

	EXPPOSED COMMON AREAS TO HAVE LOCKING HANDLES. NO IRON BODY VALVES WILL BE ACCEPTED.
FINISH, FABRICATE, AND PAINT ALL EXPOSED SURFACES TO MATCH EXISTING FINISHES. FINISHES SHALL BE AS FINE AS THE FINISHES OF THE EXISTING SURFACES.	18. PROVIDE AND INSTALL DIELECTRIC UNIONS BETWEEN ALL COPPER AND GALVANIZED & IRON PIPING & COMPONENTS. (AS WATTS, ZURN OR EQUAL).
SYSTEM WHETHER OR NOT WHICH ARE NOT BEING INSTALLED AS BEING INSTALLED	19. PENETRATIONS IN WALLS, FLOORS, OR CEILINGS, WHICH REQUIRE PROTECTED OPENINGS SHALL BE FIRE-STOPPED. FIRE-STOPPING SHALL BE AN APPROVED MATERIAL, SECURELY INSTALLED AND CAPABLE OF MAINTAINING ITS INTEGRITY WHEN SUBJECTED TO THE TIME-TEMPERATURE CURVED OF SPM STD. # 12-43.3 AND STD. # 92-4.1. INSTALLATION INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTION AUTHORITY AND BE MAINTAINED AT THE JOB SITE.
ALL APPLICABLE CODES FOLLOWING PARTS OF	20. PROVIDE WATERTIGHT FLASHING WHEREVER PIPES PASS THROUGH EXTERIOR WALLS, ROOF AND FLOORS.
	21. CUTTING AND PATCHING: ALL CUTTING & PATCHING OF THE EXISTING STRUCTURE SHALL BE PROVIDED. PROVIDE ALL NECESSARY REQUIREMENTS TO THE PROJECT MANAGER. PROTECTION AGAINST DUST AND DEBRIS SHALL BE TO THE SATISFACTION OF THE PROJECT MANAGER.
	22. CLEANUP: UPON COMPLETION OF THE WORK UNDER THIS SECTION THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIALS. EQUIPMENT & DEBRIS INCIDENTAL TO THIS WORK & LEAVE THE PREMISES CLEAN AND ORDERLY. PROVIDE NEW CEILING TILES (TO MATCH EXISTING) IF ANY DAMAGED DURING CONSTRUCTION.
	23. ALL SEWER LINES RUN @ SLOPES LESS THAN 2% ARE SUBJECT TO FIELD APPROVAL OF PLUMBING INSPECTOR.
	24. WASTE PIPE SIZES THAT ARE 3 INCHES OR SMALLER SHALL BE EVALUATED AT 2% SLOPE.
SYSTEM SHALL BE LISTED CABLE RECOGNIZED	25. WATER, SEWER, VENT, FIRE AND GAS PIPES THROUGH CONCRETE WALLS AND FLOORS SHALL HAVE PIPE-SLEEVES WITH NON COMBUSTIBLE SEALING.
	26. PROVIDE ACCESS DOORS TO ALL CONCEALED VALVES, STRAINERS, TRAP PRIMERS, ETC.
BID AND THOROUGHLY REVISION OF A BID NO CHANGES IN WHICH RESULTS FROM A	27. ALL PIPING IN FINISHED AREAS SHALL BE RUN CONCEALED. EXPOSED PIPING, WHERE NECESSARY, SHALL RUN AS HIGH AS POSSIBLE AND TIGHT TO THE WALLS.
	28. NO VENT OUTLET SHALL TERMINATE CLOSER THAN FOUR FEET TO OR ONE FOOT ABOVE ANY DOOR, WINDOW OR GRAVITY AIR INTAKE. NOR CLOSER THAN TEN FEET TO OR THREE FEET ABOVE ANY FORCED OR MECHANICAL AIR INTAKE.
CTIONS AND DEPTHS OF CONNECTIONS TO UTILITIES. IF CONTRACTOR SHALL BE AFFECTED.	29. ALL VENTS AND FLUE OUTLETS SHALL BE A MINIMUM OF 10 FEET FROM ANY FRESH AIR INTAKES.
	30. INSTALL WATER HAMMER ARRESTORS ON EACH COLD AND HOT WATER FIXTURE BRANCH AS RECOMMENDED BY PLUMBING AND DRAINAGE INSTITUTE WH-210 STANDARD. DEVICES SHALL BE FACTORY MADE WITH PERMANENT CUSHION OF GAS OR PROVIDE ACCESS PANEL.
ING THE WORK.	31. LAVATORY CONTROLS SHALL LIMIT THE FLOW RATE 0.35 GPM AND 110°F FOR PUBLIC OCCUPANCIES.
OR SHALL COORDINATE IT, ETC.	32. USE FEMALE COPPER NIPPLE TO MALE MALE PLASTIC PIPE FOR COPPER TO PLASTIC TRANSITION.
OR SATISFACTORY TO	33. BUILDING DRAIN AND VENT PIPING MATERIALS SHALL COMPLY WITH SECTIONS 701.0 AND 920.5.0 OF THE CALIFORNIA PLUMBING CODE.
ALL WORK AGAINST	34. ALL SANITARY SYSTEM MATERIALS SHALL BE LISTED BY AN APPROVED LISTING AGENCY.
RESPECTIVE KIND. FREE	35. EACH VENT SHALL RISE VERTICALLY TO A POINT NOT LESS THAN SIX (6) INCHES ABOVE THE FLOOD-LEVEL RIM OF THE FIXTURE SERVED BEFORE OFFSETTING HORIZONTALLY OR BEFORE BEING CONNECTED TO ANY OTHER VENT.
UBMITTED FOR REVIEW	36. PLUMBING FIXTURES AND FITTINGS SHALL COMPLY WITH ALL THE REQUIREMENTS IN SECTION 5.303 IN THE 2022 GREEN BUILDING STANDARDS CODE.
NGERS OR SUPPORTS PLIES TO ALL WATER INSULATION.	37. WATER SUPPLY AND DRAIN PIPES UNDER ACCESSIBLE LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE BE CONFIGURED TO PROTECT AGAINST CONTACT. PROTECTORS, INSULATORS, OR BOTH SHALL COMPLY WITH ASME A112.18.9.
	38. NEW OR REPAIRED POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE ACCORDING TO SECTION 609.9 (1-3) OF THE PLUMBING CODE. CONTRACTOR SHALL PROVIDE A SIGNED WRITTEN DECLARATION THAT POTABLE WATER SYSTEM HAS BEEN DISINFECTED PER SECTION 609.9.
ENES.	39. ANNULAR SPACE AROUND PIPES, ELECTRICAL CONDUITS, AND OTHER OPENINGS IN THE EXTERIOR SHALL BE PROTECTED AGAINST THE PASSAGE OF RODENTS BY CLOSING SUCH OPENINGS WITH CEMENT MORTAR, CONCRETE MASONRY OR A SIMILAR METHOD ACCEPTABLE TO THE ENFORCING AGENCY. CGBC 4.406.
ICES.	40. ALL VENT RISERS MUST HAVE A CLEANOUT MINIMUM 6" ABOVE FLOOD LEVEL OF PLUMBING FIXTURES.
ALL SERVICE PRESSURE ALL VALVES. VALVES IN	41. WALL CLEANOUTS SERVING FIXTURES SHALL BE THE SAME SIZE AS THE DRAIN.

		COPPER, TYPE "L"	COPPER, TYPE "M"	CAST IRON	REMARKS		
DOMESTIC COLD WATER	INSIDE	●			ALL PIPING ABOVE GROUND TO BE TYPE "L" COPPER WITH SOLDER JOINTS.		
	OUTSIDE	●					
SANITARY/WASTE SEWER	INSIDE			●		USE CAST IRON FOR ALL WASTE AND VENT INSTALLATION.	
	OUTSIDE			●			
SANITARY/WASTE VENT	INSIDE			●			
	OUTSIDE			●			
TRAP PRIMER	INSIDE	●					ROLLED COPPER WITH SLEEVE.
	OUTSIDE						

SYMBOL	ABBREVIATION	DESCRIPTION
		PIPE-TURN DOWN
		PIPE-TURN UP
	CW	DOMESTIC COLD WATER
	HW	DOMESTIC HOT WATER
	HWR	DOMESTIC HOT WATER RETURN
	W	WASTE BELOW GRADE
	W	WASTE ABOVE GRADE
	GD	GREYWATER BELOW GRADE
	GD	GREYWATER ABOVE GRADE
	V	SANITARY VENT
	V	SANITARY VENT BELOW GRADE
	G	GAS (LOW PRESSURE)
	MPG	MEDIUM PRESSURE GAS
	TPL	TRAP PRIMER LINE
	IRR	IRRIGATION LINE
	CD	A.C. CONDENSATE DRAIN
	SCD	SECONDARY CONDENSATE DRAIN
	SOV	SHUT-OFF VALVE
	CV	CHECK VALVE
	SOV YB	SHUT-OFF VALVE IN YARD BOX
	BV	BALANCING VALVE
	GC	GAS COCK
	PRV	PRESSURE REDUCING VALVE STATION
	TMV	TEMPERATURE MIXING VALVE
	FCO/COTG	FLOOR TYPE WASTE LINE CLEANOUT/CLEANOUT TO GRADE
	WCO	WALL TYPE WASTE LINE CLEANOUT
	FD	FLOOR DRAIN (ROUND)
	FD	FLOOR DRAIN (SQUARE)
		PRESSURE RELIEF VALVE
	WHA	WATER HAMMER ARRESTOR
		DIRECTION OF SLOPE
		INDICATES DIRECTION OF FLOW
	UN	UNION (FOR TYPE SEE SPEC.)
	HB	HOSE BIBB
	POC	POINT OF CONNECTION
	POD	POINT OF DISCONNECTION

ABBREVIATION	DESCRIPTION
ABV	ABOVE
AP	ACCESS PANEL
BEL	BELOW
CB	CATCH BASIN
CO	CLEANOUT
COTG	CLEANOUT TO GRADE
CLG	CEILING
CONN	CONNECT OR CONNECTION
DA	DISABLED ACCESS
DN	DOWN
EXIST(E)	EXISTING
FF	FINISH FLOOR
FR	FROM
FCO	FLOOR CLEANOUT
FLR	FLOOR
GRD	GRADE
HDR	HEADER
PDP	PUMP DISCHARGE PIPING
SSD	SUB-SURFACE DRAIN
THP	TYPICAL
MH	MANHOLE
VTR	VENT THRU ROOF
@	AT
BLDG.	BUILDING
#	NUMBER
(N)	NEW
(R)	REMOVE
GWD	GREY WATER DRAIN
POC	POINT OF CONNECTION

THE PROJECT PLUMBING SCOPE INCLUDES THE FOLLOWING:

1. ADDITION OF A NEW RESTROOM IN EXISTING PARK.
2. WASTE AND VENT UP TO 5 FEET AWAY FROM BUILDING.
3. DOMESTIC COLD AND HOT WATER UP TO 5 FEET AWAY FROM BUILDING.

SHEET NO.	SHEET TITLE	CURRENT ISSUE
P0.01	PLUMBING GENERAL NOTES, SYMBOLS & LEGEND & SHEET INDEX	PLAN CHECK
P0.02	PLUMBING SCHEDULES, CALCULATIONS & RISER DIAGRAMS	PLAN CHECK
P1.10	PLUMBING REMODELED SITE PLAN	PLAN CHECK
P2.10	PLUMBING RESTROOM FLOOR PLAN	PLAN CHECK
P5.01	PLUMBING DETAILS	PLAN CHECK

DRAWING ISSUANCE

PROJECT NAME
WWII JAPANESE
AMERICAN
INCARCERATION
MONUMENT
4045 190TH STREET
TORRANCE, CA 90504

PROJECT

SHEET NUMBER

P0.01

ORIGINAL SIZE: 30"x42'

CSAO.INC

EXISTING COLD WATER FIXTURE CALCULATIONS					
FIXTURE	NUMBER OF FIXTURE	X	FIXTURE UNITS	=	TOTAL FIXTURE UNITS
EXISTING RESTROOM					
WATER CLOSET (FLUSH VALVE)	3	X	5.0	=	15.0
LAVATORY	2	X	1.0	=	2.0
HOSE BIB 1	1	X	2.5	=	2.5
HOSE BIB 2	1	X	1.0	=	1.0
KITCHEN SINK	1	X	1.5	=	1.5
TOTAL EXISTING WATER FIXTURE UNITS					= 22.0

ADDITIONAL COLD WATER FIXTURE CALCULATIONS					
FIXTURE	NUMBER OF FIXTURE	X	FIXTURE UNITS	=	TOTAL FIXTURE UNITS
NEW RESTROOM					
WATER CLOSET (FLUSH VALVE)	2	X	5.0	=	10.0
LAVATORY	2	X	1.0	=	2.0
TOTAL ADDITIONAL WATER FIXTURE UNITS =					12.0

EXISTING PLAN VS REMODELED PLAN WATER FIXTURE UNITS		
TOTAL EXISTING RESTROOM COLD WATER FIXTURE UNITS	=	22.0
TOTAL NEW ADDED COLD WATER FIXTURE UNITS	=	12.0
TOTAL COLD WATER FIXTURE UNITS	=	34.0
TOTAL GPM (FLUSH VALVE)	=	44.0

[illegible]

EXISTING WASTE FIXTURE CALCULATIONS					
FIXTURE	NUMBER OF FIXTURE	X	FIXTURE UNITS	=	TOTAL FIXTURE UNITS
EXISTING RESTROOM					
WATER CLOSET (FLUSH VALVE)	3	X	4.0	=	12.0
LAVATORY	2	X	1.0	=	2.0
KITCHEN SINK	1	X	2.0	=	2.0
FLOOR DRAIN	6	X	1.0	=	6.0
TOTAL EXISTING WASTE FIXTURE UNITS					= 22.0

ADDITIONAL WASTE FIXTURE CALCULATIONS					
FIXTURE	NUMBER OF FIXTURE	X	FIXTURE UNITS	=	TOTAL FIXTURE UNITS
NEW RESTROOM					
WATER CLOSET (FLUSH VALVE)	2	X	4.0	=	8.0
LAVATORY	2	X	1.0	=	2.0
FLOOR DRAIN	2	X	2.0	=	4.0
TOTAL ADDITIONAL WASTE FIXTURE UNITS					= 14.0

EXISTING PLAN VS REMODELED PLAN WASTE FIXTURE UNITS		
TOTAL EXISTING RESTROOM WASTE FIXTURE UNITS	=	22.0
TOTAL NEW ADDED WASTE FIXTURE UNITS	=	14.0
TOTAL WASTE FIXTURE UNITS	=	36.0

PLUMBING EQUIPMENT SCHEDULE								
ITEM	FIXTURE/ EQUIPMENT	PIPING CONNECTION				FIXTURE UNITS		DESCRIPTION
		SOIL OR WASTE	VENT	COLD WATER	HOT WATER	WASTE F.U.	COLD WATER F.U.	
WC-1	WATER CLOSET (FLUSH VALVE)	3"	2"	¾"	-	3	2.5	ACORN PENAL WATER 1680 SERIES SIPHON JET TOILET - OFF FLOOR, MODEL # 1680-W-ADA-1-28-HPS, FABRICATED FROM 14 GAUGE TYPE 304 STAINLESS STEEL, ELONGATED BOWL, SELF-DRAINING FLUSHING, RIM WALL MOUNTED (CONCEALED), 18" INTEGRAL SEAT HEIGHT, WITH HIGH POLISH INTEGRAL SEAT, 1.28 GPF, PROVIDE FLUSH VALVE MODEL #1150-H, FIXTURE PERFORMANCE SHALL MEET OR EXCEED ASME A112.19.3CSA B45.4 STANDARDS.
L-1	LAVATORY	2"	2"	½"	½"	1	1	MURDOCK SUPERSECURE RESTROOM FIXTURE MODEL #1011B-1, ADA COMPLIANT LAVATORY WITH PUSH BUTTON VALVE, LAVATORY WITH COLD ONLY VALVE, FIXTURE DESIGNED TO BE INSTALLED ON A FINISHED WALL, FABRICATED FROM 14 GAUGE TYPE 304 STAINLESS STEEL, EXTERIOR SATIN FINISH, 14"x12"x4" DEEP RECTANGULAR LAVATORY BOWL, LAVATORY VALVE IS AN AIR-CONTROL, PNEUMATICALLY OPERATED PUSH BUTTON VALVE USING ATMOSPHERIC AIR AND INCLUDES 0.5 GPM FLOW CONTROL. LEAD FREE.
WHA	WATER HAMMER ARRESTOR	-	-	-	-	-	-	PRECISION PLUMBING PRODUCTS WATER HAMMER ARRESTORS, HYDRAULIC DISPLACEMENT, PERMANENTLY SEALED, PISTON OPERATED, SIZED IN ACCORDANCE TO SCHEDULE MODEL # FIXTURE UNIT RATING I.P.S. SC-500 1-11 ½" SC-750 12-32 ¾" SC-100 33-40 1" SC-1250 61-113 1½" PROVIDE STAINLESS STEEL ACCESS PANEL IN TILED WALLS & ALL PUBLIC BATHROOMS CONFIRM FINISH OF ALL OTHER ACCESS PANEL WITH ARCHITECT
FD-1	FLOOR DRAIN	2"	2"	½" TPL	-	2	-	J R SMITH #2005-A DUCO CAST IRON BODY & FLASHING COLLAR WITH PROTECTOR CAP AND 5" ROUND ADJUSTABLE STRAINER HEAD, BOTTOM OUTLET WITH TRAP PRIMER CONNECTION.
TP-1	TRAP PRIMER	-	-	½"	-	-	-	MIFAB MODEL# MR-500-NPB PRESSURE DROP ACTIVATED BRASS TRAP SEAL PRIMER. COMPLETE WITH FOUR VIEW HOLES AND REMOVABLE FILTER SCREEN. SERVES UP TO 6 FLOOR DRAIN TRAPS AND REQUIRES NO ADJUSTMENTS AND NO AIR PRE-CHARGE. PROVIDE STAINLESS STEEL ACCESS PANEL IN TILED WALLS & ALL PUBLIC BATHROOMS. CONFIRM FINISH OF ALL OTHER ACCESS PANELS WITH ARCHITECT. ASSE STANDARD 1018 CERTIFIED.
PLUMBING EQUIPMENT SCHEDULE NOTES:								
1	ALL FIXTURES TO BE WHITE AND TRIM TO BE POLISHED CHROME FINISH UNLESS NOTED OTHERWISE.							
2	PROVIDE BASSCRAFT HEAVY PATTERN ANGLE STOPS FOR ALL FIXTURES IN PUBLIC AREAS AND BASSCRAFT SPEEDWAY STOPS AT ALL OTHER LOCATIONS.							
3	FIXTURES AND TRIM SHALL BE AS NOTED OR EQUAL, COMPLY WITH CALIFORNIA LEED PLUMBING CODE AND APPROVED BY OWNER.							
4	ALL ACCESSIBLE LAVATORIES & SINKS TO BE PROVIDED WITH INSULATION FOR THE DRAIN & WATER PIPING AS TRUEBRO KIT #101 INSULATION KIT OR EQUAL.							
5	THE NEW PLUMBING SYSTEM INSTALLATION SHALL COMPLY WITH HIGH EFFICIENCY, LEAD FREE AND GREEN BUILDING CODE.							

REFERENCE NOTES

- POINT OF CONNECTION. CONNECT NEW 2" DOMESTIC COLD WATER PIPING BELOW GRADE TO EXISTING COLD WATER PIPING. CONTRACTOR TO FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING BEFORE MAKING FINAL CONNECTIONS.

ROOF

CEILING

FIRST FLOOR

DETAIL LEGEND

SYMBOL	DESCRIPTION
⊗	FIXTURE UNITS

[illegible]

LEAD CONSULTANT

CHEE SALETTE
ARCHITECT + LANDSCAPE ARCHITECT
1625 SOUTH CENTRAL AVENUE, GLENDALE, CA 91204
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SUB CONSULTANT



STAMP



DRAWN BY	KMEDINA
DESIGNED BY	KMEDINA
CHECKED BY	JTUPAS
APPROVED BY	PBREEN

REGULATORY APPROVALS

[illegible]

PROJECT NAME

WWII JAPANESE AMERICAN INCARCERATION MONUMENT

4045 190TH STREET
TORRANCE, CA 90504

TITLE

PLUMBING SCHEDULES, CALCULATIONS & RISER DIAGRAMS

PROJECT

2024-16

SCALE
NONE

SHEET NUMBER

P0.02

ORIGINAL SIZE: 30"x42"

CSAO, INC

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