

# MADERA UNIFIED SCHOOL DISTRICT CESAR CHAVEZ ELEMENTARY SCHOOL KITCHEN

2600 E PECAN AVENUE. MADERA, CA 93637

### **GENERAL**

PROJECT ADDRESS: 2600 E PECAN AVENUE, MADERA, CA 93637

#### PROJECT DESCRIPTION

PLUMBING REMODEL TO ACCOMMODATE NEW OVENS INCLUDING THE DEMOLITION OF EXISTING CURBS AND ADDITION OF NEW FLOOR SINK.

# MECHANICAL ENGINEER OF RECORD

#### **NET POSITIVE CONSULTING ENGINEERS**

1446 TOLLHOUSE RD. #102

JONATHAN SCHLUNDT, PE JSCHLUNDT@NPCENG.COM

# SITE MAP





# PLUMBING SCHEDULE

MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	v	CM	HW	DESCRIPTION
<u>FS-1</u>	FLOOR SINK	2°	1-1/2*	TP	_	J.R. SMITH MODEL #3150-Y, COATED CAST IRON, ACID RESISTANT PAINTED INTERIOR, 12-1/2" SQUARE TOP, 8" DEEP, DOUBLE DRAINAGE FLANGE, NO HUB OUTLET & DOME STRAINER.
<u>TP-1</u>	TRAP PRIMER	-	_	3/4"	_	PRECISION PLUMBING PRODUCTS "PRIME-RITE" MODEL #PR-500 PRESSURE DROP ACTIVATED WITH #DU-U DISTRIBUTION UNIT FOR UP TO (2) DRAINS, PROVIDE 14"x14" STAINLESS STEEL ACCESS DOOR WITH CYLINDER LOCK PROVIDE SOV UPSTREAM OF TRAP PRIMER.
TD-1	TRENCH DRAIN	4-	1-1/2*	-	_	ACO POWERDRAIN \$100X 4" DRAIN \$YSTEM WITH 4" THROAT, CLASS F VEHICLE RATING, LENGTH PER PLAN WITH 0.5% \$LOPE BUILDN, HOPE TRENCH DRAIN SYSTEM WITH POLYPROPYLENE HEEL-PROOF ADA COMPLIANT 20" LONG \$1.0 TLENG ROATE CLASSE BUILDN, HOW A WOULD BUTTOM WITH POLYPROPYLENE HEEL-PROOF ADA COMPLIANT 20" LONG \$1.0 TLENG ROATE CLASSE BUILDN, HOW AND ALIBER BUTTOM WITH PROPERTY BUTTOM WITH BUTTOM WITH PROPERTY BUTTOM W

### SHEET INDEX

P002 PLUMBING SPECIFICATIONS AND DETAILS P200 PLUMBING DEMOLITION PLAN P201 PROPOSED PLUMRING PLAN

## **GOVERNING CODES**

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), C.C.R. TITLE 24, PART 1 2022 CALIFORNIA BUILDING CODE (CBC), C.C.R. TITLE 24, PART 2 2022 CALIFORNIA ELECTRICAL CODE (CEC), C.C.R. TITLE 24, PART 3 2022 CALIFORNIA MECHANICAL CODE (CMC), C.C.R. TITLE 24, PART 4 2022 CALIFORNIA MECHANICAL CODE (CMC.), C.C.R. TITLE 24, PART 4
2022 CALIFORNIA PLUMBING CODE (CPC.), C.C.R. TITLE 24, PART 5
2022 CALIFORNIA FIRE CODE (CFC.), C.C.R. TITLE 24, PART 9
2022 CALIFORNIA REFERENCED STANDARDS CODE, C.C.R. TITLE 24, PART 12
2022 CALIFORNIA ENERGY CODE (CAC), C.C.R. TITLE 24, PART 6
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), C.C.R.
TITLE 24, PART 1

# **GENERAL NOTES**

- COORDINATION OF WORK: LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIVENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY.

- EXISTING PIPING IS SHOWN IN THEIR APPROXIMATE LOCATIONS ONLY, INFORMATION OF (E) UTILITIES IS BASED UPON EXISTING PLUMBERG DRAWINGS AND OWNERS BEST KNOWLEDGE, EXISTING PROFINATION SHOWN MAY NOT BE TAKEN AS COMPREHENSIVE, AND NO GUARANTE MADE AS TO THE ACCURACY OR COMPLETENESS OF THE EXISTING MODE AS TO THE ACCURACY OR COMPLETENESS OF THE EXISTING
- ALL ROOF PENETRATIONS SHALL BE COMPATIBLE WITH ROOF SYSTEM WITH AS FEW FENETRATIONS AS POSSIBLE.
- MINIMUM DOMESTIC WATER PIPE SIZE TO BE 3/4", USE A REDUCING ELL AT FIXTURE, IF NECESSARY.
- CONTRACTOR TO VERIFY EXACT LOCATION AND DEPTH OF POINTS OF CONNECTION TO SITE UTILITIES.
- ALL PLUVBING FIXTURES, VALVES, FAUCETS, FIXTURE STOPS, ETC. WHICH PROVIDE WATER FOR HUMAN CONSUMPTION MUST MEET THE "LEAD FREE" REQUIREVENT FOR THE STATE OF CALIFORNIA.
- 12. LEAN CONCRETE SHALL BE USED AS BACK FILL WHERE UTILITY TRENCHES EXTEND FROM THE EXTERIOR TO THE INTERIOR LIMITS OF THE BUILDING. LEAN CONCRETE SHALL EXTEND A INIMIMUM DISTANCE OF TWO (2) FEET LATERALLY ON EACH SIDE OF THE EXTERIOR BUILDING LIME AND A MINIMUM OF SU (6) INCHES ABOVE POOTING SPENTFARTON.

## PLUMBING LEGEND

	ADOUG		1
	ABOVE	ABV	1
	ABOVE CEILING	ABV CLG	4
	ABOVE FINISHED FLOOR	AFF	-
	ALTERNATE	ALT	1
8	AND		1
	ARCHITECT / ARCHITECTURAL	ARCH	4
@	AT		1
	BELOW FLOOR	BEL FLR	1
	BELOW GRADE	BEL GR	1
	CALIFORNIA MECHANICAL CODE	CMC	1
	CALIFORNIA PLUMBING CODE	CPC	1
	CEILING	CLG	1
Q.	CENTER LINE		]
5	CONTINUATION	CONT	J
	CUBIC FEET PER HOUR	CFH	]
Ø	DIAMETER	DIA	]
	DOWN	DN	]
	DRAWING	DWG	]
	ELBOW	ELL	1
	ELECTRICAL	ELEC	1
	EXISTING	(E)	1
	FEET	FT	1
	FLOOR	FLR	1
	FLOWLINE	FL	1
	GALLON	GAL	1
	GALLONS FER HOUR	GPH	1
	GALLONS PER MINUTE	GPM	1
	GAUGE	GA	1
	INSIDE DIAMETER	ID ID	1
	INVERT ELEVATION	LE.	1
	MAXIMUM	MAX	1
	MERIMUM	MIN	1
			ł
	NEW NOT IN CONTRACT	(11)	1
	NOT IN CONTRACT	NIC	1
	NOT TO SCALE	NTS	1
#	NUMBER	NO.	ł
	OWNER FURNISHED OWNER INSTALLED	OFOI	Į
	FOUNDS	LBS	1
	POUNDS PER SQUARE INCH	PSI	Į
	POUNDS PER SQUARE INCH ABSOLUTE	PSIA	1
	POUNDS PER SQUARE INCH GAUGE	PSIG	1
	POLYVINYL CHLORIDE	PVC	1
	ROOM	RM	
	SPECIFICATION	SPEC	
	SOUARE FEET	SQFT	]
	STAINLESS STEEL	SS	1
	TEMPERATURE	TEMP	1
	THROUGH	THRU	1
	TYPICAL	(TYP)	
	UNDER GROUND	UG	1
	WATER COLUMN	WC	
	WITH	W	
	WITHOUT	W/O	
_A			1
	COMPRESSED AIR	A	1
- AV	ACID VENT	AV	-
-AW	ACID WASTE	AW	9
0	ACID VENT RISER	AVR	
0	ACID VENT THRU ROOF	AVTR	3
-CD	CONDENSATE DRAIN	CD	
	DOMESTIC COLD WATER	CW	Ľ
	DOMESTIC HOT WATER	HW	'
	DOMESTIC HOT WATER RETURN	HWR	. ,
-G	LOW PRESSURE NATURAL GAS	G	
HPG-	HIGH PRESSURE GAS	HPG	
-icw	INDUSTRIAL COLD WATER	ICW	
LPG	LIQUIFIED PETROLEUM GAS	LPG	
-F	FIRE PROTECTION LINE		1
RWL	RAIN WATER LEADER	RWL	
-OD	OVERFLOW DRAIN	OD	
-sp	STORM DRAIN	SD	
	SOIL or WASTE	SorW	
-MA	MEDICAL AIR	MA	
-o <sub>2</sub>	OXYGEN	02	
VAC-	VACUUM	VAC	
	VENT	v	
0	VENT RISER	VR	
0	VENT THRU ROOF	VTR	
Φ—	CLEANOUT TO GRADE	COTG	
		DEMO	
	DEMOLITION	DEMO	
	EXISTING PIPING	Fee	
ф—	FLOOR CLEANOUT	FCO	
一	HOSE BIBB		
0	PIPING TURN UP		
	PIPING TURN DOWN	En	1
	FIPING CAP		. 4
*	POINT OF CONNECTION TO EXISTING	POC	
v			
4	ANGLE VALVE	,	
1		1	

—Ю— BALL VALVE

SYMBOL	ІТЕМ	ABBR
<del></del>	CONCENTRIC REDUCER	
	TWO-WAY CONTROL VALVE	
<b></b>  ∇	PLUG VALVE	
&	FRESSURE REDUCING VALVE	
	SHUT-OFF VALVE IN BOX	sov
$-\bowtie$	SHUT-OFF VALVE	sov
M	THERMOSTATIC MIXING VALVE	
7	TEMPERATURE / PRESSURE RELIEF VALVE	PRV
	UNION	
-11	WALL CLEANOUT	WCO
- <del></del>	"Y" TYPE STRAINER	
Ø	PRESSURE GAUGE	
T	TEMPERATURE GAUGE	
1	KEYNOTE	
<u>WC-1</u>	NEW FIXTURE TAG EXAMPLE WATER CLOSET - TYPE 1 (REFER TO PLUMBING SCHEDULE)	
2 P800	DETAIL REFERENCE EXAMPLE: DETAIL 2, SHEET PROD	
3 P300	SECTION REFERENCE EXAMPLE: SECTION 3, SHEET P300	

# **ANCHORAGE & BRACING NOTES**

MEP COMPONENT ANCHORAGE NOTE

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL, AND PLUVEING COMPONENT SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERA RESPONSIBLE OF HARGE OR STRUCTURAL ENDINGER DELEGATED RESPONSIBLITY ACCEPTANCE BY DSA. THE PROJECT INSPECTOR VIILL VERIFY THAT ALL COMPONE AND ECUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE

PIPINO, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCET-16 SECTION 3.3AS DEFINED IN ASCET-16 SECTION 3.3AS LOSE IN ASCET-36 SECTION 3.3AS LOSE IN ASCET ASCETA ASCET ASCETA ASCET ASCET ASCET ASCET ASCET ASCETA ASCET ASCET ASCET ASCETA ASCET ASCET ASCETA AS

MECHANICAL FIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):







endineer



REVISIONS: Symbol Description

USD ES KITCHEN MADERA CHAVEZ E

> COVER SHEET

> > P001

# PLUMBING SPECIFICATIONS

CONTRACTOR SHALL PROVIDE A COMPLETE WORKING SYSTEM AND SHALL INCLUDE ALL ACCESSORIES, PARTS, MATERIALS AND LABOR REQUIRED TO MEET PERFORMANCE, CAPACITY, AND QUALITY REQUIREMENTS OF CONTRACT DOCUMENTS.

- 1. COCES AND REQUIATIONS ALL WORK AND INSTERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING CODES AS ADOPTED AND AMERICED BY THE AUTHORITY HAVING JUSTICATION. NOTHING IN THESE DRAWINGS OR SPECIFICATIONS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFERENCE TO THE SECOND TO

- PERMITS, INSPECTIONS AND SERVICE CONNECTION CHARGES. OBTAIN ALL PERMITS REQUIRED FOR PERFORMING WORK AND PAY ALL RELATED FEES. PAY ALL GHARGES FOR SERVICE CONNECTIONS, METERS. ETC. BY UTILITY COMPANIES OR DISTRICTS. CALL FOR ALL RECOURED INSPECTIONS AND PAY ALL RELATED FEES.
- WORK BY OTHERS, UNLESS OTHERWISE NOTED, THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL POWER WIRING, MOTOR STARTERS IN MOTOR CONTROL CENTERS, DISCONNECTS, CONTROL WIRING AND CONDUIT AND INSTALLATION OF CONTROL DEVICES.
- 4. <u>QUARANTEE</u> THE CONTRACTOR SHALL REPAIR ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND PAY FOR ANY DAWAGE TO OTHER WORK RESULTING THEREFROM WHICH APPEARS WITHIN A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE OF WORK.
- OPERATING AND MAINTENANCE INSTRUCTIONS: TWO COPIES OF ALL EQUIPMENT OPERATION AND MAINTENANCE INSTRUCTIONS AND WIRING DIAGRAMS SHALL BE FURNISHED TO THE OWNER, THROUGH THE ENGINEER.
- 7. SUBSTITUTIONS, MANUFACTURER EQUIPMENT AND PRODUCTS OTHER THAN THE SCHEDULED BASIS OF DESIGN ARE CONSIDERED A SUBSTITUTION, ALL SUBSTITUTION IN USI DE SUBVITTED TO AND REVIEWED INVERTING BY THE EXCREDER, SUBVITTAL BUST INCLIDE SIDE-BY-SIDE COMPARISOR OF THE PRODUCTS PERFORMANCE, ELECTRICAL DATA, ACCESSORIES, DIVENSIONS, AVID VEIGHTS. CONTRACTORS SHALL BEAR THE COST OF THE ENGINEERS REVIEW ON A TIME AND MATERIAL BASIS.
- 8. <u>PIPES PASSING THROUGH FIRE RATED SURFACES</u>, PIPES PASSING THROUGH FIRE RATED WALLS, FLOORS, CEILINGS, PARTITIONS, ETC. SHALL HAVE THE ANNUAR SPACE SURROUNDING THE FIPE OR PIPE INSULATION SEALED WITH FIRE RATED MATERIALS IN ACCORDING WITH THE REQUIREMENTS OF THE FIRE BILLHOUTH MANUAL INSURPCITED.

### PLUVBING SPECIFICATIONS

- 2. LAYOUT, ROUTE FIPING TO AVOID CUTTING STRUCTURAL MEMBERS. WHERE CUTTING OR NOTCHING IS REQUIRED, THE STRUCTURAL MEMBERS SHALL BE REINFORCED IN ACCORDANCE WITH THE UNFORM BUILDING CODE, PIE'NG SHALL BE RISTALLED TO ENSURE UNRESTRICTED FLOW, ELIVERATE ARE POCKETS, PREVENT UNSUAL NOISE AND PERMIT COMPLETE DRAWAGE OF THE SYSTEM, PROVIDE INDIVIDUAL SHALL OFF VALVES AT EACH FRUNE AND EQUIPMENT ITEM.
- UNDERGROUND PIPING. ALL FERROUS PIPING BELOW GRADE (EXCEPT CAST IRON) SHALL HAVE PROTECTIVE COATING OF "X-TRU-COAT". MINIMUM COVER FOR ALL BELOW GRADE PIPING SHALL BE 24".
- 4. PIPMS MATERIALS PROVIDE NEW MATERIALS AS SPECIFIED, ALL PIPMS MATERIALS SHALL BE COMPATIBLE WITH EXISTING PIPMS MATERIAL. PROVIDE CONNECTIONS UTILIZENG DIELECTRIC UTIONS BY EPOO OR BRASS IMPRES WITH MIMMUM LENGTH OF 4 (INCHES WHEN CONNECTIVIS FERNOS) TO IONNERSHOUS PIPMS.

A. DOMESTIC WATER - HARD TEMPER SEAMLESS COPPER, ASTM 688, BRAZED JORITS
B. GAS - BLACK STEEL, ASTM A120
C. SOIL, WASTE & VEHT - CAST IRON, CISFI 201
D. CONDENSATE DRAIN - HARD TEMPER SEAMLESS COPPER, ASTM 688, BRAZED JOHTS

A PIPE HANGER, STEEL "J" HANGER WITH SIDE BOLT, PROVIDE ISOLATING SHIELD ON INSULATED PIPE, GALVANIZED STEEL AND REINFORCING RIBS WITH 1/4" NON-CONDUCTING HAIR FELT PAD, B. SPACING:

PIPE SIZE MAX SPACING
1/2' - 1-1/2' 6-0"
2' - 5" 10-0"

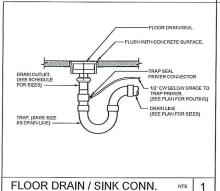
- 6. INSULATION, ALL HOT WATER PIPING TO BE INSULATED, WRAP ALL FITTINGS AND VALVES WITH PRE-CUT FIBERGLASS BLANKET TO THICKNESS MATCHING ADJOINING INSULATION, ALL INSULATION AND BLANKETS TO BE COVERED WITH PVC JACKET, SOLVENT WELD.
- 7. <u>VALVES.</u> SIZE 2" AND SWALLER: RISING STEM, UNION BONNET ALL BRONZE. WEDGE DISC, 125 WSP, STOCKHAM B-106. SIZE 2-1/2" AND LARGER: IRON BODY, BRONZE MCUNTED NON-RISING STEM, FLAVGED 125 WSP, STOCKHAM G-612.
- 8. <u>PIPE INSULATION (MAXIMUM THERMAL CONDUCTIVITY 0 23 BTU-NNHR-FT2-F)</u>: INSULATE HOT WATER PIPING WITH 1" THICK FIBERGLASS WITH ALL SERVICE JACKET.
- 9. FIXTURES: ALL FIXTURES SHALL BE WHITE UNLESS OTHERWISE NOTED, ALL FIXTURES SHALL BE FURNISHED AND INSTALLED CONFILER WHIT THIN, SEALS, CARRIERS, STOPS, ADA PROTECTIVE INSULATION, ETC., FIXTURE HEIGHT AND LOCATION AS INDICATED ON THE ARCHITECTURAL DEARMINS, PROVIDES PROPER BACKING AND HANGER PLATES FOR WILL-HANG PIXTURES.
- 10. TESTS AND DISINFECTION, PERFORM ALL TESTS AND DISINFECTION AS REQUIRED BY APPLICABLE CODES IN PRESENCE OF PLUMBING INSPECTOR.

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AUG 2 4 2023

MADERA COUNTY ENVIRONMENTAL HEALTH DIVISION

### PLUMBING DETAILS



FLOOR DRAIN / SINK CONN.

**NET POSITIVE** engineer

www.NPCeng.com 559,940,7293

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DATE: 07/18/2023 HEET TITLE: PLUMBING SPECIFICATIONS AND **DETAILS** SHEET NO: P002

CESAR

