

CITY OF LYNCHBURG

GENERATOR UPGRADES FIRE STATION #6

LYNCHBURG, VIRGINIA

PROJECT CODE: 3001-2400-7110-30200.0006

FOR CONSTRUCTION

MARCH 23, 2015

GENERAL NOTES:

1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND ARE NOT INTENDED FOR USE AS FABRICATION DRAWINGS. THESE DRAWINGS INDICATE THE GENERAL AND APPROXIMATE SIZE AND LOCATION OF MATERIAL. FIELD VERIFY ALL DIMENSIONS AND LOCATIONS PRIOR TO BEGINNING WORK. ALL UTILITIES NOTED ON PLANS ARE APPROXIMATE AND CONTRACTOR SHALL FIELD VERIFY LOCATION.
2. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO, THE 2012 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (JULY 14, 2014) AND ASSOCIATED CODES OF REFERENCE. REFER TO APPLICABLE CODES LIST THIS DRAWING.
3. CONTRACTOR SHALL OBTAIN ALL BUILDING AND TRADE PERMITS FOR CONSTRUCTION; HOWEVER, THE CITY OF LYNCHBURG SHALL WAIVE ALL FEES REQUIRED FOR PERMITS.
4. ALL MATERIAL SHALL BE NEW UNLESS OTHERWISE NOTED. MATERIALS ARE BASED ON THE INDICATED MANUFACTURERS/MODELS AND ARE INTENDED ONLY TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS, AND SUPPORT FOR INDICATED MATERIAL WITH RELATION TO OTHER BUILDING SYSTEMS. MATERIAL BY ANY MANUFACTURER THAT MEETS THE SCHEDULED CRITERIA IS ACCEPTABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ACTUAL INSTALLED MATERIAL AND ASSOCIATED CHANGES.
5. CONTRACTOR SHALL COORDINATE THE WORK WITH EXISTING CONDITIONS, INCLUDING BEAMS, COLUMNS, SITE FEATURES, AND OTHER OBSTRUCTIONS, WHETHER OR NOT SUCH IS SHOWN ON DRAWINGS.
6. CONTRACTOR SHALL COORDINATE THE WORK BETWEEN ALL TRADES. MATERIAL LOCATIONS SHALL BE COORDINATED BETWEEN CIVIL, ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, AND DEMOLITION PLANS TO AVOID CONFLICTS.
7. EXISTING MATERIAL TO BE REMOVED SHALL BE REMOVED CAREFULLY TO AVOID DAMAGING MATERIAL TO REMAIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE THAT OCCURS TO EXISTING MATERIAL TO REMAIN OR TO BE RELOCATED DURING DEMOLITION AND CONSTRUCTION.
8. ALL MATERIAL SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, MAINTAINING ALL REQUIRED CLEARANCES AND WITH ALL COMPONENTS ACCESSIBLE AND SERVICEABLE.
9. CONTRACTOR SHALL PROVIDE MATERIAL DATA SUBMITTALS FOR ALL NEW MATERIAL. REFER TO INDIVIDUAL SHEETS FOR ADDITIONAL SUBMITTAL REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE A SUBMITTAL SCHEDULE WITHIN 30 DAYS OF AWARD OF CONTRACT.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ASSEMBLING OPERATION AND MAINTENANCE MANUALS CONTAINING ALL MATERIAL SUBMITTALS, INSTALLATION AND OPERATING INSTRUCTIONS, AND WARRANTY INFORMATION. THREE (3) COPIES OF O&M MANUALS SHALL BE SUBMITTED TO THE A/E AT THE TIME OF SUBSTANTIAL COMPLETION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A SET OF AS-BUILT DRAWINGS ON SITE WHICH INDICATE IN RED ALL DEVIATIONS FROM ORIGINAL CONSTRUCTION DOCUMENTS, INCLUDING APPROVED CONSTRUCTION CHANGE ORDERS. AS-BUILT DRAWINGS SHALL BE SUBMITTED TO THE A/E AT THE TIME OF SUBSTANTIAL COMPLETION. AS-BUILT DRAWINGS SHALL BE CLEARLY LEGIBLE AND COMPLETE.
12. CONTRACTOR SHALL KEEP PUBLIC AREAS FREE OF TRASH AND CONSTRUCTION DEBRIS AND CLEAN ENTIRE WORK AREA ON A DAILY BASIS.
13. TEMPORARY POWER AND WATER SERVICE ARE AVAILABLE ON SITE FOR THE CONTRACTOR'S USE. CONTRACTOR SHALL COORDINATE ACCESS WITH OWNER AND SHALL PROVIDE ANY REQUIRED TEMPORARY CONNECTIONS AND EXTENSIONS.
14. CONTRACTOR SHALL PROVIDE A TEMPORARY TOILET FACILITY FOR USE BY CONTRACTOR'S PERSONNEL FOR THE DURATION OF THE PROJECT.
15. CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH THE SCOPE OF WORK AND TO VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THIS PROJECT. ANY DISCREPANCIES OR AMBIGUOUS ITEMS MUST BE REPORTED TO THE A/E AND THE OWNER FOR CLARIFICATION PRIOR TO BIDDING.
16. CONTRACTOR IS TYPICALLY PERMITTED TO WORK BETWEEN 7:00 AM AND 6:00 PM MONDAY THRU FRIDAY. WORK OUTSIDE THESE HOURS SHALL BE COORDINATED WITH OWNER'S PROJECT MANAGER DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH OWNER AND BUILDING TENANTS FOR SPECIAL EVENTS.
17. CONTRACTOR SHALL PROVIDE A DUST-PROOF BARRIER BETWEEN THE CONSTRUCTION ZONE AND OCCUPIED PORTIONS OF THE BUILDING. CONTRACTOR SHALL FILTER EXISTING HVAC GRILLES IN WORK AREA TO MITIGATE SPREAD OF DUST INTO OCCUPIED AREAS OF THE BUILDING.

DRAWING LIST:

DRAWING NO	TITLE
T1	TITLE SHEET
E1	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
E2	PARTIAL SITE AND BUILDING POWER PLAN
E3	INTERNET MONITORING
E4	DETAILS

GENERAL INFORMATION:

PROJECT INFORMATION:	
AGENCY:	CITY OF LYNCHBURG
PROJECT TITLE:	CITY OF LYNCHBURG GENERATOR UPGRADE
PROJECT CODES:	3001-2400-7110-30200.0006 B0159.0140 ON PO NO 15-0042562-101 AS CHANGE ORDER
BUILDING INFORMATION:	
BUILDING NAME/NUMBER:	FIRE STATION 6 2084 FORT AVENUE LYNCHBURG, VIRGINIA 24501
WORK PERMITTED:	GENERATOR UPGRADES
APPLICABLE CODES & STANDARDS:	
BUILDING CODES:	2012 VIRGINIA UNIFORM STATEWIDE BUILDING CODE - VUSBC (EFFECTIVE JULY 14, 2014) NATIONAL ELECTRICAL CODE - NFPA-70 (2011)

ASBESTOS DISCLOSURE STATEMENT:

AN ASBESTOS INSPECTION WAS NOT PERFORMED. THE CONTRACTOR SHALL NOTIFY THE CITY'S PROJECT MANAGER OF ANY SUSPECTED MATERIALS FOR REMOVAL BY THE CITY OF LYNCHBURG.

LEAD PAINT DISCLOSURE STATEMENT:

AN INSPECTION TO IDENTIFY LEAD CONTAINING OR COATED BUILDING COMPONENTS HAS NOT BEEN CONDUCTED. ASSUME THAT ALL PAINTED SURFACES CONTAIN LEAD-BASED PAINT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH ALL VIRGINIA OCCUPATIONAL SAFETY AND HEALTH (VOSH) REGULATIONS AS THEY PERTAIN TO EMPLOYEE EXPOSURES TO LEAD.

DISCLAIMER STATEMENT:

VIRGINIA A&E ASSUMES NO RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY OF THE ASBESTOS AND LEAD BASED PAINT INFORMATION PROVIDED ABOVE BY THE OWNER. THE CONTRACTOR SHALL ADDRESS ANY RELATED QUESTIONS TO THE OWNER'S PROJECT MANAGER.

VIRGINIA A&E, PLLC
1115 VISTA PARK DRIVE
FOREST, VA 24551
PHONE: (434) 316-6001



VAE PROJECT NO: 15009



Job No.: 15009

Drawing No.:

T1

LEGEND

SYMBOLS	CONDUCTORS AND RACEWAYS	ABBREVIATIONS	GENERAL NOTES
<p>1 CONSTRUCTION NOTE</p> <p>1 DEMOLITION NOTE</p> <p>● LIMIT OF DEMOLITION</p> <p>● NEW-TO-EXISTING POINT OF CONNECTION</p> <p>POWER</p> <p>E EQUIPMENT CONNECTION</p> <p>⊕ WP DUPLEX RECEPTACLE, WALL MOUNTED 18" AFF, UON. WP = WEATHERPROOF WITH GROUND FAULT CIRCUIT PROTECTION AC = MOUNT 3" ABOVE COUNTER BACKSPLASH GFI = GROUND FAULT PROTECTION</p> <p>⊕ QUAD RECEPTACLE, MOUNT 18" AFF, UON.</p> <p>⊕ SIMPLEX RECEPTACLE, MOUNT 18" AFF, UON.</p> <p>⊕ SPECIAL PURPOSE RECEPTACLE, AS NOTED, WALL MOUNT 18" AFF, UON.</p> <p>⊕ MANUAL MOTOR STARTER WITH THERMAL OVERLOADS, WALL-MOUNT 48" AFF UON.</p> <p>⊕ <u>480V, 3P, 0</u> DISCONNECT <u>VOLTAGE, POLES, AMP RATING</u> <u>70A, NEMA 1</u> FUSE SIZE, ENCLOSURE TYPE</p> <p>⊕ <u>480V, 3P, 0</u> MOTOR STARTER <u>VOLTAGE, POLES, NEMA SIZE</u> <u>FVNR, 3R, CB</u> TYPE, ENCLOSURE, DISCONNECT</p> <p>⊕ <u>400A</u> FUSED SWITCH <u>SWITCH SIZE</u> <u>300A</u> FUSE SIZE</p> <p>⊕ <u>400AF</u> CIRCUIT BREAKER <u>AMP FRAME</u> <u>300AT</u> AMP TRIP</p> <p>⊕ TRANSFER SWITCH</p> <p>⊕ LP3 PANELBOARD PANELBOARD NUMBER <u>120/208</u> VOLTAGE <u>3P/4W</u> POLES, WIRES <u>225A</u> AMP RATING MCB</p>	<p>CONDUCTORS AND RACEWAYS</p> <p>----- CONDUIT RUN CONCEALED UNDER FLOOR</p> <p>_____ CONDUIT RUN EXPOSED OR ABOVE CEILING</p> <p>(3)#12 IN 3/4"C HOMERUN CIRCUIT TO OTHER CIRCUIT. CONDUCTORS AND RACEWAY SIZE AS NOTED.</p> <p>MDP-1 HOMERUN TO PANEL AND CIRCUIT NUMBER AS INDICATED. CONDUCTOR AND RACEWAY SIZE AS INDICATED IN PANELBOARD SCHEDULE, UON.</p> <p>MDP-1 INDICATES MULTIPLE HOMERUN CIRCUITS FROM SINGLE PANEL/CIRCUIT.</p> <p>⊕ JB JUNCTION BOX</p> <p>→ CONDUIT TURNING DOWN</p> <p>○ CONDUIT TURNING UP</p>	<p>ABBREVIATIONS</p> <p>A AMPERE</p> <p>AC ABOVE COUNTER</p> <p>AE ARCHITECT/ENGINEER</p> <p>AF AMP FRAME</p> <p>AT AMP TRIP</p> <p>AFF ABOVE FINISHED FLOOR</p> <p>APPROX APPROXIMATE</p> <p>BCSD BARE COPPER SOFT DRAWN</p> <p>C CONDUIT</p> <p>CB CIRCUIT BREAKER</p> <p>CWL COLD WATER LINE</p> <p>DWG DRAWING</p> <p>(E) EXISTING</p> <p>ECB ENCLOSED CIRCUIT BREAKER</p> <p>EMT ELECTRICAL METALLIC TUBING</p> <p>FD FUSED DISCONNECT</p> <p>FMC FLEXIBLE METALLIC CONDUIT</p> <p>FTL FEED THROUGH LUGS</p> <p>FVNR FULL VOLTAGE NON REVERSING</p> <p>G GROUND</p> <p>GFI GROUND FAULT INTERRUPTING</p> <p>HOA HAND-OFF-AUTO</p> <p>HP HORSEPOWER</p> <p>HVAC HEATING, VENTILATING, AND AIR CONDITIONING</p> <p>JB JUNCTION BOX</p> <p>KVA KILOVOLTAMPS</p> <p>LFMC LIQUID-TIGHT FLEXIBLE METALL CONDUIT</p> <p>MAX MAXIMUM</p> <p>MC METAL CLAD CABLE</p> <p>MCA MIN CIRCUIT AMPACITY</p> <p>MCB MAIN CIRCUIT BREAKER</p> <p>MIN MINIMUM</p> <p>MLO MAIN LUGS ONLY</p> <p>MOPD MAX OVERCURRENT PROTECTION DEVICE</p> <p>N NEUTRAL</p> <p>NF NON FUSED</p> <p>NIC NOT IN CONTRACT</p> <p>OCPD OVERCURRENT PROTECTION DEVICE</p> <p>P PHASES OR POLES</p> <p>PB PUSHBUTTON</p> <p>R+R REMOVE AND REPLACE</p> <p>RNC RIGID NONMETALLIC CONDUIT</p> <p>RSC RIGID STEEL CONDUIT</p> <p>STP SHIELDED TWISTED PAIR</p> <p>TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION</p> <p>TYP TYPICAL</p> <p>UG UNDERGROUND</p> <p>UON UNLESS OTHERWISE NOTED</p> <p>UTP UNSHIELDED TWISTED PAIR</p> <p>V VOLTS</p> <p>VFD VARIABLE FREQUENCY DRIVE</p> <p>W WIRES</p> <p>W/ WITH</p> <p>W/O WITHOUT</p> <p>WP WEATHERPROOF</p> <p>XFMR TRANSFORMER</p>	<p>GENERAL NOTES</p> <ol style="list-style-type: none"> THESE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE GENERAL AND APPROXIMATE LOCATION OF EQUIPMENT AND EXISTING CONSTRUCTION. FIELD-VERIFY ALL DIMENSIONS AND LOCATIONS. INDICATED UNDERGROUND OBSTRUCTIONS WERE DEVELOPED FROM EXISTING RECORDS AND ABOVE-GROUND INSPECTION. ACCURACY OR COMPLETENESS OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES CANNOT BE GUARANTEED. VERIFY LOCATION AND DEPTH OF ALL UNDERGROUND FACILITIES BEFORE STARTING WORK. THESE DRAWINGS MAY NOT INDICATE ALL FITTINGS, PARTS AND ACCESSORIES THAT ARE REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM. NO EXCLUSION FROM OR LIMITATION IN THE SYMBOLISM USED ON THE DRAWINGS FOR THE WORK, OR THE LANGUAGE USED IN THE SPECIFICATIONS FOR THE WORK SHALL BE INTERPRETED AS A REASON FOR OMITTING THE APPURTENANCES OR ACCESSORIES NECESSARY TO COMPLETE AND REQUIRED WORK, SYSTEM, OR ITEM OF EQUIPMENT. COORDINATE ARRANGEMENT, MOUNTING, AND SUPPORT OF ELECTRICAL EQUIPMENT TO AVOID INTERFERENCES WITH ELECTRICAL AND OTHER TRADES. COORDINATE WORK WITH EXISTING CONDITIONS INCLUDING BEAMS, COLUMNS, SITE FEATURES, AND OTHER CONSTRUCTION WHETHER OR NOT SUCH IS SHOWN ON THE DRAWINGS. SET SLEEVES IN CAST-IN-PLACE CONCRETE AND MASONRY WALLS, AS THEY ARE CONSTRUCTED. COORDINATE LOCATION OF ACCESS PANELS AND DOORS FOR ELECTRICAL EQUIPMENT THAT ARE BEHIND FINISHED SURFACES OR ARE OTHERWISE CONCEALED. COORDINATE AMPACITY, VOLTAGE, PHASING, OVERCURRENT PROTECTION, AND LOCAL DISCONNECT REQUIREMENTS WITH ACTUAL EQUIPMENT PROVIDED. MAINTAIN A SET OF AS-BUILT RED-LINE MARKUPS INDICATING ACTUAL INSTALLATION. DELIVER TO OWNER AT CONCLUSION OF PROJECT. PROVIDE PRODUCT DATA SUBMITTALS FOR THE FOLLOWING EQUIPMENT: GENERATOR, REMOTE ANNUNCIATOR, DATA MONITOR, AND E-STOP. MATERIALS INSTALLED PRIOR TO OBTAINING AN APPROVED SUBMITTAL ARE AT CONTRACTOR'S RISK. CUT EXISTING CONSTRUCTION AS NEEDED FOR DEMOLITION AND CONSTRUCTION. USE CUTTING METHODS THAT MINIMIZE DAMAGE TO FINISHED AND ADJACENT SURFACES. PATCH EXISTING AND NEW CONSTRUCTION AND REPAIR ALL DAMAGED SURFACES TO MATCH EXISTING. PATCH UNUSED AND ABANDONED PENETRATIONS. CONTRACTOR SHALL ADVISE A/E IMMEDIATELY OF DISCREPANCIES WITHIN DRAWINGS. MINOR DEVIATIONS FROM THE PLANS MAY BE MADE TO AVOID MINOR CONFLICTS. WHERE MAJOR CONFLICTS ARE ENCOUNTERED, THE AFFECTED WORK SHALL NOT BE INSTALLED UNTIL THE CONFLICT HAS BEEN RESOLVED. THE A/E IS NOT RESPONSIBLE FOR THE CONSEQUENCES OF PROCEEDING WITH WORK BASED ON CONTRACTOR INTERPRETATION OR ON DIRECTION FROM OTHER PARTIES. CONTACT INFORMATION SITE REPRESENTATIVE: SCOTT GLASS 434-455-4409 ELECTRIC UTILITY: AMERICAN ELECTRIC POWER

NO.	BY	DATE
0	SPB	23 MAR 15
FOR CONSTRUCTION	REVISIONS	



CITY OF LYNCHBURG
FIRE STATION #6 GENERATOR
CLIENT PROJECT CODE:
LYNCHBURG, VIRGINIA

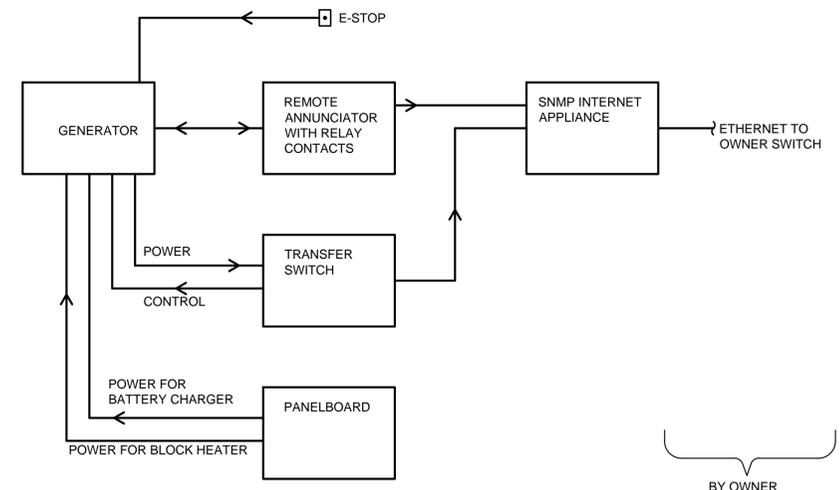
LEGEND, ABBREVIATIONS, AND
GENERAL NOTES

PROJECT NO:
150209

DATE:
23 MAR 15

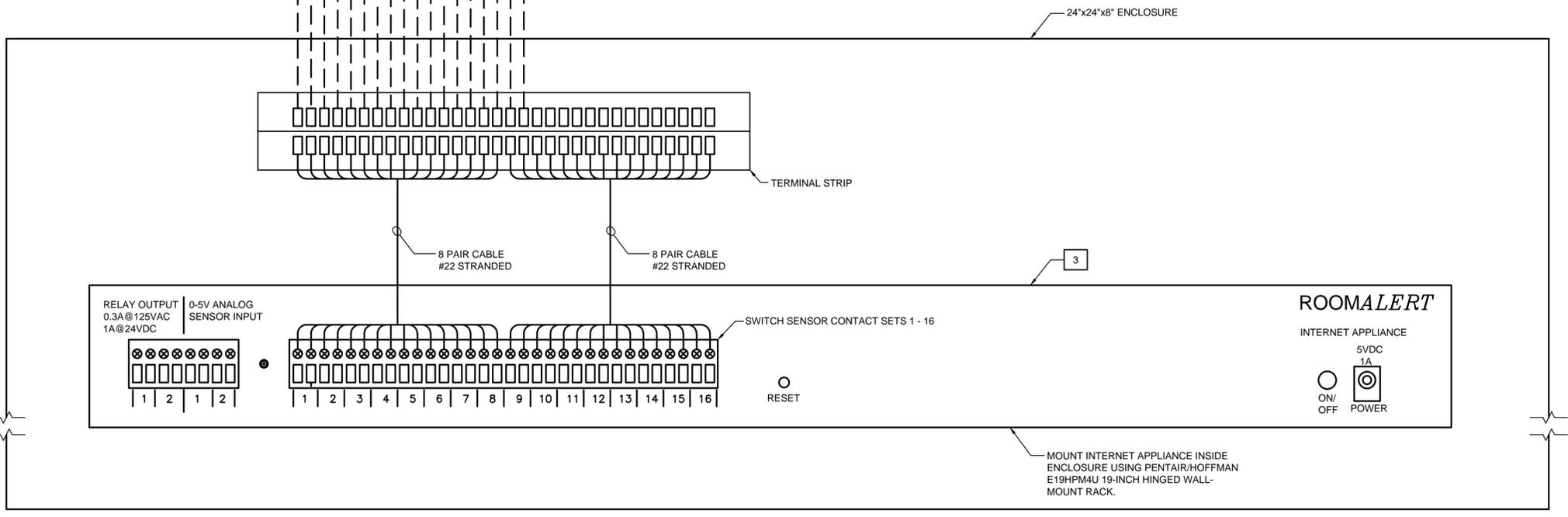
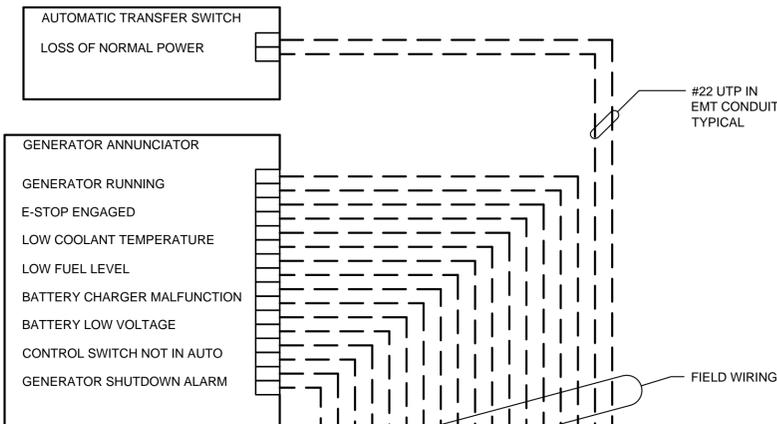
Full Scale Verification
0" 1"

Drawing No.:
E1



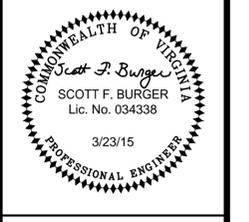
3 GENERATOR INTERCONNECTION
 E3 E3 SCALE: NONE

- INTERNET APPLIANCE SPECIFICATIONS:**
1. PROVIDE SNMP INTERNET APPLIANCE WITHIN 24"x24"x8" ENCLOSURE. PROVIDE ONE PER GENERATOR.
 2. INTERNET SNMP APPLIANCE ENCLOSURE TO INCLUDE TERMINAL STRIPS AND INTERNET APPLIANCE.
 3. PROVIDE INTERNET APPLIANCE. AVTECH ROOM ALERT RA32E-TH1-RAS.



A INTERNET APPLIANCE ENCLOSURE ELEVATION AND INTERCONNECTION
 E3 E3 SCALE: NONE

NO.	BY	REVISIONS	DATE
0	SFB	FOR CONSTRUCTION	23 MAR 15

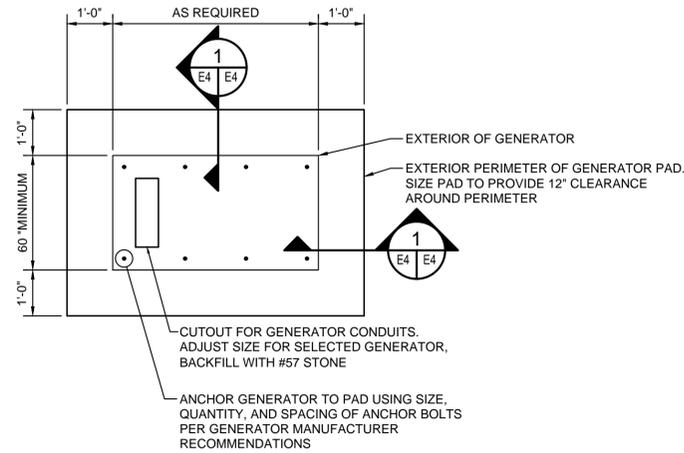


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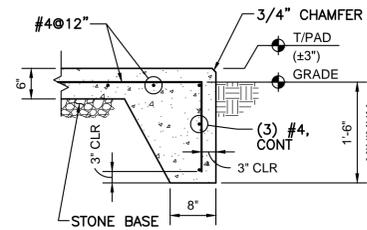
CITY OF LYNCHBURG
FIRE STATION #6 GENERATOR
 CLIENT PROJECT CODE:
 LYNCHBURG, VIRGINIA

INTERNET MONITORING
 PROJECT NO.: 150209
 DATE: 23 MAR 15

Full Scale Verification
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 Drawing No.: **E3**



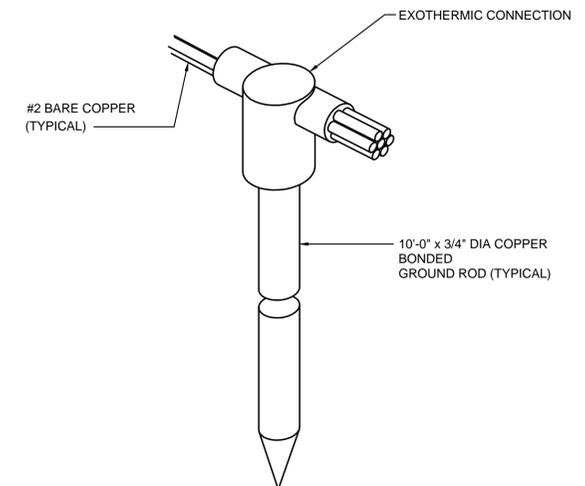
A GENERATOR PAD ENLARGED PLAN
SCALE: NONE



1 GENERATOR PAD ENLARGED PLAN
SCALE: NONE

GENERATOR PAD CONCRETE AND REINFORCEMENT NOTES:

1. GENERATOR PAD SOIL BEARING CAPACITY SHALL BE A MINIMUM 1,500 PSF. CONTRACTOR SHALL ENGAGE INSPECTOR TO VERIFY SOIL BEARING CAPACITY AND REINFORCEMENT PLACEMENT PRIOR TO CONCRETE PLACEMENT. SUBMIT INSPECTION REPORT TO A/E FOR REVIEW.
2. CONCRETE SHALL BE NORMAL WEIGHT 145 PCF WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
3. REINFORCING BARS SHALL BE ROLLED FROM NEW BILLET STEEL CONFORMING WITH ASTM A615/A615M, GRADE 60, UNLESS OTHERWISE NOTED.
4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR ALL REINFORCEMENT, UNLESS OTHERWISE NOTED:
 - A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
 - B. CONCRETE EXPOSED TO EARTH OR WEATHER: #5 BAR AND SMALLER: 1 1/2"
5. LAP ALL REINFORCING SPLICES AT LEAST 48 BAR DIAMETERS (24" MINIMUM) UNLESS OTHERWISE NOTED.
6. ALL REINFORCING SHALL BE SECURELY WIRED TOGETHER IN FORMS AS CALLED FOR IN "PLACING REINFORCING BARS" BY CRSI.
7. STONE BASE SHALL BE 4" THICK, COMPACTED #57 STONE.



DETAIL - EXOTHERMIC CONNECTION WIRE TO WIRE
SCALE: NONE

DETAIL - EXOTHERMIC CONNECTION WIRE TO GROUND ROD
SCALE: NONE



CITY OF LYNCHBURG
FIRE STATION #6 GENERATOR
CLIENT PROJECT CODE:
LYNCHBURG, VIRGINIA

DETAILS

Full Scale Verification
0" | 1"

E4

NO.	BY	REVISIONS	DATE
0	SFB	FOR CONSTRUCTION	23 MAR 15

PROJECT NO: 150209	DATE: 23 MAR 15
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