	LUMBING LEGEND
SYMBOL	DESCRIPTION
——SAN——	SANITARY OR WASTE PIPING ABOVE GRADE (SAN)
— — SAN — — .	SANITARY OR WASTE PIPING BELOW GRADE (SAN)
—— GW——	GREASE WASTE PIPING (GW)
	GREASE WASTE PIPING BELOW GRADE (GW) VENT PIPING ABOVE OR BELOW GRADE (V)
	COLD WATER PIPING (CW) HOT WATER PIPING (HW)
· - · - · · · · · · · · · · · · · ·	HOT WATER RETURN PIPING (HWR)
TW	TEMPERED WATER (TW)
——тР——	TRAP PRIMER LINE (TP)
——— GAS ———	NATURAL GAS PIPING (G)
GV	GAS VENT PIPING (GV)
	FLOW DIRECTIONAL ARROW
	SHUT-OFF VALVE
——————————————————————————————————————	BALANCING VALVE (BV)
	SOLENOID VALVE (SV)
-	BALL VALVE (BV)
Ţ	BUTTERFLY VALVE
	GAS PLUG VALVE (GPV)
	HORIZONTAL SWING CHECK UNION
	Y-STRAINER
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
×	REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)
	PIPING DOWN
	RISE OR DROP PIPING
	PIPING UP -OR- PIPING UP & DOWN
=======================================	CAP ON END OF PIPE
	CLEANOUT (WALL OR CEILING) (CO)
— — —	FLOOR CLEANOUT (FCO)
——————————————————————————————————————	EXTERIOR CLEANOUT WITH 18"x18"x4" CONCRETE PAD (ECO)
	TWO-WAY CLEANOUT (PROVIDE 18"x24"x4" CONCRETE PAD OUTSIDE)
	PRESSURE REDUCING VALVE (PRV)
	BRANCH CONNECTION OUT OF TOP
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF SIDE
r	WYE & 1/8TH BEND BRANCH CONNECTION
P	WYE BRANCH CONNECTION
*	HOSE BIBB
	PRESSURE GAUGE WITH COCK
	THERMOMETER
	GAS PRESSURE REGULATOR
	TEST COCK GAS METER
.221	WALL HYDRANT
<u>—</u> 太	VALVE IN RISE
√ ⊠	ASME TEMPERATURE & PRESSURE RELIEF VALVE
ਫ਼	VACUUM RELIEF VALVE
<u> </u>	ANGLE VALVE
1	refer to keyed note
<u> </u>	Floor Sink (FS)
Ø	FLOOR DRAIN (FD)
⊠ 9—	Floor Drain with P-trap (FD)
ф о—	Floor drain with P-trap at 45° angle (FD)
œ -	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER
(AP)	ACCESS PANEL LOCATION SYMBOL
A	SHOCK ABSORBER WITH ACCESS PANEL
	AIR CHAMBER
(E)	EXISTING
(N) ⊗	NEW
⊗	CONNECT NEW TO EXISTING
1/4" PER FOOT	INVERT ELEVATION QUARTER OF AN INCH SLOPE
1/8* PSR 100T	1/8TH OF AN INCH SLOPE
1/16" PER FOOT	1/16TH OF AN INCH SLOPE
\wedge	DELTA CHANGE SYMBOL
/ 13	-
P 4" VTR	RISER FLAG

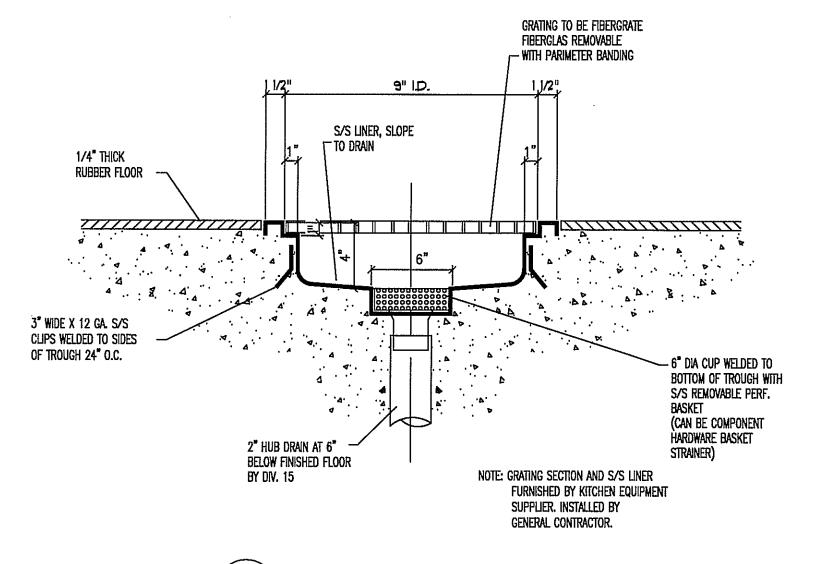
NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT.

		-	/ABBREVIATIONS
•	HOT WATER	FD	FLOOR DRAIN
•	COLD WATER	FFD	FUNNEL FLOOR DRAIN
•	DRAIN	FS	FLOOR SINK
0	CONNECTION	HD	HUB DRAIN
	FLOOR DRAIN AS NOTED	SS	STEAM SUPPLY
0	FUNNEL DRAIN AS NOTED	SR	STEAM RETURN
	FLOOR SINK FULL GRATE	EL	ELEVATION ABOVE FINISHED
	FLOOR SINK HALF GRATE		FLOOR
₩0	GAS CONNECTION	SU	STUB UP ABOVE FINISHED FLOOR
•	GAS SUPPLY	GPH	GALLONS PER HOUR
	PIPE ROUTING	GPM	GALLONS PER MINUTE
HW	HOT WATER	PSI	POUNDS PER SQUARE INCH
CW	COLD WATER		BRANCH TO CONNECTION POINT AND CONNECT EQUIPMENT
DR	DRAIN	ВТС	
AFF	ABOVE FINISHED FLOOR	DFA	DOWN FROM ABOVE
BFF	BELOW FINISHED FLOOR		

	PLUMBING NOTES
A	PLUMBER TO CONNECT ALL WATER LINES, GAS LINES, WASTE LINES, ETC. TO FULLY CONNECT ALL EQUIPMENT AND RUN CONDENSATE LINES FROM UNITS TO DRAINS AND THESE LINES TO BE NO SMALLER THAN THE STUB— OUT OF THE FIXTURE. PLUMBER TO PROVIDE GATE VALVES ON ALL WATER AND GAS LINES, ALL VALVES, CUT-OFFS, TRAPS, HYDROSTATIC SHOCK ELIMINATORS, PRESSURE REGULATORS AND MATERIALS NECESSARY TO CONNECT ALL LINES, UNLESS OTHERWISE SPECIFIED IN THE ITEM SPECIFICATIONS. FAUCETS, DRAIN OUTLET FITTINGS IN FIXTURES AND SPECIALTY ITEMS ARE TO BE FURNISHED BY THE KITCHEN EQUIPMENT SUPPLIER AS OUTLINED IN THE ITEM SPECIFICATIONS. ALL WORK TO BE PERFORMED IN FULL ACCORDANCE WITH ALL APPLICABLE CODES RELATING TO INSTALLATION AND HOOKUP OF EQUIPMENT OMISSIONS OR ERRORS ON THE SCHEDULE DO NOT RELIEVE THE PLUMBING CONTRACTOR FROM COMPLETE FINAL PLUMBING RESPONSIBILITY.
В	ALL OUTLETS AND CONNECTIONS SHOWN RELATE TO KITCHEN EQUIPMENT ONLY. REFER TO ARCHITECTURAL/ENGINEERING PLANS FOR ADDITIONAL REQUIREMENTS.
C	ALL DIMENSIONS GIVEN ARE FROM COLUMN CENTERLINES AND/OR FINISHED WALLS AND ARE IN INCHES TO 4'-0". ELEVATIONS GIVEN ARE FROM FINISHED FLOORS. ALL ROUGH-INS SHOWN ARE TO BE RUN INSIDE WALLS (EXCEPT STUB-UPS) LOCATIONS INDICATE POINT OF EXIT FROM WALLS, CEILINGS OR FLOORS.

ALL FLOOR DRAINS TO SET 1/2" BELOW FINISHED FLOOR UNLESS OTHERWISE NOTED. DO NOT SLOPE FLOORS SO CLOSE TO DRAINS AS TO CREATE "PITS" OR "DIPS" IN FLOOR.
MINIMUM RADIUS OF SLOPE TO BE 24" FROM CENTERLINE OF DRAIN.

NO.	UTILITY	SIZE	HEIGHT A.F.F.	LOCATION	BTU/hr	REMARKS
FS	FLOOR SINK	3"	FLUSH	FLOOR		HALF-GRATE - TO RECEIVE INDIRECT WASTE FROM EQUIPMENT
FD	Floor Drain	3"	-1/2*	FLOOR		area floor drain – see detail
FFD	FUNNEL FLOOR DRAIN	3"	FLUSH	FL00R		TO RECEIVE INDIRECT WASTE FROM EQUIPMENT - 4" HIGH FUNNEL
HD	Hub Drain	3"	4"	FLOOR		FOR INDIRECT WASTE FROM EQUIPMENT
1	HOT & COLD WATER	1/2"	4'-0"	WALL		BTC ON MOP SINK FAUCET - VERIFY REQUIREMENTS
1.1	DRAIN	2"	1"	FLOOR		BTC ON MOP SINK WASTE - VERIFY REQUIREMENTS
4	HOT & COLD WATER	1/2*	20"	WALL.		BTC ON HAND SINK FAUCET
4	DRAIN	1 1/2"	16"	WALL	-	BTC ON HAND SINK WASTE
7	HOT & COLD WATER	1/2*	12"	WALL	,	BTC ON SINK FAUCET
9	COLD WATER	3/4"	12"	WALL		BTC ON DISPOSER
9.1	DRAIN	3"	16"	WALL		BTC ON DISPOSER
10	HOT WATER (140° F)	3/4"	5'-0"	WALL		BTC ON DISHMACHINE
14	COLD WATER	1/2"	6'-0"	WALL		BTC ON ICE MACHINE; INTERCONNECT THRU FILTER
15	DRAIN	2"	-6 "	FL00R		BTC ON FLOOR TROUGH WASTE - SEE DETAIL
16	HOT & COLD WATER	1/2"	12"	WALL		BTC ON SINK FAUCET
21	COLD WATER	1/2*	12"	WALL		FOR FILL FAUCET
26	NATURAL GAS	3/4"	36"	WALL	224,000	BTC ON EIGHT (8) BURNER RANGE
28	NATURAL GAS	3/4"	36"	WALL	80,000	BTC ON PASTA COOKER
28.1	COLD WATER	1/2*	12*	WALL		BTC ON PASTA COOKER FAUCET
30	NATURAL GAS	3/4"	36"	WALL	60,000	BTC ON GRIDDLE
33	natural gas	3/4"	36"	WALL	35,000	BTC ON SALAMANDER
34	natural gas	3/4"	36 "	WALL	35,000	BTC ON SALAMANDER
35	NATURAL GAS	3/4"	36"	WALL.	80,000	BTC ON CHARBROILER
36	NATURAL GAS	3/4"	36 "	WALL	105,000	BTC ON FRYER
39	natural gas	3/4"	36 "	WALL.	180,000	BTC ON FOUR (4) BURNER RANGE
40	NATURAL GAS	TWO(2) 3/4"	 36"	WALL	55,000 EACH	BTC ON CONVECTION OVEN
41	COLD WATER	1/2"	12"	WALL		BTC ON KETTLE FAUCET
42	DRAIN	2"	-6"	FLOOR	11 6 4 10 1.	BTC ON FLOOR TROUGH WASTE - SEE DETAIL
44	HOT & COLD WATER	1/2"	12"	WALL.		BTC ON SINK FAUCET
47	HOT & COLD WATER	1/2"	12"	WALL		BTC ON SINK FAUCET
54	HOT & COLD WATER	1/2"	12"	WALL		BTC ON SINK FAUCET
61	COLD WATER	1/2"	48"	WALL		BTC ON COFFEE BREWER
62	COLD WATER	1/2"	48"	WALL		BTC ON TEA BREWER
66	HOT & COLD WATER	1/2"	8"	WALL		BTC ON SINK FAUCET
	HOT & COLD WATER	1/2"	20"	WALL		BTC ON HAND SINK FAUCET
67	DRAIN	1 1/2"	16"	WALL		BTC ON HAND SINK WASTE
69	HOT & COLD WATER	1/2"	8*	WALL		BTC ON SINK FAUCET
70	HOT WATER (140° F)	3/4"	12"	WALL		BTC ON DISHMACHINE
74	HOT & COLD WATER	1/2"	8 "	WALL.		BTC ON SINK FAUCET
78	NATURAL GAS	3/4"	18"	WALL		



1 TYPICAL FLOOR TROUGH DETAIL

FS-2.0 NO SCALE



09-10-10 ISSUED FOR PERMIT
10-08-10 DBR REVIEW COMMENTS
11-02-10 ISSUED FOR CONSTRUCTION

HRRELL ARCHITECTS, LP

9575 Katy Frwy., #200 Houston, Texas 77024

tel: 713.722.7071 fax: 713.722.7072

HOLSTE & ASSOCIATES
MEP Engineers
Holste & Associates

CONSULTANTS

Holste & Associates, Inc.
Consulting Engineers - Texas Reg. F-544;
6671 Southwest Frwy., Suite 850
Houston, Texas 77074 (713) 995-1351
www.holstemep.com

PROJECT NAME

LUCA & LEONARDO RESTAURANT

LEONARD

PROJECT ADDRESS

20 WATERWAY
THE WOODLANDS, TEXAS

PROJECT NUMBER

SHEET NAME

PLUMBING
SCHEDULES
SHEET NUMBER

P2.00