# PLUMBING GENERAL NOTES

- REFER TO ARCHITECTURAL/CIVIL DRAWINGS FOR BUILDING FINISHED FLOOR
- 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.
- 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.
- PRIOR TO BEGINNING CONSTRUCTION, COORDINATE PLUMBING BACKFLOW PREVENTION REQUIREMENTS WITH THE LOCAL CODE AUTHORITY AND PROVIDE AS
- CONTRACTOR SHALL COORDINATE ROUTING OF PIPING BELOW SLAB WITH COLUMN FOOTINGS, GRADE BEAMS, UNDERGROUND PLUMBING AND ELECTRICAL UTILITIES, AND OTHER SUB-SURFACE BUILDING ELEMENTS.
- 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.
- MAINTAIN MINIMUM 10'-0" DISTANCE BETWEEN VENT TERMINALS THROUGH ROOF AND ALL FRESH AIR INTAKES.
- COORDINATE ALL FIXTURE AND EQUIPMENT LOCATIONS AND CONNECTION REQUIREMENTS WITH LATEST ARCHITECTURAL DRAWINGS, SPECIFICATIONS, AND MANUFACTURER RECOMMENDATIONS PRIOR TO ANY ROUGH-INS.
- DO NOT ROUGH-IN FROM THESE DRAWINGS. REFER TO LATEST ARCHITECTURAL DRAWINGS FOR DIMENSIONED LOCATIONS.

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- 10. CONTRACTOR TO COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES TO AVOID CONFLICTS AND TO MINIMIZE INTERRUPTION OF SERVICES.
- 11. 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.
- 12. UPON COMPLETION OF WORK, THOROUGHLY ROD OUT AND FLUSH ALL SANITARY PIPING TO ENSURE IT IS FREE FROM BLOCKAGES.

# 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 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 HOUSTON (2003 INTERNATIONAL PLUMBING CODE, WITH AMENDMENTS).

PRODUCE RECORD DRAWINGS.

CONTRACTOR SHALL OBTAIN REQUIRED PERMITS AND PAY ALL FEES.

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

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.

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

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 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 EQUIPMENT

#### 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

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.

#### GAS WATER HEATER ELECTRICAL | SET MAX. | MANUFACTURER CAPACITY REQUIRED WATER MODEL NO. (GALLONS) TEMP.('F' GWH-1 380 120/1 140° T-M50 ASME GWH-2 380 120/1 140 #T-M50 ASME NOTES:

# THERMOSTATIC MIXING VALVE

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

- 1. MAKE WATER CONNECTIONS TO THERMOSTATIC MIXING VALVE(S) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 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.

## 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

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.
- G. SYSTEM SHALL BE DESIGNED BY AN RME/STATE OF TEXAS REGISTERED ENGINEER.

PLUMBING FIXTURE	SPECI	FICATION
C-1 ATER CLOSET, FLOOR MOUNTED 10" ROUGH-IN, WHITE VITREOUS HINA, 1.6 GALLON PER FLUSH SIPHON JET ACTION, ONE-PIECE ONGATED CLOSET BOWL WITH BOLT COVERS. USH VALVE WITH SENSOR HERICAN STANDARD MADERA ELONGATED TOILET 2234.015. ONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF- STAINING CHECK HINGES. CHURCH 9500SSC. RN ZR6000AX-WS1 BATTERY POWERED 1.6 GPF FLUSH VALVE. WASTE, 2" VENT, 1" COLD WATER. REFER TO ARCHITECTURAL	TYPE: DESCRIPTION: ROUGH-IN:	IMC-1 ICE MACHINE CONNECT PROVIDE DOUBLE CHEC AND WATER FILTER. WA AQUA-PURE AP510 FILT DISCHARGE TO FLOOR S 3/4" COLD WATER. COC FINAL CONNECTION WITH

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: DESCRIPTION:  SEAT: SUPPLIES: ROUGH-IN:	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. ELONGATED OPEN FRONT WHITE PLASTIC SEAT WITH SELF- SUSTAINING CHECK HINGES. CHURCH 9500SSC. 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)

ROUGH-IN:	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 ELIRABELED AND
FAUCET:	INSTALLED BY GENERAL CONTRACTOR.  LAVATORY SET TO BE PROVIDED WITH THREE (3) SETS OF FAUCETS.  CHROME PLATED BRASS WALL MOUNTED LAVATORY FITTING WITH  9-1/2" SPOUT, CP-4 COVER PLATE, TEMPERATURE MIXING VALVE,  AND 1.5 GPM.
STRAINER:	AMERICAN STANDARD BERWICK #7430.451
STIVENER.	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.
	in the second

1/2" I.P.S. X 3/8" O.D.CHROME PLATED LOOSE KEY STOP VALVES SUPPLIES: WITH ESCUTCHEONS AND 3/8" COMPRESSION CHROME PLATED FLEXIBLE RISERS. MCGUIRE 2165LK. ROUGH-IN: 2" WASTE, 2" VENT, 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS. SK-1 - KITCHEN HAND WASH WALL HUNG LAVATORY AND FAUCET FURNISHED BY OWNER. DESCRIPTION: ROUGH-INS, FIXTURE INSTALLATION, AND FINAL CONNECTIONS BY

PROPERLY INSTALL FIXTURE.

SK-2 - KITCHEN SINK

PLUMBING CONTRACTOR. PLUMBING CONTRACTOR TO PROVIDE

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

SINGLE COMPARTMENT SINK, INTEGRAL TO PRE-FABRICATED

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

STAINLESS STEEL TABLE TOP, FURNISHED BY K. E. C.

AND INSTALLED BY ARCHITECTURAL DIVISION. FAUCET

ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS.

STRAINER, P-TRAP, TRAP ARM, ESCUTCHEONS AT WALL, SUPPLIES

AND STOPS, FIXTURE SUPPORTS, ETC. AS REQUIRED IN ORDER TO

ROUGH-IN:

DESCRIPTION:

DESCRIPTION:

ELC

SEAT:

#### ROUGH-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.. SK-3 - PRE-RINSE SINK

DESCRIPTION: SINGLE COMPARTMENT SINK, INTEGRAL TO PRE-FABRICATED STAINLESS STEEL DISHWASH TABLE TOP, FURN AND INSTALLED BY ARCHITECTURAL DIVISION. PRE-RINSE FAUCET ALSO FURNISHED BY OWNER. ROUGH-INS, FAUCET INSTALLATION, AND FINAL CONNECTIONS BY PLUMBING CONTRACTOR. PLUMBING

IN ORDER TO PROPERLY INSTALL FIXTURE.

CONTRACTOR TO PROVIDE STRAINER, INDIRECT WASTE PIPING, ESCUTCHEONS AT WALL, SUPPLIES AND STOPS, ETC. AS REQUIRED IN ORDER TO PROPERLY INSTALL FIXTURE. ROUGH-IN: 3/4" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL

REQUIREMENTS IN ADVANCE WITH ARCHITECT/K, E. C. SK-4 - THREE COMPARTMENT SINK FREESTANDING THREE COMPARTMENT SINK FURNISHED BY DESCRIPTION: 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 IN ORDER TO PROPERLY INSTALL FIXTURE. 3/4" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS ROUGH-IN: FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL

REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C. SK-5 - BAR SINK PRE-FABRICATED BAR AREA SINK FURNISHED BY DESCRIPTION: 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 IN ORDER TO PROPERLY INSTALL FIXTURE. 1/2" HOT AND COLD WATER. REFER TO ARCHITECTURAL DRAWINGS ROUGH-IN: FOR HEIGHT REQUIREMENTS. CONFIRM ALL DIMENSIONAL REQUIREMENTS IN ADVANCE WITH ARCHITECT/K. E. C.

#### 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 AQUA-PURE AP510 FILTER. ROUTE BACKFLOW PREVENTER DISCHARGE TO FLOOR SINK SERVING ICE MACHINE. ROUGH-IN: 3/4" COLD WATER. COORDINATE ROUGH-IN LOCATION/HEIGHT AND FINAL CONNECTION WITH EQUIPMENT BEING INSTALLED AND WITH ARCHITECTURAL DRAWINGS. TOILET ROOMS SERVICE: FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 6" DESCRIPTION: 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 MANUFACTURER. ROUGH-IN: REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION AND INSTALLATION WITH ARCHITECTURAL DRAWINGS / FLOOR CONSTRUCTION. SERVICE: T&P VALVE DISCHARGE / WALK-IN COOLER CONDENSATE FLOOR DRAIN, BOTTOM OUTLET CAST IRON BODY, ADJUSTABLE 5" DESCRIPTION: 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-PROVIDE PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO TRAP SEAL: MATCH EACH FLOOR DRAIN BY SIZE, MODEL, AND MANUFACTURER. REFER TO FLOOR PLANS FOR SIZES. COORDINATE FINAL LOCATION ROUGH-IN: AND INSTALLATION WITH ARCHITECTURAL DRAWINGS, EQUIPMENT PLACEMENT, AND DOOR SWING CLEARANCES.

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 PRO-SET SYSTEMS, INC. TRAP GUARD FACTORY FITTED TO

MATCH EACH FLOOR SINK BY SIZE, MODEL, AND MANUFACTURER.

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

WALL CLEANOUT. CAST IRON CLEANOUT FERRULE WITH BRONZE

FLOOR CLEANOUT, CAST IRON BODY WITH SECONDARY O-RING

EXTERIOR CLEANOUT: CAST IRON BODY WITH GASKET

PROVIDE 18" X 18" X 18" CONCRETE SLAB.

DESCRIPTION: THERMOSTATIC MIXING VALVE. SCHEDULED ON DRAWINGS.

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

TEST SEAL AND ADJUSTABLE COMBINED ACCESS COVER/PLUG TOP

NICKEL BRONZE COVER. MIFAB C1100-R-1. FOR CARPETED FLOORS

SEAL, ABS PLUG AND HEAVY DUTY CAST IRON SERRATED COVER WITH

SQUARE OR DIAMOND PATTERN. IF LOCATED IN ASPHALT OR DIRT

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

WALLS. PROVIDE MOP HANGER AND 36" HOSE WITH WALL HANGER.

ADJUSTABLE SUPPLY ARMS, VACUUM BREAKER SPOUT WITH PAIL

HOOK AND WALL BRACE, 2-1/2" INDEXED LEVER HANDLES ON 8"

CENTERS. QUARTER TURN CARTRIDGES, 3/4" MALE HOSE THREAD

URINAL, WALL HUNG, WHITE VITREOUS CHINA 1.0 GALLON PER FLUSH.

ZURN ZR6003AV-WS1 BATTERY POWERED 1.0 GPF FLUSH VALVE.

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

ESCUTCHEON. REFER TO FIXTURE SCHEDULE FOR MINIMUM SIZES

INSULATION KITS (BY MCGUIRE OR TRUEBRO) AT ALL LAVATORIES AND SINKS REQUIRED TO BE T.A.S. ACCESSIBLE. ALL SUCH

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

FIXTURES AND FINAL INSTALLATIONS SHALL COMPLY WITH THE

FLEXIBLE RISERS OF SIZE REQUIRED TO PROPERLY CONNECT

TRAP WITH CLEANOUT AND EXTENSION TO WALL WITH

PROVIDE MOLDED CLOSED CELL ANTI-MICROBIAL VINYL

STATE ACCESSIBILITY STANDARDS REQUIREMENTS.

FIXTURES. PROVIDE 17 GAUGE CHROME PLATED CAST BRASS P-

2" WASTE, 2" VENT, 3/4" COLD WATER. REFER TO ARCHITECTURAL

GUARDS IN QUANITITY AS REQUIRED TO PROTECT ADJACENT

ACORN TNC-24 WITH KWGX-24", KMH, AND KH36.

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

AMERICAN STANDARD WASHBROOK 6501.010.

PROVIDE ZURN WALL CARRIER FOR FIXTURE SUPPORT.

CHROME PLATED BRASS WALL MOUNTED FITTING WITH

ASSEMBLY WITH PRIMARY GASKET SEAL, AND ROUND SCORIATED

PROVIDE CLAMPING DEVICE FOR DRAINS IN MEMBRANE FLOOR

KITCHEN INDIRECT WASTE

AREAS. MIFAB FS1730-FL-1

PROPERLY SERVE EQUIPMENT.

FOR WALL CONSTRUCTION.

PROVIDE MIFAB C1100-RC-1.

FIXTURE: SMITH 4220-U

OULET. CHICAGO 897-CP.

U-1 (T.A.S. COMPLIANT FOR ADULTS)

DRAWINGS FOR HEIGHT REQUIREMENTS.

OF PLUMBING FIXTURE ROUGH-INS.

SERVICE:

DESCRIPTION:

TRAP SEAL:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

DESCRIPTION:

TYPE:

TYPE:

ROUGH-IN:

DESCRIPTION:

CARRIER:

SUPPLIES:

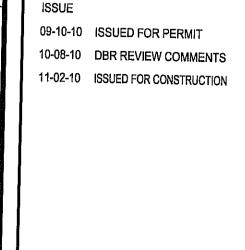
ROUGH-IN:

TYPE:

GENERAL

NOTES:

FAUCET:



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

CONSULTANTS **HOLSTE & ASSOCIATES** MEP Engineers



PROJECT NAME

LUCA & LEONARDO RESTAURANT

RISTORANTE

PROJECT ADDRESS 20 WATERWAY THE WOODLANDS, TEXAS

PROJECT NUMBER 10018

SHEET NAME

SHEET NUMBER

**PLUMBING SCHEDULES**