

09-10-10 ISSUED FOR PERMIT

ARCHITECTS, LP

9575 Katy Frwy., #200 Houston, Texas 77024 tel: 713.722.7071 fax: 713.722.7072

CONSULTANTS HOLSTE & ASSOCIATES MEP Engineers

GUADALUPANA RESTAURANT

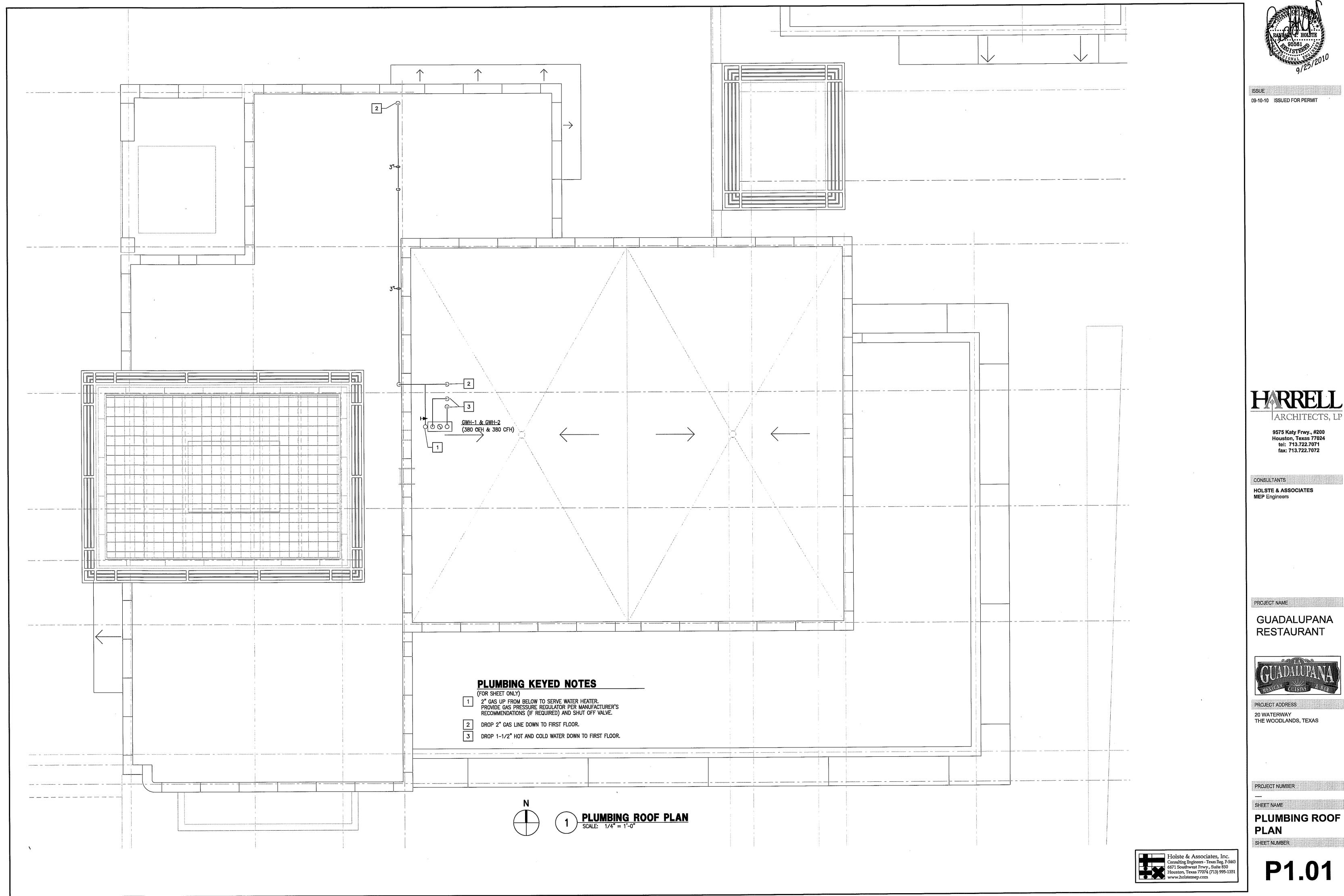


PROJECT ADDRESS 20 WATERWAY THE WOODLANDS, TEXAS

PROJECT NUMBER

PLUMBING

FLOOR PLAN SHEET NUMBER





and a sec	
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)
тw	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)
	BUTTERFLY VALVE
	GAS PLUG VALVE (GPV) HORIZONTAL SWING CHECK
	HORIZONIAL SWING CHECK UNION
	Y-STRAINER
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
──────────────	REDUCED PRESSURE BACKFLOW PREVENTER (RPZ)
	PIPING DOWN
	RISE OR DROP PIPING
 to	PIPING UP -OR- PIPING UP & DOWN
	CAP ON END OF PIPE
1	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
! *	WYE & 1/8TH BEND BRANCH CONNECTION
₽ ‡	WYE BRANCH CONNECTION
 (a)	HOSE BIBB PRESSURE GAUGE WITH COCK
<u> </u>	THESSORE GAUGE WITH COOK
	THERMOMETER
<u>ō</u>	gas pressure regulator
	TEST COCK
	GAS METER
.EZA.	WALL HYDRANT
太	VALVE IN RISE
∆ ⊠	ASME TEMPERATURE & PRESSURE RELIEF VALVE
	VACUUM RELIEF VALVE
<u></u> -≽1	ANGLE VALVE
1	refer to keyed note
	FLOOR SINK (FS)
Ø	FLOOR DRAIN (FD)
© ∈—	FLOOR DRAIN WITH P-TRAP (FD)
Фс—	FLOOR DRAIN WITH P-TRAP AT 45" ANGLE (FD)
œ— Г <u>п</u> П	HUB DRAIN (HD)
	ACCESS PANEL FOR TRAP PRIMER
æ	ACCESS PANEL LOCATION SYMBOL
	SHOCK ABSORBER WITH ACCESS PANEL
<u> </u>	AIR CHAMBER
(E)	EXISTING
(N)	NEW
$\overset{(i')}{\otimes}$	CONNECT NEW TO EXISTING
IE=100.00'	INVERT ELEVATION
1/4" PER FOOT	QUARTER OF AN INCH SLOPE
1/ <u>8* PSP 100</u> T	1/8TH OF AN INCH SLOPE
1/16° PER F00T	1/16TH OF AN INCH SLOPE
1	DELTA CHANGE SYMBOL

NOTE: NOT ALL SYMBOLS MAY APPLY TO THIS PROJECT.

۲۱	TOWRING SIME	IOL2	/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
O	FUNNEL DRAIN AS NOTED	SR	STEAM RETURN
	FLOOR SINK FULL GRATE	FL	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
DR	DRAIN	BIC	POINT AND CONNECT EQUIPMENT
AFF	ABOVE FINISHED FLOOR	DFA	DOWN FROM ABOVE
BFF	BELOW FINISHED FLOOR		

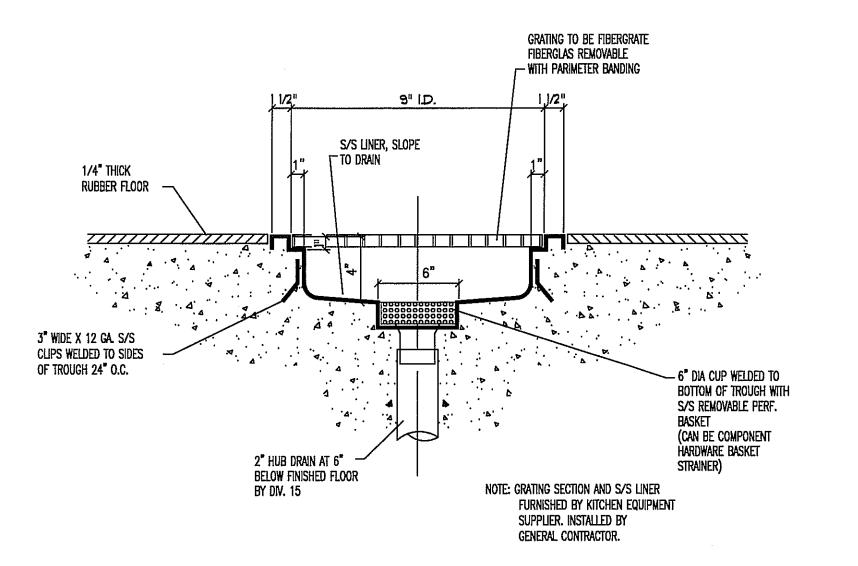
A	PLUMBER TO CONNECT ALL WATER LINES, GAS LINES, WASTE LINES, ETC. TO FULLY CONNECT ALL EQUIPMENT AND RUN CONDENSATE LINES FROM UNITS TO DRAINS AND THESE LINES TO BE NO SMALLER THAN THE STUB-OUT OF THE FIXTURE. PLUMBER TO PROVIDE GATE VALVES ON ALL WATER AND GAS LINES, ALL VALVES, CUT-OFFS, TRAPS, HYDROSTATIC 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.
С	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.

D 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.

PLUMBING NOTES

NO.	UTILITY	SIZE	HEIGHT A.F.F.	LOCATION	BTU/hr	REMARKS
FS	FLOOR SINK	3**	FLUSH	FL00Ř	<u>.</u>	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"	FL00R		BTC ON MOP SINK WASTE - VERIFY REQUIREMENTS
4	HOT & COLD WATER	1/2"	20"	WALL		BTC ON HAND SINK FAUCET
Ť [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"	FLOOR		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	TW0(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		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		ETC 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.	81,000	BTC ON PIZZA OVEN



TYPICAL FLOOR TROUGH DETAIL

PS-2.0 NO SCALE





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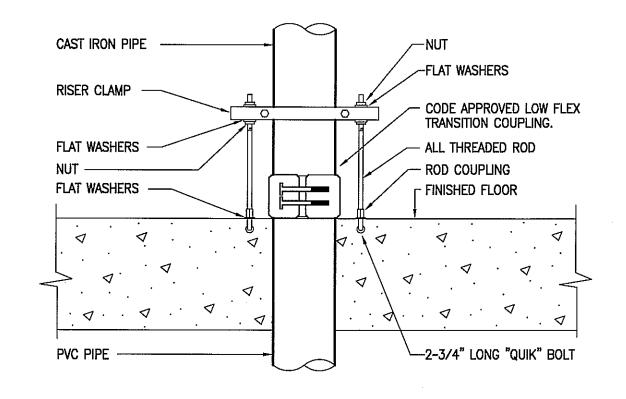
SHEET NAME

PLUMBING

SCHEDULES

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P2.00



<u>NOTE:</u> THERE IS TO BE NO EXPOSED PVC ABOVE SLAB.

SEAL GAS PIPE TIGHT AT PENETRATION OF

COMPONENT HARDWARE

- LIFT-AND-TURN

FLUSH LATCHES

CUP AND LEVER

SOUTHCO MODEL

-MANUAL BALL VALVE AND BOX TO BE

NOTE: INSTALL MANUAL VALVE IN BOX UPSTREAM OF ANSUL VALVE.

KITCHEN MANUAL VALVE BOX

1. PROVIDE UNIT IN READILY ACCESSIBLE LOCATION, IN COMPLIANCE WITH

2. PROVIDE 1" PIPE INSULATION HAVING A CONDUCTIVITY NOT EXCEEDING

PROVIDE JACKETING FOR ALL EXPOSED PIPING.

0.28 BTU PER INCH/HR x S.F. x 'F ON ALL DOMESTIC WATER PIPING.

WATER HEATER TYPICAL WATER PIPING

ARCHITECT AND/OR OWNER.

SCALE: NONE

LOCAL CODES. COORDINATE FINAL LOCATION AND INSTALLATION WITH

FURNISHED AND INSTALLED BY DIV. 15

NO. 62-10-702-10.

- WATTS N36-M1 VACUUM

RELIEF VALVE

- 27" HEAT TRAP

- CHECK VALVE

— AIR INLET

-BALL VALVE (TYPICAL)

- DIELECTRIC UNION (TYPICAL)

- ASME THERMAL EXPANSION TANK WITH ROOFTOP PAD/SUPPORT. THERM-X-TROL ST-5-C.

COORDINATE ALL ROOF PENETRATIONS IN FIELD WITH ROOF CONSTRUCTION.

COLD WATER SUPPLY

POLISHED CHROME

MODEL NO. M48-0112

S/S PIANO HINGE

CABINET CONSTRUCTION

OF #18 GAUGE

Stainless Steel -

SLEEVE CONNECTION

PLAN PIPE SIZES. —

VERIFY SIZE W/ FLOOR

SCALE: NONE

PROVIDE FLUE PER MANUFACTURER'S

RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS.

FLUE COLLAR AND ADAPTER

TANKLESS WATER HEATER.

PROVIDE UNITSTRUT SUPPORT.
COORDINATE WITH STRUCTURAL
AND ROOF CONSTRUCTION. —

ASME RATED T&P RELIEF VALVE. WATTS MODEL 100XL.

ROUTE ALL COPPER DRAIN

TO MOP SINK BELOW AND

TURNED DOWN, TYPICAL. —

HOT WATER SUPPLY. REFER TO PLANS. —

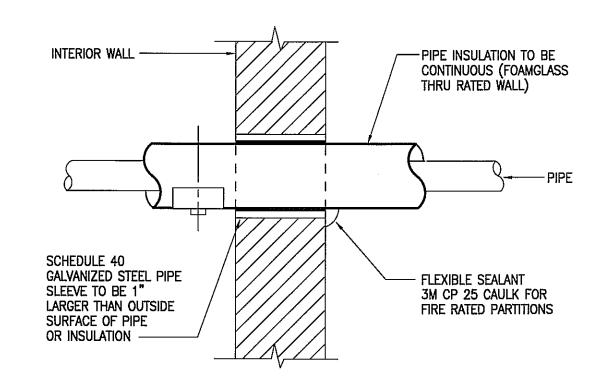
LINES FULL SIZE AND SLOPED

TERMINATE LOW WITH ELBOWS

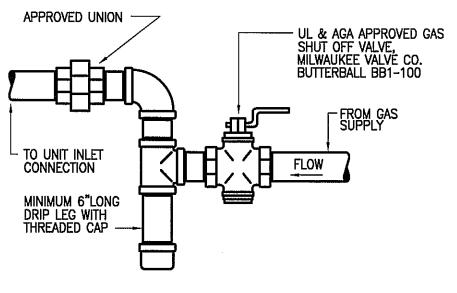
REFER TO SCHEDULE. -

THERMOMETER -

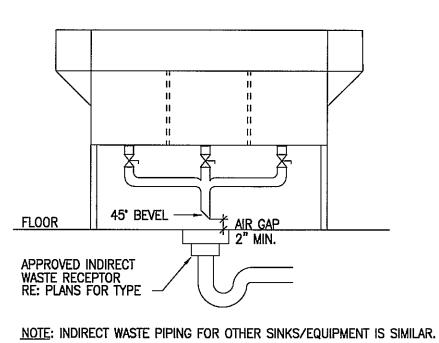
7 CAST IRON TO PVC PIPE TRANSITION
SCALE: NONE



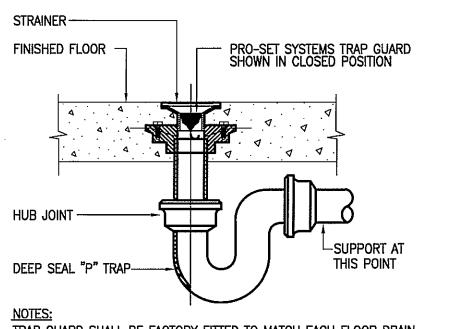
6 INTERIOR WALL PENETRATION SCALE: NONE



5 GAS CONNECTION TO EQUIPMENT
SCALE: NONE



4 THREE COMPARTMENT SINK
SCALE: NONE



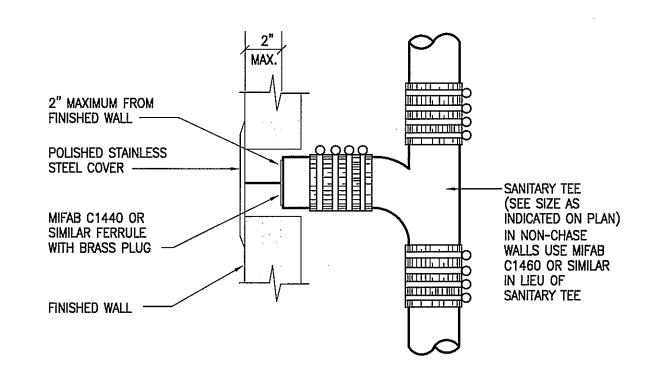
1. TRAP GUARD SHALL BE FACTORY FITTED TO MATCH EACH FLOOR DRAIN (AND FLOOR SINK) BY SIZE, MODEL, AND MANUFACTURER.

3. INSTALLATION OF TRAP GUARD TO BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

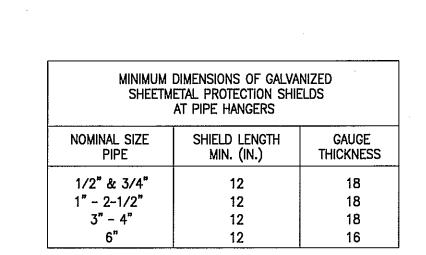
4. INSERT TRAP GUARD ONLY AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS TITE SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.

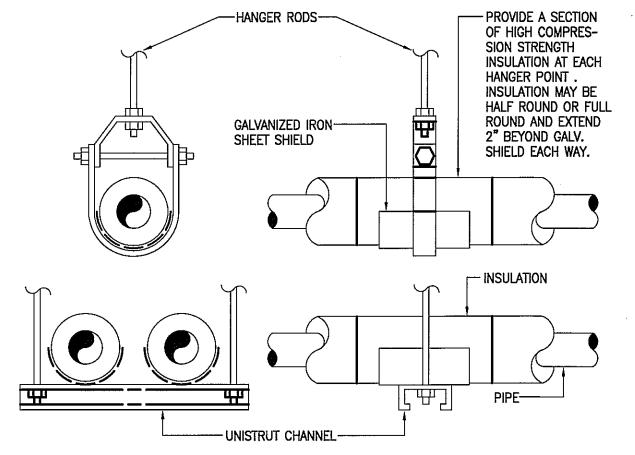
FLOOR DRAIN WITH TRAP SEAL PROTECTION

SCALE: NONE



WALL CLEANOUT
SCALE: NONE





1 HANGER FOR WATER PIPING

Holste & Associates, Inc.
Consulting Engineers - Texas Reg. F-5443
6671 Southwest Frwy., Suite 850
Houston, Texas 77074 (713) 995-1351
www.holstemep.com



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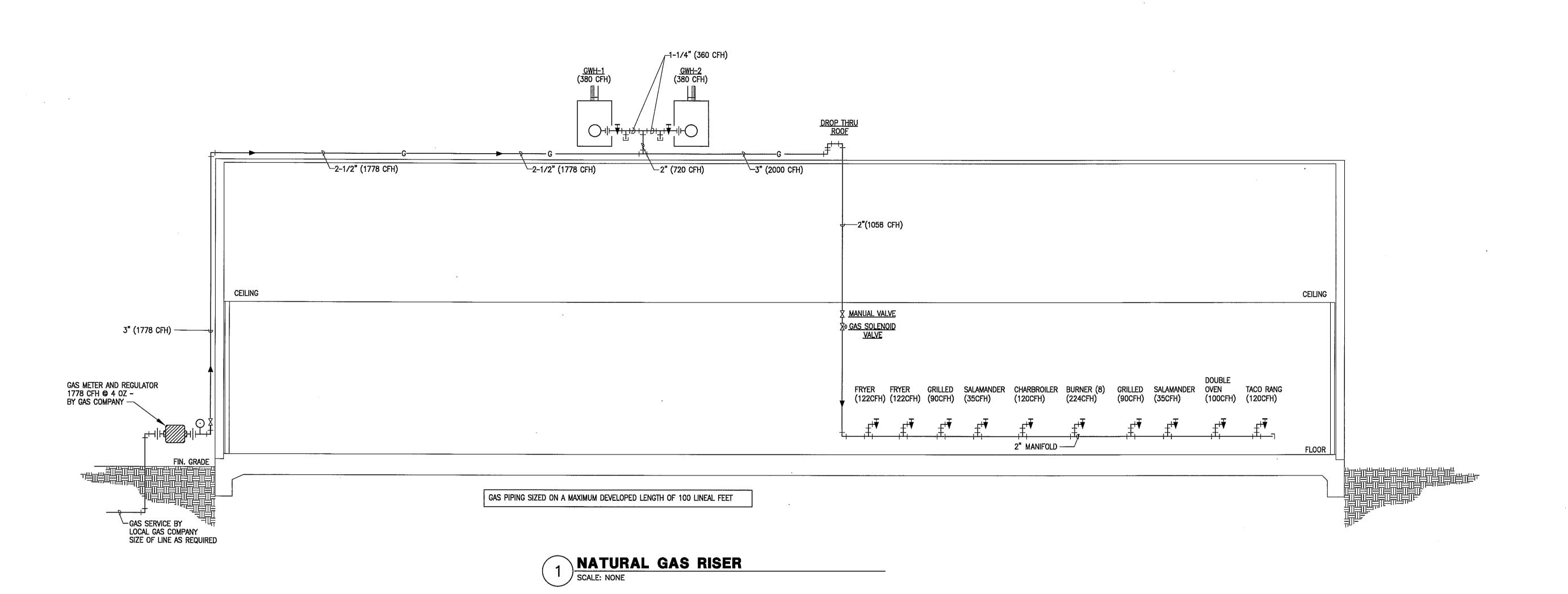
20 WATERWAY
THE WOODLANDS, TEXAS

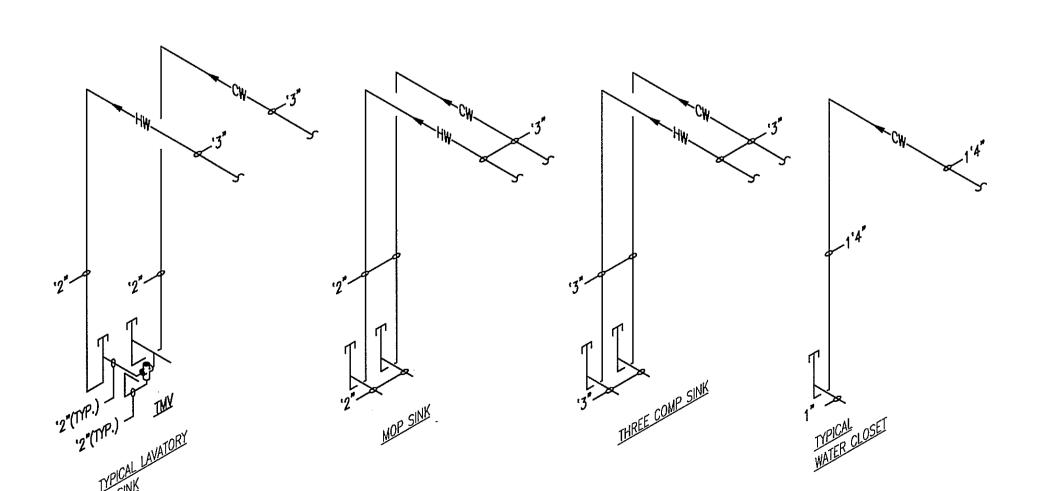
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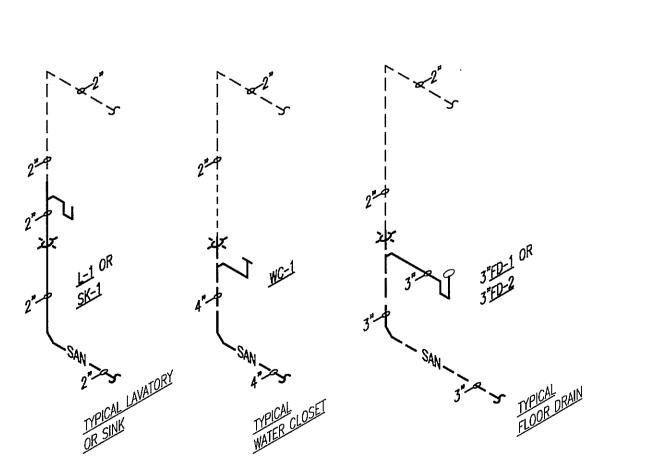
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2 TYPICAL DOMESTIC WATER RISERS
SCALE: NONE



TYPICAL WASTE AND VENT RISERS

SCALE: NONE

PLUMBING GENERAL NOTES

- REFER TO CIVIL DRAWINGS FOR CONTINUATION OF DOMESTIC WATER AND SANITARY WASTE UTILITIES.
- 2. REFER TO CIVIL DRAWINGS FOR SIZE AND LOCATION OF DOMESTIC
- WATER METER ON SITE.
- 3. REFER TO ARCHITECTURAL/CIVIL DRAWINGS FOR BUILDING FINISHED FLOOR ELEVATION.
- 4. FIELD VERIFY EXACT LOCATION, SIZE, DEPTH, DIRECTION OF FLOW, CAPACITY, PIPE MATERIAL AND CONDITION OF EXISTING SITE DOMESTIC WATER AND SANITARY WASTE PIPING PRIOR TO BEGINNING CONSTRUCTION TO ENSURE THAT PROPER CONNECTIONS TO AND EXTENSION OF SUCH UTILITIES CAN BE MADE.
- 5. INVERT ELEVATIONS LISTED ARE APPROXIMATE. PRIOR TO CONSTRUCTION, COORDINATE FINAL INVERT ELEVATIONS OF BUILDING SANITARY OUTFALLS AND SITE PIPING WITH SITE UTILITY CONTRACTOR. MAKE ADJUSTMENTS AS REQUIRED TO ENSURE PROPER CONNECTIONS TO SITE UTILITIES.
- 6. PRIOR TO BEGINNING CONSTRUCTION, COORDINATE PLUMBING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL CODE AUTHORITY AND PROVIDE AS
- 7. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
- 8. CONTRACTOR SHALL COORDINATE ROUTING OF PIPING IN CEILING SPACES WITH MECHANICAL AND ELECTRICAL EQUIPMENT, DUCTWORK AND CONDUIT. SHOULD A CONFLICT OCCUR THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO INSTALLING AN ALTERNATE PIPING PLAN.
- 9. MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES.
- 10. COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS, SPECIFICATIONS, AND MANUFACTURER RECOMMENDATIONS PRIOR TO ANY ROUGH-INS.
- 11. DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.
- 12. CONTRACTOR TO COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
- 13. ALL WORK, METHODS AND INSTALLATIONS INVOLVED IN THE PLUMBING DESIGN SHALL BE IN ACCORDANCE WITH THE CITY BUILDING CODE AND INSPECTION REGULATIONS AND ALL OTHER OFFICIALS HAVING JURISDICTION.
- 14. UPON COMPLETION OF WORK, THOROUGHLY ROD OUT AND FLUSH ALL SANITARY PIPING TO ENSURE IT IS FREE FROM BLOCKAGES.



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THE WOODLANDS, TEXAS

PROJECT NUMBER

PLUMBING GAS
RISER & DETAILS
SHEET NUMBER

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Consulting Engineers - Texas Reg. F-5443
6671 Southwest Frwy., Suite 850
Houston, Texas 77074 (713) 995-1351
www.holstemep.com

PLUMBING SCOPE & SPECIFICATION

THE WORK OF THIS SECTION SHALL INCLUDE, BUT NOT BE LIMITED TO:

- A. A DOMESTIC HOT AND COLD WATER DISTRIBUTION SYSTEM TO SERVE ALL FIXTURES. AND EQUIPMENT.
- B. SANITARY SOIL WASTE AND VENT AND GREASE WASTE AND VENT SYSTEMS TO SERVE ALL FIXTURES AND EQUIPMENT.
- C. CONNECT TO EXISTING COLD WATER, SANITARY, AND GREASE WASTE MAINS.
 D. A NATURAL GAS DISTRIBUTION SYSTEM TO SERVE ALL GAS-FUELED EQUIPMENT.
 COORDINATE WITH THE LOCAL NATURAL GAS UTILITY PROVIDER TO ESTABLISH A NEW GAS SERVICE COMPLETE WITH METER AND REGULATOR SET.

DRAWINGS ARE DIAGRAMMATIC; CONFIRM DIMENSIONS AND LOCATIONS IN THE FIELD, ADVISE OF MAJOR DISCREPANCIES.

GUARANTEE LABOR AND MATERIALS FOR ONE YEAR.

ADHERE TO APPLICABLE LOCAL CODES AND REGULATIONS, WHICH INCLUDE BUT ARE NOT LIMITED TO CITY OF SUGAR LAND (2003 INTERNATIONAL PLUMBING CODE, WITH AMENDMENTS).

PRODUCE RECORD DRAWINGS.

CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND PAY ALL FEES.

ALVES

VALVES SHALL BE MANUFACTURED BY NIBCO, HAMMOND, POWELL, STOCKHAM, WATTS OR EQUIVALENT APPROVED BY THE ENGINEER.

GATE VALVES SHALL CONFORM TO MSS-SP-80 FOR BRONZE AND MSS-SP-70 FOR IRON, VALVES 2" AND SMALLER SHALL BE NIBCO T-113 OR S-113 OR APPROVED EQUIVALENT.

BALL VALVES SHALL HAVE CAST BRONZE BODY, BLOWOUT PROOF STEMS, FULL SIZE PORT, 316 STAINLESS STEEL TRIM, TEFLON SEAT AND SEAL AND THRUST WASHERS. VALVES 2" AND SMALLER SHALL BE NIBCO T-585-70-66 OR APPROVED EQUIVALENT.

<u>UNIONS</u>

UNIONS IN COPPER OR BRASS LINES SHALL BE BRASS, THREADED PATTERN UNIONS.

EXCAVATION

EXCAVATE TRENCHES FOR UNDERGROUND PIPING TO THE REQUIRED DEPTH.

CUT THE BOTTOM OF THE TRENCH OR EXCAVATION TO UNIFORM GRADE.

EXCAVATE 6" BELOW GRADE, FILL WITH BEDDING MATERIAL (SAND) AND TAMP WELL.

LAY OUT ALIGNMENT OF PIPE TRENCHES TO AVOID OBSTRUCTIONS. PROVIDE ASSURANCE

LAY OUT ALIGNMENT OF PIPE TRENCHES TO AVOID OBSTRUCTIONS. PROVIDE ASSURANCE THAT PROPOSED ROUTE OF PIPE WILL NOT INTERFERE WITH BUILDING FOUNDATION BEFORE ANY CUTTING IS BEGUN. SHOULD INTERFERENCE BE FOUND, CONTACT THE ARCHITECT/ENGINEER BEFORE PROCEEDING.

BACKFILL

BACKFILL SHALL NOT BE PLACED UNTIL THE WORK HAS BEEN INSPECTED, TESTED AND APPROVED. USE SUITABLE FRIABLE SOILS AS BACKFILL MATERIAL. DO NOT USE PEAT, SILT, MUCK, DEBRIS OR OTHER ORGANIC MATERIALS. DEPOSIT BACKFILL IN UNIFORM LAYERS.

PLACE BACKFILL MATERIAL IN UNIFORM LAYERS, 8" MAXIMUM LOOSE MEASURE. COMPACT TO NOT LESS THAN 95% OF MAXIMUM SOIL DENSITY AS DETERMINED BY ASTM D698 STANDARD PROCTOR.

PLUMBING PIPING HANGER SPACING

MAXIMUM SPACING SHALL BE 10 FOOT.

CLEANING, TESTING AND ADJUSTING

THIS CONTRACTOR SHALL FURNISH ALL LABOR, TOOLS, INSTRUCTIONS, AND SUPERVISION REQUIRED FOR THE PERFORMANCE OF ALL TESTS, CLEANING, AND MAKING NECESSARY ADJUSTMENTS TO OPERATION OF ALL FIXTURES AND FOLIPMENT

PIPING INSULATION

ALL COLD WATER PIPING, FITTINGS AND VALVES SHALL BE INSULATED WITH NOMINAL 1/2" WALL THICKNESS IMCOLOCK PIPE INSULATION, OR AN APPROVED EQUAL HAVING FLAME SPREAD RATING OF 25 OR LESS AND A SMOKE DENSITY OF 50 OR LESS WHEN TESTED BY ASTM E-84 METHOD.

IMCOLOCK PIPE INSULATION MAY BE SLIPPED ONTO THE PIPE PRIOR TO CONNECTION OR APPLIED AFTER THE PIPE IS INSTALLED, AT THE CONTRACTOR'S OPTION. ALL BUTT JOINTS AND MITER JOINTS SHALL BE CLOSED USING IMCOA'S FUSE SEAL JOINING SYSTEM OR FACTORY APPROVED CONTACT ADHESIVE. IMCOLOCK PIPE INSULATION SHALL BE INSTALLED ACCORDING TO THE PROCEDURES OUTLINED BY THE MANUFACTURER.

FITTING COVER INSULATION SHALL BE FABRICATED AND INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDED PROCEDURES. SWEAT FITTINGS SHALL BE INSULATED WITH MITER CUT PIECES OF IMCOLOCK PIPE INSULATION THE SAME SIZE AS ON ADJACENT PIPING. THREADED FITTINGS SHALL BE INSULATED WITH SLEEVED FITTING COVERS FABRICATED FROM MITER CUT PIECES OF IMCOLOCK PIPE INSULATION ACCORDING TO THE MANUFACTURER'S SLEEVING SIZE RECOMMENDATIONS AND SHALL BE OVERLAPPED 2" AND SEALED TO THE ADJACENT PIPE INSULATION. ALL VALVES SHALL BE INSULATED WITH CUT PIECES OF IMCOLOCK PIPE INSULATIONS. ALL JOINTS AND MITER CUT PIECES ARE TO BE SEALED USING IMCOA'S FUSE SEAL JOINING SYSTEM OR FACTORY APPROVED CONTACT ADHESIVE.

SUPPORTING HANGERS SHALL BE DESIGNED TO RESIST COMPRESSION; SUPPORTING DEVICES SUCH AS SHORT WOOD DOWELS OR WOOD BLOCKS SHALL BE USED IN COMBINATION WITH GALVANIZED SHEET METAL HANGER SHIELDS. THE WOOD SUPPORTING DEVICES SHALL BE THE SAME THICKNESS AS THE INSULATION AND SEALED TO THE INSULATION WITH FACTORY APPROVED CONTACT ADHESIVE.

INSTALL THERMAL INSULATION ON CLEAN, DRY SURFACES AFTER ALL TESTING AND INSPECTION IS COMPLETED. INSTALLATION SHALL BE IN STRICT ACCORDANCE WITH THESE SPECIFICATIONS AND WITH MANUFACTURER'S INSTRUCTIONS.

NOTES STORAGE CAPACITY (CALL ONE) ELECTRICAL SET MAX. MANU WATER TEAR (CALL ONE)

 ITEM NO.
 TOTAL MBH
 NOTES
 STORAGE CAPACITY (GALLONS)
 ELECTRICAL REQUIRED
 SET MAX. WATER TEMP.(*F)
 MANUFACTURER MODEL NO.

 GWH-1
 380
 120/1
 120*
 TAKAGI #T-M50

 GWH-2
 380
 120/1
 120*
 TAKAGI #T-M50

 NOTES:

THERMOSTATIC MIXING VALVE

ITEM NO.	INLET HOT WATER TEMP (*F)	OUTLET MIXED WATER TEMP (*F)	MINIMUM FLOW (GPM)	DESIGN FLOW (GPM)	PRESSURE DROP © DESIGN FLOW (PSI)	VALVE FINISH	MANUFACTURER / MODEL NO.
TMV-1	140°	110°	0.5	7	4.0	ROUGH BRONZE	SYMMONS TEMPCONTROL 5-500W-ASB

NOTES

- 1. MAKE WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE(S) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 2. PROVIDE PIPE INCREASERS AND/OR VALVES AS REQUIRED.
- 3. PROVIDE UNION CONNECTIONS AND OUTLET THERMOMETER UNLESS INDICATED OTHERWISE.
- 4. REFER TO DETAIL FOR ADDDITIONAL INFORMATION.

SHOCK ARRESTORS

P.D.I. SYMBOL	fixture units	CHAMBER LENGTH	SWEAT CONNECTION
A	1–11	9-5/8"	1/2"
В	12-32	11-3/4"	3/4"
C	33-60	14-11/18"	1 5
D	61–113	12-3/8"	1°
E	114–154	15–3/8"	1"
F	155–330	17-3/8"	1"

PIPE MATERIAL LIST

DOMESTIC WATER PIPING

ABOVE SLAB INSIDE THE BUILDING SHALL BE SEAMLESS ASTM B 88 TYPE L COPPER WATER TUBE WITH WROUGHT COPPER FITTINGS, ANSI B16.22. SOLDER MATERIAL SHALL BE 95.5% LEAD FREE, ASTM B 32. THE USE OF DRILLED-T CONNECTIONS IS NOT PERMITTED.

CONDENSATE AND INDIRECT DRAIN PIPING SHALL BE

TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV TUBING AND COPPER FITTINGS FOR 1-1/4" AND LARGER SIZES, AND 95-5 SOLDER JOINTS.

SANITARY SOIL WASTE AND VENT AND GREASE WASTE PIPING SHALL BE

ABOVE SLAB INSIDE BUILDING SHALL BE NO-HUB CAST IRON SYSTEM CONFORMING TO CISPI STANDARD NO. 301-75. NEOPRENE GASKETS SHALL CONFORM TO ASTM STANDARD C564-75.

BELOW SLAB SHALL BE SCHEDULE 40 DWV POLYVINYL CHLORIDE PIPE AND FITTINGS CONFORMING TO ASTM D-1784-82 WITH SOLVENT WELDED JOINTS.

NATURAL GAS PIPING SHALL BE

ABOVE GRADE SHALL BE SCHEDULE 40 BLACK STEEL, SEAMLESS, OR ELECTRIC RESISTANCE WELDED, ASTM A-53 WITH WELDED JOINTS AND STEEL FITTINGS OF THE SAME THICKNESS AS PIPE. PIPING 2 INCHES AND SMALLER MAY BE SCHEDULE 40 BLACK STEEL PIPE WITH MALLEABLE IRON 150 PSI CLASS FITTINGS ANSI B16.3, BANDED AIR TESTED, AND SCREWED JOINTS. ALL GAS PIPING AND FITTINGS OUTDOORS SHALL BE PAINTED WITH TWO COATS OF BRUSHED ON RUST PREVENTATIVE SILVER PAINT. ONE COAT OF RUST PREVENTATIVE PRIMER SHALL BE APPLIED TO THE PIPE IMMEDIATELY AFTER INSTALLATION.

FIRE SPRINKLER SYSTEM

- A. DESIGN AND FURNISH LABOR AND MATERIALS FOR THE COMPLETE INSTALLATION OF AN AUTOMATIC WET PIPE FIRE EXTINGUISHING SPRINKLER SYSTEM WITH THE ATTENDANT ACCESSORIES FOR THE ENTIRE AREA.
- B. STUDY THE GENERAL, STRUCTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND SPECIFICATIONS, IN ORDER TO BECOME FAMILIAR WITH THE BUILDING AND DETAILS AS THEY APPLY TO THE WORK OF THIS SECTION. COOPERATE WITH OTHERS SO THAT THERE WILL BE NO CONFLICT OF SPACE REQUIRED. DUCTWORK AND ELECTRICAL WORK SHALL TAKE PRECEDENCE OVER OTHER WORK, EXCEPT WHERE IT IS ABSOLUTELY NECESSARY TO MAINTAIN COVERAGE PROTECTION.
- C. THE INSTALLATION OF THE ENTIRE SPRINKLER SYSTEM SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE NATIONAL BOARD OF FIRE UNDERWRITERS, THE GOVERNING BUILDING CODE, REQUIREMENTS OF NFPA PAMPHLET 13, AND OTHER LOCAL AUTHORITIES EXERCISING JURISDICTION.
- D. IT SHALL BE THE FIRE PROTECTION INSTALLER'S RESPONSIBILITY, PRIOR TO BID, TO VERIFY PRESSURE AT THE PROJECT SITE BY PERFORMING A FLOW TEST. DETERMINE IF THE AVAILABLE STATIC AND RESIDUAL PRESSURE WILL ADEQUATELY PROVIDE THE FIRE EXTINGUISHING SYSTEM WITH THE NECESSARY PRESSURE OR IF A FIRE PUMP, BREAK TANK AND NECESSARY APPURTENANCES ARE REQUIRED.
- E. SCHEDULE 40 BLACK STEEL PIPE IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA FOR APPLICABLE FIRE PROTECTION SYSTEMS. CONFORM TO ASTM A53 AND A120. PROVIDE PIPING WITH MALLEABLE IRON, CAST IRON, STEEL WELDED OR SCREWED FITTINGS. VICTAULIC GROOVED FITTINGS MAY BE USED ABOVE GRADE IN ACCESSIBLE LOCATIONS ONLY.
- F. DESIGN DRAWINGS MUST BE SUBMITTED TO THE LOCAL FIRE DEPARTMENT JURISDICTION FOR REVIEW AND APPROVAL. EVIDENCE OF SUCH REVIEW AND APPROVAL SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE PRIOR TO SYSTEM INSTALLATION.

PLUMBING FIXTURE SPECIFICATION

TYPE: DESCRIPTION: SEAT: SUPPLIES:	WC-1 WATER CLOSET, FLOOR MOUNTED 10" ROUGH-IN, WHITE VITREOUS CHINA, 1.6 GALLON PER FLUSH SIPHON JET ACTION, ONE-PIECE ELONGATED CLOSET BOWL WITH BOLT COVERS. FLUSH VALVE WITH SENSOR AMERICAN STANDARD MADERA ELONGATED TOILET 2234.015. ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF- SUSTAINING CHECK HINGES. CHURCH 9500SSC. ZURN ZR6000AX-WS1 BATTERY POWERED 1.6 GPF FLUSH VALVE.	TYPE: DESCRIP ROUGH-I
ROUGH-IN:	4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.	TYPE: SERVICE:
TYPE: DESCRIPTION:	WC-2 (T.A.S. COMPLIANT FOR ADULTS) WATER CLOSET, FLOOR MOUNTED 10" ROUGH-IN, WHITE VITREOUS CHINA, 1.6 GALLON PER FLUSH SIPHON JET ACTION, ONE-PIECE 16-1/2" H ELONGATED CLOSET BOWL WITH BOLT COVERS. FLUSH VALVE WITH SENSOR LOCATED ON LEFT OR ON RIGHT SIDE	DESCRIP

TYPE: DESCRIPTION:	WC-2 (T.A.S. COMPLIANT FOR ADULTS) WATER CLOSET, FLOOR MOUNTED 10" ROUGH-IN, WHITE VITREOUS CHINA, 1.6 GALLON PER FLUSH SIPHON JET ACTION, ONE-PIECE 16-1/2" H ELONGATED CLOSET BOWL WITH BOLT COVERS. FLUSH VALVE WITH SENSOR LOCATED ON LEFT OR ON RIGHT SIDE IN ORDER TO MEET T.A.S. REQUIREMENT THAT FLUSH CONTROLS BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREA. AMERICAN STANDARD MADERA ELONGATED TOILET 2305.100.
SEAT:	ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF- SUSTAINING CHECK HINGES. CHURCH 9500SSC.
SUPPLIES: ROUGH-IN:	ZURN ZR6000AX-WS1 BATTERY POWERED 1.6 GPF FLUSH VALVE. 4" WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE:	L-1 - TOILET ROOMS (T.A.S. COMPLIANT FOR ADULTS)
DESCRIPTION:	PRE-FABRICATED COUNTERTOP LAVATORY TO BE FURNISHED AND
	INSTALLED BY GENERAL CONTRACTOR.
	LAVATORY SET TO BE PROVIDED WITH THREE (3) SETS OF FAUCETS.
FAUCET:	CHROME PLATED BRASS DECK MOUNTED BATTERY POWERED
	LAVATORY FITTING WITH 6-7/16" SPOUT, CP-4 COVER PLATE,
	TEMPERATURE MIXING VALVE, AND VANDAL RESISTANT 2.2 GPM
	AERATOR. ZURN Z6912-C-CP4-MV.
STRAINER:	CHROME PLATED BRASS GRID STRAINER WITH 1-1/4" 17 GAUGE
	TAILPIECE WITH LOCK NUT. MCGUIRE 155A.
P-TRAP:	1-1/4" 17 GAUGE CHROME PLATED HEAVY CAST BRASS TRAP WITH
	CLEANOUT AND EXTENSION TO WALL WITH ESCUTCHEON PLATE.
	MCGUIRE 8872.
SUPPLIES:	1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVES
	WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED
	FLEXIBLE RISERS. MCGUIRE 2165LK.

TYPE:	SK-1 - KITCHEN HAND WASH
DESCRIPTION:	WALL HUNG LAVATORY AND FAUCET FURNISHED BY OWNER.
	ROUGH-INS, FIXTURE INSTALLATION, AND FINAL CONNECTIONS BY
	PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE
	STRAINER, P-TRAP, TRAP ARM, ESCUTCHEONS AT WALL, SUPPLIES
	AND STOPS, FIXTURE SUPPORTS, ETC. AS REQUIRED IN ORDER TO
	PROPERLY INSTALL FIXTURE.
DOLLOLI IN	OF MACTE OF VENT 4 OF HOT AND ON DAMATE DEFENT

ROUGH-IN:

ROUGH-IN:

2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO

ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

OUGH-IN:	2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.
YPE: ESCRIPTION:	SK-2 - KITCHEN SINK SINGLE COMPARTMENT SINK, INTEGRAL TO PRE-FABRICATED STAINLESS STEEL TABLE TOP, FURNISHED BY K. E. C. AND INSTALLED BY ARCHITECTURAL DIVISION. FAUCET

	AND INSTALLED BY ARCHITECTURAL DIVISION, FAUCET
	ALSO FURNISHED BY OWNER. ROUGH-INS, FAUCET INSTALLATION,
	AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING
	CONTRACTOR TO PROVIDE STRAINER, INDIRECT WASTE PIPING,
	ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED
	IN ORDER TO PROPERLY INSTALL FIXTURE.
GH-IN:	1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS
	FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL

REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C..

TYPE:	SK-3 - PRE-RINSE SINK
DESCRIPTION:	SINGLE COMPARTMENT SINK, INTEGRAL TO PRE-FABRICATED
	STAINLESS STEEL DISHWASH TABLE TOP, FURNISHED BY K. E. C.
	AND INSTALLED BY ARCHITECTURAL DIVISION. PRE-RINSE FAUCET
	ALSO FURNISHED BY OWNER. ROUGH-INS, FAUCET INSTALLATION,
	AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING
	CONTRACTOR TO PROVIDE STRAINER, INDIRECT WASTE PIPING,
	ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED
	in order to properly install fixture.

	FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C.
TYPE: DESCRIPTION:	SK-4 - THREE COMPARTMENT SINK FREESTANDING THREE COMPARTMENT SINK FURNISHED BY K. E. C. AND INSTALLED BY ARCHITECTURAL DIVISION. FAUCET(S) ALSO FURNISHED BY OWNER. ROUGH-INS, FAUCET INSTALLATION, AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE STRAINER, INDIRECT WASTE PIPING, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED

3/4" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS

ROUGH-IN:	CONTRACTOR TO PROVIDE STRAINER, INDIRECT WASTE PIPING, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED IN ORDER TO PROPERLY INSTALL FIXTURE. 3/4" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWIN FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C.
TYPE: DESCRIPTION:	SK-5 - BAR SINK PRE-FABRICATED BAR AREA SINK FURNISHED BY

T(S)
10N
BING
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UIR
WIN(
3

REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C.

SPECIFICATION		
TYPE: DESCRIPTION:	IMC-1 ICE MACHINE CONNECTION, WATER SUPPLY VALVED AT WALL. PROVIDE DOUBLE CHECK VALVE TYPE BACKFLOW PREVENTER AND WATER FILTER. WATTS 1/2" 007-S BACKFLOW PREVENTER AND	
ROUGH-IN:	AQUA-PURE AP510 FILTER. ROUTE BACKFLOW PREVENTER DISCHARGE TO FLOOR SINK SERVING ICE MACHINE. 3/4" COLD WATER. COORDINATE ROUGH-IN LOCATION/HEIGHT AND FINAL CONNECTION WITH EQUIPMENT BEING INSTALLED AND WITH ARCHITECTURAL DRAWINGS.	
TYPE: SERVICE:	FD-1 TOILET ROOMS	
DESCRIPTION:	FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 6" DIAMETER NICKEL BRONZE STRAINER WITH VANDAL PROOF SCREWS. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS, MI-FAB F1100-1-6.	
TRAP SEAL:	PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND	
ROUGH-IN:	MANUFACTURER. REFER TO FLOOR PLANS FOR SIZES, COORDINATE FINAL LOCATION.	

ROUGH-IN:	AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION.
TYPE: SERVICE: DESCRIPTION:	FD-2 T&P VALVE DISCHARGE / WALK-IN COOLER CONDENSATE FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 5" DIAMETER NICKEL BRONZE STRAINER WITH 4" ROUND FUNNEL ASSEMBLY AND VANDAL PROOF SCREWS. PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR AREAS. MIFAB F1100-EF- 1-6

	1-6.
TRAP SEAL:	PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO
	MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN:	REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION
	AND INSTALLATION WITH ARCHITECTURAL DRAWINGS,
	EQUIPMENT PLACEMENT, AND DOOR SWING CLEARANCES.

TYPE:	FS-1
SERVICE:	KITCHEN INDIRECT WASTE
DESCRIPTION:	FLOOR SINK, BOTTOM OUTLET CAST IRON BODY, 12" SQUARE
	NICKEL BRONZE FULL GRATE AND RIM, ANCHOR FLANGE, 8" DEEP
	SUMP WITH A.R.E. INTERIOR, ALUMINUM DOME BOTTOM STRAINER.
	PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR
	AREAS. MIFAB FS1730-FL-1.
TRAP SEAL:	PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO
	MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER.
ROUGH-IN:	refer to floor plans for sizes. Coordinate final location
	WITH ARCHITECTURAL DRAWINGS AND EQUIPMENT PLACEMENT.
	FIELD CUT GRATES PER OWNER'S INSTRUCTIONS IN ORDER TO

TYPE:	WCO
DESCRIPTION:	WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH BRONZE
	raised head plug and round stainless steel cover plate
	WITH CENTER SECURING SCREW. MIFAB C1440-RD6. PROVIDE MIFAB
	C1460 CAST IRON CLEANOUT TEE IN LIEU OF FERRULE AS REQUIRED
	FOR WALL CONSTRUCTION.

PROPERLY SERVE EQUIPMENT.

TYPE: DESCRIPTION:	FCO FLOOR CLEANOUT, CAST IRON BODY WITH SECONDARY O-RING TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORIATED NICKEL BRONZE COVER. MIFAB C1100-R-1. FOR CARPETED FLOORS PROVIDE MIFAB C1100-RC-1.

TYPE:	ECO	
DESCRIPTION:	EXTERIOR CLEANOUT: CAST IRON BODY WITH GASKET	
	SEAL, ABS PLUG AND HEAVY DUTY CAST IRON SERRATED COVER WITH	
	SQUARE OR DIAMOND PATTERN. IF LOCATED IN ASPHALT OR DIRT	
	PROVIDE 18" X 18" X 18" CONCRETE SLAB.	
	FIXTURE: SMITH 4220-U	

ATIC MIVING VALVE SCHEDITIED ON DRAWINGS

ı	DESCRIPTION:	THERMOSTATIC MIXING VALVE, SCHEDOLED ON DRAWINGS.
***	DESCRIPTION:	MS-1 MOP SINK BASIN, 24" X 24" X 12" HIGH, PRECAST
		TERRAZZO WITH 6" DROPPED FRONT, STAINLESS STEEL THRESHOLD CAP, AND GRID STRAINER DRAIN. PROVIDE STAINLESS STEEL WALL GUARDS IN QUANITITY AS REQUIRED TO PROTECT ADJACENT
	TYPE:	WALLS. PROVIDE MOP HANGER AND 36" HOSE WITH WALL HANGER. ACORN TNC-24 WITH KWGX-24", KMH, AND KH36.

	GUARDS IN QUANITITY AS REQUIRED TO PROTECT ADJACENT
	WALLS. PROVIDE MOP HANGER AND 36" HOSE WITH WALL HANGER.
TYPE:	ACORN TNC-24 WITH KWGX-24", KMH, AND KH36.
FAUCET:	CHROME PLATED BRASS WALL MOUNTED FITTING WITH
	ADJUSTABLE SUPPLY ARMS, VACUUM BREAKER SPOUT WITH PAIL
TYPE:	HOOK AND WALL BRACE, 2-1/2" INDEXED LEVER HANDLES ON 8"
	CENTERS. QUARTER TURN CARTRIDGES, 3/4" MALE HOSE THREAD
	OULET, CHICAGO 897-CP.
ROUGH-IN:	3" WASTE, 2" VENT, 1/2" HOT AND COLD WATER.
	- ····, - · ·-···, ··· - · ····- · · · ·

DESCRIPTION: CARRIER: SUPPLIES: ROUGH-IN:	U-1 (T.A.S. COMPLIANT FOR ADULTS) URINAL, WALL HUNG, WHITE VITREOUS CHINA 1.0 GALLON PER FLUSH AMERICAN STANDARD WASHBROOK 6501.010. PROVIDE ZURN WALL CARRIER FOR FIXTURE SUPPORT. ZURN ZR6003AV-WS1 BATTERY POWERED 1.0 GPF FLUSH VALVE. 2" WASTE, 2" VENT, 3/4" COLD WATER, REFER TO ARCHITECTURAL
	2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

TYPE:

GENERA

NOTES:

۱L	ALL LAVATORIES AND SINKS SHALL BE SUPPLIED WITH HOT AND
	COLD WATER TO FAUCETS AS INDICATED ON PLANS AND FIXTURE
	SCHEDULE. PROVIDE CHROME PLATED BRASS SUPPLY STOPS WITH
	LOOSE KEYS AND WALL ESCUTCHEONS. PROVIDE CHROME PLATED
	FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT
	FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-
	TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH
	ESCUTCHEON. REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES
	of Plumbing fixture rough-ins.

PROVIDE MOLDED CLOSED CELL ANTI-MICROBIAL VINYL INSULATION KITS (BY MCGUIRE OR TRUEBRO) AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE. ALL. SUCH FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

INSERT TRAP GUARDS AFTER FINAL RODDING OF DRAINS. INSTALL TRAP GUARD WITH CLEAR SILICONE CAULK FOR GAS-TIGHT SEAL. FOR DRAIN RODDING AFTER INSTALLATION, INSERT SEWER TAPE THROUGH LIGHTLY GREASED 1-1/2" PVC PIPE TO PROTECT TRAP GUARD.



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MEP Engineers

PROJECT NAME

GUADALUPANA RESTAURANT



PROJECT ADDRESS

20 WATERWAY
THE WOODLANDS, TEXAS

PROJECT NUMBER

PLUMBING SCHEDULES

SHEET NUMBER

P5.00