

- 1.0 SCOPE:
- A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation and to provide complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, storm drainage, fixtures, equipment and other items described in these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer.
- B. Extend piping systems as indicated on contract documents or to point of connection as follows:
1. Points of connection within the existing building.
- 2.0 DOMESTIC WATER SERVICE AND SYSTEMS.
- A. Contractor shall verify water service availability, including size and available pressure to service the building.
1. The pressure provided to fixtures within the building shall not exceed that allowed by local code or shall not exceed 80 PSIG. Provide pressure regulator(s) as required to limit the maximum pressure.
- 3.0 PIPING, FITTINGS AND VALVES:
- A. Provide hot and cold water supply to each and every fixture, piece of equipment and to systems where makeup water is required.
- B. Provide service valves for each item of equipment, at branch piping, fixture groups, individual fixtures and elsewhere as indicated or required. Provide balance valves, strainers, check valves and other valves as indicated or required by the application.
- C. Provide a union or flanged connection between each item of equipment and its service valve. Copper to ferrous pipe connections shall have isolation coupling, flange or union.
- D. Domestic water, interior, above ground -
1. Pipe, copper tube -
- a. 2-1/2" and Smaller - Type "L" hard temper copper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silivabrite or "CB" solder joints, or roll grooved mechanical joints or pressure seal joint fittings with EPDM O-ring seals.
2. Provide valves where indicated on the drawings, where required by code, or required for service.
- a. 1/4 turn Service -
- 1) 1/2" thru 2" - Nibco 585-66-LF bronze lead free, 600 PSIG, full port, stainless steel ball and stem.
- 2) Provide isolation valves where indicated on drawing, including at branches, terminations, each piece of equipment and elsewhere as required by code.
3. Securely anchor and support piping, valves and fittings, with adequate provisions for expansion and contraction. Grade lines, free of traps, to low point at cut-off and drain valve.
4. Hot and cold supply lines to have manufactured pre-charged piston type water hammer arresters sized and installed in accordance with PDI-VH 201. Install at each solenoid actuated quick closing valve location including but not limited to dishwashers, clothes washers, ice makers, electronic faucets and similar items. Sioux Chief, JR Smith or equal. Provide access panel where required.
- F. Natural Gas --
1. Pipe above ground:
- a. 2" and smaller - Schedule 40 black steel piping with threaded fittings.
2. Valves & Connectors:
- a. Shutoff Service -
- 1) 1/2" thru 1" - Nibco GB-1A, brass body, chrome plated brass ball, PTFE seats, screwed ends, 5 PSIG per CGA, lever handle.
- 2) 1/2" thru 2" - Nordstrom 142, iron lubricated tapered plug valve, 200 PSIG, threaded ends.
- b. Regulator, 3/4" thru 1-1/2" - Fisher type S, spring loaded diaphragm, 1.5" WC to 2.5 PSIG discharged pressure, threaded, vented to atmosphere.
- c. Flex Connectors, Metraflex GASCT 300 series stainless steel braided hose with carbon steel threaded ends.
3. Natural gas piping in return air plenum, where permitted shall be either installed in vented fabricated enclosure, sleeved and vented; or welded or one piece.
4. Paint exterior natural gas piping with corrosion inhibiting paint, color to be selected.
- G. Sanitary sewer, vent, interior --
1. Pipe - Standard weight cast iron hubless with no-hub shielded mechanical joints; solid wall schedule 40 PVC, ABS with solvent cement joints, vents may be galvanized malleable iron.
2. Plastic piping shall not be allowed in return air plenums.
3. Floor or equipment drains shall be provided at all locations where equipment is indirect wasted. Floor drains shall be provided outside all ADA showers for roll-in applications or where there is no threshold.
4. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise, except that piping sizes up thru 2-1/2" shall be sloped at 1/4" per foot. Piping sizes up thru 4" to be sloped at 1/4" per foot where possible and where required by local codes.
5. Vents shall be sloped upward in direction of flow.
- H. Sanitary sewer, vent, below grade --
1. Pipe - Standard weight cast iron hubless with no-hub heavy duty mechanical joint fittings; solid wall schedule 40 PVC, ABS with solvent cement joints.
2. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise, except that piping sizes up thru 2-1/2" shall be sloped at 1/4" per foot. Piping sizes up thru 4" to be sloped at 1/4" per foot where possible and where required by local codes.
3. Vents below grade shall be 2" minimum size and shall be sloped up in direction of flow.
- 4.0 CLEANOUTS, TEST TEES, TRAPS AND TRAP SEALS:
- A. Provide cleanout at the base of each stack or riser, at ends of runs greater than 100', each 135 degree aggregate change of direction in horizontal piping, where indicated on the drawings or as required by code. Plugs, extra heavy cast brass, screwed. Scored tops in unfinished areas, carpet markets in carpet floors, tile top in tile floors, stainless steel cover in finished walls. Cleanouts shall be the same size as pipe up to 4" diameter, 4" cleanouts for larger pipe unless otherwise noted.
- B. All traps shall be deep seal type with liquid seal not less than specified by code.
- C. Where trap primers are not specified provide all floor and hub drains with trap seal with EPDM or silicone diaphragm, conforming to requirements of ASSE 1072 or 1017.2. Provent Proset Series SG22 or TG22, Sioux Chief series 835, Rectorseal SS series or acceptable equal.
- 5.0 SLEEVES AND SEALS, FLASHINGS, ROOF PIPE SUPPORTS AND UV PROTECTION:
- A. Flash all pipes and vents extending through roof. Flashing details shall be in accordance with roof manufacturer's requirements.
- B. Continuous roof piping penetrations shall be made weather tight, conform to roof manufacturer warranty.
- C. Roof pipe supports shall be prefabricated with UV resistant rubber base, unistrut channel and pipe clamp, length and height for consistent pipe elevation to suit application. MI-Fab C6 series or acceptable equal.
- D. Plastic piping without UV inhibitors which is exposed to UV radiation from sunlight shall be protected by coating with a UV resistant paint.
- 6.0 CROSS- CONNECTIONS AND INTERCONNECTIONS:
- A. No plumbing device or piping shall be installed which will provide cross-connection or interconnection between a distributing supply or waste so as to make possible the backflow or back-siphonage of polluted water into the potable water supply system. Where the possibility of back-siphonage exists, water supply to the fixture shall be introduced through a suitable backflow preventer device suitable for the hazard protected. Installed backflow preventers must be approved through the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research.
1. They may be an air gap, anti-syphon valve, atmospheric vacuum breaker, pressure vacuum breaker, double check, reduced pressure backflow preventer or as otherwise required by the authority having jurisdiction.
- 7.0 PLUMBING EQUIPMENT:
- A. Water heaters, pumps, expansion tanks and other equipment shall be as scheduled or by acceptable equal by one of the following:
- Water Heaters and Accessories:
- Water Heaters: A.O. Smith, State, Rheem, Bradford White
- Expansion Tanks: Watts, Amtrol, Armstrong, Elbi, Taco, Wessels.
- B. Water Heater Installation
1. Pipe water heater drains and/or pan drains to indirect waste per code and as noted or detailed. Water heater P&T relief valves shall be piped independently, indirectly wasted 6" above receptor per code and as noted or detailed.
2. Install vacuum relief valve on each bottom fed storage water heater, installed above the top of the water heater on cold water inlet piping.
3. Mount water heaters on concrete floor pads, suspended from structure on steel rods, on steel floor stands or wall bracket steel frames as indicated on drawings.
4. Suspended heaters up to 50 gallons may be mounted utilizing prefabricated steel support platform, HoldRite SVHP series or acceptable equal.
5. Where water heaters are mounted overhead, on wood floor or other location requiring containment, mount water heaters in drain pan with 1" minimum drain, HoldRite QP series, acceptable equal or field fabricated equivalent.

END OF SECTION

6. Water piping connections to water heaters shall be metallic, no plastic piping is permitted within 18" of a water heater connection. Stainless steel flexible connectors with union ends may be used, HoldRite or acceptable equal. Provide 18" minimum flexible corrugated copper or braided stainless steel connector hoses with compression ends for water heaters with 3/4" water connections.
- C. Provide equipment accessories including but not limited to operating controls, limit switches, oil sensors, high level controls, timers, aquastats, energy management system interface, etc. as indicated on drawings and as required for a complete operating system.
- 8.0 INSULATION:
- A. Pipe insulation shall conform to the International Energy Conservation Code.
- B. Insulate all cold water, hot water piping, Owens Corning or acceptable equal.
1. Cold water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket.
2. Hot Water piping insulation: 1" (pipe sizes up thru 1-1/4") 1-1/2" (pipe sizes 1-1/2" and above) fiber glass sectional pipe covering with universal all service jacket.
- C. At Contractor's option, Armacel AP Armaflex unicellular insulation or acceptable equal with 25/50 flame and smoke rating with equal thermal performance may be substituted for fiberglass products.
- D. Seal all joints on cold water insulation to maintain vapor barrier.
- E. Insulation shall run continuously thru hangers and supports without interruption.
- F. Refer to plumbing fixture schedule for protective insulation of fixture drains and water piping for compliance with ADA requirements for People with Disabilities.
1. Pipe coverings may be omitted where protection from injury (such as shrouds or casework) is provided by other trades.
2. Provide comparable protection for accessory items such as disposers where items are exposed to contact beneath ADA designated fixtures.
- 9.0 PIPE SUPPORTS AND ROUTING:
- A. Hangers and Supports
1. Piping shall be supported in accordance with industry standards including support methods, sizes and spacing. All supports and installation shall conform to MSS SP58 and 69 and Fed Spec WW-H-171E and A-A-1192A.
2. Pipe Slopes: Install hangers and supports to provide indicated or required pipe slopes to provide for drainage and venting
3. Each piping system shall be independently supported with no piping bearing on another and installed such that no weight of piping is borne by the equipment.
4. Space hangers and supports within maximum piping span length indicated in MSS SP-58. Install building attachments at required locations for proper piping support.
5. Hangers shall be designed to allow for expansion and contraction of pipe lines and shall be of adequate size to permit covering when required. Provide protective saddles and blocking where supporting insulated piping to prevent crushing insulation.
- B. Routing
1. Piping shall be routed as shown on drawings, parallel to building lines unless otherwise shown, coordinated with building structure and other trades. Adjust pipe routing and drop locations with necessary pipe offsets or changes in elevation to accommodate beams and other obstructions.
- 10.0 EQUIPMENT AND PIPE LABELS:
- A. Equipment labels shall be provided for all plumbing equipment and shall be self-adhesive engraved plastic, blue with white lettering, sized, minimum 1-1/2" high, and located for viewing from ground or floor level. Label shall indicate drawing designation or unique equipment number.
- B. Pipe labels for domestic water, waste, vent and gas piping shall be preprinted, color-coded, with 1-1/2" lettering indicating service, and showing flow direction, locate pipe labels where piping is exposed or above accessible ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums; and locations as follows:
1. Near each valve and control device.
2. Near each branch connection, excluding short takeoffs for fixtures and terminal units. Where flow pattern is not obvious, mark each pipe at branch.
3. Near major equipment items and other points of origination and termination.
4. Spaced at maximum intervals of 50 feet along each run. Reduced intervals to 25 feet in areas of congested piping and equipment.
5. On piping above removable acoustical ceilings, omit intermediately spaced labels.
- 11.0 MISCELLANEOUS
- A. Indirect wastes shall discharge full size thru an air gap to a floor, equipment drain, sanitary floor sink or hub drain. The floor or equipment drain grate shall be fitted with a funnel, the sanitary floor sink shall have a partial grate or the grate shall be omitted. Drains shall be located so they are accessible and not a tripping hazard.
- B. Provide escutcheons at all penetrations of exposed walls and ceilings. Escutcheons shall be chrome plated brass in occupied areas, prime paint finish for unoccupied areas unless otherwise noted. Escutcheons for exterior or moist areas shall be brass.
- 12.0 PROTECTION OF WORK
- A. Protection
1. Protect and cover piping and fixture waste and water openings to prevent entry of dirt and debris.
2. Cover and protect fixtures and plumbing equipment to prevent damage.
- 13.0 TEST, ADJUSTMENTS AND CLEANING:
- A. Soil, waste and vent piping testing:
1. Initial Piping Water Test: Fill with water to the top of the highest point of the system extending through roof. Systems may be tested in whole or part. The system shall remain leak free under test for a minimum period of Fifteen (15) minutes.
- a. Gravity Drain Test: Either 10' water column or at a pressure not less than 10% above that the piping will be subjected to during nominal operation
- b. Pressure Piping Test: Either 25 PSIG or at a pressure not less than 10% above that the piping will be subjected to during nominal operation.
- c. Where applicable, isolate new portions of the system(s) piping with test tee and Oatey Clean Seal inflatable plug prior to testing.
2. Final Piping Test: The completed system(s) shall be visually inspected to determine compliance with all codes and standards. Where required by the building official, the completed system shall be smoke tested with all traps water filled and system pressured to 1" WC for a minimum period of fifteen (15) minutes.
- B. Water and gas line testing:
1. Water piping shall be purged and tested with compressed air or water at 50 PSIG above the operating pressure but not to exceed the pressure rating of piping system materials for a period of 2 hours with no measurable pressure drop.
2. Natural gas lines shall be inspected and blown out with dry compressed air or nitrogen to purge of debris and tested at 1-1/2 times the operating pressure or a minimum of 25 PSIG pressure with no measurable pressure drop. All test procedures including duration of test shall be in accordance with NFPA 54 and the International Fuel Gas Code.
3. Where applicable, isolate new portions of pressure piping from existing piping with valves prior to testing.
- C. After successful testing, sterilize water system with an approved solution in accordance with local health officials.
- D. Contractor to submit all test data and other documentation for record.
- 14.0 FIXTURE BRANCH PIPING:
- A. Fixture branch and connection sizes shall be as shown in the plumbing fixture schedule on the drawings and not less than required by code.
- B. Minimum waste or vent size below slab on grade shall be 2".
- 15.0 PLUMBING FIXTURES:
- A. Refer to plumbing fixture schedule for plumbing fixtures and accessories. Include all fittings and accessories as required for a complete working system.
- B. Where required for ADA compliance, provide lavatory and sink offset drain and tailpiece assembly.
- C. At contractor option, flexible stainless steel braided hose, 125 PSIG rated, with non-toxic liner and compression fittings may be used in lieu of chrome plated brass riser tube. Where ADA compliance is required, provide flexible insulation wrap on braided water supplies in lieu of specified molded vinyl wrap.

GENERAL NOTES (TYPICAL ALL SHEETS)

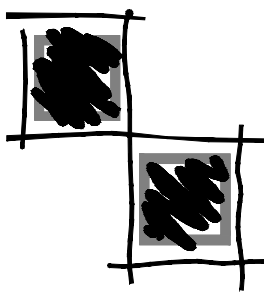
- A. PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.
- B. ALL EXISTING PIPING SHOWN ON DRAWINGS IS SCHEMATIC AND IS BASED ON EXISTING RECORD DRAWINGS PROVIDED BY THE OWNER AND DO NOT REFLECT EXACT EXISTING CONDITIONS. CONTRACTOR TO FIELD VERIFY EXACT DEPTH AND/OR LOCATIONS ON JOB SITE. CONTRACTOR SHALL REROUTE NEW WORK TO ACCOMMODATE EXACT LOCATIONS OF EXISTING UTILITIES, SUBROUTS AND/OR CONNECTIONS.
- C. CUTTING AND PATCHING OF FLOORS, WALLS, CEILING, ETC., REQUIRED IN STRICT ACCORDANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECT'S AND/OR BUILDING OWNER REQUIREMENTS.
- D. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID ROUTING CONFLICTS.
- E. ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED FROM PROJECT SITE AND DISPOSED OF BY CONTRACTOR.
- F. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES PASSING THRU INTERIOR NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL PIPES. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION. INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
- G. PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT BY OTHERS. VERIFY CONNECTIONS SIZES AND REQUIREMENTS.
- H. PIPING ROUTED BELOW COUNTER IN CABINETS SHALL BE ROUTED AS NOTED. NOT TO INTERFERE WITH DRAWERS, SHELVES, EQUIPMENT, ETC., AND SUPPORT FROM BACK WALL OF CABINET.
- I. PLUMBING CONTRACTOR SHALL PROVIDE PRO-SET SYSTEMS 'TRAP GUARD' IN ALL FLOOR DRAIN TRAPS WITHIN PROJECT SCOPE OF WORK.
- J. PLUMBING CONTRACTOR SHALL VERIFY WALL THICKNESS WITH ARCHITECT PRIOR TO ORDERING FREEZE PROOF WALL HYDRANTS.

PLUMBING SYMBOLS

————	EXISTING TO REMAIN
————	NEW PIPING
————▶————	FLOW ARROW
————CW————	COLD WATER
————HW————	HOT WATER
————HWR————	HOT WATER RETURN
————NG————	NATURAL GAS
————V————	SANITARY VENT ABOVE GROUND/FLOOR
---V---	SANITARY VENT BELOW GROUND/FLOOR
---W---	SANITARY WASTE BELOW GROUND/FLOOR
⊕	BALANCE VALVE
⊕	GAS SHUT-OFF COCK
⊕	SHUT OFF VALVE
⊕	IN-LINE PUMP
⊕ OR ⊕	FLOOR DRAIN OR EQMT FLOOR DRAIN
⊕- WH	WALL HYDRANT
WCO-	WALL CLEAN OUT
⊕FFCO	FINISHED FLOOR CLEANOUT
⊕VTR	SANITARY VENT THROUGH ROOF
⊕DWH-1	EQUIPMENT TYPE AND DESIGNATION
⊕	PLUMBING FIXTURE DESIGNATION
ETR	EXISTING TO REMAIN
⊕	CONNECT TO EXISTING

1730 Walnut Street
Kansas City, Missouri
64108

Fender



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Seal



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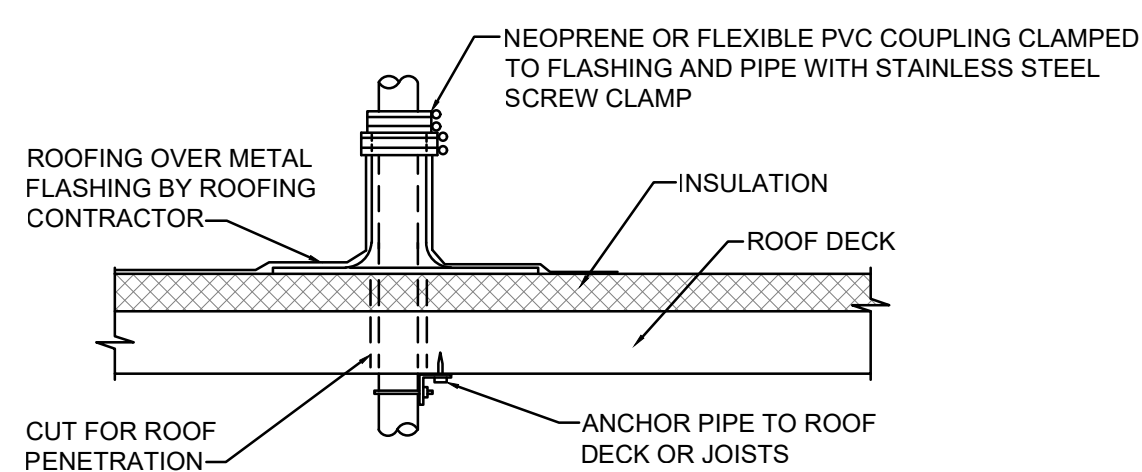
LEE'S SUMMIT LOGISTICS BUILDING B
Corner of NE Tudor RD and Main Street
Lee's Summit, MO 64086

Project Number: 23.7317.06

Date	08.24.2023
Phase	CONSTRUCTION
Issued For	PERMIT
Drawn By	JMS
P.I.C.	JON

Revision	
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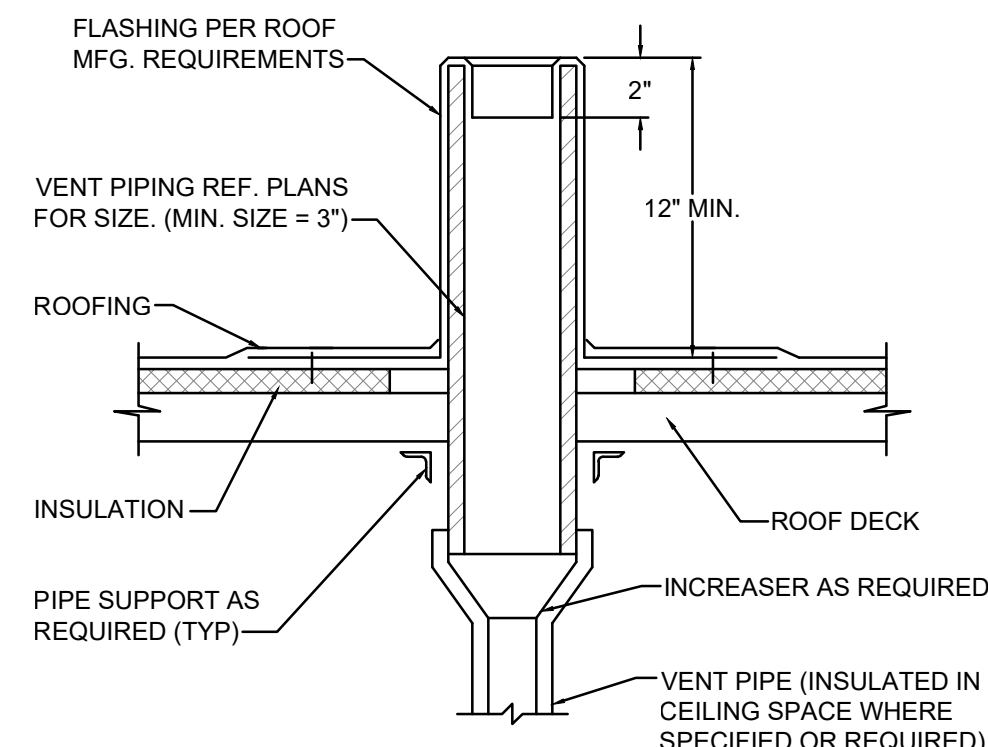
- NOTES:

1. REFER TO PLANS FOR PIPE SIZE(S) AND LOCATION(S). LOCATE PENETRATION MINIMUM 18" FROM ADJACENT WALLS OR ANY EQUIPMENT CURBS, PARAPETS, EXPANSION JOINTS, ETC
2. VERIFY FLASHING AND COUNTERFLASHING WITH ROOF MFG. COMPLY WITH ROOF WARRANTY REQUIREMENTS.
3. FLASHING AND COUNTER FLASHING IS BY ROOFING CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE INSTALLATION.

SINGLE PIPE

ROOF PENETRATION DETAIL

NO SCALE



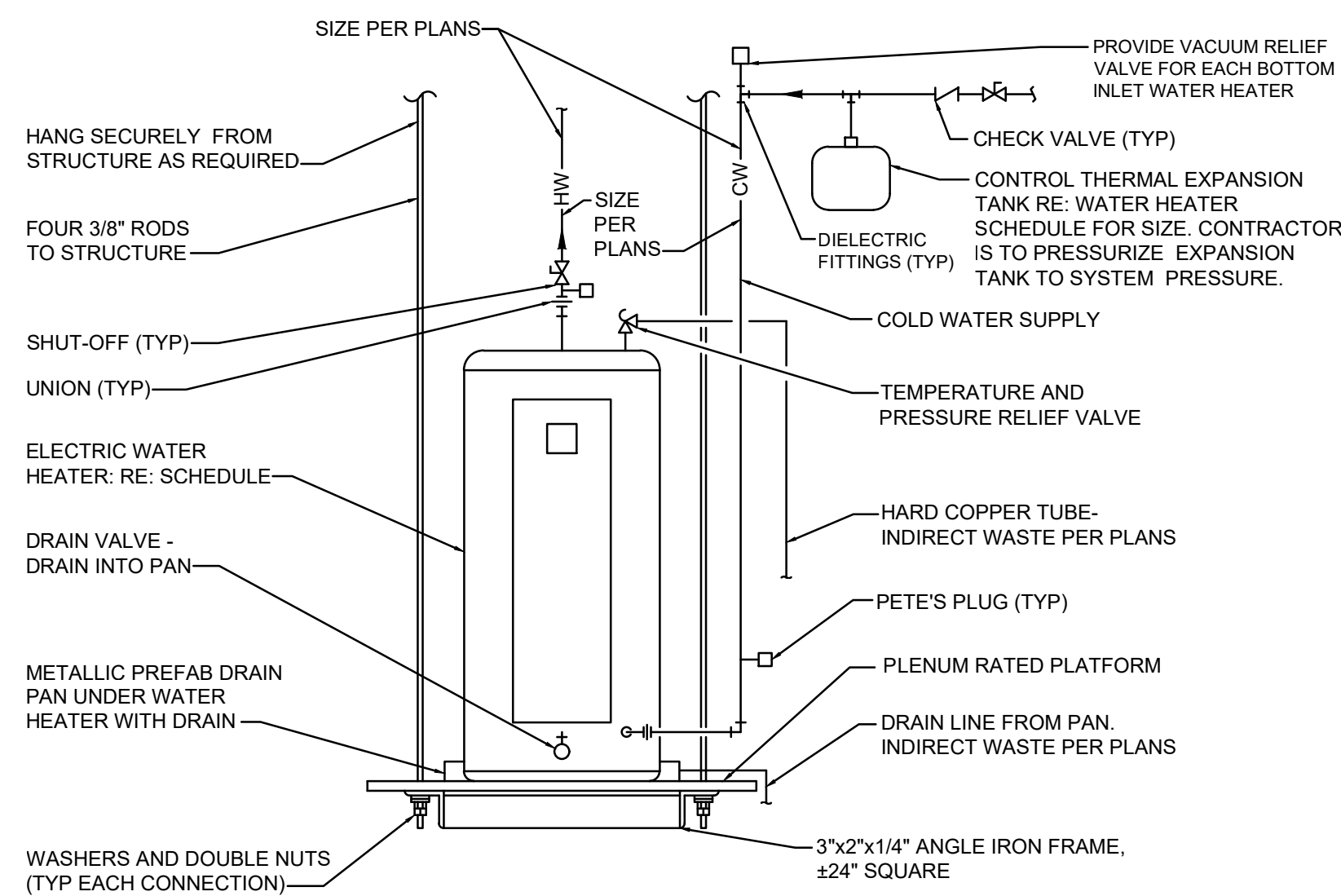
NOTE:
LOCATE VTR A MINIMUM OF 10' FROM ANY
BUILDING OPENINGS, MECHANICAL UNIT
INTAKES, RELIEF OR INTAKE HOODS

VENT THRU ROOF DETAIL

NO SCALE

- NOTES:

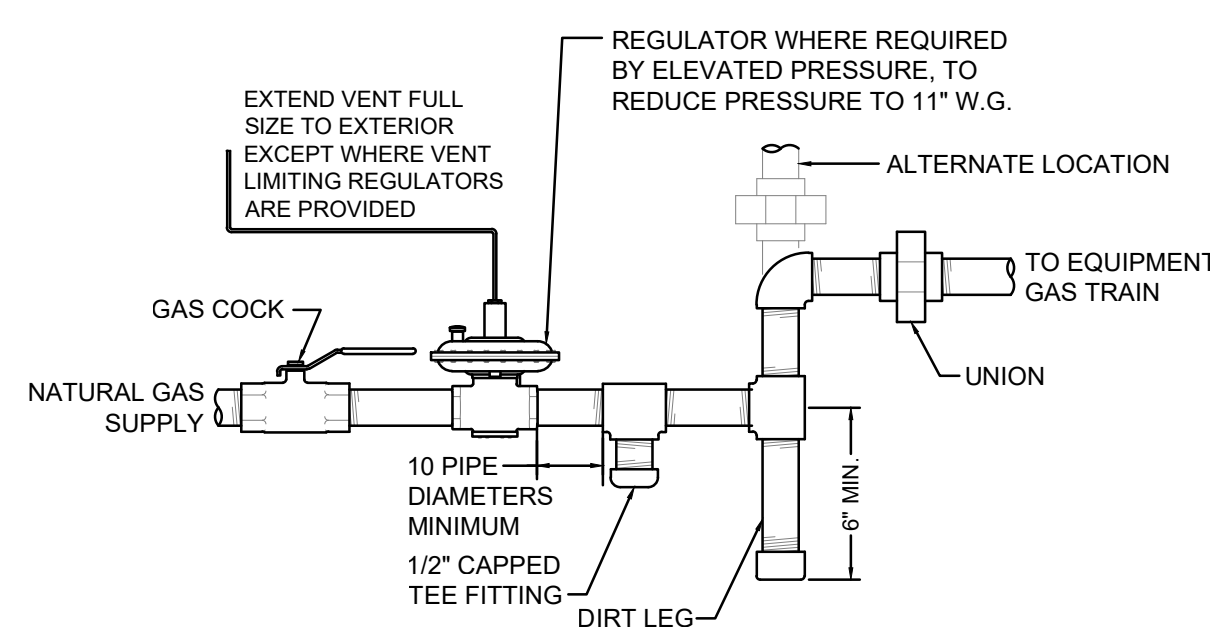
1. CONTRACTOR TO INSTALL WHERE INDICATED ON PLANS IN ACCESSIBLE LOCATION.
2. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
3. WATER HEATERS THAT ARE NOT RECIRCULATED SHALL BE EQUIPPED WITH AN INLET AND OUTLET HEAT TRAP, WHETHER INTEGRAL OR EXTERNAL, IN ACCORDANCE WITH THE IECC ENERGY CODE.
4. FOR DOMESTIC WATER SYSTEMS UTILIZING PVC, CPVC OR PEX, PROVIDE 18" MINIMUM COPPER OR BREADED STAINLESS STEEL HOSE CONNECTIONS.



NOTE: NO PIPING SHALL BE LOCATED
DIRECTLY BELOW WATER HEATER.

ELECTRIC WATER HEATER DETAIL

NO SCALE

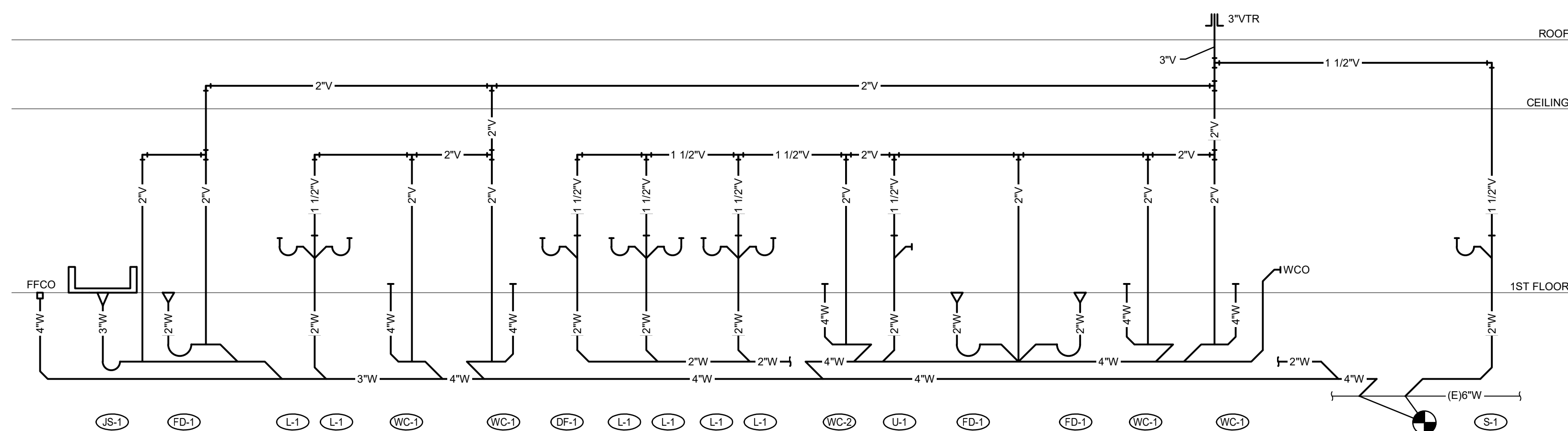


GAS EQUIPMENT CONNECTION DETAIL NO SCALE

MARK NO.	FIXTURE TYPE	MANUFACTURER	MODEL NO.	DESCRIPTION	MINIMUM CONNECTION SIZE			
					CW	HW	WASTE	VENT
WC-1	WATER CLOSET (ADA)	AMERICAN-STANDARD	3043.001 "MADERA"	FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD, 16-1/2" RIM HEIGHT. SLOAN "G2 OPTIMA PLUS" 8111-1-E-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: BEMS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS. NOTE: MOUNT FLUSH VALVE TO WIDE SIDE OF FIXTURE.	1"	-	4"	2"
WC-2	WATER CLOSET	AMERICAN-STANDARD	2234.001 "MADERA"	FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD, 15" RIM HEIGHT. SLOAN "G2 OPTIMA PLUS" 8111-1-E-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: BEMS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS.	1"	-	4"	2"
U-1	URINAL (ADA)	AMERICAN-STANDARD	6590.001 "WASHBROOK"	WHITE VITREOUS CHINA, WALL-HUNG, HIGH EFFICIENCY WASHOUT FLUSH ACTION, INTEGRAL FLUSHING RIM, 3/4" TOP SPUD, 2" OUTLET. SLOAN "OPTIMA PLUS" G2 8186-1.0 (1.6 GPF) BATTERY OPERATED ELECTRONIC FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: J. R. SMITH URINAL SUPPORT. NOTE: MOUNT FIXTURE RIM 17" ABOVE FINISHED FLOOR.	3/4"	-	2"	1-1/2"
L-1	LAVATORY (ADA)	AMERICAN-STANDARD	"LUCERNE" 0355.012 (4" CENTERS)	WALL HUNG, VITREOUS CHINA, 20" X 18", FRONT OVERFLOW, INTEGRAL BACK, AMERICAN STANDARD 7075.004 "COLONY PRO" DECK-MOUNTED FAUCET WITH CERAMIC OPERATING CARTRIDGE, 4" CENTERS, INTEGRAL SPOUT, AND LEVER HANDLES, LESS DRAIN, POP-UP HOLE AND ROD. ACCESSORIES: PROVIDE LEAD FREE BRONZE THERMOSTATIC MIXING VALVE WITH 0.25 GPM MINIMUM FLOW RATE, INTEGRAL CHECK VALVES, DISCHARGE SET AT 105 F, MOUNTED DOWNSTREAM OF FIXTURE STOPS, FLOOR GRID DRAIN, 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH LOOSE KEY, ANGLE STOPS AND J.R. SMITH CONCEALED ARM LAVATORY SUPPORT. PROVIDE WITH FULLY MOLDED FLEXIBLE VINYL INSULATION KIT COVER TRAP, SUPPLIES AND STOPS, TRUEBRO EZ LAV GUARD. NOTE: MOUNT FIXTURE RIM 31" ABOVE FLOOR.	1/2"	1/2"	1-1/2"	1-1/2"
S-1	SINK (ADA)	DAYTON	DCFU2416	SINGLE COMPARTMENT UNDERMOUNT SINK, 18 GA, TYPE 304 STAINLESS STEEL, 6-1/2" DEEP BOWL. AMERICAN STANDARD 7074.300 "COLONY PRO" SINGLE HOLE, DECK MOUNTED FAUCET WITH CERAMIC OPERATING CARTRIDGE, SINGLE LEVER HANDLE, AND PULL DOWN SPRAY. ACCESSORIES: STRAINER WITH 1-1/2" TALL PICE, 1-1/2" 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS. GARBAGE DISPOSAL: MOEN GXP33C PRO SERIES 1/3 HP WITH POWER CORD.	1/2"	1/2"	2"	1-1/2"
JS-1	JANITOR SINK	ZURN	Z1995-24	SIZE 24" X 24" X 10", COMPOSITE SERVICE SINK WITH COMPOSITE DRAIN, STAINLESS STEEL STRAINER, 3" DRAIN CONNECTION. ZURN Z843M1 WITH QUARTER TURN CERAMIC OPERATING CARTRIDGES, VACUUM BREAKER SPOUT WITH RAIL HOOK AND WALL BRACE, 3/4" MALE HOSE THREAD OUTLET, 369 LEVER HANDLES, FLANGED ADJUSTABLE SUPPLY ARM AND INTEGRAL SUPPLY STOPS AND CHECK VALVES. ACCESSORIES: EXTRUDED VINYL BUMPER GUARDS ON EXPOSED SIDES, RUBBER HOSE WITH STAINLESS STEEL WALL BRACKET.	1/2"	1/2"	3"	2"
DF-1	DRINKING FOUNTAIN (ADA)	ELKAY	EZSTL8WSLK	BL/VEL CABINET WITH BOTTLE FILLER, ADA BARRIER-FREE BL/LEVEL COOLER, 8.0 G.P.H. (50" F WATER WITH 90° F AIR TEMPERATURE), PUSH BAR ACTIVATION, STAINLESS STEEL COOLER TOP, HEAVY GAUGE VINYL CLAD STEEL CABINET WITH GREY FINISH, CANE APRON ON UPPER BOWL, ELECTRONIC ACTUATED INTEGRAL BOTTLE FILLER STATION ON LOWER FOUNTAIN. 120V/1PH/60HZ. ACCESSORIES: 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED SUPPLY AND STOP, J.R. SMITH FOUNTAIN MOUNTED TYPE SUPPORT WITH "PRO-SET" UPRIGHTS. NOTES: MOUNT WITH SPOUT 35" ABOVE FINISH FLOOR.	1/2"	-	1-1/2"	1-1/2"
IM-1	ICE MAKER WALL BOX	OATEY	39134	RECESSED ICE MAKER WALL BOX WITH QUARTER TURN VALVE AND 1/2" INLET, ABS COVER	1/2"	-	-	-
FD-1	FLOOR DRAIN	SIOUX CHIEF	832 SERIES	GENERAL PURPOSE PVC BODY WITH ADJUSTABLE STRAINER HEAD, ROUND NICKEL BRONZE STRAINER, AND SEEPAGE OPENINGS, OUTLET SIZE PER PLANS. NOTE: PROVIDE WITH RECTORSIAL TRAP SEAL IN OUTLET OF FLOOR DRAIN, MATCH OUTLET SIZE.	-	-	2"	1-1/2"

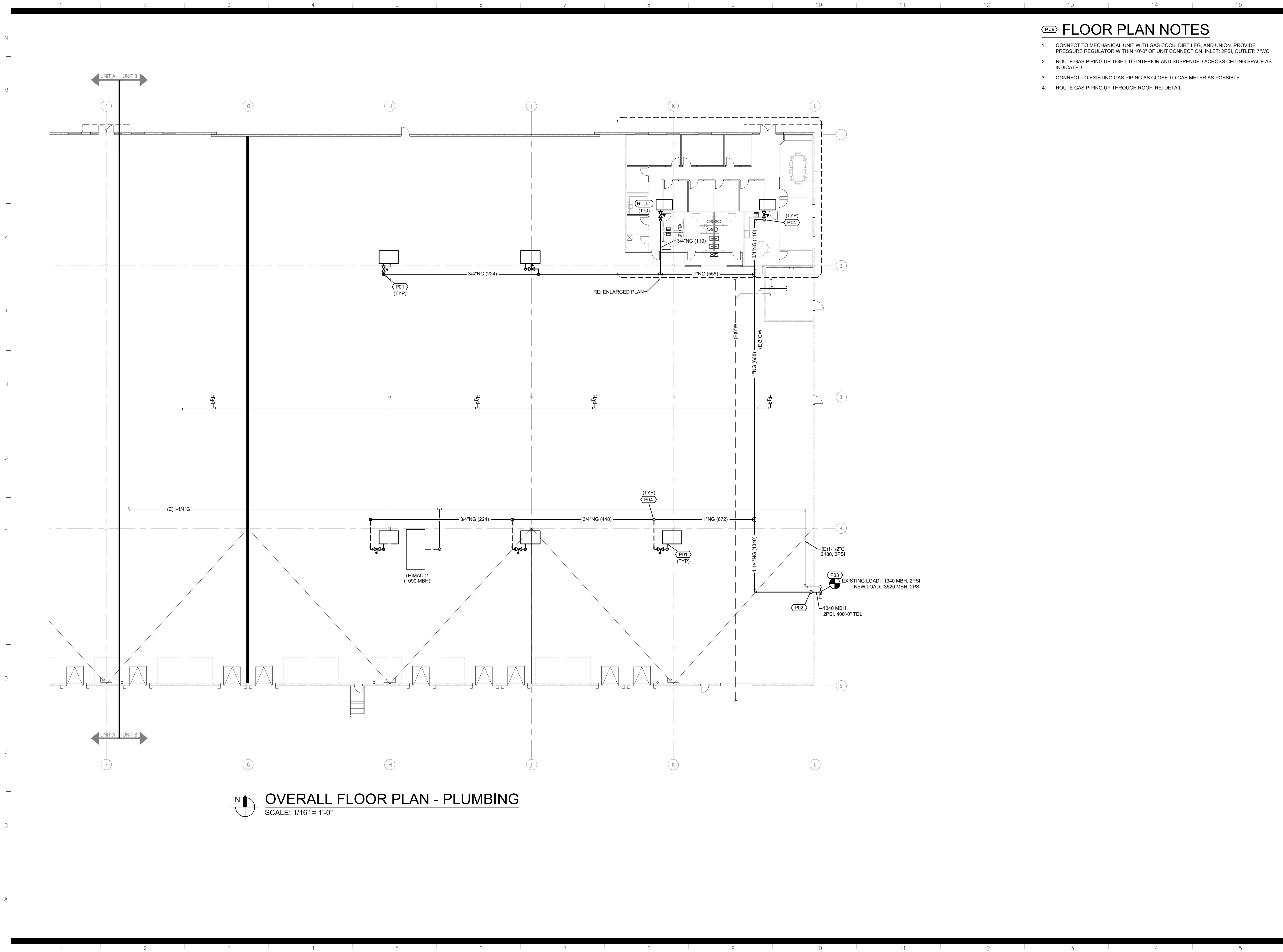
WATER HEATER SCHEDULE (ELECTRIC)

MARK NO.	MANUFACTURER	MODEL NO.	TANK LINING	TANK CAPACITY (GAL)	RECOVERY (GPH @ 90 F)	INPUT (KW)	THERMAL EXPANSION TANK MODEL NO.	ELECTRICAL			NOTES
								VOLT	ø	HZ	
DWH-1	RHEEM	PROCESS S2 RUBS	GLASS	38	21	4.5	FLT-5	240	1	60	1.2
NOTES: 1. PROVIDE WITH TEMPERATURE AND PRESSURE RELIEF VALVE AND DRAIN 2. PROVIDE WITH CONTROL THERMAL EXPANSION TANK, WATTS MODEL SCHEDULED WITH WATTS SCV SERVICE CHECK VALVE 3. COORDINATE											



WASTE/VENT RISER DIAGRAM

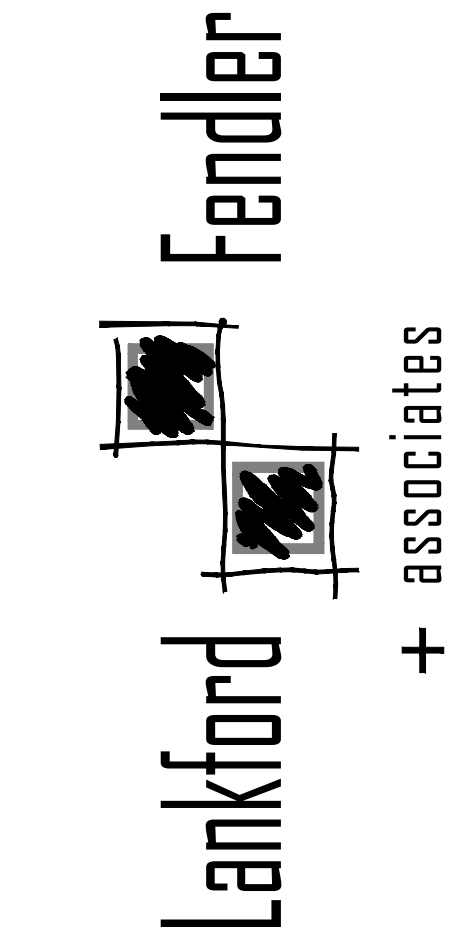
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FLOOR PLAN NOTES

1. CONNECT TO MECHANICAL UNIT WITH GAS COCK, DIRT LEG, AND UNION. PROVIDE PRESSURE REGULATOR WITHIN 10'-0" OF UNIT CONNECTION. INLET: 2PSI, OUTLET: 7"WC.
2. ROUTE GAS PIPING UP TIGHT TO INTERIOR AND SUSPENDED ACROSS CEILING SPACE AS INDICATED.
3. CONNECT TO EXISTING GAS PIPING AS CLOSE TO GAS METER AS POSSIBLE.
4. ROUTE GAS PIPING UP THROUGH ROOF, RE: DETAIL.

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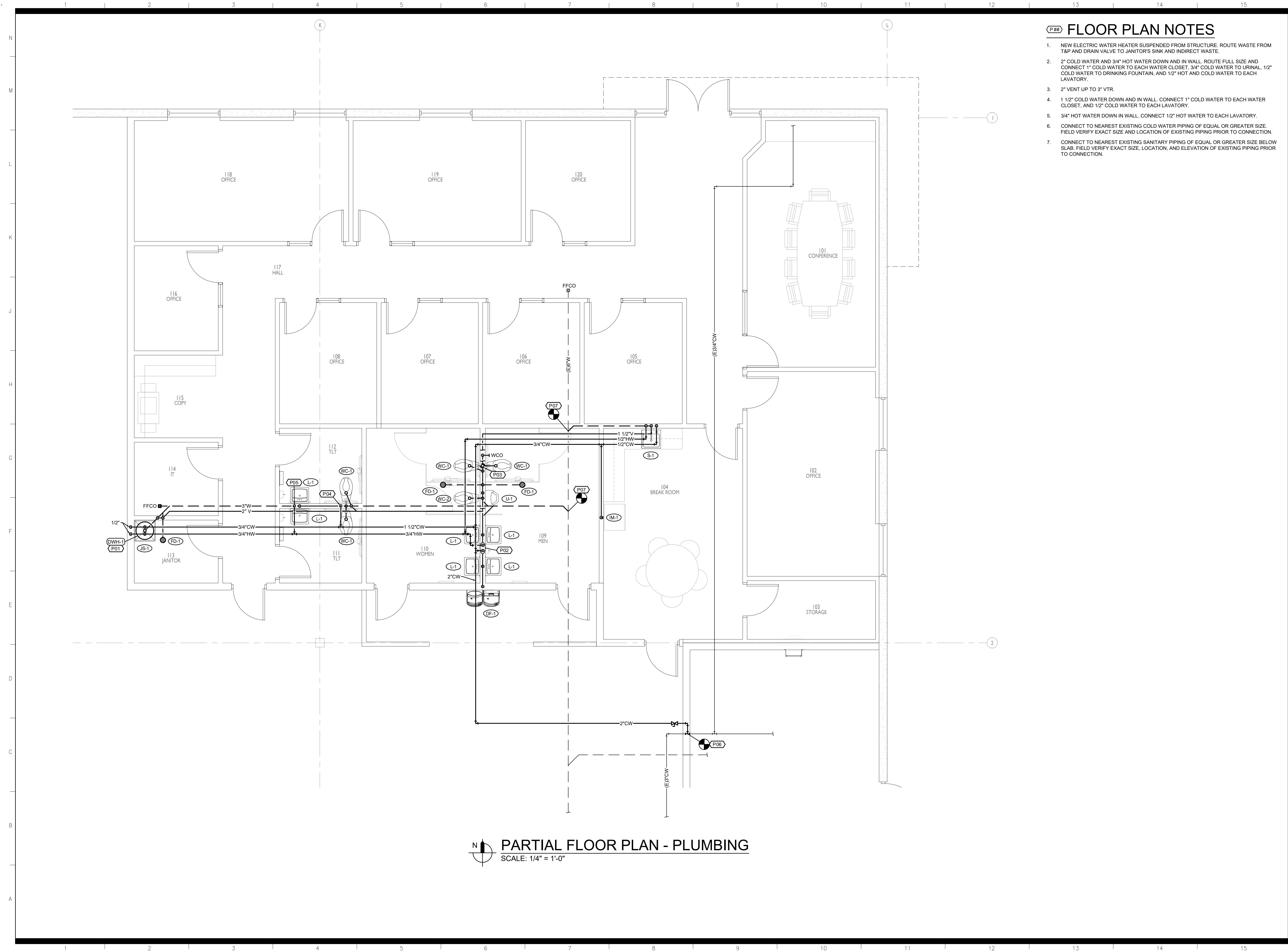
MIDWEST DISTRIBUTION
LEE'S SUMMIT LOGISTICS BUILDING B
Corner of NE Tudor RD and Main Street
Lee's Summit, MO 64086

Project Number: 23.7317.06

Date	08.24.2023
Phase	CONSTRUCTION
Issued For	PERMIT
Drawn By	JMS
P.I.C.	JON

Revision	
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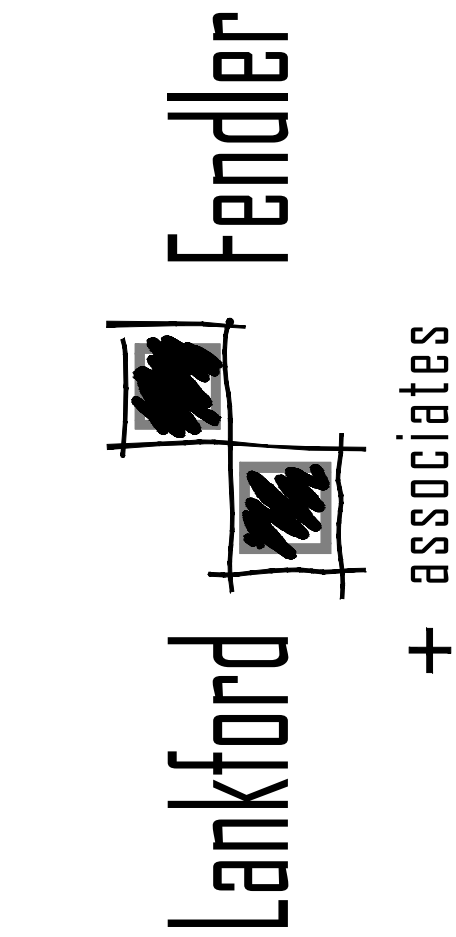


FLOOR PLAN NOTES

1. NEW ELECTRIC WATER HEATER SUSPENDED FROM STRUCTURE. ROUTE WASTE FROM T&P AND DRAIN VALVE TO JANITOR'S SINK AND INDIRECT WASTE.
2. 2" COLD WATER AND 3/4" HOT WATER DOWN AND IN WALL. ROUTE FULL SIZE AND CONNECT 1" COLD WATER TO EACH WATER CLOSET, 3/4" COLD WATER TO URINAL, 1/2" COLD WATER TO DRINKING FOUNTAIN, AND 1/2" HOT AND COLD WATER TO EACH LAVATORY.
3. 2" VENT UP TO 3" VTR.
4. 1 1/2" COLD WATER DOWN AND IN WALL. CONNECT 1" COLD WATER TO EACH WATER CLOSET, AND 1/2" COLD WATER TO EACH LAVATORY.
5. 3/4" HOT WATER DOWN IN WALL. CONNECT 1/2" HOT WATER TO EACH LAVATORY.
6. CONNECT TO NEAREST EXISTING COLD WATER PIPING OF EQUAL OR GREATER SIZE. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING PRIOR TO CONNECTION.
7. CONNECT TO NEAREST EXISTING SANITARY PIPING OF EQUAL OR GREATER SIZE BELOW SLAB. FIELD VERIFY EXACT SIZE, LOCATION, AND ELEVATION OF EXISTING PIPING PRIOR TO CONNECTION.

PARTIAL FLOOR PLAN - PLUMBING
SCALE: 1/4" = 1'-0"

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