

**PLUMBING LEGEND**

W	SANITARY SEWER (WASTE)
W U/G	SANITARY SEWER U/G (WASTE U/G)
V	VENT (V)
CW U/G	UNDERGROUND COLD WATER PIPING (U/G)
CW	COLD WATER (CW) INSULATED 1" THICK WITH VAPOR BARRIER
HW	HOT WATER (HW) INSULATED 1" THICK WITH VAPOR BARRIER
HHW	HIGH TEMPERATURE HOT WATER (HHW) SUPPLY 140 F TO 160 F THICK INSULATION WITH VAPOR BARRIER
P-#	FIXTURE NUMBER - SEE PLUMBING SCHEDULE
C.O.	CLEAN OUT
F.C.O.	FLOOR CLEAN-OUT W/ BRASS COVER
W.C.O.	WALL CLEAN-OUT W/ CHROME COVER
V.T.R.	VENT THRU ROOF
F.P.H.B.	FREEZE PROOF HOSE BIBB
—	PIPE UP - INSULATED
—	PIPE DOWN - INSULATED
S-#	SANITARY RISER REFERENCE NUMBER

**PLUMBING FIXTURE SCHEDULE**

MARK	DESCRIPTION	MINIMUM CONNECTIONS INCHES		REMARKS	
		COLD	HOT		
P-1	WATER CLOSET - HANDICAP	1/2	---	4 2	A.D.A. COMPLIANT
P-2	WATER CLOSET - STANDARD	1/2	1/2	4 2	
P-3	WALL HUNG LAVATORY-H.C.	1/2	1/2	2 1 1/2	A.D.A. & SENSOR FAUCET
P-4	SS HAND SINK	1/2	1/2	2 1 1/2	W/FAUCET & TRAP
P-5	URINAL - H.C.	3/4	---	2 1 1/2	A.D.A. COMPLIANT
P-6	FROST-PROOF HOSE BIBB	3/4	---	---	
P-7	MOP SERVICE SINK	3/4	3/4	3 1 1/2	W/ VACUUM BREAKER
P-8	DRINKING FOUNTAIN	1/2	---	1 1/2	A.D.A. COMPLIANT LOW/HIGH
P-9	SUMP PUMP & BASIN	---	---	---	
P-10	KITCHEN MOP SERVICE SINK	3/4	3/4	3 1 1/2	W/ VACUUM BREAKER
P-11	FOOD WASHING SS TABLE W/SINK	1/2	1/2	2 1 1/2	
P-12	3-COMPARTMENT SS SINK	3/4	3/4	2 1 1/2	W/ 2 DRAIN BOARDS
P-13	SOILED DISHTABLE	1/2	1/2	2 1 1/2	
P-14	DISHWASHER, DOOR TYPE	1/2	---	2 1 1/2	INDIRECT 2" DRAIN
P-15	BEVERAGE COUNTER	1/2	1/2	2 1 1/2	W/TEMP. MIXING VALVE 110F
P-16	ICE MAKER CUBE STYLE - NOT-IN-CONTRACT	1/2	---	3 1 1/2	W/BACKFLOW & FLOOR SINK
P-17	S.S. BAR SINK W/FAUCET & TRAP	1/2	1/2	2 1 1/2	W/TEMP. MIXING VALVE 110F
P-18	FLOOR SINK	---	---	3 1 1/2	
P-19	GREASE INTERCEPTOR	---	---	3	IN-FLOOR TYPE
P-20	FLOOR DRAIN W/TRAP PRIMER	1/2	---	3 1 1/2	
P-21	HOT WATER EXPANSION TANK	---	3/4	---	INSTALL ON COLD WATER INCOMING SIDE FOR HW-1
P-22	THERMOSTATIC MIX VALVE	1	1	---	W/ CABINET
P-23	HOT WATER EXPANSION TANK	---	1/2	---	INSTALL ON COLD WATER INCOMING SIDE FOR HW-2.

**PLUMBING FIXTURE SCHEDULE**

MARK	DESCRIPTION	MANUFACTURER OR APPROVED EQUAL
P-1	WATER CLOSET - HANDICAP	TOTO MODEL C51454CFE W/ SC534 SEAT, BOLT CAPS, AND CHROME SHUTOFF VALVE AND A.D.A. COMPLIANT
P-2	WATER CLOSET - STANDARD	TOTO MODEL C51454CFE W/ SC534 SEAT, BOLT CAPS, AND CHROME SHUTOFF VALVE
P-3	WALL HUNG LAVATORY-H.C.	AMERICAN STANDARD ROCKALYN WALL HUNG LAVATORY W/ WALL CARRIER, CHROME GRID DRAIN, 6058.105 SINGLE INLET FAUCET, 115V POWER SUPPLY, LED SENSOR, TEMP. MIX VALVE, A.D.A. COMPLIANT W/ TRUEBRO LAVGUARD INSULATION.
P-4	S.S. HAND SINK	EAGLE MODEL H5A-10-FAW WITH GOOSENECK FAUCET, SPLASH BACK, P-TRAP, HOT AND COLD WATER, STOPS, AND CHROME STRAINER.
P-5	URINAL - H.C.	HOWER FC-SIDE ET W/ WALL CARRIER, SLEAZE ROTAL, 180-1.0 FLUSH VALVE, COLD WATER, DRAIN/VENT, AND INSTALL AT ADA HEIGHT.
P-6	FROST-PROOF HOSE BIBB	JOSAM HYDRASAN I SERIES 71050 OR APPROVED EQUAL W/ KEY CONTROL FITTING AND INTEGRAL VACUUM BREAKER.
P-7	MOP SERVICE SINK	ZURN Z5850 28 X 28 CORNER FLOOR SINK, W/ DRAIN & STRAINER, ZURN Z843M1 8" FAUCET W/ VACUUM BREAKER, AND MOP HOLDER.
P-8	DRINKING FOUNTAIN	HALSEY TAYLOR MODEL DA-11 E W/ STAINLESS STEEL AND MOUNTING HARDWARE. MOUNT PER A.D.A. LOW/HIGH CODE
P-9	SUMP PUMP & BASIN	ZOELLER OIL SMART SYSTEM 940-0005 W/ 2" OUTLET, 20 GPM AT 15 FT. HEAD PRESSURE, 115/1/60, 0.3HP PUMP MOTOR, PROVIDE OIL SMART ALARM SYSTEM W/LIGHTS, AUDIBLE ALARM, & DRY CONTACTS & BASIN.
P-10	KITCHEN MOP SERVICE SINK	EAGLE MODEL F191E-12 WITH T&S MODEL B-0665-BSTR SERVICE FAUCET W/VACUUM BREAKER, #312689 HOSE & BRACKET, MODEL 321561 4-POLE MOP HOLDER WITH COLD/HOT WATER SERVICE STOPS AND DRAIN.
P-11	FOOD WASHING TABLE W/SINK	EAGLE S.S. WASHING TABLE WITH MODEL E24 S.S. SINK COMPLETE WITH FAUCET AND BASKET DRAIN, HOT AND COLD WATER, STOPS, AND CHROME STRAINER.
P-12	3-COMPARTMENT SS SINK	EAGLE MODEL 412-16-3-18 WITH T&S MODEL B-0230-LN FAUCET W/ MODEL 063X MOP, STRAIN BASKETS, WITH COLD/HOT WATER SERVICE STOPS AND DRAIN.
P-13	SOILED DISHTABLE	EAGLE MODEL SDTR-30-16 1/4 WITH T&S MODEL B-0113-08-LN FAUCET W/44" FLEXIBLE SS HOSE ASSY, STRAIN BASKETS, RACK SLIDES & EASYINSTALL PRE-RINSE UNIT 1.48 GPM AND COLD/HOT WATER SERVICE STOPS AND DRAIN.
P-14	DISHWASHER, DOOR TYPE	MEKO MODEL CS 70 KUBR, 40-50 RACKS/HR, 3/4 HP, 115/1/60, PROOF OF DELIVERY CHEMICAL WINDOW, AND HOT WATER SERVICE STOP AND 2" INDIRECT DRAIN.
P-15	BEVERAGE COUNTER	EAGLE MODEL BEV30145E-10B3L WITH FAUCET LOUVERED GRATE, RACK SLIDES 8" O.C., COLD/HOT WATER SERVICE STOPS, ADJUSTABLE TEMPERATURE MIX VALVE ON HOT WATER 110 F AND DRAIN.
P-16	ICE MAKER - NOT IN CONTRACT	ICE-O-MATIC MODEL ICE5006R, 115/1/60, 14.9 AMPS, WATER FILTER MANIFOLD, R-404A REFRIGERANT, AND COLD WATER SERVICE STOP AND 3" FLOOR SINK.
P-17	S.S. BAR SINK	EAGLE MODEL S10A-14-9.5-1 WITH GOOSENECK FAUCET, COUNTERTOP SELF RIMMING, P-TRAP, HOT AND COLD WATER, STOPS, ADJUSTABLE TEMPERATURE MIX VALVE ON HOT WATER 110 F AND CHROME STRAINER.
P-18	FLOOR SINK	JONESPEC FD-2377-NH4, 12" X 12" A.R.C. FLOOR SINK, 10" SUMP DEPTH WITH STRAINER.
P-19	GREASE INTERCEPTOR	J.R. SMITH MODEL 8335GT, 35 GPM, 70 LB. CAP., VENTED FLOW CONTROL VALVE, RECESSED, LIFT OUT SEDIMENT BUCKET, TRAFFIC RATED COVER-H20, ACID RESISTANT COATING INSIDE & OUTSIDE ARO, DRAW-OFF FITTING, VALVE COORDINATE W/G.C. & OWNER.
P-20	FLOOR DRAIN W/TRAP PRIMER	USAM 3000-4-50 FLOOR DRAIN W/ ADJUSTABLE STRAINER & PFP (PRECISION PLUMBING PRODUCTS) PRIME-RITE TRAP PRIMER VALVE/DISTRIBUTION UNIT.
P-21	HOT WATER EXPANSION TANK	AMTRIO ST-12-C NSF RATED EXPANSION TANK W/ PRESSURE GAGE, DRAIN COOK, SHUTOFF VALVES & ALL PIPING & FITTINGS.
P-22	THERMOSTATIC MIX VALVE	SYMMONS MODEL 6-200 W/ SURFACE MOUNTED CABINET, AT STANDARD PRESSURE PROP. WALL MOUNTING BRACKET AND ALL ACCESSORIES.
P-23	HOT WATER EXPANSION TANK	AMTRIO ST-5 NSF RATED EXPANSION TANK W/ PRESSURE GAGE, DRAIN COOK, SHUTOFF VALVES & ALL PIPING & FITTINGS.

**HANDICAP ACCESSIBILITY NOTES:**

- WATER CLOSETS: 17"-19" A.F.F. TO RIM  
18" FROM SIDEWALL TO CENTER (IN PLAN)
- LAVATORIES: 34" MAX. A.F.F. TO TOP OF RIM  
29" MIN. CLEAR A.F.F. @ APRON  
17" MIN. PROJECTION  
30" CLEAR CENTERED (IN PLAN)
- WATER COOLERS: 36" MAX. A.F.F.  
27" MIN. CLEAR A.F.F. @ APRON  
17"-19" PROJECTION
- URINALS: 17" MAX. A.F.F. TO TOP OF ELONGATED RIM.

**PLUMBING NOTES:**

- ALL FIXTURES SHALL BE WHITE UNLESS NOTED OTHERWISE.
- ALL WORK SHALL COMPLY WITH THE 2012 INTERNATIONAL MECHANICAL AND PLUMBING CODES, NATIONAL ELECTRICAL CODE, AND LOCAL GOVERNING CODES AND PERMITS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS.
- ALL INTERIOR HOT, COLD & RETURN WATER LINES SHALL BE INSULATED. HOT WATER LINES AND EXPOSED DRAINS SHALL BE INSULATED W/ WHITE PLASTIC JACKET INSULATION TO PREVENT TOUCH BY HANDICAP (TRUEBRO LAV GUARD OR EQUAL). PIPE INSULATION 1 1/2" THICK IN ABOVE CEILINGS AND 1" THICK IN WALLS.
- CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS, FIXTURES, & VALVES TO MAKE A COMPLETE AND OPERATING SYSTEM. ALL PIPING SHALL BE RUN INSIDE ABOVE CEILING, OR EXPOSED AT MAXIMUM HEIGHT UNLESS SHOWN OTHERWISE. ALL PIPE PENETRATIONS OF FIRE RATED CEILINGS AND WALLS SHALL HAVE FIRE SEALANT/CAULKING PER MANUFACTURER AND CODE.
- CONTRACTOR SHALL COORDINATE CONNECTION OF WATER AND SEWER SYSTEMS WITH SITE CONTRACTOR, OWNER, AND ARCHITECT. CONTRACTOR SHALL COORDINATE SHUTDOWN OF UTILITY SYSTEMS WITH LOCAL UTILITY CO. & OWNER PRIOR TO MAKING FINAL CONNECTIONS TO WATER AND SANITARY SEWER MAINS.
- CONTRACTOR SHALL PROVIDE ALL MOUNTING HARDWARE AND ACCESSORIES TO INSTALL ALL FIXTURES. INSTALL HANDICAP FIXTURES IN COMPLIANCE WITH ADA.
- PLUMBER/INSTALLER SHALL INSURE THAT PIPES ARE ADEQUATELY INSULATED TO PREVENT FREEZING. PLUMBER SHALL USE FIBERGLASS INSULATION WITH VAPOR BARRIER (OWENS CORNING OR EQUAL).
- PLUMBING CONTRACTOR SHALL FIELD COORDINATE FINAL LOCATION OF WATER, STORM, SANITARY SEWER AND VENT PIPING W/ G.C., STRUCTURAL, MECHANICAL, ELECTRICAL AND SPRINKLER CONTRACTORS AND ADJUST FINAL LOCATIONS BASED ON FINAL FIELD CONDITIONS TO AVOID INTERFERENCES.
- WATER TREATMENT SYSTEM.
- CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED AND CERTIFIED WATER TREATMENT CONTRACTOR TO TEST THE WATER AND INSTALL A COMPLETE AND OPERATIONAL WATER TREATMENT SYSTEM. THE TREATMENT SYSTEM SHALL BE BASED ON A MAXIMUM PEAK FLOW OF 34 GPM.

**FIRE PROTECTION SCOPE OF WORK:**

OBTAIN THE SERVICES OF A STATE QUALIFIED AND LICENSED SPRINKLER CONTRACTOR TO DESIGN, OBTAIN NECESSARY STATE AND LOCAL APPROVALS OF DESIGN AND INSTALL A COMPLETE FIRE PROTECTION SPRINKLER SYSTEM PER CODE AND NFPA 13 CODE. FIRE PROTECTION CONTRACTOR SHALL SUBMIT 3 COPIES OF THE DESIGN CALCULATIONS, FLOW TESTS, AND SCALED LAYOUT DWGS FOR ARCHITECT/ENGINEER APPROVAL AND SUBMIT REQUIRED COPIES TO STATE FIRE AUTHORITIES FOR APPROVAL PRIOR TO INSTALLATION OF SYSTEM. FIRE PROTECTION CONTRACTOR SHALL COORDINATE W/ GENERAL, MECHANICAL, PLUMBING AND ELECTRICAL CONTRACTORS TO ADJUST FOR INTERFERENCES AND ADJUST SPRINKLER DESIGN & LAYOUT ACCORDINGLY. FIRE PROTECTION CONTRACTOR SHALL FIELD TEST THE SPRINKLER SYSTEM PER STATE, LOCAL CODE, AND NFPA 13 STANDARD. SPRINKLER SYSTEM SHALL BE DRY-PIPE TYPE IN ANY FREEZING CONDITIONS. SPRINKLERS SHALL BE CONCEALED TYPE. IF INSTALLED IN SUSPENDED CEILING, CENTERED IN CEILING GRID. INCOMING SPRINKLER LINE SHALL HAVE AN ASSE 1013 REDUCED PRESSURE BACKFLOW PREVENTER OR AS REQUIRED BY CODE. COORDINATE CLOSELY W/ ARCHITECT & G.C. ON FINAL CEILING HTS, FINISHES, AND OTHER TRADES (MECHANICAL, ELECTRICAL, & STRUCTURAL).

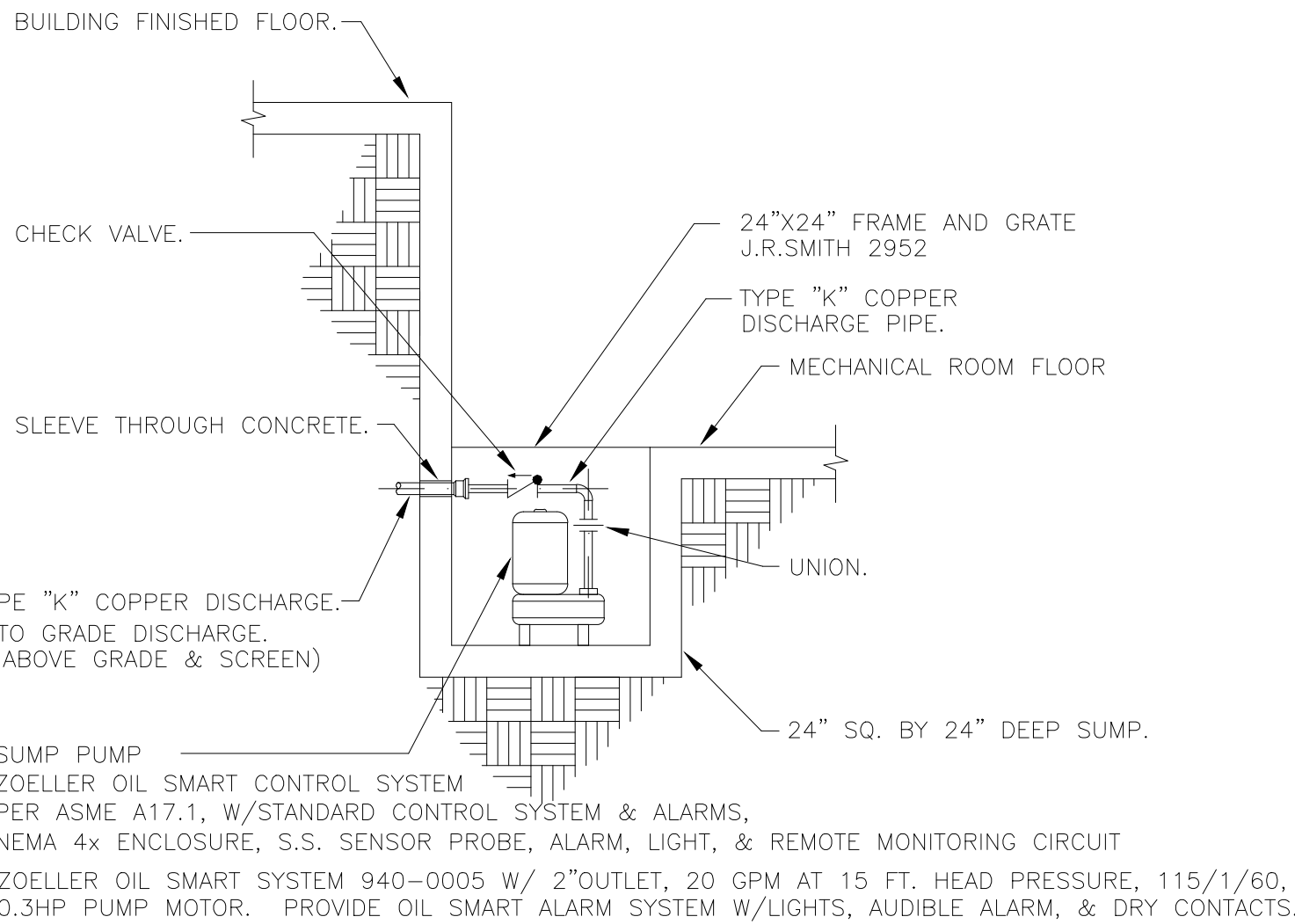
**WATER HEATER SCHEDULE**

MARK	GPH @ 100°F RISE	OPERATING TEMP. (°F)	BTUH INPUT	STORAGE GALLONS	MAX. PRESS. DROP (F.T.)	FUEL	THERMAL EFFICIENCY	A.O. SMITH OR EQUAL
HW-1	116	160	100,000	50 GALLONS	10'	LP GAS	96%	BTX-100
HW-2	8	110	2 KW*	10 GALLONS	N/A	ELECTRIC	STD	DEL 10

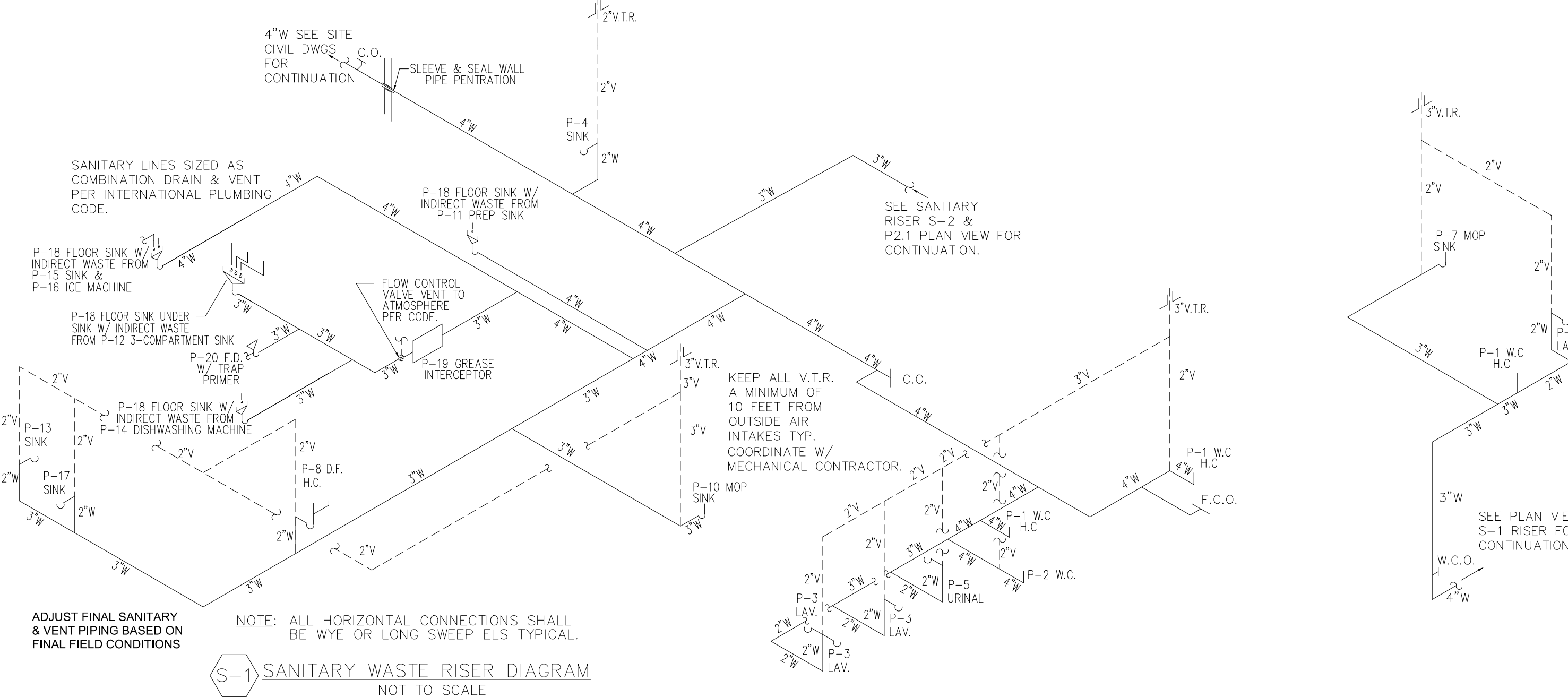
ELECTRIC HEATER AT 208/1/60

**NOTES:**

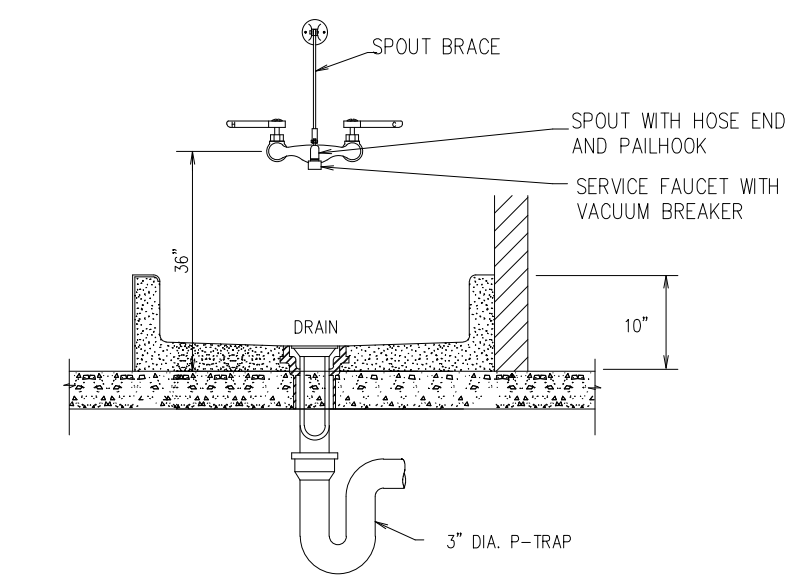
- PROVIDE LP GAS PIPING FROM GAS REGULATOR TO MECHANICAL ROOM TO WATER HEATER AND PRESSURE REGULATORS AT EACH WATER HEATER W/ DIRT LEGS, VENTING, & FITTINGS.
- PROVIDE ELECTRONIC IGNITION GAS CONTROLS, CONTROLLER/SENSOR FOR BURNER SEQUENCING, SAFETY CONTROLS, FORCED DRAFT BURNER, WATER, RIM, AND RESET VALVE.
- PROVIDE COMBUSTION AIR AND EXHAUST PIPING PER MANUFACTURER WITH CLEAN-OUTS.
- INTERLOCK BURNER CIRCUIT WITH POWER VENTER, HOT WATER FLOW SWITCH & SAFETY CONTROLS. HOT WATER HEATERS WILL BE USED NEAR ROUND TO PROVIDE DOMESTIC HOT WATER HEATING.
- PROVIDE ALL COLD AND HOT WATER PIPING AND INSULATION AS SHOWN.
- ALL WORK SHALL COMPLY WITH CURRENT VIRGINIA MECHANICAL AND PLUMBING CODES AND LOCAL CODES AND PERMITS. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS.
- PROVIDE MANUFACTURER'S REPRESENTATIVE FOR START-UP OF NEW WATER HEATER AND PROVIDE A WRITTEN REPORT VERIFYING THAT SYSTEM IS INSTALLED IN ACCORDANCE W/ THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- IF REQUIRED, WATER HEATERS AND SYSTEM SHALL BE INSPECTED BY BOILER INSPECTORS OF THE LOCAL JURISDICTION. CONTRACTOR SHALL PAY FOR ALL REQUIRED PERMITS AND FEES.



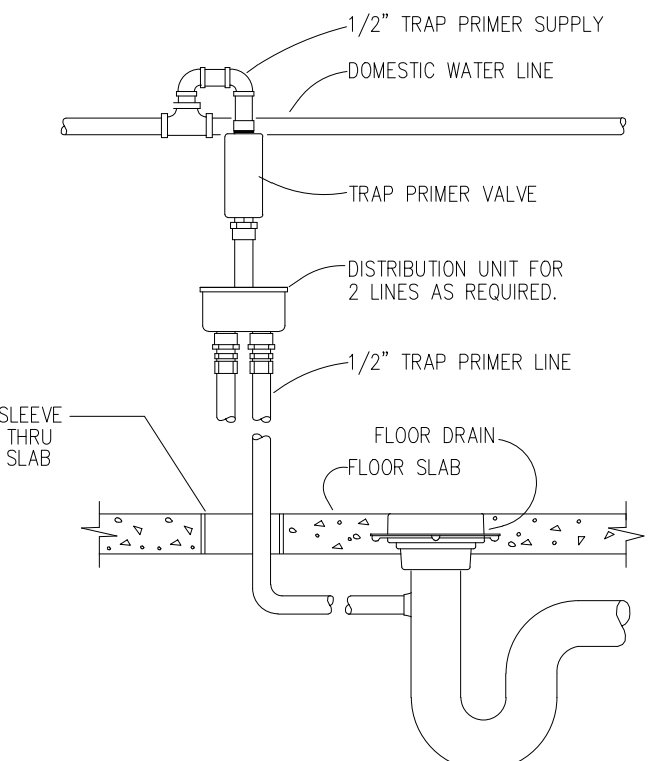
**P-9 SUMP PUMP DETAIL**  
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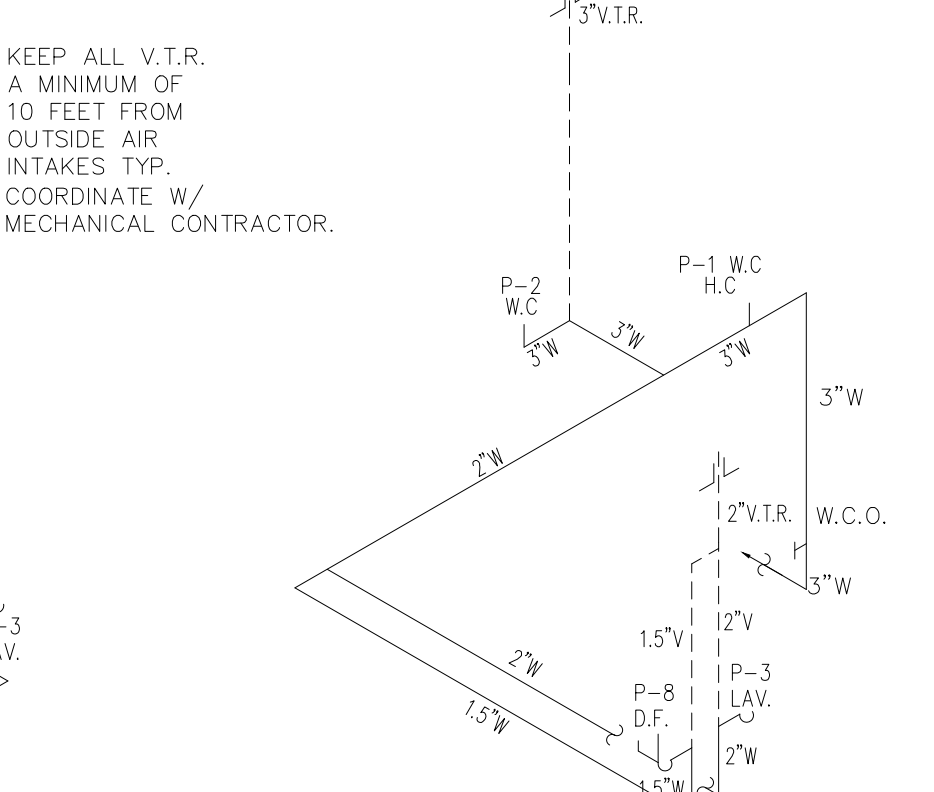
**SANITARY WASTE RISER DIAGRAM**  
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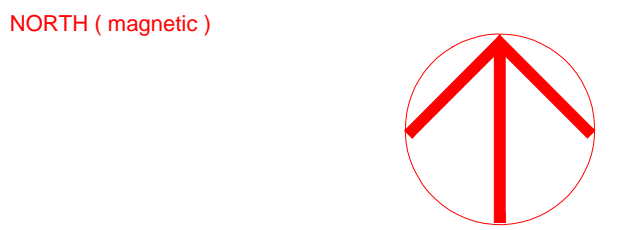
**P-7 MOP SINK DETAIL**  
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**P-20 TRAP SEAL PRIMER DETAIL**  
NOT TO SCALE



**SANITARY WASTE RISER DIAGRAM**  
NOT TO SCALE



**Charles Washington Hall RENOVATIONS**  
Corner of George & Washington Streets  
Charles Town, W.Va.

For the  
**City of Charles Town**  
**City of Ranson**

Planning & Engineering (prime)  
**Hall Planning & Engineering, Inc**  
316 Williams Street  
Tallahassee, FL 32303

Landscape Architecture  
**Stromberg/Garrigan & Assoc., Inc.**  
102 E. Main Street-The Penn Bldg  
Somerset, PA 15501

Historic Preservation & Architecture  
**Landmarks SGA, LLC**  
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Winchester, VA 22601

Architect  
**GROVE & DALL'OLIO ARCHITECTS<sup>LLC</sup>**  
220 WEST KING • MARTINSBURG, WEST VIRGINIA • 25401

Issue/Revision Seal  
Professional Engineer Seal for R. A. Catlett, State of West Virginia, No. 7540, dated 9/26/2014.

Drawing Title  
**Plumbing Schedules & Details**  
Date 9/26/14  
Scale: As Shown Project Number 11105  
Drawing Number

**P1.1**