	PLUMBING SYMBOLS	
SYMBOL	DESCRIPTION	
	WASTE PIPING (W)	
	VENT PIPING (V)	
	COLD WATER PIPING (CW)	
	HOT WATER PIPING (HW)	
<b>— • • • —</b>	HOT WATER RETURN PIPING (HWR)	
<b>—</b> F <b>—</b>	FIRE SPRINKLER PIPING	
D	DRAIN PIPING (D)	
<u> </u>	BALL VALVE	
<b></b>	BALANCING VALVE	
	UNION	
	CHECK VALVE	
<b>∻</b>	HOSE BIBB	
_ø	SURFACE CLEAN-OUT (SCO)	
_ø	FLOOR CLEAN-OUT (FCO)	
WCO	WALL CLEAN-OUT (WCO)	
9	FLOOR DRAIN (FD)	
$\mathbf{X}$	FLOOR SINK (FS)	
<u> </u>	PIPING UP	
<u> </u>	PIPING DROP	
	S.O.V. IN RISE	
┛┖	VENT THRU ROOF (VTR)	
М	WATER METER	
0	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK	

ABBREVIATION	DESCRIPTION
BV BPW	BALANCING VALVE BED PAN WASHER
CA	COMPRESSED AIR
CO	CLEAN OUT
COTG	CLEAN OUT TO GRADE
COP	CLEANOUT PLUG
CS	CLINIC SINK
CW	
CD, SCD CP	CONDENSATE DRAIN (PRIMARY), SECONDARY CONDENSATE PUMP
DE	DEIONIZED WATER
DFU	DRAINAGE FIXTURE UNIT
DWS	DRINKING WATER SUPPLY
EST.	ESTIMATED
ET	EXPANSION TANK
EW EWC	
EWC EX. OR (E)	ELECTRIC WATER COOLER EXISTING
FCO	FLOOR CLEAN OUT
FD	FLOOR DRAIN
FLR.	FLOOR
FS	FLOOR SINK
FV	FLUSH VALVE
GW HB	
HW	HOSE BIB HOT WATER
HWR	HOT WATER RECIRC.
LA	LAB AIR
LAV	LAVATORY
MB	MIXING BOX
MER MAX.	MECHANICAL ROOM
MAX. MIN.	MAXIMUM MINIMUM
MS	MOP SINK
NOM.	NOMINAL
Р	PUMP
PD	PRESSURE DROP
PP PR	PLUMBING PUMP(RECIRC. PUMP)
PRV	PRESSURE REGULATOR PRESSURE REDUCING VALVE
PW	PURE WATER
RO	REVERSE OSMOSIS
RPZ	REDUCED PRESSURE BACKFLOW PREVENTOR
S	SINK
SAN SB	SANITARY WASTE
SEU	SPINAL CORD BATH SUPPLY FIXTURE UNIT
SH	SHOWER
SP	STATIC PRESSURE
SPS	STATIC PRESSURE SENSOR
	TRAP PRIMER
TT U	
V	URINAL VENT
VFD	
VI	VIBRATION ISOLATOR
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WFMD WH	WATER FLOW MEASURING DEVICE
WHA	WATER HEATER
WS	WATER HAMMER ARRESTER WATER SOFTENER

## DOMESTIC WATER BRANCH PIPE SIZE SCHEDULE

	•
2 TO 3 LAV, EWC, OR SH	
4 TO 6 LAV, EWC, OR SH	
2 TO 3 FLUSH VALVE WC OR U	
4 TO 8 FLUSH VALVE WC OR U	
OVER 8 FLUSH VALVE WC OR U	REFER TO PLAN

## FIRE SPRINKLER NOTES:

- 1. SPRINKLER CONTRACTOR SHALL PROVIDE SYSTEM DESIGN, LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE COMPLETE DESIGN BUILD FIRE SPRINKLER SYSTEM.
- 2. THE DESIGN AND INSTALLATION SHALL CONFORM TO ALL REQUIREMENTS OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 13) AND THE GENERAL REQUIREMENTS OF APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE, THE SPECIFIC REQUIREMENTS OF THE LOCAL FIRE PREVENTION BUREAU, AND THE OWNER'S INSURANCE UNDERWRITER.
- 3. THE SYSTEM SHALL INCLUDE, BUT IS NOT LIMITED TO, SPRINKLER HEADS, VALVES, ESCUTCHEONS, PIPING, FITTINGS, HANGERS, DRAINS, WET TEST CONNECTIONS, SIGNS AND OTHER IDENTIFICATION MARKINGS AS REQUIRED.
- 4. ALL MATERIALS AND EQUIPMENT USED IN THE INSTALLATION OF FIRE PROTECTION SYSTEMS SHALL BE LISTED AS APPROVED BY UNDERWRITERS LABORATORIES, INC., "LIST OF INSPECTED FIRE PROTECTION EQUIPMENT AND MATERIALS," OR APPROVED BY OTHER APPROPRIATE, NATIONALLY RECOGNIZED TESTING LABORATORIES FOR USE IN SPRINKLER SYSTEMS, AND SHALL BE THE LATEST DESIGN OF THE MANUFACTURER.
- 5. SPRINKLER HEADS SHALL BE PROVIDED AS REQUIRED AND CONFORM TO THE LATEST EDITION OF THE NFPA 13, AND CITY REQUIREMENTS.
- 6. PIPING, PIPE HANGERS AND SUPPORTS SHALL CONFORM TO THE LATEST EDITION OF NFPA 13.
- 7. INSTALL HEADS AT FINISHED HEIGHT WITH ESCUTCHEON.

## FIXTURE UNIT SCHEDULE

			ESTIC TER	WA	STE
FIXTURE	QTY	FU/EACH	TOTAL FU	FU/EACH	TOTAL FU
WC	2	6	12	4	8
L	2	2	4	1	2
EDF	1	1	1	1	1
SK	1	2	2	2	2
			19		13

- 8. COORDINATE WITH OTHER WORK, INCLUDING DUCTWORK, DIFFUSERS, GRILLES, ELECTRICAL AND PLUMBING PIPING, AS NECESSARY TO INTERFACE COMPONENTS OF FIRE SPRINKLER PIPING PROPERLY WITH OTHER WORK.
- 9. AFTER SYSTEM IS COMPLETELY INSTALLED, IT SHALL BE FILLED AND TESTED IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE REQUIREMENTS OF THE APPLICABLE NFPA BULLETINS.
- 10. SHOP DRAWINGS SHALL BE SUBMITTED TO THE AUTHORITIES HAVING JURISDICTION FOR REVIEW AND APPROVAL. APPROVED DRAWINGS SHALL THEN BE SUBMITTED TO THE ARCHITECT FOR REVIEW OF COMPLIANCE WITH DESIGN INTENT.
- 11. THE CONTRACTOR GUARANTEES THAT ALL WORK INSTALLED SHALL BE FREE OF ALL DEFECTS IN WORKMANSHIP AND MATERIAL FOR A PERIOD OF ONE YEAR FROM THE DATE OF THE CERTIFICATION OF COMPLETION AND ACCEPTANCE OF THE WORK.
- 12. ADDITIONAL SPRINKLER HEADS SHALL BE PROVIDED A5 REQUIRED AND CONFORM TO THE LATEST EDITION OF NFPA 13.
- 13. ADDITIONAL PIPING, PIPE HANGERS AND SUPPORTS SHALL CONFORM TO THE LATEST EDITION OF NFPA 13.
- 14. ALL SPRINKLER HEADS AND ESCUTCHEONS SHALL HAVE MOUNTING TYPE (FLUSH OR SEMI-RECESSED), FINISH AND COLOR AS SELECTED BY ARCHITECT.
- 15. ALL SPRINKLERS SHALL BE CENTERED WITHIN THE CEILING GRID, COORDINATE EXACT LOCATION WITH ARCHITECT PRIOR TO SUBMITTAL OF DRAWINGS TO FIRE DEPARTMENT.

MARK			WASTE	VENT	SU	PPLY	
MAININ	FIXTURE TYPE	DESCRIPTION	WASTE	VLINI	CW	HW	GENERAL NOTES
WC-1	TOILET (FLOOR MTD.) ADA	WALL HUNG TOILET	3"	2"	1"	-	1. ALL PIPING IN FINISHED ROOMS
L-1	LAVATORY (WALL HUNG)	COUNTER MOUNTED LAVATORY	1-1/2"	1-1/2"	1/2"	1/2"	IN A FURRED CHASE OR ABOVE CEILING. ACCESS PANELS IN GY FOR ALL VALVES, TRAPS, CLEAN
EDF-1	ELECTRIC WATER COOLER	ELKAY, EZ8, SINGLE LEVEL WALL MOUNTED @ ADA COMPLIANT HEIGHT WITH STAINLESS STEEL TOP, INTEGRAL REFRIGERATION SYSTEM TO PROVIDE 8.0 GPH OF 50° F DRINKING WATER @ 90° F AMBIENT TEMPERATURE. SYSTEM SHALL OPERATE @ 115 VOLT, FLA: 4.0, 370 WATTS, 55 LBS. PROVIDE WITH EZ-FLO/EASTMAN #04322 1/2" X 3/8" ANGLE STOPS WITH FLEXIBLE TUBE RISER AND LOOSE KEY MOUNTED BEHIND FIXTURE AND 1-1/2" P-TRAP ASSEMBLY.	1-1/2"	1-1/2"	1/2"	-	2. ACCESS PANELS SHALL BE FUR ARCHITECTURAL SPECIFICATION
WCO	WALL CLEANOUT	J.R. SMITH MODEL 442, LINE TYPE WITH LACQUERED CAST IRON BODY AND ROUND EPOXY COATED GASKETED COVER AND ROUND STAINLESS STEEL ACCESS COVER SECURED WITH MACHINE SCREW.	VARIES	-	-	-	
FCO	FLOOR CLEANOUT	J.R. SMITH FIG. NO. 4040, LINE TYPE WITH LACQUERED CAST IRON 2 PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, AND ADJUSTABLE NICKL-BRONZE STRAINER, ROUND SCORIATED COVER IN SERVICE AREA OR ROUND WITH DEPRESSED COVER TO ACCEPT FLOOR FINISH IN FINISHED FLOOR AREAS AND TRAP PRIMER CONNECTION	VARIES	-	-	-	
WHA	WATER HAMMER ARRESTOR	JR SMITH HYDROTOL MODEL (5005 TO 5050), SIZED IN ACCORDANCE W/ PDI STANDARD WH201, PROVIDE ACCESS PANEL.	-	-	-	-	WATER CA
BFP	REDUCED PRESSURE BACKFLOW PREVENTER	ZURN WILKINS MODEL # 975XL, AWWA COMPLIANT C511, ASSE® LISTED 1013, IAPMO® LISTED, BRONZE BODY WITH BRONZE AND PLASTIC INTERNAL PARTS AND SS SPRINGS. TWO (2) INDEPENDENTLY OPERATING SPRING LOADED CHECK VALVES, THIRD CHECK VALVE WHICH OPENS UNDER PRESSURE IN CASE OF DIAPHRAGM FAILURE, NON-THREADED VENT OUTLET: ASSEMBLED WITH TWO (2) GATE VALVES, STRAINER AND FOUR (4) TEST COCKS.	-	-	1/2"	-	LEVEL NAME NEW FIXTURES FUTURE FIXTURES TOTAL FIXTURES
FD-1	FLOOR DRAIN	WADE MODEL 1100-STD FLOOR DRAIN, 5" TOP SIZE, DURA-COATED CAST IRON BODY WITH BOTTOM OUTLET, WITH POLISHED BRONZE TOP AND LIGHT DUTY STRAINER. PROVIDE WITH WADE "TRAP GUARD" INSERT FOR ACTUAL FLOOR DRAIN MODEL AND SIZE PROVIDED, FLEXIBLE ELASTOMERIC PVC MATERIAL MOLDED INTO SHAPE OF DUCK'S BILL, OPEN TOP WITH CURL AT CLOSURE AT BOTTOM, ALLOWS WASTE WATER TO OPEN AND ADEQUATELY DISCHARGE FLOOR DRAIN THROUGH ITS INTERIOR. CLOSES AND RETURNS TO ORIGINAL MOLDED SHAPE AFTER WASTE WATER DISCHARGE IS COMPLETE.	2"	2"	-	-	19 FU = MECH GPM REQUIREMENT TOTAL CURRENT DEMAND (GPM)= SITE PRESSURE (PSI) PRESSURE LOSS THRU WATER MET

ELECTRIC WATER HEATER SCHEDULE									
MARK	MANUFACTURER	MODEL	STORAGE CAPACITY	CAPA EWT F°	ACITY LWT F°	VVAL15	RECOVERY 100 DEGREE RISE (GPH)	VOLT/Ø	REMARKS
WH-1	AO SMITH	EJC-10	10	40	140	4.5	18	120/1	123

NOTES:

(1) WATER HEATER SHALL BE PROVIDED WITH ASME RATED T&P RELIEF VALVE.

(2) PER DETAIL, PROVIDE THERMOSTATIC MIXING VALVE MODEL # POWERS LM49 WITH INTEGRAL CHECK VALVES AND INLET SCREENS.

PER DETAIL, PROVIDE EXPANSION TANK MODEL # AMTROL AX-15, WELDED STEEL, TESTED AND STAMPED IN ACCORDANCE WITH I AMPO RATED FOR 125 PSI WITH FLEXIBLE DIAPHRAGM SEALED INTO TANK AND STEEL LEGS OR SADDLE. PROVIDE WITH PRESS IAMPO, RATED FOR 125 PSI, WITH FLEXIBLE DIAPHRAGM SEALED INTO TANK AND STEEL LEGS OR SADDLE. PROVIDE WITH PRESSURE GAUGE AND AIR CHARGE FITTING, TANK DRAIN & PRECHARGED TO 12 PSI.

## **GENERAL NOTES**

STATIC LOSS 30 x 0.43 (PSI)

AVAILABLE PRESSURE (PSI)

/ERTICAL LENGTH (FT)

URTHEST FIXTURE DISTANCE (FT)

LLOWANCE FOR FITTINGS (FT)

PIPE = 23.6 X 100 / 205 FT =

DTAL DEVELOPED LENGTH (FT)

MAXIMUM ALLOWABLE LOSS PER 100 FT OF

- 1. ALL PIPING IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN A FURRED CHASE OR ABOVE THE SUSPENDED OR GYPSUM CEILING. ACCESS PANELS IN GYPSUM CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, CLEANOUTS, CONTROLS, ETC.
- 2. ACCESS PANELS SHALL BE FURNISHED AND INSTALLED UNDER THE ARCHITECTURAL SPECIFICATIONS.

WATER CALCULATION

70 6.5 12

15

12.9

23.6

150

30

25

205

11.5

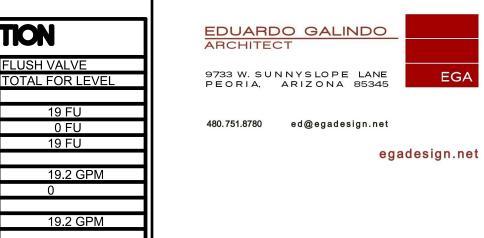


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# ADMINISTRATION BUILDING

EGA



ISSUED	REV	DATE
DART Submittal		15 May 2015
Site Development Plan 1		23 June 2015
30% Schematic Design		30 Oct. 2015
Pre-App & Architectural Board of Review Submittal		23 Apr. 2016
Architectural Board of Review Submittal		25 Jan. 2017
Architectural Board of Review		10 OCT 2022



## PLUMBING NOTES ABBREVIATIONS, SYMBOLS, AND SCHEDULES

—— N.T.S.

PLUMBING INDEX					
SHEET NO.	SHEET TITLE				
P0.0	PLUMBING NOTES ABBREVIATIONS SYMBOLS & SCHEDULES				
P2.0	PLUMBING FLOOR/ROOF PLANS (OPS)				
P2.1	PLUMBING RCP PLAN (OPS)				
P3.0	PLUMBING DETAILS				

PROJECT NUMBER

SCALE

DRAWING

DRAWING NUMBER

**P0.0** 

40903