

PLUMBING LEGEND					
SYMBOL	ABBR.	ITEM	SYMBOL	ABBR.	ITEM
—	ACC.	ACCESSIBLE	—	H.B.	HOSE BIBB
—	A.D.	ACCESS DOOR/WALL BOX	—	H.V.(A-C)	AIR CONDITIONING EQPT.
—	A.F.F.	ABOVE FINISHED FLOOR	—	L.	LAVATORY
—	C.D.	CONDENSATE DRAIN	—	LOC.	LOCATION
—	C.I.	CAST IRON	—	NJ	NEW
—	C.L.	CEILING	—	N.I.C.	NOT IN CONTRACT
—	C.O.	CLEANOUT	—	P.O.C.	POINT OF CONNECTION
—	COMB.	COMBUSTION	—	PROV.	PROVIDE
—	CONN.	CONNECTION	—	P.R.V.	PRESSURE REDUCING VALVE
—	CONT.	CONTINUATION	—	R.D.	ROOF DRAIN
—	COTG	CLEANOUT TO GRADE	—	R.W.L.	RAINWATER LEADER
—	(D/C.W.)	(DOMESTIC) COLD WATER	—	S.	SINK
—	D.F.	DRINKING FOUNTAIN	—	S.H.	SOIL AND WASTE
—	(D/H.W.)	(DOMESTIC) HOT WATER	—	SIM.	SIMILAR
—	(D/H.W.R.)	(DOMESTIC) HOT WATER RETURN	—	S.O.V.	SHUT OFF VALVE
—	DN.	DOWN	—	SS	STAINLESS STEEL
—	DR.N.	DRAIN	—	S.S.	SERVICE SINK
—	(E.)	EXISTING	—	SURF.	SURFACE
—	E.D.F.	ELECTRIC DRINKING FOUNTAIN	—	T.F.P.	TEMPERATURE AND PRESSURE RELIEF
—	E.H.H.	ELECTRIC WATER HEATER	—	T.P.	TRAP PRIMER
—	EXT'G	EXISTING	—	(TYP)	TYPICAL
—	F.C.O.	FLOOR CLEANOUT	—	UR.	URINAL
—	F.D.	FLOOR DRAIN	—	V.O.	VENT OFFSET
—	FL.R.	FLOOR	—	V.T.R.	VENT THRU ROOF
—	F.S.	FLOOR SINK	—	W.	WASTE
—	G.	GAS	—	W.C.	WATER CLOSET
—	G.D.	GARBAGE DISPOSAL	—	W.H.	WATER HEATER
—	GRD.	GRADE	—	W.C.O.	WALL CLEANOUT

PLUMBING FIXTURE SCHEDULE	
WC-1	Floor mounted accessible 16.5" high flush-valve elongated water closet, "American Standard" # 3461.001, 1.28 gallons / flush, "Zurn" # ZER6000AV-HET-CCP battery powered 1.28 GPF sensor flush-valve, heavy duty plastic elongated open-front seat, both caps, 3" S. & W., 2" V.O., 1-1/4" C.W. (reduce to 1" @ flush-valve), see plan for trap primer accessory.
WC-2	Floor mounted 14" high flush-valve elongated youth water closet, "American Standard" # 2599.001; all else per WC-1.
UR	Wall mounted water saver accessible urinal, "American Standard" # 6590.001 "Zurn" # ZER6003AV-ULF-CP battery powered (paint) sensor flush-valve, 3/4" C.W., 2" W., 2" W.C.O., 1-1/2" V.O. (see arch. dwgs. for mounting heights)
L-1	Wall mounted cast iron accessible lavatory, "Ceco" # 540B, "Pro-Flow" # PF155A grid drain, "Zurn" # ZB6500-XL metering hot/cold faucet w/25 gal./cycle, (2) wall stops with supplies & 17 ga. C.P. trap/tailpiece per specifications, (wrap H.W. and trap/tailpiece per spec's) 1/2" H.W./C.W., 2" W., 1-1/2" V.O., 2" W.C.O., see mounting detail with steel backer plate, provide "Leonard" # 170-LF-BP tempering valve set @ 110 deg.
L-2	Counter under-mounted china accessible lavatory, "American Standard" # 0496.221, all else per L-1 except backer plate.
L-3	Wall mounted cast iron accessible lavatory, "Ceco" # 540B, single hole punch for "Zurn" metering cold faucet # 86100-XL-CP w/25 gal./cycle, all else per L-1 except H.W. and T.V., see mounting detail AP-501.
S-1	Counter mounted stainless steel accessible classroom sink with U-channel type mounting system, "Elkay" # DRKR25172LM with center mounted "Zurn" ZB25B1-XL-15F goose-neck faucet and "Haws" # 5054L-F bubbler, strainer / grid drain, (2) wall stops with supplies & 17 ga. C.P. trap/tailpiece per specifications, supplies from each stop (one to bubbler and faucet), 1/2" C.W., 2" W., 2" W.C.O., 1-1/2" V.O.
S-2	Counter mounted 18 ga. stainless steel (33"x21"x6-1/2") accessible double bowl sink, "Elkay" # LRAD3321, # LK99 strainer, garbage disposer at other bowl, "Zurn" # ZB71CX1L goose-neck faucet, (2) angled wall stops with supplies per specifications, 17 ga. C.P. trap/tailpiece, 1/2" H.W./C.W., 2" W., 1-1/2" V.T.R., 2" W.C.O., (wrap H.W. and trap/tailpiece per spec's)
S-3	Counter mounted 18 ga. stainless steel (22"x19"x6-1/2") accessible single bowl sink with off-center back drain outlet, connect GD, "Elkay" # LRAD2219, "Zurn" # ZB71CX1L goose-neck faucet, (2) wall stops with supplies & 17 ga. C.P. trap/tailpiece per specifications, 1/2" H.W./C.W., 2" W., 1-1/2" V.T.R. or V.O. (see plan), 2" W.C.O., provide "Leonard" # 170-LF-BP tempering valve set @ 110 deg.
S-4	Counter mounted 18 ga. stainless steel (22"x19"x6-1/2") accessible single bowl sink with off-center back drain outlet, "Elkay" # LRAD2219, # LK99 strainer, "Zurn" # ZB71CX1L goose-neck faucet, (2) wall stops with supplies & 17 ga. C.P. trap/tailpiece per specifications, 1/2" H.W./C.W., 2" W., 1-1/2" V.T.R. or V.O. (see plan), 2" W.C.O.
IM	Galvanized ice maker fire resistant wall box with integral 1/4 turn ball valve and water hammer arrester, "Guy Gray" # FR-12, 1/2" C.W., 1/4" coiled soft copper tubing for connection.
HB-1	Recessed stainless steel box mt'd. hose bibb, "Acom" # 8151 w/ door, vacuum breaker, 3/4" C.W.,
HB-2	Wall mounted bent nose brass loose tee key hose bibb, "Acom" # 8121 with integral vacuum breaker, 3/4" C.W., rough chrome plated for interior use.
HB-3	Riser mt'd. hose bibb, "Acom" # 8136 with vacuum breaker and loose tee key handle, 3/4" C.W., provide dielectric fitting from copper pipe in attic to schedule 40 galvanized pipe thru roof. Extend galvanized HB riser up to 12" above roof.
ED	Cast iron floor drain, "Zurn" # Z415B with 5" dia. bronze grate, 2" trap with primer connection, 2" W., 1-1/2" V.O. (2" V.O. below slab if shown)
MS	Floor mt'd. cast iron mop sink, "Ceco" # 871 w/ rim guard, (3") strainer, "Zurn" # 842MI-RC faucet w/ vac. brkr and top brace, 2" trap, 3/4" H.W./C.W., 3" W., 2" V.O., (28" x 28" - 163 lbs.)
FS-1	Floor sink, "Ceco" # 908-2, 12"x12"x8" deep, 2" W., 2" V.O. (below floor), half grate
FS-2	Floor sink, "Ceco" # 910-3, 12"x12"x10" deep, 3" W., 2" V.O. (below floor), half grate
FS-3	4"x8" enameled cast iron floor sink, "J.R. Smith" # 3300Y-12 with nickel-bronze rim and half-grate, 2" W., 2" V.O. (below floor),
FS-4	Stainless Steel trough drain for tilting braising pan, "Advance Tabco" # FTG1230, 4" waste connection, reduce to 3" trap, 3" W., 2" V.O. below floor
DF	Dual (hi-lo) wall mounted accessible drinking fountain, "Haws" # 1119.14, #6700.4 mounting plate, satin finish 14 ga. stainless steel, push button operation, (2) 17 ga. C.P. trap/tailpiece, (2) angled wall stops with supply to each bubbler, 2" W., 1-1/2" V.O., 1/2" C.W.
TV	Exposed mounted high-low tempering valve, "Powers" # LFSH1432, 3/4" H.W./C.W. inlets, 1" tempered water outlet, rough brass, field provided outlet thermometer, (set to 120 degrees F.) 5-27 GPM range. Increase discharge as shown on plans and reduce into tempering valve as shown.
TP	Trap primer behind wall access door, "PPP" with manifold as required for multiple traps, 1/2" C.W. w/ ball valve to primer.
CW	Can wash, "J.R. Smith" # 2690 with adjustable spray nozzle and integral drain, # 3380 wall box mounted mixing valve with keylock door and integral vacuum breaker, 1/2" H.W./C.W., 1/2" tempered water supply sleeved below grade to spray nozzle, 2" drain with trap, 2" V.O.
DF	Pedestal mounted hi-lo dual drinking fountain "Haws" #3300, 11 ga. powder coated steel, accessory custom color selected by architect, 1/2" C.W., 2" W.,
RD	"MIFAB" # R1150-B-M (metal domes) cast iron roof drain/ overflow combination, 3" or 4" (indicated on plan), adjust to 2" overflow height, integral 12"x24" galvanized sump receiver, underdeck clamps.

PLUMBING EQUIPMENT SCHEDULE	
GD	Sound insulated garbage disposal, "InSinkerator" # PRO-333-SS, 3/4 H.P. @ 120v.-1ph.,
EWH	Electric undercounter point of use water heater, "Eemax" #DX65T FS 105 deg. ML, 6500 Watts @ 240/208v.-ph., mount under sink cabinet/lavatory in an ADA compliant manner. (1/2" H.W. to sink faucet), 3 GPM min. flow rate. Factory set max. temp. @ 120 degrees F.
EDF	Wall mounted hi-low dual accessible electric drinking fountain, "Oasis" # ADA8ACB, 1/4 HP, 4.4 F.L.A. @ 120v.-1ph., (1) angle wall stop with supply, 17 ga. C.P. trap/tailpiece, 2" W., 2" W.C.O., 1-1/2" V.O.,
CP	Freeze body domestic hot water circulating pump, "Bell & Gossett" #NBF-22, 92 Watts @ 120v.-1ph., 7 GPM @ 10ft. head, (control thru "Honeywell" Aquastat and digital 7 day time clock)
WH	Gas high efficiency (94%) condensing sealed combustion water heater, "Bradford White" # EF-100T-150E-3NKA, 100 gallon glass lined tank, 150,000 BTU/H nat. gas input, 315 GPH recovery @ 70 degree rise, 3" dia. PVC flue thru roof with concentric kit, 3" dia. PVC combustion air, "Amrol" # ST-12 expansion tank mounted on the C.W. inlet, 5 amps at 120v.-1phase for flue blower and electric ignition, 1733 lbs (wet),

KITCHEN PLUMBING SCHEDULE	
PR	Pre-rinse by kitchen contractor, 15400 to rough-in and install, 1/2" H.W./C.W., 1/2" C.W. on down to GD-1 thru vacuum breaker, solenoid valve and "Shoktrol".
HS	Hand sink by kitchen contractor, 15400 to rough-in and install, 1/2" H.W./C.W., 2" W., 2" W.C.O., 1-1/2" V.O. provide "Leonard" # 170-LF-BP tempering valve set @ 110 deg.
KS	Free standing stainless steel kitchen sink with faucet(s) and drain fitting(s) by kitchen contractor; Spec. Section 15400 to provide soldered "L" copper tailpiece assembly(es) to floor sink and install faucet(s)/drain fitting(s), 3/4" H.W. and C.W. with corp. stops and supplies to faucet(s),
GD-1	Garbage disposer / pre-rinse by kitchen contractor, 15400 to rough-in and install with 1/2" C.W. through field supplied "Shoktrol" to GD, 1/2" H.W./C.W. to pre-rinse, 3" W., 3" W.C.O., 2" V.O.
PF	Pot filler faucet by kitchen contractor, 15400 to rough-in and install, 1/2" H.W./C.W.
DW	Dishwasher by kitchen contractor, 15400 to connect H.W. thru solenoid valve and vacuum breaker, provide "Shoktrol" and 2" soldered "L" copper tailpiece to FS
FS-4	Stainless Steel, trough drain by Kitch. contract, 15,400 to install, 2" W., 2" V.O.

Piping, Ductwork, and Electrical Distribution System Bracing Note:

Piping, ductwork, and Electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-10 Section 13.3 as defined in ASCE 7-10 Section 13.6.8, 13.6.7, 13.6.5.6 and 2013 CBC, Sections 1616A.1.23, 1616A.1.24, 1616.1.25, 1616A.1.26.

The bracing attachments to the structure shall be detailed on the approved drawings and shall comply with one of the OSHPD pre-approvals (OPM) as modified to satisfy anchorage requirements of ACI 318, Appendix D.

Copies of the manual shall be available on the jobsite prior to start of hanging and bracing of the pipe, ductwork, and electrical distribution systems. The structural engineer of record shall verify the adequacy of the structure to support the hanger and brace loads. Drawings on the plan are from Mason Industries, Inc. "Seismic Restraint Components for Suspended Utilities", OSHPD pre-approved anchorage OPM-0043-13.

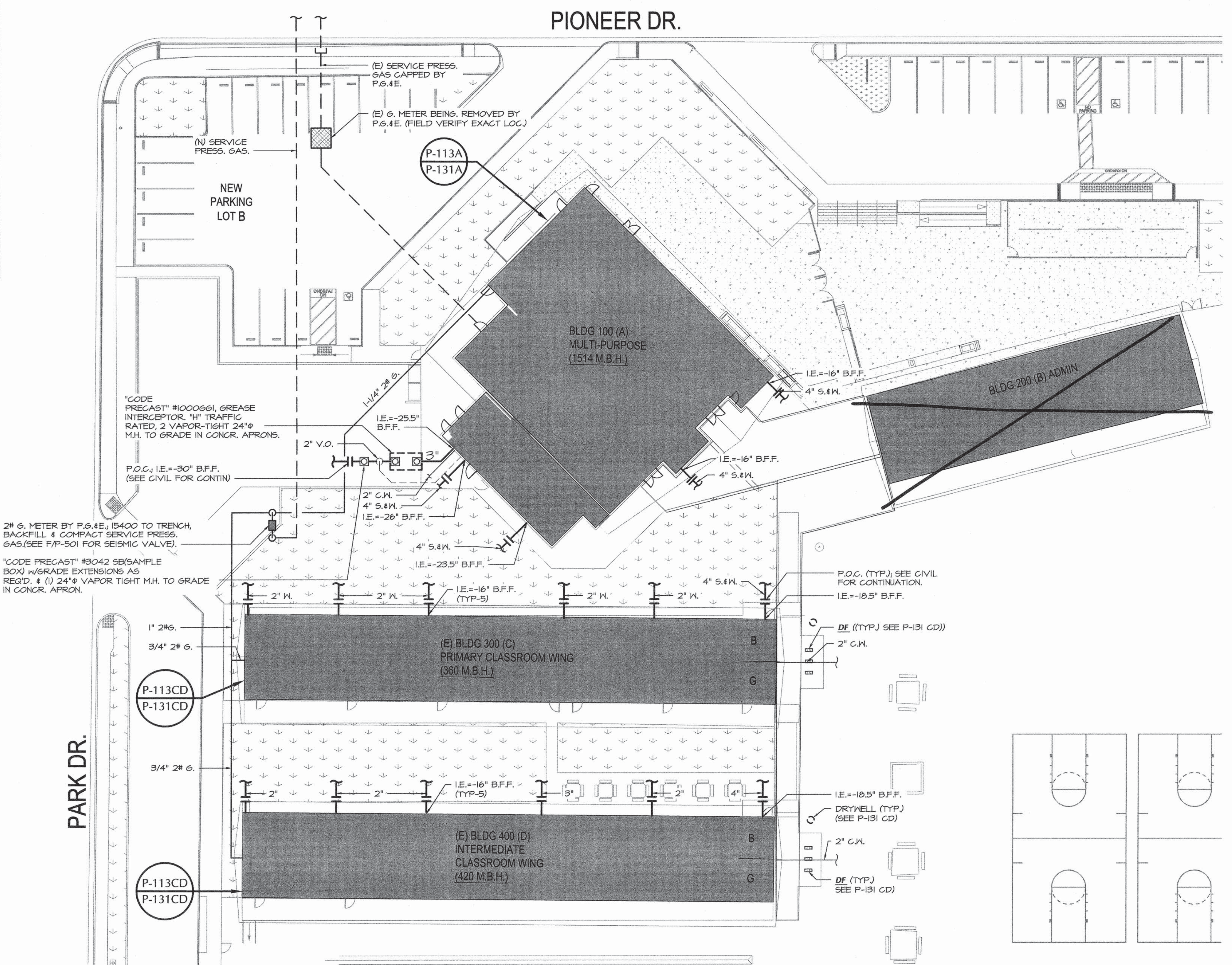
Codes:

California Code of Regulations (C.C.R.)

Part 1 - 2013 California Standards Administrative Code, Title 24, C.C.R.
 Part 2 - 2013 California Building Code (C.B.C.), Title 24, C.C.R. Volumes 1-3.
 Part 3 - 2013 California Electrical Code, Title 24, C.C.R.
 Part 4 - 2013 California Mechanical Code (C.M.C.), Title 24, C.C.R.
 Part 5 - 2013 California Plumbing Code (C.P.C.), Title 24, C.C.R.
 Part 6 - 2013 California Fire Code, Title 24, C.C.R.
 Part 9 - 2013 California Fire Code, Title 24, C.C.R.

Standards and Guides:

ADAAG - American with Disabilities Act, Accessibility Guidelines.
 Fixtures - Plumbing fixtures to comply with table 5.303.6 of the California Green Building Standards - 2013 Edition.



PLUMBING SITE PLAN
 SCALE: 1"=20'-0"

NOTE:
 Provide DF as detailed on P-131CD w/ drywell. Locate per Arch. dwg. #A-111 adjacent to (N) reloo toilet bid'g.

2# G. CALC's (250')

BLDG.	100 (A)	=	1514	MBH
BLDG.	300(C)	=	360	MBH
BLDG.	400(D)	=	420	MBH
	TOTAL	=	2,294	MBH =

1-1/2" G. TO START

GREASE TRAP CALC's

KS @	3	DFU's =	3
DW @	3	DFU's =	3
MS @	3	DFU's =	3
CW @	3	DFU's =	3
	TOTAL DFU's =	12 =	

750 G. TANK; USE 1000; "CODE PRECAST" #GGT-1000

Equipment Anchorage Notes:

All Mechanical, Plumbing, and Electrical components shall be anchored and installed per the details on the DSA approved construction documents. Where there no detail is indicated, the following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2013 CBC, Sections 1616A.1.18 through 1616A.1.26 and ASCE 7-10 Chapter 6 and 30.

- All permanent equipment and components.
- Temporary or movable equipment that is permanently attached (E.G. hard wired) to the building utility services such as electricity, gas or water.
- Movable equipment which is stationed in one place for more than 8 hours and heavier than 400 pounds are required to be anchored with temporary attachments.

The attachment of the following Mechanical and Electrical components shall be positively attached to the structure, but need not be detailed on the plans. These components shall have flexible connections provided between the component and associated ductwork, piping and conduit.

- Components weighing less than 400 pounds and have a center mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
- Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

For those elements that do not require details on the approved drawings, the installation shall be subject to the approval of the structural engineer of record and the DSA district structural engineer. The project inspector will verify that all components and equipment have been anchored in accordance with above requirements.

General Project Note:

Coordination of work: Layout of materials, equipment and systems is generally diagrammatic unless specifically dimensioned. Some work may be shown offset for clarity. The actual location of all materials, piping, ductwork, fixtures, equipment, supports, etc. shall be carefully planned, prior to installation of any work to avoid all interferences with each other, or with structural, electrical, architectural or other elements. Verify the proper voltage and phase of all equipment with the electrical plans. All conflicts shall be called to the attention of the architect and the engineer prior to the installation of any work or the ordering of any equipment.

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 FOR:
BAKERSFIELD CITY SCHOOL DISTRICT
 1300 BAKER STREET
 BAKERSFIELD CA 93305

PTN: 63321-186

MARK	DATE	DESCRIPTION
-	12-09-15	DSA SUBMITTAL

JOB NUMBER: 2015-1663
 CDD DRAWING FILE

DRAWN BY: M.M.
 CHECKED BY: MB

CHECK AND VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH THE WORK. REPORT DISCREPANCIES TO THE ARCHITECT.

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SHEET TITLE
PLUMBING SITE PLAN

SHEET IDENTIFICATION NUMBER
P-111
 SHEET OF

bme BASKIN MECHANICAL ENGINEERS
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 Pjt: 08-29-2017