMENTS THAT ARE APPLICABLE TO ALL THREE-PHASE TRANSFORMER PADVAULTS.

3.2 AUTHORIZED MATERIAL SPECIFICATION

THIS MATERIAL SPECIFICATION IS NOT CONSIDERED VALID UNTIL EACH PAGE CONTAINS THE APPROVAL SIGNATURE OR INITIALS OF THE PERSONS NAMED IN THE TITLE BLOCKS.

4. APPLICABLE STOCK ITEM NUMBERS

MATERIALS BEING SUBMITTED FOR THE FOLLOWING PACIFICORP STOCK ITEM NUMBERS ARE SUBJECT TO EVALUATION IN ACCORDANCE WITH REQUIREMENTS IN THIS MATERIAL SPECIFICATION.

7992600, PADVAULT, TRANSFORMER, 3-PHASE, 75-750 KVA

7992958, PADVAULT, TRANSFORMER, 3-PHASE, 1000-2500 KVA

5. PRODUCT AND INSTALLATION REQUIREMENTS

THE PURPOSE OF A THREE-PHASE TRANSFORMER PADVAULT IS TO SUPPORT A THREE-PHASE TRANSFORMER.

5.1 PADVAULT LAYOUT

THE THREE-PHASE TRANSFORMER PADVAULT IS COMPOSED OF TWO PIECES: (1) THE PAD, AND (2) THE ENCLOSURE. UNLESS OTHERWISE APPROVED BY PACIFICORP ENGINEERING, ALL DIMENSIONS AND PLACEMENT OF HARDWARE SHALL CONFORM TO THOSE SHOWN ON THIS SHEET. THE ENCLOSURE IS COMMON TO ALL PADVAULTS COVERED BY THIS MATERIAL SPECIFICATION, ZG 531, PADVAULT-THREE-PHASE SECTIONALIZING CABINET, AND ZG 551, PADVAULT-THREE-PHASE FUSING CABINET.

5.2 INSERTS

TWO .375" 16UNC STAINLESS STEEL OR NYLON THREADED INSERTS AND STAINLESS STEEL BOLTS WITH CLEATS FOR MOUNTING THE TRANSFORMER SHALL BE PLACED IN THE PAD AS SHOWN IN FIGURE 2.

5.3 PULLING ATTACHMENTS

CABLE PULLING ATTACHMENTS SHALL BE INSTALLED OPPOSITE OF EACH SET OF CONDUIT BREAKOUTS SUCH THAT BLOCKS MAY BE ATTACHED FOR A STRAIGHT CABLE PULL. PULLING ATTACHMENTS SHALL HAVE A MINIMUM PULLOUT STRENGTH OF 6000 POUNDS. ATTACHMENTS SHALL ALLOW THE ATTACHMENT OF A CLEVIS WITH A ONE-INCH DIAMETER THROUGH BOLT. PULLING ATTACHMENTS MAY BE DESIGNED BY THE MANUFACTURER TO MEET THESE REQUIREMENTS.

5.4 CONDUIT ENTRANCES

BANKS OF NINE (9) SIX-INCH SQUARE BREAKOUTS SHALL BE USED FOR CONDUIT ENTRANCES. TWO BANKS OF KNOCKOUTS SHALL BE PLACED IN EACH SIDE AND IN EACH END OF THE ENCLOSURE.

5.5 LIFTING ATTACHMENTS

ENOUGH LIFTING ATTACHMENTS SHALL BE PROVIDED TO ENSURE SAFE INSTALLATION OF ALL PIECES AT THE SITE.
ENOUGH LIFTING ATTACHMENTS SHALL BE PROVIDED TO ENSURE SAFE INSTALLATION OF ALL PIECES AT THE SITE.

5.6 INSTALLATION

THIS UNIT SHALL BE INSTALLED AT THE SITE BY THE SUPPLIER OR CONTRACTOR. ALL EARTH UNDER THE PADVAULT SHALL BE COMPACTED AND LEVEL PRIOR TO SETTING THE PADVAULT. PROVIDE 6" OF 3/4-INCH-MINUS GRAVEL BACKFILL BASE. THE JOINT BETWEEN THE PAD AND ENCLOSURE SHALL BE SEALED USING TAR OR MASTIC. THE TOP OF THE PAD SHOULD BE TWO TO FOUR INCHES ABOVE FINAL GRADE, WHEN INSTALLED.

6. TESTING

6.1 TEST COMPLIANCE

PADVAULTS SUBMITTED UNDER THIS MATERIAL SPECIFICATION SHALL MEET ALL TESTS AND REQUIREMENTS CONTAINED IN ZG 301, GENERAL EQUIPMENT BASE AND ENCLOSURE REQUIREMENTS, ZG 311, CONCRETE REQUIREMENTS, AND THIS MATERIAL SPECIFICATION. PADVAULTS WILL ALSO COMPLY WITH REQUIREMENTS IN APPLICABLE NATIONAL STANDARDS.

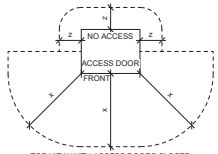
6.2 SECURITY TEST

TRANSFORMER PADVAULTS MUST BE ABLE TO PASS THE FOLLOWING SECURITY TEST. THE SECURITY TEST IS DESIGNED TO ENSURE THAT PADMOUNT EQUIPMENT, WHICH COMPLIES WITH WESTERN UNDERGROUND COMMITTEE GUIDE 2.13, SECURITY FOR PADMOUNTED EQUIPMENT ENCLOSURES, IS NOT COMPROMISED BY UNEVEN PAD SETTING.

WITH THE APPROPRIATE TRANSFORMER MOUNTED, ATTEMPT TO PASS A #14 AWG SOFT-DRAWN COPPER WIRE THROUGH THE INTERFACE BETWEEN THE CABINET AND PAD. IF THE WIRE CAN BE PASSED THROUGH, THE PADVAULT HAS FAILED THE TEST AND IS NOT ACCEPTABLE.

7. PROVIDE AMCOR TYPE GV151 PADVAULT OR AS APPROVED OR DIRECTED BY ROCKY MOUNTAIN POWER.

8. REQUIREMENTS ARE SUBJECT TO CHANGE. SUBMIT PADVAULT TO ROCKY MOUNTAIN POWER FOR APPROVAL PRIOR TO THE PURCHASE AND INSTALLATION OF THE PADVAULT, AND INCLUDE ALL COSTS IN BID.



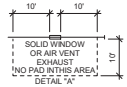
TOP VIEW WITH ACCESS DOORS CLOSED
DETAIL "C"

MINIMUM DISTANCE REQUIRED FROM PAD:

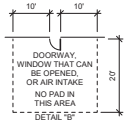
x = 10 FT. CLEAR AREA IN FRONT OF, ANY EQUIPMENT ACCESS DOOR OR OPENING TO ALLOW THE USE OF HOT STICKS. (SEE DIMENSIONS IN DETAIL "C". LOCATE PADMOUNTED EQUIPMENT WITH ACCESS DOORS AWAY FROM BUILDING WALLS OR OTHER BARRIERS TO ALLOW SAFE WORKING PRACTICES. IF THE EQUIPMENT ACCESS SIDE MUST FACE A WALL, ALLOW 10 FEET FOR WORKING CLEARANCE. NO VEGETATION OR TRIP HAZARDS IN THIS WORK SPACE ARE PERMITTED.)

y = 8 FT FROM ANY STRUCTURE OR ROOF OVERHANG CONSISTING OF COMBUSTIBLE MATERIAL. 3 FT TO NON-COMBUSTIBLE STRUCTURES HAVING NO OPENINGS CLOSER THAN 10 FT.

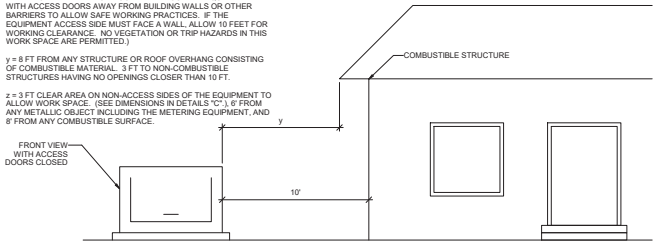
z = 3 FT CLEAR AREA ON NON-ACCESS SIDES OF THE EQUIPMENT TO ALLOW WORK SPACE. (SEE DIMENSIONS IN DETAILS "C"), 6' FROM ANY METALLIC OBJECT INCLUDING THE METERING EQUIPMENT, AND 8' FROM ANY COMBUSTIBLE SURFACE.



DETAIL "A"



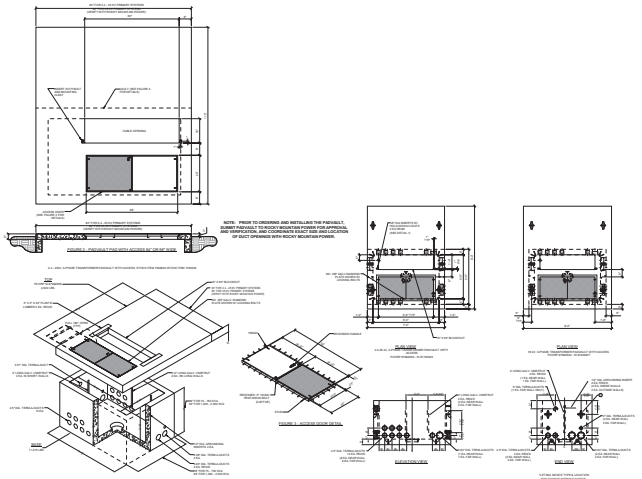
DETAIL "B"



CLEARANCE GENERAL NOTES:

1. CLEARANCES: THE FRONT OF THE PAD SHOULD ALWAYS FACE AWAY FROM ADJACENT STRUCTURES AND BE FREE OF OBSTRUCTIONS. AT LEAST 3 FEET MUST SEPARATE THE EDGES OF THE PAD FROM ANY ADJACENT STRUCTURE. THE EDGES OF THE PAD MUST BE AT LEAST 10 FEET FROM ANY COMBUSTIBLE STRUCTURE. IF AN ADJACENT STRUCTURE HAS ANY OVERHANG OR EAVE WITHIN 27 VERTICAL FEET OF THE TOP OF THE PAD, CLEARANCES MUST BE MEASURED FROM THE OUTSIDE OF THE OVERHANG. THE PAD MUST NOT BE PLACED IN AN AREA 10 FEET IN LINE WITH OR 10 FEET TO EITHER SIDE OF ANY WINDOW IN AN ADJACENT STRUCTURE (SEE DETAIL "A"). CLEARANCE FOR A DOOR MUST BE 20 FEET IN LINE WITH IT AND 10 FEET ON THE SIDES (SEE DETAIL "B"). PADS MUST NOT BE PLACED WITHIN 15 FEET OF ANY VALVE OR WITHIN 25 FEET OF ANY PLUMBING OR STORAGE FACILITY CONTAINING FLAMMABLE MATERIAL. NO WALLS, FENCES, OR ANY OTHER OBSTRUCTIONS WILL BE PLACED WITHIN 3 FEET OF THE SIDES OR BACK OF THE PAD, OR WITHIN 10 FEET OF THE FRONT OF THE PAD (SEE DETAIL "C"). THE AREA IN FRONT OF THE PAD MUST HAVE 10 FEET OF CLEAR, LEVEL WORKING AREA FOR MAINTENANCE OF THE TRANSFORMER. THE PAD MAY NOT BE PLACED IN LINE WITH AN AIR INTAKE WITHIN 32 VERTICAL FEET OF THE SURFACE PAD. ALSO VERTICALLY, IT MUST NOT BE PLACED WITHIN 12 FEET OF A DOOR OR WINDOW. VAULTS SHALL BE LOCATED WITHIN 15 FEET OF A GRAVELED OR PAVED SURFACE SUITABLE FOR INCIDENTAL HEAVY TRUCK ACCESS.
2. BARRIERS: IF THE TRANSFORMER PAD IS TO BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC, (PARKING LOTS, DRIVEWAYS, ETC) CONTACT ROCKY MOUNTAIN POWER FOR PROTECTIVE BARRIER REQUIREMENTS.
3. IF THE TRANSFORMER WILL NOT COVER THE CABLE OPENINGS ON THESE STANDARD PADS, SEAL THE SIDES OF THE CABLE OPENING TO FIT THE TRANSFORMER USING SACKRETE OR COMPARABLE.

A1 TRANSFORMER CLEARANCE DETAIL
SCALE: NTS



A4 THREE-PHASE TRANSFORMER PADVAULT (ROCKY MOUNTAIN POWER STANDARD)
SCALE: NTS

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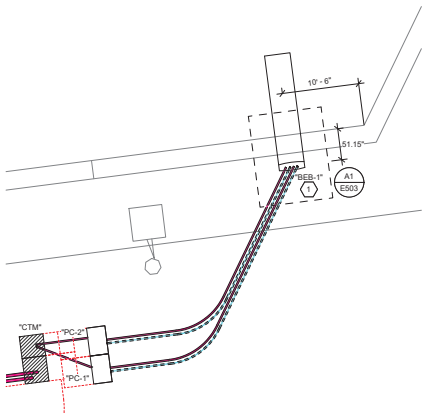
SHEET TITLE

TRANSFORMER DETAILS

E502

SHEET KEYNOTES

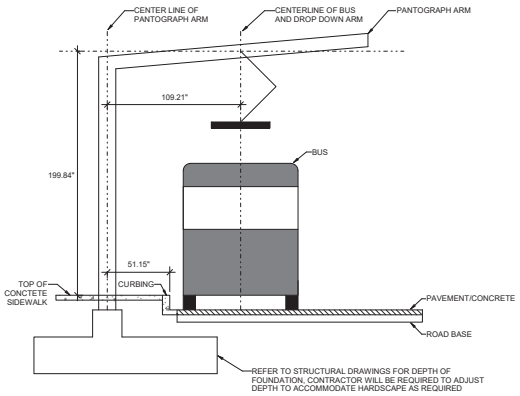
1 ALL RACEWAY SHALL BE ROUTED TO PANTOGRAPH ARM'S CONDUIT ENTRY AND KEEP THEM BUNDLED AND INSTALLED TIGHT AS POSSIBLE TO ASSURE CONDUITS WILL FIT WITHIN CONDUIT ENTRY AREA.



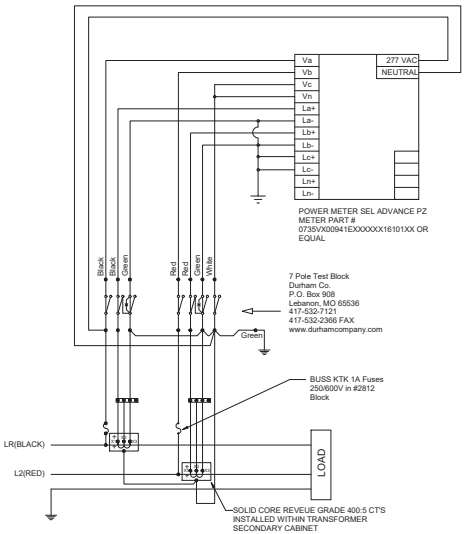
C1 TYPICAL PANTOGRAPH ALIGNMENT
SCALE: 1/8" = 1'-0"

NORTH

NOTE:
DETAIL IS PROVIDED AS AN EXAMPLE. CONTRACTOR WILL NEEDED TO COORDINATED WITH ABB TECH ON SITE AND ADJUST AS DIRECTED BY MANUFACTURERS REPRESENTATIVE



A1 PANTOGRAPH SECTION ALIGNMENT
SCALE: NTS



A2 MDP METERING
SCALE: NTS

NOTES:

1. INSTALL CONDUITS PER LOCAL UTILITY REQUIREMENTS.
2. ALL BENDS SHALL BE LARGE RADIUS
3. PROVIDE WIDE SWEEP FIBERGLASS ELBOWS FOR UTILITY POWER CONDUITS.
4. ALL ABOVEGROUND CONDUIT IN AREAS WHERE DAMAGE MAY OCCUR, ALL STUBUPS AND THE FIRST 10' UNDERGROUND SHALL BE PVC WRAPPED RMC. ALL OTHER UNDERGROUND CONDUIT SHALL BE PVC SCH 40.
5. PROVIDE 2500-LB POLYPROPYLENE PULL ROPE WITH MEASUREMENT MARKS IN EMPTY CONDUITS.
6. MAINTAIN UTILITY SEPARATION AS SHOWN BELOW UNLESS NOTED OTHERWISE. FOR ALL OTHER UTILITIES NOT SHOWN, MAINTAIN A MINIMUM 18" CLEARANCE.

SANITARY SEWER & NON-WATER
-60" HORIZONTALLY
-18" VERTICALLY
WATER
-36" HORIZONTALLY
-18" VERTICALLY
STORM DRAIN
-60" HORIZONTALLY
-18" VERTICALLY

LOW PRESSURE GAS LINE
-36" HORIZONTALLY
-18" VERTICALLY
HIGH PRESSURE GAS LINE
-0-600V - 24" VERTICALLY
-600V - 30" VERTICALLY
-600V - 22,000V - 30" VERTICALLY
-22,001V - 40,000V - 36" VERTICALLY
TELECOM & LOW VOLTAGE
-12" HORIZONTALLY
-12" VERTICALLY

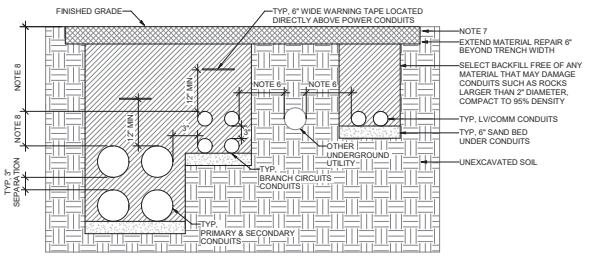
7. REPAIR EXISTING ASPHALT OR SURFACE REFER TO CIVIL SPECIFICATIONS, WHERE SPECIFICATIONS DO NOT DEFINE CONTRACTOR SHALL REPAIR TO MATCH EXISTING CONDITIONS OR REQUIREMENTS BELOW.

FOR CONCRETE:
- 5" CEMENT CONCRETE
- 6" UNTREATED BASE COURSE COMPACT TO 95% MODIFIED PROCTOR
- 6" PIT RUN GRAVE COMPACT TO 95% MODIFIED PROCTOR

FOR ASPHALT:
- 3" STANDARD ASPHALT
- 4" UNTREATED BASE COURSE COMPACT TO 95% MODIFIED PROCTOR
- 6" PIT RUN GRAVE COMPACT TO 95% MODIFIED PROCTOR

FOR TURF/PLANTER/LANDSCAPE:
- TURF/PLANTER/LANDSCAPE
- 12" TOPSOIL

8. TYPICAL DEPTHS UNLESS NOTED OTHERWISE:
PRIMARY AND SECONDARY POWER = 36" MIN DEPTH
BRANCH CIRCUITS & LV/COMM = 24" MIN DEPTH



A4 TYPICAL POWER AND TELECOM CONDUIT DIRECT BURY DETAIL
SCALE: NTS

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UTA

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

Mark:	Date:	Description:
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PROJECT NO:		220184
DRAWN BY:		IBC
CHECKED BY:		LSK
DESIGNED BY:		LSK

RECORD DRAWING DATE:

SIGNATURE:

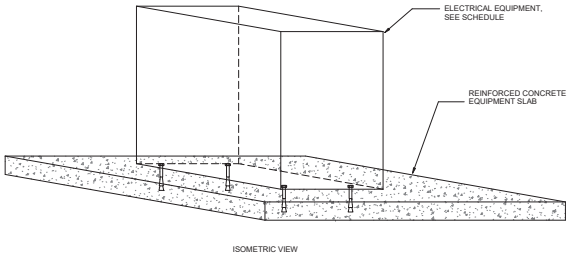
SHEET TITLE

ELECTRICAL DETAILS

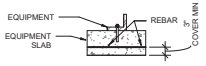
E503

EQUIPMENT SLAB SCHEDULE							
LENGTH (in)	THICKNESS (in)	BAR SIZE (#)	QUANTITY	SPACING (in o.c.)	COVER (in)	EQUIPMENT ANCHOR DIAMETER	ANCHOR QTY[4]
24	6	4	2	18	2	3/8"	4
36	6	4	3	16	2	1/2"	4
48	8	5	4	15	2	1/2"	4
60	8	5	5	14	2	1/2"	4
72	8	5	5	17	2	1/2"	4
84	10	5	6	16	2	1/2"	6
96	10	5	6	18	2	5/8"	6
108[7]	12	5	7	17	2	5/8"	8

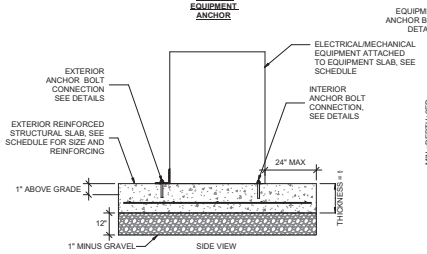
NOTE:
1. EDGE DISTANCE (ED) = 6" UNLESS NOTED OTHERWISE.
2. FOR REINFORCING IN THE WIDTH DIRECTION REFER TO SCHEDULE ABOVE AND SUBSTITUTE WIDTH DIMENSION FOR THE LENGTH.
3. ALL REINFORCING IS TO BE TIED IN PLACE AND CHAIRED TO THE CORRECT HEIGHT (CENTER OF SLAB) PRIOR TO PLACING CONCRETE.
4. ICC APPROVED ANCHOR BOLTS FOR USE IN CRACKED CONCRETE. ANCHOR SHALL BE HILTI KWIK BOLT TZ2 WEDGE ANCHOR, HILTI HY200 EPOXY ANCHOR, OR EQUAL
5. **THIS SCHEDULE OF FOR BIDDING PURPOSES ONLY! THE ACTUAL EQUIPMENT SLAB DESIGN, REINFORCING AND ANCHORAGE SHALL BE DESIGNED BY QUALIFIED STRUCTURAL/SEISMIC ENGINEER IN THE STATE WHERE THE PROJECT IS LOCATED VIA DEFERRED SUBMITTAL BY THE CONTRACTOR.**
6. 3000 PSI CONCRETE STRENGTH AT 28 DAYS MIN UNLESS NOTED OTHERWISE
7. PROVIDE REINFORCING BARS TOP AND BOTTOM. BOTTOM STEEL TO PLACED WITH 3" COVER, TOP STEEL SHALL HAVE 1-1/2" COVER MIN.
8. ANCHOR SHALL BE PLACED IN EACH CORNER MINIMUM. DESIGN ASSUMES THAT THE EQUIPMENT MANUFACTURER HAS PROVIDED ANCHORAGE LOCATIONS ON EQUIPMENT. WHERE ANCHORAGE LOCATION IS NOT PROVIDED CONTRACTOR SHALL CONSULT QUALIFIED SEISMIC ENGINEER FOR QUANTITY AND LOCATION OF ANCHORAGE.

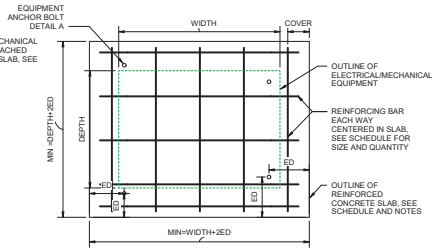


ISOMETRIC VIEW



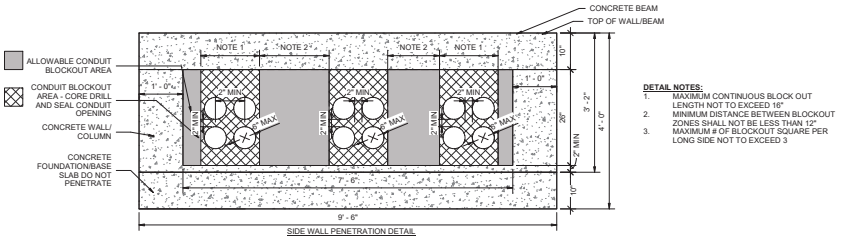
DETAIL A EQUIPMENT ANCHOR





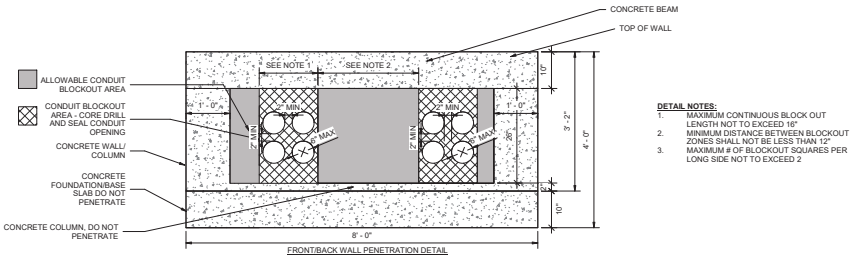
PLAN VIEW

A1 EXTERIOR EQUIPMENT PAD
SCALE: NTS



SIDE WALL PENETRATION DETAIL

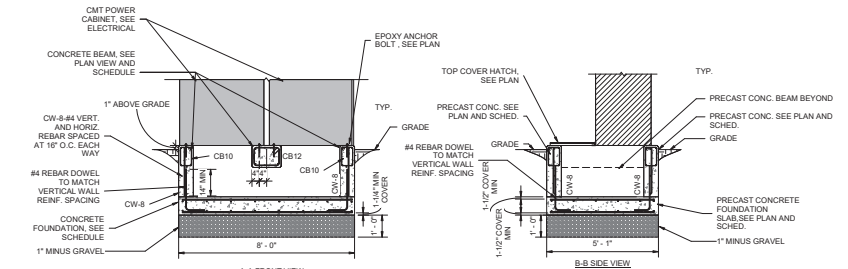
DETAIL NOTES:
1. MAXIMUM CONTINUOUS BLOCK OUT LENGTH NOT TO EXCEED 16"
2. MINIMUM DISTANCE BETWEEN BLOCKOUT ZONES SHALL NOT BE LESS THAN 12"
3. MAXIMUM # OF BLOCKOUT SQUARE PER LONG SIDE NOT TO EXCEED 3



FRONT/BACK WALL PENETRATION DETAIL

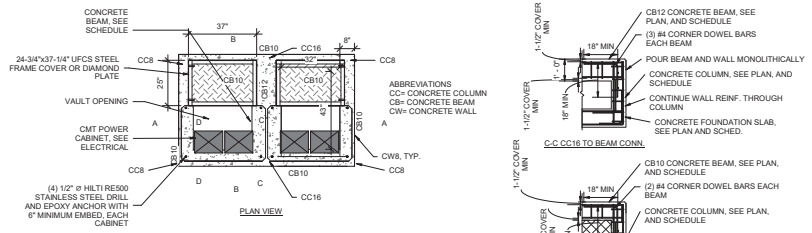
DETAIL NOTES:
1. MAXIMUM CONTINUOUS BLOCK OUT LENGTH NOT TO EXCEED 16"
2. MINIMUM DISTANCE BETWEEN BLOCKOUT ZONES SHALL NOT BE LESS THAN 12"
3. MAXIMUM # OF BLOCKOUT SQUARES PER LONG SIDE NOT TO EXCEED 2

C3 TYPICAL WALL PENETRATION DETAIL
SCALE: NTS



A-A FRONT VIEW

B-B SIDE VIEW



PLAN VIEW

D-D CC8 TO BEAM CONN.

A3 CMT CHARGER DOUBLE VAULT PLAN
SCALE: NTS

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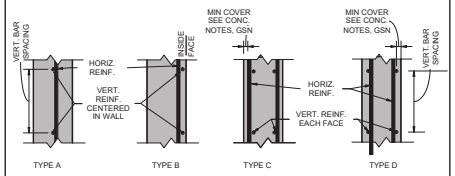
SHEET TITLE
STRUCTURAL DETAILS

E504

CONCRETE WALL SCHEDULE

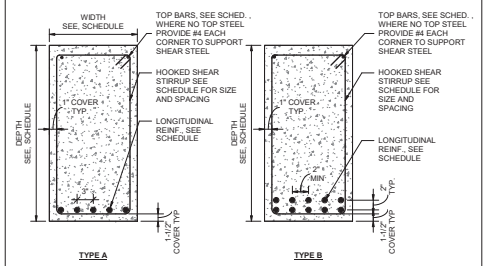
WALL MARK	THICKNESS (in)	VERT. REINF.	HORIZ WALL REINF.	WALL TYPE	COMMENTS
CW-8	8	#4 @ 18" O.C. .	#4 @ 16" O.C.	A	DO NOT CUT REINF. FOR CORE HOLES

1. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTING WALLS, PER TYPICAL CORNER WALL REINFORCING DETAIL
2. WHEN A SINGLE CURTAIN OF REINFORCING IS SPECIFIED, PLACE THE VERTICAL REINFORCING IN THE CENTER OF THE WALL, TYPICAL, U.N.O..
3. WHEN A DOUBLE CURTAIN OF REINFORCING IS SPECIFIED, PLACE EACH CURTAIN OF STEEL AT THE FACE OF THE WALL WITH MINIMUM COVER AS SPECIFIED IN THE GENERAL NOTES.
4. PROVIDE DOWELS WITH STANDARD HOOKS TO THE STRUCTURE BELOW WITH SIZE AND SPACING TO ATTACH THE VERTICAL REINFORCING IN THE WALL ABOVE.
5. SPLICE VERTICAL REINFORCING AT FLOOR LEVELS ONLY, TYPICAL, U.N.O..
6. SPLICES IN HORIZONTAL REINFORCING IN ONE CURTAIN SHALL BE STAGGERED FROM SPLICES IN THE OPPOSITE CURTAIN A MINIMUM OF 4 FEET.



CONCRETE BEAM SCHEDULE

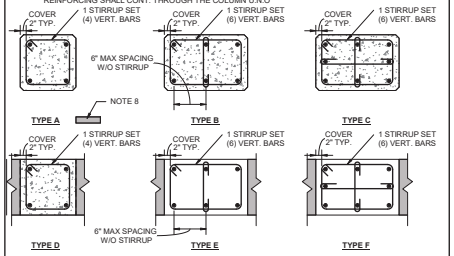
BEAM MARK	DEPTH (in)	WIDTH (in)	TOP LONG. REINF.	BOT. LONG. REINF.	SHEAR STIRRUP AND SPACING	BEAM TYPE	BEAM COMMNETS
CB10	10	8	(2) #4	(2) #4 BARS	#3 @ 8" O.C.	A	TOP OF WALL
CB12	12	16	(3) #5	(3) #5	#3@12" O.C.	A	
CB8	8	8	(2)#4	NA	NA	A	TOP OF WALL



CONCRETE COLUMN/PIER SCHEDULE

COLUMN MARK	WIDTH (in)	LENGTH (in)	VERTICAL REINF.	STIRRUP TIE SETS	TYPE	COMMENTS
CC8	8	8	(4) #4	#3 @ 8" O.C.	D	
CC16	16	8	(6) #4	#3 @ 8" O.C.	E	

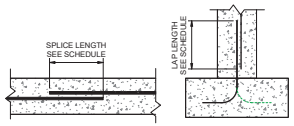
1. VERTICAL BARS SHALL TERMINATE IN A STANDARD 90 DEGREE HOOK UNLESS APPROVED OTHERWISE BY THE STRUCTURAL ENGINEER.
2. VERTICAL REINFORCING SHALL SPLICE AT FLOOR LEVELS ONLY, TYP., U.N.O.
3. WHEN USED, THE MAXIMUM OFFSET FOR INCLINED BARS SHALL BE 3 INCHES. THE MAXIMUM SLOPE FOR INCLINED BARS SHALL BE 1:6.
4. PROVIDE DOWELS WITH STANDARD HOOKS TO THE STRUCTURE BELOW TO MATCH THE VERTICAL REINFORCING IN THE COLUMN ABOVE, TYP., U.N.O., SEE STANDARD HOOK SCHEDULE
5. COLD JOINTS SHALL OCCUR AT FLOOR LEVELS ONLY, TYP., U.N.O.
6. PROVIDE CHAMFERS AT ALL CORNERS OF ALL COLUMNS, TYP., U.N.O.
7. PENETRATION THROUGH CONCRETE COLUMNS IS NOT ALLOWED, TYP. U.N.O.
8. HATCH INDICATES CONC. WALL. WALL REINFORCING IS NOT SHOWN FOR CLARITY, HOWEVER, REINFORCING SHALL CONT. THROUGH THE COLUMN U.N.O



TYPICAL REBAR DEVELOPMENT/LAP LENGTH SCHEDULE

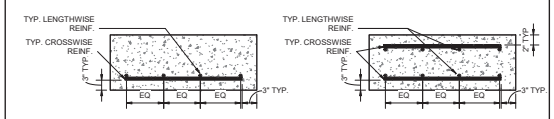
BAR SIZE	NORMAL WEIGHT REBAR SPLICE/LAP LENGTH SCHEDULE (150 pcf) 2500 psi S (in)	T (in)	3000 psi S (in)	T (in)	3500 psi S (in)	T (in)	4000 psi S (in)	T (in)	4500 psi S (in)	T (in)	5000 psi S (in)	T (in)
#3	18	23	16	21	15	20	14	18	13	17	13	17
#4	24	31	22	28	20	26	19	25	18	23	17	22
#5	30	39	27	36	25	33	24	31	22	29	21	28
#6	36	47	33	43	30	40	28	37	27	35	25	33
#7	53	68	48	62	44	58	42	54	39	51	37	48
#8	60	78	55	71	51	66	47	62	45	58	42	55
#9	68	88	62	80	57	74	54	70	50	66	48	62
#10	76	99	70	90	64	84	60	78	57	74	54	70
#11	89	116	82	106	76	98	71	92	67	87	63	82
#14	129	168	118	153	109	142	102	133	96	125	91	119
#18	229	298	209	272	194	252	181	236	171	222	162	211

SCHEDULE NOTES:
1. SCHEDULE IS INDENTED FOR USE WITH ALL BAR SPLICES IN CONCRETE WALLS FOUNDATIONS AND FOOTINGS.
2. TABULATED VALUES ARE THE MINIMUM REQUIRED LAP LENGTH PER CODE. LONGER LAP/DEVELOPMENT LENGTHS MAY BE USED AS REQ'D FOR EASE OF CONSTRUCTION, ETC.
3. TIES AND STIRRUPS SHALL NOT BE SPLICED.
4. TABULATED VALUES OF FOR GRADE 60 (fy=60ksi) REBAR. FOR GRADE 75 (fy= 75ksi) MULTIPLY TABLE VALUES BY 1.25 AND FOR GRADE 80 (fy=80ksi) MULTIPLY TABLE VALUE BY 1.33
5. EPOXY COATED OR ZINC AND EPOXY DUAL COATED BARS WITH CLEAR COVER LESS THAN $3d_b$ WITH OR CLEAR SPACING LESS THAN $6d_b$ MULTIPLY TABULATED VALUE BY 1.5, OTHERWISE FOR ALL OTHER CASES MULTIPLY TABULATED VALUE BY 1.2
6. FOR LIGHTWEIGHT CONCRETE MULTIPLY VALUE BY 1.33
7. S= STANDARD REBAR AND T= TOP REBAR. TOP REBAR IS ANY BAR THAT HAS 12" OR MORE OF FRESH CONCRETE BELOW THE BAR AT THE TIME THE CONCRETE IS PLACED.
8. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL INFORMATION

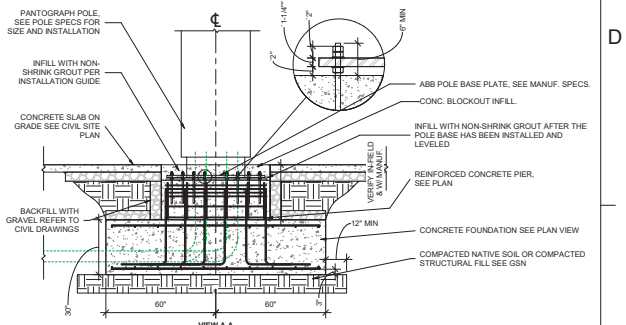


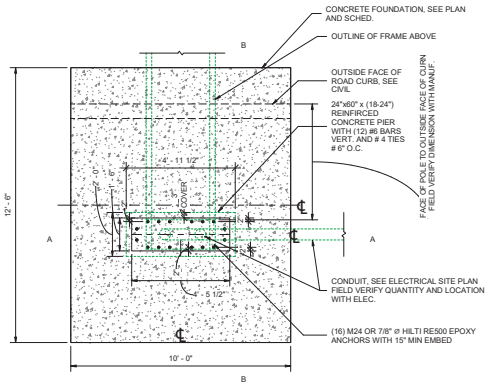
MARK	WIDTH	LENGTH	THICKNESS	LENGTHWISE REINF. QTY	LENGTHWISE REINF. SIZE	CROSSWISE REINF. QTY	CROSSWISE REINF. SIZE	CROSSWISE REINF. SPACING	COMMENT
FS8x5.1	8' - 0"	5' -1"	0' - 10"		#4		#4	12" O.C.	TOP AND BOTTOM
FS10x12	10' - 0"	12' - 0"	2' - 6"		#6		#6	12" O.C.	TOP AND BOTTOM

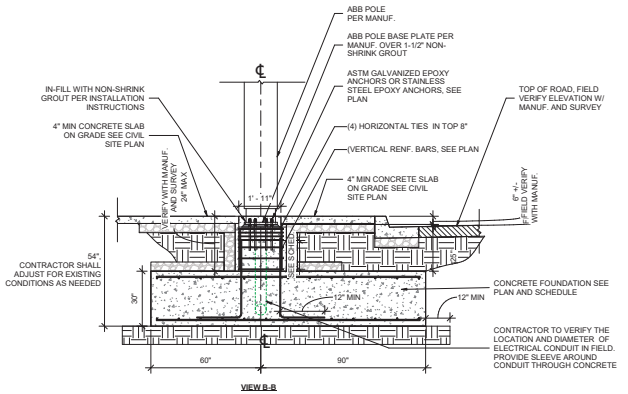
CONCRETE FOOTING NOTES:
1. BOTTOM REINFORCING REBAR SHALL HAVE A MINIMUM OF 3" CONCRETE CLEAR COVER (UNO).
2. TOP REINFORCING REBAR SHALL HAVE A MINIMUM OF 2" OF CONCRETE CLEAR COVER (UNO). TOP REINFORCING WITH MORE THAN 12" OF CONCRETE BELOW SHALL HAVE INCREASE LAP LENGTHS AS NOTED IN THE CONCRETE LAP LENGTH SCHEDULE.
3. EARTH FORMED FOOTING INCREASE LENGTH AND WIDTH AN ADDITIONAL 6" (UNO)
4. CONTINUOUS FOOTING REBAR SHALL RUN CONTINUOUS THROUGH SPREAD FOOTING (UNO)
5. SEE FOOTING AND FOUNDATION PLAN FOR FOOTING CALLOUTS. NOTE SOME FOOTING MARK MAY NOT BE USED.
6. SEE GENERAL STRUCTURALLY NOTES FOR ADDITIONAL INFORMATION



GENERAL INSTALL NOTES
1. COORDINATE ALL DIMENSIONS AND ELEVATIONS IN FIELD WITH SURVEY AND PER MANUFACTURERS PRINTED INSTALLATION INSTRUCTIONS.
2. IN THE CASE OF ANY DISCREPANCY BETWEEN THE PLANS/DETAILS AND THE MANUFACTURER PRINTED INSTALL GUIDE THE MORE STRINGENT OPTION SHALL BE ADHERED TOO
3. CONTRACTOR SHALL COORDINATE DEPTH OF CONCRETE FOUNDATION WITH HARDSCAPE SUCH THAT ALL REQUIRED HARDSCAPE SPECIFICATIONS SHALL BE MET.







A4 PANTOGRAPH CHARGING POLE FOUNDATION
SCALE: NTS

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SHEET TITLE
STRUCTURAL DETAILS

E505

150KW VEHICLE CHARGER CONDUIT AND CABLING SCHEDULE

XX** — ID

ID	Description
DC	2" GRC WITH (2) #350CU, 1,000V
DC-G	2" GRC WITH (2) #350CU, 1000V & #2CU GROUND
G1	1" GRC WITH #2CU GROUND

SHEET KEYNOTES

1 PROVIDE METER SOCKET PER RMP STANDARDS. METER & CT'S SHALL BE FURNISHED AND INSTALLED BY RMP.

2 PROVIDE 100% RATED MAIN BREAKER.

3 PROVIDE (2) 4" CONDUIT WITH PULL STRING. PROVIDE WIDE SWEEP FIBERGLASS ELBOWS. RMP TO PROVIDE CABLING.

4 PROVIDE DIGITAL METER LOCATED IN SWITCHGEAR AND FACTORY INSTALLED.

5 OWNER FURNISHED ABB HVC 150 POWER CABINET AND CONTRACTOR INSTALLED CHARGING STATIONS. REFER TO GROUNDING RISER FOR GROUNDING REQUIREMENTS.

6 OWNER FURNISHED ABB ELECTRIC BUS PANTOGRAPH CHARGER AND CONTRACTOR INSTALLED. REFER TO GROUNDING RISER FOR GROUNDING REQUIREMENTS.

7 REFER TO LOW VOLTAGE RISERS FOR ADDITIONAL DETAILS.

8 OWNER FURNISHED ABB HVC 150S POWER CABINET AND CONTRACTOR INSTALLED CHARGING STATIONS. REFER TO GROUNDING RISER FOR GROUNDING REQUIREMENTS.

9 PROVIDE (1) 4" CONDUIT WITH PULL STRING. PROVIDE WIDE SWEEP FIBERGLASS ELBOWS. RMP TO PROVIDE CABLING.

10 RMP FURNISHED AND INSTALLED TRANSFORMER. CONTRACTOR TO FURNISH AND INSTALL PRECAST VAULT MEETING RMP STANDARDS. COORDINATE EXACT LOCATION WITH RMP PRIOR TO INSTALLATION.

GENERAL SHEET NOTES

1. PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO ELECTRICAL SPECIFICATIONS FOR REQUIREMENTS.
4. TYPICAL, ALL CHARGERS AND CHARGER EQUIPMENT SHALL BE FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR.

FAULT CURRENT TABLE

BUS	FAULT CURRENT
CTM	65000

PROVIDE FULLY RATED CIRCUIT BREAKERS IN PANELBOARDS FOR THE FAULT CURRENT SHOWN. SERIES RATINGS WITH NEXT LEVEL UPSTREAM OVERCURRENT PROTECTIVE DEVICES ARE PERMITTED SUBJECT TO FACTORY UL DOCUMENTATION OF SERIES RATING SUBMITTED TO ENGINEER. IF DEVICE OR EQUIPMENT FAULT CURRENT RATING IS NOT SHOWN, ASSUME 100,000 AIC.

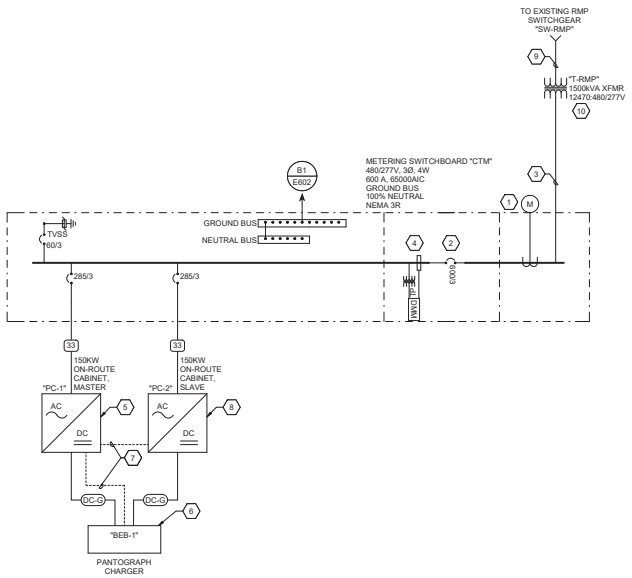
COPPER CONDUCTOR AND CONDUIT SCHEDULE

SCHEDULE NUMBER; SUBSCRIPT (NOTE 5) — (E.G. 5 IG)

SYM	AMP	HH AMPS	CONDUIT SIZE	CONDUCTOR (NOTE 1) QTY	SIZE	G	IG/HH	SE	NOTES
1	20	-	.75	2	12	12	12	8	2
2	20	-	.75	3	12	12	12	8	2,3
3	20	24	.75	4	12	12	12	8	2,3
4	30	-	.75	2	10	10	10	8	2
5	30	-	.75	3	10	10	10	8	2
6	30	32	.75	4	10	10	10	8	2
7	40	-	1	2	8	10	8	6	2
8	40	-	1	3	8	10	8	6	2
9	40	44	1	4	8	10	8	6	2
10	55	-	1	2	6	10	8	4	2
11	55	-	1	3	6	10	8	4	2
12	55	60	1.25	4	6	10	8	4	2
13	70	-	1	2	4	8	4	2	2
14	70	-	1.25	3	4	8	4	2	2
15	70	76	1.25	4	4	8	4	2	2
16	85	-	1.25	2	3	8	3	2	2
17	85	-	1.25	3	3	8	3	2	2
18	85	92	1.25	4	3	8	3	2	2
19	95	-	1.25	3	2	8	2	2	2
20	95	104	1.50	4	2	8	2	2	2
21	130	-	1.50	3	1	6	2	2	2
22	130	116	1.50	4	1	6	2	2	2
23	150	-	2	3	1/0	6	2	1/0	2
24	150	136	2	4	1/0	6	2	1/0	2
25	175	-	2	3	2/0	6	2	2/0	2
26	175	156	2	4	2/0	6	2	2/0	2
27	200	-	2	3	3/0	6	2	2/0	2
28	200	180	2.50	4	3/0	6	2	2/0	2
29	230	-	2.50	3	4/0	4	2	2/0	2
30	230	208	2.50	4	4/0	4	2	2/0	2
31	255	-	2.50	3	250	4	1	2/0	2
32	255	232	2.50	4	250	4	1	2/0	2
33	310	-	3	3	350	3	1/0	3/0	2
34	310	280	3	4	350	3	1/0	3/0	2
35	380	-	3.50	3	500	3	3/0	3/0	2
36	380	344	4	4	500	3	3/0	3/0	2
37	400	-	2 EA 2	3	3/0	3	3/0	3/0	2
38	400	360	2 EA 2.50	4	3/0	3	3/0	3/0	2
39	510	-	2 EA 2.50	3	250	1	4/0	3/0	2
40	510	464	2 EA 3	4	250	1	4/0	3/0	2
41	620	-	2 EA 3	3	350	1/0	4/0	3/0	2,4
42	620	560	2 EA 3	4	350	1/0	4/0	3/0	2,4
43	760	-	2 EA 3.50	3	500	1/0	4/0	3/0	2,4
44	760	688	2 EA 4	4	500	1/0	4/0	3/0	2,4
45	855	-	3 EA 3	3	300	2/0	4/0	3/0	2,4
46	855	768	3 EA 3	4	300	2/0	4/0	3/0	2,4
47	1000	-	3 EA 3.50	3	400	2/0	4/0	3/0	4
48	1000	912	3 EA 3.50	4	400	2/0	4/0	3/0	4
49	1140	-	3 EA 4	3	500	3/0	4/0	3/0	4
50	1140	1032	3 EA 4	4	500	3/0	4/0	3/0	4
51	1240	-	4 EA 3	3	350	3/0	4/0	3/0	4
52	1240	1120	4 EA 3	4	350	3/0	4/0	3/0	4
53	1675	1520	5 EA 4	4	400	4/0	4/0	4/0	4
54	2010	1824	6 EA 4	4	400	250	250	250	4
55	2660	2408	7 EA 4	4	500	350	350	350	4
56	3040	2752	8 EA 4	4	500	500	500	500	4
57	4180	3784	11 EA 4	4	500	500	500	500	4
58	-	-	5 EA 4	-	-	-	-	-	6
59	-	-	5	-	-	-	-	-	6
60	-	-	10 EA 4	-	-	-	-	-	6

CONDUIT AND CONDUCTOR SCHEDULE NOTES

1. CONDUCTORS SHOWN ARE SHOWN FOR EACH CONDUIT WITH MODIFICATIONS AS NOTED IN NOTE 5. ALL CONDUCTORS SHOWN ARE THWN UNLESS OTHERWISE NOTED.
2. PROVIDE EQUIPMENT GROUND CONDUCTORS PER TABLE 250-122 WHEN CIRCUIT BREAKERS ARE SIZED GREATER THAN AMPERE RATING SHOWN IN TABLE.
3. PROVIDE #10 NEUTRALS FOR MULTIWIRE BRANCH CIRCUITS SERVING COMPUTERS.
4. GROUND (G) CONDUCTOR MAY BE DELETED ON SERVICE ENTRANCE CONDUCTORS.
5. SYMBOL SUBSCRIPTS:
   - "2N": INCLUDE TWO NEUTRAL CONDUCTORS SIZED AS SCHEDULED FOR PHASE AND NEUTRAL CONDUCTORS WHERE THE CONDUCTOR IS #1/0 OR LARGER. INCLUDE A SINGLE 200% RATED CONDUCTOR THAT IS TWICE THE AMPACITY OF THE SCHEDULED PHASE AND NEUTRAL CONDUCTOR WHERE THE CONDCUTOR IS BELOW #1/0 IN SIZE.
   - "FG" FULL SIZE GROUND, SIZE EQUIPMENT GROUNDING CONDUCTOR TO BE SAME SIZE AS THE PHASE CONDUCTORS.
   - "HH": NEUTRAL CURRENTS EXIST DUE TO HIGH HARMONIC "NONLINEAR" LOADS. CURRENT CARRYING CONDUCTORS DERATED ACCORDINGLY. PROVIDE THE IG/HH SIZE FOR THE EQUIPMENT GROUNDING CONDUCTOR.
   - "IG": INCLUDE IG (INSULATED/ISOLATED GROUND CONDUCTOR) SCHEDULED ALONG WITH THE GROUND OF EQUIPMENT GROUND CONDUCTOR.
   - "SE": SUBSTITUTE "SE" CONDUCTOR FOR "G" CONDUCTOR SHOWN, WHICH IS SIZED FOR THE GROUNDING OF THE SECONDARY OF THE SEPARATELY DERIVED SYSTEM.
6. RACEWAY ONLY. CONDUCTORS PROVIDED BY UTILITY.



A1 ONE-LINE DIAGRAM
SCALE: NTS

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UTA

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

6490 N. LANDMARK DRIVE
PARK CITY, UTAH 84098

Mark:	Date:	Description:
ISSUE:		CONSTRUCTION DOCUMENTS
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PROJECT NO:	220184
DRAWN BY:	IBC
CHECKED BY:	LSK
DESIGNED BY:	LSK
RECORD DRAWING DATE:	
SIGNATURE:	

SHEET TITLE
ONE-LINE DIAGRAM

E601

SHEET KEYNOTES

1. 18 AWG., 4 CONDUCTOR COMMUNICATIONS CABLE WILL CONNECT DIRECTLY TO DIN-RAIL MOUNTED COMMUNICATIONS EQUIPMENT. LEAVE A MINIMUM OF 6' ADDITIONAL SLACK TO ENSURE ENOUGH CABLE LENGTH FOR PROPER TERMINATION.
2. FIBER OPTIC CABLE WILL CONNECT DIRECTLY TO DIN-RAIL MOUNTED FIBER PATCH PANEL WITH ST CONNECTORS.

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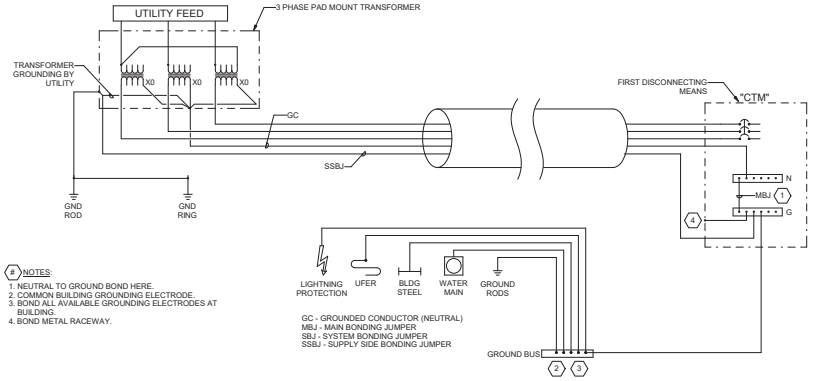
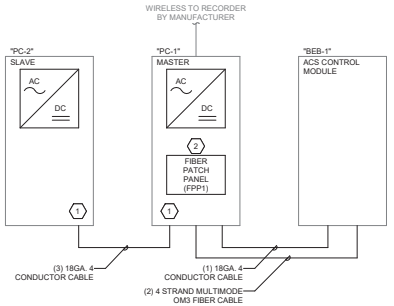


NOTES:
1. NEUTRAL TO GROUND BOND HERE.
2. COMMON BUILDING GROUNDING ELECTRODE.
3. BOND ALL AVAILABLE GROUNDING ELECTRODES AT BUILDING.
4. BOND METAL RACEWAY.

B1 TYPICAL OUTDOOR UTILITY TRANSFORMER SEPARATELY DERIVED SYSTEM GROUNDING AND BONDING DETAIL
SCALE: NTS

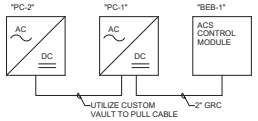


C3 ON ROUTE BEB CHARGER LOW VOLTAGE RISER
SCALE: NTS

EQUIPMENT/CABLE LIST

THE ITEMS INDICATED BELOW SHALL NOT BE CONSTRUED AS A "BILL OF MATERIALS". THIS LIST IDENTIFIES ITEMS OF SIGNIFICANCE USED DURING THE DESIGN OF THE CABLING INSTALLATION. WHERE THE ITEMS INDICATED ARE ONE PORTION OF AN ASSEMBLY, THE ENTIRE ASSEMBLY SHALL BE PROVIDED UNLESS SPECIFIED OTHERWISE. PROVIDE ALL MISCELLANEOUS HARDWARE AND SUPPORTS WHICH MAY NOT BE LISTED HERE, FOR A COMPLETE INSTALLATION. COMPARE CATALOG NUMBERS WITH DESCRIPTIONS AND NOTIFY ENGINEER OF DISCREPANCIES PRIOR TO BID. IF CATALOG NUMBERS DO NOT MATCH DESCRIPTIONS, THE DESCRIPTIONS TAKE PRECEDENCE. PROVIDE COMPLETE SUBMITTAL FOR APPROVAL PRIOR TO PURCHASING ANY EQUIPMENT OR CABLE. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

SYMBOL	ITEM DESCRIPTION	ACCEPTABLE TYPES
	FIBER OPTIC CABLE, 04 STRAND MULTI MODE, OUTDOOR, OSP RATED, LOOSE TUBE, GEL FREE	CORNING 004T U4-T4780D20
	INTERLOCK CABLE, 18 AWG, 4 CONDUCTOR, UV RESISTANT PVC, OSP	WEST PENN AQ244
FPP1	FIBER PATCH PANEL, DIN RAIL MOUNTED	CORNING SPH-01P
	ADAPTER PANEL, 08 POSITION, 08 FIBER, ST CONNECTOR	CORNING CCH-CP08-H3
	DIN RAIL MOUNTING KIT	CORNING SPH-DIN-KIT

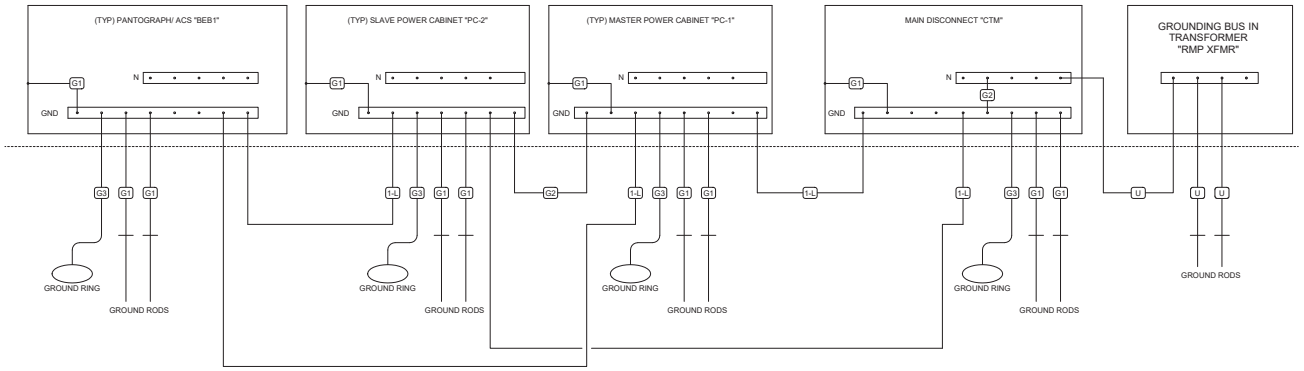


B3 ON ROUTE BEB CHARGER LOW VOLTAGE RACEWAY RISER
SCALE: NTS

GROUNDING SCHEDULE

ALL CONDUCTORS ARE INSULATED UNLESS INDICATED OTHERWISE

SYM	SIZE
G1	#6 CU
G2	#2 CU
G3	#4/0 CU
G5	#250 KCMIL CU
G6	#350 KCMIL CU
G7	1" CNDW/#2 CU
U	BY LOCAL UTILITY POWER COMPANY
I-L	GROUNDING CONDUCTOR PER ONE-LINE DIAGRAM



A1 TYPICAL ON ROUTE BEB CHARGER GROUNDING & BONDING RISER
SCALE: NTS

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SHEET TITLE

GROUNDING RISER DIAGRAMS

UTA HIGH POWERED CHARGERS - KIMBALL JUNCTION

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E602

EXHIBIT B

ENLARGED ELECTRICAL SITE PLAN

MARKS AND SYMBOLS LEGEND

SECTION MARK / SHEET NUMBER	FCx.x	INDICATES CONTINOUS FOOTING, SEE SCHEDULE
FOOTING DESIGNATION	CW-x	INDICATES CONCRETE FOUNDATION WALL TYPE AND WIDTH, SEE SCHEDULE
TOP OF FOOTING ELEVATION (ft-in)	CC-x	INDICATES COLUMN, SEE SCHEDULE

GENERAL SHEET NOTES

1 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCHING, BACKFILL, AND COMPACTION ASSOCIATED TO ALL ELECTRICAL UNDERGROUND RACEWAYS AND CABLES. SEE UNDERGROUND RACEWAY DETAILS FOR REQUIREMENTS FOR EACH TRENCH.

2 THE CONTRACTOR IS RESPONSIBLE FOR ALL CONCRETE/ASPHALT CUTTING AND REPLACEMENT OF CONCRETE/ASPHALT TO MATCH EXISTING ASSOCIATED WITH UNDERGROUND RACEWAYS PROVIDED AS PART OF THIS PROJECT.

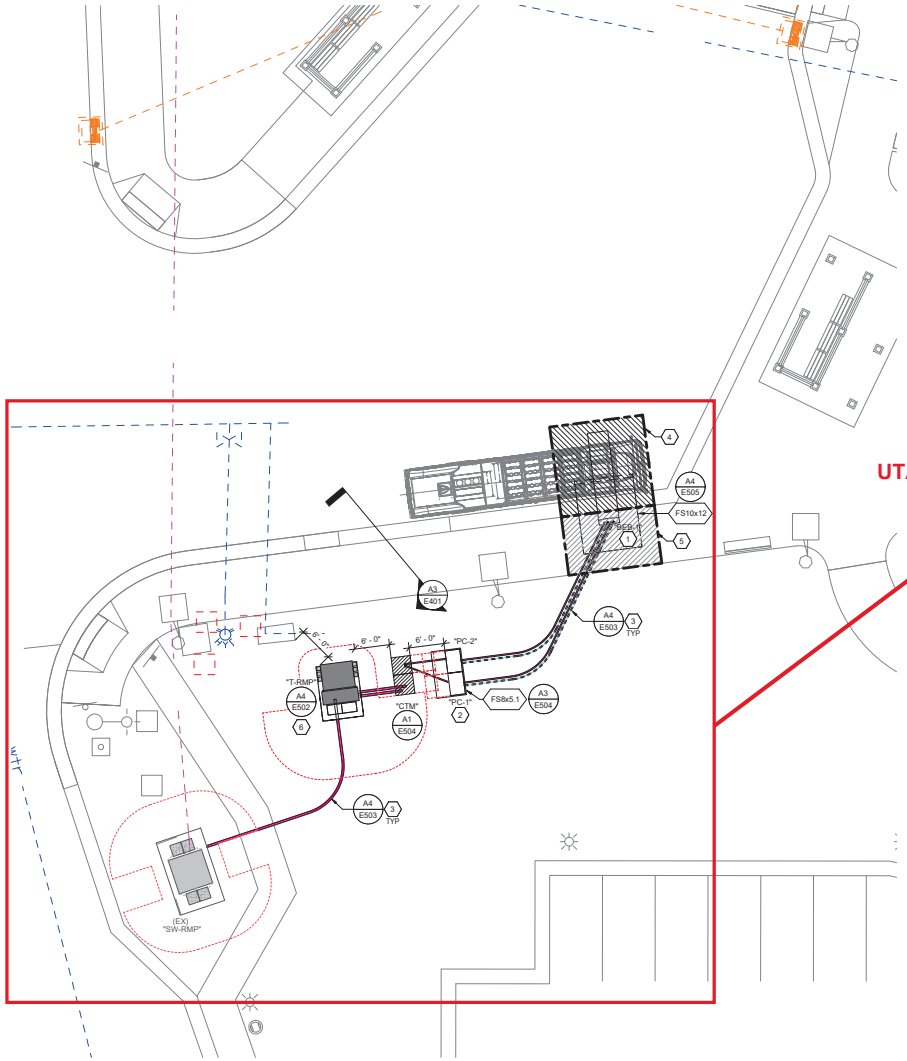
3 ALL MATERIALS PROVIDED FOR PROJECT SHALL MEET THE FTA BUY AMERICA ACT. CONTRACTOR SHALL SUBMIT CERTIFICATION TO ENGINEER AND OWNER FOR REVIEW FOR ALL MATERIALS.

4 CONTRACTOR IS RESPONSIBLE FOR BECOMING FAMILIAR WITH EXISTING CONDITIONS AND VERIFYING THE CONDITIONS PRIOR TO BIDDING PROJECT. IF ANY DISCREPANCIES OCCUR BETWEEN THE EXISTING PHYSICAL CONDITIONS ON SITE AND THE CONDITIONS DESCRIBED IN THE DRAWINGS, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

5 UNLESS NOTED OTHERWISE, ELECTRICAL ITEMS SHOWN IN DARK AND SOLID LINES ARE NEW AND THE CONTRACTOR SHALL PROVIDE THEM. ITEMS SHOWN IN SOLID LIGHT LINES ARE TO REMAIN.

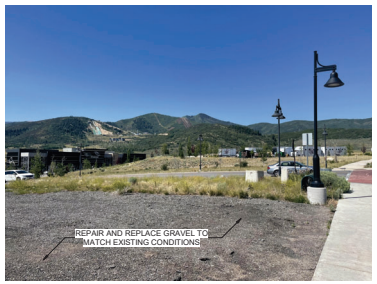
6 TYPICAL FOR ALL OPEN TO STRUCTURE CEILING AREAS - POWER CABLING AND CONTROLS CABLING SHALL BE INSTALLED IN CONDUIT IN A NEAT AND PROFESSIONAL MANNER, PARALLEL AND PERPENDICULAR TO STRUCTURE WITH CONDUIT UP IN STRUCTURE AND PAINTED TO MATCH SURFACE. ALL LOW VOLTAGE CABLING SHALL BE INSTALLED IN TRAY OR CONDUIT. INSTALLATION SHALL COMPLY WITH NECA STANDARDS.

7 CONTRACTOR SHALL CONTACT BLUE STAKES AND LOCATE ALL UNDERGROUND UTILITIES.



A1 ENLARGED ELECTRICAL SITE PLAN
SCALE: 1" = 10'-0"

NORTH



A3 SITE PHOTO
SCALE: NTS

SHEET KEYNOTES

1 CONTRACTOR SHALL COORDINATE EXACTLY LOCATION TO INSTALL PANTOGRAPH WITH OWNER PROVIDED ABB REPRESENTATIVE.

2 CONTRACTOR SHALL INSTALL OWNER PROVIDED ABB POWER CABINETS. CONTRACTOR SHALL ASSIST ABB WITH COMMISSIONING OF SYSTEM.

3 CONTRACTOR SHALL SAW CUT, TRENCH, INSTALL CONDUIT, BACKFILL, COMPACT SOIL AND REPLACE/REPAIR ALL, LANDSCAPE, ASPHALT, CURBING, HARDSCAPE PAINTING AND PARKING STRIPING TO MATCH EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

4 DEMOLISH EXISTING CONCRETE CURBING AND ROADWAY FROM EXPANSION JOINT TO EXPANSION JOINT. PROVIDE NEW CURBING AND ROADWAY MATCHING EXISTING AND PARK CITY STANDARDS. NEW CONCRETE MEETING UDOT/UTA SPEC TO MITIGATE HARDSCAPE MOVING WITH HEAVY BUSES AND CURVED CONCRETE TO MATCH GUTTER AND ALLOW WATER TO FLOW DOWN HILL.

5 DEMOLISH EXISTING CONCRETE SIDEWALK FROM EXPANSION JOINT TO EXPANSION JOINT. PROVIDE NEW SIDEWALK MATCHING EXISTING AND PARK CITY STANDARDS.

6 RMP FURNISHED AND INSTALLED TRANSFORMER. CONTRACTOR TO FURNISH AND INSTALL PRECAST VAULT MEETING RMP STANDARDS, COORDINATE EXACT LOCATION WITH RMP PRIOR TO INSTALLATION.

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SHEET TITLE

ENLARGED ELECTRICAL SITE PLAN

E401

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