

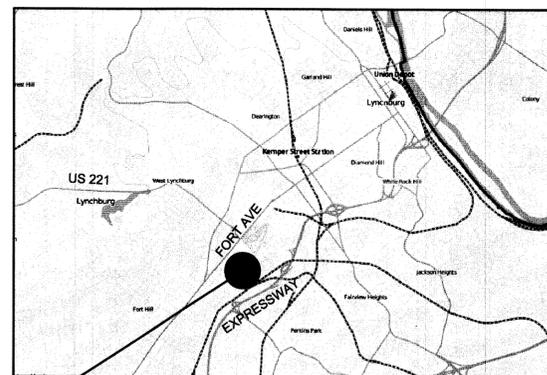
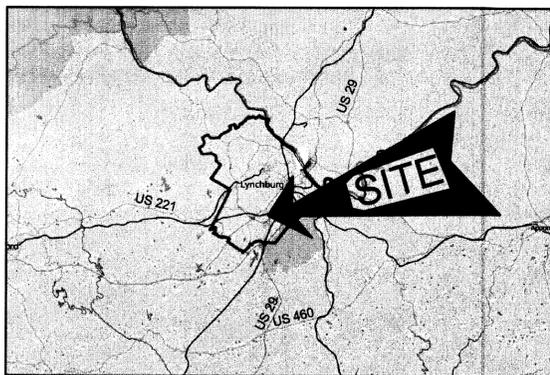
CITY OF LYNCHBURG

STADIUM CLUBHOUSE

WATER HEATER REPLACEMENT

LYNCHBURG, VIRGINIA

FOR CONSTRUCTION
OCTOBER 15, 2013



ASBESTOS AND LEAD PAINT DISCLOSURE STATEMENT:

ASBESTOS AND LEAD-BASED PAINT INSPECTIONS WERE NOT PERFORMED. THE CONTRACTOR SHALL NOTIFY THE CITY'S PROJECT MANAGER OF ANY SUSPECTED MATERIALS FOR REMOVAL BY THE CITY OF LYNCHBURG.

DRAWING LIST:

DRAWING NO	TITLE
T1	TITLE SHEET
D1	DEMOLITION PLAN
P1	LEGEND AND SPECIFICATIONS
P2	PLUMBING PLAN
P3	ENLARGED PLUMBING PLANS AND DETAILS
P4	ENLARGED PLUMBING PLAN
E1	ELECTRICAL PLANS, NOTES, LEGEND, AND ABBREVIATIONS

GENERAL INFORMATION:

PROJECT INFORMATION: OWNER: WORK LOCATION:	CITY OF LYNCHBURG STADIUM CLUBHOUSE WATER HEATER REPLACEMENT 3176 FORT AVENUE, LYNCHBURG, VA 24501
APPLICABLE CODES: BUILDING CODES	2009 VIRGINIA UNIFORM STATEWIDE BUILDING CODE - VUSBC (EFFECTIVE MARCH 1, 2011)

GENERAL NOTES:

- 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 WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO, THE 2009 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (MARCH 1, 2011) AND ASSOCIATED CODES OF REFERENCE. REFER TO APPLICABLE CODES LIST THIS SHEET.
- CONTRACTOR SHALL OBTAIN ALL BUILDING AND TRADE PERMITS FOR CONSTRUCTION; HOWEVER, THE CITY OF LYNCHBURG SHALL WAIVE ALL FEES REQUIRED FOR PERMITS.
- 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.
- THE CONTRACTOR SHALL COORDINATE THE WORK WITH EXISTING CONDITIONS, INCLUDING BEAMS, COLUMNS, SITE FEATURES, AND OTHER OBSTRUCTIONS, WHETHER OR NOT SUCH IS SHOWN ON DRAWINGS.
- THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN ALL TRADES. MATERIAL LOCATIONS SHALL BE COORDINATED BETWEEN PLUMBING, ELECTRICAL AND DEMOLITION PLANS TO AVOID CONFLICTS.
- 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.
- THE CONTRACTOR SHALL ADVISE THE A/E IMMEDIATELY OF DISCREPANCIES FOUND ON THE DRAWINGS, IN THE SPECIFICATIONS, OR BETWEEN THE TWO. NEITHER THE DRAWINGS NOR THE SPECIFICATIONS HAVE PRIORITY OVER THE OTHER AND TOGETHER FORM A COMPREHENSIVE SET OF CONSTRUCTION DOCUMENTS. 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. NEITHER THE A/E NOR THE OWNER SHALL BE RESPONSIBLE FOR CONSEQUENCES OF PROCEEDING WITH WORK BASED ON CONTRACTOR INTERPRETATION OR ON DIRECTION FROM OTHER PARTIES, INCLUDING THE OWNER AND INSPECTORS.
- ALL MATERIAL SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, MAINTAINING ALL REQUIRED CLEARANCES AND WITH ALL COMPONENTS ACCESSIBLE AND SERVICEABLE.
- 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.
- THE 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.
- THE 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.
- CONTRACTOR SHALL KEEP PUBLIC AREAS FREE OF TRASH AND CONSTRUCTION DEBRIS AND CLEAN ENTIRE WORK AREA ON A DAILY BASIS.
- TEMPORARY POWER AND WATER SERVICE ARE AVAILABLE ON SITE FOR THE CONTRACTOR'S USE. CONTRACTOR SHALL COORDINATE ACCESS WITH CITY'S PROJECT MANAGER AND SHALL PROVIDE ANY REQUIRED TEMPORARY CONNECTIONS AND EXTENSIONS.
- CONTRACTOR'S PERSONNEL MAY USE THE TOILET FACILITIES IN THE BUILDING FOR THE DURATION OF THE PROJECT.
- 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 CITY'S PROJECT MANAGER FOR CLARIFICATION PRIOR TO BIDDING.
- THE CONTRACTOR IS TYPICALLY PERMITTED TO WORK BETWEEN 7:00 AM AND 6:00 PM MONDAY THRU FRIDAY EXCEPT FOR HOLIDAYS OBSERVED BY THE CITY OF LYNCHBURG. ACCESS AND WORK OUTSIDE THESE HOURS SHALL BE COORDINATED WITH CITY'S PROJECT MANAGER DURING CONSTRUCTION. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH CITY'S PROJECT MANAGER AND BUILDING TENANTS.
- CONTRACTOR SHALL PROVIDE A DUST-PROOF BARRIER BETWEEN THE CONSTRUCTION ZONE AND OCCUPIED PORTIONS OF THE BUILDING.
- CONTRACTOR SHALL PROTECT THE BUILDING, ADJACENT FEATURES, ROADWAYS, WALKWAYS, SITE IMPROVEMENTS, EXTERIOR PLANTINGS, LANDSCAPING, ETC. AS REQUIRED FROM DAMAGE AND CORRECT DAMAGE RESULTING FROM CONSTRUCTION ACTIVITIES TO THE SATISFACTION OF THE OWNER.
- CONTRACTOR SHALL COLLECT DEMOLISHED MATERIALS AND PLACE IN APPROPRIATE DISPOSAL CONTAINERS. DEMOLISHED MATERIALS SHALL BE PROMPTLY REMOVED FROM THE OWNER'S PROPERTY AND DISPOSED OF LEGALLY.
- CONTRACTOR SHALL COORDINATE MATERIAL STORAGE AND DUMPSTER LOCATION WITH CITY'S PROJECT MANAGER DURING CONSTRUCTION.
- CONTRACTOR SHALL NOTIFY OWNER OF ANY INTERRUPTION OF UTILITIES INCLUDING BUT NOT LIMITED TO POWER, WATER, COMMUNICATIONS, ETC AND COORDINATE OUTAGE WITH CITY'S PROJECT MANAGER AND ALL BUILDING TENANTS.

SUBMITTAL LIST:

PRELIMINARY SUBMITTAL LIST PROVIDED BELOW.

DOMESTIC WATER HEATER
DOMESTIC PIPING AND VALVES
POTABLE EXPANSION TANK
THERMOSTATIC MIXING VALVE
THERMOMETERS
CALIBRATED BALANCING VALVES

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



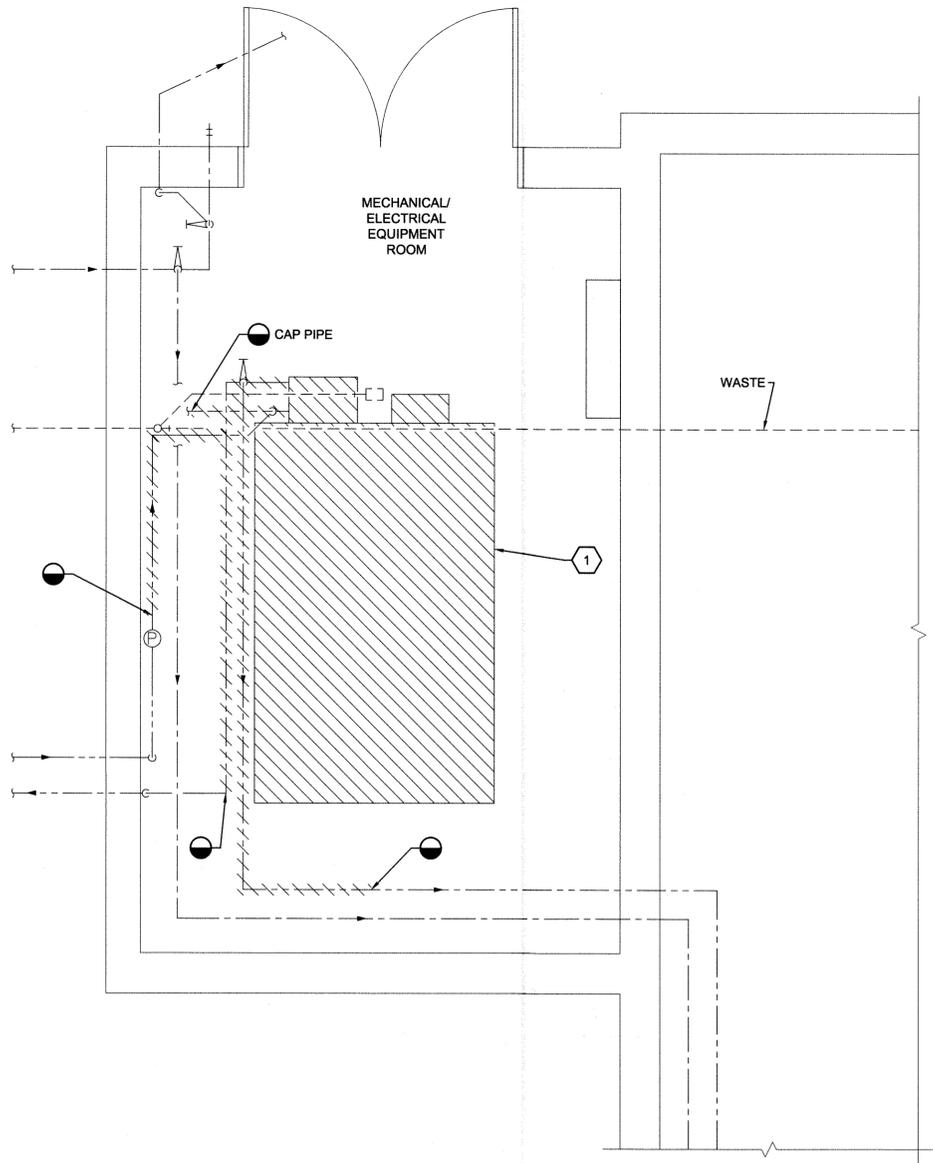
VAE PROJECT NO: 13050



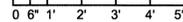
Job No.: 13050

Drawing No.:

T1



NORTH
PLUMBING - PARTIAL FLOOR PLAN
 SCALE: 3/8"=1'-0"



DEMOLITION SYMBOLS LEGEND:

- PIPING TO BE REMOVED
- LIMIT OF DEMOLITION
- ITEMS TO BE REMOVED
- DEMOLITION NOTE

GENERAL NOTES:

1. ALL FIREPROOFING REMOVED DURING DEMOLITION SHALL BE PATCHED TO MATCH EXISTING.
2. REMOVE A TOTAL OF 18 SHOWER HEADS IN THE TWO GANG SHOWER ROOMS.

GENERAL NOTES:

1. REMOVE BOILER.

NO.	BY	REVISIONS	DATE



**CITY OF LYNCHBURG
 STADIUM CLUBHOUSE
 WATER HEATER REPLACEMENT**

LYNCHBURG, VIRGINIA



DEMOLITION PLAN

DATE: 15 OCT 13
 PROJECT NO: 13050

Mayes Engineering, Inc.
 21 Timber Oak Court, Suite A
 Lynchburg, Virginia 24502
 Phone (434) 239-1616
 Fax (434) 239-6164
 COMMISSION NO. 13023

Full Scale Verification
 0" = 1"
 Drawing No.: **D1**

LEGEND			
SYMBOLS			
---	DOMESTIC COLD WATER		CONCENTRIC REDUCER
----	DOMESTIC HOT WATER		ECCENTRIC REDUCER
---	WASTE OR SANITARY SEWER		UNION
----	VENT		WYE STRAINER
G	PIPE TURNING DOWN		GATE VALVE
O	PIPE TURNING UP		BALL VALVE
E	PIPE CAP		CHECK VALVE
○	PIPE DOWN		SAFETY RELIEF VALVE
→	PIPE FLOW ARROW	(E)	EXISTING
----	HOT WATER RECIRCULATED		CALIBRATED BALANCING VALVE WITH MEMORY STOP
—GAS—	NATURAL GAS		

PLUMBING SPECIFICATIONS:

- ALL PIPING SHALL BE CLEAN AND FREE OF DIRT AND SCALE AT TIME OF INSTALLATION.
- ROUTE PIPING TO CLEAR STRUCTURES, DUCTWORK, CONDUIT, ETC. ALLOWING SPACE FOR PIPE HANGERS AND ACCESS TO VALVES. ALL PIPING SHALL BE INSTALLED SQUARE AND PLUMB.
- ALL PIPING SHALL BE SLEEVED THROUGH WALL AND FLOOR PENETRATIONS WITH SCHEDULE 40 STEEL SLEEVES. ALL PENETRATIONS THROUGH FIRE BARRIERS SHALL BE SEALED WITH A RATED FIRE SYSTEM PROVIDING A MINIMUM 1-HOUR FIRE RATING.
- USE TRANSITION FITTINGS TO JOIN DISSIMILAR PIPING MATERIALS.
- ALL ABOVE-GROUND DOMESTIC WATER PIPE SHALL BE TYPE "L" COPPER, ASTM B 88 WITH WROUGHT FITTINGS AND NO LEAD SOLDER JOINTS. ALL PIPING, FITTINGS, AND VALVES SHALL BE NSF 61 CERTIFIED. ALL PUMPS AND OTHER DEVICES CONTACTING POTABLE SHALL BE CERTIFIED BY THE MANUFACTURER FOR DOMESTIC WATER USE.
- NATURAL GAS PIPING SHALL BE SCHEDULE 40 CARBON STEEL, ASTM A53, THREADED WITH MALLEABLE IRON FITTINGS. DO NOT INSTALL UNIONS, TUBING FITTINGS, COUPLING, BUSHINGS AND SWING JOINTS IN CONCEALED SPACES EXCEPT TUBING JOINED BY BRAZING OR FITTINGS LISTED FOR USE IN CONCEALED LOCATIONS. PRESSURE TEST ALL GAS PIPING USING SOAP SOLUTION.
- DRAWINGS DO NOT INDICATE PIPING SUPPORT LOCATIONS AND DETAILS. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY PIPE SUPPORTS. SELECTIONS OF PIPE SUPPORT TYPES, SIZES, LOCATIONS, AND SPACING SHALL CONFORM TO MSS SP-69 OR TABLE BELOW, WHICHEVER IS MORE STRINGENT. PIPE HANGER MATERIAL, DESIGN, AND MANUFACTURE SHALL COMPLY WITH MSS SP-58.

PIPE SUPPORT (HORIZONTAL HANGER SPACING)			
PVC		4'OC	
COPPER 1 1/4" AND SMALLER		6'OC	
COPPER 1 1/2" AND LARGER		10'OC	
STEEL 1" AND SMALLER		6'OC	
STEEL 1 1/4" - 2"		9'OC	
STEEL 2 1/2" AND LARGER		12'OC	
- ALL ABOVE-GROUND DOMESTIC WATER PIPE SHALL BE INSULATED WITH ASTM C 534, TYPE I, CLOSED-CELL FLEXIBLE ELASTOMETRIC RUBBER, USING MIL-A-24179A, TYPE II CLASS I ADHESIVE; OR ASTM C 547, TYPE I, GRADE A PRE-FORMED FIBERGLASS WITH FACTORY-APPLIED ASTM C 1136, TYPE I, ASJ-SSL VAPOR RETARDER JACKET, USING MIL-A-3316C, CLASS 2, GRADE A ADHESIVE. ADHESIVE SHALL HAVE VOC CONTENT < 50 g/L AND SHALL BE APPLIED PER MANUFACTURER'S INSTRUCTIONS TO MAINTAIN VAPOR BARRIER INTEGRITY ACROSS JOINTS AND SEAMS. MINIMUM INSULATION THICKNESS:

SERVICE TYPE	PIPE SIZE	THICKNESS
DOMESTIC COLD WATER	UP TO 2"	1/2"
DOMESTIC COLD WATER	2" AND ABOVE	1"
DOMESTIC HOT WATER	---	1"

- REFER TO PIPING SCHEMATIC FOR PIPE SIZES AND DEVICES NOT SHOWN ON PLANS.
- ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES, REGULATIONS, AND LOCAL ORDINANCES.
- ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS.
- COMBUSTION AIR AND VENT PIPE MATERIAL SHALL BE AS INSTRUCTED BY MANUFACTURER.
- PROVIDE DRAINS AT LOW POINTS IN PIPING.

SEQUENCE OF OPERATION:

WATER STORAGE AND DISTRIBUTION TEMPERATURE CONTROL

THE DOMESTIC WATER HEATERS SHALL STORE WATER AT 140 DEG F. THE THERMOSTATIC MIXING VALVE SHALL BE ADJUSTED TO DISCHARGE WATER AT 120 DEG F. THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S INSTALLATION LITERATURE TO ACHIEVE THIS AND SHALL USE THE HOSE CONNECTION REQUIRED UNDER CONSTRUCTION NOTE 7 ON DRAWING P3 TO LOAD THE VALVE IF THERE IS NO BUILDING DEMAND.

THE DISCHARGE PIPING FROM THE DOMESTIC HOT WATER RECIRCULATION PUMP SHALL BE PIPED PER IPC 607.2.3 AS INDICATED ON THE DRAWINGS. THE CONTRACTOR SHALL USE THE CALIBRATED BALANCING VALVES TO LIMIT THE OVERALL RECIRCULATION FLOW TO NO MORE THAN 8 GPM AND WATER FLOW THROUGH THE HEATER TO SLIGHTLY MORE THAN THAT REQUIRED TO OFFSET PIPING THERMAL LOSSES. THIS SHALL BE DETERMINED THROUGH TRIAL AND ERROR AND OBSERVING THE RATE AT WHICH THE DOMESTIC HOT WATER RETURN TEMPERATURE INCREASES OR DECREASES. THE REMAINDER OF THE RECIRCULATION FLOW SHALL BYPASS THE HEATER.

THE DOMESTIC HOT WATER RECIRCULATION PUMP SHALL START WHEN THE DOMESTIC WATER RETURN TEMPERATURE DROPS BELOW 100 DEG F. THE PUMP SHALL STOP WHEN THE DOMESTIC WATER RETURN TEMPERATURE RISES ABOVE 110 DEG F.

GAS-FIRED DOMESTIC WATER HEATER SCHEDULE													
TAG	LOCATION	FUEL	TANK SIZE, GAL	ELECTRICAL	INPUT MBH	MIN EFF (%)	GAS PRESSURE RANGE, INWG	AIR & VENT, IN	WATER CONN, IN	GAS INLET, IN	RECOVERY RATE		BASIS OF DESIGN (OR EQUAL)
											GPH	TEMP RISE DEG F	
DWH-1,-2	MECH/ELEC RM	NAT GAS	120	120V / 1PH / 60HZ	285	96	4 - 14	4	2	3/4	332	100	LOCHINVAR SNA286-125
<ol style="list-style-type: none"> UNIT SHALL BE DIRECT VENT / SEALED COMBUSTION WITH ASME CONSTRUCTION. PROVIDE LOW NOX BURNER WITH DIRECT SPARK IGNITION. PROVIDE GLASS-LINED STEEL TANK WITH 3 YEAR WARRANTY. PROVIDE DIELECTRIC WATER CONNECTIONS. PROVIDE ADJUSTABLE THERMOSTAT SET AT 140 DEG F. PROVIDE ASME TEMPERATURE AND PRESSURE RELIEF VALVE. PROVIDE BRASS DRAIN VALVE. PROVIDE SIDEWALL CONCENTRIC VENT KIT. PROVIDE CONDENSATE DRAIN NEUTRALIZER KIT. PROVIDE ONBOARD CONTROLS WITH LCD DISPLAY, NIGHT SETBACK, MANUAL RESET HI LIMIT, AND WATER & FLUE TEMPERATURE SENSORS. 													

NO.	BY	REVISIONS	DATE



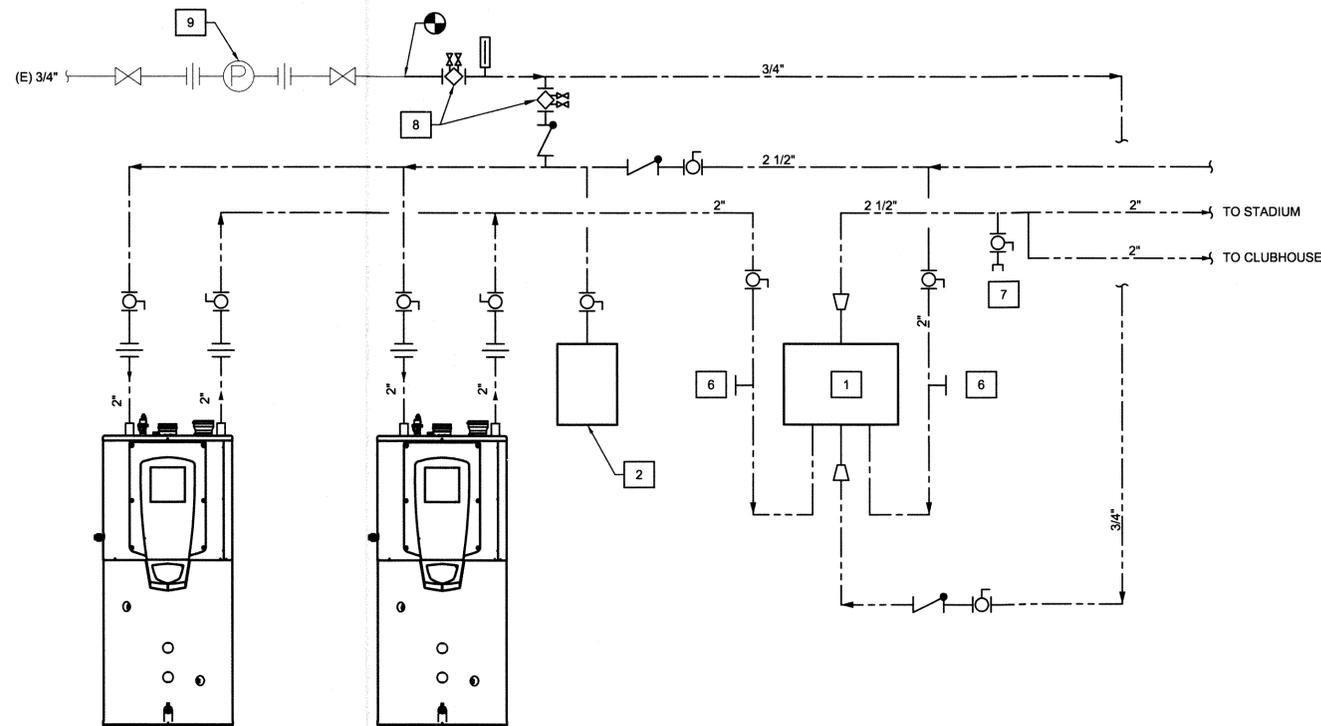
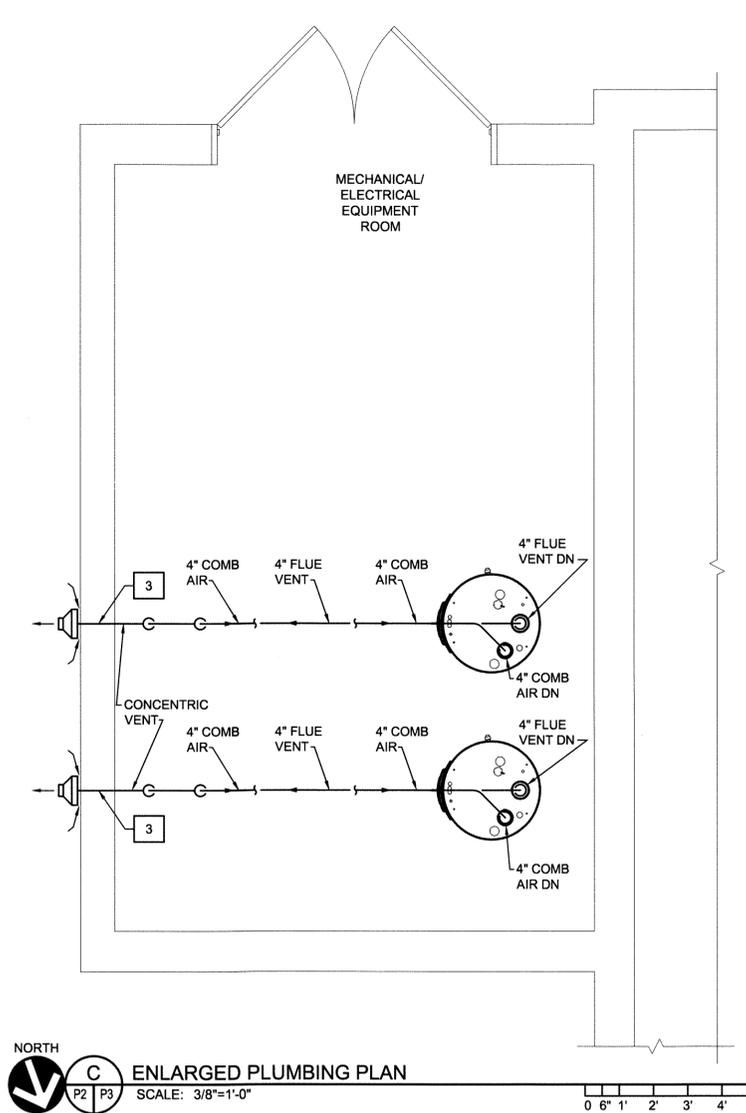
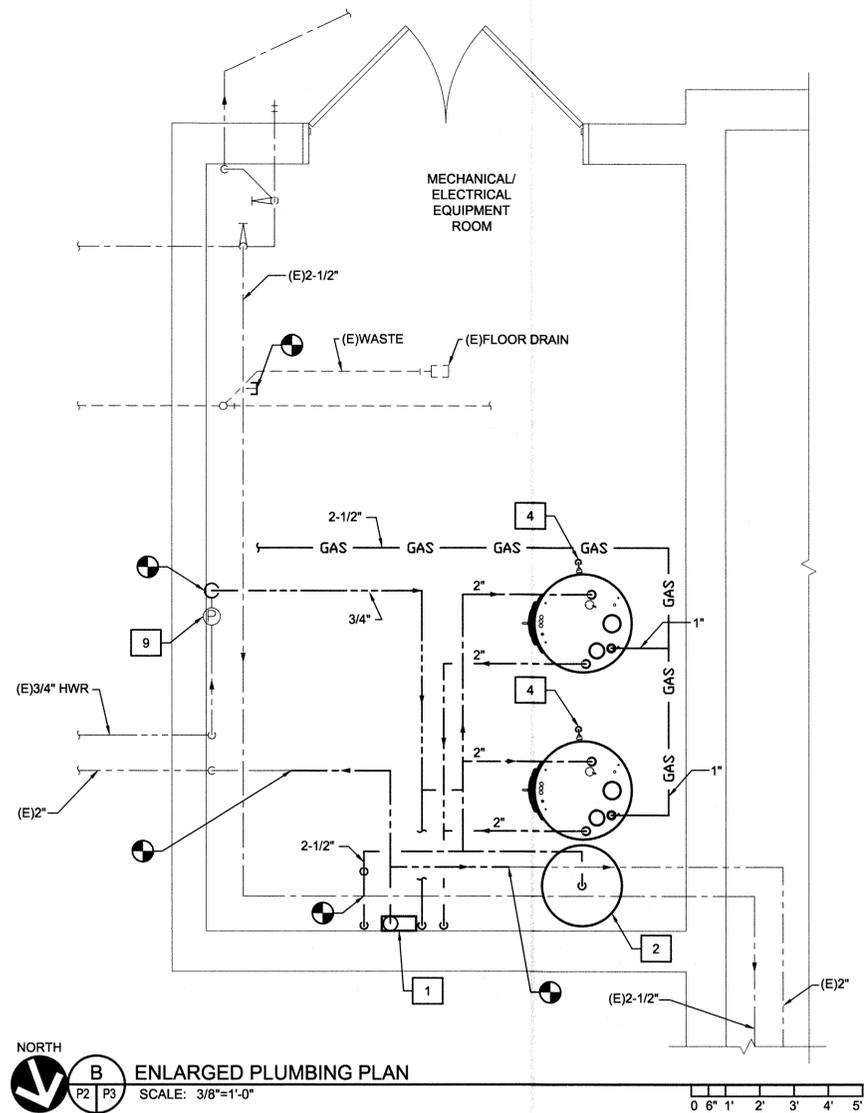
CITY OF LYNCHBURG
STADIUM CLUBHOUSE
WATER HEATER REPLACEMENT
LYNCHBURG, VIRGINIA



PROJECT NO.	DATE
13060	15 OCT 13

Mayes Engineering, Inc.
21 Timber Oak Court, Suite A
Lynchburg, Virginia 24502
Phone (434) 239-1616
Fax (434) 239-6164
COMMISSION NO. 13023

Full Scale Verification
0" | 1"
Drawing No.: **P1**



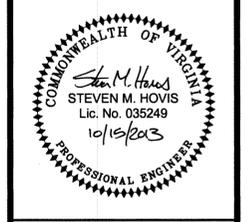
GENERAL NOTES:

1. PROVIDE A TOTAL OF 18 SHOWER HEADS IN THE TWO GANG SHOWER ROOMS. HEADS SHALL BE 1.5 GPM.

xx CONSTRUCTION NOTES:

1. PROVIDE ASSE 1017 THERMOSTATIC HIGH-LOW STYLE MIXING VALVE WITH PREPIPED INLET MANIFOLD, 2-INCH INLETS AND OUTLET; FLOW RATE OF 1 GPM TO 145 GPM AT A PRESSURE DROP OF 20 PSIG; MINIMUM HOT WATER TEMPERATURE DIFFERENTIAL OF 8 DEG F; INTEGRAL SUPPLY CHECKSTOPS AND OUTLET BALL VALVES; OUTLET DIAL THERMOMETER AND TEST CONNECTION; EQUAL TO LEONARD TM-2020B-LF-DT-RF-TC.
2. PROVIDE POTABLE ASME-CONSTRUCTION EXPANSION TANK WITH 10.5 GAL ACCEPTANCE AND 14 GAL TOTAL VOLUME, EQUAL TO AMTROL ST-30V-C. PROVIDE BALL VALVE WITH LOCKING HANDLE AND LOCK OPEN.
3. PROVIDE COMBUSTION AIR AND VENT PIPE. TERMINATE WITH SIDEWALL CONCENTRIC VENT KIT.
4. ROUTE CONDENSATE DRAIN PIPING TO FLOOR DRAIN.
5. NOT USED.
6. PROVIDE 1/4" PRESSURE / TEMPERATURE TEST PORT WITH BRASS BODY, NEOPRENE OR EPDM VALVE SEAL, AND SCREW-ON CAP WITH STRAP OR CHAIN RETAINER. LENGTH SHALL BE AS REQUIRED FOR INSULATION THICKNESS AND TO ALLOW A MINIMUM 12 INCHES OF ACCESS FOR PROBE INSERTION AND REMOVAL. LOCATE IN STRAIGHT LENGTH OF PIPE AS FAR FROM FITTINGS AND VALVES AS POSSIBLE.
7. PROVIDE 1/2" BALL VALVE WITH HOSE CONNECTION TO SIMULATE FIXTURE USE DURING TESTING. PROVIDE LOCKING HOSE CONNECTION VACUUM BREAKER.
8. SIZE VALVE FOR 2-8 GPM.
9. VERIFY PROPER OPERATION OF EXISTING RECIRCULATION PUMP AND AQUASTAT.

NO.	BY	REVISIONS	DATE



CITY OF LYNCHBURG
STADIUM CLUBHOUSE
WATER HEATER REPLACEMENT
LYNCHBURG, VIRGINIA

ENLARGED PLUMBING PLANS
AND DETAILS
PROJECT NO: 13023
DATE: 15 OCT 13



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COMMISSION NO. 13023

Full Scale Verification
0" | 1"
Drawing No: **P3**

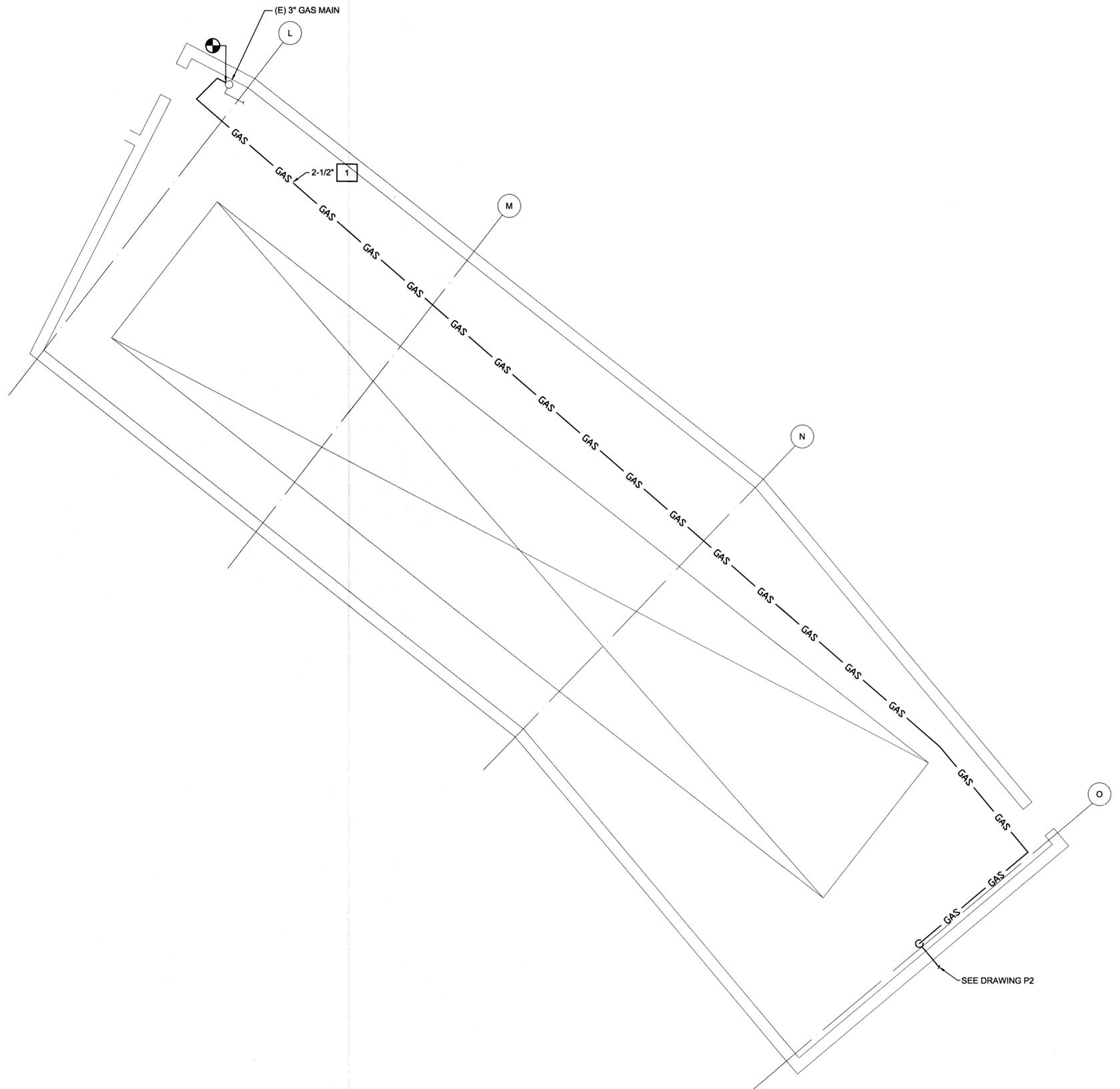
B ENLARGED PLUMBING PLAN
SCALE: 3/8"=1'-0"

C ENLARGED PLUMBING PLAN
SCALE: 3/8"=1'-0"

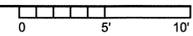
WATER HEATER PIPING DIAGRAM
SCALE: NONE

xx CONSTRUCTION NOTES:

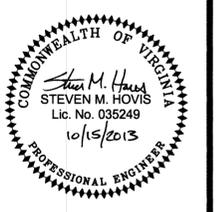
- ROUTE GAS PIPING AS HIGH AS POSSIBLE. SUPPORT EVERY 10 FT FROM BAR JOISTS.



NORTH
 PARTIAL FLOOR PLAN - GAS PIPING
 SCALE: 3/16"=1'-0"



NO.	BY	REVISIONS	DATE



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

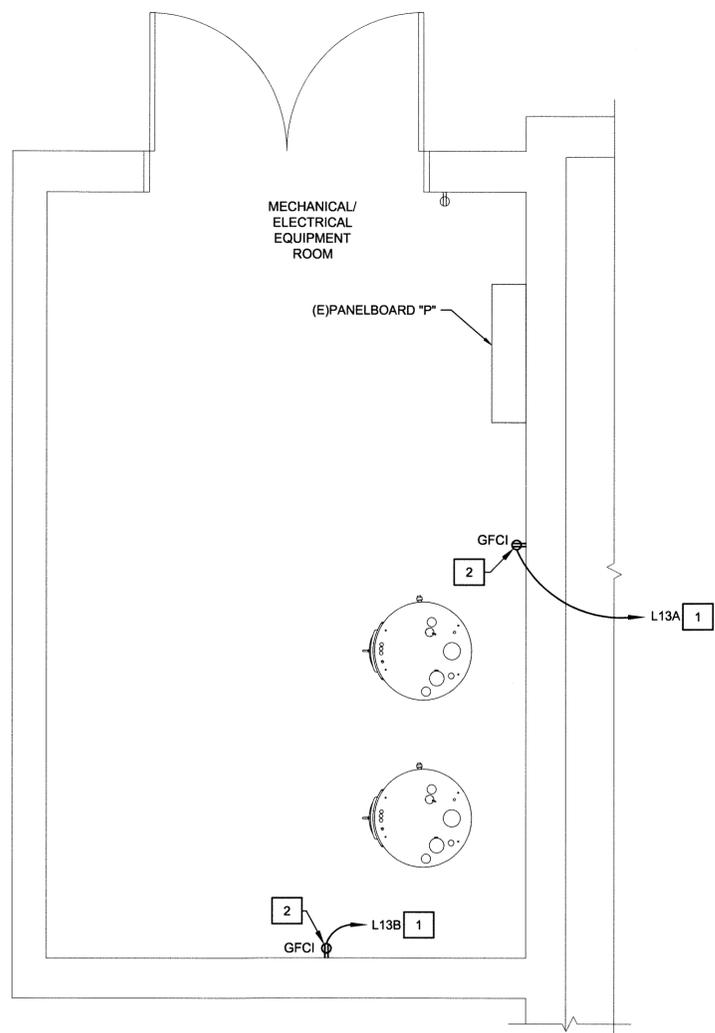
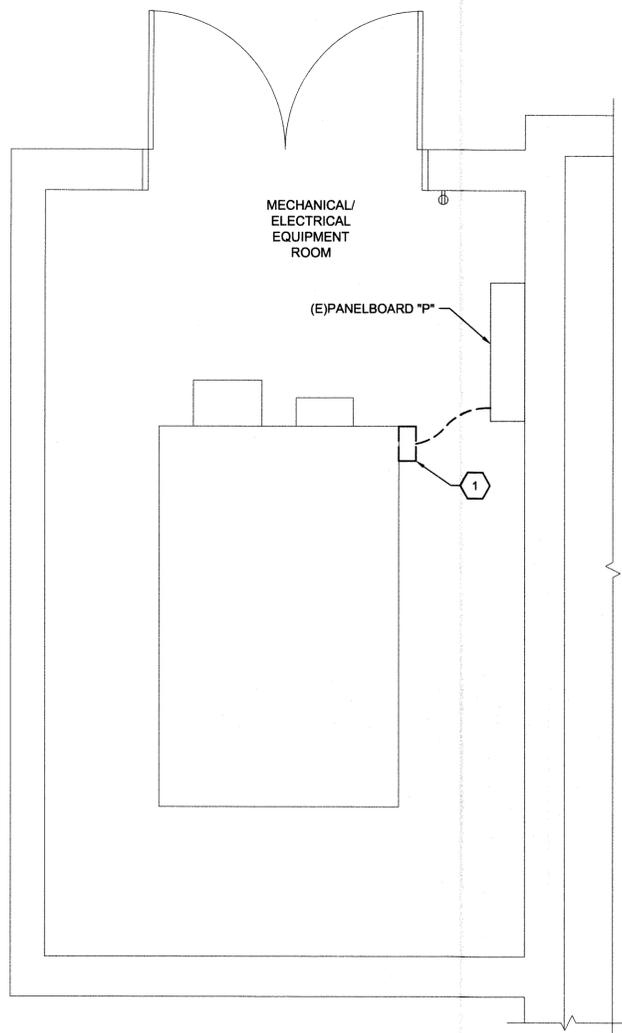
CITY OF LYNCHBURG
 STADIUM CLUBHOUSE
 WATER HEATER REPLACEMENT
 LYNCHBURG, VIRGINIA

ENLARGED PLUMBING PLANS
 AND DETAILS
 PROJECT NO. 13050
 DATE: 15 OCT 13

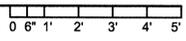


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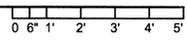
Full Scale Verification
 0" = 1"
 Drawing No. **P4**



NORTH
DEMOLITION PLAN
 SCALE: 3/8"=1'-0"



NORTH
CONSTRUCTION PLAN
 SCALE: 3/8"=1'-0"



ABBREVIATIONS:

- A AMPERE
- AFF ABOVE FINISHED FLOOR
- AWG AMERICAN WIRE GAUGE
- BRKR BREAKER
- C CONDUIT
- CKT CIRCUIT
- COND CONDUCTOR
- DWG DRAWING
- (E) EXISTING
- EGC EQUIPMENT GROUNDING
- FVNR FULL-VOLTAGE, NON-REVERSING
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- I/O INPUT/OUTPUT
- NC NORMALLY CLOSED
- NF NOT FUSED
- NO NORMALLY OPEN
- P POLES
- UL UNDERWRITERS LABORATORIES
- UON UNLESS OTHERWISE NOTED
- TYP TYPICAL
- V VOLTS

GENERAL NOTES:

1. THESE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE GENERAL AND APPROXIMATE LOCATION OF EQUIPMENT AND EXISTING CONSTRUCTION. DO NOT SCALE DRAWINGS FOR FABRICATION. FIELD- VERIFY ALL DIMENSIONS, LOCATIONS, AND REQUIRED CLEARANCES.
2. APPLICABLE CODES
 ALL ELECTRICAL WORK ON THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE 2009 VIRGINIA UNIFORM STATEWIDE BUILDING CODE AND NFPA 70-2008 (NATIONAL ELECTRICAL CODE).
3. COORDINATION
 COORDINATE ARRANGEMENT, MOUNTING, AND SUPPORT OF ELECTRICAL EQUIPMENT: TO PROVIDE FOR EASE OF DISCONNECTING EQUIPMENT; TO ALLOW RIGHT OF WAY FOR PIPING; AND SO RACEWAYS WILL BE CLEAR OF OBSTRUCTIONS AND OF THE WORKING AND ACCESS SPACE OF OTHER EQUIPMENT.
4. RACEWAYS AND BOXES
 4.1 DEFINITIONS:
 EMT - ELECTRICAL METALLIC TUBING
 RSC - RIGID STEEL CONDUIT
 4.2 INDOOR APPLICATIONS:
 EXPOSED, NOT SUBJECT TO PHYSICAL DAMAGE: EMT.
 EXPOSED AND SUBJECT TO DAMAGE: RSC.
 CONCEALED IN CEILINGS AND INTERIOR WALLS AND PARTITIONS: EMT.
 DAMP OR WET LOCATIONS: RSC.
 BOXES AND ENCLOSURES: NEMA 250, TYPE 1, EXCEPT USE NEMA 250, TYPE 4, IN DAMP OR WET LOCATIONS.
 4.3 MINIMUM RACEWAY SIZE: 3/4-INCH TRADE SIZE.
5. CABLES AND CONDUCTORS
 5.1 CONDUCTOR AND CABLE TYPES:
 A. SINGLE CONDUCTORS: THHN-THWN COPPER, #12 MINIMUM CONDUCTOR SIZE, SOLID FOR #10 AWG AND SMALLER, STRANDED FOR #8 AWG AND LARGER.
 5.2 CONDUCTOR AND CABLE APPLICATIONS:
 A. SERVICE, FEEDER, AND BRANCH CIRCUITS: SINGLE CONDUCTORS IN RACEWAY.
 B. ALL OTHER APPLICATIONS: AS INDICATED.
6. DEVICES
 A. STRAIGHT BLADE RECEPTACLES: HEAVY-DUTY CONVENIENCE RECEPTACLES, 125 V, 20 A: COMPLY WITH NEMA WD 1, NEMA WD 6 CONFIGURATION 5-20R, AND UL 498.
 B. WALL COVER PLATES: PROVIDE SINGLE AND COMBINATION TYPES TO MATCH CORRESPONDING WIRING DEVICES. FOR FINISHED SPACES PROVIDE STEEL WITH WHITE BAKED ENAMEL. FOR UNFINISHED SPACES PROVIDE GALVANIZED STEEL.

LEGEND:

- DEMOLITION NOTE
- CONSTRUCTION NOTE
- CONDUIT RUN EXPOSED OR ABOVE SUSPENDED CEILING
- HOMERUN
- DUPLEX RECEPTACLE, MOUNT 18" AFF, UON.

DEMOLITION NOTES:

1. DISCONNECT POWER CIRCUIT FROM WATER HEATER PANEL. REMOVE WIRES AND CONDUIT BACK TO PANELBOARD "P". MARK BREAKER AS SPARE. PLUG UNUSED HOLES IN PANELBOARD.

CONSTRUCTION NOTES:

1. PANEL "L" IS LOCATED APPROXIMATELY 100 FEET NORTH AND 30 FEET EAST OF MECHANICAL ROOM IN "CITY STORAGE" ROOM. INSIDE PANEL "L" REPLACE CIRCUIT BREAKER 15 WITH PIGGYBACK 20A/1P BREAKERS. CONNECT ORIGINAL LIGHTING CIRCUIT ATTACHED TO 15 TO 15A AND CONNECT ORIGINAL LIGHTING CIRCUIT ATTACHED TO 13 TO 15B. REPLACE CIRCUIT BREAKER 13 WITH PIGGYBACK 15A/1P BREAKERS. RUN INDIVIDUAL 20A (3 #12, IN 3/4" CONDUIT) CIRCUITS FROM PANEL "L" TO NEW RECEPTACLES.
2. SURFACE MOUNTED 15A GFCI RECEPTACLES WITH SHEET METAL BACK BOXES AND GALVANIZED STEEL COVERS.



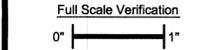
**CITY OF LYNCHBURG
 STADIUM CLUBHOUSE
 WATER HEATER REPLACEMENT**

LYNCHBURG, VIRGINIA

ELECTRICAL PLANS,
 NOTES, LEGEND,
 AND ABBREVIATIONS

PROJECT NO:
13090

DATE:
15 OCT 13



Drawing No.: **E1**

NO.	BY	REVISIONS	DATE