



# AT&T

## UNITY VILLAGE

### FA#: 10000434

AMERICAN TOWER: SITE# 306035

## GENERATOR REPLACEMENT PROJECT 50KW KOHLER DIESEL GENERATOR

**2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081**



**GENERAL DYNAMICS**  
Information Technology



**GEOSTRUCTURAL**  
PO BOX 2621, BOISE, ID 83701  
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#### REVISIONS

REV	DATE	DESCRIPTION	INT
0	11/03/25	ISSUED FOR CONSTRUCTION	BM

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DATE SIGNED: 11/3/25

SITE INFORMATION:  
UNITY VILLAGE

10000434

GENERATOR REPLACEMENT  
PROJECT

2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:

**TITLE SHEET**

SHEET NUMBER:

**T-1**

#### SITE INFORMATION:

SITE ADDRESS: 2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

COUNTY: JACKSON

COORDINATES: 38.93361° / -94.41694° (FOR NAVIGATION ONLY)

PROPERTY LANDLORD OR OWNER: TELECOM TOWERS LLC

TAX ID #: 51800040202000000

ZONING: R-1

OCCUPANCY GROUP: U - UNMANNED

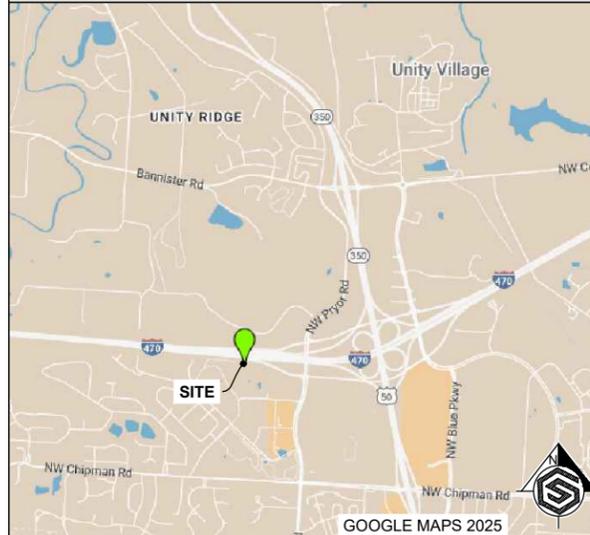
CONSTRUCTION TYPE: II-B

POWER COMPANY: EVERGY-M

FLOOD ZONE: X

A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION

#### VICINITY MAP:



#### AREA MAP:



#### CODE COMPLIANCE:

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF ALL GOVERNING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS ARE TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

- INTERNATIONAL BUILDING CODE (IBC) 2021
- NATIONAL ELECTRICAL CODE (NEC) 2020
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 13,30,37,58,70,72,110,111
- AMERICAN CONCRETE INSTITUTE (ACI) 318
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 607

#### DO NOT SCALE DRAWINGS:

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

#### CONTACT INFORMATION:

APPLICANT: AT&T MOBILITY  
1452 EDINGER AVE  
TUSTIN, CA 92780  
PHONE: 858.666.7638

PROJECT MANAGER: GENERAL DYNAMICS WIRELESS SERVICES, LLC.  
PHONE: 318.833.4864  
CONTACT: KEITH JEFFREYS

SITE ACQUISITION MANAGER: GENERAL DYNAMICS WIRELESS SERVICES, LLC.  
CONTACT: CYNTHIA FORTNER  
EMAIL: Cynthia.Fortner@GDIT.com  
PHONE: 615.314.7225

ARCHITECTURE & ENGINEERING: GEOSTRUCTURAL, LLC.  
PO BOX 2621  
BOISE, ID 83701  
PHONE: 530.539.4787  
CONTACT: DON GEORGE

#### APPROVALS :

AT&T MANAGER	_____	_____
CONSTRUCTION MANAGER	_____	_____
SITE ACQ. MANAGER	_____	_____
PROPERTY OWNER	_____	_____
LANDLORD	_____	_____

#### SCOPE OF WORK:

INSTALL (1) ARTICLE 702 OPTIONAL STANDBY DIESEL GENERATOR (KOHLER 50REOZK) WITH UL-142 BASE FUEL TANK ON NEW CONCRETE PAD AND 200A ATS / CAMLOCK (KOHLER 200-T) WITHIN COMPOUND NEAR EXISTING AT&T EQUIPMENT SHELTER. REMOVE (1) INACTIVE GENERATOR AND CONCRETE PAD. INSPECT, TEST, AND REUSE / REPLACE EXISTING ELECTRICAL LINES.

INTEGRATE NEW GENERATOR WITH EXISTING SERVICE.

NOTE: NO CHANGES OR ALTERATIONS TO THE TOWER, MOUNTS, ANTENNAS, FEEDLINES, ETC. IS PROPOSED AS A PART OF THIS SCOPE OF WORK.

#### DIG LINE:

THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES, AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS.

ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE CONTRACTOR'S EXPENSE.



#### SHEET INDEX:

SHEET	DESCRIPTION
T-1	TITLE SHEET
N-1	GENERAL NOTES
A-1	OVERALL SITE PLAN
A-2	ENLARGED SITE PLAN
S-1	GENERATOR PAD DETAILS
S-2	GENERAL STRUCTURAL DETAILS
E-1	ELECTRICAL DETAILS
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL DETAILS
E-4.0 <--> E-4.2	GENERATOR SPECIFICATIONS
E-5.0	ATS SPECIFICATIONS
E-5.1	CAM-LOCK BOX SPECIFICATIONS

**NOTES TO SUBCONTRACTOR:**

1. THE GENERAL SUBCONTRACTOR MUST VERIFY ALL DIMENSIONS, CONDITIONS AND ELEVATIONS BEFORE PROCEEDING WITH THE WORK. ALL DISCREPANCIES SHALL BE RESOLVED BEFORE PROCEEDING WITH THE WORK. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER IN ACCORDANCE WITH ACCEPTED CONSTRUCTION PRACTICES.

2. IT IS THE INTENTION OF THESE DRAWINGS TO SHOW THE COMPLETED INSTALLATION. THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING, SHORING, TIES, FORM WORK, ETC. IN ACCORDANCE WITH ALL NATIONAL, STATE, AND LOCAL ORDINANCES, TO SAFELY EXECUTE ALL WORK AND SHALL BE RESPONSIBLE FOR SAME. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

3. THE SUBCONTRACTOR SHALL USE ADEQUATE NUMBER OF SKILLED WORKMAN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHOD NEEDED FOR PROPER PERFORMANCE OF THE WORK.

4. SUBCONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION SUBCONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND SUBCONTRACTOR FURTHER AGREES TO INDEMNIFY AND HOLD DESIGN ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF WORK ON THIS PROJECT.

5. SITE GROUNDING SHALL COMPLY WITH AT&T WIRELESS SERVICES TECHNICAL SPECIFICATIONS FOR FACILITY GROUNDING FOR CELL SITE STANDARDS, LATEST EDITION, AND COMPLY WITH AT&T TOWERS GROUNDING CHECKLIST, LATEST VERSION. WHEN NATIONAL AND LOCAL GROUNDING CODES ARE MORE STRINGENT THEY SHALL GOVERN.

6. ALL WORK SHALL COMPLY WITH OSHA AND STATE SAFETY REQUIREMENTS. PROCEDURES FOR THE PROTECTION OF EXCAVATIONS, EXISTING CONSTRUCTION AND UTILITIES SHALL BE ESTABLISHED PRIOR TO FOUNDATION INSTALLATION.

7. ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES OR ORDINANCES. THE MOST STRINGENT CODE WILL APPLY IN THE CASE OF DISCREPANCIES OR DIFFERENCES IN THE CODE REQUIREMENTS.

8. ANY DAMAGE TO THE ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE LANDOWNER AND THE CONSTRUCTION MANAGER.

9. THE COMPLETE BID PACKAGE INCLUDES THESE CONSTRUCTION DRAWINGS ALONG WITH THE SPECIFICATIONS. SUBCONTRACTOR IS RESPONSIBLE FOR REVIEW OF TOTAL BID PACKAGE PRIOR TO BID SUBMITTAL.

10. SUBCONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES WITHIN CONSTRUCTION LIMITS PRIOR TO CONSTRUCTION.

11. THE SUBCONTRACTOR IS RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE ON THE SITE AT ALL TIMES. SILT AND EROSION CONTROL SHALL BE MAINTAINED ON THE DOWNSTREAM SIDE OF THE SITE AT ALL TIMES. ANY DAMAGE TO ADJACENT PROPERTIES WILL BE CORRECTED AT THE SUBCONTRACTOR'S EXPENSE.

12. CLEARING OF TREES AND VEGETATION ON THE SITE SHOULD BE HELD TO A MINIMUM. ONLY THE TREES NECESSARY FOR CONSTRUCTION OF THE FACILITIES SHALL BE REMOVED. ANY DAMAGE TO THE PROPERTY OUTSIDE THE LEASED PROPERTY SHALL BE REPAIRED BY THE SUBCONTRACTOR.

13. ALL SUITABLE BORROW MATERIAL FOR BACK FILL OF THE SITE SHALL BE INCLUDED IN THE BID. EXCESS TOPSOIL AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF OFF SITE AT LOCATIONS APPROVED BY GOVERNING AGENCIES PRIOR TO DISPOSAL.

14. PERMITS: THE SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF ALL REQUIRED PERMITS, INSPECTIONS, CERTIFICATES, ETC.

15. RECORD DRAWINGS: MAINTAIN A RECORD OF ALL CHANGES, SUBSTITUTIONS BETWEEN WORK AS SPECIFIED AND INSTALLED. RECORD CHANGES ON A CLEAN SET OF CONTRACT DRAWINGS WHICH SHALL BE TURNED OVER TO THE CONSTRUCTION MANAGER UPON COMPLETION OF THE PROJECT.

16. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE GROUND STRUCTURES AND/OR EXISTING UTILITIES BELIEVED TO BE IN THE WORKING AREA. IT IS THE RESPONSIBILITY OF THE SUBCONTRACTOR TO VERIFY ALL UTILITIES, PIPELINES AND OTHER STRUCTURES SHOWN OR NOT SHOWN ON THESE PLANS. THE SUBCONTRACTOR SHALL CONTACT THE LOCAL LOCATE SERVICE BEFORE DIGGING OR DRILLING. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AND ENGINEER AT THE SUBCONTRACTOR'S EXPENSE.

**GENERAL PROJECT NOTES:**

1. THIS PROPOSAL IS FOR THE ADDITION OF A NEW GENERATOR ON A CONCRETE PAD AT AN EXISTING UNMANNED TELECOMMUNICATIONS FACILITY CONSISTING OF AN EQUIPMENT SHELTER/PLATFORM AND TOWER.

2. THE PROPOSED FACILITY WILL BE UNMANNED AND DOES NOT REQUIRE POTABLE WATER OR SEWER SERVICE.

3. THE PROPOSED FACILITY IS UNMANNED AND IS NOT FOR HUMAN HABITAT. (NO ADA ACCESS IS REQUIRED)

4. OCCUPANCY IS LIMITED TO PERIODIC MAINTENANCE AND INSPECTION, APPROXIMATELY 2 TIMES PER MONTH BY AT&T TECHNICIANS.

5. OUTDOOR STORAGE AND SOLID WASTE CONTAINERS ARE NOT PROPOSED.

6. ALL MATERIAL SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

7. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED BY THE CONSTRUCTION OPERATION.

8. SUBCONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND INSPECTION REQUIRED FOR CONSTRUCTION.

9. SUBCONTRACTOR SHALL REMOVE ALL TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.

**ELECTRICAL NOTES:**

**A. GENERAL**

1. COORDINATE LOCATION AND POWER REQUIREMENTS OF ALL EQUIPMENT WITH AT&T AND EQUIPMENT SUPPLIER PRIOR TO INSTALLATION.

2. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL AND TELEPHONE SERVICES WITH THE PROPERTY REPRESENTATIVE, AT&T AND UTILITY COMPANIES. ROUTING OF CONDUITS MAY BE MODIFIED TO MEET SITE REQUIREMENTS. EXACT CONDUIT ROUTING TO BE DETERMINED IN THE FIELD.

3. ALL WIRING AND EQUIPMENT SHOWN ON ELECTRICAL SHEETS SHALL BE FURNISHED AND INSTALLED UNDER ELECTRICAL PORTION OF CONTRACT UNLESS OTHERWISE NOTED

4. UNINTERRUPTED ELECTRICAL SERVICE FOR EXISTING EQUIPMENT SHALL BE MAINTAINED DURING THE INSTALLATION OF THE WORK DESCRIBED UNDER THESE DOCUMENTS. TEMPORARY EQUIPMENT, CABLES AND WHATEVER ELSE IS NECESSARY SHALL BE PROVIDED AS REQUIRED TO MAINTAIN ELECTRICAL SERVICE. TEMPORARY SERVICE FACILITIES, IF REQUIRED AT ANY TIME, SHALL NOT BE DISCONNECTED OR REMOVED UNTIL NEW SERVICE EQUIPMENT IS IN PROPER OPERATION. IF ANY SERVICE OR SYSTEM MUST BE INTERRUPTED, THE CONTRACTOR SHALL REQUEST PERMISSION IN WRITING STATING THE DATE, TIME, ETC. THE SERVICE WILL BE INTERRUPTED AND THE AREAS AFFECTED. THIS REQUEST SHALL BE MADE IN SUFFICIENT TIME FOR PROPER ARRANGEMENTS TO BE MADE. WRITTEN PERMISSION SHALL BE OBTAINED FROM THE OWNER BEFORE INTERRUPTING ELECTRICAL SERVICE.

5. COORDINATE NEW WORK WITH OTHER TRADES AND VERIFY EXISTING CONDITIONS TO AVOID INTERFERENCE. IN CASE OF INTERFERENCE, AT&T'S REPRESENTATIVE WILL DECIDE WHICH WORK IS TO BE RELOCATED, REGARDLESS OF WHICH WAS FIRST INSTALLED.

6. THE INSTALLATION MUST COMPLY WITH NEC AND ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS.

7. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND EQUIPMENT UNLESS OTHERWISE DEFINED BY DIMENSIONS OR DETAILS. EXACT EQUIPMENT LOCATIONS AND RACEWAY ROUTING SHALL BE GOVERNED BY ACTUAL FIELD CONDITIONS AND/OR DIRECTIONS FROM AT&T'S REPRESENTATIVE.

8. CONTRACTOR SHALL PAY ALL PERMITS AND FEES REQUIRED.

9. ALL MATERIALS SHALL BE FURNISHED AND WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STANDARDS REFERENCED BELOW:

- a. ANSI (AMERICAN NATIONAL STANDARDS INSTITUTE)
- b. ASTM (AMERICAN SOCIETY FOR TESTING MATERIALS)
- c. ETL (ELECTRICAL TESTING LABORATORY)
- d. ICEA (INSULATED CABLE ENGINEERS ASSOCIATION)
- e. IEEE (INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS)
- f. MBFU (NATIONAL BOARD OF FIRE UNDERWRITERS)
- g. NESC (NATIONAL ELECTRICAL SAFETY CODE)
- h. NEMA (NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION)
- i. NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)
- j. UL (UNDERWRITER'S LABORATORY)
- k. NEC (NATIONAL ELECTRICAL CODE)

10. CONTRACTOR SHALL REVIEW PLANS, DETAILS AND SPECIFICATIONS IN DETAIL AND ADJUST WORK TO CONFORM WITH ACTUAL SITE CONDITIONS SO THAT ELECTRICAL DEVICES AND EQUIPMENT WILL BE LOCATED AND READILY ACCESSIBLE. QUANTITIES LISTED IN MATERIAL LISTS ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL PROVIDE HIS OWN TAKEOFF FOR MATERIAL QUANTITY AND TYPES BASED ON ACTUAL SITE CONDITIONS, IN ADDITION, CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS TO INSTALL EQUIPMENT FURNISHED BY AT&T OR ITS SUPPLIERS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN OR SHOWN ON THE DRAWINGS, BUT WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE INCLUDED.

11. THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) AT&T'S REPRESENTATIVE OF ANY CONFLICTS PRIOR TO THE SUBMISSION OF CONTRACTOR'S PROPOSAL OR PERFORMANCE OF WORK, IN THE EVENT OF DISCREPANCIES THE CONTRACTOR SHALL PRICE THE MORE COSTLY OR EXTENSIVE WORK, UNLESS DIRECTED IN WRITING OTHERWISE.

**ELECTRICAL NOTES:**

12. ALL FLOORS WHERE PENETRATIONS ARE REQUIRED IN BUILDING ARE TO BE CORE DRILLED AND THEN FIREPROOFED.

**B. WIRING/CONDUIT**

1. PROVIDE PULL BOXES AND JUNCTION BOXES WHERE SHOWN OR AS REQUIRED BY CODE SUCH THAT NO MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) EXIST IN A CONDUIT RUN.

2. ALL POWER AND CONTROL/INDICATION WIRING SHALL BE TYPE THHN/THWN 600V RATED 75 DEGREES CELSIUS, UNLESS NOTED OTHERWISE.

3. CONDUIT BENDS SHALL BE MADE IN ACCORDANCE WITH THE NEC. NO RIGHT ANGLE DEVICE OTHER THAN STANDARD CONDUIT ELBOWS WITH 12" MINIMUM INSIDE SWEEPS FOR ALL CONDUITS 2" OR LARGER.

4. POWER WIRING SIZE SHALL NOT BE SMALLER THAN #12 AWG.

5. ALL WIRING SHALL BE COPPER. ALUMINUM WILL NOT BE ACCEPTABLE ALL POWER CIRCUITS SHALL CONTAIN A GROUND WIRE.

6. PHASE MARKINGS TO BE USED AT POWER CONDUCTOR TERMINATIONS.

7. CONTRACTOR SHALL ENSURE INTEGRITY IS MAINTAINED WHEN INSTALLING CONDUIT AND WIRING.

8. INSTALL PULL STRING IN ALL CONDUIT.

9. FOR ROOFTOP INSTALLS AND BUILD-OUTS, CONDUITS INSIDE BUILDING AND ON ROOF SHALL BE RGS, UNLESS OTHERWISE NOTED. FOR RAW LAND SITES AND CO-LOCATES, PVC SCHEDULE 80 SHALL BE UTILIZED UNLESS NOTED OTHERWISE.

10. MAINTAIN MINIMUM 1'-0" VERTICAL AND 1'-0" HORIZONTAL SEPARATIONS FROM ANY MECHANICAL GAS PIPING.

11. ALL WIRING ROUTED IN PLENUM TO BE RATED OR IN METALLIC FLEX (LIQUIDTITE) CONDUIT.

**C. EQUIPMENT**

1. EQUIPMENT/PARTS CONNECTED TO EXISTING PANELS, DUCTS, ETC. SHALL MATCH THE CHARACTERISTICS (A/C, V, A) OF THAT EQUIPMENT.

2. ALL ELECTRICAL EQUIPMENT OUTSIDE SHALL BE NEMA 3R RATED.

**D. GROUNDING**

1. ALL GROUND CONNECTIONS TO BUILDING SHALL BE MADE USING TWO-HOLE CONNECTORS. PROVIDE STAINLESS STEEL BOLTS AND LOCK WASHERS ON ALL MECHANICAL GROUND CONNECTIONS.

2. ALL EQUIPMENT SURFACES TO BE BONDED TO GROUNDING SYSTEM SHALL BE STRIPPED OF ALL PAINT AND DIRT AT ANY POINT OF CONNECTION. CONNECTIONS TO VARIOUS METALS SHALL BE OF A TYPE AS TO PREVENT A GALVANIC OR CORROSIVE REACTION. AREA SHALL BE REPAINTED FOLLOWING BONDING.

3. ANY METALLIC ITEM WITHIN 6' OF ANY EQUIPMENT OR METALLIC INFRASTRUCTURE (RACKS, CABLE TRAY.. ETC.) OR GROUND CONDUCTORS MUST BE CONNECTED TO THE GROUNDING SYSTEM PER AT&T STANDARDS.

4. EXTERIOR, ABOVE GRADE GROUND CONNECTIONS SHALL BE FURNISHED WITH A LIBERAL PROTECTIVE COATING OF ANTI-OXIDATION COMPOUND.

5. ALL MATERIALS AND LABOR REQUIRED FOR THE GROUNDING SYSTEM AS INDICATED ON THE PLANS AND DETAILS, AND AS DESCRIBED HEREIN SHALL BE FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.

6. EXACT LOCATION OF GROUND CONNECTION POINTS SHALL BE DETERMINED IN FIELD. ADJUST LOCATIONS INDICATED ON PLANS ACCORDING TO ACTUAL EQUIPMENT LOCATIONS TO KEEP THE GROUND CONNECTION CABLES AS SHORT AND STRAIGHT AS PRACTICAL.

7. PROVIDE ALL ELECTRICAL SYSTEM AND EQUIPMENT GROUNDS AS REQUIRED BY THE CURRENT EDITION OF THE NEC, THE CURRENT EDITION OF THE NATIONAL ELECTRICAL SAFETY CODE AND AT&T STANDARDS. BONDING JUMPERS WITH APPROVED GROUND FITTINGS SHALL BE INSTALLED AT ALL RACEWAYS, EQUIPMENT ENCLOSURES, PULL BOXES, ETC. TO MAINTAIN GROUND CONTINUITY WHERE REQUIRED BY CODE.

8. ALL BURIED EQUIPMENT GROUND CONDUCTORS SHALL BE #2 AWG BARE, TINNED, SOLID COPPER UNLESS NOTED OTHERWISE ON THE DRAWINGS.

**E. INSPECTION/DOCUMENTATION**

1. THE CONTRACTOR, UPON COMPLETION OF HIS WORK, SHALL PROVIDE AS-BUILT DRAWINGS. INFORMATION SHOULD BE GIVEN TO THE GENERAL CONTRACTOR FOR INCLUSION IN FINAL AS-BUILT SURVEY DOCUMENTS TO BE GIVEN TO THE OWNER.

2. CONTRACTOR SHALL SUPPLY DOCUMENTATION ATTESTING TO THE COMPLETE GROUND SYSTEM'S RESISTANCE TO GROUND (MAX. 5 OHMS).

3. AN ELECTRICAL INSPECTION SHALL BE MADE BY AN INSPECTING AGENCY APPROVED BY AT&T'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE ALL INSPECTIONS AND OBTAIN POWER COMPANY APPROVAL.

4. CONTRACTOR SHALL HAVE ATS AND GENERATOR RELAY INSTALLATION AND CONNECTIONS INSPECTED BY OTHERS TO ENSURE THAT UL LISTING FOR THAT EQUIPMENT IS NOT VOIDED.



**GENERAL DYNAMICS**  
Information Technology



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JURISDICTION USE:

SHEET TITLE:  
**GENERAL NOTES**

SHEET NUMBER:  
**N-1**

**GENSET USE AND INFORMATION:**  
 THE PROPOSED KOHLER 50REOZK GENSET:  
 \* IS RATED AT 86 HP AT MAXIMUM RATED kW OUTPUT,  
 \* IS INSTALLED WITH AN ABOVE-GROUND DOUBLE-WALL SECONDARY CONTAINMENT BASE FUEL TANK WITH 270 USABLE GALLONS OF FUEL,  
 \* USES ULTRA LOW SULFUR DIESEL FUEL (15 ppm SULFUR),  
 \* IS LIMITED TO 100 HOURS PER YEAR OF NON-EMERGENCY USE (TESTING & MAINTENANCE),  
 \* IS INSTALLED WITH AN ACOUSTIC ENCLOSURE, WHICH BUFFERS SOUND OUTPUT TO A MAXIMUM OF 65 dB AT 7 METERS (~23 FEET),  
 \* IS COMPLIANT WITH APPLICABLE AIR QUALITY REGULATIONS.

**CUMULATIVE VOLUME CALCULATIONS:**  
 THE PHYSICAL DIMENSIONS OF THE PROPOSED GENERATOR w/ ENCLOSURE AND BASE FUEL TANK ARE LESS THAN 250 CU. FT. IN VOLUME.  
 BASE FUEL TANK = 114.0"x40.94"x29" = 78.3 CU. FT.  
 GENERATOR BODY w/ ENCLOSURE = 93.21"x41.22"x49.82" = 110.8 CU. FT.  
 TOTAL CUMULATIVE VOLUME OF GENSET = 78.3 + 110.8 = 189.1 CU. FT.

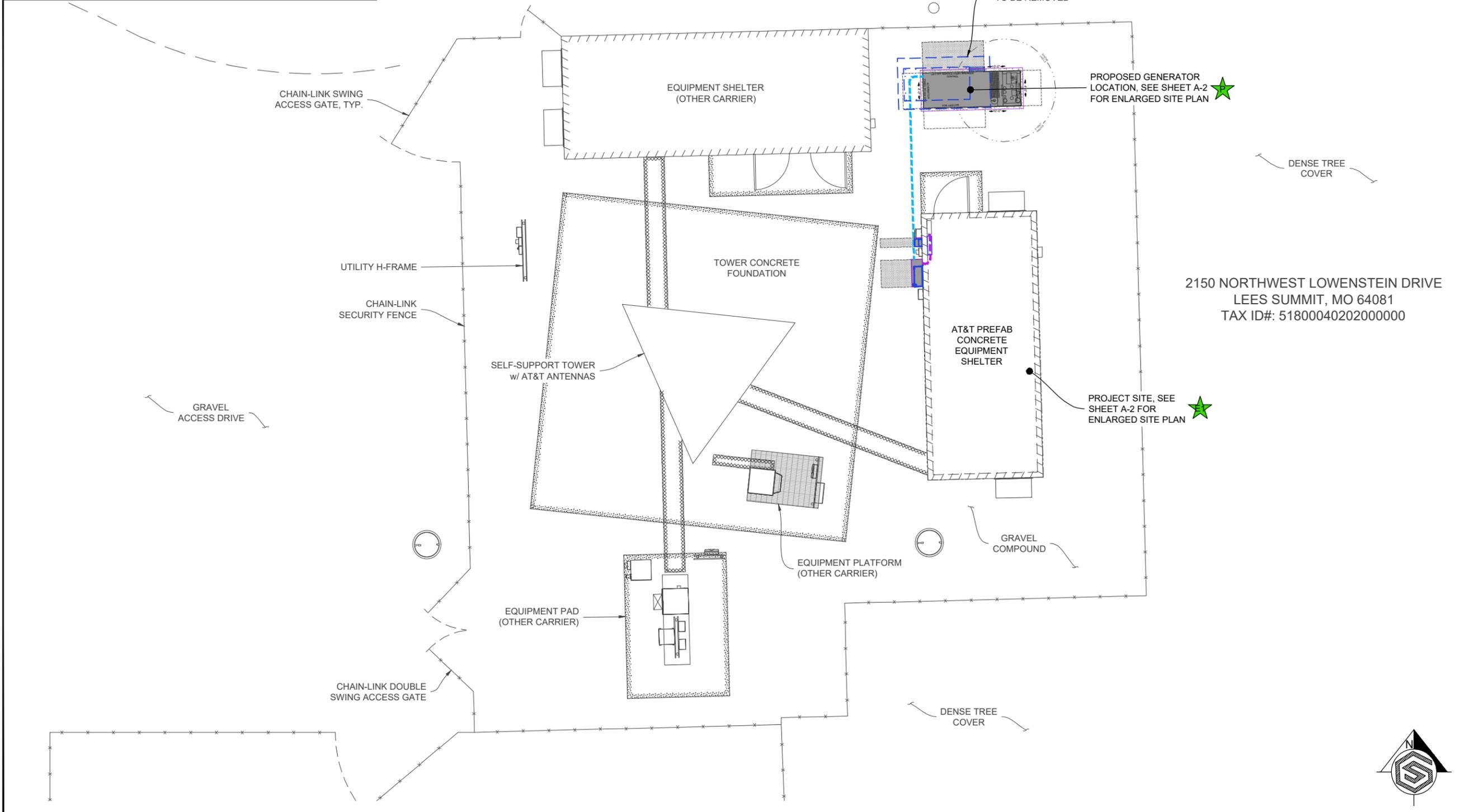
**EXISTING CONDITIONS:**  
 THESE DRAWINGS WERE PRODUCED WITH INFORMATION PROVIDED BY THE CLIENT. LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION, GEOSTRUCTURAL DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINE, EASEMENTS AND SETBACKS.

**AT&T LEASE AREAS**

- ★ EXISTING APPROXIMATE (294 SQ.FT.) LEASE AREA
- ★ EXISTING APPROXIMATE (45 SQ.FT.) GENERATOR LEASE AREA
- ★ PROPOSED 4'-0"x10'-0" (40 SQ.FT.) GENERATOR LEASE AREA

EXISTING LEASE AREA SIZES WERE OBTAINED FROM LEASE DOCUMENTS PROVIDED TO GEOSTRUCTURAL AND ARE SHOWN FOR REFERENCE ONLY. REFER TO FINAL LEASE DOCUMENTS FOR APPROVED EXISTING AND PROPOSED LEASE AREAS.

**NOTE:**  
 EVERYTHING SHOWN IS EXISTING UNLESS MARKED PROPOSED



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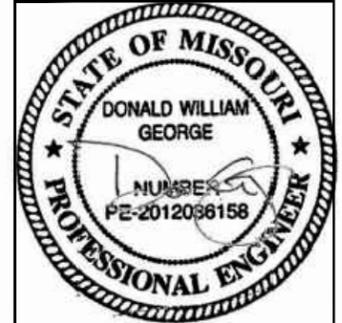


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JURISDICTION USE:

**SHEET TITLE:**  
 OVERALL SITE PLAN

**SHEET NUMBER:**  
 A-1

**UTILITY NOTE:**

THE UTILITIES AS SHOWN ON THIS SET OF DRAWINGS WERE DEVELOPED FROM RECORD INFORMATION. THE INFORMATION PROVIDED IS IMPLIED NOT INTENDED TO BE A COMPLETE INVENTORY OF THE UTILITIES IN THIS AREA. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES (WHETHER SHOWN OR NOT) AND PROTECT SAID UTILITIES FROM ANY DAMAGE CAUSED BY CONTRACTOR'S ACTIVITIES.

**EXISTING CONDITIONS:**

THESE DRAWINGS WERE PRODUCED WITH INFORMATION PROVIDED BY THE CLIENT. LINES, EASEMENTS, AND SETBACKS SHALL BE VERIFIED PRIOR TO START OF CONSTRUCTION. GEOSTRUCTURAL DOES NOT GUARANTEE THE ACCURACY OF SAID PROPERTY LINE, EASEMENTS AND SETBACKS.

**SCOPE OF WORK DETAILS:**

**GENERAL:**

- NEW KOHLER DIESEL GENERATOR PROVIDED BY GENERAL DYNAMICS & INSTALLED BY GENERAL CONTRACTOR. SEE SHEETS E-4.0, E-4.1, E-4.2.
- NEW CONCRETE PAD PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE SHEET S-1.
- NEW KOHLER AUTOMATIC TRANSFER SWITCH PROVIDED BY GENERAL DYNAMICS & INSTALLED BY CONTRACTOR. SEE SHEETS S-2, E-5.0, E-5.1.
- CONTRACTOR TO VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL RESTORE & REPAIR ANY DAMAGED AREAS CAUSED BY CONSTRUCTION TO ORIGINAL OR BETTER CONDITION.
- INNER AND OUTER TANK TESTING DOCUMENTATION SHALL BE PROVIDED ONCE TANK IS IN PLACE ON SITE IN ACCORDANCE WITH NFPA 30.
- A CALIBRATION CHART OF PERMANENT AND DURABLE CONSTRUCTION SHALL BE LOCATED AT THE FILL BOX.

**CONDUITS:**

- INSTALL PULL STRING IN EACH CONDUIT.
- (2) EXISTING OR NEW ELECTRICAL CONDUITS WITH CONDUCTORS TO BE INSTALLED FROM NEW GENERATOR TO NEW ATS. CONDUIT PROVIDED AND INSTALLED BY GENERAL CONTRACTOR. SEE SHEETS E-1, E-2.
- (2) EXISTING OR NEW ELECTRICAL CONDUITS WITH CONDUCTORS TO BE INSTALLED FROM NEW GENERATOR TO AC PANEL. CONDUIT PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE SHEETS E-1, E-2.
- (1) EXISTING OR NEW ALARM CONDUIT & CABLING PROVIDED & INSTALLED BY GENERAL CONTRACTOR. SEE SHEETS E-1, E-2.

**GROUNDING:**

- NEW EXOTHERMIC CONNECTION FROM EXISTING GROUND RING TO NEW MECHANICAL CONNECTION AT GENERATOR CHASSIS. GENERAL CONTRACTOR TO VERIFY LOCATION IN FIELD. LOCATE GROUND RODS NO MORE THAN 8'-0" APART. SEE SHEET E-3.

**POWER ROUTING KEYED NOTES:**

- ATS** EXISTING AT&T AUTOMATIC TRANSFER SWITCH TO BE REMOVED AND REPLACED WITH NEW ATS
- INT** INTERCEPT EXISTING CONDUIT AND CONDUCTORS AT ATS LOCATION AND RE-ROUTE THROUGH PROPOSED ATS (-5'). COORDINATE PATH WITH CONSTRUCTION MANAGER
- AC** EXISTING AC LOAD CENTER
- CON** EXISTING OR PROPOSED AT&T UNDERGROUND GENERATOR CONDUIT ROUTE (~25'). CONTRACTOR TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. SEE SHEETS E-1, E-2.  
SEE SHEET E-1 FOR SINGLE LINE DIAGRAM.

**GENERATOR KEYED NOTES:**

- GEN** PROPOSED AT&T 50KW DIESEL GENERATOR w/ SOUND ATTENUATED ENCLOSURE, NORMAL/EMERGENCY TANK VENTING AND BASE FUEL TANK. SEE SHEETS S-1, S-2, E-3.
- 1** FUEL FILL SHALL BE PROVIDED WITH SPILL CONTROL, WITH A SOLID FILL CONNECTION, AND WITH OVERFILL PREVENTION
- 2** FUEL TANK NORMAL AND EMERGENCY VENTS SHALL TERMINATE AT LEAST 12'-0" ABOVE THE ADJACENT GRADE. SEE SHEET S-2.
- 3** NFPA 704 PLACARD AND OTHER SIGNAGE. SEE SHEET S-2.

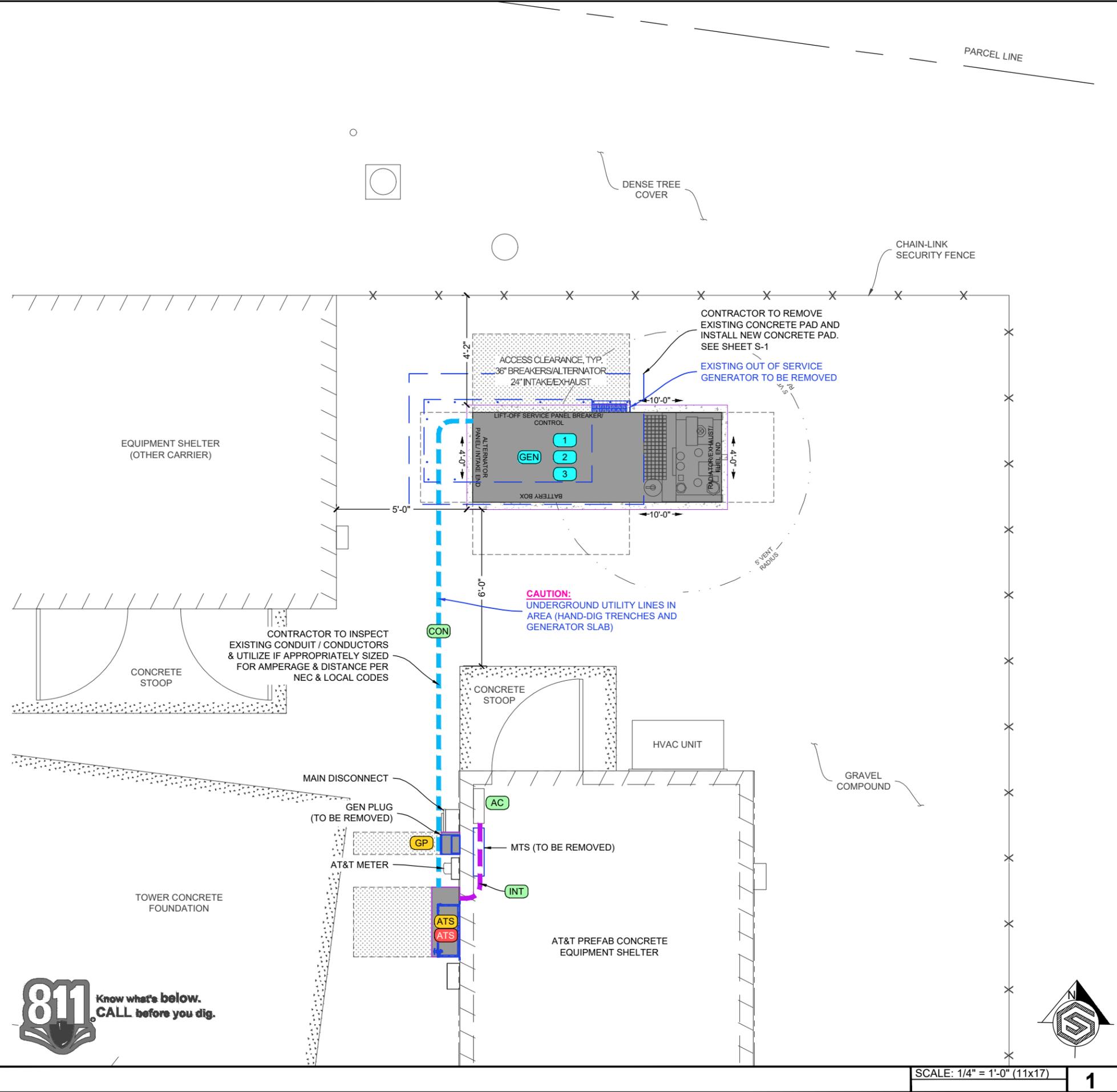
**ATS / EQUIPMENT KEYED NOTES:**

- ATS** PROPOSED ATS MOUNTED ON EXTERIOR WALL WITH 36" FRONT CLEARANCE. SEE SHEET S-2.
- GP** CONTRACTOR TO REPLACE EXISTING GENPLUG w/ NEW KOHLER CAMLOCK (UTILIZE EXISTING CONDUIT & CONDUCTORS; REROUTE TO NEW ATS). COORDINATE WITH AT&T CONSTRUCTION MANAGER.

**NOTE:**

EVERYTHING SHOWN IS EXISTING UNLESS MARKED PROPOSED

ENLARGED SITE PLAN





**GENERAL DYNAMICS**  
Information Technology

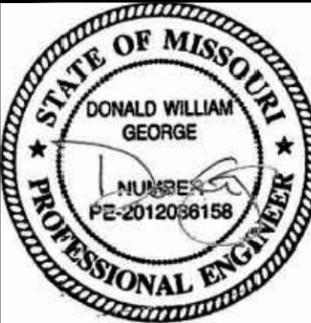


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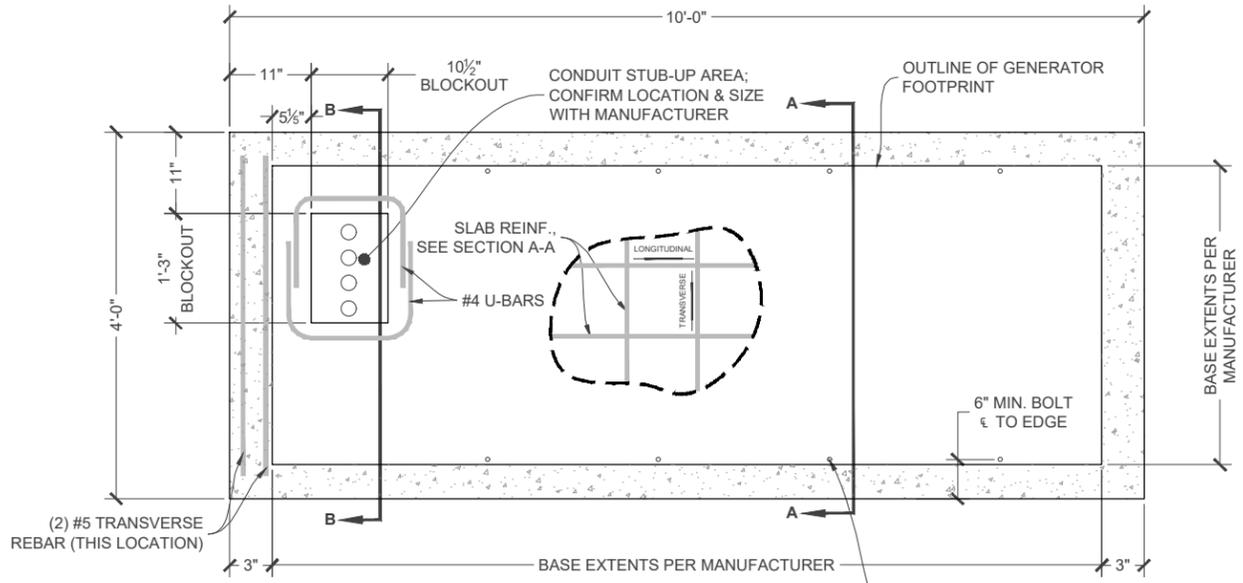
DATE SIGNED: 11/3/25

SITE INFORMATION:  
**UNITY VILLAGE**  
10000434  
**GENERATOR REPLACEMENT PROJECT**  
2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:  
**ENLARGED SITE PLAN**

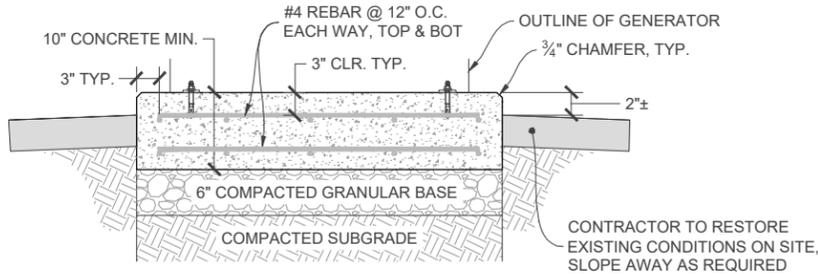
SHEET NUMBER:  
**A-2**



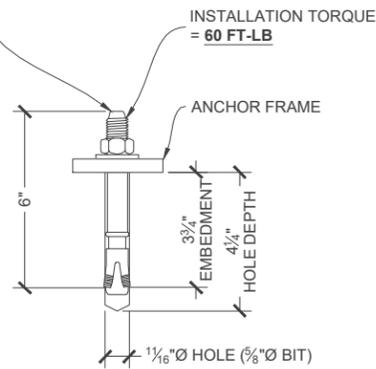
**GENERATOR PAD DETAIL**  
SCALE: 1/2"=1'-0" (11x17) 1"=1'-0" (24x36)

(6) 5/8"Ø x 3 3/4" EMBED HILTI KWIK TYZ2 STAINLESS STEEL EXPANSION ANCHOR (OR APPROVED EQUAL). REFERENCE ICC-ES ESR-4266 REPORT.

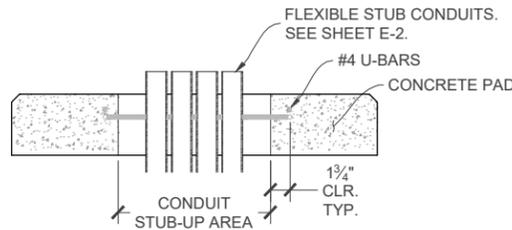
INSTALLATION TORQUE = 60 FT-LB



**GENERATOR PAD - SECTION A-A**  
SCALE: 1/2"=1'-0" (11x17) 1"=1'-0" (24x36)



**TYPICAL ANCHOR**



**GENERATOR PAD - SECTION B-B**

**STRUCTURAL DESIGN NOTES:**

- ALL LOADS DERIVED FROM REQUIREMENTS OF THE IBC 2021, ASCE 7-16 & ANSI TIA-222.  
BUILDING & COMMUNICATION STRUCTURES: (38.93361° / -94.41694°)
- WIND LOADS:  
V = 109 MPH ULTIMATE WIND SPEED  
RISK CATEGORY = II; EXPOSURE CATEGORY = C; TOPOGRAPHIC CATEGORY = 1.  
IMPORTANCE FACTOR = 1.0.
  - SEISMIC LOADS:  
RISK CATEGORY = II; SITE CLASS = D - DEFAULT.  
S<sub>s</sub> = 0.099 ; S<sub>1</sub> = 0.068 ; S<sub>ds</sub> = 0.106 ; a<sub>p</sub> = 1.0 ; R<sub>p</sub> = 2.5

**CONCRETE NOTES:**

- PRIOR TO EXCAVATION, CHECK THE AREA FOR UNDERGROUND FACILITIES.
- ALL CONCRETE SHALL BE IN ACCORDANCE WITH CHAPTER 19 OF THE IBC & ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", LATEST EDITION & HAVE THE FOLLOWING PROPERTIES:  
A MINIMUM 28-DAY COMPRESSIVE STRENGTH (f<sub>c</sub>) OF 4,000 PSI.  
B CEMENT SHALL BE "LOW-ALKALI" TYPE IIA (MODERATE SULFATE RESISTANCE, AIR ENTRAINING) CONFORMING TO ASTM C150.  
C MAXIMUM WATER/CEMENT RATIO OF 0.45 AND AIR-ENTRAINED 4% TO 7%.  
D CONCRETE PROPORTIONING SHALL BE DESIGNED BY AN APPROVED LABORATORY. TOLERANCES IN ACCORDANCE WITH ACI 117. COPIES OF CONCRETE MIX SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PLACEMENT.  
E ALL AGGREGATE USED IN CONCRETE SHALL CONFORM TO ASTM C33. USE ONLY AGGREGATES KNOWN NOT TO CAUSE EXCESSIVE SHRINKAGE. MAXIMUM AGGREGATE SIZE TO BE 3/4".  
F MAXIMUM SLUMP: REFER TO GEOTECHNICAL REPORT WHEN APPLICABLE.
- FORMWORK FOR CONCRETE SHALL CONFORM TO ACI 347. TOLERANCES FOR FINISHED CONCRETE SURFACES SHALL MEET CLASS-C REQUIREMENTS. IN NO CASE SHALL FINISHED CONCRETE SURFACES EXCEED THE FOLLOWING VALUES AS MEASURED FROM NEAT PLAN LINES AND FINISHED GRADES: ± 1/4" VERTICAL, ± 1" HORIZONTAL.
- CHAMFER ALL EXPOSED CORNERS AND FILLET ENTRANT ANGLES 3/4" U.N.O.
- CONCRETE FINISHING: CONCRETE SURFACES SHALL BE FINISHED IN ACCORDANCE WITH ACI. PROVIDE ROUGH FINISH FOR ALL SURFACES NOT EXPOSED TO VIEW AND SMOOTH FINISH FOR ALL OTHERS, U.N.O.
- STEEL REINFORCEMENT AND CONCRETE SHOULD BE PLACED IMMEDIATELY UPON COMPLETION OF THE FOUNDATION EXCAVATION. CONTRACTOR SHALL NOT ALLOW A COLD JOINT TO FORM IN THE CONCRETE. PORTION AT GRADE SHOULD BE FORMED. TEMPORARY CASING MAY BE REQUIRED TO PREVENT CAVING PRIOR TO CONCRETE PLACEMENT.

**REINFORCING STEEL NOTES:**

- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615. VERTICAL/HORIZONTAL BARS SHALL BE GRADE 60; TIES OR STIRRUPS SHALL BE A MINIMUM OF GRADE 40. ALL REINFORCING STEEL SHALL HAVE 3" (± 3/8") OF CONCRETE COVER, U.N.O.
- ALL BAR BENDS, HOOKS, SPLICES AND OTHER REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ACI 315.
- ALL BARS SHALL BE SPLICED WITH A MINIMUM LAP OF 48 BAR DIAMETERS. LAP SPLICES OF DEFORMED BARS IN TENSION ZONES SHALL BE CLASS-B SPLICES. WELDING OF BARS IS NOT PERMITTED.
- AT ALL CORNERS AND WALL INTERSECTIONS, PROVIDE BENT HORIZONTAL BARS TO MATCH THE HORIZONTAL REINFORCING STEEL.
- PROVIDE VERTICAL DOWELS IN FOOTINGS AND AT CONSTRUCTION JOINTS TO MATCH VERTICAL REINFORCING BAR SIZE AND SPACING.
- ACI-APPROVED PLASTIC-COATED BAR CHAIRS OR PRECAST CONCRETE BLOCKS SHALL BE PROVIDED FOR SUPPORT OF ALL GRADE-CAST REINFORCING STEEL & SHALL BE SUFFICIENT IN NUMBER TO PREVENT SAGGING. METAL CLIPS OR SUPPORTS SHALL NOT BE PLACED IN CONTACT WITH THE FORMS OR THE SUB-GRADE.
- DOWELS AND ANCHOR BOLTS SHALL BE WIRED OR OTHERWISE HELD IN CORRECT POSITION PRIOR TO PLACING CONCRETE. IN NO CASE SHALL DOWELS OR ANCHOR BOLTS BE "STABBED" INTO FRESHLY-POURED CONCRETE.

**FOUNDATION & SOIL NOTES:**

- FOUNDATION DESIGN BASED ON PRESUMPTIVE MINIMUM SOIL PARAMETERS (ALLOWABLE BEARING = 1,500 PSF; ALLOWABLE PASSIVE SLIDING = 100 PSF/FT) IN ACCORDANCE WITH THE IBC.
- THE EXCAVATION SHALL BE DOCUMENTED BY THE INSTALLATION CONTRACTOR PRIOR TO THE PLACEMENT OF CONCRETE AND THE CONTRACTOR SHALL PROVIDE DOCUMENTATION TO CONSTRUCTION MANAGER & AT&T RECORDS PURPOSES.
- THE CONTRACTOR SHALL DETERMINE THE MEANS AND METHODS NECESSARY TO SUPPORT THE EXCAVATION DURING CONSTRUCTION.
- ALL FOUNDATIONS TO BE PLACED ON FIRM, UNDISTURBED, INORGANIC MATERIAL. PROOF ROLL SUB-GRADE PRIOR TO PLACING CONCRETE WHERE THE MATERIAL HAS BEEN DISTURBED BY EQUIPMENT. UNACCEPTABLE/DISTURBED MATERIAL SHALL BE OVER-EXCAVATED AND REPLACED WITH "LEAN CONCRETE FILL" OR REPLACED WITH STRUCTURAL BACKFILL.
- STRUCTURAL BACKFILL SHALL BE GRANULAR FREE-DRAINING MATERIAL FREE OF DEBRIS, ORGANICS, REFUSE AND OTHERWISE DELETERIOUS MATERIALS. MATERIAL SHALL BE PLACED IN LIFTS NO GREATER THAN 6" IN DEPTH AND COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED PER ASTM D1557 (MODIFIED PROCTOR).

**MECHANICAL ANCHOR NOTES:**

- HILTI PRODUCTS MUST BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, AS INCLUDED IN THE PACKAGING.
- CONTRACTOR SHALL AVOID DRILLING HOLES IN VERTICAL/HORIZONTAL REINFORCING BARS.
- HOLES MUST BE WIRE BRUSHED AND BLASTED WITH COMPRESSED AIR PRIOR TO INSTALLATION. TEMPERATURES/METHODS/WORKING TIME/ETC. ARE TO BE IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.

NOTE: IT IS ACCEPTABLE TO INSTALL AND UTILIZE A PRE-CAST GENERATOR PAD FOUNDATION SO LONG AS THE MINIMUM CONCRETE AND REINFORCING REQUIREMENTS DETAILED HEREIN ARE MET, AND PROVIDED SUB-GRADE SURFACE COMPACTION AND PREPARATION ARE PERFORMED ADEQUATELY IN ACCORDANCE WITH THIS PLAN.



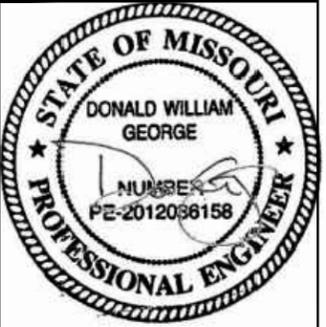
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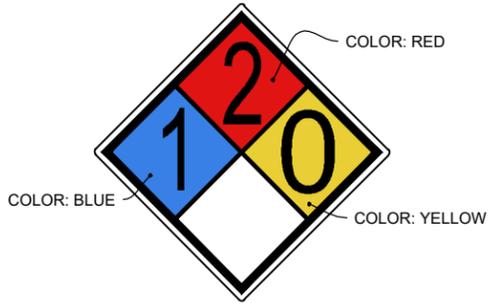
SHEET TITLE:  
**GENERATOR PAD DETAILS**

SHEET NUMBER:  
**S-1**



PLACE ON (2) VISIBLE SIDES OF PROPOSED GENERATOR TANK

15" x 12" SIGN



PLACE ON (2) VISIBLE SIDES OF PROPOSED GENERATOR TANK

15" x 15" SIGN



PLACE ON (2) VISIBLE SIDES OF PROPOSED GENERATOR TANK

11" x 11" SIGN



PLACE ON (2) VISIBLE SIDES OF PROPOSED GENERATOR TANK

6.5" x 3" SIGN

CONTRACTOR TO PROVIDE REQUIRED SIGNAGE FOR ELECTRICAL PANELS, DISCONNECTS, TRANSFER SWITCHES, ETC. PER NATIONAL ELECTRICAL CODE ARTICLE 702.7

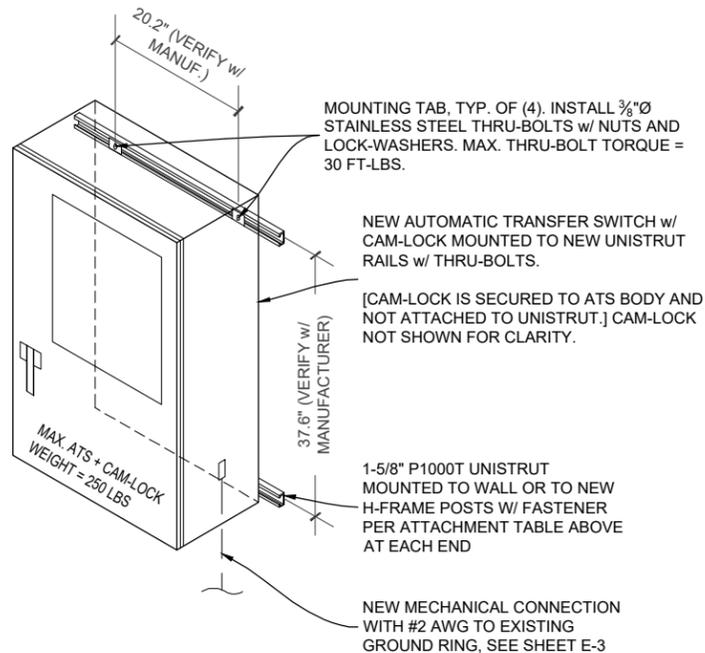
**REQUIRED LABELING & SIGNAGE**

**ATS LOCATION NOTE:**  
ATS LOCATION SHOWN IN PLANS IS THE BEST AVAILABLE BASED ON THE INFORMATION PROVIDED. ALTERNATIVE LOCATION MAY BE REQUIRED AND SHALL BE APPROVED BY CONSTRUCTION MANAGER AND/OR LANDLORD. THIS DETAIL PROVIDES ALTERNATIVE METHODS OF INSTALLATION (NOT ALL DETAILS MAY BE USED).

**UNISTRUT WALL ATTACHMENT:**

WALL CONSTRUCTION TYPE	FASTENER
HOLLOW, AT STUD	3/8" DIA. x 2-1/2" EMBED SAE J429 GR.1 LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-270 (ESR-4143) WITH SCREEN, MINIMUM EMBEDMENT 2-3/8"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-200-R V3 (ESR-4868), MINIMUM EMBEDMENT 2-3/8"

NOTES:  
1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS  
2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH WALL



**ATS MOUNTING DETAIL**

**DIESEL TANK CHECKLIST:**

- READILY ACCESSIBLE MANUAL SHUTOFF VALVES SHALL BE INSTALLED ON SUPPLY PIPING AT THE POINT OF USE AND THE TANK (IFC 5003.2.2.1)  
SECONDARY CONTAINMENT-TYPE TANKS SHALL BE UL LISTED, UL-142, AND COMPLY WITH ALL OF THE FOLLOWING REQUIREMENTS; OTHERWISE TRADITIONAL SPILL CONTROL OR SECONDARY CONTAINMENT MEASURES, SUCH AS DIKING, SHALL BE UTILIZED (NFPA 30 22.11.4)
- + CAPACITY OF DIESEL TANK SHALL NOT EXCEED 50,000 GAL.
  - + PIPING CONNECTIONS SHALL BE ABOVE THE LIQUID LEVEL
  - + MEANS SHALL BE PROVIDED TO PROTECT RELEASE OF LIQUID BY SIPHON FLOW.
  - + MEANS TO DETERMINE LIQUID LEVEL IN TANK SHALL BE PROVIDED TO DRIVER.
  - + MEANS TO PREVENT OVERFILLING BY AN ALARM AT 90% CAPACITY AND AUTOMATICALLY STOPPING DELIVERY OF LIQUID TO THE TANK AT 95% CAPACITY.
  - + SPACING BETWEEN ADJACENT TANKS SHALL NOT BE LESS THAN 3'.
  - + TANK SHALL BE PROTECTED AGAINST DAMAGE FROM VEHICLES.
  - + INTERSTITIAL SPACE SHALL HAVE EMERGENCY VENTING.
  - + INTEGRITY OF SECONDARY CONTAINMENT SHALL BE ESTABLISHED.
  - + THE SECONDARY CONTAINMENT SHALL WITHSTAND THE HYDROSTATIC HEAD OF THE MAXIMUM AMOUNT OF LIQUID STORED IN THE PRIMARY TANK.

**TANK LABELING AND PROTECTIONS:**

- THE FOLLOWING SIGNS AND LABELS SHALL BE AFFIXED TO THE TANK.
- + "DIESEL FUEL - NO SMOKING" (IFC 5703.5 & IFC 5003.7.1)
  - + NFPA 704 PLACARD (IFC 5003.5)
  - + EH&S
  - + AT&T MOBILITY SIGN #3
- CRASH PROTECTION COMPLYING WITH IFC 312 SHALL BE PROVIDED (IFC 5003.9.3) (IF APPLICABLE)

**GENERATOR FEATURES:**

- GENERATORS SHALL BE UL 2200 LISTED AND COMPLY WITH NFPA 37 AND NFPA 110. (IFC 1203.1.1)  
INSTALLATIONS SHALL HAVE A LABELED REMOTE MANUAL STOP (NFPA 110 5.6.5.6 & 5.6.5.6.1 AND NFPA 37 9.2.1.1)

**DOUBLE WALL FUEL TANK BASE SPECIFICATION:**

- REF: AT&T 50KW GENERATOR PACKAGE  
UL REGISTRATION NUMBER: MH 18459  
UL 142 DOUBLE WALL FUEL TANK BASE SPECIFICATION
- FUEL TANK BASE CONSTRUCTION:  
BE CONSTRUCTED IN ACCORDANCE WITH UNDERWRITERS LABORATORIES STANDARD UL-142. BE CONSTRUCTED IN ACCORDANCE WITH FLAMMABLE COMBUSTIBLE LIQUIDS CODE, NFPA 30; THE STANDARD FOR INSTALLATION USE OF STATIONARY COMBUSTIBLE ENGINE GAS TURBINES, NFPA 37; AND THE STANDARD FOR EMERGENCY STANDBY POWER SYSTEMS, NFPA 110.
- + MINIMUM ANCHOR QUANTITY PER MANUFACTURER OR THIS PLAN SET; WHICHEVER IS LARGER.
- SUB BASE TANK TESTING:  
+ PRIMARY TANK & SECONDARY CONTAINMENT BASIN SECTIONS SHALL BE PRESSURIZED AT 3-5 PSI AND LEAK-CHECKED TO ENSURE INTEGRITY OF SUB BASE WELD SEAMS PER UL-142 STANDARDS  
FUEL FILL: 2.5 - 5 GALLON SPILL CONTAINMENT WITH ALARM
- + 40% REMAINING FOR ALARM
  - + 20% REMAINING FOR SHUT-DOWN
- FACTORY PRE-SET AT 90% FULL FOR ALARM
- FUEL CONTAINMENT BASIN:  
SUB BASE TANK SHALL INCLUDE A WELDED STEEL CONTAINMENT BASIN, SIZED AT A MINIMUM OF 110% OF THE TANK. CAPACITY TO PREVENT ESCAPE OF FUEL INTO THE ENVIRONMENT IN THE EVENT OF A TANK RUPTURE. A FUEL CONTAINMENT BASIN LEAK DETECTOR SWITCH SHALL BE PROVIDED.

**NEPA NOTES:**

- CONSTRUCTION, INSTALLATION, MAINTENANCE, & OPERATIONAL TESTING OF EPSS SHALL COMPLY WITH THE LATEST ADOPTED EDITION OF NFPA 110.
- ALL ELECTRICAL WORK SHALL COMPLY WITH LATEST ADOPTED EDITION OF NFPA 70 - NATIONAL ELECTRICAL CODE.

**FUEL TANK NOTES:**

- THE TANK SHALL BE MANUFACTURED WITH THE FOLLOWING:
- INTERSTITIAL ELECTRONICALLY MONITORED RUPTURE BASIN
  - ALARM TO MONITOR THE SPACE BETWEEN THE PRIMARY AND SECONDARY TANK.
  - OVERFILL ALERT TO VISUALLY WARN WHEN THE TANK IS FILLED UPON CAPACITY.
  - OVERSPILL CONTAINMENT AT FILL PORT TO PREVENT SPILL OF FUEL DURING FILLING OPERATIONS.
  - 2.5/5 GALLON OVERSPILL CONTAINMENT W/ LOCKABLE CAP.



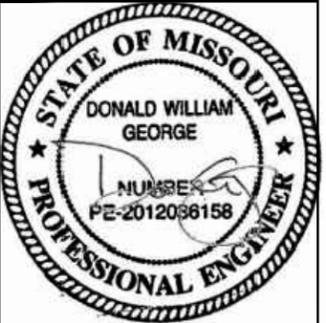
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SHEET TITLE:  
**GENERAL STRUCTURAL DETAILS**

SHEET NUMBER:  
**S-2**

**CONDUIT / WIRE SCHEDULE:**

NO.	FROM	TO	WIRES	GROUND	CONDUIT SIZE	FUNCTION
①	NORMAL POWER SOURCE	AUTOMATIC TRANSFER SWITCH	(3) 3/O	(1) #4	(1) 2"	NORMAL POWER FEEDER TO ATS (CUT BACK EXISTING)
②	AUTOMATIC TRANSFER SWITCH	LOAD CENTER	(3) 3/O	(1) #4	(1) 2"	POWER FEEDER FROM ATS TO PANELS
③	GENERATOR	AUTOMATIC TRANSFER SWITCH	(3) W/C	(1) W/C	(1) W/C	STANDBY POWER FEEDER TO ATS
④	AUTOMATIC TRANSFER SWITCH	GENERATOR	(2) W/C	(1) W/C	(1) W/C	START CIRCUIT
⑤	LOAD CENTER (DISTRIBUTION CENTER)	GENERATOR	(2) W/C (2) W/C	(1) W/C (1) W/C	(1) W/C (1) W/C	CKT FOR GEN BLOCK HEATER & BATTERY HEATER, CKT FOR BATTERY CHARGER,
⑥	GENERATOR	THROUGH ATS TO ALARM BLOCK	12-PAIR 24 AWG OR 2EA 4-PAIR CAT5	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
⑦	AUTOMATIC TRANSFER SWITCH	ALARM BLOCK	(2) 12-PAIR 24 AWG OR (2) 4-PAIR CAT5 (1) 1-PAIR 24AWG	N/A	1"	ALARM CABLES (1) 12 PAIR 24 AWG (RUN THRU INTERIOR OF SHELTER OR GROUND EQUIPMENT & INTO ALARM BOX). PROVIDE SINGLE PAIR FOR COMMERCIAL POWER FAIL ALARM. PROVIDE 24" OF SLACK CABLE. FINAL PUNCH DOWN IS BY AT&T TECH. LABEL ALL WIRES
⑧	CAM-LOCK BOX	AUTOMATIC TRANSFER SWITCH	(3) 3/O	(1) #4	(1) 2"	STANDBY POWER FEEDER TO ATS

(W/C) = SEE WIRE/CONDUIT SIZING TABLE FOR VALUES

**ATS POLE NOTE:**

NEW ATS/CAMLOCK ARE CONFIGURABLE FOR SINGLE OR THREE PHASE OPERATION. IN SINGLE PHASE INSTALLATIONS, 3-POLE ATS TO BE INSTALLED WITH ONE POLE NOT CONNECTED (UNUSED) AND TO BE CONFIGURED FOR DUAL-POLE USE. NEUTRAL SHALL NOT BE SWITCHED.

**CONDUCTOR/CONDUIT NOTES:**

UNLESS NOTED OTHERWISE:  
- CONDUCTORS SHALL BE CU THHN/ THWN/ THWN-2 RATED 75°C. CONDUIT SHALL BE PVC SCH.40. CONDUIT THROUGH CONCRETE OR ABOVE GRADE SHALL BE SCH.80.

**ALARM WIRE IDENTIFICATION CHART:**

WIRE	ALARM
BROWN BROWN / WHITE	GENERATOR RUNNING
GREEN GREEN / WHITE	GEN MAJOR
BLUE BLUE / WHITE	GEN SHUTDOWN
ORANGE ORANGE / WHITE	LOW FUEL
BROWN * BROWN / WHITE *	FUEL LEAK

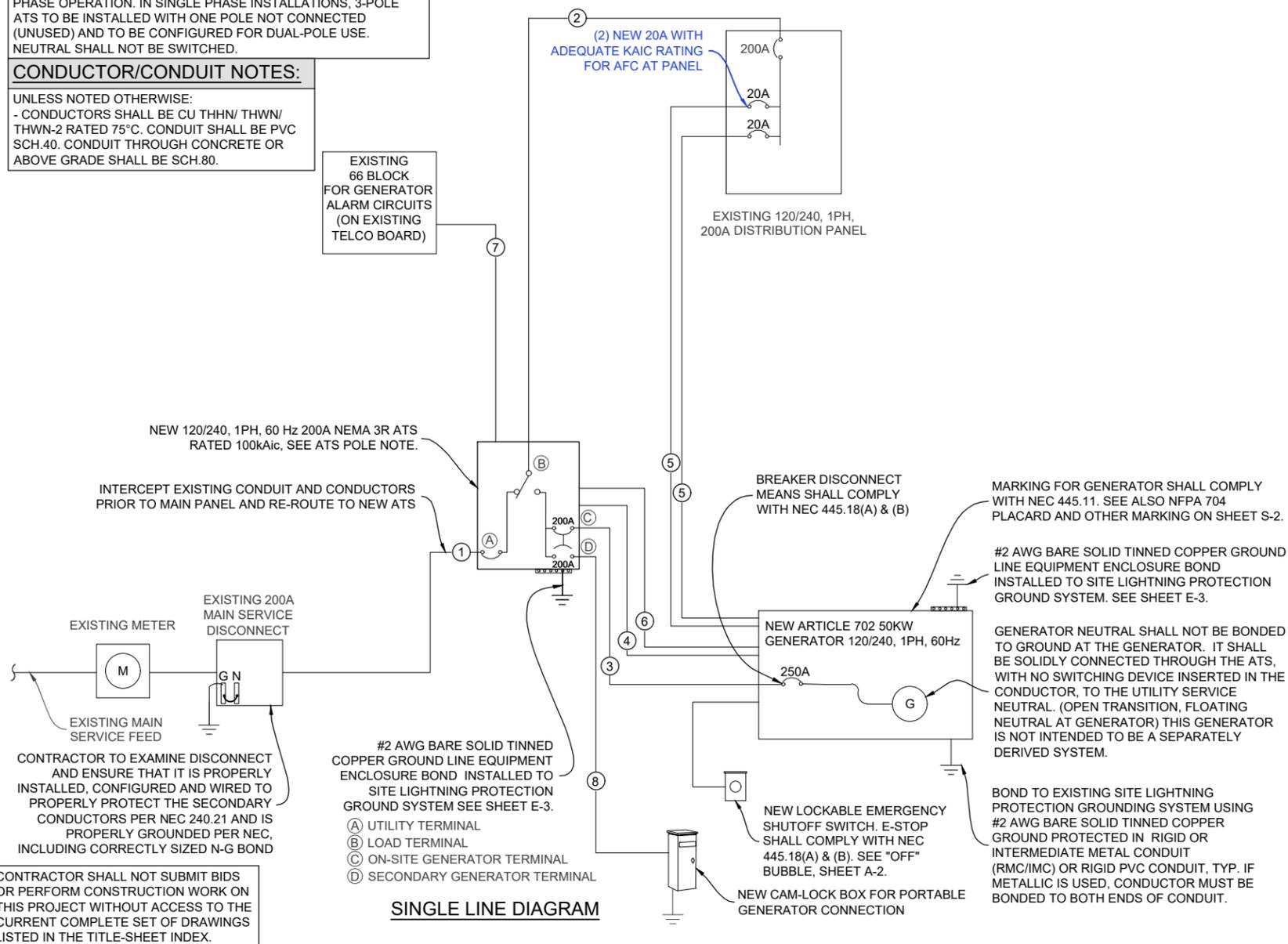
\*CAT5 CABLE ONLY, FROM 2ND CAT5 CABLE

**EXISTING DISTRIBUTION PANEL**



(2) PROPOSED 20 AMP BREAKERS FOR BLOCK HEATER, BATTERY HEATER, AND BATTERY CHARGER ON NEW AT&T GENERATOR (INSTALL FILLER PLATES ON ANY OPEN SLOTS)

ALL ELECTRICAL WORK CONDUCTED ON PANELS TO BE VERIFIED WITH CONSTRUCTION MANAGER AND CONDUCTED BY AN APPROVED ELECTRICAL CONTRACTOR LICENSED IN THE STATE.



**SINGLE LINE DIAGRAM**

**PANEL NOTES:**

- CONTRACTOR TO LABEL WIRES WITH P-TOUCH OR SIMILAR LABELS ONLY. ABSOLUTELY NO HANDWRITTEN LABELS.
- CONTRACTOR SHALL PERFORM A POWER STUDY ON EXISTING AC PANEL PRIOR TO INSTALLING, CHANGING, ALTERING, OR REMOVING ANY BREAKER. NO WORK SHALL BE COMPLETED ON AC PANEL WITHOUT PROPER INSPECTOR OR ENGINEER APPROVED DOCUMENTATION CONFIRMING CAPACITY ON SITE. ALL WORK SHALL CONFORM TO NEC VERSION ENFORCED BY A.H.J. AT TIME OF INSTALLATION.
- CONTRACTOR SHALL VERIFY THAT THE MAXIMUM DEMAND FOR ALL CONNECTED EQUIPMENT AT THIS SITE AS CALCULATED PER NEC DOES NOT EXCEED THE GENERATOR OUTPUT CIRCUIT BREAKER RATING. (SEE NOTE #4 ALSO.)
- IF MAXIMUM DEMAND OF GENERATOR OUTPUT CIRCUIT BREAKER RATING AS CALCULATED PER NEC IS CONTINGENT ON THE TWO HVAC UNITS NOT OPERATING CONCURRENTLY, THEN CONTRACTOR SHALL VERIFY THAT THE HVAC LEAD/LAG CONTROLLER IS CONFIGURED TO PREVENT CONCURRENT OPERATION. IF NOT, THEN CONTRACTOR SHALL RECONFIGURE IT AS NEEDED TO PREVENT TRIPPING THE CIRCUIT BREAKER.
- SEE REQUIRED LABELING & SIGNAGE; SHEET S-2.

**WIRE/CONDUIT SIZING: FEEDER MAX 1-WAY LENGTH IN FEET**

WIRE SIZE	250A OCP	250A OCP	250A OCP	GROUND WIRE SIZE	CONDUIT SIZE
	120/240V 1P	120/208V 1P	208Y/120V 3P		
1/O	-	-	-	#4	1-1/2"
2/O	-	-	-	#4	2"
3/O	-	-	-	#4	2"
4/O	-	-	-	#4	2"
250 KCMIL	284	246	284	#4	2-1/2"
300 KCMIL	318	275	318	#3	2-1/2"
350 KCMIL	354	307	354	#2	2-1/2"
400 KCMIL	383	332	383	#2	3"
500 KCMIL	436	378	436	#1	3"
600 KCMIL	469	406	469	1/O	3-1/2"
750 KCMIL	521	451	521	2/O	3-1/2"
1000 KCMIL	586	508	586	3/O	4"

FEEDER MAXIMUM LENGTH VALUES SHOWN ARE FOR MAX. FEEDER VOLTAGE DROP OF 2.5%.

**MAX. ONE-WAY LENGTH VS. WIRE SIZE FOR 20A CKT, AND NEC REQ'D INCREASED GROUND WIRE SIZE - BELOW GROUND**

WIRE SIZE	DISTANCE	GROUND WIRE SIZE	CONDUIT SIZE
#12	0 - 51 FT	#12	1"
#10	52 - 85 FT	#10	1"
#8	86 - 130 FT	#8	1"
#6	131 - 203 FT	#6	1"

FOR LONG RUNS, PER NEC 300.3(B)(1), FOR CONDUCTORS 1/O AND LARGER, CONTRACTOR MAY ELECT TO INSTALL EQUIVALENT SETS OF PARALLEL CONDUCTORS (UPSIZE GROUND WIRE AND CONDUIT ACCORDINGLY). SMALLER CONDUCTORS REQUIRING UPSIZING MUST BE REPLACED w/ ADEQUATELY SIZED LARGER CONDUCTORS.



**GENERAL DYNAMICS**  
Information Technology

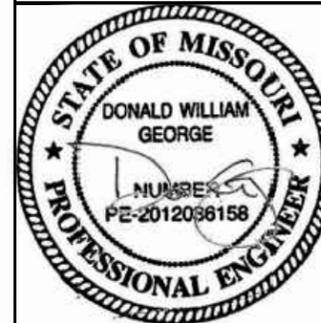


**REVISIONS**

REV	DATE	DESCRIPTION	INT
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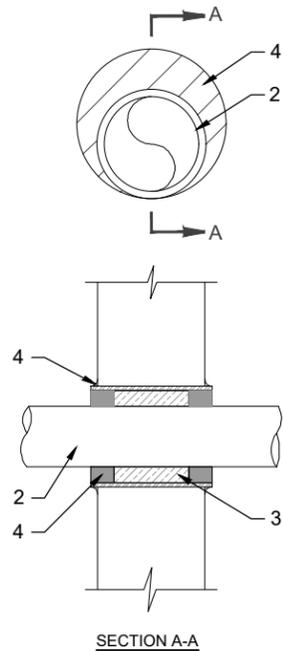
SITE INFORMATION:  
**UNITY VILLAGE**  
10000434

**GENERATOR REPLACEMENT PROJECT**  
2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:  
**ELECTRICAL DETAILS**

SHEET NUMBER:  
**E-1**



U.L. SYSTEM NO. C-AJ-1150  
 CONDUIT THROUGH BEARING WALL SIMILAR TO U.L. DESIGN NO. U902  
 F RATING = 3 HR  
 T RATING = 0 HR

- FLOOR OR WALL ASSEMBLY : MINIMUM 4-1/2" THICK REINFORCED LIGHTWEIGHT OR NORMAL WEIGHT (100-150 PCF) CONCRETE. WALL MAY ALSO BE CONSTRUCTED OF ANY UL CLASSIFIED CONCRETE BLOCKS\*. MAX DIAMETER OF OPENING IS 4". (SEE CONCRETE BLOCKS 9CATZ) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS.
- THROUGH PENETRATIONS : ONE METALLIC PIPE OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY. THE ANNULAR SPACE SHALL BE MINIMUM 0", (POINT CONTACT) TO MAXIMUM 1-3/8". THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED:
  - A. STEEL PIPE-NOMINAL 6" DIAMETER (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE
  - B. IRON PIPE-NOMINAL 6" DIAMETER (OR SMALLER) CAST OR DUCTILE IRON PIPE.
  - C. CONDUIT - NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOMINAL 3-1/2" DIAMETER (OR SMALLER) STEEL CONDUIT.
- PACKING MATERIAL: MINIMUM 6" THICKNESS OF MIN 4.0 PCF MINERAL WOOL BATTING INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.
- FILL, VOID, OR CAVITY MATERIAL\*: SEALANT: MINIMUM 1/4" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH TOP SURFACE OF FLOOR AND WITH BOTH SURFACES OF WALL. AT THE POINT CONTACT LOCATION BETWEEN PIPE AND CONCRETE, A MINIMUM 1/2" DIAMETER BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/PIPE INTERFACE ON THE TOP SURFACE OF FLOOR AND ON BOTH SURFACES OF WALL. W-RATING APPLIES ONLY WHEN CP601S OR CP604 SEALANT IS USED.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. : CP601S, CP604, CP606, OR FS-ONE SEALANT.

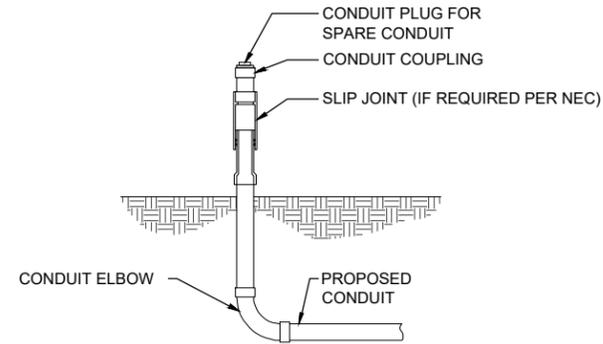
\* BEARING THE UL CLASSIFICATION MARK

NOTE:  
 1. IF EXISTING CONSTRUCTION VARIES FROM THIS DETAIL, AN EQUAL 3-HR U.L. PENETRATION APPROPRIATE FOR THE EXISTING WALL TYPE SHALL BE CONSTRUCTED  
 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHERSEAL ALL PENETRATIONS INTO OR THRU SHELTER WALL.

OUTER WALL PENETRATION DETAIL (IF APPLICABLE)

CONDUIT NOTES:

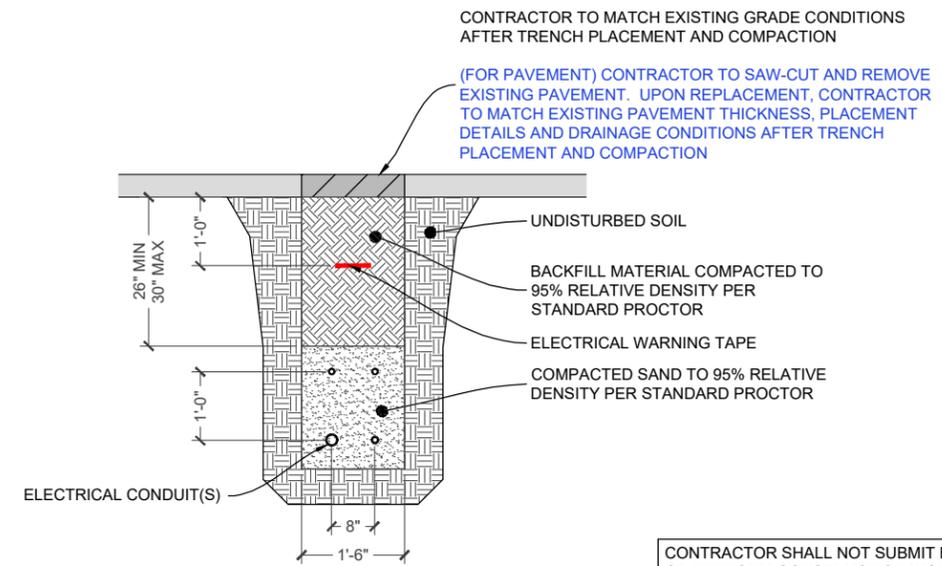
- VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.
- ALL CONDUIT ABOVE GRADE, THROUGH CONCRETE, OR IN AREAS OF HIGH TRAFFIC SHALL BE SCH 80 PVC U.N.O.
- PROVIDE SCH 40 PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
- PROVIDE SCH 80 PVC CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
- INSTALL UTILITY PULLBOXES PER NEC.



SLIP JOINT DETAIL (IF APPLICABLE)

CONDUIT NOTES:

- VERIFY WIRE AND CONDUIT QUANTITY & SIZES WITH GENERATOR MAKE & MODEL # PRIOR TO INSTALLATION. VERIFY ELECTRICAL REQUIREMENTS WITH LOCAL UTILITY PROVIDER.
- ALL CONDUIT ABOVE GRADE, THROUGH CONCRETE, OR IN AREAS OF HIGH TRAFFIC SHALL BE SCH 80 PVC U.N.O.
- PROVIDE SCH 40 PVC CONDUIT BELOW GRADE EXCEPT AS NOTED BELOW.
- PROVIDE SCH 80 PVC CONDUIT AND ELBOWS AT STUB UP LOCATIONS (I.E. SERVICE POLE, BTS EQUIPMENT, ETC.)
- INSTALL UTILITY PULLBOXES PER NEC.



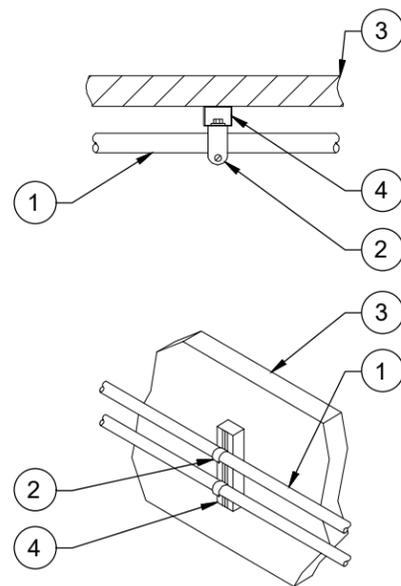
UTILITY TRENCH SECTION (IF APPLICABLE)

CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.

UNISTRUT WALL ATTACHMENT:

WALL CONSTRUCTION TYPE	FASTENER
HOLLOW, AT STUD	3/8" DIA. x 2-1/2" EMBED LAG SCREW
CONCRETE BLOCK (HOLLOW)	3/8" DIA. HILTI HY-270 (ESR-4143) WITH SCREEN, MINIMUM EMBEDMENT 2-3/8"
CONCRETE (SOLID)	3/8" DIA. HILTI HY-200-R V3 (ESR-4868), MINIMUM EMBEDMENT 2-3/8"

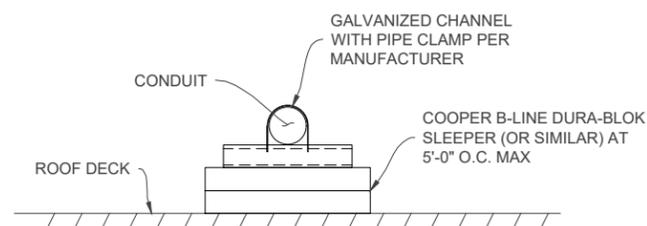
- NOTES:  
 1. USE GALVANIZED OR STAINLESS STEEL HARDWARE FOR WALL MOUNT AND CONNECTION OF CHANNELS  
 2. GC SHALL USE NON-SHRINKING CAULK TO WEATHER SEAL ALL PENETRATIONS INTO OR THROUGH WALL



- 1 CONDUIT (TYP)
- 2 P1119 OR P2558 CLAMP
- 3 EXISTING WALL/CEILING
- 4 GALVANIZED CHANNEL WITH PIPE CLAMP PER MANUFACTURER

"UNISTRUT" P1000T. REQUIRED LENGTH BASED ON QUANTITY OF CONDUIT TO BE MOUNTED. INSTALL AT 5'-0" O.C. MAX. W/ FASTENER PER ATTACHMENT TABLE AT EACH END.

CONDUIT WALL MOUNT DETAIL (IF APPLICABLE)



ROOF CONDUIT MOUNTING DETAIL (IF APPLICABLE)



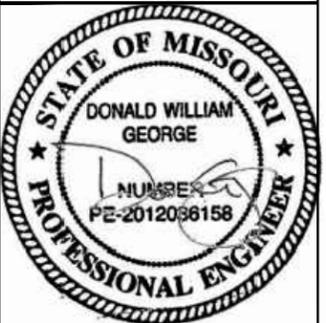
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REVISIONS			
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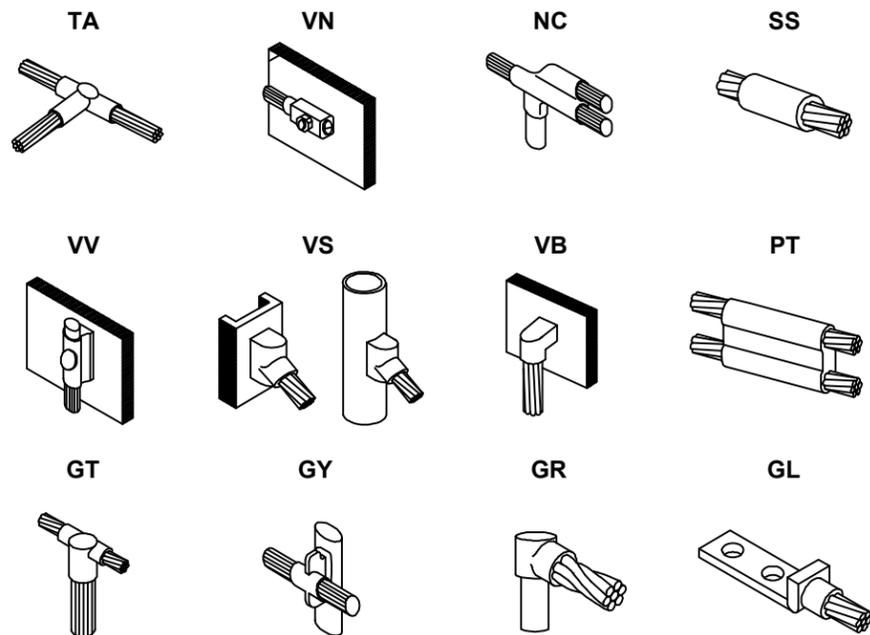
DATE SIGNED: 11/3/25

SITE INFORMATION:  
 UNITY VILLAGE  
 10000434  
 GENERATOR REPLACEMENT PROJECT  
 2150 NORTHWEST LOWENSTEIN DRIVE  
 LEES SUMMIT, MO 64081

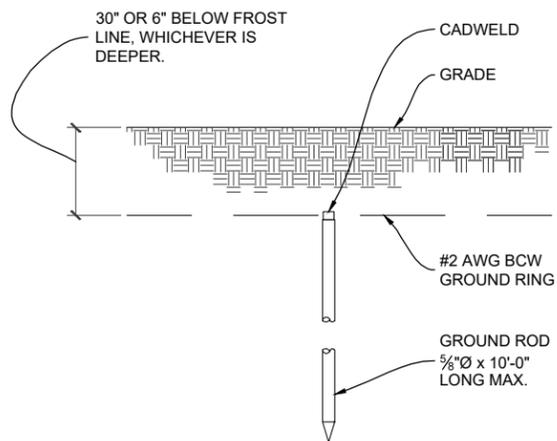
JURISDICTION USE:

SHEET TITLE:  
 ELECTRICAL  
 DETAILS

SHEET NUMBER:  
 E-2



CADWELD DETAILS



GROUND ROD DETAILS

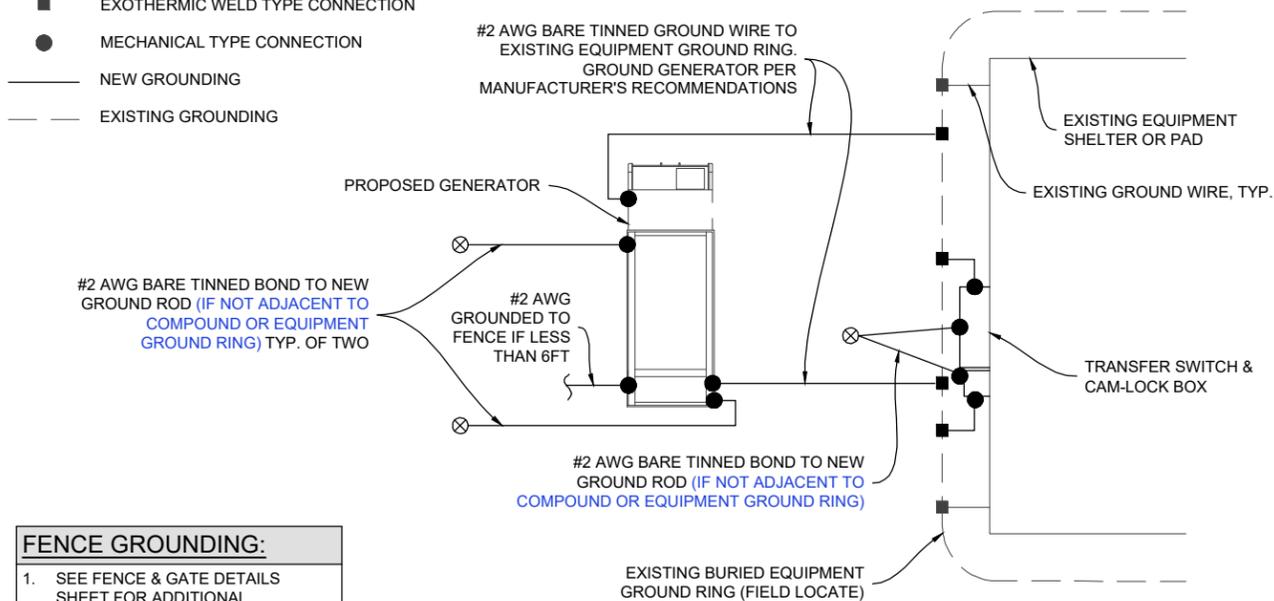
- GROUND ROD NOTES:**
- GROUND RODS MAY BE:
    - COPPER CLAD STEEL
    - SOLID COPPER
  - GROUND RODS SHALL HAVE A MAXIMUM SPACING TWICE THE LENGTH OF ROD
  - SEE RESISTIVITY REPORT FOR VERIFICATION AS AVAILABLE
  - A LARGER CONDUCTOR SHALL BE REQUIRED IN AREAS HIGHLY PRONE TO LIGHTNING AND/OR AREAS WITH HIGHLY ACIDIC SOIL
  - GROUND RODS INSTALLED WITHIN CLOSE PROXIMITY TO TOWER OR WHEN SOIL IS AT OR BELOW 2,000 OHM-CM, SHALL BE GALVANIZED TO PREVENT GALVANIC CORROSION OF TOWER, (SEE ANSI/TIA-EIA-222)
  - PROVIDE (1) GROUND LEAD TO EACH SIDE OF THE GENERATOR

**GROUNDING NOTES:**

- IF MORE THAN 20' FROM EXISTING GROUND RING, INSTALL NEW GROUND RODS AT MINIMUM SPACING OF 10' O.C. TOP OF ROD AND GROUND WIRE TO BE BELOW FROST LINE. SEE GROUND ROD DETAILS.
- CONTRACTOR SHALL COORDINATE INCOMING SERVICES WITH LOCAL UTILITIES PRIOR TO TRENCHING.
- ALL CONDUCTORS SHALL BE COPPER, 75°C RATED, AND CONDUCTOR INSULATION BE THWN OR THWN-2.
- ALL TERMINATION SHALL BE LISTED AND IDENTIFIED FOR USE WITH 75°C RATED CONDUCTORS OPERATING AT 75°C.
- GROUND FAULT PROTECTION REQUIRED FOR UTILITY RECEPTACLES.
- GENERATOR NEUTRAL SHALL NOT BE GROUNDED AT THE GENERATOR. REFER TO SINGLE LINE DETAIL, SHEET E-1.
- EQUIPMENT LOCATED OUTSIDE OR EXPOSED TO MOISTURE SHALL BE NEMA 3R RATED.
- CONTRACTOR SHALL USE SCHEDULE 80 PVC CONDUIT THROUGH CONCRETE AND ABOVE GROUND, UNLESS OTHERWISE NOTED.
- ALL NEWLY INSTALLED EQUIPMENT SHALL BE RATED "AT 10K AIC" MINIMUM. HIGHER RATINGS SHALL BE REQUIRED WHERE AVAILABLE FAULT CURRENT EXCEEDS THIS VALUE. EXACT FAULT CURRENT AVAILABLE SHALL BE COORDINATED WITH LOCAL UTILITY BASED ON EXACT CONDITIONS (XFMR SIZE, PERCENT IMPEDANCE, LENGTH OF CONDUCTORS, ETC).

**ELECTRICAL SYMBOLS LEGEND**

- EXOTHERMIC WELD TYPE CONNECTION
- MECHANICAL TYPE CONNECTION
- NEW GROUNDING
- - - EXISTING GROUNDING



TYPICAL GROUNDING DIAGRAM

**FENCE GROUNDING:**

- SEE FENCE & GATE DETAILS SHEET FOR ADDITIONAL GROUNDING (IF APPLICABLE)

CONTRACTOR SHALL NOT SUBMIT BIDS OR PERFORM CONSTRUCTION WORK ON THIS PROJECT WITHOUT ACCESS TO THE CURRENT COMPLETE SET OF DRAWINGS LISTED IN THE TITLE-SHEET INDEX.



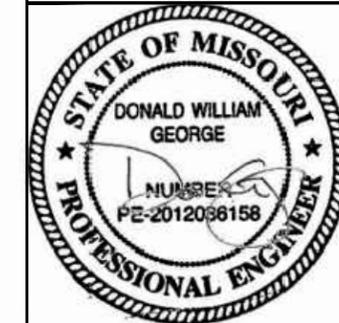
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Information Technology



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DATE SIGNED: 11/3/25

SITE INFORMATION:  
UNITY VILLAGE  
10000434  
GENERATOR REPLACEMENT PROJECT  
2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:  
ELECTRICAL  
DETAILS

SHEET NUMBER:  
E-3

REVISIONS		
REV	DATE	DESCRIPTION
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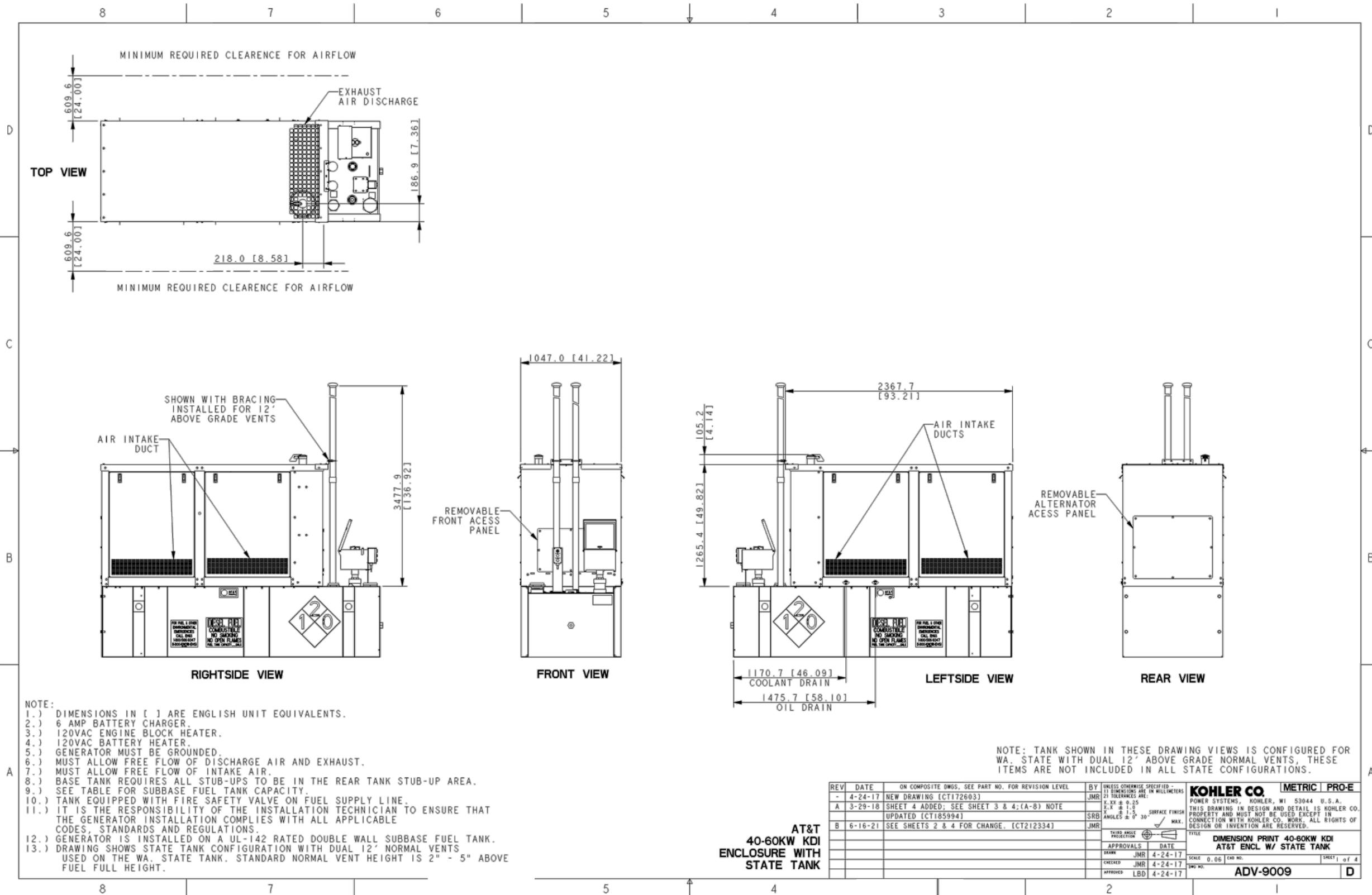
SITE INFORMATION:  
UNITY VILLAGE  
10000434  
GENERATOR REPLACEMENT  
PROJECT  
2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:  
**GENERATOR  
SPECIFICATIONS**

SHEET NUMBER:

**E-4.0**



AT&T  
40-60KW KDI  
ENCLOSURE WITH  
STATE TANK

REV	DATE	ON COMPOSITE DWGS. SEE PART NO. FOR REVISION LEVEL	BY	UNLESS OTHERWISE SPECIFIED - 13 DIMENSIONS ARE IN MILLIMETERS
-	4-24-17	NEW DRAWING [CT172603]	JMR	21 TOLERANCES ARE: 1. XX ± 0.25 2. X ± 1.0 3. ± 1.5
A	3-29-18	SHEET 4 ADDED; SEE SHEET 3 & 4;(A-8) NOTE UPDATED [CT185994]	SRB	SURFACE FINISH ANGLES ± 0° 30' MAX.
B	6-16-21	SEE SHEETS 2 & 4 FOR CHANGE. [CT212334]	JMR	THIRD ANGLE PROJECTION

APPROVALS	DATE	SCALE	END NO.	SHEET
DRW	JMR 4-24-17	0.06		1 of 4
CHECKED	JMR 4-24-17			
APPROVED	LBD 4-24-17			

**KOHLER CO. METRIC PRO-E**  
POWER SYSTEMS, KOHLER, WI 53044 U.S.A.  
THIS DRAWING IN DESIGN AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.  
TITLE: **DIMENSION PRINT 40-60KW KDI AT&T ENCL W/ STATE TANK**  
DWG NO. **ADV-9009**

REVISIONS		
REV	DATE	DESCRIPTION
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SITE INFORMATION:  
UNITY VILLAGE

10000434

GENERATOR REPLACEMENT  
PROJECT

2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

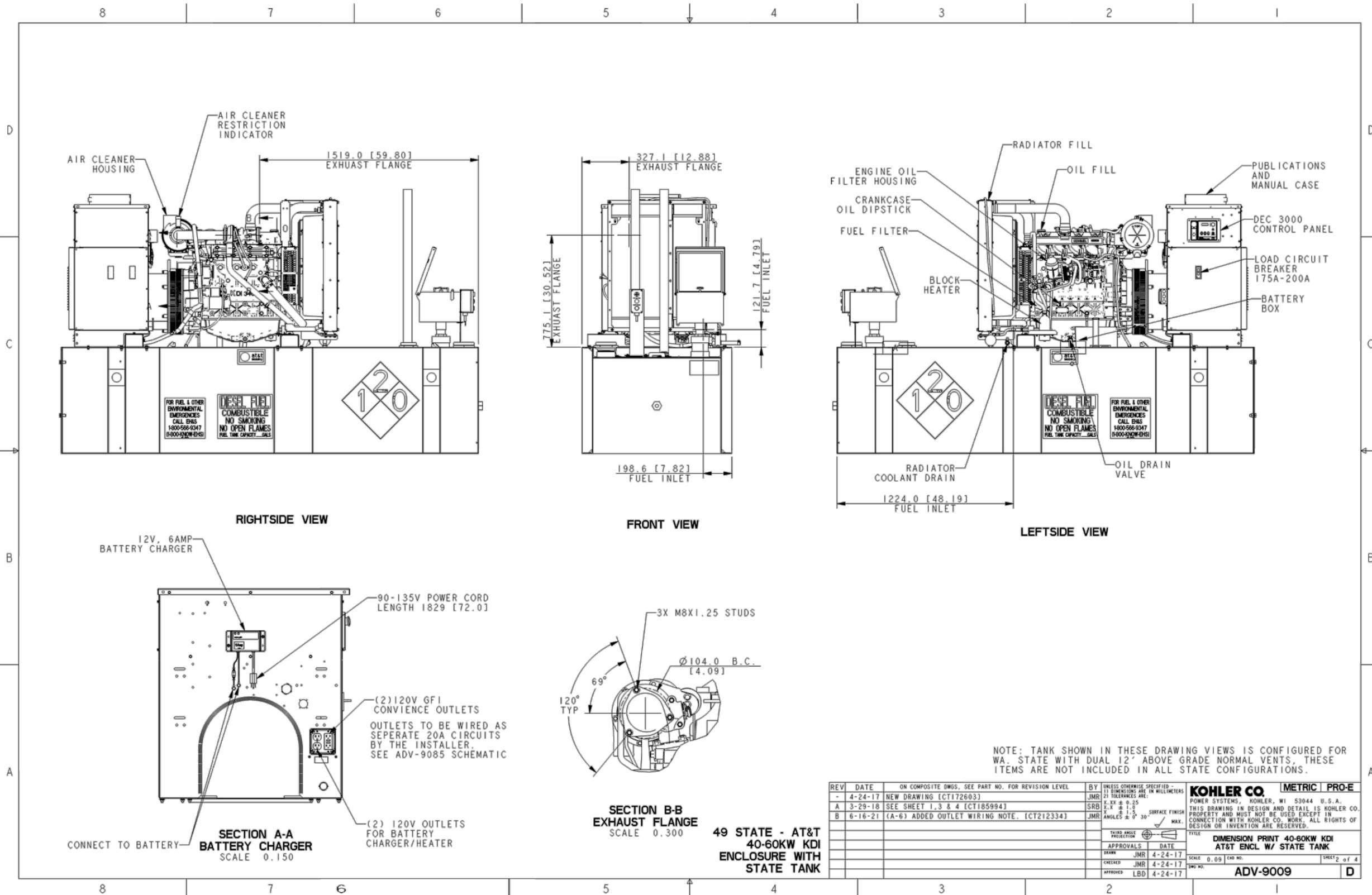
JURISDICTION USE:

SHEET TITLE:

**GENERATOR  
SPECIFICATIONS**

SHEET NUMBER:

**E-4.1**



REVISIONS		
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LEES SUMMIT, MO 64081

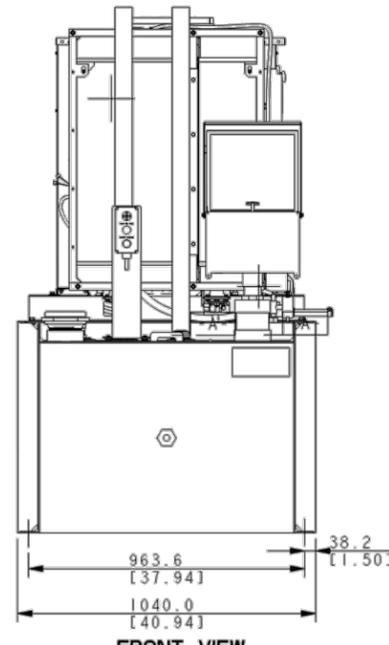
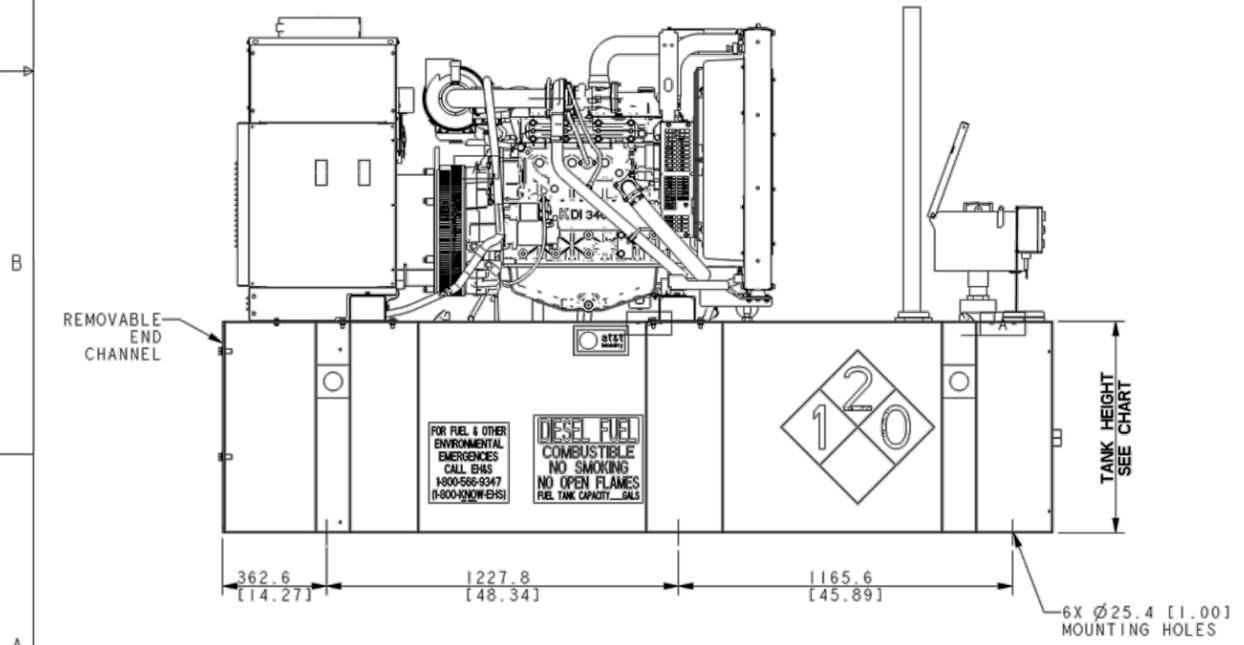
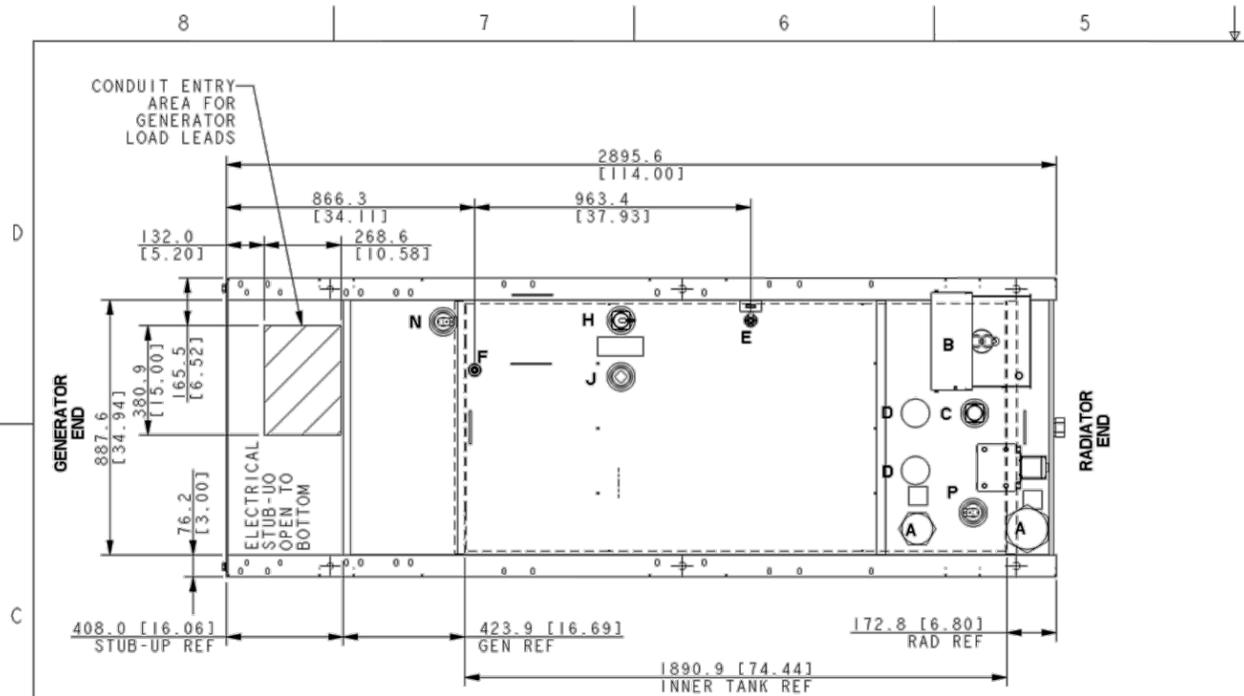
JURISDICTION USE:

SHEET TITLE:  
**GENERATOR  
SPECIFICATIONS**

SHEET NUMBER:  
**E-4.2**

MODEL	TANK P/N	TANK HEIGHT	DESCRIPTION	ASSY WEIGHT
40/50	GM103362-MA1	431.8 [17.0]	SKID/ST TANK, 552 L [145 GAL]	1451 KG [3222 LBS]
40/50	GM103362-MA2	736.6 [29.0]	SKID/ST TANK, 1025 L [270 GAL]	1704 KG [3756 LBS]
60	GM103362-MA1	431.8 [17.0]	SKID/ST TANK, 552 L [145 GAL]	1490 KG [3308 LBS]
60	GM103362-MA2	736.6 [29.0]	SKID/ST TANK, 1025 L [270 GAL]	1743 KG [3842 LBS]
60	GM103362-MA6	914.4 [36.0]	SKID/ST TANK, 1520 L [401 GAL]	1875 KG [4135 LBS]

- TANK FITTING:
- A. 3" NPT & 4" NPT EMERGENCY VENT FITTING PER NFPA 30 WITH VENT CAPS (QTY 1 EA).
  - B. 4" NPT FUEL FILL FITTING WITH 5 GAL SPILL BOX 95% OVERFILL PREVENTION VALVE AND FILL PIPE.
  - C. 2" NPT FITTING FOR FUEL LEVEL SENDING UNIT WITH MECHANICAL INDICATOR NEEDLE.
  - D. 2" NPT NORMAL VENT FITTING WITH MUSHROOM VENT CAP AND 138" RISER (QTY 2).
  - E. 1/2" NPT FITTING REMOVABLE ENGINE SUPPLY DIP TUBE (3/8" NPT FEMALE WITH CHECK VALVE, FIRE SAFTY VALVE AND LOCKOUT COVER).
  - F. 1/2" NPT FITTING FOR REMOVABLE FUEL RETURN DIP TUBE (3/8" NPT FEMALE).
  - H. 2" NPT FUEL LEVEL SENDING UNIT.
  - J. 2" NPT FITTING FOR OPTIONAL SWITCH (INSTALL 2" PIPE PLUG).
  - N. 2" NPT FUEL IN BASIN SWITCH.
  - P. 2" NPT FITTING FOR HIGH FUEL LEVEL ALARM SWITCH (SET AT 90% FULL, SILICONE PACKED).



NOTE: TANK SHOWN IN THESE DRAWING VIEWS IS CONFIGURED FOR WA. STATE WITH DUAL 12" ABOVE GRADE NORMAL VENTS, THESE ITEMS ARE NOT INCLUDED IN ALL STATE CONFIGURATIONS.

AT&T  
40-60KW KDI  
ENCLOSURE WITH  
STATE TANK

REV	DATE	ON COMPOSITE DWGS. SEE PART NO. FOR REVISION LEVEL	BY	UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN MILLIMETERS	BY	UNLESS OTHERWISE SPECIFIED - DIMENSIONS ARE IN MILLIMETERS
-	4-24-15	NEW DRAWING [CT172603]	JMR	± 0.25	JMR	± 0.25
A	3-29-18	VIEWS FROM SHEET 3 MOVED [CT185994]	SRB	± 1.0	SRB	± 1.0
B	6-16-21	[D-3] GM103362-MA6 401 GALLON TANK ADDED TO TABLE. [CT212334]	JMR	± 1.5	JMR	± 1.5

APPROVALS	DATE	SCALE	FIG NO.	SHEET
JMR	4-24-17	0, 10	ADV-9009	4 of 4
JMR	4-24-17			
LBD	4-24-17			

REVISIONS			
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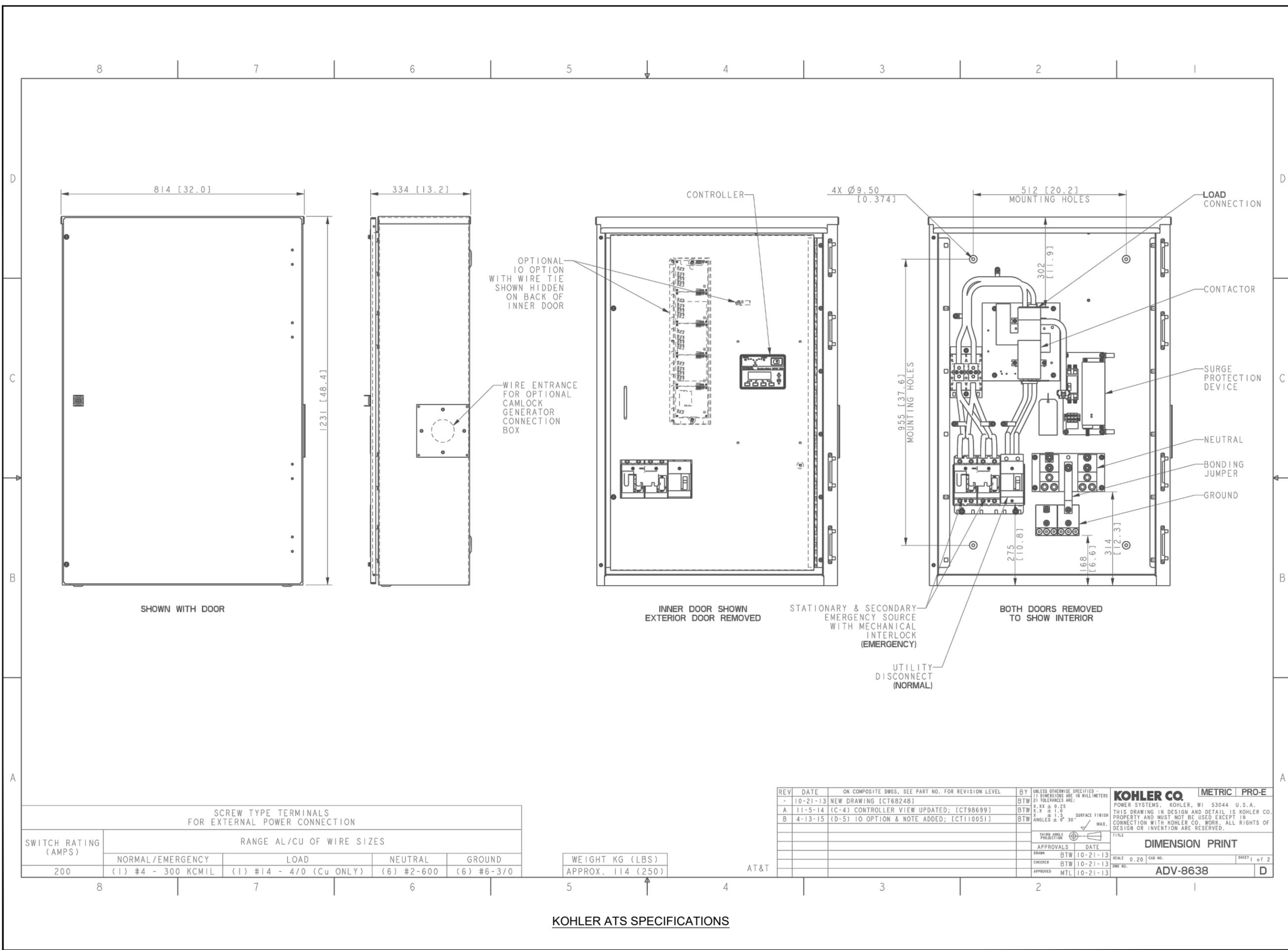
**FOR INFORMATION ONLY**

SITE INFORMATION:  
**UNITY VILLAGE**  
  
10000434  
**GENERATOR REPLACEMENT PROJECT**  
2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:  
**ATS SPECIFICATIONS**

SHEET NUMBER:  
**E-5.0**



SWITCH RATING (AMPS)	RANGE AL/CU OF WIRE SIZES			
	NORMAL/EMERGENCY	LOAD	NEUTRAL	GROUND
200	(1) #4 - 300 KCMIL	(1) #14 - 4/0 (Cu ONLY)	(6) #2-600	(6) #6-3/0

WEIGHT KG (LBS)  
APPROX. 114 (250)

AT&T

REV	DATE	ON COMPOSITE DWGS, SEE PART NO. FOR REVISION LEVEL	BY	UNLESS OTHERWISE SPECIFIED - (1) DIMENSIONS ARE IN MILLIMETERS (2) TOLERANCES ARE:
-	10-21-13	NEW DRAWING [CT68248]	BTW	X.XX ± 0.25
A	11-5-14	(C-4) CONTROLLER VIEW UPDATED; [CT98699]	BTW	X.X ± 1.0
B	4-13-15	(D-5) TO OPTION & NOTE ADDED; [CT110051]	BTW	± 1.5 SURFACE FINISH ANGLES ± 0° 30° MAX.

<b>KOHLER CO.</b> [METRIC] [PRO-E]	
POWER SYSTEMS, KOHLER, WI 53044 U.S.A.	
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APPROVALS	DATE
DRAWN BTW	10-21-13
CHECKED BTW	10-21-13
APPROVED MTL	10-21-13
TITLE: <b>DIMENSION PRINT</b>	
SCALE: 0.20	CAD NO.:
DWG NO.:	SHEET 1 of 2
ADV-8638	

REVISIONS		
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SITE INFORMATION:  
UNITY VILLAGE

10000434

GENERATOR REPLACEMENT  
PROJECT

2150 NORTHWEST LOWENSTEIN DRIVE  
LEES SUMMIT, MO 64081

JURISDICTION USE:

SHEET TITLE:

**CAM-LOCK BOX  
SPECIFICATIONS**

SHEET NUMBER:

**E-5.1**

