

ACRONYMS
C = CONTRACTOR
A = AMAZON (OWNER)
U = UTILITY
E = ENGINEER OF RECORD

GENERAL NOTES:

1. TOURS TO MEAN PROCURE AND DELIVER TO THE PROJECT SITE READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR ACTIVITIES.

2. INSTALL MEANS TO SET IN A POSITION FOR SERVICE OR USE. INCLUDES ACTIVITIES SUCH AS UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, PROTECTING, ANCHORING, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR ACTIVITIES.

3. ALL MATERIALS, EQUIPMENT, COMPONENTS TO BE INSTALLED AT THE PROJECT SITE ARE LISTED IN THE TABLE ABOVE THAT ARE REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM.

4. FOR THE PURPOSE OF THE TABLE ABOVE, MATERIALS ARE TO BE FURNISHED BY THE INDICATED PARTY UNLESS OTHERWISE NOTED WITHIN THE CONTRACT DOCUMENTS.

5. ALL MATERIALS AND INSTALLATIONS ARE FOR CONFORMANCE WITH THE FOLLOWING:

6. THE INSTALLATION, HANDLING AND O&M INSTRUCTIONS FOR ALL AMAZON FURNISHED EQUIPMENT CAN BE FOUND IN THE BELOW LOCATION IN BIM

7. LIST OF ITEMS IS GENERIC IN NATURE. ALL ITEMS MAY NOT BE APPLICABLE TO THIS PROJECT.

| | |
|--|--|
| ACRONYMS | |
| C = CONTRACTOR | |
| A = AMAZON (OWNER) | |
| U = UTILITY | |
| NA = NOT APPLICABLE | |
| GENERAL NOTES: | |
| <p>1. FURNISH IS TO MEAN PROCURE AND DELIVER TO THE PROJECT SITE READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR ACTIVITIES</p> <p>2. INSTALL MEANS TO SET IN POSITION FOR SERVICE OR USE AND INCLUDES ACTIVITIES AT SITE, SUCH AS UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, PROTECTING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR ACTIVITIES</p> <p>3. THIS TABLE DOES NOT BE CONSIDERED A COMPREHENSIVE LIST. ANY ITEM NOT LISTED IN THE TABLE ABOVE SHALL BE PROVIDED BY THE CONTRACTOR FOR A COMPLETE AND FUNCTIONAL SYSTEM.</p> <p>4. ALL CIVIL WORK IS TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS NOTED OTHERWISE IN THE CONSTRUCTION DRAWINGS</p> <p>5. THE INSTALLATION, HANDING, AND OPERATIONAL & MAINTENANCE INSTRUCTIONS FOR ALL AMAZON FURNISHED EQUIPMENT CAN BE FOUND IN THE BMS60 REPOSITORY. PLEASE REACH OUT TO THE AMAZON CONSTRUCTION MANAGER FOR ACCESS.</p> <p>6. MARKING IF IT IS NOT APPLICABLE TO THE PROJECT</p> | |
| SCHEDULE NOTES: | |
| <p>1. THE CTS AND METER-SOCKET WILL BE SUPPLIED, OWNED AND MAINTAINED BY THE COMPANY AND SHALL BE INSTALLED BY THE ELECTRICAL CONTRACTOR. THE INSTRUMENT TRANSFORMER COMPARTMENT IN A CT CABINET, SERVICE CONNECTION CABINET, OR SWITCHGEAR CT COMPARTMENT, THE NECESSARY CONDUIT AND FITTINGS SHALL BE SUPPLIED, OWNED, INSTALLED AND MAINTAINED BY THE CUSTOMER. THE ELECTRICAL CONTRACTOR SHALL TERMINATE THE LINE-SIDE AND LOAD-SIDE CONDUCTORS IN THE CT CABINET, OR SWITCHGEAR CT COMPARTMENT. THE COMPANY WILL TERMINATE THE LINE-SIDE CONDUCTORS AND THE CUSTOMER SHALL TERMINATE THE LOAD-SIDE CONDUCTORS IN A SECONDARY CONNECTION CABINET. THE SECONDARY METERING CONDUCTORS WILL BE SUPPLIED, OWNED, INSTALLED AND MAINTAINED BY THE COMPANY. CUSTOMER-OWNED EQUIPMENT, OTHER THAN SERVICE CONDUCTORS, SHALL NOT BE INSTALLED IN THE SPACE DEDICATED TO INSTRUMENT TRANSFORMERS.</p> <p>2. REFER TO NASHVILLE ELECTRIC SERVICE STANDARDS FOR ELECTRICAL INSTALLATION AND USE. (BLUE BOOK) FOR UTILITY METERING CABINET AND INSTRUMENT TRANSFORMER COMPARTMENTS FOR UTILITY REQUIREMENTS.</p> | |

ELECTRICAL SYMBOL LEGEND

- | | |
|-------|--|
| AF | AMPERE |
| AMP | AMP FRAME |
| APC | AVAILABLE FAULT CURRENT |
| ARC | ARC FAULT CIRCUIT INTERRUPTER |
| APC | AMPERE INTERRUPTING CAPACITY |
| AL | ALUMINUM |
| AT | AMP TRIP |
| AWG | AMERICAN WIRE GAUGE |
| BLDG | BUILDING |
| C | CONDUIT |
| CB | CIRCUIT BREAKER |
| CR | CIRCUIT |
| CONT | CONTINUOUS (AUS) (USED) (ATTN) |
| CONTR | CONTRACTOR |
| CT | CURRENT TRANSFORMER |
| CU | COPPER |
| DWG | DRAWING |
| EC | ELECTRICAL CONTRACTOR |
| EMT | ELECTRICAL METALLIC TUBING |
| END | END OF LINE |
| ERMS | ENERGY REDUCTION MAINTENANCE SWITCH |
| EXIST | EXISTING |
| FLL | FULL LOAD AMPS |
| FMC | FLEXIBLE METALLIC CONDUIT |
| FSW | FUSE (SWITCH RATINGS) (AMPS) |
| GC | GENERAL CONTRACTOR |
| GRO | GROUND FAULT CIRCUIT INTERRUPTER |
| GPE | GROUND FAULT PROTECTION EQUIPMENT |
| GRD | GROUND |
| GRC | GALVANIZED RIGID CONDUIT |
| HZ | HERTZ |
| IMB | INTERMEDIATE METALLIC CONDUIT |
| JB | JUNCTION BOX |
| KCMIL | KILOVAULT CIRCULAR MILS |
| KVA | KILOVOLT AMPERE |
| KVAR | KILOVOLT AMPERE REACTIVE |
| KW | KILOWATT |
| LFMC | LIQUID TIGHT FLEXIBLE METALLIC CONDUIT |
| LFC | LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT |
| LSC | LONG TIME, SHORT TIME, INSTANTANEOUS |
| LSCA | LONG TIME, SHORT TIME, INSTANTANEOUS, GROUND |
| MCA | MINIMUM CIRCUIT AMPS |
| MCB | MAIN CIRCUIT BREAKER |
| MDP | MAIN DISTRIBUTION PANEL |
| ML | MAIN LUGS ONLY |
| MOOP | MAXIMUM OVERCURRENT PROTECTION |
| N | NUMBER |
| NA | NOT APPLICABLE |
| NC | NORMALLY CLOSED |
| NEC | NATIONAL ELECTRICAL CODE |
| NIC | NOT IN CONTRACT |
| NO | NORMALLY OPEN |
| NTS | NOT TO SCALE |
| PNL | PANEL BOX |
| PNL | PANEL |
| POI | POINT OF INTERCONNECTION |
| PRI | PRIMAVERA |
| PVC | POLYVINYL CHLORIDE CONDUIT |
| REQ | REQUIRED |
| RES | REGD STEEL CONDUIT |
| SCCR | SHORT CIRCUIT CURRENT RATING |
| SEC | SECONDARY |
| SW | SWITCH |
| SWBD | SWITCHBOARD |
| UG | UNDERGROUND |
| V | VOLT |
| VCB | VACUUM CIRCUIT BREAKER |
| VFI | VACUUM FAULT INTERRUPTER |
| W | WATT |
| XMR | TRANSFORMER |

| SYMBOL | DESCRIPTION |
|--------|--|
| | RECEPTACLE |
| | RECESSED JUNCTION BOX - LETTER INDICATES TYPE |
| | SURFACE MOUNTED JUNCTION BOX - LETTER INDICATES TYPE |
| | RECESSED JUNCTION BOX, WALL - LETTER INDICATES TYPE |
| | SURFACE MOUNTED JUNCTION BOX, WALL - LETTER INDICATES TYPE |
| | LEVEL 2 EV VEHICLE CHARGER |
| | LEVEL 3 EV VEHICLE CHARGER |
| | GENERATOR - SIZE VARIES |
| | TRANSFORMER - SIZE VARIES |
| | PANELBOARD |
| | SWITCHBOARD/DISTRIBUTION PANELBOARD |
| | GROUND |
| | ELECTRICAL INTERLOCK |
| | METER |
| | MANHOLE |
| | HANDHOLE |
| | AUTOMATIC TRANSFER SWITCH |
| | METER & RELAY |
| | DRAW-OUT POTENTIAL TRANSFORMER |
| | SURGE PROTECTION DEVICE |
| | DISCONNECT SWITCH |
| | INSTANTANEOUS / TIME-DELAY / GROUND INSTANTANEOUS RELAY |
| | UTILITY POLE |

ELECTRICAL SHEET INDEX

1. INTERRUPTING NOTED IN SCHEDULES SHALL APPLY TO ENTIRE PANELBOARD AND/OR SWITCHBOARD. ALL EQUIPMENT CONNECTING PANELS AND/OR SWITCHBOARDS SHALL BE FULLY RATED FOR SHORT CIRCUIT CURRENT NOTED.
2. PROVIDE ENGRAVED NAMEPLATES ON SWITCHBOARDS, PANELBOARDS, DISCONNECT SWITCHES, MOTOR CONTROL CENTERS, TRANSFORMERS, ETC., INDICATING EQUIPMENT DESIGNATION (OR DESIGNATION OF EQUIPMENT SERVED) AND VOLTAGE.
3. FINAL CONNECTIONS TO EQUIPMENT BE PER MANUFACTURER'S APPROVED WIRING DIAGRAM, DETAILS, AND INSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS AND EQUIPMENT COMPATIBLE WITH EQUIPMENT ACTUALLY SUPPLIED.
4. PANEL SHALL BE REMOVABLE. SUBMIT PROPOSED SCHEDULE OF DIRECTORIES TO OWNER FOR APPROVAL. ROOM NAMES AND NUMBERS SHALL BE AS DIRECTED BY OWNER. DIRECTORIES SHALL BE TYPED AND INSTALLED UNDER CLEAR PLASTIC COVER.
5. ALL BRANCH CIRCUIT AND FEEDER CONDUITS SHALL HAVE A SIZED COPPER GROUNDING CONDUCTOR. INCREASE CONDUIT SIZE AS REQUIRED.
6. PULLBOXES, CANNEDS, ETC. MOUNTED ON THE EXTERIOR AT GRADE LEVEL, SHALL BE WEATHERPROOF TYPE WITH HINGED LOCKABLE COVERS SECURED WITH TAMPERPROOF SCREWS.
7. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, UNLESS NOTED OTHERWISE.
8. PROVIDE SELF ADHESIVE IDENTIFICATION INSIDE COVER OF EACH FUSIBLE SWITCH, INDICATING SIZE AND TYPE OF FUSES PROVIDED.
9. PROVIDE ONE (1) SET OF (3) SPARE FUSES FOR EACH SIZE AND TYPE PROVIDED ON THIS PROJECT. INSTALL FUSES IN A HINGED DOOR, SHEET METAL STORAGE CABINET EQUIPPED WITH CUPS OR CUBICLES, EACH MARKED WITH THE SIZE AND TYPE FUSE STORED THEREIN. PROVIDE NAMEPLATE "SPARE FUSES" INSTALL IN LOCATION(S) AS DIRECTED BY OWNER.

| SHEET NUMBER | SHEET NAME |
|--------------|---|
| E0.00 | ELECTRICAL TITLE SHEET |
| E0.10 | ELECTRICAL SITE PLAN |
| E0.11 | ELECTRICAL DISTRIBUTION PLAN SERVICE 1 - WEST |
| E0.12 | ELECTRICAL DISTRIBUTION PLAN SERVICE 2 - EAST |
| E0.13 | ELECTRICAL ONE-LINE DIAGRAM SERVICE 1 - WEST |
| E0.14 | ELECTRICAL ONE-LINE DIAGRAM SERVICE 2 - EAST |
| E0.00 | PANEL SCHEDULES |
| E0.01 | PANEL SCHEDULES |
| E0.02 | PANEL SCHEDULES |
| E7.00 | ELECTRICAL DETAILS |
| E8.00 | ELECTRICAL SPECIFICATIONS |
| E8.01 | ELECTRICAL SPECIFICATIONS |
| E8.02 | ELECTRICAL SPECIFICATIONS |

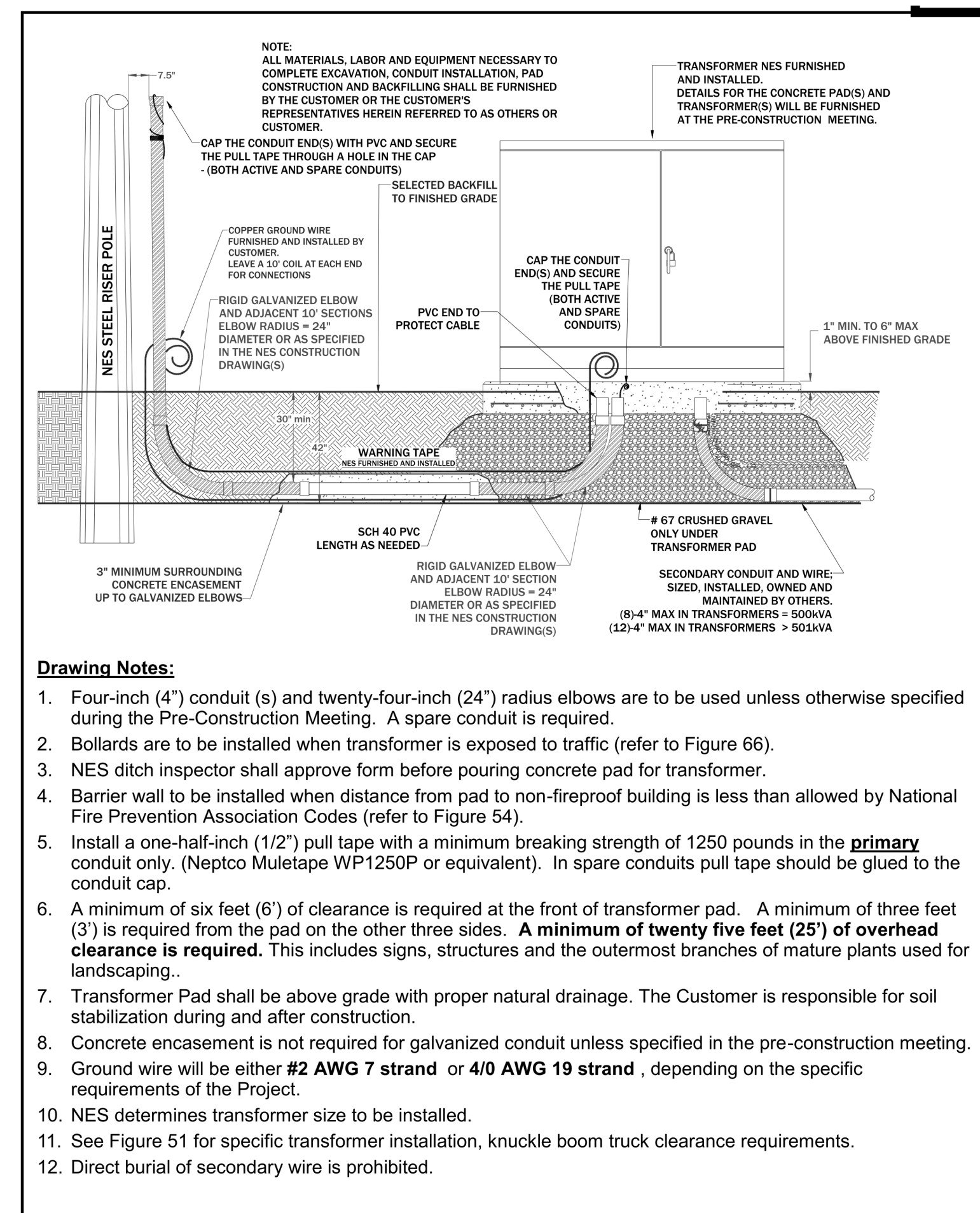
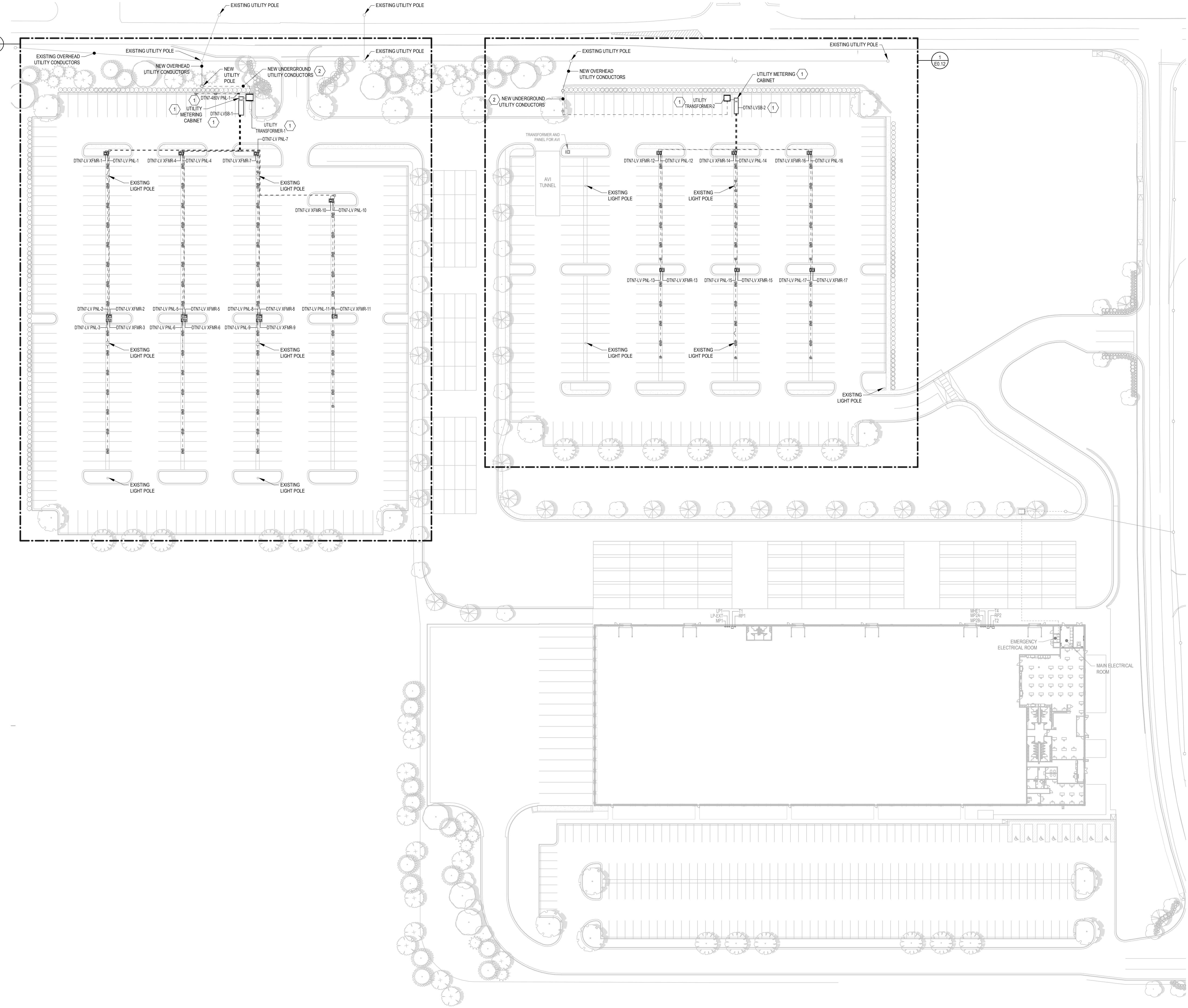


Figure 23: Underground Commercial Three Phase Primary Installation

1 UNDERGROUND THREE PHASE PRIMARY INSTALLATION

Address Docx//433.0221 DNTV EV - La Vergne, TN/AMZL_DTN7 EV - La Vergne, TN_MP_2023.cxd



1 ELECTRICAL SITE PLAN
SCALE: 1" = 50'-0"

CHARGER QUANTITIES

| | |
|-----|--|
| 219 | SERVICE 1 - WEST, LEVEL 2 CHARGERS |
| 2 | LEVEL 3 CHARGERS (DUAL PORT) |
| 120 | SERVICE 2 - EAST, LEVEL 2 CHARGERS |
| 0 | LEVEL 3 CHARGERS (DUAL PORT) |
| 1 | SERVICE 1 - WEST, SINGLE MOUNT PEDESTALS |
| 109 | DUAL MOUNT PEDESTALS |
| 0 | SERVICE 2 - EAST, SINGLE MOUNT PEDESTALS |
| 60 | DUAL MOUNT PEDESTALS |

LINE STYLE KEY

| | |
|-------|-------------------------------------|
| ----- | NEW UNDERGROUND POWER CONDUIT |
| ----- | NEW ABOVE-GROUND POWER CONDUIT |
| ----- | EXISTING UNDERGROUND POWER CONDUIT |
| ----- | EXISTING ABOVE-GROUND POWER CONDUIT |

GENERAL NOTES:

- A. SEE SHEET E0.00 FOR PROJECT NOTES.
- B. COORDINATE CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES.
- C. SPLICING LOW VOLTAGE AND MEDIUM VOLTAGE FEEDERS IS STRICTLY PROHIBITED UNLESS DIRECTED IN THIS DOCUMENT. SPLICING DEVICES, FULL SIDES AND HANDHOLE ENCLOSURES SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 314 & 250.148. ENCLOSURES SHALL REQUIRE A TOOL TO OPEN.

KEY NOTES:

1. PROVIDE CONCRETE PAD AND UNISTRUT FRAMING AS REQUIRED FOR ALL GRADE MOUNTED ELECTRICAL EQUIPMENT. REFER TO CIVIL PAD DETAILS FOR MORE INFORMATION.
2. PROVIDE (2) 6" CONDUITS FROM UTILITY POLE TO UTILITY TRANSFORMER PAD. COORDINATE ROUTING OF CONDUCTORS WITH CIVIL PLANS. CUSTOMER INSTALLED INFRASTRUCTURE AND PRIMARY TRENCH MUST BE INSPECTED BY UTILITY BEFORE BACKFILL IS COMPLETE. CONTACT NASHVILLE ELECTRIC SERVICE PRIOR TO WORK COMMENCING FOR FINAL COORDINATION AND INSPECTION. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR MORE INFORMATION AND CONDUCTOR REQUIREMENTS.

ELECTRICAL SITE PLAN

AMAZON.COM SERVICES LLC
ELECTRIC VEHICLE CHARGER INSTALLATION
DTN7 DELIVERY STATION
342 MASON ROAD
LA VERGNE, TENNESSEE 37086

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1000 17th Avenue South
Edina, MN 55425
(952) 938-0050 | www.epinc.com

REVISION RECORD

| NO. | DATE | DESCRIPTION |
|-----|------------|------------------|
| 1 | 12/06/2023 | ISS PLAN SET |
| 2 | 01/09/2024 | REVISED PLAN SET |
| 3 | 05/08/2025 | ISS PLAN SET |

E0.10

Address: Docx://433.0221 DTV EV - La Vergne, TN/AMZ_DTV EV - La Vergne, TN_MP_2023.cxd

1 ELECTRICAL DISTRIBUTION PLAN SERVICE 1 - WEST

SCALE: 1" = 20'-0"

| 208V L2 CHARGER CABLE AND CONDUIT SIZING - COPPER CABLE STANDARDS | | | | | | | | | |
|---|---------------------|-------------------|--------------------|--|--------------------|--|--------------------------------|------------------------------|------------------------------|
| CONDUIT TAG | EV CHARGER DISTANCE | MAX LENGTH (FEET) | NUMBER OF CHARGERS | CONDUCTOR SIZE FOR EACH CHARGER (SEE NOTE BELOW FOR #2AWG) | CONDUIT TRADE SIZE | QUANTITY OF CURRENT CARRYING CONDUCTORS IN A CONDUIT | CONDUCTOR AMPACITY 75 DEGREE C | DERATING FACTOR (310.15.C.1) | DERATED AMPACITY 90 DEGREE C |
| 1 | SHORT | 140 FT | 1 | (2)#8AWG - #10AWG GROUND | 1 1/2" | 2 | 65A | 100% | N/A |
| 2 | SHORT | 140 FT | 2 | (2)#8AWG - #10AWG GROUND | 1 1/2" | 4 | 65A | 80% | 65A |
| 3 | MEDIUM | 220 FT | 1 | (2)#8AWG - #8AWG GROUND | 1" | 2 | 85A | 100% | N/A |
| 4 | MEDIUM | 220 FT | 2 | (2)#8AWG - #8AWG GROUND | 1 1/2" | 4 | 85A | 80% | 76A |
| 5 | LONG | 340 FT | 1 | (2)#2AWG - #8AWG GROUND | 1 1/4" | 2 | 115A | 100% | N/A |
| 6 | LONG | 340 FT | 2 | (2)#2AWG - #8AWG GROUND | 1 1/2" | 4 | 115A | 80% | 92A |
| 7 | MEDIUM | 220 FT | 4 | (2)#8AWG - #8AWG GROUND | 1 1/2" | 8 | 85A | 70% | 66 |
| 8 | LONG | 340 FT | 4 | (2)#2AWG - #8AWG GROUND | 2" | 8 | 115A | 70% | 80A |
| #2 CONDUCTOR NOTE: EV CHARGERS CANNOT ACCEPT ELECTRICAL CONDUCTORS LARGER THAN #8AWG. SPICE BRANCH CIRCUIT CONDUCTORS (#2AWG OR LARGER) DOWN TO #8AWG WITHIN A NEMA 4 BOX NEAR CHARGER USING POLARIS TAP UL480D SUBMERSIBLE CONNECTORS. | | | | | | | | | |
| 480V BRANCH CIRCUIT CABLE AND CONDUIT SIZING STANDARDS - L3 CHARGER | | | | | | | | | |
| 1 | N/A | N/A | 1 | (3)#3AWG - #8AWG GROUND | 1 1/4" | 3 | 100A | 100% | N/A |

GENERAL NOTES:

- SEE SHEET E0.00 FOR PROJECT GENERAL NOTES.
- ACCESS TO AND CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL CONFORM TO NEC ARTICLE 110. CONSULT ENGINEER WHERE SPACE APPEARS INADEQUATE DUE TO CIVIL CHANGES. EQUIPMENT LAYOUT CHANGES, OR FIELD CONDITIONS, DO NOT COVER, OBSCURE OR BLOCK ACCESS TO EQUIPMENT, DATA PLATES, ACCESS PANELS OR MAINTENANCE AREAS WITH ELECTRICAL WORK.
- COORDINATE CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES.
- PRIMARY DISCONNECT NOT LOCATED WITHIN SIGHT OF TRANSFORMER MUST HAVE LOCKING MEANS AT REMOTE DISCONNECT AND A LABEL AT TRANSFORMER DENOTING DISCONNECT LOCATION PER NEC 400.14.
- EQUIPMENT SHOWN LIGHT AND GRAY IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- EQUIPMENT SHOWN DARK AND SOLID TO BE NEW UNLESS NOTED OTHERWISE.
- SPICING: LOW VOLTAGE AND MEDIUM VOLTAGE FEEDERS IS STRICTLY PROHIBITED. BRANCH CIRCUIT SPLICES ARE NOT ALLOWED UNLESS DIRECTED IN THIS DOCUMENT. SPLICES, SPLICING DEVICES, PULL BOXES AND HANDHOLE ENCLOSURES SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 314 & 250.148. ENCLOSURES SHALL REQUIRE A TOOL TO OPEN.

KEY NOTES:

- PROVIDE CONCRETE PAD AND UNISTRUT FRAMING AS REQUIRED FOR ALL GRADE MOUNTED ELECTRICAL EQUIPMENT. REFER TO CIVIL PAD DETAILS FOR MORE INFORMATION.
- PROVIDE SINGLE POINT CONNECTION FOR DUAL OUTPUT LEVEL 3 DC FAST CHARGER. PROVIDE CONCRETE PAD FOR EV CHARGER. REFER TO MANUFACTURER CUT SHEET FOR EQUIPMENT DIMENSIONS. EXTEND PAD 4" BEYOND EDGE OF EQUIPMENT, CHARGER CORNERS.
- PROVIDE CONNECTION TO OWNER SUPPLIED ELECTRIC VEHICLE CHARGER. PROVIDE CONDUIT FROM SOURCE PANEL TO EACH GROUPING OF CHARGERS. A SINGLE CONDUIT SHALL FEED UP TO 2 CHARGERS. ROUTE CONDUIT BELOW GRADE AND STUB UP INTO 1" BODY CONDUIT FITTING. PROVIDE FLEXIBLE CONNECTION TO EACH CHARGER BASE. TRENCH OR BORE CONDUITS AS REQUIRED. REFER TO DETAILS & E7.01 FOR MORE INFORMATION.
- PROVIDE CONDUIT AND CONDUCTORS FROM LOW VOLTAGE SWITCHBOARD TO DOWNSTREAM TRANSFORMERS AND PANELS. ROUTE CONDUIT BELOW GRADE. COORDINATE ROUTING OF CONDUITS WITH CIVIL DRAWINGS. TRENCH OR BORE AS REQUIRED.
- PROVIDE 48" SQUARE X 48" DEEP FLUSH GROUND MOUNTED QUATITE ELECTRICAL PULLBOX WITH COVER. BOX SHALL BE RATED FOR OCCASIONAL NON-DILIGENT HEAVY VEHICULAR TRAFFIC. PROVIDE 1" CRUSHED STONE BENEATH BOX. CONDUITS SHALL ENTER ON SIDES. MINIMUM BURIAL DEPTH OF CONDUITS IS 24" BELOW FINISHED GRADE. CONDUIT KNOCKOUTS SHALL BE DRILLED OR PUNCHED ON SITE, QUANTITIES TO MATCH PLANS. REFER TO FLUSH GROUND MOUNTED PULLBOX DETAIL ON ELECTRICAL SHEET E7.01.

| Legend | | |
|---|-----------|-------|
| Description | Quantity | Unit |
| 26: 2#4, 1#8 GND, CU WIRE, 1" PVC CONDUIT, SERVICE FOR CHARGER | 1,787.91 | ft |
| 26: 2#6, 1#10 GND, CU WIRE, 1" PVC CONDUIT, SERVICE FOR CHARGER | 12,646.95 | ft |
| 26: 3#3, 1#8 GND, CU WIRE, 1-1/4" PVC CONDUIT, SERVICE FOR EV CHARGER | 77.28 | ft |
| 26: 8-SETS OF 4#500 KCMIL, CU WIRE, 4" PVC CONDUIT, SERVICE FOR MAIN | 64.37 | ft |
| 26: 48" SQUARE X 48" DEEP PULL BOX | 3 | Count |
| 26: L2, EV CHARGER | 219 | Count |
| 26: L3, EV CHARGER | 2 | Count |
| Highlight | 4 | Count |

AMAZON.COM SERVICES LLC
ELECTRIC VEHICLE CHARGER INSTALLATION
DTN7 DELIVERY STATION
342 MASON ROAD
LA VERGNE, TENNESSEE 37086

ELECTRICAL DISTRIBUTION PLAN SERVICE 1 - WEST

| | | | |
|--------------|--------------|-------------|---------|
| DATE: | 06/09/2025 | DRAWN BY: | GLS/TRR |
| DWG SCALE: | AS INDICATED | CHECKED BY: | NBA |
| PROJECT NO: | 4383.022-1 | | |
| APPROVED BY: | | | |

E0.11

emanuelson-podas
consulting engineers

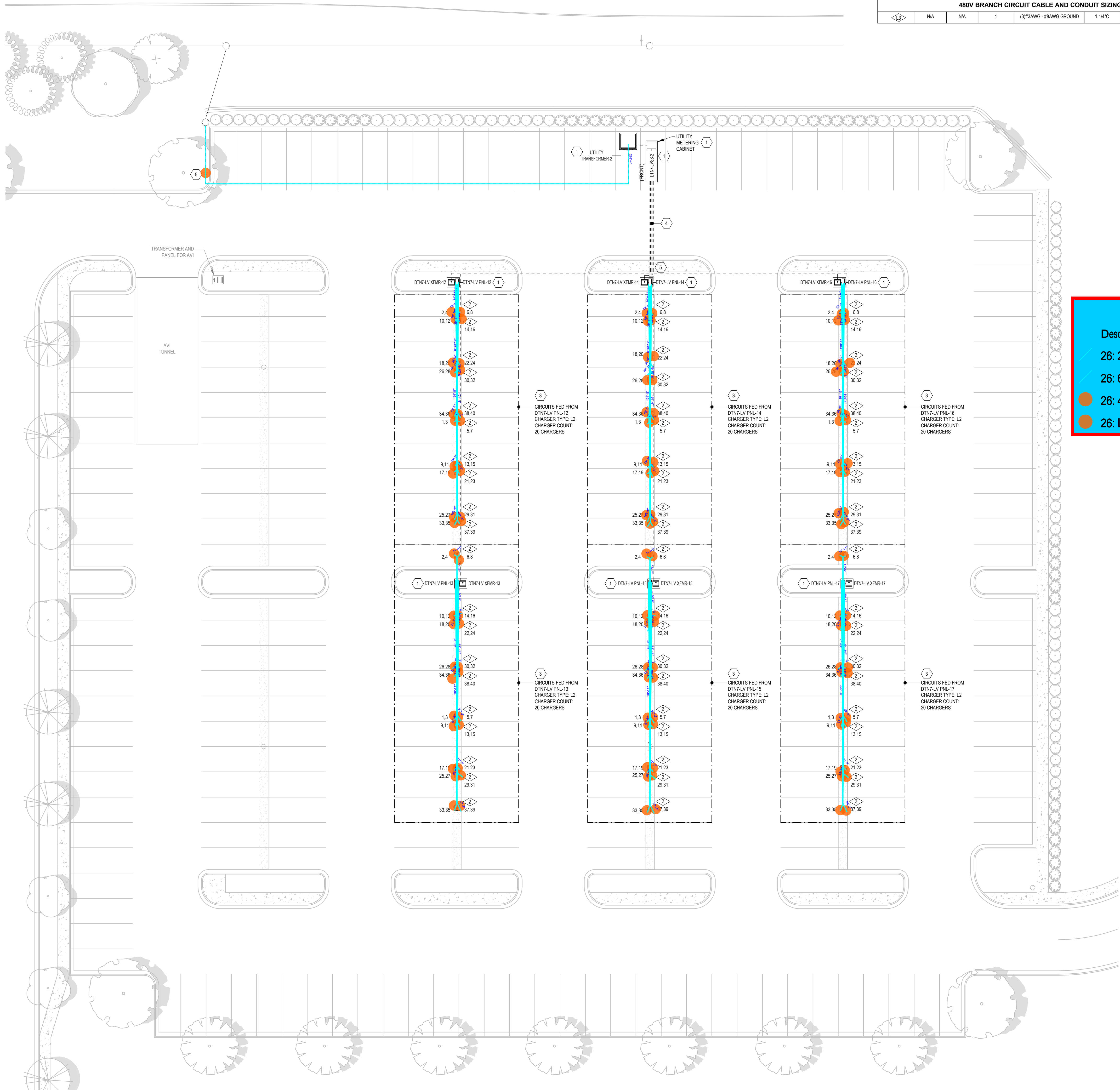
Emanuelson-Podas, Inc.
10000 Highway 100
Edina, MN 55425
(952) 798-0050 | www.epinc.com

REVISION RECORD

| NO | DATE | NO | NO | NO | NO | NO | NO | NO | NO |
|----|------------|----|----|----|----|----|----|----|----|
| 1 | 12/06/2024 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2 | 05/09/2025 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

Address: Docx://433.0221 DTY BY - La Vergne, TN/AMZL_DTYV BY - La Vergne, TN/AMP_2023.ctb

1 ELECTRICAL DISTRIBUTION PLAN SERVICE 2 - EAST
SCALE: 1" = 20'-0"



| 208V L2 CHARGER CABLE AND CONDUIT SIZING - COPPER CABLE STANDARDS | | | | | | | | | |
|---|---------------------|-------------------|--------------------|--|--------------------|--|--------------------------------|------------------------------|------------------------------|
| CONDUIT TAG | EV CHARGER DISTANCE | MAX LENGTH (FEET) | NUMBER OF CHARGERS | CONDUCTOR SIZE FOR EACH CHARGER (SEE NOTE BELOW FOR #2AWG) | CONDUIT TRADE SIZE | QUANTITY OF CURRENT CARRYING CONDUCTORS IN A CONDUIT | CONDUCTOR AMPACITY 75 DEGREE C | DERATING FACTOR (310.15 C.1) | DERATED AMPACITY 90 DEGREE C |
| 1 | SHORT | 140 FT | 1 | (2)#8AWG - #10AWG GROUND | 1 1/2" | 2 | 65A | 100% | N/A |
| 2 | SHORT | 140 FT | 2 | (2)#8AWG - #10AWG GROUND | 1 1/2" | 4 | 65A | 80% | 60A |
| 3 | MEDIUM | 220 FT | 1 | (2)#4AWG - #8AWG GROUND | 1" | 2 | 85A | 100% | N/A |
| 4 | MEDIUM | 220 FT | 2 | (2)#4AWG - #8AWG GROUND | 1 1/2" | 4 | 85A | 80% | 76A |
| 5 | LONG | 340 FT | 1 | (2)#2AWG - #6AWG GROUND | 1 1/4" | 2 | 115A | 100% | N/A |
| 6 | LONG | 340 FT | 2 | (2)#2AWG - #6AWG GROUND | 1 1/2" | 4 | 115A | 80% | 92A |
| 7 | MEDIUM | 220 FT | 4 | (2)#4AWG - #8AWG GROUND | 1 1/2" | 8 | 85A | 75% | 66 |
| 8 | LONG | 340 FT | 4 | (2)#2AWG - #6AWG GROUND | 2" | 8 | 115A | 75% | 90A |
| #2 CONDUCTOR NOTE: EV CHARGERS CANNOT ACCEPT ELECTRICAL CONDUCTORS LARGER THAN #4AWG. SPICE BRANCH CIRCUIT CONDUCTORS (#2AWG OR LARGER) DOWN TO #4AWG WITHIN A NEMA 4 BOX NEAR CHARGER USING POLARIS TAP UL486D SUBMERSIBLE CONNECTORS. | | | | | | | | | |
| 480V BRANCH CIRCUIT CABLE AND CONDUIT SIZING STANDARDS - L3 CHARGER | | | | | | | | | |
| 13 | N/A | N/A | 1 | (3)#3AWG - #8AWG GROUND | 1 1/4" | 3 | 100A | 100% | N/A |

- GENERAL NOTES:**
- A. SEE SHEET E0.00 FOR PROJECT GENERAL NOTES.
- B. ACCESS TO AND CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL CONFORM TO NEC ARTICLE 110. CONSULT ENGINEER WHERE SPACE APPEARS INADEQUATE DUE TO CIVIL CHANGES, EQUIPMENT LAYOUT CHANGES, OR FIELD CONDITIONS. DO NOT COVER, OBSCURE OR BLOCK ACCESS TO EQUIPMENT, DATA PLATES, ACCESS PANELS OR MAINTENANCE AREAS WITH ELECTRICAL WORK.
- C. COORDINATE CONDUIT ROUTING WITH ALL UNDERGROUND UTILITIES.
- D. PRIMARY DISCONNECT NOT LOCATED WITHIN SIGHT OF TRANSFORMER MUST HAVE LOCKING MEANS AT REMOTE DISCONNECT AND A LABEL AT TRANSFORMER DENOTING DISCONNECT LOCATION PER NEC 450.14.
- E. EQUIPMENT SHOWN LIGHT AND GRAY IS EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
- F. EQUIPMENT SHOWN DARK AND SOLID TO BE NEW UNLESS NOTED OTHERWISE.
- G. SPLICING LOW VOLTAGE AND MEDIUM VOLTAGE FEEDERS IS STRICTLY PROHIBITED. BRANCH CIRCUIT SPLICES ARE NOT ALLOWED UNLESS DIRECTED IN THIS DOCUMENT. SPLICES, SPlicing DEVICES, PULL BOXES AND HANDHOLE ENCLOSURES SHALL BE INSTALLED IN ACCORDANCE WITH NEC ARTICLE 314 & 250.14B. ENCLOSURES SHALL REQUIRE A TOOL TO OPEN.
- KEY NOTES:**
1. PROVIDE CONCRETE PAD AND UNISTRUT FRAMING AS REQUIRED FOR ALL GRADE MOUNTED ELECTRICAL EQUIPMENT. REFER TO CIVIL PAD DETAILS FOR MORE INFORMATION.
2. PROVIDE SINGLE POINT CONNECTION FOR DUAL OUTPUT LEVEL 3 DC FAST CHARGER. PROVIDE CONCRETE PAD FOR EV CHARGER. REFER TO MANUFACTURER CUT SHEET FOR EQUIPMENT DIMENSIONS. EXTEND PAD 4" BEYOND EDGE OF EQUIPMENT. CHAMFER CORNERS.
3. PROVIDE CONNECTION TO OWNER SUPPLIED ELECTRIC VEHICLE CHARGER. PROVIDE CONDUIT FROM SOURCE PANEL TO EACH GROUPING OF CHARGERS. A SINGLE CONDUIT SHALL FEED UP TO 2 CHARGERS. ROUTE CONDUIT BELOW GRADE AND STUB UP INTO T-BODY CONDUIT FITTING. PROVIDE FLEXIBLE CONNECTION TO EACH CHARGER BASE. TRENCH OR BORE CONDUIT AS REQUIRED. REFER TO DETAILS 6 & 7E/01 FOR MORE INFORMATION.
4. PROVIDE CONDUIT AND CONDUCTORS FROM LOW VOLTAGE SWITCHBOARD TO DOWNSTREAM TRANSFORMERS AND PANELS. ROUTE CONDUIT BELOW GRADE. COORDINATE ROUTING OF CONDUITS WITH CIVIL DRAWINGS. TRENCH OR BORE AS REQUIRED.
5. PROVIDE 48" SQUARE X 48" DEEP FLUSH GROUND MOUNTED QUAZITE ELECTRICAL PULLBOX WITH COVER. BOX SHALL BE RATED FOR OCCASIONAL NON-LUBRICATED HEAVY VEHICULAR TRAFFIC. PROVIDE 12" CRUSHED STONE BENEATH BOX. CONDUITS SHALL ENTER ON SIDES. MINIMUM BURIAL DEPTH OF CONDUITS IS 24" BELOW FINISHED GRADE. CONDUIT KNOCKOUTS SHALL BE DRILLED OR PUNCHED ON SITE. QUANTITIES TO MATCH PLANS. REFER TO FLUSH GROUND MOUNTED PULLBOX DETAIL ON ELECTRICAL SHEET E7.01.

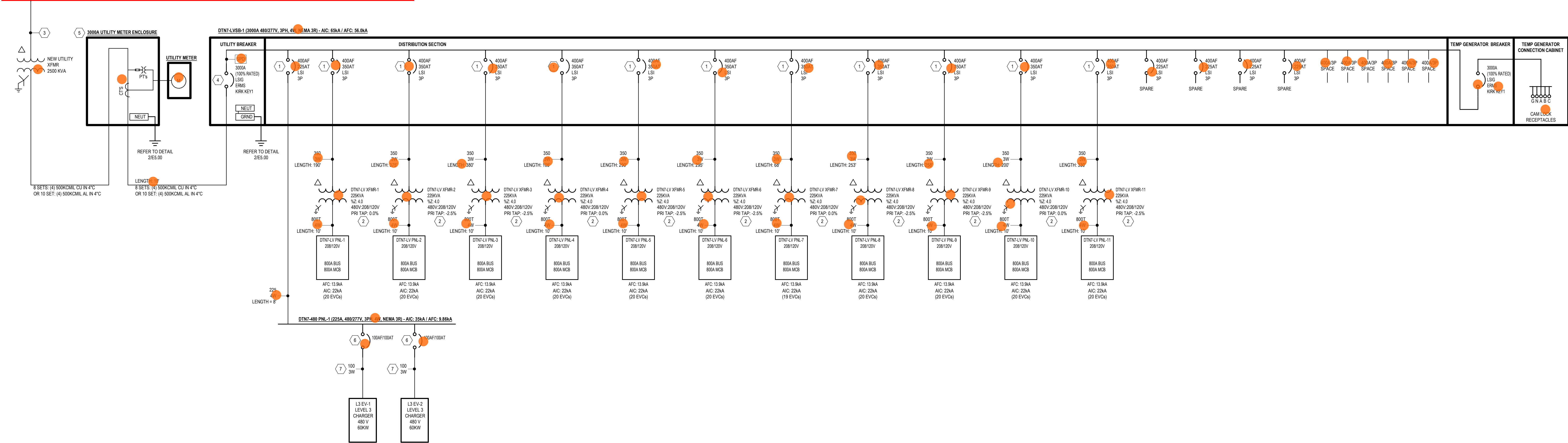
| Description | | Quantity | Unit |
|--|--|----------|-------|
| 26: 2#6, 1#10 GND, CU WIRE, 1" PVC CONDUIT, SERVICE FOR CHARGER | | 6,722.01 | ft |
| 26: 6-SETS OF 4#400 KCMIL, CU WIRE, 4" PVC CONDUIT, SERVICE FOR MAIN | | 226.37 | ft |
| 26: 48" SQUARE X 48" DEEP PULL BOX | | 1 | Count |
| 26: L2, EV CHARGER | | 120 | Count |

AMAZON.COM SERVICES LLC
ELECTRIC VEHICLE CHARGER INSTALLATION
DTN7 DELIVERY STATION
342 MASON ROAD
LA VERGNE, TENNESSEE 37086

| | | | |
|---|--------------|--------------|---------|
| ELECTRICAL DISTRIBUTION PLAN SERVICE 2 - EAST | | | |
| DATE: | 06/08/2025 | DRAWN BY: | GLS/TRR |
| DWG SCALE: | AS INDICATED | CHECKED BY: | NBA |
| PROJECT NO: | 4383.0221 | APPROVED BY: | NBA |

E0.12

| Legend | | |
|--|----------|-------|
| Description | Quantity | Unit |
| 26: 3-SETS OF #300 KCMIL, 1#2 GND, CU WIRE, 2-1/2" PVC CONDUIT, SERVICE FOR PANEL, 10'-0" | 11 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 68'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 105'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 190'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 200'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 253'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 258'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 290'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 295'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 330'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 375'-0" | 1 | Count |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 380'-0" | 1 | Count |
| 26: 4#4/0, 1#2 GND, CU WIRE, 2-1/2" PVC CONDUIT, SERVICE FOR PANEL, 8'-0" | 1 | Count |
| 26: 8-SETS OF #4500 KCMIL, CU WIRE, 4" PVC CONDUIT, SERVICE FOR MAIN, 10'-0" | 1 | Count |
| 26: 2500KVA UTILITY TRANSFORMER | 1 | Count |
| 26: 3000A, UTILITY METER ENCLOSURE | 1 | Count |
| 26: 3000A, UTILITY METER SOCKET | 1 | Count |
| 26: DTN7-LV-XFMR-1, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-2, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-3, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-4, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-5, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-6, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-7, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-8, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-9, 225 KVA TRANSFORMER | 1 | Count |
| 26: DTN7-LV-XFMR-11, 225 KVA TRANSFORMER | 1 | Count |
| 26: GEN: 3000A, 3P CIRCUIT BREAKER | 1 | Count |
| 26: GEN: KIRK KEY 1 | 1 | Count |
| 26: GEN: TEMP GNERATOR CAM LOCK RECEPTACLE | 1 | Count |
| 26: GND: 1#3/0 GND, CU WIRE FOR GROUNDING | 1 | Count |
| 26: GND: 1#4 GND, CU WIRE FOR GROUNDING, 10'-0" | 1 | Count |
| 26: GND: 1#4/0 GND, CU WIRE FOR GROUNDING | 2 | Count |
| 26: GND: 3/4" DIA COPPER GROUND ROD | 2 | Count |
| 26: GND: ELECTRODE GROUNDING CONDUCTOR | 1 | Count |
| 26: GND: GROUND BUS | 1 | Count |
| 26: GND: NEUTRAL BUS | 2 | Count |
| 26: PANEL DTN7-480, 100AF, 100AT, 3P CIRCUIT BREAKER | 2 | Count |
| 26: PANEL DTN7-480, 480/277V, 3P, 4W, MAIN BUS: 225A, MAIN TYPE: MLO, AIC RATING: 35KA | 1 | Count |
| 26: PANEL DTN7-LVSB-1, 400A, 3P CIRCUIT BREAKER | 6 | Count |
| 26: PANEL DTN7-LVSB-1, 400AF, 225AT, 3P CIRCUIT BREAKER | 5 | Count |
| 26: PANEL DTN7-LVSB-1, 400AF, 350AT, 3P CIRCUIT BREAKER | 11 | Count |
| 26: PANEL DTN7-LVSB-1, 480/277V, 3P, 4W, MAIN BUS: 3000A, MAIN TYPE: 3000A MCB, AIC RATING: 65KA | 1 | Count |
| 26: SPD | 1 | Count |
| Highlight | 1 | Count |



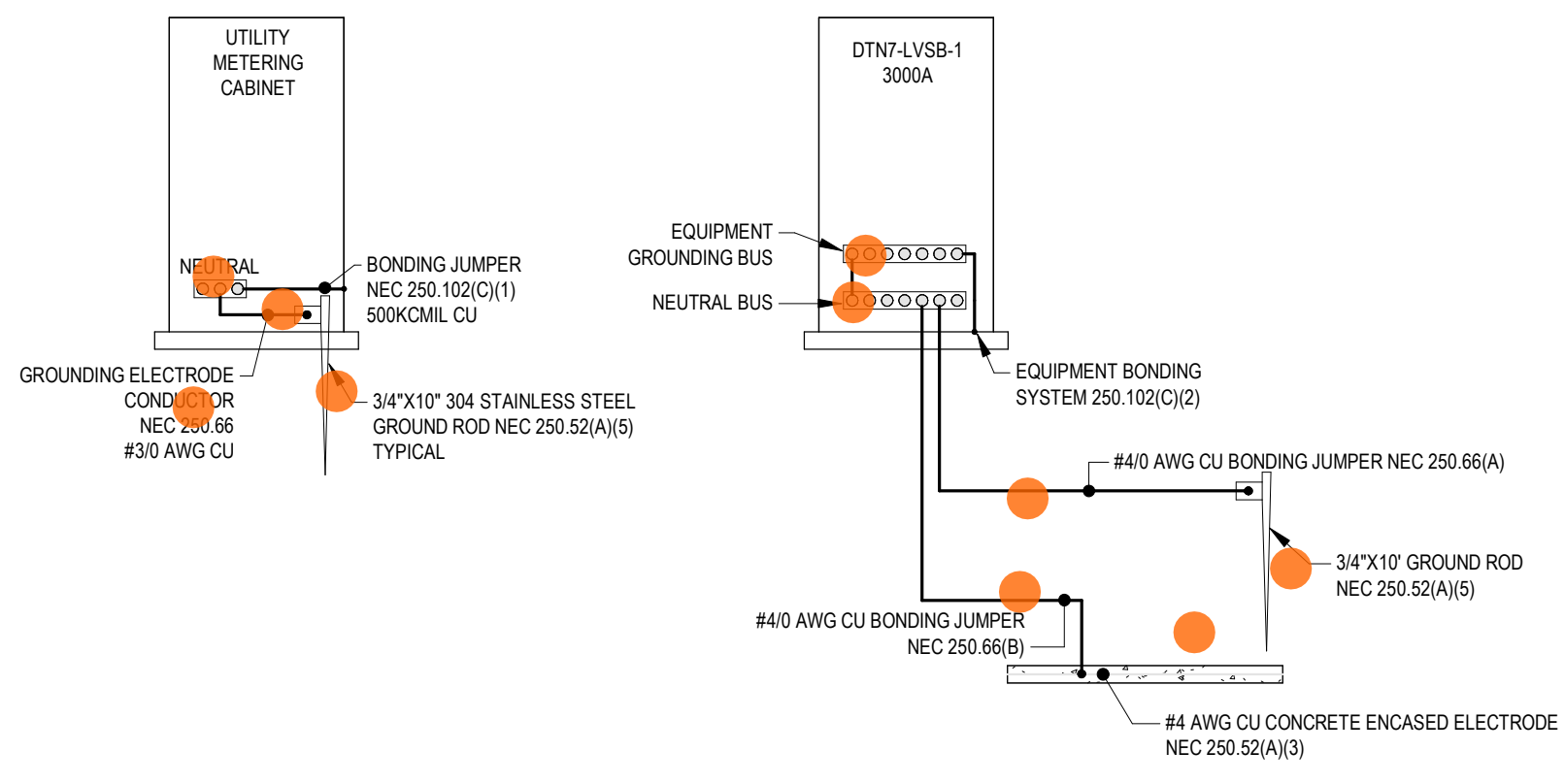
1 ELECTRICAL ONE-LINE DIAGRAM SERVICE 1 - WEST
NO SCALE

3Ø FEEDER SCHEDULE

GENERAL NOTES:
A. APPROVED CONDUCTOR INSULATIONS: THINWALL, THINWALL-2, XHHW-2. REFER TO PROJECT SPECIFICATIONS FOR INSULATION TYPE REQUIRED WITH VARYING CONDUCTOR SIZES AND APPLICATIONS.
B. CONDUIT TYPE REQUIREMENTS VARY DEPENDING ON APPLICATION AND LOCATION OF FEEDER. REFER TO PROJECT SPECIFICATIONS FOR REQUIREMENTS.
C. NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTOR UNLESS OTHERWISE NOTED.
D. CONTRACTOR TO BID ALUMINUM FEEDERS AS ALLOWED IN FEEDER SCHEDULE. APPROVAL FROM AMAZON IS REQUIRED FOR COPPER FEEDER USE IN LIEU OF ALUMINUM.

| MARK (AMPACITY) | COPPER | | COMPACT STRAND ALUMINUM ALLOY | | MARK (AMPACITY) |
|--------------------|--|--------------------------------------|---|--------------------------------------|--------------------|
| | FEEDER RW (NO NEUTRAL) PH-GND-C | FEEDER RW (W NEUTRAL) PH-GND-C | FEEDER RW (NO NEUTRAL) PH-GND-C | FEEDER RW (W NEUTRAL) PH-GND-C | |
| 20 | 12-12.34" | 12-12.34" | NOT ALLOWED | NOT ALLOWED | 20 |
| 30 | 10-10.34" | 10-10.34" | NOT ALLOWED | NOT ALLOWED | 30 |
| 40 | 8-10.34" | 8-10.34" | NOT ALLOWED | NOT ALLOWED | 40 |
| 50 | 6-10.34" | 6-10.34" | NOT ALLOWED | NOT ALLOWED | 50 |
| 60 | 4-10.34" | 4-10.34" | NOT ALLOWED | NOT ALLOWED | 60 |
| 70 | 4-10.114" | 4-10.114" | NOT ALLOWED | NOT ALLOWED | 70 |
| 80 | 3-8.114" | 3-8.114" | NOT ALLOWED | NOT ALLOWED | 80 |
| 90 | 2-8.114" | 2-8.114" | NOT ALLOWED | NOT ALLOWED | 90 |
| 100 | 3-8.114" | 3-8.114" | 10-6.112" | 10-6.112" | 100 |
| 100T | — | — | — | — | 100T |
| 125 | 1-6.112" | 1-6.112" | 20-4.112" | 20-4.112" | 125 |
| 150 | 10-6.112" | 10-6.112" | 30-4.212" | 30-4.212" | 150 |
| 150T | — | — | — | — | 150T |
| 175 | 20-6.212" | 20-6.212" | 40-4.212" | 40-4.212" | 175 |
| 200 | 30-6.212" | 30-6.212" | 250KCMIL-4-3" | 250KCMIL-4-3" | 200 |
| 200T | — | — | — | — | 200T |
| 225 | 40-4.212" | 40-4.212" | 300KCMIL-2-2 1/2" | 300KCMIL-2-3" | 225 |
| 225T | — | — | — | — | 225T |
| 250 | 250KCMIL-4-2 1/2" | 250KCMIL-4-3" | 350KCMIL-2-3" | 350KCMIL-2-3" | 250 |
| 300 | 350KCMIL-4-3" | 350KCMIL-4-3" | 500KCMIL-2-3 1/2" | 500KCMIL-2-3 1/2" | 300 |
| 350 | 500KCMIL-3-3" | 500KCMIL-3-4" | (2) 40-1.212" | (2) 40-1.212" | 350 |
| 400 | (2) 30-3.312" | (2) 30-3.412" | (2) 250 KCMIL -1.312" | (2) 250 KCMIL -1.312" | 400 |
| 400T | — | — | — | — | 400T |
| 450 | (2) 40-2.212" | (2) 40-2.212" | (2) 300KCMIL-10-3 1/2" | (2) 300KCMIL-10-3 1/2" | 450 |
| 500 | (2) 250KCMIL-2-2 1/2" | (2) 250 KCMIL-2-3" | (2) 350KCMIL-10-3 1/2" | (2) 350KCMIL-10-3 1/2" | 500 |
| 600T | — | — | — | — | 600T |
| 600 | (2) 350KCMIL-1-312" | (2) 350 KCMIL-1-312" | (2) 500KCMIL-20-3 1/2" | (2) 500KCMIL-20-3 1/2" | 600 |
| 800T | — | — | — | — | 800T |
| 800 | (2) 500 KCMIL-10-3 1/2" | (2) 500 KCMIL-10-3 1/2" | (3) 400KCMIL-30-3 1/2" | (3) 400 KCMIL-30-3 1/2" | 800 |
| 1000T | — | — | — | — | 1000T |
| 1000 | (3) 400KCMIL-20-3 1/2" | (3) 400 KCMIL-20-3 1/2" | (4) 500KCMIL-40-3 1/2" | (4) 500 KCMIL-40-3 1/2" | 1000 |
| 1200 | (4) 350KCMIL-30-3 1/2" | (4) 350 KCMIL-30-3 1/2" | (4) 500KCMIL-50-3 1/2" | (4) 500 KCMIL-50-3 1/2" | 1200 |
| 1200T | — | — | — | — | 1200T |
| 1600T | — | — | — | — | 1600T |
| 2000 | (6) 400KCMIL-250KCMIL-3" | (6) 400 KCMIL-250 KCMIL-3 1/2" | (6) 600 KCMIL-400KCMIL-4" | (6) 600 KCMIL-400KCMIL-4" | 2000 |
| 2000T | — | — | — | — | 2000T |
| 2500T | — | — | — | — | 2500T |
| 3000T | — | — | — | — | 3000T |
| MY125 | #2 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | #2 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | MY125 |
| MY165 | #2 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | #10 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | MY165 |
| MY245 | #30 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | #40 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | MY245 |
| MY330 | #250 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | #350 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | MY330 |
| MY400 | #350 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #6GND (800V RATED) IN 6" CONDUIT | — | #500 (15KV RATED 133% MV-105 - 10 CONCENTRIC NEUTRAL), W/ #10GND (800V RATED) IN 6" CONDUIT | — | MY400 |

| AMAZON DTN7 LOAD SUMMARY | | | | |
|---|--|------------------------------------|-----------------|-------------|
| LOAD SUMMARY DATE CREATED: 11/26/24 AMAZON SSOIT PUBLISH DATE: 11/08/24 | | | | |
| FORECAST DATE | INITIATIVE TYPE | EQUIPMENT SUB-CATEGORY | NUMBER OF UNITS | POWER (KVA) |
| 09/22/20 | MAX BUILDING DEMAND | 25% OF METERED DEMAND (NEC 220.87) | | 302 |
| 02/01/24 | AUTOMATED VEHICLE INSPECTION (AVI) | ASL UNIT | | 76 |
| 08/30/25 | AUTO SCAN LABEL (ASL) DELTA | ADTA FINGER | 2 | 167 |
| 08/30/25 | AUTOMATIC DIVERT TO AISLE (ADTA) DELTA | ADTA FINGER | 2 | 255 |
| 08/30/25 | AUTOMATIC DIVERT TO AISLE (ADTA) PHASE 1 | ADTA FINGER | 2 | 255 |
| BUILDING SERVICE SUB-TOTAL | | | | 1089 |
| 06/01/26 | STANDARD EV PHASE 1 | L2 CHARGERS | 337 | 3539 |
| 06/01/26 | STANDARD EV PHASE 1 | L3 CHARGERS | 2 | 110 |
| EV SERVICE SUB-TOTAL | | | | 3649 |
| BUILDING + EV TOTAL | | | | 4738 |
| TOTAL LOAD REQUIREMENT (WITH 20% FUTURE SPARE CAPACITY) (EXCLUDES 25% OF METERED DEMAND AS REQUIRED IN NEC 220.87) | | | | 5594.4 |



2 GROUNDING ELECTRODE SYSTEM - EV SERVICE 1
NO SCALE

GENERAL NOTES:

- SEE SHEET E5.00 FOR PROJECT GENERAL NOTES.
- REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION.
- ALL GRADE MOUNTED EQUIPMENT SHALL BE INSTALLED ON A CONCRETE PAD, NO LESS THAN 6\"/>

KEY NOTES:

- OWNER PROVIDED CIRCUIT BREAKERS ARE PROVIDED LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 400.14 AND NEC 110.25 FOR BREAKER FEEDING A TRANSFORMER.
- ADJUST TRANSFORMER TAPS AS INDICATED. CONTRACTOR SHALL MEASURE VOLTAGE AT SECONDARY TERMINALS TO VERIFY VOLTAGE IS WITHIN 2% OF 208V LINE TO LINE AND 120V LINE TO NEUTRAL.
- INCOMING UTILITY CONDUITS BY ELECTRICAL CONTRACTOR. COORDINATE WITH UTILITY COMPANY FOR SERVICE ENTRANCE LOCATION WITH UTILITY COMPANY PRIOR TO INSTALLATION. REFER TO ELECTRICAL SHEET E5.10 FOR FEEDER ROUTING. PROVIDE CONDUIT AS REQUIRED.
- PROVIDE MARKING TO IDENTIFY SERVICE DISCONNECT PER NEC 250.70(B).
- PROVIDE UTILITY METERING CABINET. REFER TO ELECTRICAL SHEET E5.00 FOR TABLE OF RESPONSIBILITY MATRIX. REFER TO UTILITY HANDBOOK FOR ADDITIONAL UTILITY METERING REQUIREMENTS. COORDINATE WITH UTILITY COMPANY FOR METERING CABINET APPROVAL PRIOR TO PROCUREMENT AND INSTALLATION.
- OWNER PROVIDED CIRCUIT BREAKERS ARE PROVIDED LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 400.14 AND NEC 110.25 FOR CIRCUIT BREAKER FEEDING A L3 CHARGER.
- CONTRACTOR TO PROVIDE COPPER FEEDERS AS ALLOWED IN FEEDER SCHEDULE. APPROVAL FROM AMAZON IS REQUIRED FOR ALUMINUM FEEDER USE IN LIEU OF COPPER.

REVISION RECORD

| NO | DATE | DESCRIPTION |
|----|------------|----------------------|
| 1 | 12/08/2024 | ISSUE PLAN SET |
| 2 | 01/08/2025 | REVISED PER COMMENTS |
| 3 | 02/08/2025 | ISSUE PLAN SET |

emanuelson-podas

Consulting Engineers

emanuelson-podas, Inc.
342 MASON ROAD
LA VERGNE, TENNESSEE 37086
(931) 938-0050 | www.epnc.com

AMAZON.COM SERVICES LLC

ELECTRIC VEHICLE CHARGER INSTALLATION

DTN7 DELIVERY STATION

342 MASON ROAD

LA VERGNE, TENNESSEE 37086

| | | | |
|-------------|--------------|--------------|-------|
| DATE: | 05/08/2025 | DRAWN BY: | GLSTR |
| DWG SCALE: | AS INDICATED | CHECKED BY: | NBA |
| PROJECT NO: | 4383-0221 | APPROVED BY: | NBA |

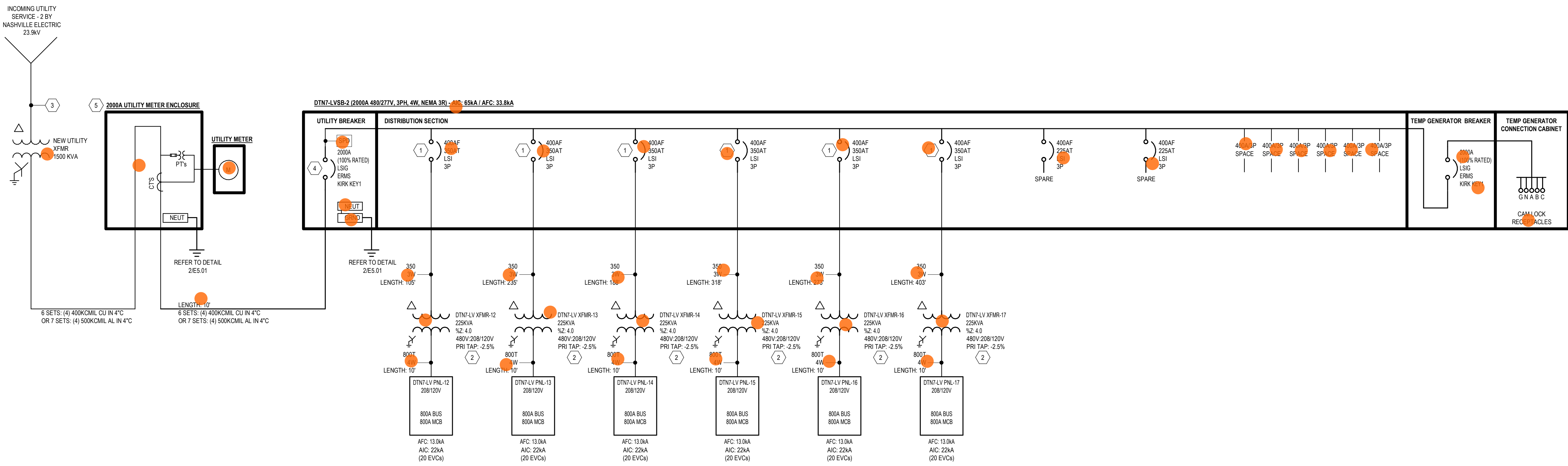
E5.00

Address: Docx://433.0221 DTY BY - La Vergne, TN/AMZL_DTN7 EV - La Vergne, TN_MP_2023.cxl

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A

| TRANSFORMER SCHEDULE | | | | | | | | | |
|--|-----------------------|---------------------------|---------|----------|-----------|---|-------------|--------------|-------|
| NOTES: 1. REFER TO DETAILS ON SHEET JE7.00. | | | | | | | | | |
| ITEM | PRIMARY (DELTA) | SECONDARY (WYE) | SIZE | TYPE | ENCLOSURE | TRANSFORMER GROUND ELECTRODE CONDUCTOR (EG) | MOUNTING | WEIGHT (LBS) | NOTES |
| DTN7-LV-XFMR-1 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-2 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-3 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-4 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-5 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-6 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-7 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-8 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-9 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-10 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-11 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-12 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-13 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-14 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| DTN7-LV-XFMR-15 | 480V, 3 PHASE, 3 WIRE | 120/208V, 3 PHASE, 4 WIRE | 225 VVA | DRY TYPE | NEMA-3R | #6 AWG | PAD MOUNTED | 920 | |
| Legend | | | | | | | | | |
| Description | | Quantity | | Unit | | | | | |
| 26: 3-SETS OF 4#300 KCMIL, 1#2 GND, CU WIRE, 2-1/2" PVC CONDUIT, SERVICE FOR PANEL, 10'-0" | | 6 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 105'-0" | | 1 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 188'-0" | | 1 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 235'-0" | | 1 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 273'-0" | | 1 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 318'-0" | | 1 | | Count | | | | | |
| 26: 3#500 KCMIL, 1#3 GND, CU WIRE, 3" PVC CONDUIT, SERVICE FOR PANEL, 403'-0" | | 1 | | Count | | | | | |
| 26: 6-SETS OF 4#400 KCMIL, CU WIRE, 4" PVC CONDUIT, SERVICE FOR MAIN, 10'-0" | | 1 | | Count | | | | | |
| 26: 1500 KVA UTILITY TRANSFORMER | | 1 | | Count | | | | | |
| 26: 2000A UTILITY METER ENCLOSURE | | 1 | | Count | | | | | |
| 26: 2000A UTILITY METER SOCKET | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-12, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-13, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-14, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-15, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-16, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: DTN7-LV-XFMR-17, 225 KVA TRANSFORMER | | 1 | | Count | | | | | |
| 26: GEN: 2000A CIRCUIT | | 1 | | Count | | | | | |
| 26: GEN: CAMLOCK | | 1 | | Count | | | | | |
| 26: GEN: KIRK | | 1 | | Count | | | | | |
| 26: GND: 1#3/0 GND CU WIRE FOR GROUNDING, 10'-0" | | 1 | | Count | | | | | |
| 26: GND: 1#4 GND, CU WIRE, 10'-0" | | 1 | | Count | | | | | |
| 26: GND: 1#4/0 GND, CU WIRE, 10'-0" | | 2 | | Count | | | | | |
| 26: GND: 3/4" X 10'-0" LONG-CLAD GROUND ROD | | 2 | | Count | | | | | |
| 26: GND: ELECTRODE GROUNDING CONDUCTOR | | 1 | | Count | | | | | |
| 26: GND: GROUND BUS | | 2 | | Count | | | | | |
| 26: GND: NEUTRAL BUS | | 2 | | Count | | | | | |
| 26: PANEL DTN7-LVSB-2, 400AF, 3P CIRCUIT BREAKER | | 6 | | Count | | | | | |
| 26: PANEL DTN7-LVSB-2, 400AF, 225AT, 3P CIRCUIT BREAKER | | 2 | | Count | | | | | |
| 26: PANEL DTN7-LVSB-2, 400AF, 350AT, 3P CIRCUIT BREAKER | | 6 | | Count | | | | | |
| 26: PANEL DTN7-LVSB-2, 480/277V, 3P, 4W, MAIN BUS: 2000A, MAIN TYPE: 2000A MCB, AIC RATING: 65KA | | 1 | | Count | | | | | |
| 26: SPD | | 1 | | Count | | | | | |

1 ELECTRICAL ONE-LINE DIAGRAM SERVICE 2 - EAST
NO SCALE



| 3Ø FEEDER SCHEDULE | | | | | |
|---|--|--------------------------------|--|--------------------------------|-----------------|
| GENERAL NOTES: A. APPROVED CONDUCTOR INSULATIONS: THINWHTN, THINWHTN 2, WHN 2. REFER TO PROJECT SPECIFICATIONS FOR INSULATION TYPE REQUIRED WITH VARYING CONDUCTOR SIZES AND APPLICATIONS. B. CONDUIT TYPE REQUIREMENTS VARY DEPENDING ON APPLICATION AND LOCATION OF FEEDER. REFER TO PROJECT SPECIFICATIONS FOR REQUIREMENTS. C. NEUTRAL SHALL BE THE SAME SIZE AS THE PHASE CONDUCTOR UNLESS OTHERWISE NOTED. D. CONTRACTOR TO BID ALUMINUM FEEDERS AS ALLOWED IN FEEDER SCHEDULE. APPROVAL FROM AMAZON IS REQUIRED FOR COPPER FEEDER USE IN LIEU OF ALUMINUM. | | | | | |
| MARK (AMPACITY) | FEEDER W/ (NO NEUTRAL) PH-GND-C | FEEDER W/ (W NEUTRAL) PH-GND-C | COMPACT STRAND ALUMINUM ALLOY FEEDER W/ (NO NEUTRAL) PH-GND-C | FEEDER W/ (W NEUTRAL) PH-GND-C | MARK (AMPACITY) |
| 20 | 12-10-3/4" | 12-10-3/4" | NOT ALLOWED | NOT ALLOWED | 20 |
| 30 | 12-10-3/4" | 12-10-3/4" | NOT ALLOWED | NOT ALLOWED | 30 |
| 40 | 8-10-3/4" | 8-10-3/4" | NOT ALLOWED | NOT ALLOWED | 40 |
| 50 | 6-10-1/2" | 6-10-1/2" | NOT ALLOWED | NOT ALLOWED | 50 |
| 50T | — | 6-8-1/2" | NOT ALLOWED | NOT ALLOWED | 50T |
| 60 | 4-10-1/2" | 4-10-1/2" | NOT ALLOWED | NOT ALLOWED | 60 |
| 70 | 4-8-1/2" | 4-8-1/2" | NOT ALLOWED | NOT ALLOWED | 70 |
| 80 | 3-8-1/4" | 3-8-1/4" | NOT ALLOWED | NOT ALLOWED | 80 |
| 90 | 2-8-1/4" | 2-8-1/4" | NOT ALLOWED | NOT ALLOWED | 90 |
| 100 | 3-8-1/4" | 3-8-1/4" | 10-6-1/2" | 10-6-1/2" | 100 |
| 100T | — | 3-8-1/4" | — | 10-6-1/2" | 100T |
| 125 | 1-6-1/2" | 1-6-1/2" | 20-4-1/2" | 20-4-1/2" | 125 |
| 150 | 10-6-1/2" | 10-6-1/2" | 30-4-1/2" | 30-4-1/2" | 150 |
| 150T | — | 10-6-1/2" | — | 30-4-1/2" | 150T |
| 175 | 20-6-2" | 20-6-2" | 40-4-1/2" | 40-4-1/2" | 175 |
| 200 | 30-6-2" | 30-6-2" | 50KCMIL-4-3" | 50KCMIL-4-3" | 200 |
| 200T | — | 30-4-1/2" | 250KCMIL-2-3" | 250KCMIL-2-3" | 200T |
| 225 | 40-4-2" | 40-4-2" | 300KCMIL-2-2 1/2" | 300KCMIL-2-2 1/2" | 225 |
| 225T | — | 40-2-1/2" | 300KCMIL-10-3" | 300KCMIL-10-3" | 225T |
| 250 | 250KCMIL-4-2 1/2" | 250KCMIL-4-3" | 350KCMIL-4-3" | 350KCMIL-4-3" | 250 |
| 300 | 350KCMIL-4-3" | 350KCMIL-4-3" | 500KCMIL-4-3" | 500KCMIL-4-3" | 300 |
| 350 | 500KCMIL-3-3" | 500KCMIL-3-4" | (2) 40-3 1/2" | (2) 40-3 1/2" | 350 |
| 400 | (2) 30-3-3" | (2) 30-3-4" | (2) 250 KCMIL-1-3" | (2) 250 KCMIL-1-3" | 400 |
| 400T | — | (2) 30-2-2" | (2) 250 KCMIL-2-2 1/2" | (2) 250 KCMIL-2-2 1/2" | 400T |
| 450 | (2) 40-2-2" | (2) 40-2-1/2" | (2) 300KCMIL-10-3" | (2) 300KCMIL-10-3" | 450 |
| 500 | (2) 250KCMIL-2-2 1/2" | (2) 250 KCMIL-2-3" | (2) 350KCMIL-10-3" | (2) 350KCMIL-10-3" | 500 |
| 500T | — | (2) 250 KCMIL-2-1 1/2" | (2) 250 KCMIL-2-1 1/2" | (2) 250 KCMIL-2-1 1/2" | 500T |
| 600 | (2) 350KCMIL-1-3" | (2) 350 KCMIL-1-3" | (2) 500KCMIL-20-3" | (2) 500KCMIL-20-3" | 600 |
| 600T | — | (2) 350 KCMIL-2-2 1/2" | (2) 500KCMIL-10-3" | (2) 500KCMIL-10-3" | 600T |
| 800 | (2) 500KCMIL-10-3" | (2) 500 KCMIL-10-3 1/2" | (3) 400KCMIL-30-3 1/2" | (3) 400 KCMIL-30-3 1/2" | 800 |
| 800T | — | (3) 300 KCMIL-2-2 1/2" | (3) 400 KCMIL-10-2 1/2" | (3) 400 KCMIL-10-2 1/2" | 800T |
| 1000 | (3) 400KCMIL-20-3" | (3) 400 KCMIL-20-3" | (4) 500KCMIL-40-3 1/2" | (4) 400 KCMIL-40-3 1/2" | 1000 |
| 1000T | — | (4) 250 KCMIL-2-2 1/2" | (4) 250 KCMIL-10-2 1/2" | (4) 250 KCMIL-10-2 1/2" | 1000T |
| 1200 | (4) 500KCMIL-30-3" | (4) 500 KCMIL-30-3" | (4) 500KCMIL-250KCMIL-3 1/2" | (4) 500KCMIL-250KCMIL-3 1/2" | 1200 |
| 1200T | — | (4) 350 KCMIL-2-2 1/2" | — | (4) 500 KCMIL-10-3" | 1200T |
| 1600T | — | (5) 400 KCMIL-10-3" | — | (5) 500 KCMIL-10-3" | 1600T |
| 2000 | (6) 400KCMIL-250KCMIL-3" | (6) 400 KCMIL-250 KCMIL-3 1/2" | (6) 600KCMIL-400KCMIL-3 1/2" | (6) 600KCMIL-400KCMIL-3 1/2" | 2000 |
| 2000T | — | (6) 400 KCMIL-10-3" | — | (7) 500 KCMIL-10-3" | 2000T |
| 2500T | — | (7) 500 KCMIL-10-3" | — | (8) 500 KCMIL-10-3" | 2500T |
| 3000T | — | (8) 500 KCMIL-10-3" | — | (10) 500 KCMIL-10-3" | 3000T |
| MV125 | #2 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | #2 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | MV125 |
| MV165 | #2 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | #10 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | MV165 |
| MV245 | #20 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | #40 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | MV245 |
| MV330 | #250 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | #350 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | MV330 |
| MV400 | #350 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | #500 (15KV RATED 133% MV-105 - 1/3 CONCENTRIC NEUTRAL) W/ #6GND (800V RATED) IN 6" CONDUIT | — | MV400 |

| AMAZON DTN7 LOAD SUMMARY | | | | |
|--|--|------------------------------------|-----------------|-------------|
| LOAD SUMMARY DATE CREATED: 11/26/24 AMAZON S&T PUBLISH DATE: 11/08/24 | | | | |
| FORECAST DATE | INITIATIVE TYPE | EQUIPMENT SUB-CATEGORY | NUMBER OF UNITS | POWER (KVA) |
| 09/22/20 | MAX BUILDING DEMAND | 25% OF METERED DEMAND (NEC 220.87) | | 302 |
| 02/01/24 | AUTOMATED VEHICLE INSPECTION (AVI) | ASL UNIT | | 34 |
| 08/30/25 | AUTO SCAN LABEL (ASL) DELTA | ADTA FINGER | 2 | 167 |
| 08/30/25 | AUTOMATIC DIVERT TO AISLE (ADTA) DELTA | ADTA FINGER | 2 | 255 |
| 08/30/25 | AUTOMATIC DIVERT TO AISLE (ADTA) PHASE 1 | | | 255 |
| BUILDING SERVICE SUB-TOTAL | | | | 1089 |
| 06/01/26 | STANDARD EV PHASE 1 | L2 CHARGERS | 337 | 3539 |
| 06/01/26 | STANDARD EV PHASE 1 | L3 CHARGERS | 2 | 110 |
| EV SERVICE SUB-TOTAL | | | | 3649 |
| BUILDING + EV TOTAL | | | | 4738 |
| TOTAL LOAD REQUIREMENT (WITH 20% FUTURE SPARE CAPACITY) (EXCLUDES 25% OF METERED DEMAND AS REQUIRED IN NEC 220.87) | | | | 5594.4 |

SWITCHBOARD: DTN7-LVSB-1

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|---|---------------------|--------------------|---------------|---------------------|---|---------|
| LOCATION: | | VOLTS: 480/277 Wye | | MOUNTING: PAD | | |
| BUS RATING: 3000 A | | PHASES: 3 | | FED FROM: SEE RISER | | |
| MAIN BREAKER: 3000 A (100% RATED) | | WIRES: 4 | | ENCLOSURE: NEMA-3R | | |
| AVAILABLE FAULT CURRENT: 65,000 A | | | | | | |
| NOTES: | | | | | | |
| 1. PROVIDE INTEGRAL SURGE PROTECTION DEVICE | | | | | | |
| 2. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS FOR ALL CIRCUIT BREAKERS | | | | | | |
| 3. MAIN CIRCUIT BREAKER IS RATED AT 100% FEEDER AND OVERCURRENT PROTECTION ARE SIZED PER CONNECTED CURRENT (EXCEPTION FOR NEC215.3) | | | | | | |
| CKT | CIRCUIT DESCRIPTION | POLES | FRAME SIZE | TRIP RATING | LOAD | REMARKS |
| 1 | DTN7-480V PNL-1 | 3 | 400 A | 225 A | 110000 VA | |
| 2 | DTN7-LV XFMR-1 | 3 | 400 A | 350 A | 199680 VA | |
| 3 | DTN7-LV XFMR-2 | 3 | 400 A | 350 A | 199680 VA | |
| 4 | DTN7-LV XFMR-3 | 3 | 400 A | 350 A | 199680 VA | |
| 5 | DTN7-LV XFMR-4 | 3 | 400 A | 350 A | 199680 VA | |
| 6 | DTN7-LV XFMR-5 | 3 | 400 A | 350 A | 199680 VA | |
| 7 | DTN7-LV XFMR-6 | 3 | 400 A | 350 A | 199680 VA | |
| 8 | DTN7-LV XFMR-7 | 3 | 400 A | 350 A | 199680 VA | |
| 9 | DTN7-LV XFMR-8 | 3 | 400 A | 350 A | 199680 VA | |
| 10 | DTN7-LV XFMR-9 | 3 | 400 A | 350 A | 199680 VA | |
| 11 | DTN7-LV XFMR-10 | 3 | 400 A | 350 A | 199680 VA | |
| 12 | DTN7-LV XFMR-11 | 3 | 400 A | 350 A | 199680 VA | |
| 13 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 14 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 15 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 16 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 17 | SPACE | 3 | -- | -- | -- | |
| 18 | SPACE | 3 | -- | -- | -- | |
| 19 | SPACE | 3 | -- | -- | -- | |
| 20 | SPACE | 3 | -- | -- | -- | |
| TOTAL LOAD: | | | | | 2296496 VA | |
| TOTAL AMPS: | | | | | 2762 A | |
| LOAD CLASSIFICATION | | CONNECTED... | DEMAND FACTOR | ESTIMATED... | SWITCHBOARD TOTALS | |
| ELECTRIC VEHICLE | | 2296496 VA | 125.00% | 2870620 VA | CONNECTED LOAD: 2296496 VA ESTIMATED DEMAND: 2870620 VA CONNECTED CURRENT: 2762 A | |
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SWITCHBOARD: DTN7-LVSB-2

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|---|---------------------|--------------------|---------------|---------------------|------------------------------|---------|
| LOCATION: | | VOLTS: 480/277 Wye | | MOUNTING: PAD | | |
| BUS RATING: 2000 A | | PHASES: 3 | | FED FROM: SEE RISER | | |
| MAIN BREAKER: 2000 A (100% RATED) | | WIRES: 4 | | ENCLOSURE: NEMA-3R | | |
| AVAILABLE FAULT CURRENT: 65,000 A | | | | | | |
| NOTES: | | | | | | |
| 1. PROVIDE INTEGRAL SURGE PROTECTION DEVICE. | | | | | | |
| 2. PROVIDE LOCKABLE OPEN/DISCONNECTING MEANS FOR ALL CIRCUIT BREAKERS. | | | | | | |
| 3. MAIN CIRCUIT BREAKER IS RATED AT 100%. FEEDER AND OVERCURRENT PROTECTION ARE SIZED PER CONNECTED CURRENT (EXCEPTION FOR NEC215.3). | | | | | | |
| CKT | CIRCUIT DESCRIPTION | POLES | FRAME SIZE | TRIP RATING | LOAD | REMARKS |
| 1 | DTN7-LV XFMR-12 | 3 | 400 A | 350 A | 199680 VA | |
| 2 | DTN7-LV XFMR-13 | 3 | 400 A | 350 A | 199680 VA | |
| 3 | DTN7-LV XFMR-14 | 3 | 400 A | 350 A | 199680 VA | |
| 4 | DTN7-LV XFMR-15 | 3 | 400 A | 350 A | 199680 VA | |
| 5 | DTN7-LV XFMR-16 | 3 | 400 A | 350 A | 199680 VA | |
| 6 | DTN7-LV XFMR-17 | 3 | 400 A | 350 A | 199680 VA | |
| 7 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 8 | SPARE | 3 | 400 A | 225 A | 0 VA | |
| 9 | SPACE | 3 | -- | -- | -- | |
| 10 | SPACE | 3 | -- | -- | -- | |
| 11 | SPACE | 3 | -- | -- | -- | |
| 12 | SPACE | 3 | -- | -- | -- | |
| 13 | SPACE | 3 | -- | -- | -- | |
| 14 | SPACE | 3 | -- | -- | -- | |
| TOTAL LOAD: | | | | | 1198080 VA | |
| TOTAL AMPS: | | | | | 1441 A | |
| LOAD CLASSIFICATION | | CONNECTED... | DEMAND FACTOR | ESTIMATED... | SWITCHBOARD TOTALS | |
| ELECTRIC VEHICLE | | 1198080 VA | 125.00% | 1497600 VA | | |
| | | | | | CONNECTED LOAD: 1198080 VA | |
| | | | | | ESTIMATED DEMAND: 1497600 VA | |
| | | | | | CONNECTED CURRENT: 1441 A | |
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| Legend | | |
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| Description | Quantity | Unit |
| 26: PANEL DTN7-LV PNL-1, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-1, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-1, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| 26: PANEL DTN7-LV PNL-2, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-2, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-2, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| 26: PANEL DTN7-LV PNL-3, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-3, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-3, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| 26: PANEL DTN7-LV PNL-4, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-4, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-4, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| 26: PANEL DTN7-LV PNL-5, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-5, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-5, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| 26: PANEL DTN7-LV PNL-6, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| 26: PANEL DTN7-LV PNL-6, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| 26: PANEL DTN7-LV PNL-6, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |

PANEL: DTN7-LV PNL-1

| | | | | | | | | | | | |
|--|---------------------------|----|------|-----------------------------------|---------------|------------------|-----------------------------|-----------------------|----------------------------|-----|--|
| BUS RATING: 800 A | | | | VOLTS: 120/208 Wye | | | | MOUNTING: PAD MOUNTED | | | |
| MAIN BREAKER: 800 A | | | | PHASES: 3 | | | | FED FROM: SEE RISER | | | |
| | | | | WIRES: 4 | | | | ENCLOSURE: NEMA-3R | | | |
| | | | | AVAILABLE FAULT CURRENT: 22,000 A | | | | | | | |
| NOTES: | | | | | | | | | | | |
| 1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER CIRCUIT BREAKERS. | | | | | | | | | | | |
| CKT | CIRCUIT DESCRIPTION | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | CKT | |
| 1 | EV L2 DTN7-LV PNL-1.1,3 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.2,4 | 2 | |
| 3 | EV L2 DTN7-LV PNL-1.5,7 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.6,8 | 6 | |
| 5 | EV L2 DTN7-LV PNL-1.9,11 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.10,12 | 10 | |
| 7 | EV L2 DTN7-LV PNL-1.13,15 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.14,16 | 14 | |
| 9 | EV L2 DTN7-LV PNL-1.17,19 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.18, 20 | 18 | |
| 11 | EV L2 DTN7-LV PNL-1.21,23 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.22,24 | 22 | |
| 13 | EV L2 DTN7-LV PNL-1.25,27 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.26,28 | 26 | |
| 15 | EV L2 DTN7-LV PNL-1.29,31 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.30,32 | 30 | |
| 17 | EV L2 DTN7-LV PNL-1.33,35 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.34,36 | 34 | |
| 19 | EV L2 DTN7-LV PNL-1.37,39 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-1.38,40 | 38 | |
| 21 | SPARE | 1 | -- | -- | 0 | -- | 1 | -- | SPACE | 42 | |
| TOTAL LOAD: | | | | 68888 VA | 68888 VA | 595A VA | | | | | |
| TOTAL AMPS: | | | | 595 A | 595 A | 499 A | | | | | |
| LOAD CLASSIFICATION | | | | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS | | | | |
| ELECTRIC VEHICLE | | | | 199680 VA | 125.00% | 249600 VA | CONNECTED LOAD: 199680 VA | | | | |
| | | | | | | | ESTIMATED DEMAND: 249600 VA | | | | |
| | | | | | | | CONNECTED CURRENT: 554 A | | | | |
| | | | | | | | EMD CURRENT: 693 A | | | | |

PANEL: DTN7-LV PNL-2

| | | | | | | | | | | | | | | | | | | | |
|--|---------------------------|---|------|--------------------|---|----------|---|-----------------------|------|-------|-------------------------|-------------------------|---------------------------|---------------------------|----|-----------------------------|--|--|--|
| BUS RATING: 800 A | | | | VOLTS: 120/208 Wye | | | | MOUNTING: PAD MOUNTED | | | | | | | | | | | |
| MAIN BREAKER: 800 A | | | | PHASES: 3 | | | | FED FROM: SEE RISER | | | | | | | | | | | |
| | | | | WIRES: 4 | | | | ENCLOSURE: NEMA-3R | | | | | | | | | | | |
| AVAILABLE FAULT CURRENT: 22,000 A | | | | | | | | | | | | | | | | | | | |
| NOTES: | | | | | | | | | | | | | | | | | | | |
| 1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER CIRCUIT BREAKERS. | | | | | | | | | | | | | | | | | | | |
| CKT | CIRCUIT DESCRIPTION | | | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | CKT | | | | | | | |
| 1 | EV L2 DTN7-LV PNL-2.1,3 | 2 | 4992 | 4992 | | | | | 2 | 60 | EV L2 DTN7-LV PNL-2.2,4 | 2 | | | | | | | |
| 3 | EV L2 DTN7-LV PNL-2.5,7 | 2 | 4992 | 4992 | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.6,8 | 6 | | | | | | |
| 5 | EV L2 DTN7-LV PNL-2.9,11 | 2 | 4992 | 4992 | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.10,12 | 10 | | | | | |
| 7 | EV L2 DTN7-LV PNL-2.13,15 | 2 | 4992 | 4992 | | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.14,16 | 14 | | | | |
| 9 | EV L2 DTN7-LV PNL-2.17,19 | 2 | 4992 | 4992 | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.18,20 | 18 | | | | | |
| 11 | EV L2 DTN7-LV PNL-2.21,23 | 2 | 4992 | 4992 | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.22,24 | 22 | | | | | |
| 13 | EV L2 DTN7-LV PNL-2.25,27 | 2 | 4992 | 4992 | | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.26,28 | 26 | | | | |
| 15 | EV L2 DTN7-LV PNL-2.29,31 | 2 | 4992 | 4992 | | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.30,32 | 30 | | | | |
| 17 | EV L2 DTN7-LV PNL-2.33,35 | 2 | 4992 | 4992 | | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.34,36 | 34 | | | | |
| 19 | EV L2 DTN7-LV PNL-2.37,39 | 2 | 4992 | 4992 | | | | | | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-2.38,40 | 38 | | | | |
| 21 | SPARE | 1 | -- | -- | | | | 0 | -- | 1 | -- | SPACE | | | 42 | | | | |
| TOTAL LOAD: | | | | 68888 VA | | 68888 VA | | 595 A | | 595 A | | | | | | | | | |
| TOTAL AMPS: | | | | 595 A | | 595 A | | 499 A | | | | | | | | | | | |
| LOAD CLASSIFICATION | | | | CONNECTED LOAD | | | | DEMAND FACTOR | | | | ESTIMATED DEMAND | | | | PANEL TOTALS | | | |
| ELECTRIC VEHICLE | | | | 199680 VA | | | | 125.00% | | | | 249600 VA | | | | | | | |
| | | | | | | | | | | | | | | | | CONNECTED LOAD: 199680 VA | | | |
| | | | | | | | | | | | | | | | | ESTIMATED DEMAND: 249600 VA | | | |
| | | | | | | | | | | | | | | | | CONNECTED CURRENT: 554 A | | | |
| | | | | | | | | | | | | | | | | EMD CURRENT: 693 A | | | |

PANEL: DTN7-LV PNL-3

| | | | | | | | | | | | |
|--|---------------------------|-----------------------------------|------|-----------------------|-------------------|---------------|---|------------------|---------------------------|-----------------------------|--|
| BUS RATING: 800 A | | VOLTS: 120/208 Wye | | MOUNTING: PAD MOUNTED | | | | | | | |
| MAIN BREAKER: 800 A | | PHASES: 3 | | FED FROM: SEE RISER | | | | | | | |
| | | WIRES: 4 | | ENCLOSURE: NEMA-3R | | | | | | | |
| | | AVAILABLE FAULT CURRENT: 22,000 A | | | | | | | | | |
| NOTES: | | | | | | | | | | | |
| 1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER CIRCUIT BREAKERS. | | | | | | | | | | | |
| CKT | CIRCUIT DESCRIPTION | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | CKT | |
| 1 | EV L2 DTN7-LV PNL-3.1,3 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.2,4 | 2 | |
| 3 | EV L2 DTN7-LV PNL-3.5,7 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.6,8 | 6 | |
| 5 | EV L2 DTN7-LV PNL-3.9,11 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.10,12 | 10 | |
| 7 | EV L2 DTN7-LV PNL-3.13,15 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.14,16 | 14 | |
| 9 | EV L2 DTN7-LV PNL-3.17,19 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.18,20 | 18 | |
| 11 | EV L2 DTN7-LV PNL-3.21,23 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.22,24 | 22 | |
| 13 | EV L2 DTN7-LV PNL-3.25,27 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.26,28 | 26 | |
| 15 | EV L2 DTN7-LV PNL-3.29,31 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.30,32 | 30 | |
| 17 | EV L2 DTN7-LV PNL-3.33,35 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.34,36 | 34 | |
| 19 | EV L2 DTN7-LV PNL-3.37,39 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-3.38,40 | 38 | |
| 21 | SPARE | 20 | 1 | 60888 VA 595 A | 60888 VA 595 A | 0 -- | 1 | -- | SPACE | 40 | |
| TOTAL LOAD: | | 20 | | 60888 VA 595 A | | 0 -- | | SPACE | | 42 | |
| TOTAL AMP: | | 20 | | 595 A | | 0 -- | | SPACE | | 42 | |
| LOAD CLASSIFICATION | | | | CONNECTED LOAD | | DEMAND FACTOR | | ESTIMATED DEMAND | | PANEL TOTALS | |
| ELECTRIC VEHICLE | | | | 199680 VA | | 125.00% | | 249600 VA | | CONNECTED LOAD: 199680 VA | |
| | | | | | | | | | | ESTIMATED DEMAND: 249600 VA | |
| | | | | | | | | | | CONNECTED CURRENT: 554 A | |
| | | | | | | | | | | EMD CURRENT: 693 A | |
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BUS RATING: 800 A

MAIN BREAKER: 800 A

VOLTS: 120/208 Wye

PHASES: 3

WIRES: 4

MOUNTING: PAD MOUNTED

FED FROM: SEE RISER

ENCLOSURE: NEMA-3R

AVAILABLE FAULT CURRENT: 22,000 A

NOTES:

1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER CIRCUIT BREAKERS.

| CKT | CIRCUIT DESCRIPTION | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | CKT | |
|-------------|---------------------------|----|------|----------|------|----------|------|----------|---------------------------|-----|--|
| 1 | EV L2 DNT7-LV PNL-9.1,3 | 2 | 4992 | 4992 | | | | 2 | EV L2 DNT7-LV PNL-9.2,4 | 2 | |
| 4 | | 2 | | 4992 | 4992 | | | 2 | | 4 | |
| 5 | EV L2 DNT7-LV PNL-9.5,7 | 2 | 4992 | 4992 | | 4992 | 4992 | 2 | EV L2 DNT7-LV PNL-9.6,8 | 6 | |
| 7 | | 2 | | 4992 | 4992 | | | 2 | | 8 | |
| 9 | EV L2 DNT7-LV PNL-9.9,11 | 2 | | | 4992 | 4992 | | 2 | EV L2 DNT7-LV PNL-9.10,12 | 10 | |
| 11 | | 2 | | | | 4992 | 4992 | 2 | | 12 | |
| 13-15 | EV L2 DNT7-LV PNL-9.13,15 | 2 | 4992 | 4992 | | | | 2 | EV L2 DNT7-LV PNL-9.14,16 | 14 | |
| 17 | | 2 | | 4992 | 4992 | | 4992 | 4992 | | 16 | |
| 19 | EV L2 DNT7-LV PNL-9.17,19 | 2 | 4992 | 4992 | | | | 2 | EV L2 DNT7-LV PNL-9.18,20 | 20 | |
| 21-23 | | 2 | | | 4992 | 4992 | | 2 | | 22 | |
| 25 | EV L2 DNT7-LV PNL-9.21,23 | 2 | | | | 4992 | 4992 | 2 | EV L2 DNT7-LV PNL-9.22,24 | 24 | |
| 27 | | 2 | | | | | 4992 | 4992 | | 26 | |
| 29 | EV L2 DNT7-LV PNL-9.25,27 | 2 | 4992 | 4992 | | | | 2 | EV L2 DNT7-LV PNL-9.26,28 | 28 | |
| 31 | | 2 | | 4992 | 4992 | | 4992 | 4992 | | 30 | |
| 33 | EV L2 DNT7-LV PNL-9.29,31 | 2 | 4992 | 4992 | | | | 2 | EV L2 DNT7-LV PNL-9.30,32 | 32 | |
| 35 | | 2 | | 4992 | 4992 | | 4992 | 4992 | | 34 | |
| 37 | EV L2 DNT7-LV PNL-9.33,35 | 2 | | | | 4992 | 4992 | 2 | EV L2 DNT7-LV PNL-9.34,36 | 36 | |
| 39 | | 2 | 4992 | 4992 | | | | 2 | | 38 | |
| 41 | EV L2 DNT7-LV PNL-9.37,39 | 2 | | 4992 | 4992 | | | 2 | EV L2 DNT7-LV PNL-9.38,40 | 40 | |
| 43 | SPARE | 1 | | | | 0 | -- | 1 | SPARE | 42 | |
| TOTAL LOAD: | | | | 69688 VA | | 69688 VA | | 59904 VA | | | |
| TOTAL AMPS: | | | | 595 A | | 595 A | | 499 A | | | |

LOAD CLASSIFICATION

CONNECTED LOAD

DEMAND FACTOR

ESTIMATED DEMAND

PANEL TOTALS

ELECTRIC VEHICLE

199680 VA

125.00%

249600 VA

CONNECTED LOAD: 199680 VA

ESTIMATED DEMAND: 249600 VA

CONNECTED CURRENT: 154 A

EMD CURRENT: 693 A

<

BUS RATING: 800 A

MAIN BREAKER: 800 A

PANEL 4: DNTN7-LV PNL-14

VOLTS: 120/208 Vye

PHASES: 3

WIRES: 4

AVAILABLE FAULT CURRENT: 22,000 A

MOUNTING: PAD MOUNTED

FED FROM: SEE RISER

ENCLOSURE: NEMA-3R

NOTES:

1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER DISCONNECTS.

| CKT | CIRCUIT DESCRIPTION | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | CKT |
|--------------------|----------------------------|----|------|----------|----------|----------|---|----|----------------------------|-----|
| 1 | EV L2 DTN7-LV PNL-14.1,3 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.2,4 | 2 |
| 4 | | 2 | | | 4992 | 4992 | 2 | | | 4 |
| 5 | EV L2 DTN7-LV PNL-14.5,7 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.6,8 | 6 |
| 7 | | 2 | | | 4992 | 4992 | 2 | | | 8 |
| 9 | EV L2 DTN7-LV PNL-14.9,11 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.10,12 | 10 |
| 11 | | 2 | | | 4992 | 4992 | 2 | | | 12 |
| 13 | EV L2 DTN7-LV PNL-14.13,15 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.14,16 | 14 |
| 15 | | 2 | | | 4992 | 4992 | 2 | | | 16 |
| 17 | EV L2 DTN7-LV PNL-14.17,19 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.18,20 | 18 |
| 19 | | 2 | | | 4992 | 4992 | 2 | | | 20 |
| 21 | EV L2 DTN7-LV PNL-14.21,23 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.22,24 | 22 |
| 23 | | 2 | | | 4992 | 4992 | 2 | | | 24 |
| 25 | EV L2 DTN7-LV PNL-14.25,27 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.26,28 | 26 |
| 27 | | 2 | | | 4992 | 4992 | 2 | | | 28 |
| 29 | EV L2 DTN7-LV PNL-14.29,31 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.30,32 | 30 |
| 31 | | 2 | | | 4992 | 4992 | 2 | | | 32 |
| 33 | EV L2 DTN7-LV PNL-14.33,35 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.34,36 | 34 |
| 35 | | 2 | | | 4992 | 4992 | 2 | | | 36 |
| 37 | EV L2 DTN7-LV PNL-14.37,39 | 2 | 4992 | 4992 | 4992 | 4992 | 2 | 60 | EV L2 DTN7-LV PNL-14.38,40 | 38 |
| 39 | | 2 | | | 4992 | 4992 | 2 | | | 40 |
| 41 | SPARE | 1 | | | 0 | -- | 1 | -- | SPACE | 42 |
| TOTAL LOAD: | | | | 68888 VA | 68888 VA | 59004 VA | | | | |
| TOTAL AMPS: | | | | 595 A | 595 A | 499 A | | | | |

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS |
|---------------------|----------------|---------------|------------------|------------------------------------|
| ELECTRIC VEHICLE | 196600 VA | 125.00% | 249600 VA | |
| | | | | CONNECTED LOAD: 196600 VA |
| | | | | ESTIMATED DEMAND: 249600 VA |
| | | | | CONNECTED CURRENT: 554 A |
| | | | | EMD CURRENT: 693 A |

| Legend | | | |
|--------|---|----------|-------|
| | Description | Quantity | Unit |
| ● | 26: PANEL DTN7-LV PNL-7, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-7, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-7, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-8, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-8, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-8, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-9, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-9, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-9, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-10, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-10, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-10, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-11, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-11, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-11, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-12, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-12, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-12, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-13, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-13, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-13, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-14, 20A, 1P CIRCUIT BREAKER | 1 | Count |
| ● | 26: PANEL DTN7-LV PNL-14, 60A, 2P CIRCUIT BREAKER | 20 | Count |
| ● | 26: PANEL DTN7-LV PNL-14, 120/208V, 3P, 4W, MAIN BUS: 800A, MAIN TYPE: 800A MCB, AIC RATING: 22KA | 1 | Count |

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| PANEL: DTN7-LV PNL-17 | | | | | | | | | | | | | |
|--|----------------------------|--|----|-----------------------------------|------|---------------|----------|-----------------------|------|-----------------------------|--|-----|--|
| BUS RATING: 800 A | | | | VOLTS: 120/208 Wye | | | | MOUNTING: PAD MOUNTED | | | | | |
| MAIN BREAKER: 800 A | | | | PHASES: 3 | | | | FED FROM: SEE RISER | | | | | |
| | | | | WIRES: 4 | | | | ENCLOSURE: NEMA-3R | | | | | |
| | | | | AVAILABLE FAULT CURRENT: 22,000 A | | | | | | | | | |
| NOTES: | | | | | | | | | | | | | |
| 1. PROVIDE LOCKABLE OPEN DISCONNECTING MEANS IN ACCORDANCE WITH NEC 625.43 AND 110.25 FOR ALL EV CHARGER CIRCUIT BREAKERS. | | | | | | | | | | | | | |
| OKT | CIRCUIT DESCRIPTION | | CB | P | A | B | C | P | CB | CIRCUIT DESCRIPTION | | OKT | |
| 1 | EV L2 DTN7-LV PNL-17:1,3 | | 2 | 4992 | 4992 | | | 2 | 4992 | EV L2 DTN7-LV PNL-17:2,4 | | 2 | |
| 3 | | | | | 4992 | 4992 | | | | | | 4 | |
| 5 | EV L2 DTN7-LV PNL-17:5,7 | | 2 | 4992 | 4992 | | 4992 | 4992 | 2 | EV L2 DTN7-LV PNL-17:6,8 | | 6 | |
| 7 | | | | | | | | | | | | 8 | |
| 9 | EV L2 DTN7-LV PNL-17:9,11 | | 2 | | 4992 | 4992 | 4992 | 4992 | 2 | EV L2 DTN7-LV PNL-17:10,12 | | 10 | |
| 11 | | | | | | | | | | | | 12 | |
| 13 | EV L2 DTN7-LV PNL-17:13,15 | | 2 | 4992 | 4992 | | | 2 | 4992 | EV L2 DTN7-LV PNL-17:14,16 | | 14 | |
| 15 | | | | | 4992 | 4992 | | | | | | 16 | |
| 17 | EV L2 DTN7-LV PNL-17:17,19 | | 2 | 4992 | 4992 | | 4992 | 4992 | 2 | EV L2 DTN7-LV PNL-17:18,20 | | 18 | |
| 19 | | | | | | | | | 60 | | | 20 | |
| 21 | EV L2 DTN7-LV PNL-17:21,23 | | 2 | | | 4992 | | 4992 | 4992 | EV L2 DTN7-LV PNL-17:22,24 | | 22 | |
| 23 | | | | | | | | | | | | 24 | |
| 25 | EV L2 DTN7-LV PNL-17:25,27 | | 2 | 4992 | 4992 | | | 4992 | 4992 | EV L2 DTN7-LV PNL-17:26,28 | | 26 | |
| 27 | | | | | | 4992 | 4992 | | | | | 28 | |
| 29 | EV L2 DTN7-LV PNL-17:29,31 | | 2 | 4992 | 4992 | | | 4992 | 4992 | EV L2 DTN7-LV PNL-17:30,32 | | 30 | |
| 31 | | | | | | | | | | | | 32 | |
| 33 | EV L2 DTN7-LV PNL-17:33,35 | | 2 | | 4992 | 4992 | | | 4992 | EV L2 DTN7-LV PNL-17:34,36 | | 34 | |
| 35 | | | | | | | | 4992 | 4992 | | | 36 | |
| 37 | EV L2 DTN7-LV PNL-17:37,39 | | 60 | 4992 | 4992 | | 4992 | 4992 | 2 | EV L2 DTN7-LV PNL-17:38,40 | | 38 | |
| 39 | | | | | | | | | | | | 40 | |
| 41 | SPARE | | 1 | | | | 0 | -- | 1 | SPACE | | 42 | |
| TOTAL LOAD: | | | | 69888 VA | | | 69888 VA | | | 59904 VA | | | |
| TOTAL AMP: | | | | 595 A | | | 595 A | | | 499 A | | | |
| LOAD CLASSIFICATION | | | | CONNECTED LOAD | | DEMAND FACTOR | | ESTIMATED DEMAND | | PANEL TOTALS | | | |
| ELECTRIC VEHICLE | | | | 196860 VA | | 125.00% | | 249600 VA | | | | | |
| | | | | | | | | | | CONNECTED LOAD: 196860 VA | | | |
| | | | | | | | | | | ESTIMATED DEMAND: 249600 VA | | | |
| | | | | | | | | | | CONNECTED CURRENT: 554 A | | | |
| | | | | | | | | | | EMD CURRENT: 693 A | | | |
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