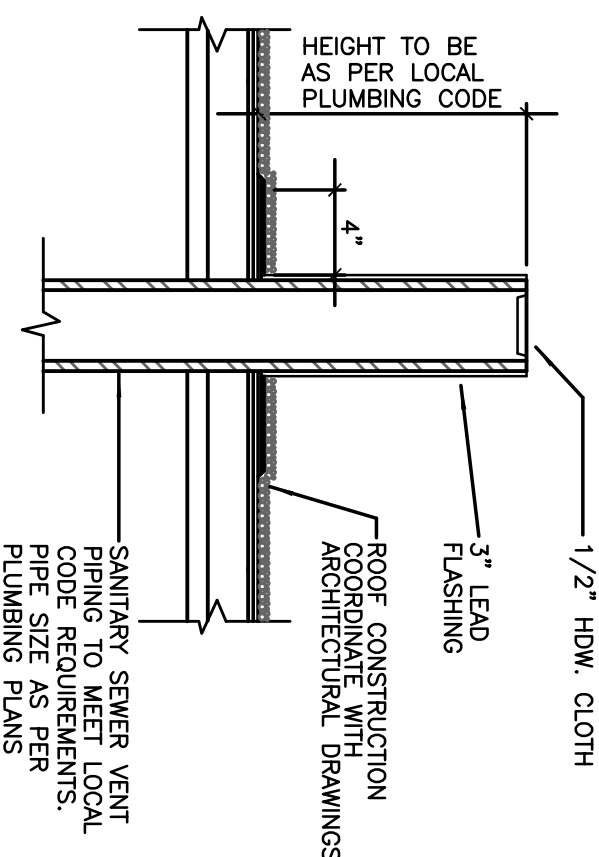


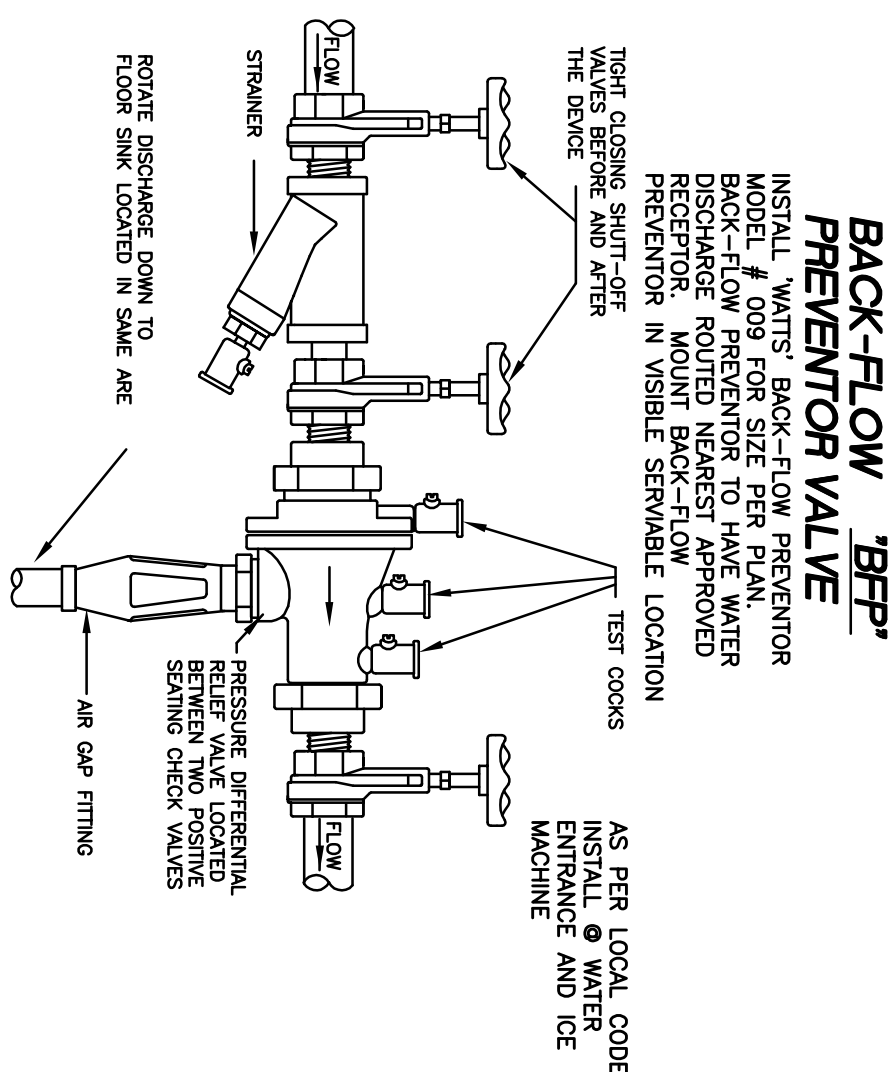
P.O. SYMBOL	FLUTURE UNIT	CHAMBER LENGTH	SWEAT CONNECTION
A	1-11	9 5/8"	1/2"
B	12-32	12 3/4"	3/4"
C	33-60	14 11/16"	1"
D	61-113	12 3/8"	1"
E	114-154	15 3/8"	1"
F	155-330	17 3/8"	1"

14 AIR CHAMBER/SHOCK ARRESTOR



REFER TO ARCH.

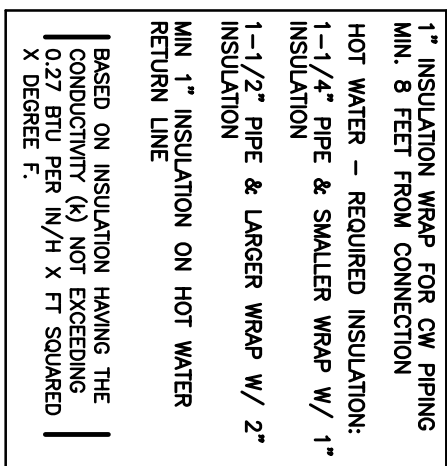
10 INSTANT PIPE PENETRATION



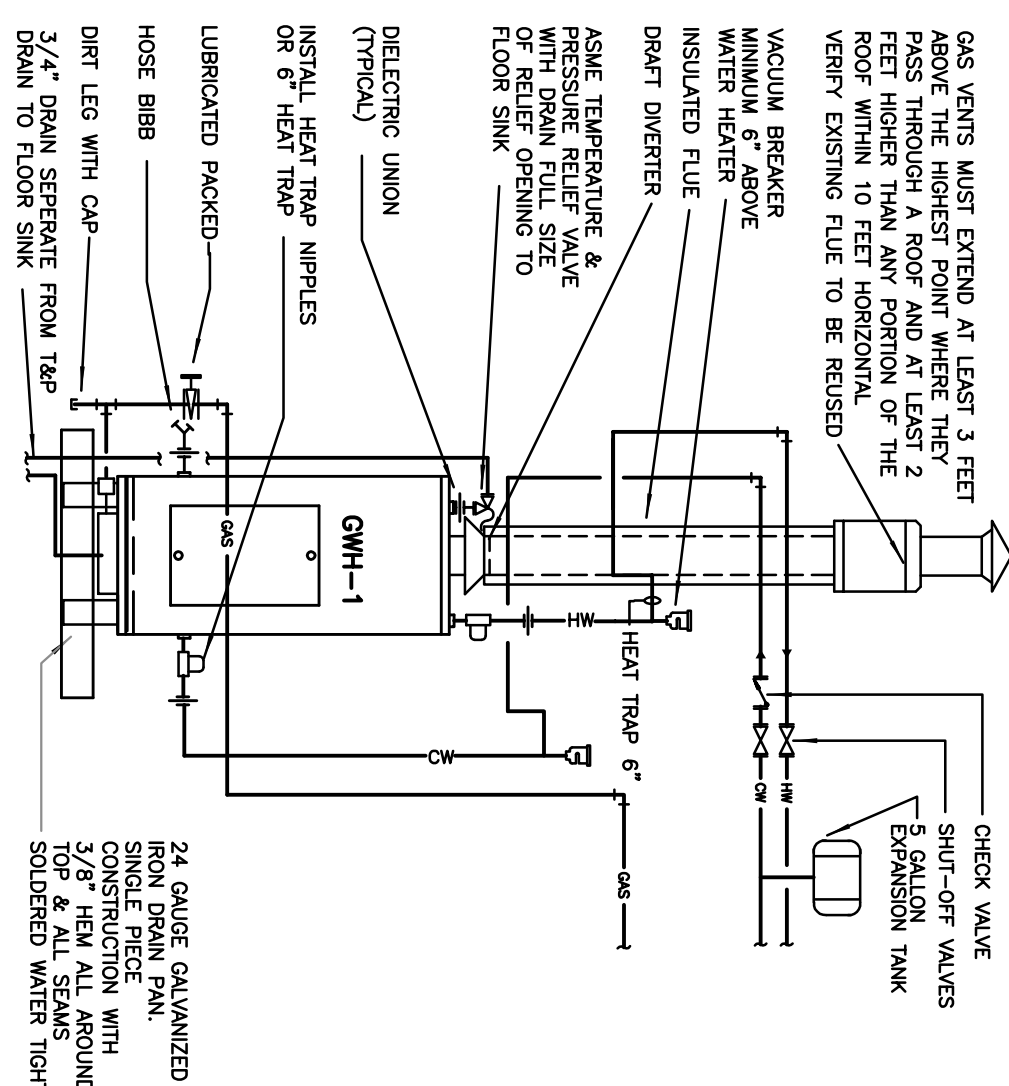
13 WATER ENT. BACK FLOW PREVENTOR.

[illegible]

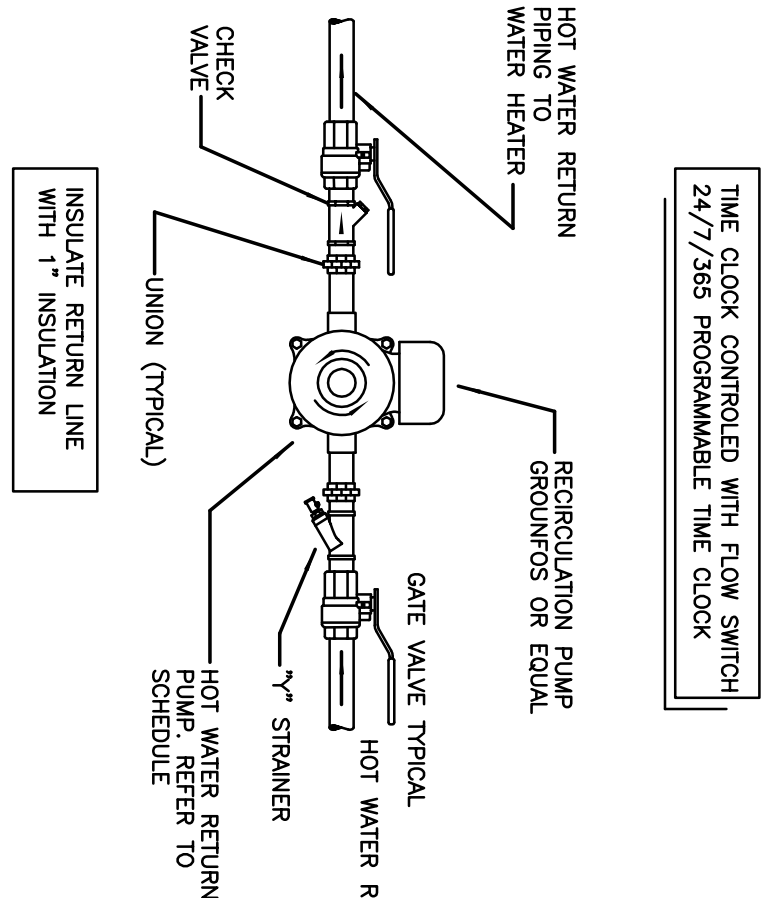
9 GENERAL ABBREVIATIONS



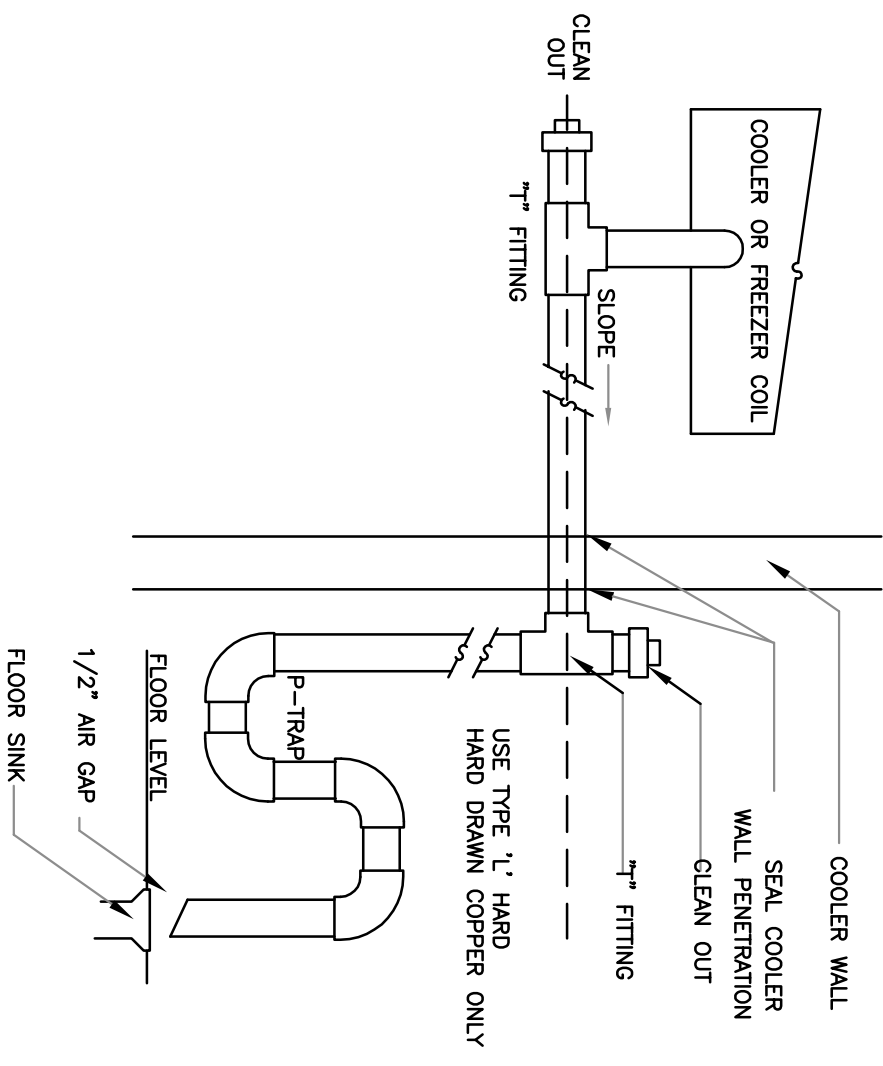
NOTE: ALL PIPING SHOWN SHALL BE TYPE 'L' COPPER.
WATER LINE ONLY



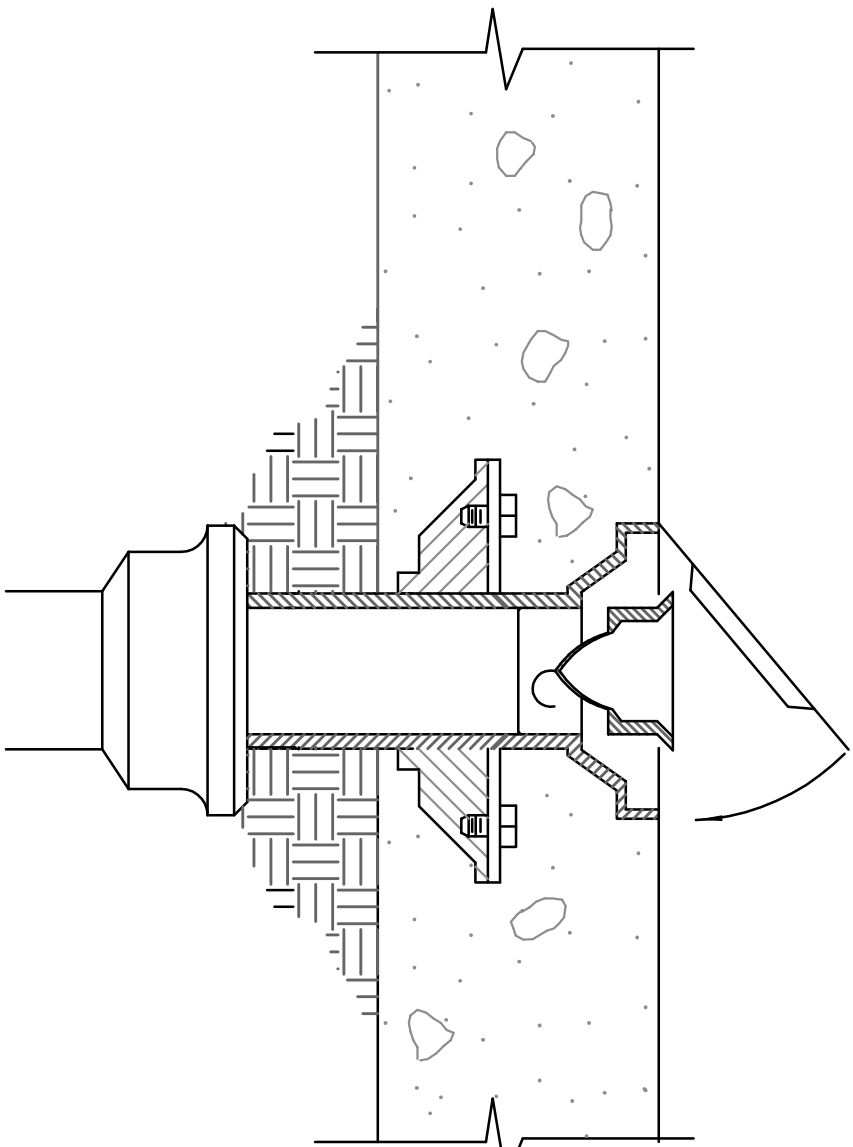
6 GAS WATER HEATER DETAIL



8 HOT WATER RECIRCULATION PUMP

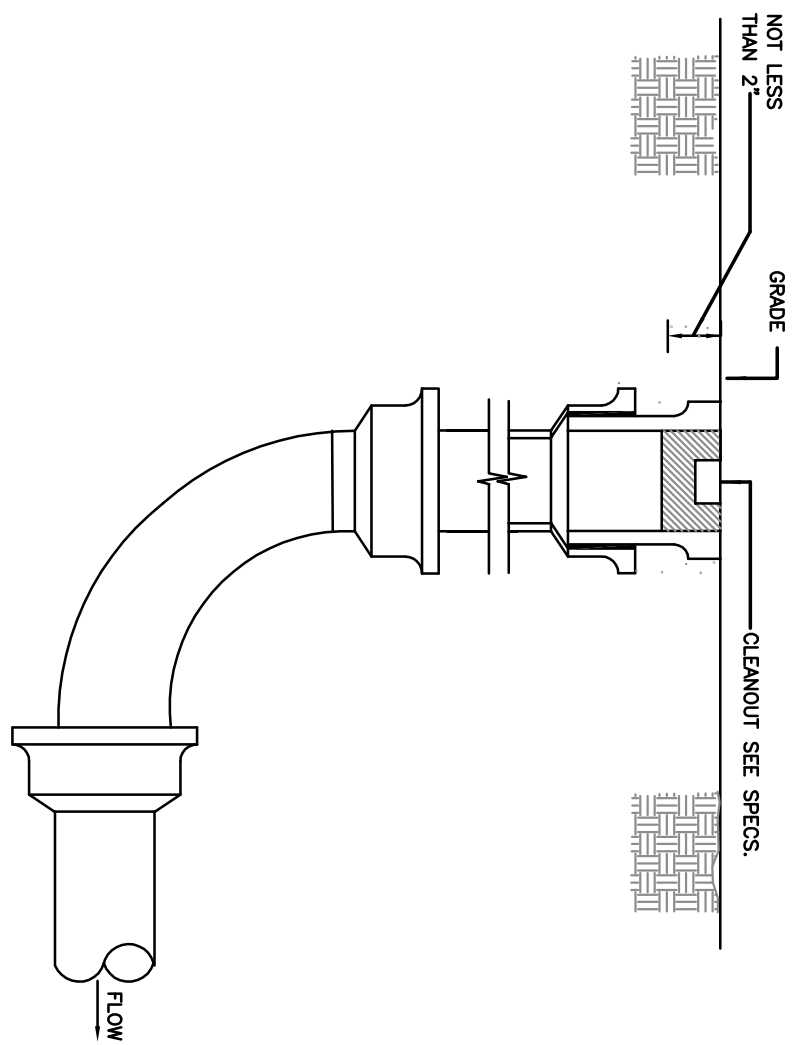


11 EQUIP. CONDENSATE DRAIN



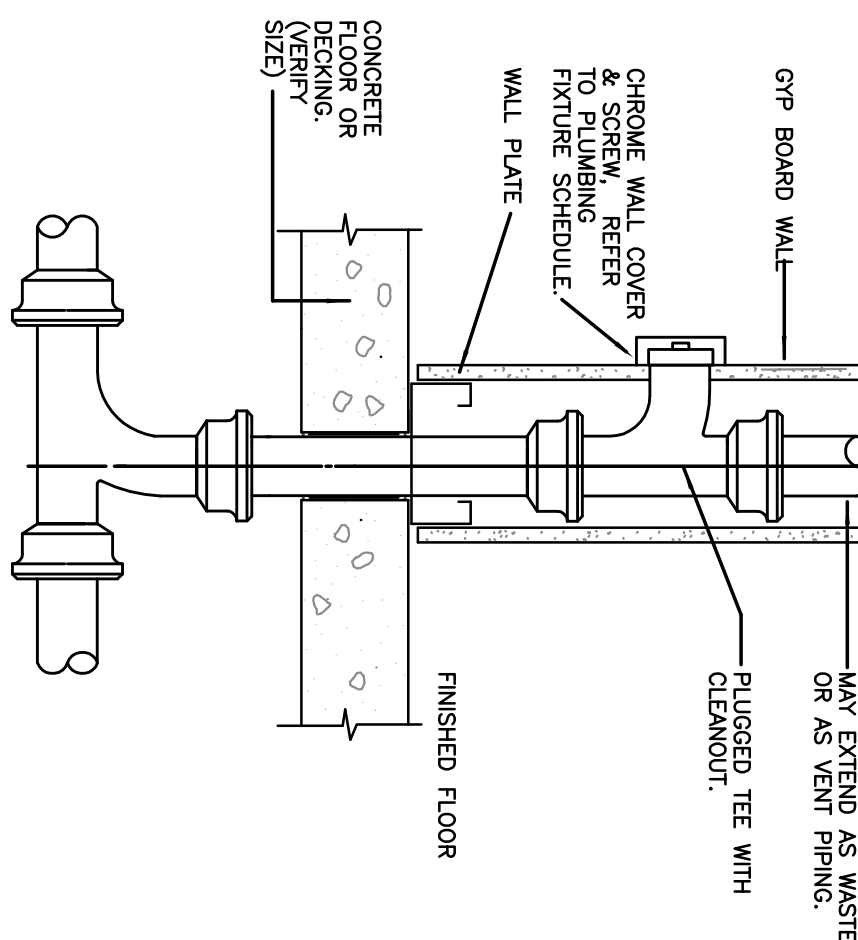
FD-1 KITCHEN AREA ONLY

5 FLOOR DRAIN W/ TRAP GUARD



4 EXTERIOR END OF LINE CLEANOUT

TAG	DESCRIPTION	PIPE SIZING			NOTES TO P.C.	
		C.W.	H.W.	SAN /VENT		
WC-1	WATER, CLOSET, ADA COMPLIANT, 16-1/2" HEIGHT, ELONGATED BOWL, WIRELESS CHINA, 1000 GRAMS OF WASTE, LEFT OR RIGHT TRAPWAY, PASS 1,000 GRAMS OF WASTE, LEFT OR RIGHT HANDED, COLOR-WHITE, AMERICAN STANDARD, CADET 3 FLOWSEI MODEL NO. 2853.128	3/4"	N/A	4"	2"	ADA
WC-2	TOILET, CLOSET, 15" HEIGHT, ELONGATED BOWL, WIRELESS CHINA, 1000 GRAMS OF WASTE, GLAZED 2-1/8" TRAPWAY, PASS 1,000 GRAMS OF WASTE, LEFT OR RIGHT HANDED, COLOR-WHITE, AMERICAN STANDARD, CADET 3 FLOWSEI MODEL NO. 2853.128	3/4"	N/A	4"	2"	ADA
LV-1	URINAL, 6.5 GPF LOW-CONSUMPTION, FLUSHING RIM, ENLARGED 14" RIM, WASHOUT FLUSH ACTION, 3/4" INLET FOR 1/2" WIRELESS CHINA, 1000 GRAMS OF WASTE, LEFT OR RIGHT HANDED, COLOR-WHITE, AMERICAN STANDARD, WASHBROOK MODEL NO. 6501.010, FLUSH VALVE - "ELKAY" MODEL NO. LK402 (OR APPROVED EQUAL)	3/4"	N/A	2"	2"	
UR-1	URINAL, 6.5 GPF LOW-CONSUMPTION, FLUSHING RIM, ENLARGED 14" RIM, WASHOUT FLUSH ACTION, 3/4" INLET FOR 1/2" WIRELESS CHINA, 1000 GRAMS OF WASTE, LEFT OR RIGHT HANDED, COLOR-WHITE, AMERICAN STANDARD, WASHBROOK MODEL NO. 6501.010, FLUSH VALVE - AMERICAN STANDARD ELECTRONIC FLOWSEI URINAL FLUSH VALVE MODEL NO. 6663 SERIES.	3/4"	N/A	2"	2"	
METER-1	FLUSH OPERATING, FLOTTED CROSS, EXCESS FLOW, 3/4" TOP SPOOL, BRASS, 0.5 GPM, 1/2" INLET/RIGHT HANDED, AMERICAN STANDARD FLOWSEI MODEL NO. 6663.101.002	3/4"	-	-	-	
MANUAL	FLUSH OPERATING, FLOTTED CROSS, EXCESS FLOW, 3/4" TOP SPOOL, BRASS, 0.5 GPM, 1/2" INLET/RIGHT HANDED, AMERICAN STANDARD FLOWSEI MODEL NO. 6663.101.002	3/4"	-	-	-	



2 WALL CLEAN-OUT DETAIL

PLUMBING SPECIFICATIONS

WATER PIPING NOTES:

1. WATER PIPING SHALL BE TYPE "C" COPPER, WITH 95-5 SILVER SOLDERED JOINTS.
2. INSULATE ALL HOT & COLD WATER PIPING WITH #1 RIGID FIBERGLASS OR 1/2" FLEXIBLE FOAM INSULATION (GAMMALEX) & 1" FLEXIBLE FOAM INSULATION (BUTY) AROUND ALL HOT WATER SUPPLY LINES. HOT WATER - REQUIRED INSULATION:
1-1/4" PIPE & SMALLER WRAP W/ 2" INSULATION
1-1/2" PIPE & LARGER WRAP W/ 2" INSULATION
3. PROTECT EACH FIXTURE WITH STOPS AND SQUEELES. EXPOSED STOPS SHALL BE CHROME PLATED WITH LOOSE KEY.
4. PROVIDE WATER HAMMER PROTECTION AT EACH FIXTURE, OR GROUP OF SIMILAR FIXTURES.
5. PROVIDE VACUUM BREAKERS AS REQUIRED BY UNIFORMED PLUMBING CODES.
6. PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS. PRIMERS SHALL BE LOCATED IN A SERVICEABLE LOCATION.

SANITARY PIPING NOTES:

1. SANITARY, WASTE AND VENT PIPING SHALL BE PVC UNLESS PROHIBITED BY THE LOCAL CODES.
2. ROOF PENETRATIONS SHALL BE WITH LEAD PIPE ROOF JACKS, COORDINATE ROOF SYSTEM WITH GENERAL CONTRACTOR AND VERIFY WITH ARCHITECTURAL DRAWINGS. CONTRACTOR TO MINIMIZE ROOF PENETRATIONS.
3. SLOPE OF SANITARY AND WASTE PIPING SHALL BE 1/4" PER FOOT MINIMUM FOR 3" PIPE AND MINIMUM OF 1/8" SLOPE FOR 4" PIPE.
4. EXPOSED WASTE DRAINS, IN TOLLETS, SHALL BE CHROME PLATED BRASS, WITH WATCHING STORES AND ESCUTCHEONS.

GENERAL NOTE TO CONTRACTOR

1. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY OF LOS ANGELES PLUMBING INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
2. THIS CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACE TO AVOID CONFLICT WITH OTHER MECHANICAL SYSTEMS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ANY SUCH CONFLICTS PRIOR TO THE BEGINNING OF WORK FOR INSTALLING AN ALTERNATE PIPE PLAN.
3. ALL COUNTER JOINTED LAYONOTES TO HAVE INSULATION ON ALL EXPOSED PIPES PER A.D.A. REQUIREMENTS.
4. ALL MATERIALS TO BE NEW & OF COMMERCIAL QUALITY AND INSTALLATION TO BE GUARANTEED BY PLUMBING CONTRACTOR.
5. PLUMBING CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION.

WATER SAVING STANDARDS:



THE WATER SAVING PERFORMANCE STANDARDS FOR A PLUMBING FIXTURE ARE THOSE ESTABLISHED BY THE AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), CURRENT REVISION, OR THE FOLLOWING STANDARDS, WHICHEVER ARE THE MORE RESTRICTIVE.

- (1) THE MAXIMUM FLOW FROM A SINK OR LAVATORY FAUCET OR A FAUCET, TUBER OR SHALL NOT EXCEED 2.20 GALLONS OF WATER PER MINUTE WHEN TESTED IN ACCORDANCE WITH ASSESSMENT PROCEDURES.
- (2) THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A TOILET SHALL NOT EXCEED 1.60 GALLONS WHEN TESTED IN ACCORDANCE WITH ASSESSMENT PROCEDURES.
- (3) THE MAXIMUM VOLUME OF WATER PER FLUSH FROM A URINAL AND FROM ONE GALLON WHEN TESTED IN ACCORDANCE WITH ASSESSMENT PROCEDURES.

PLUMBING MATERIAL LIST:

MINIMUM STANDARDS

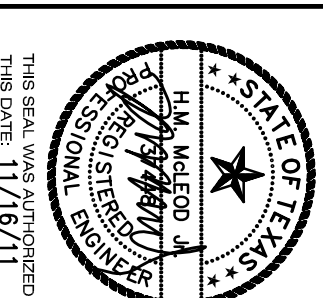
- (1) ALL UNDER GROUND WATER PIPING TO BE COPPER TYPE "K" WITH NO CONNECTIONS BELOW GRADE.
- (2) ALL SANITARY AND VENT PIPING SHALL BE: SCHEDULE 40 DWV POLYVNYL CHLORIDE PIPE AND FITTINGS, CONFORMING TO ASTM-2683 WITH SOLVENT WELDED JOINTS.
- (3) ALL ABOVE GRADE WATER PIPING SHALL BE: DRAIN (HARD) COPPER WATER TUBE, TYPE "L", ASTM B88, WITH WROUGHT COPPER FITTINGS, ANSI B16.22 AND 35-5 SOLDER JOINTS, TO MATCH THE BE-IN-LINE GATE VALVES. SIZE ACCORDING TO WATER LINE SIZE.
- (4) NATURAL GAS PIPING SHALL BE: SCHEDULE 40 BLACK ASTM A53 WITH WELDED JOINTS AND STEEL FITTINGS, SAME THICKNESS AS PIPE. LOW PRESSURE (LESS THAN 1 PSI) PIPING 2 INCHES AND SMALLER MAY BE SCHEDULE 40 STEEL PIPE, SAME THICKNESS AS PIPE.
- (5) ALL GAS FITTINGS, W/ B16.3, BANNED ARE TESTED AND SOLDERED JOINTS.

ISSUE	DATE	DESCRIPTION
	06/29/11	PERMIT / CONSTRUCTION
	10/13/11	PERMIT / CONSTRUCTION
	11/16/11	CITY COMMENTS

PROJECT:

CONSTRUCTION FOR Demeris Barbecue

1702 West Loop North
Houston, Texas 77092



H.M. McLEOD, P.E.
4727 MERWIN ST. SUITE B
HOUSTON, TEXAS 77027
OFFICE: (713) 961-2699
FAX: (713) 961-5691
CELL: (713) 806-1846

Firm Registration:
H. M. McLeod, P.E. #F-36797

© 2011 H.M. McLeod, P.E.

Drawings, written material, and design concepts shall not be used or reproduced in whole or part in any form or format without prior written consent of H.M. McLeod, P.E.

PLUMBING DETAILS

SHEET NUMBER:

7