

**SCOPE OF WORK**

PROVIDE ALL PLUMBING FOR NEW FAST FOOD RESTAURANT INCLUDING ALL WATER, GAS, GREASE & SANITARY LINES AND CONNECT TO EXISTING UTILITIES. USE THE EXISTING WATER HEATER AND GREASE INTERCEPTOR.

**PLUMBING NOTES**

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN STRICT ACCORDANCE WITH APPLICABLE LOCAL CODES, RULES AND ORDINANCES.
2. PLUMBING CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THIS SET. CONTRACTOR TO VERIFY THAT ALL EQUIPMENT SHOWN AS EXISTING MATCHES THE DESCRIPTIONS AND SPECIFICATIONS SHOWN ON DRAWINGS AND SCHEDULES. IF DIFFERENT NOTIFY ARCHITECT/ENGINEER BEFORE BIDDING, ORDERING OR PRECEDING WITH WORK.
3. ALL EQUIPMENT WHICH IS TO REMAIN MUST BE REFURBISHED TO A LIKE NEW CONDITION.
4. PLUMBING CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS.
5. ALL MATERIALS SHALL BE NEW.
6. ALL WORK SHALL BE PERFORMED BY A LICENSED PLUMBING CONTRACTOR IN A FIRST CLASS WORKMANLIKE MANNER. THE COMPLETED SYSTEM SHALL BE FULLY OPERATIVE. ALL EXCAVATION AND BACKFILL AS REQUIRED FOR THIS PHASE OF CONSTRUCTION SHALL BE A PART OF THIS CONTRACT.
7. REQUIRED INSURANCE SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR FOR PROTECTION AGAINST PUBLIC LIABILITY AND PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
8. PLUMBING CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS, FEES, INSPECTION AND TESTS. PLUMBING CONTRACTOR TO OBTAIN PERMIT AND APPROVED SUBMITTALS PRIOR TO BEGINNING WORK OR ORDERING EQUIPMENT. PLUMBING CONTRACTOR MUST BE PRESENT FOR ALL INSPECTIONS OF HIS WORK BY REGULATORY AUTHORITIES.
9. DRAWINGS ARE DIAGRAMMATIC. DO NOT SCALE FOR THE EXACT LOCATION OF FIXTURES, PIPING, EQUIPMENT, ETC.
10. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROGRESS OF CONSTRUCTION. REPORT ANY DISCREPANCY TO ENGINEER/ARCHITECT PRIOR TO BEGINNING CONSTRUCTION.
11. VERIFY LOCATION, SIZE, DIRECTION OF FLOW AND INVERTS OF ALL EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION. ADVISE ENGINEER OF ANY DISCREPANCIES.
12. EXPOSED WATER PIPING SHALL BE TYPE "1" COPPER FOR 2" AND UNDER. WATER PIPING IN WALLS AND UNDERGROUND MAY BE "PEX" TYPE PIPING THAT MEETS ANSI/NSF STANDARD G1.
13. SOIL, WASTE, VENT AND RAINWATER PIPING SHALL BE PVC BUT MAY NOT RUN THRU RATED ASSEMBLIES OR IN PLENUMS.
14. ALL FIXTURES MUST BE PROVIDED WITH READILY ACCESSIBLE STOPS AND APPROPRIATELY MARKED ACCESS PANELS. COORDINATE LOCATIONS WITH GENERAL CONTRACTOR PRIOR TO INSTALLATION.
15. FURNISH AND INSTALL APPROVED AIR CHAMBERS AT EACH PLUMBING FIXTURE GROUP AS PER CODE AND WITH GOOD ENGINEERING PRACTICE.
16. DIELECTRIC COUPLINGS ARE REQUIRED BETWEEN ALL DISSIMILAR METAL IN PIPING AND EQUIPMENT CONNECTIONS; EXCEPT AT WATER HEATER AS PER CODE.
17. ISOLATE COPPER PIPE FROM HANGER OR SUPPORTS WITH ISOLATOR PAD.
18. ALL FIRE RATED FLOOR AND WALL PENETRATIONS SHALL BE PROPERLY PROTECTED FROM FIRE, SMOKE AND WATER PENETRATION BY FILLING VOIDS BETWEEN PIPE AND WALL/FLOOR SLEEVES WITH FIRE RATED FOAM, TO ACHIEVE THE SAME RATING AS WALLS OR FLOORS AS PART OF THE PLUMBER'S WORK.
19. PLUMBING CONTRACTOR SHALL GUARANTEE ALL MATERIALS AND WORKMANSHIP FREE FROM DEFECTS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM DATE OF CERTIFICATE OF OCCUPANCY. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE WITHIN 72 HOURS OF NOTIFICATION AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY OTHER PHASE OF THE INSTALLATION WHICH MAY HAVE BEEN DAMAGED. PROVIDE COPY TO LL.
20. STUDOR MINI/MAXI AIR ADMITTANCE VALVES MAY NOT BE USED AS AN ALTERNATE TO VENT PIPING THRU ROOF.
21. PROVIDE CHROME PLATED COMBINATION COVER PLATE AND CLEAN OUT PLUG OR ACCESS PANEL FOR ALL CLEANOUTS.
22. NO COMBUSTIBLE MATERIAL TO BE USED IN MECHANICAL ROOMS OR IN CEILING SPACES WHERE USED AS RETURN AIR PLENUMS.
23. NO WATER, SANITARY OR DRAINAGE PIPING PERMITTED IN ELECTRICAL OR ELEVATOR EQUIPMENT ROOMS.
24. WATER PIPING INSULATION SHALL BE 1" THICK ARMAFLEX INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS FOR ALL HOT WATER PIPING. WHERE DOMESTIC WATER TEMPERATURES CAN CAUSE SWEATING, ALL COLD WATER PIPING SHALL BE INSULATED WITH 1/2" THICK ARMAFLEX INSULATION.
25. CONDENSATE DRAIN LINES TO BE RUN UNDER SLAB IN PVC SCH40 PIPE AND STUBBED OUT OF WALL TO UNIT. TIE-IN OF A/C TO BE BY OTHERS. PVC PIPING WITH 1/2" THICK ARMAFLEX INSULATION MAY BE USED IN LOCATIONS WHERE ALLOWED BY LOCAL CODES. SEE PLUMBING DRAWINGS FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40 FOR SIZE AND LOCATION OF PIPING. PVC WILL BE MIN. SCHEDULE 40.
26. PROVIDE ANGLE STOPS ON ALL WATER SERVICE LINES TO FIXTURES FOR INDIVIDUAL SHUT-OFF.
27. NO JOINTS UNDERGROUND FOR COPPER.
28. PLUMBING FIXTURES SHALL COMPLY WITH IPC.
29. WATER HAMMER ARRESTORS AS PER IPC.
30. PLUMBING CONTRACTOR TO PROVIDE ANTI-SCALDING VALVE FOR TUBS AND SHOWERS.
31. PLUMBING CONTRACTOR SHALL REVIEW ALL BID DOCUMENTATION.
32. PLUMBING CONTRACTOR SHALL REVIEW WALL FINISHES @ LOCATION REQUIRING BARRIER-FREE COMPLIANCE (EXAMPLE: CENTER LINE TO TOILET).
33. CONSTRUCTION "AS BUILT" DRAWINGS AND DOCUMENTS SHALL BE PROVIDED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF ACCEPTANCE. PROVIDE A COPY TO LL.
34. OPERATION MANUALS AND MAINTENANCE MANUALS SHALL BE PROVIDED TO THE BUILDING OWNER. PROVIDE A COPY TO LL.
35. ANY ROOF PENETRATIONS, FLASHING, SEALING, ETC. MUST BE PERFORMED BY COMMERCIAL ROOFING ASSOCIATES (KEITH GILSTRAP (803) 754-3400)

**PLUMBING LEGEND**

	SANITARY SEWER PIPING
	GREASE SANITARY SEWER PIPING
	VENT PIPING
	DOMESTIC COLD WATER PIPING
	HOT WATER PIPING
	GAS PIPING
	PIPE RISE OR DROP
	PIPE RISER UP
	CAPPED END OF PIPE
	CLEAN OUT
	P-TRAP
	SHUT-OFF VALVE
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	GATE VALVE
	GAS COCK
	WATER HAMMER ARRESTER
	FLOOR DRAIN
	INDIRECT WASTE
	FLOOR SINK
	THERMOSTATIC MIXING VALVE

**FIXTURE BRANCH SCHEDULES**

FIXTURE	COLD WATER	HOT WATER	WASTE	VENT
4" WATER CLOSET	1"		4"	2"
2" LAVATORY	1/2"	1/2"	2"	1 1/2"-2"
FLOOR DRAIN SINK	--	--	3"-4"	1 1/2"-2"

**RESTROOM FIXTURE SCHEDULE**

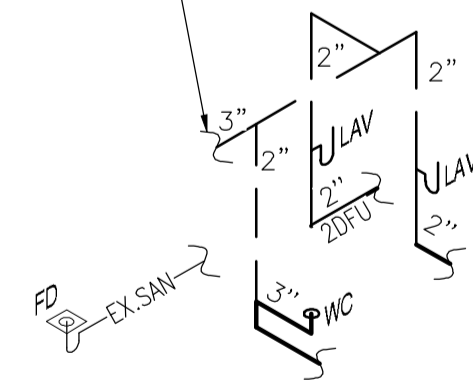
Item No.	Qty.	Description	Manufacturer	Model	WATER		WASTE		Usage	Spec
					Hot	Cold	Waste	Usage		
A	1	LAVATORY	EXISTING	EXISTING			1 1/4"			
A1	1	LAVATORY	EXISTING	EXISTING			1 1/4"			
I	2	LAVATORY FAUCET	EXISTING	EXISTING	1/2"	1/2"				
C	1	WATER CLOSET	EXISTING	EXISTING			1/2"	3"		
C1	1	WATER CLOSET	EXISTING	EXISTING			1/2"	3"		

**KITCHEN EQUIPMENT PLUMBING SCHEDULE**

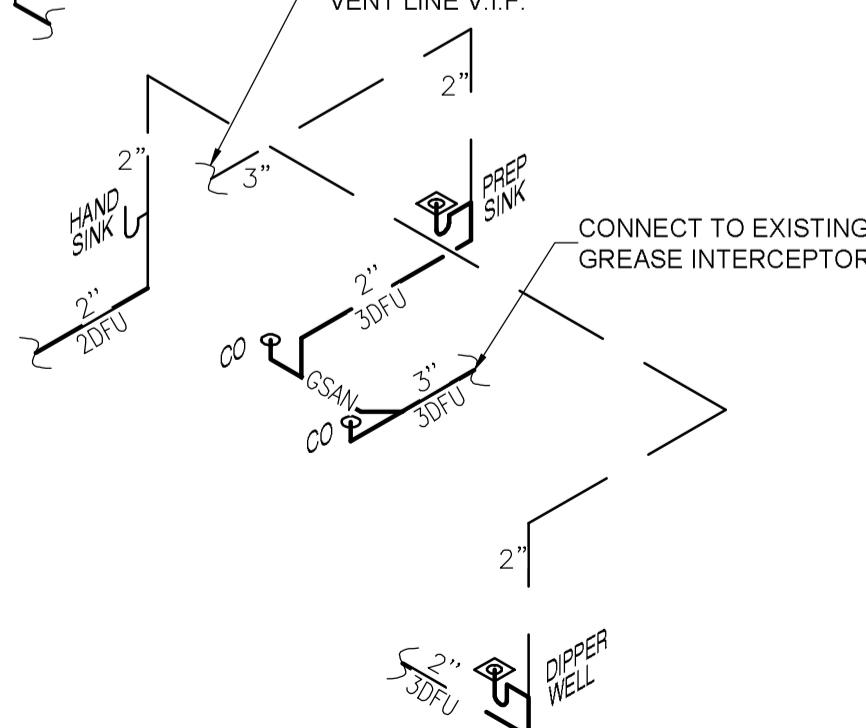
Item No.	Qty.	Description	MANUFACTURER	MODEL	WATER		WASTE	
					Hot	Cold	Direct	Indirect
1	1	BAG IN BOX SODA	PROFIMASTER DISPLAYS	BIFLEX			1/2"	
5	1	3-COMP SINK - 96"	ADVANCE TOBACO	FC-3-182418RL-X				1 1/2"
5A	1	PRE RINSE FAUCET	EXISTING	EXISTING	1/2"	1/2"		
5B	1	PRE RINSE UNIT	EXISTING	EXISTING	1/2"	1/2"		
5C	3	LEVER WASTE	EXISTING	EXISTING				1 1/2"
7	1	HAND SINK	EXISTING	EXISTING	1/2"	1/2"	1 1/2"	
8	1	PREP SINK, 1 COMPARTMENT	EAGLE	414-16-1-X				1 1/2"
8A	1	FAUCET	FISHER	13269	1/2"	1/2"		
8B	1	LEVER/TWIST WASTE	T&B BRASS	B-392				2"
11	1	ICE MAKER	EXISTING	EXISTING			1/2"	1/2"
11A	1	WATER FILTER	EXISTING	EXISTING			1/2"	
14	1	MOP SINK	EXISTING	EXISTING	1/2"	1/2"		3"
34	1	COKE	EXISTING	EXISTING			1/2"	1"
37	1	DIPPER WELL	SERVER PRODUCTS	87760				3/4"
59	1	TANKLESS WATER HEATER	SEE SCHEDULE	SEE SCHEDULE	3/4"	3/4"		
60	1	GREASE INTERCEPTOR	EXISTING	EXISTING				
61	1	COLD BEVERAGE DISPENSER (BARRILITOS)	CRATHCO	CS-4E-16				1"
		FLOOR SINKS	ZURN	Z1900-23-31 (ZS1900 IF IN EXPOSED AREAS)				
		FLOOR DRAINS*	ZURN	ZS415 W/ TYPE BS STRAINER				

+ HOT WATER 140 DEG. \*PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS/\*\*ADAPTOR REQUIRED/\*\*LEVER WASTE VALVE REQUIRED

CONNECT TO EXISTING VENT LINE V.I.F.



CONNECT TO EXISTING VENT LINE V.I.F.

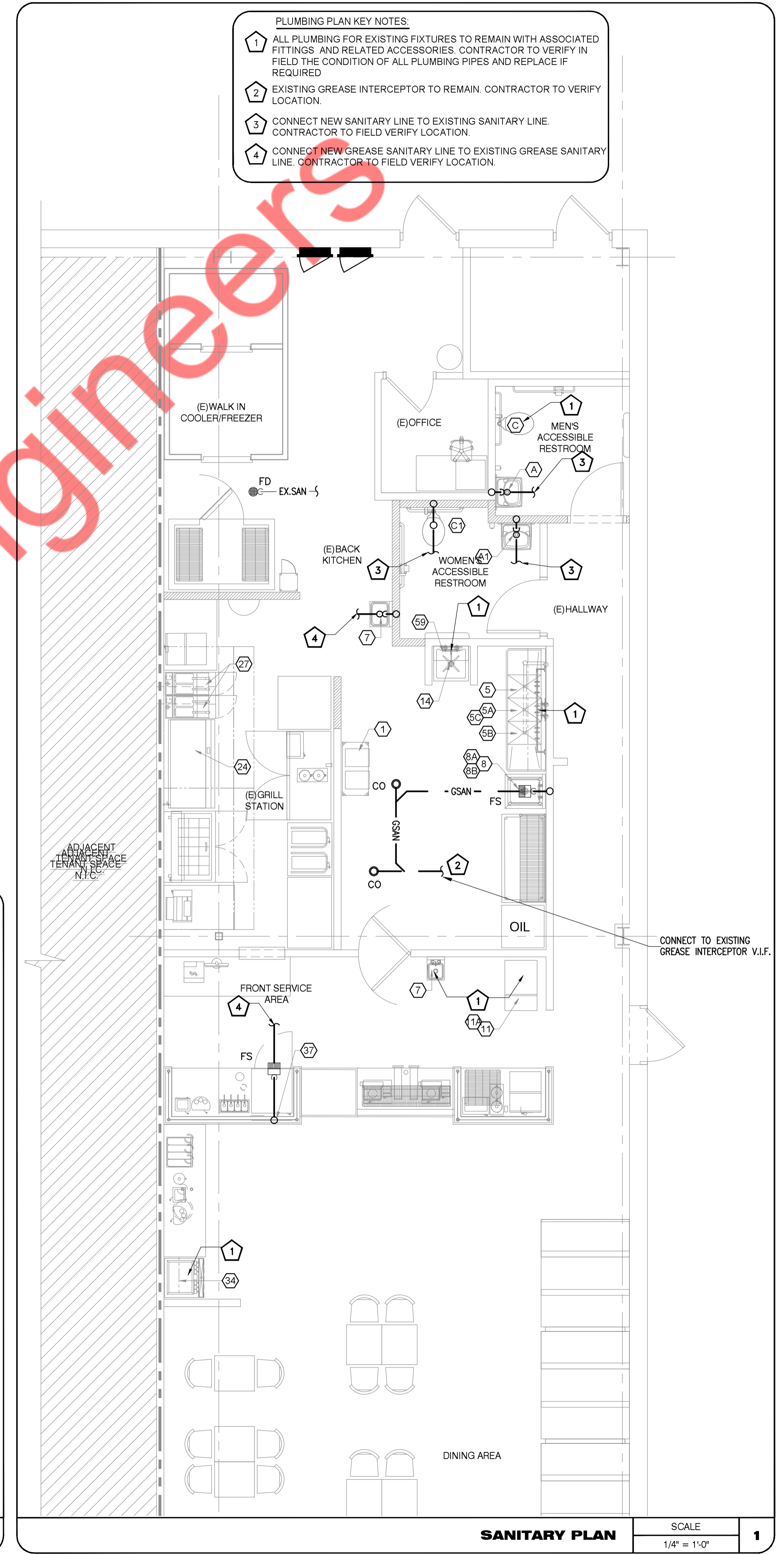


**SANITARY RISER**

SCALE  
N.T.S. **2**

**PLUMBING PLAN KEY NOTES:**

1. ALL PLUMBING FOR EXISTING FIXTURES TO REMAIN WITH ASSOCIATED FITTINGS AND RELATED ACCESSORIES. CONTRACTOR TO VERIFY IN FIELD THE CONDITION OF ALL PLUMBING PIPES AND REPLACE IF REQUIRED.
2. EXISTING GREASE INTERCEPTOR TO REMAIN. CONTRACTOR TO VERIFY LOCATION.
3. CONNECT NEW SANITARY LINE TO EXISTING SANITARY LINE. CONTRACTOR TO FIELD VERIFY LOCATION.
4. CONNECT NEW GREASE SANITARY LINE TO EXISTING GREASE SANITARY LINE. CONTRACTOR TO FIELD VERIFY LOCATION.



**SANITARY PLAN**

SCALE  
1/4" = 1'-0" **1**

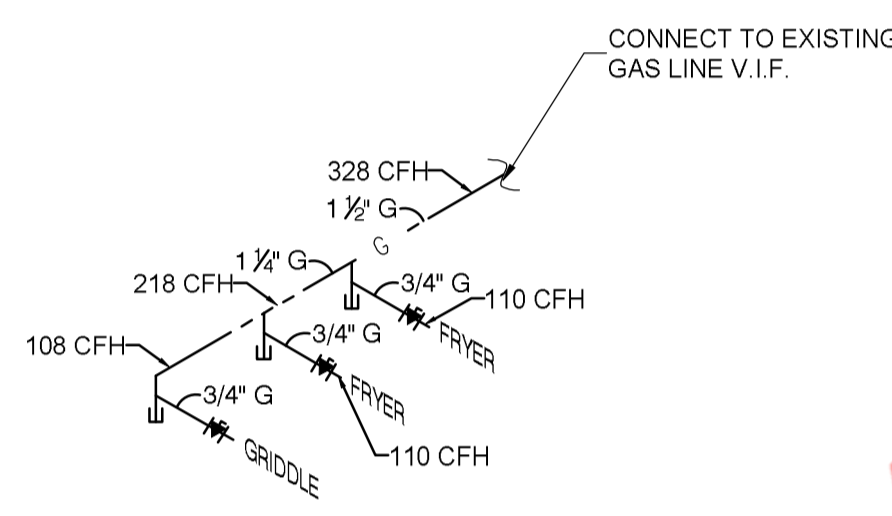
**WATER HEATER SCHEDULE**

MANUFACTURER	NORITZ
MODEL	N-0751M-DVC
EQUIPMENT TAG	59
STATUS	EXISTING
CAPACITY	TANKLESS
FUEL	GAS
BTU/HR	199,000
FLOW RATE	4.4 GPM*
ENERGY FACTOR	0.83
VENT	4"Ø
VOLTAGE	120/1/Ø
AMPERAGE	2
WEIGHT (EMPTY)	47 LBS.

\* @ 77° F TEMPERATURE RISE

**NATURAL GAS PIPING SYSTEM**  
 PROVIDE A COMPLETE GAS PIPING SYSTEM TO SERVE GAS EQUIPMENT FURNISHED BY OTHERS, AS NOTED ON THE DRAWINGS. PROVIDE EITHER THREADED STEEL OR MALLEABLE IRON PIPE WITH MALLEABLE FITTINGS OR WELDED STEEL. PROVIDE ALL UNIONS, SHUT-OFF VALVES AND DIRT LEGS REQUIRED BY NFPA-54 AND GOVERNING LOCAL CODES AND AT EACH GAS APPLIANCE CONNECTION. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.

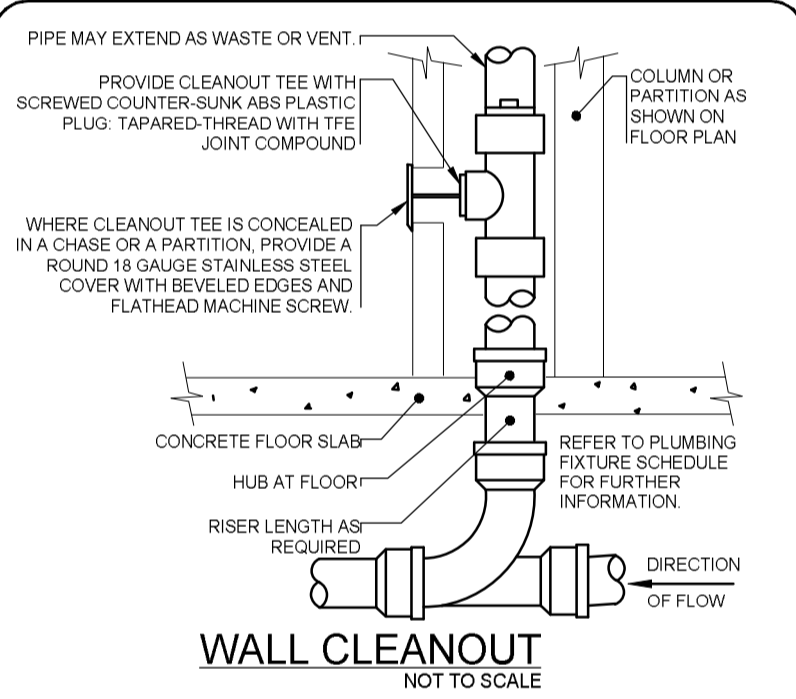
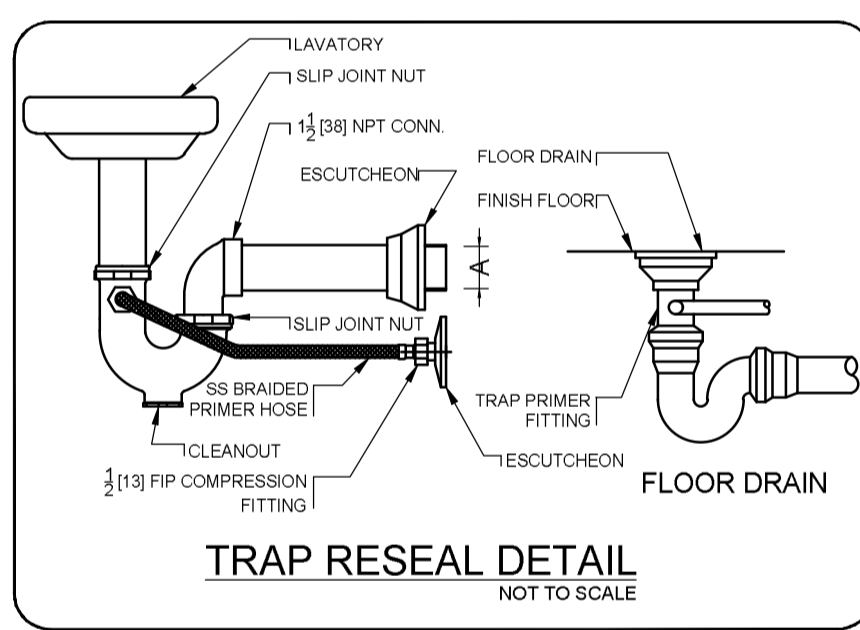
**NOTES:**  
 1. GAS PIPING TO BE SCHEDULE 40 STEEL PIPE W/125 CAST IRON SCREWD FITTINGS  
 2. GAS SYSTEM TO BE INSTALLED BY QUALIFIED LICENSED CONTRACTOR.  
 3. VERIFY ALL EQUIPMENT BTU'S PRIOR TO INSTALLATION. ADJUST PIPE SIZE ACCORDING INTERNATIONAL FUEL GAS CODE, 2015, TABLE 402.4.



**GAS SCHEDULE**

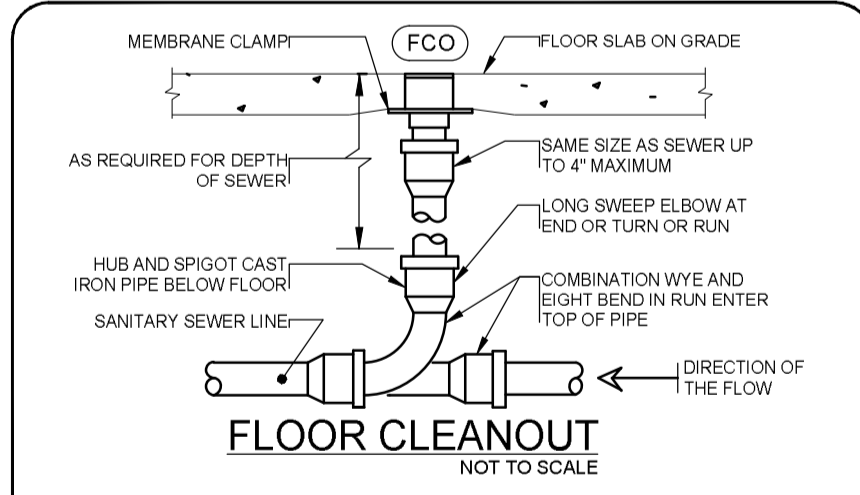
ITEM NO.	QTY.	DESCRIPTION	MANUFACTURER	MODEL	SIZE	BTU/HR.
24	1	GRIDDLE	VULCAN	948RX	3/4"	108,000
27	2	GAS FLOOR FRYERS	PITCO	SG14S	3/4"	220,000
<b>TOTAL LOAD</b>						<b>328,000</b>

**GAS RISER** SCALE **3**  
N.T.S.



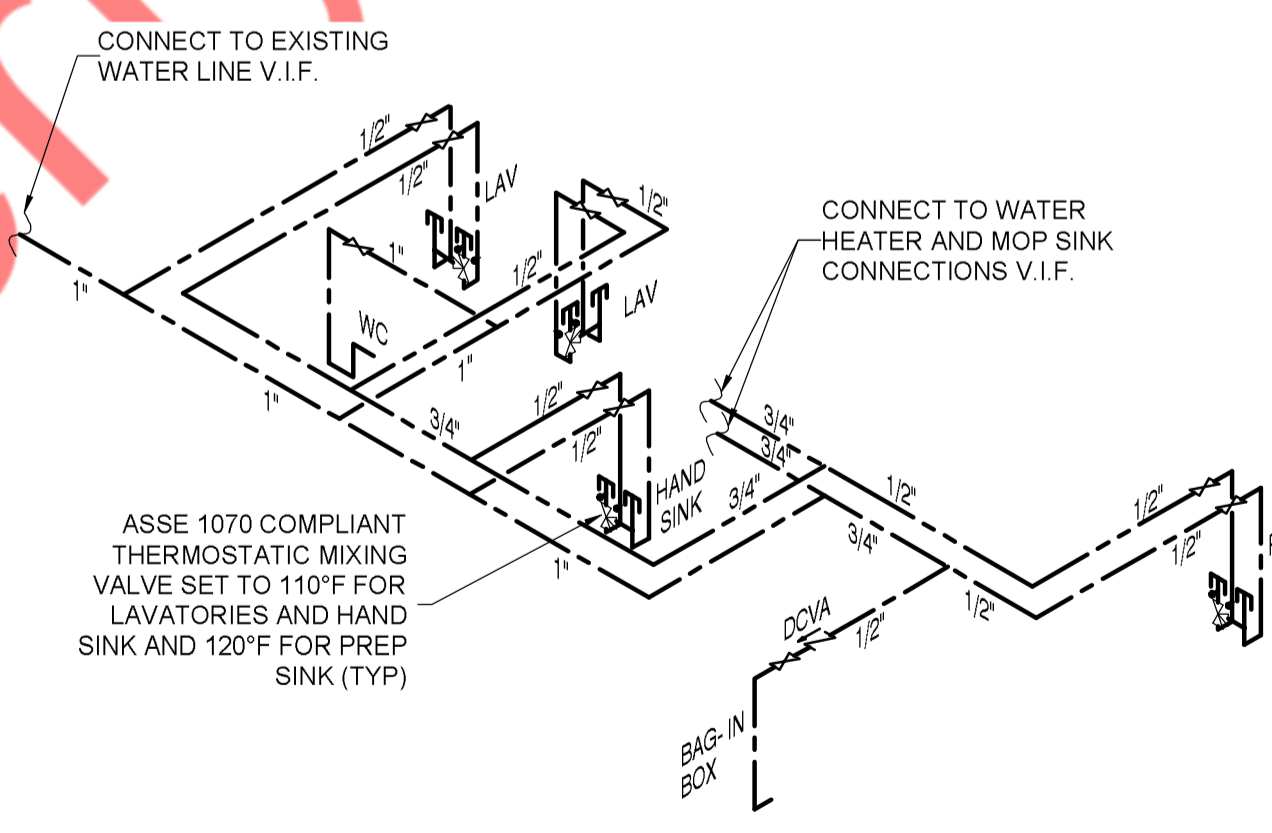
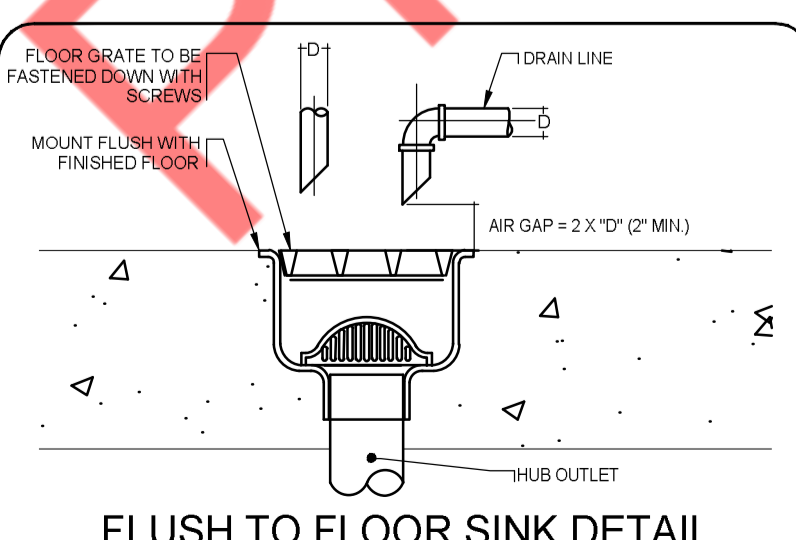
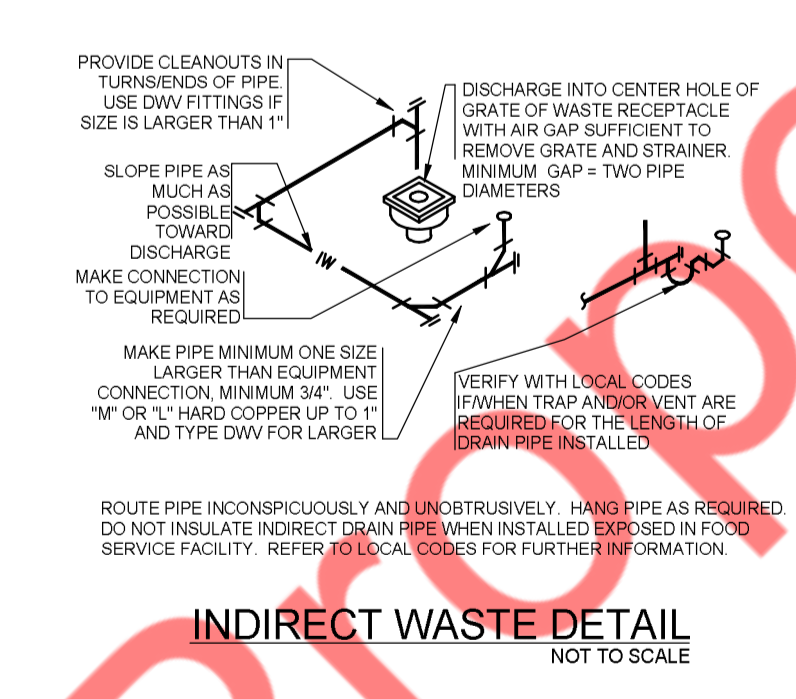
**WALL CLEANOUT DETAIL NOTES**

- 1) PROVIDE WCO WHERE SHOWN ON PLANS, AND ON SANITARY WASTE BRANCHES NOT SERVED WITH A FLOOR CLEANOUT
- 2) LOCATE ABOVE FIXTURE FLOOR RIM WITHIN 4" OF FLOOR
- 3) CONSULT LOCAL CODES FOR OTHER WCO REQUIREMENTS
- 4) LONG SWEEP AT END OF LINE OR COMBINATION WYE AND EIGHT BEND IN RUN OF LINE
- 5) CLEAN OUT FACE SHALL BE WITHIN 4" OF WALL SURFACE. PROVIDE A PIPE EXTENSION IF REQUIRED
- 6) REFER TO PLUMBING FIXTURE SCHEDULE FOR FURTHER INFORMATION



**FLOOR CLEANOUT DETAIL NOTES**

- 1) LOCATE CLEANOUT AT THIS LOCATIONS:  
 A) BUILDING EXIT  
 B) AT TURNS OF PIPES GREATER THAN 45 DEGREES  
 C) AT 90 INTERVALS ON STRAIGHT RUNS  
 D) WHERE IS SHOWN ON PLANS  
 E) WHERE IS 18" CLEAR AROUND



**FIXTURE FACTOR VALUE \***

1 WATER CLOSETS (N) @ 5	= 5
2 LAVATORIES (N) @ 2	= 4
1 HAND SINKS @ 2	= 2
1 PREP SINK @ 3	= 3
1** MISC. @ 25	= 0.25
<b>TOTAL</b>	<b>= 14.25</b>

\* TABLE E103.3(2)  
\*\* BAG-N-BOX

**WATER RISER** SCALE **2**  
N.T.S.

**PLUMBING PLAN KEY NOTES:**

- 1 ALL PLUMBING FOR EXISTING FIXTURES TO REMAIN WITH ASSOCIATED FITTINGS AND RELATED ACCESSORIES. CONTRACTOR TO VERIFY IN FIELD THE CONDITION OF ALL PLUMBING PIPES AND REPLACE IF REQUIRED
- 2 EXISTING WATER HEATER TO REMAIN WITH ASSOCIATED PLUMBING AND ACCESSORIES. CONTRACTOR TO VERIFY IN FIELD THE CONDITION OF ALL PLUMBING PIPES AND REPLACE IF REQUIRED

