

AIR HANDLER (HEAT PUMP) SCHEDULE

MARK	MFG. *	MODEL	CFM	COOLING MBH		COIL ENT. AIR		ADD. ELEC HEAT		WT (LBS)	ELECTRICAL				REMARKS		
				TOTAL	SENS.	db°F	wb°F	KW	MCA		MOP	VOLTS	PH	HP		MCA	MOP
HP-1	TRANE	TEM14A0C36841	1200	22	22	80	62	3.6	25	25	115*	208	1	1/2	3	15	W/120V, CONDENSATE PUMP, PROVIDE, BOTTOM FILTER ACCESS, PROGRAMMABLE T-STAT, 600 CFM O.A. DUCT SMOKE DETECTOR
HP-2	TRANE	TUA120	3600	119	92	80	64	5.0	12	15	500*	460	3	2	3.6	15	W/120V, CONDENSATE PUMP, PROVIDE, BOTTOM FILTER ACCESS, PROGRAMMABLE T-STAT, 1600 CFM O.A. DUCT SMOKE DETECTOR
HP-3	TRANE	TUA120	3600	119	92	80	64	5.0	12	15	500*	460	3	2	3.6	15	W/120V, CONDENSATE PUMP, PROVIDE, BOTTOM FILTER ACCESS, PROGRAMMABLE T-STAT, 1600 CFM O.A. DUCT SMOKE DETECTOR

CONDENSING UNIT SCHEDULE

MARK	MFG. *	MODEL	TOTAL CAP. MBH	AMB	ELECTRICAL				EER	WT	REMARKS
					MCA	MOP	VOLTS	PH			
CU-1	TRANE	4TUA4036A4000A	36	101	6	15	460	3	12.2	250*	W/ HAIL GUARD
CU-2	TRANE	TUA120E4	120	101	20	25	460	3	12.2	400*	DUAL REFRIGERANT CIRCUIT W/ HAIL GUARD
CU-3	TRANE	TUA120E4	120	101	20	25	460	3	12.2	400*	DUAL REFRIGERANT CIRCUIT W/ HAIL GUARD

EXHAUST FAN SCHEDULE

MARK	MFG.	MODEL	CFM	ESP	WATTS		MOTOR		WT	REMARKS
					V	PHNO.	SPDS.			
EF-1	COOK	GC542	300	0.35'	102	115	1	1	26 #	CEILING EXHAUSTER
EF-2	COOK	GC542	300	0.35'	102	115	1	1	26 #	CEILING EXHAUSTER
EF-3	COOK	GC168	150	0.35'	50	115	1	1	12 #	CEILING EXHAUSTER
EF-4	COOK	GC168	150	0.35'	50	115	1	1	12 #	CEILING EXHAUSTER

DIFFUSER SCHEDULE

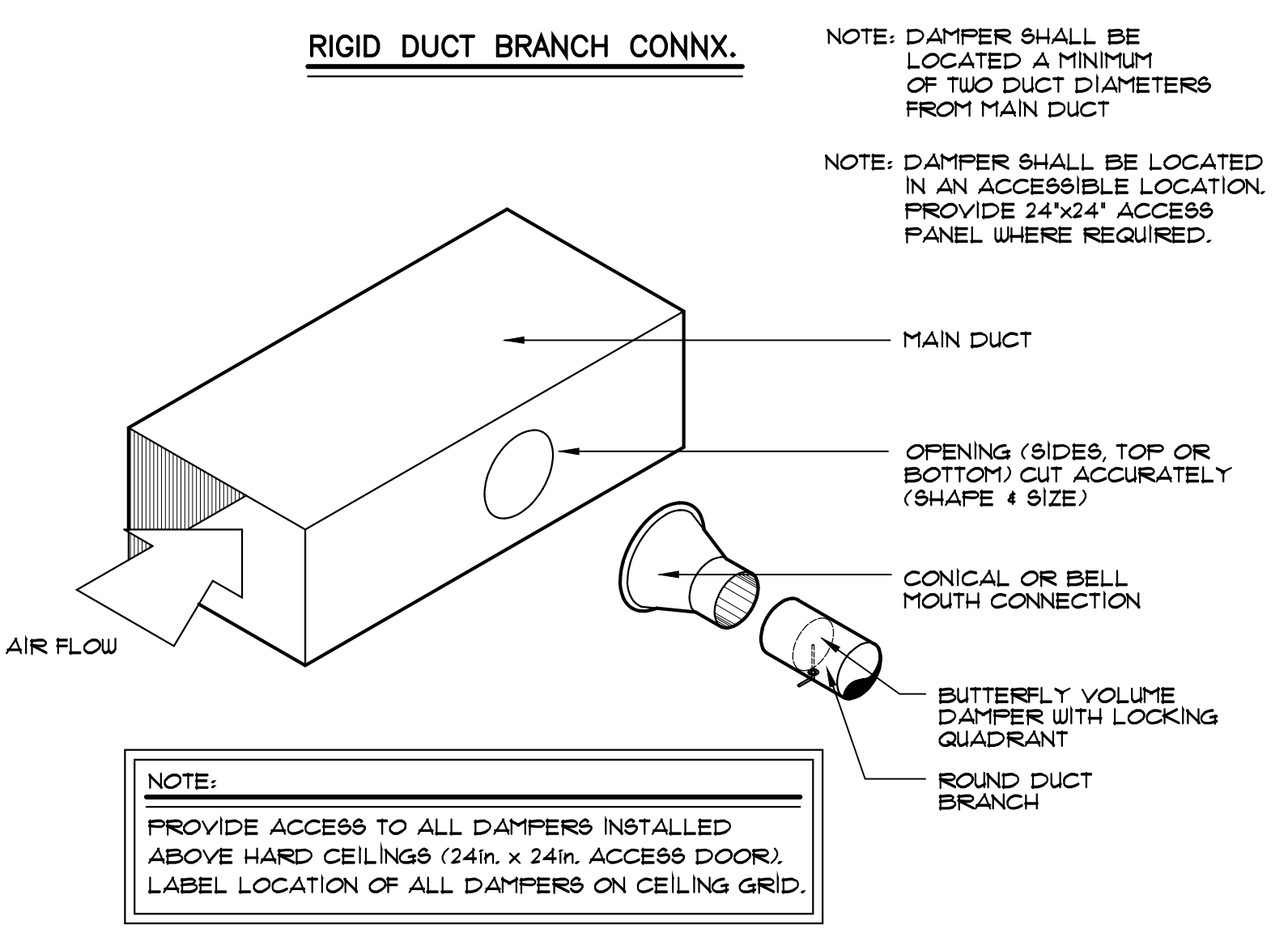
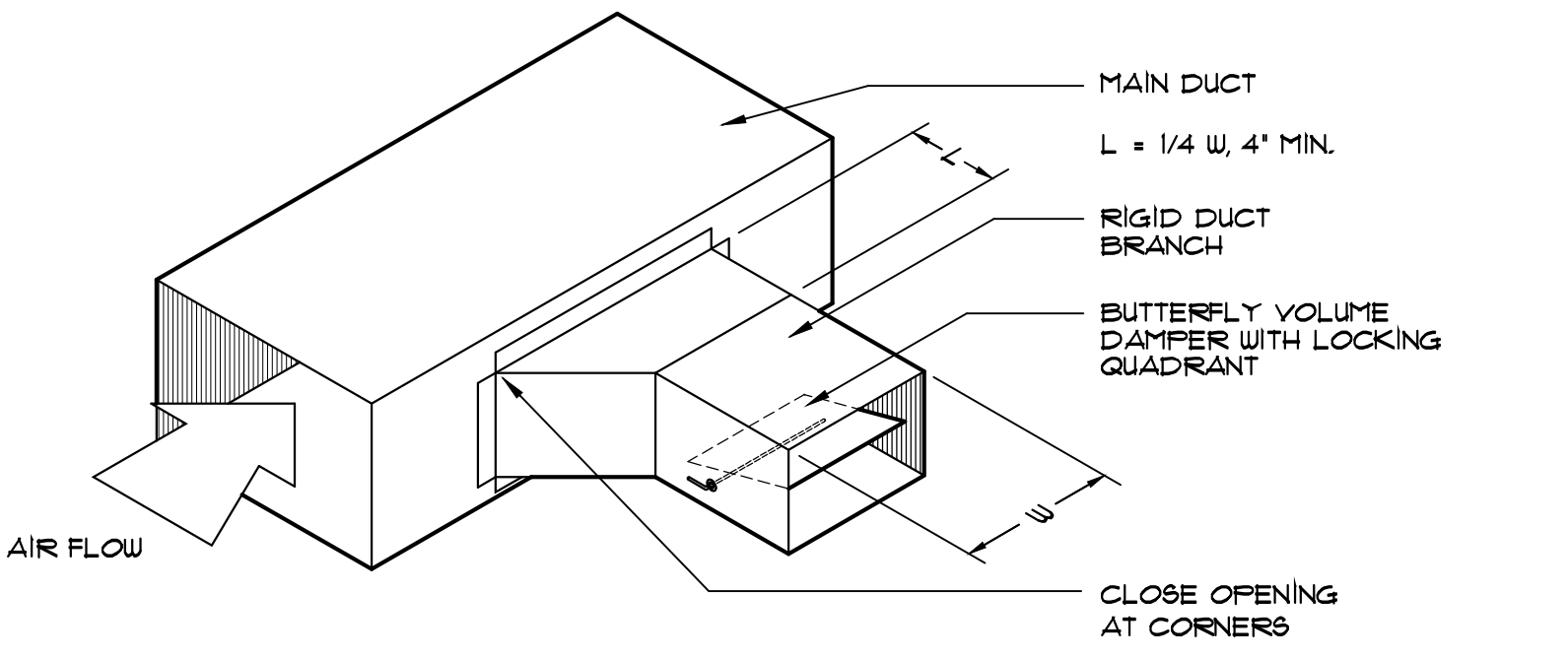
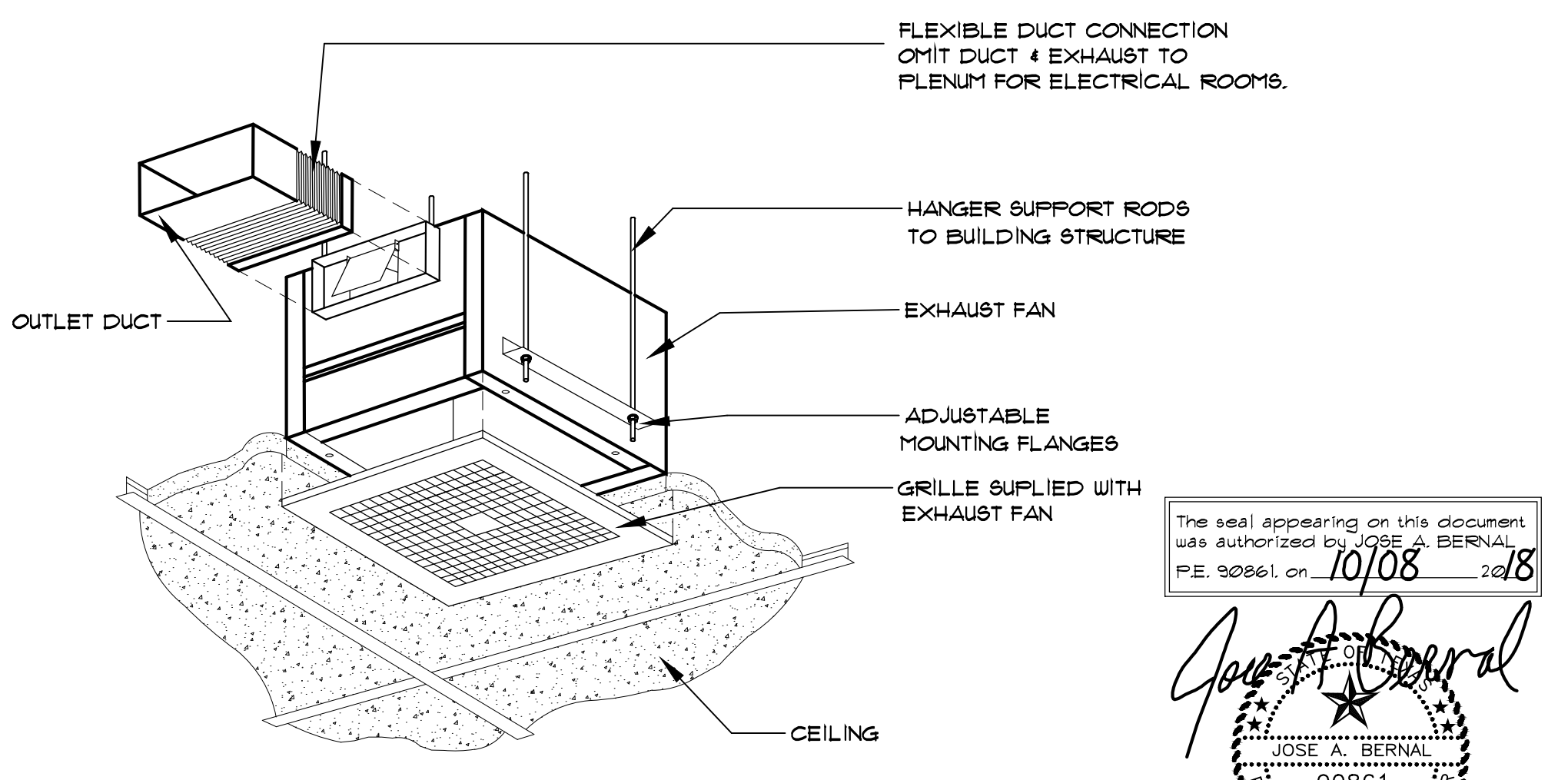
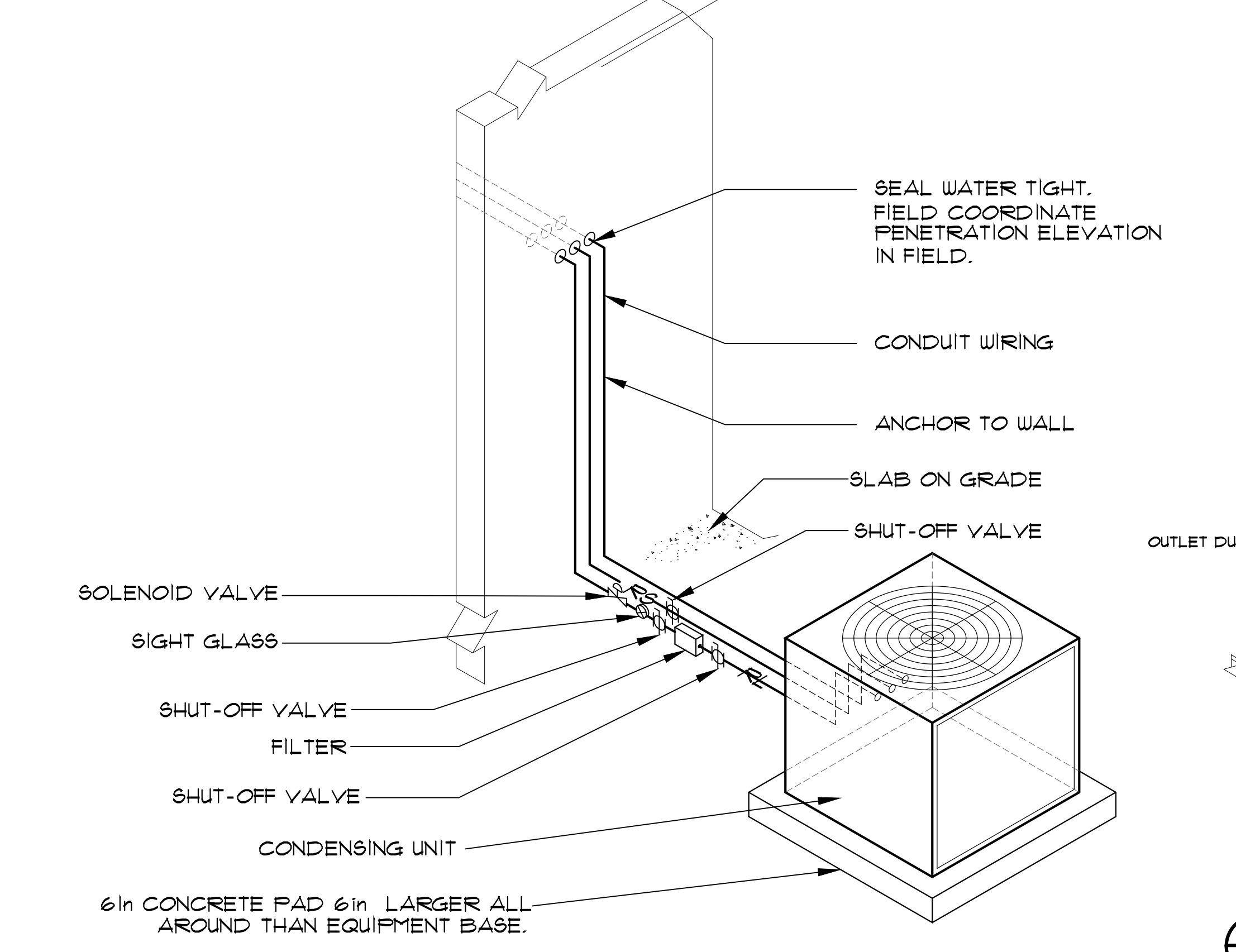
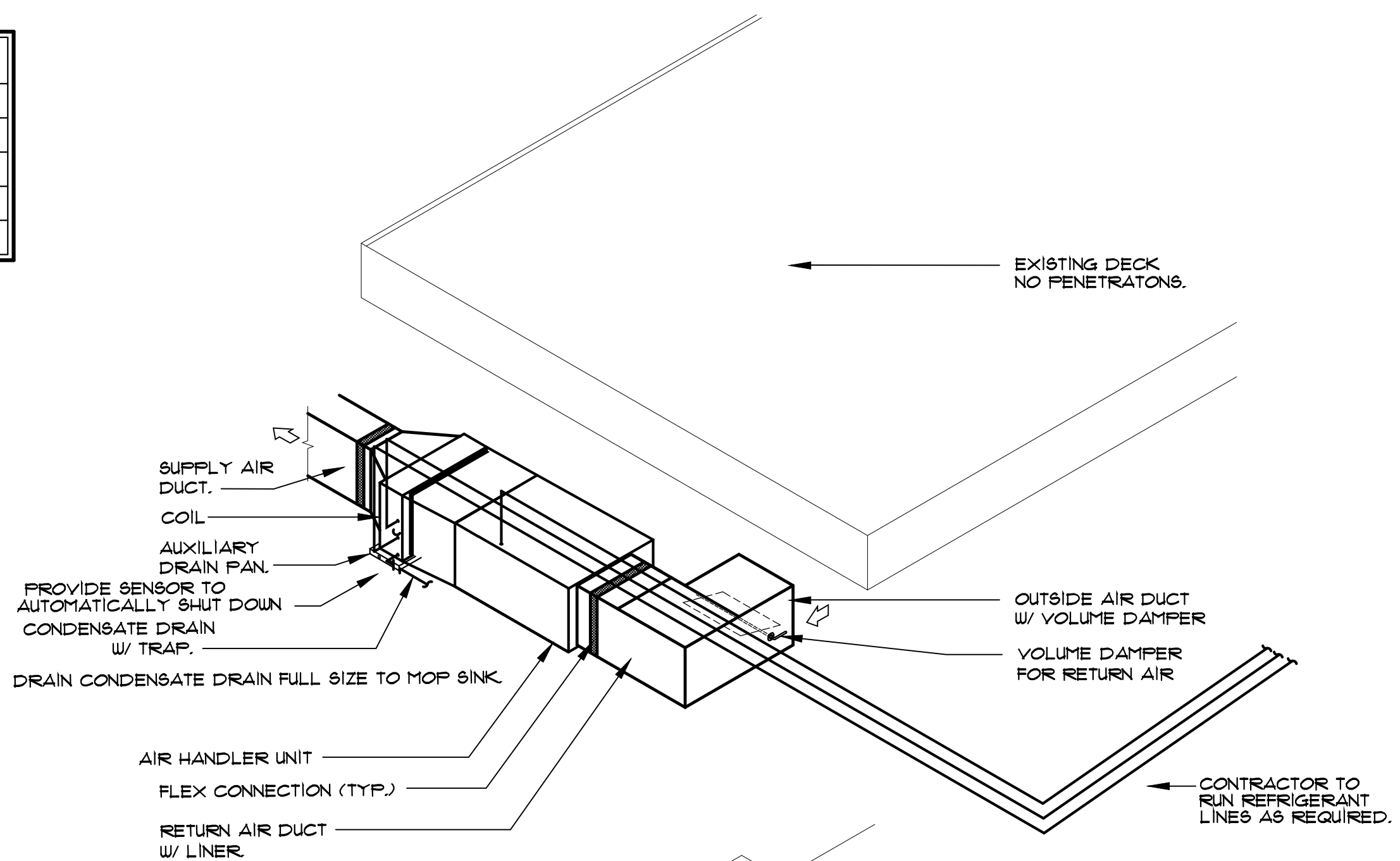
MARK	MFG.	MODEL	REMARKS
A	NAILOR	45DL2	DUCT MOUNT ROTOLOUVER, ALUMINUM CONSTRUCTION, COLOR WHITE W/OBD.
B	NAILOR	5IEC	CUBE CORE RETURN AIR GRILLE, ALL ALUMINUM CONSTRUCTION, SURFACE MOUNTED W/ OBD.
C	NAILOR	6200	4-WAY SUPPLY DIFFUSER, ALUMINUM CONSTRUCTION, COLOR WHITE W/OBD, PROVIDE FRAME FOR GYP. CEILING INSTALL.
D	RUSKIN	ELF315DX	FOUR INCH ALUMINUM OUTSIDE AIR LOUVER W/ INSECT SCREEN. PROVIDE FLANGE.
E	SEIHO	8FX-N	ALUMINUM VENT CAP FOR EXTERIOR USE, PROVIDE WITH INSECT SCREEN SEE PLAN FOR SIZE TO MATCH DUCT.

LEGEND

	NEW	EXISTING
HOT WATER SUPPLY	—HWS—	—EHWS—
HOT WATER RETURN	—HWR—	—EHW—
COLD WATER	—C—	—EC—
GAS LINE	—G—	—EG—
DUCTWORK (INSULATED)		
DUCTWORK ON ROOF		
DUCTWORK (UNINSULATED)		
MECHANICAL EQUIPMENT ON ROOF		
MECHANICAL EQUIPMENT BELOW ROOF		
PIPE TO BE REMOVED		
FLEXIBLE DUCT		
FAN COIL UNIT	FCU	EFCU
OUTSIDE AIR	OA	EOA
EXHAUST FAN	EF	EEF
FIN-TUBE	FT	EFT
MAKE-UP AIR UNIT	MUA	EMUA
RADIANT CEILING PANEL	RCP	ERCPC
BOILER	B	EB
PUMP	P	EP
FURNACE	F	EF
STORAGE TANK	ST	EOT
WATER HEATER	WH	EW
EVAPORATIVE COOLER	EC	EEC
CHEMICAL FEEDER	CF	ECF
AIR SEPARATOR	AS	EAS
EXPANSION TANK	ET	EET
THERMOSTAT	Ⓢ	Ⓢ
CONTROL SWITCH	Ⓢ	Ⓢ
RELIEF HOOD	RH	ERH
NEW WORK INTERFACE		
DIFFUSER		
KEYED SYMBOL		

GENERAL NOTES

- MECHANICAL CONTRACTORS ARE REQUIRED TO VISIT THE SITE PRIOR TO SUBMITTING A BID.
- DUCT DIMENSIONS SHOWN ARE AIR PASSAGE DIMENSIONS. ALL INSULATED DUCT IS TO BE LINED OR WRAPPED AS SPECIFIED.
- ALL THERMOSTATS AND CONTROL SWITCHES SHALL BE LOCATED 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED.
- SHEET METAL SADDLES SHALL BE PLACED UNDER PIPE INSULATION AT ALL HANGER LOCATIONS, WHERE HANGERS CONTACT BARE COPPER PIPING PROVIDE DIELECTRIC INSULATION.
- ALL EXPOSED SUPPORTS AND HANGERS FOR EQUIPMENT OR PIPING SHALL BE PAINTED TO MATCH SURROUNDING ROOM OR STRUCTURE.
- ALL INFORMATION TAKEN FROM OWNERS ORIGINAL DRAWINGS, CONTRACTOR TO FIELD VERIFY ACTUAL CONDITIONS.
- PROVIDE DIELECTRIC INSULATION ANYWHERE DISSIMILAR METALS CONTACT.
- PRIOR TO INSTALLATION OF ANY DUCT, PIPE, OR EQUIPMENT, CONTRACTOR IS TO FIELD VERIFY ALL LOCATIONS AND COORDINATE WITH EXISTING FIELD CONDITIONS.
- DUCT INSULATION (WRAP) SHALL BE A MINIMUM OF 1/2" PCF DENSELY 2" THICK WITH A THERMAL CONDUCTIVITY EQUAL TO 0.265 AT 15° F. WRAP SHALL HAVE AN F9K FIBERGLASS REINFORCED FOIL.
- COORDINATE LOCATION OF GRILLES, REGISTERS, OR DIFFUSERS WITH ELECTRICAL CONTRACTOR.
- ALL DUCTS SHALL BE CONSTRUCTED, SUPPORTED AND REINFORCED IN ACCORDANCE WITH THE RECOMMENDED CONSTRUCTION AS LISTED IN THE CURRENT EDITION OF HVAC METAL DUCT CONSTRUCTION STANDARDS WRITTEN BY S.M.A.C.N.A. AND THE MECHANICAL CODE.
- FLEX DUCT MAXIMUM LENGTH TO BE FIVE FEET (5').



1 DUCT BRANCH DETAIL SCALE: NTS

2 HEAT PUMP UNIT DETAIL SCALE: NTS

3 EXHAUST FAN DETAIL SCALE: NTS

EMPLOYEE FITNESS & WELLNESS CENTER
 EL PASO, TEXAS
 500 E SAN ANTONIO ST.

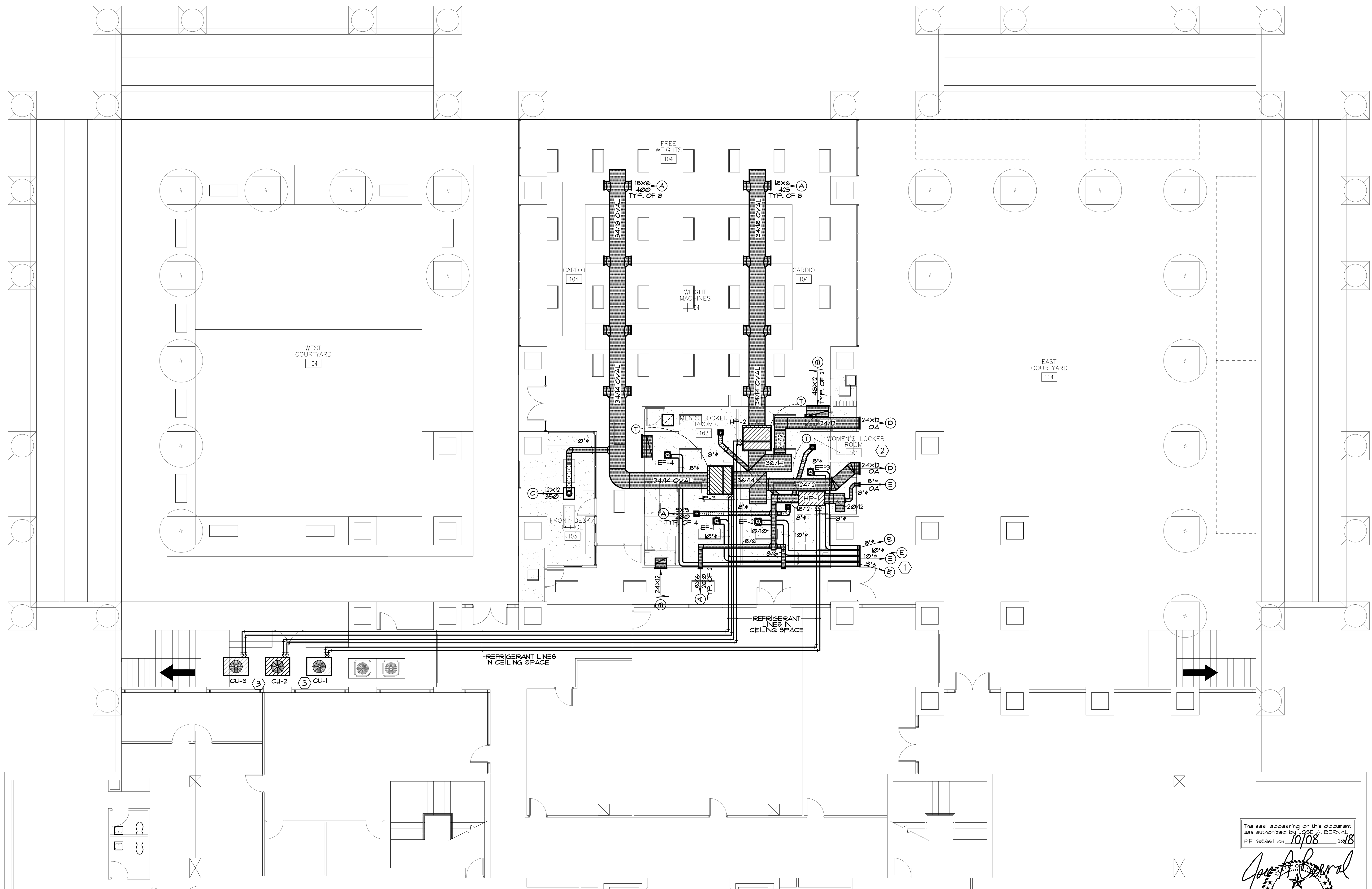
CONSTRUCTION DOCUMENTS

NO.	DATE	REVISION:

DATE: SEPTEMBER 22 - 2018

SHEET: **M1.0**
LEGEND, NOTES, SCHEDULES AND DETAILS

FLUID SYSTEMS, INC.
CONSULTING MECHANICAL ENGINEERS
REGISTRATION NUMBER: F-1161
12244 BATHMORE DR. • EL PASO, TEXAS 79928
OFFICE: (915) 856-9420



NEW MECHANICAL PLAN
 SCALE: 1/8" = 1'-0"

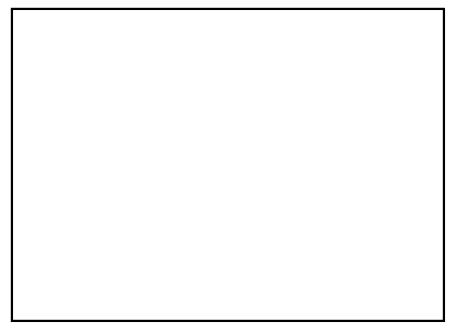
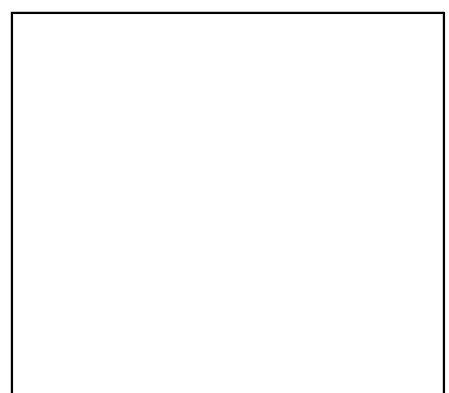
KEYED NOTES

- ① EXTEND EXHAUST DUCT THRU WALL AND PROVIDE VENT CAP AS SCHEDULED. PROVIDE WITH INSECT SCREEN.
- ② EXTEND OUTSIDE AIR DUCT THRU ROOF AND PROVIDE WALL CAP OR LOUVER AS SCHEDULED.
- ③ FIELD COORDINATE EXACT PLACEMENT OF EXTERIOR EQUIPMENT WITH OWNER AND ARCHITECT.

The seal appearing on this document was authorized by JOSE A. BERNAL, P.E. 90861, on 10/08 2018



FLUID SYSTEMS, INC.
 CONSULTING MECHANICAL ENGINEERS
 REGISTRATION NUMBER: F-1161
 12244 BATHMORE DR. • EL PASO, TEXAS 79928
 OFFICE: (915) 856-9420



EMPLOYEE FITNESS & WELLNESS CENTER
 500 E SAN ANTONIO ST. EL PASO, TEXAS

CONSTRUCTION DOCUMENTS

NO.	DATE:	REVISION:

DATE: SEPTEMBER 22 - 2018

SHEET:
M2.0
 NEW MECHANICAL PLAN

PLUMBING GENERAL NOTES

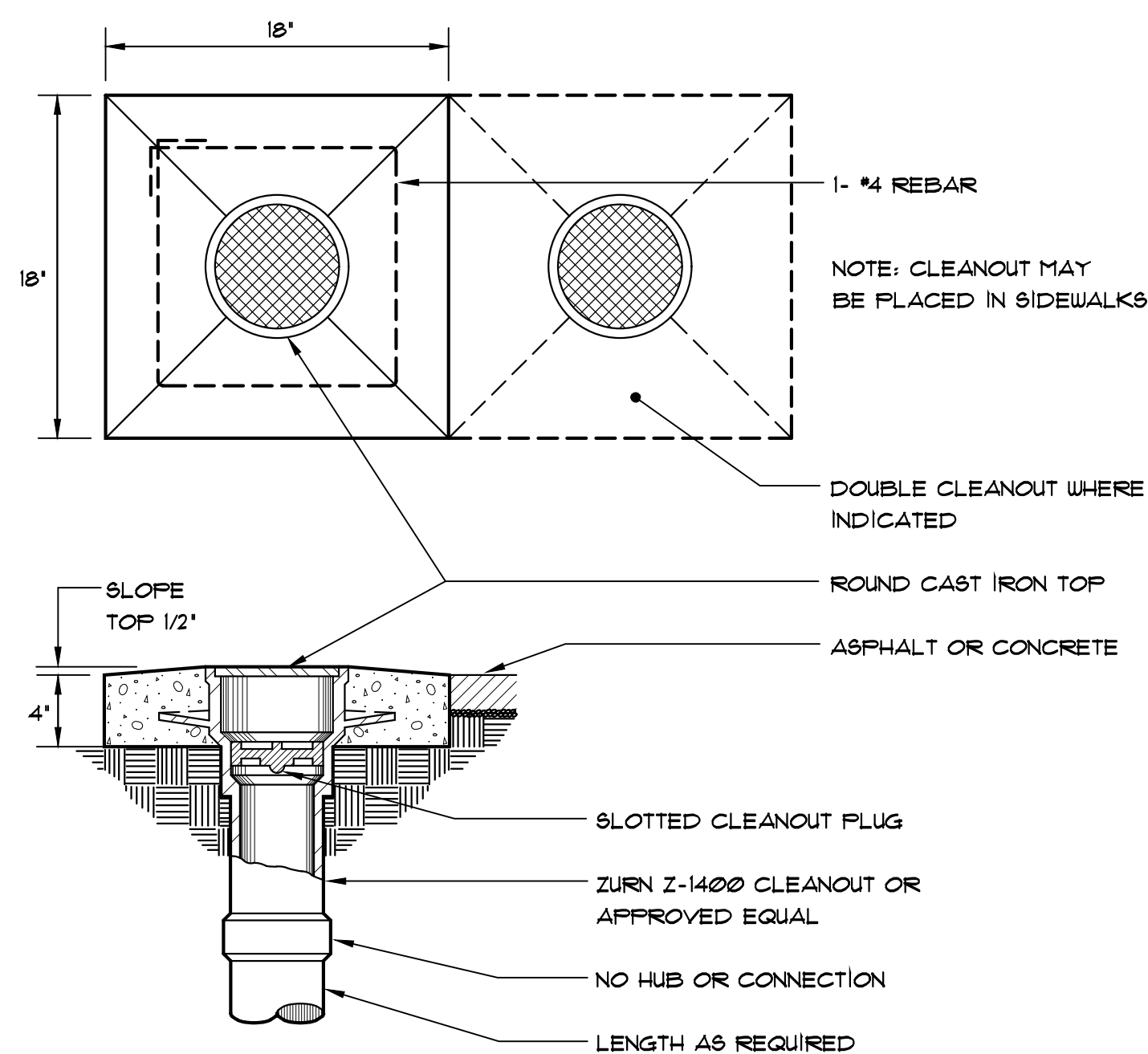
- CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING AND PROPOSED UTILITIES, AND SITE CONDITIONS PRIOR TO BEGINNING WORK.
- PROVIDE DIELECTRIC INSULATION FOR COPPER PIPE ANYWHERE IT CONTACTS DISSIMILAR METAL. THIS INCLUDES THE WATER HEATER CONNECTIONS.
- ALL PLUMBING FIXTURES SHALL MEET AND BE INSTALLED AT DIMENSIONS REQUIRED BY TEXAS ACCESSIBILITY STANDARDS FOR HANDICAPPED PERSONS.
- ALL SEWER VENTS THRU ROOF (VTR) SHALL BE NO CLOSER THAN 5 FT. TO EDGE OF ROOF AND A MINIMUM OF 10 FT. FROM ANY AIR INTAKE.
- ALL SEWER, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 PVC.
- DOMESTIC HOT AND COLD WATER LINES SHALL BE TYPE 'L' COPPER
- INSULATE ALL HOT WATER LINES AND EXTERIOR WATER LINES WITH TWO INCH FIBERGLASS ASJ INSULATION. PROVIDE ALUMINUM JACKETING ON EXTERIOR.
- ANY PLASTIC PIPING LOCATED IN PLENUM RETURN SPACE SHALL BE WRAPPED WITH 3M FIREMASTER BLANKET.
- DRAWINGS ARE DIAGRAMMATIC DO NOT SCALE DRAWINGS FOR INSTALLATION OF EQUIPMENT. COORDINATE WITH ARCHITECTURAL DRAWINGS.

LEGEND

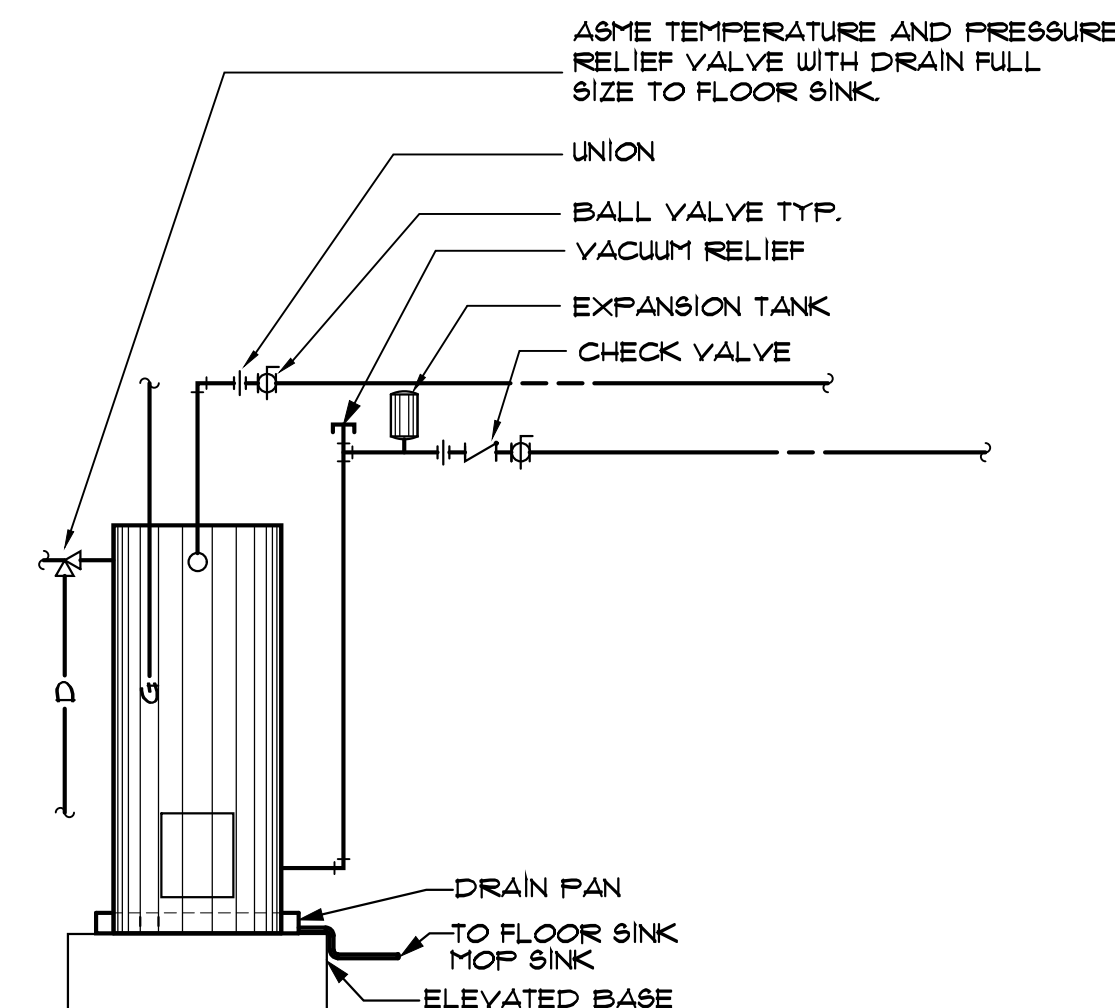
	NEW	EXISTING
SEWER (BURIED)	---	---
VENT LINE	---	---
COLD WATER LINE	---	---
HOT WATER LINE	---	---
CONDENSATE OR DRAIN LINE	---	---
GAS	---	---
MAKE-UP WATER LINE	---	---
WATER CLOSET (HANDICAPPED)	WC-H	WC-EH
LAVATORY (HANDICAPPED)	L-H	EL-H
SINK	S	ES
ELECTRIC WATER COOLER (HANDICAPPED)	EWC-H	EEWC-H
MOP SERVICE BASIN	M5B	EM5B
WALL CLEANOUT	WCO	EWCO
WATER HEATER	WH	EWH
VENT THRU ROOF	VTR	EVTR
PRESSURE REGULATOR	PR	
LINT TRAP	LT	
NEW WORK INTERFACE		
KEYED SYMBOL		

PLUMBING FIXTURE SCHEDULE									
MARK	MFGR.	NAME	MODEL	H	C	D	V	E	ACCESSORIES
L-1, 1H	ZURN		Z-5810	1/2'	1/2'	2'	1-1/2'	-	ZURN Z-8101 FAUCET, McGUIRE 8089 CAST BRASS P-TRAP, Z-8146 OFFSET GRID DRAIN, ZURN Z-8802-LK STOPS, HANDY-SHIELD INSULATION COVERS, PROVIDE BRADLEY 889-400 THERMOSTATIC MIXING VALVE, ASSE 1010.
ATP	PPP		500	-	1/2'	-	-	-	INSTALL ON ALL FLOOR DRAINS, AND FLOOR SINKS, INSTALL BEHIND ACCESS DOOR.
FD-1	ZURN		ZN-415B	-	-	3'	2'	-	C. I. BODY, 1"x, TYPE 'B' STRAINER W/ ATP.
HB-1	WOODFORD		24P-1/2	-	1/2'	-	-	-	
WHA-1	ZURN	SHOKTROL	Z-11200	-	-	-	-	-	INSTALL BEHIND ACCESS DOOR.
CO	ZURN		Z-1400	-	-	AS SHOWN	-	-	
WCO	ZURN		Z-1468	-	-	AS SHOWN	-	-	
M5B-1	FIAT		T5BC-6010	1/2'	1/2'	3'	2'	-	W/ 830-AA FAUCET, 832-AA HOSE AND BRACKET, 889 MOP HANGER, PROVIDE WIT ATP.
RP-1	BELL & GOSSETT		SERIES-100	-	AS SHOWN	-	-	-	5 GPM, 10 FT HD, ALL BRONZE CONSTRUCTION, 1/2 HP, 120V, 1 PHASE, W/ TEMP. SWITCH.
EWC-1H	HALSEY TAYLOR	HTHB-HAC8BLFV-WF		-	1/2'	2'	1-1/2'	YES	80 GPH OF 50°F WATER @ 90°F AMBIENT, McGUIRE 155A DRAIN, DEARBORN BRASS 151 P-TRAP, McGUIRE 2169 ANGLE STOPS, ZURN Z-1235 CARRIER, 120V, WITH BOTTLE FILLER. SEE ARCHITECTS DRAWINGS FOR MOUNTING HEIGHT.
WC-1	ZURN		Z-5655-BWL	-	1'	3'	2'	-	W/ ZURN Z-6000AV-HET FLUSH VALVE, ZURN MODEL Z595566 SEAT (WHITE), 128 GPF.
WC-1H	ZURN		Z-5665-BWL	-	1'	3'	2'	-	W/ ZURN Z-6000AV-HET FLUSH VALVE, ZURN MODEL Z595566 SEAT (WHITE), 11 GPF.
SHR-1H	SYMMONS		1-117-F8	1/2'	1/2'	3'	2'	-	PRESSURE BALANCING MIXING VALVE, WALL/HAND SHOWER W/FLEXIBLE METAL HOSE, IN LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE, 30" SLIDE BAR AND DIVERTER VALVE. MOUNT CONTROL VALVE AS SHOWN IN ARCH DUGS. PROVIDE 10 GPM SHOWER HEAD.
FD-2	ZURN		ZN-158	-	-	4'	-	-	C. I. BODY, 10" SQUARE TOP FROM-DECK DRAIN.
FS-1	ZURN		Z-1910	-	-	3'	2'	-	W/ 3/4 GRATE AND ATP.

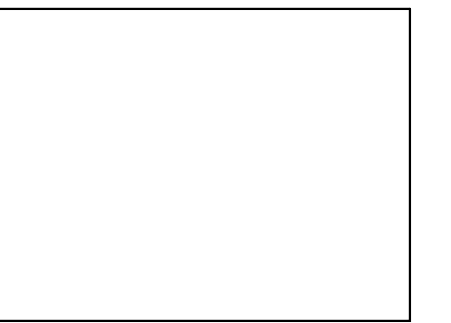
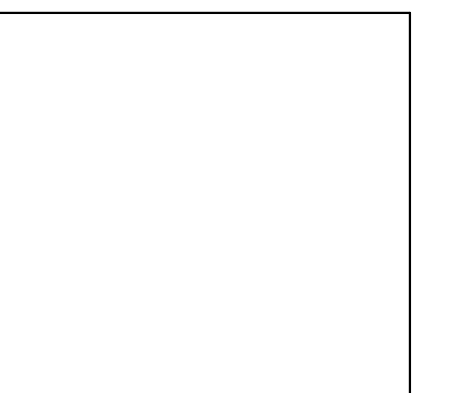
WATER HEATER SCHEDULE						
MARK	MFGR.	MODEL	INPUT KW	RECOVERY GPH @ 100' ΔT	CAPACITY GAL.	REMARKS
WH-1	AO SMITH	DSE-40-12	12	38	40	460V/ 3PH W/ EXPANSION TANK.



1 CLEANOUT DETAIL
SCALE: P1.0 NTS



2 WATER HEATER CONNECTION DETAIL
SCALE: P1.0 NTS



EMPLOYEE FITNESS & WELLNESS CENTER
500 E SAN ANTONIO ST. EL PASO, TEXAS

CONSTRUCTION DOCUMENTS

NO.	DATE:	REVISION:

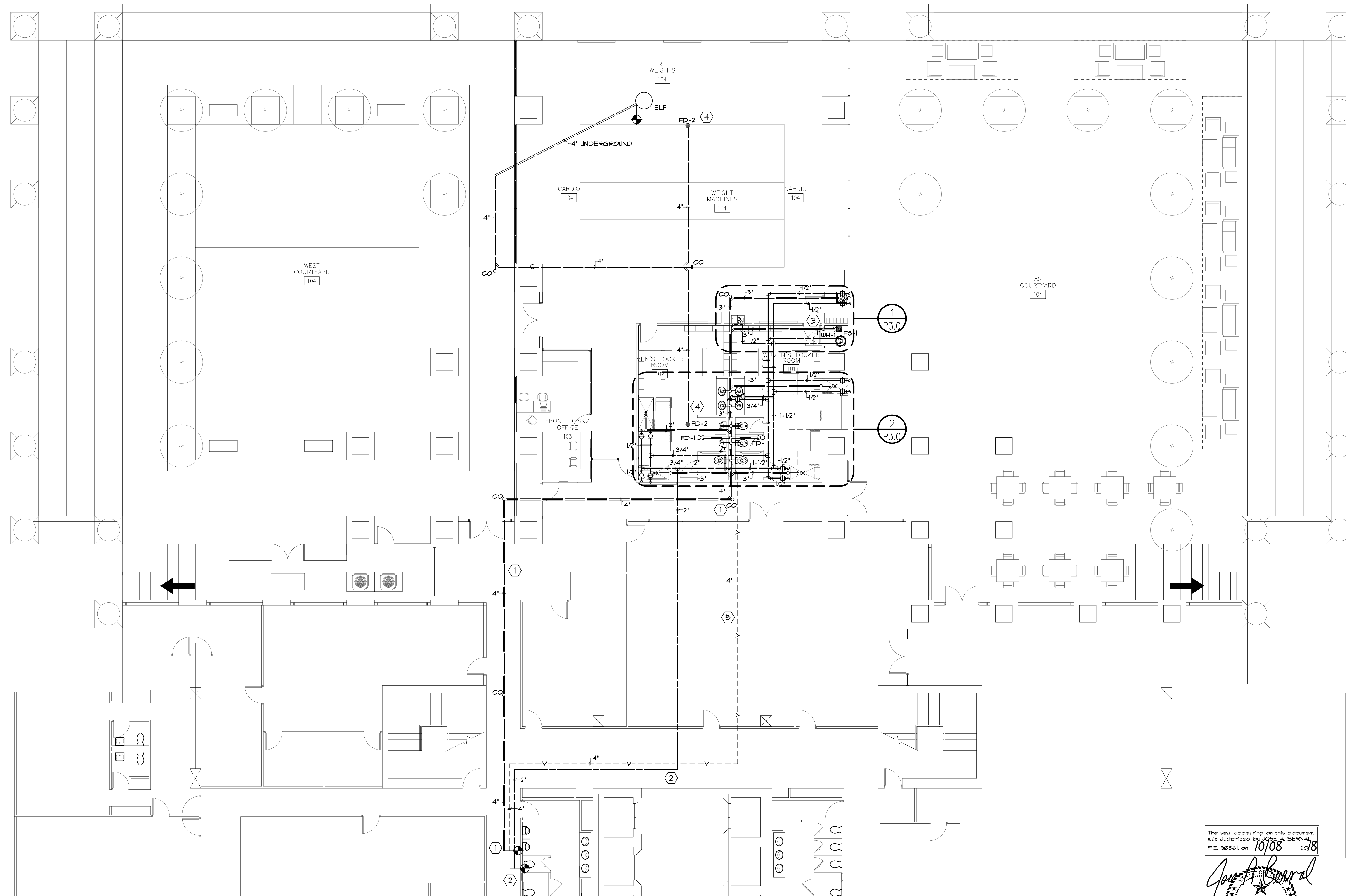
DATE: SEPTEMBER 22 - 2018

The seal appearing on this document was authorized by JOSE A. BERNAL, P.E. 90861, on 10/08/2018.



FLUID SYSTEMS, INC.
CONSULTING MECHANICAL ENGINEERS
REGISTRATION NUMBER: F-1161
12244 BATHMORE DR. EL PASO, TEXAS 79928
OFFICE: (915) 856-9420

SHEET: **P1.0**
LEGEND, NOTES, SCHEDULES AND DETAILS



NEW PLUMBING PLAN
 SCALE: 1/8" = 1'-0"

KEYED NOTES

- ① SAW CUT CONCRETE SLAB AND EXTEND NEW WASTE LINE TO EXISTING. FIELD VERIFY WITH OWNER EXACT CONNECTION POINT. PATCH AND REPAIR SLAB TO MATCH EXISTING.
- ② EXTEND DOMESTIC COLD WATER LINE FROM EXISTING WATER LINE. FIELD VERIFY WITH OWNER EXACT CONNECTION POINT.
- ③ EXTEND CONDENSATE DRAINS FROM ALL NEW UNITS TO FLOOR SINK.
- ④ INSTALL TWO NEW FLOOR DRAINS TO DRAIN DECK ABOVE. EXTEND LEADERS DOWN FURROUT AND UNDERGROUND TO EXISTING STORM WATER LIFT STATION. COORDINATE EXACT LOCATION OF DRAINS WITH ARCHITECTURAL DRAWING A12
- ⑤ EXTEND VENT TO EXISTING BUILDING VENT SYSTEM PIPING. FIELD VERIFY EXACT LOCATION.

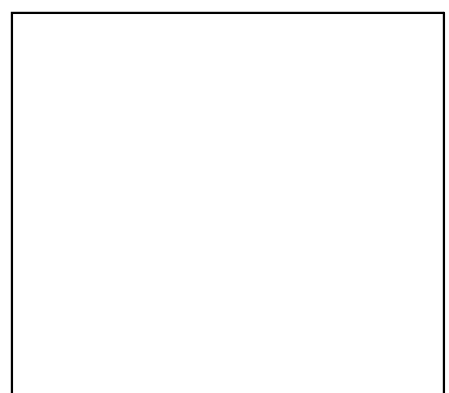
FIRE PROTECTION NOTES

1. NEW BUILDING ADDITION SHALL HAVE A NFPA APPROVED FIRE SPRINKLER SYSTEM. EXTEND FROM EXISTING BUILDING SYSTEM.
2. FIRE SPRINKLER HEADS SHALL BE LOCATED IN SYMMETRICAL PATTERN RELATED TO CEILING FEATURES SUCH AS GRID BEAMS, LIGHT FIXTURES, DIFFUSERS, ETC. AND WHERE APPLICABLE HEADS SHALL BE LOCATED SYMMETRICALLY WITH THE CEILING GRID, CENTERED IN TWO DIRECTIONS.
3. SYSTEM SHALL BE INTERFACED WITH BUILDING FIRE AND SMOKE ALARM.

The seal appearing on this document was authorized by JOSE A. BERNAL, P.E. 90861, on 10/08 2018



FLUID SYSTEMS, INC.
 CONSULTING MECHANICAL ENGINEERS
 REGISTRATION NUMBER: F-1161
 12244 BATHMORE DR. • EL PASO, TEXAS 79928
 OFFICE: (915) 856-9420



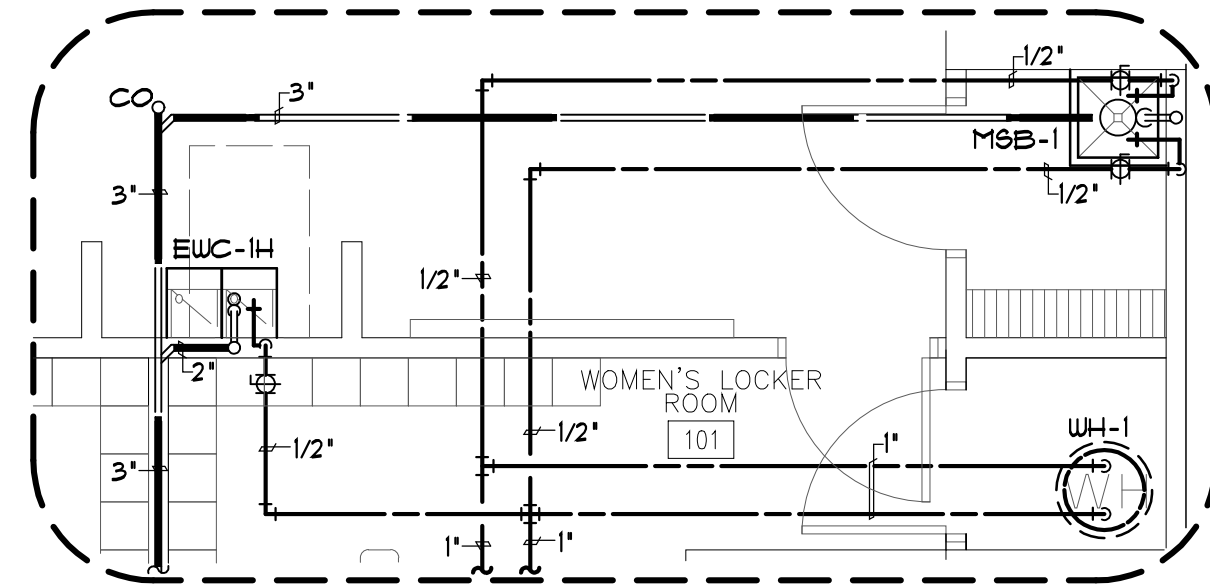
EMPLOYEE FITNESS & WELLNESS CENTER
 500 E SAN ANTONIO ST. EL PASO, TEXAS

CONSTRUCTION DOCUMENTS

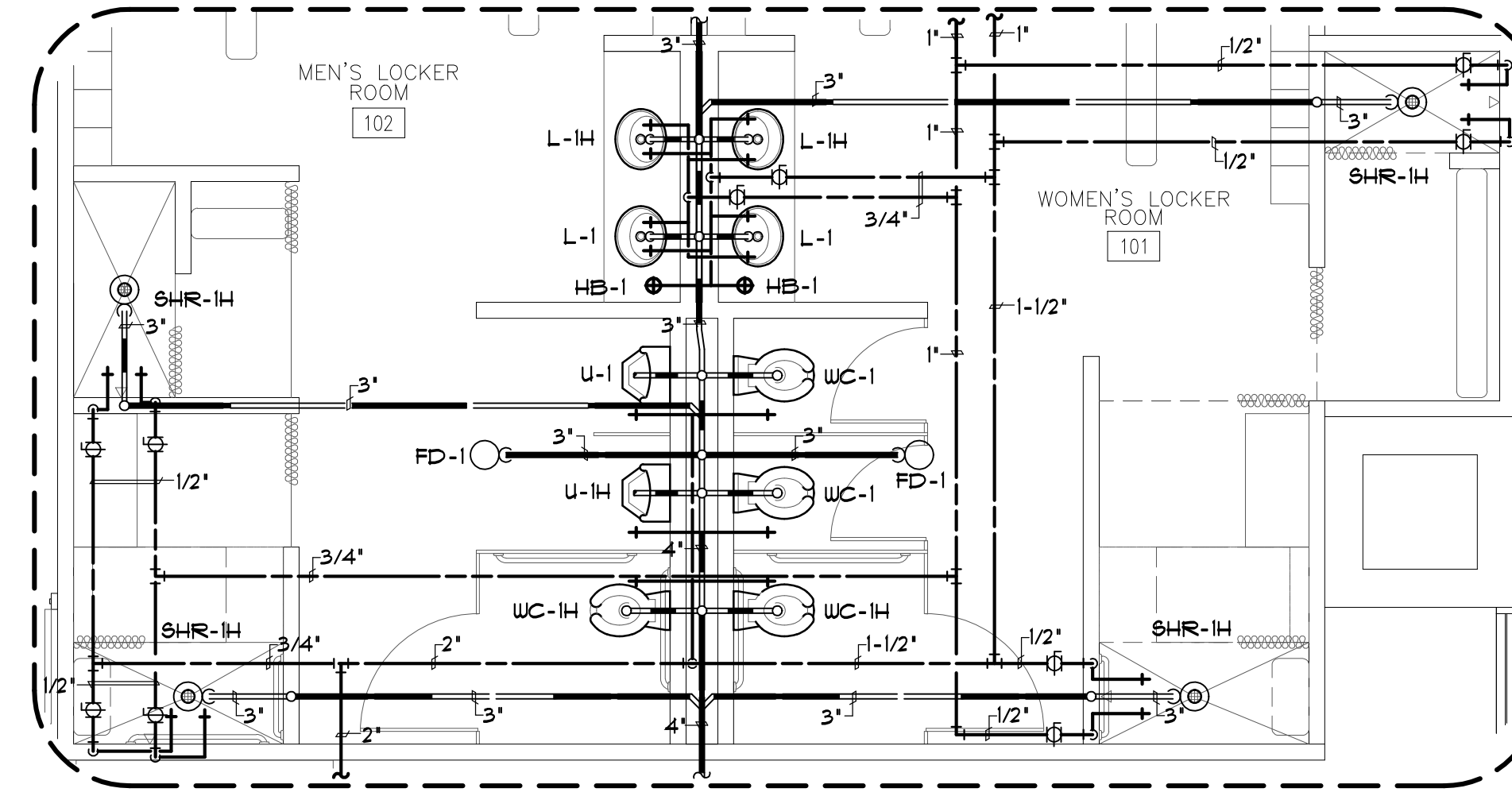
NO.	DATE	REVISION:

DATE: SEPTEMBER 22 - 2018

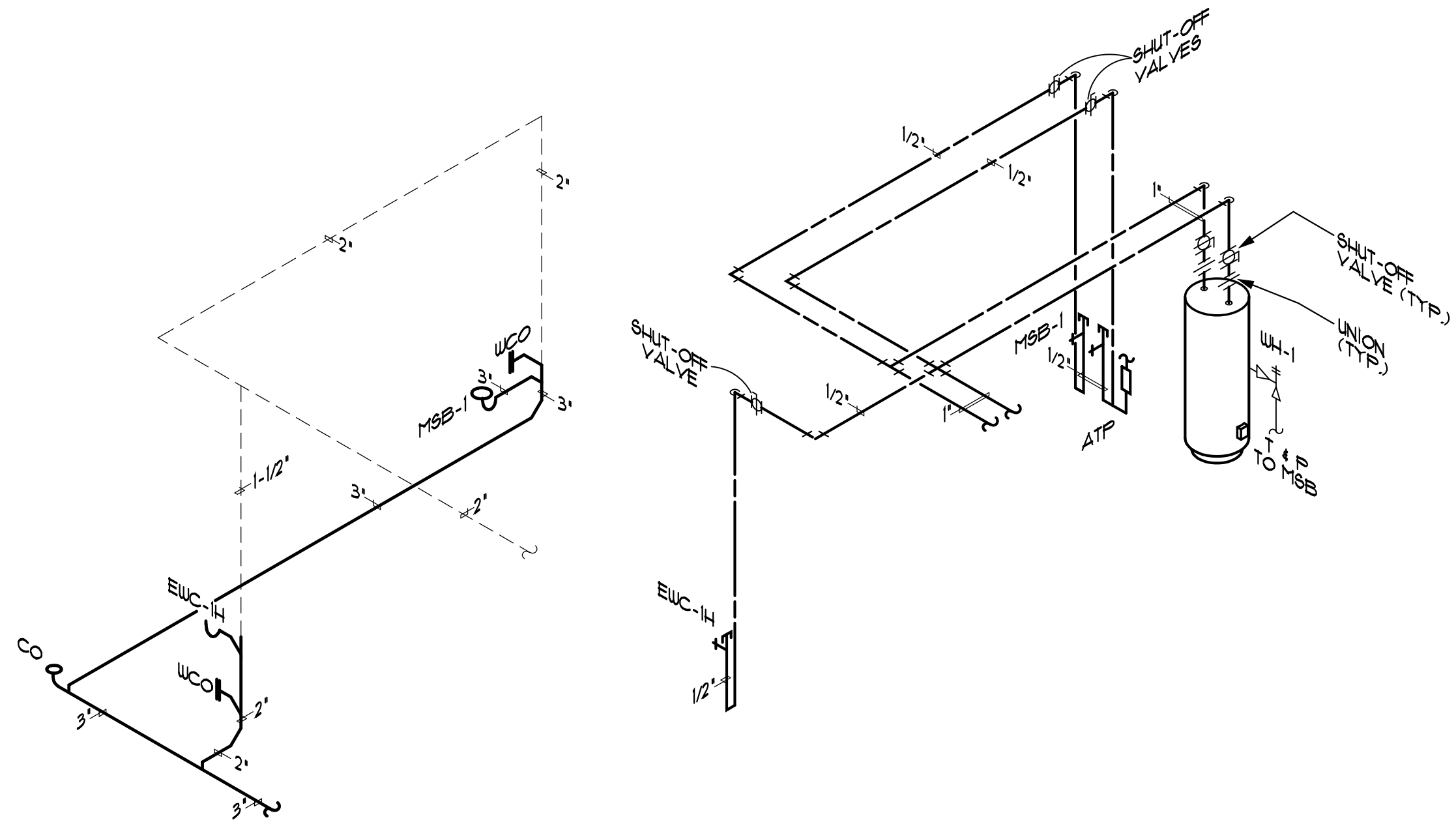
SHEET:
P2.0
 NEW PLUMBING PLAN



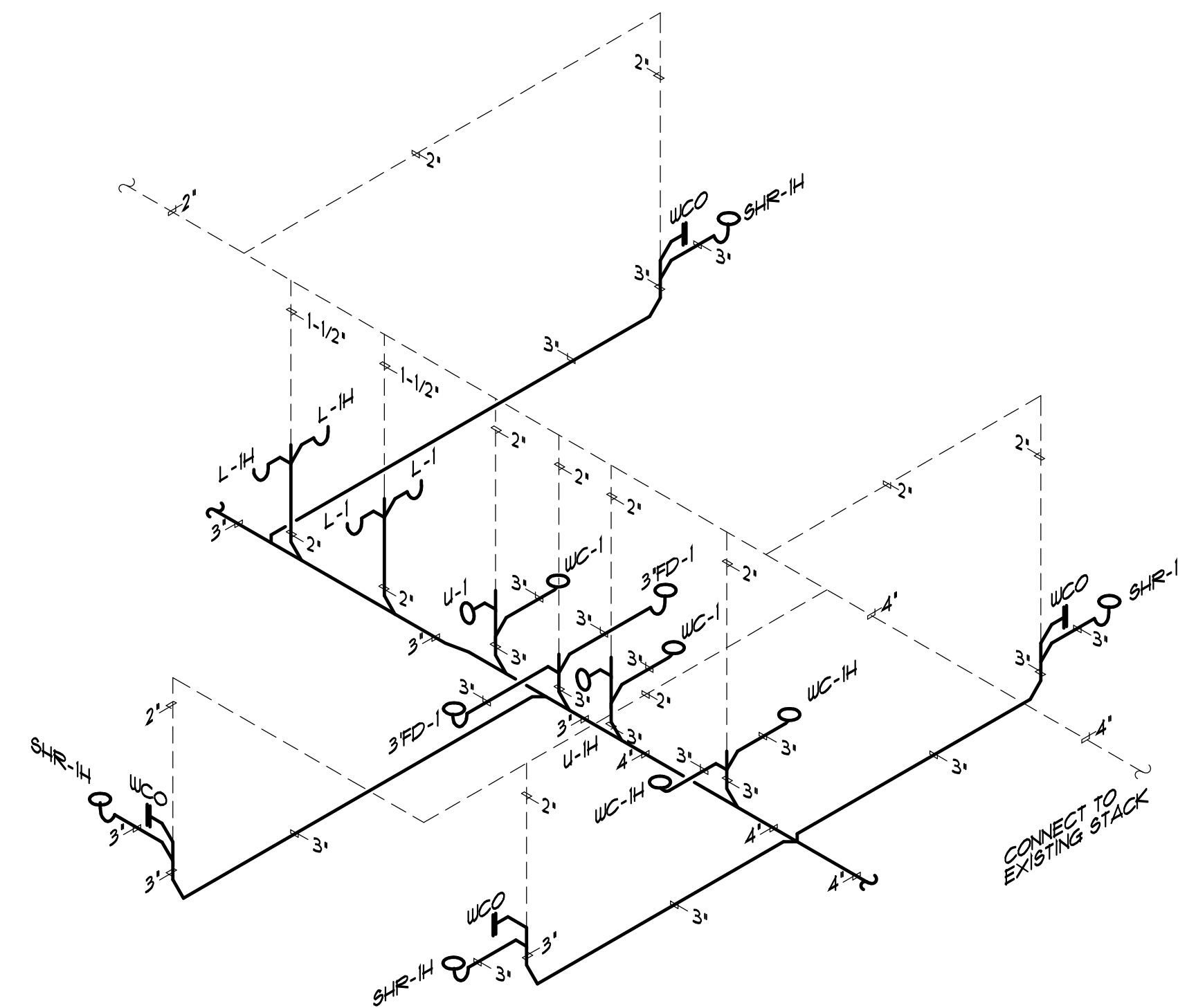
1 ENLARGED PLUMBING PLAN
 P3.0 SCALE: 1/4" = 1'-0"



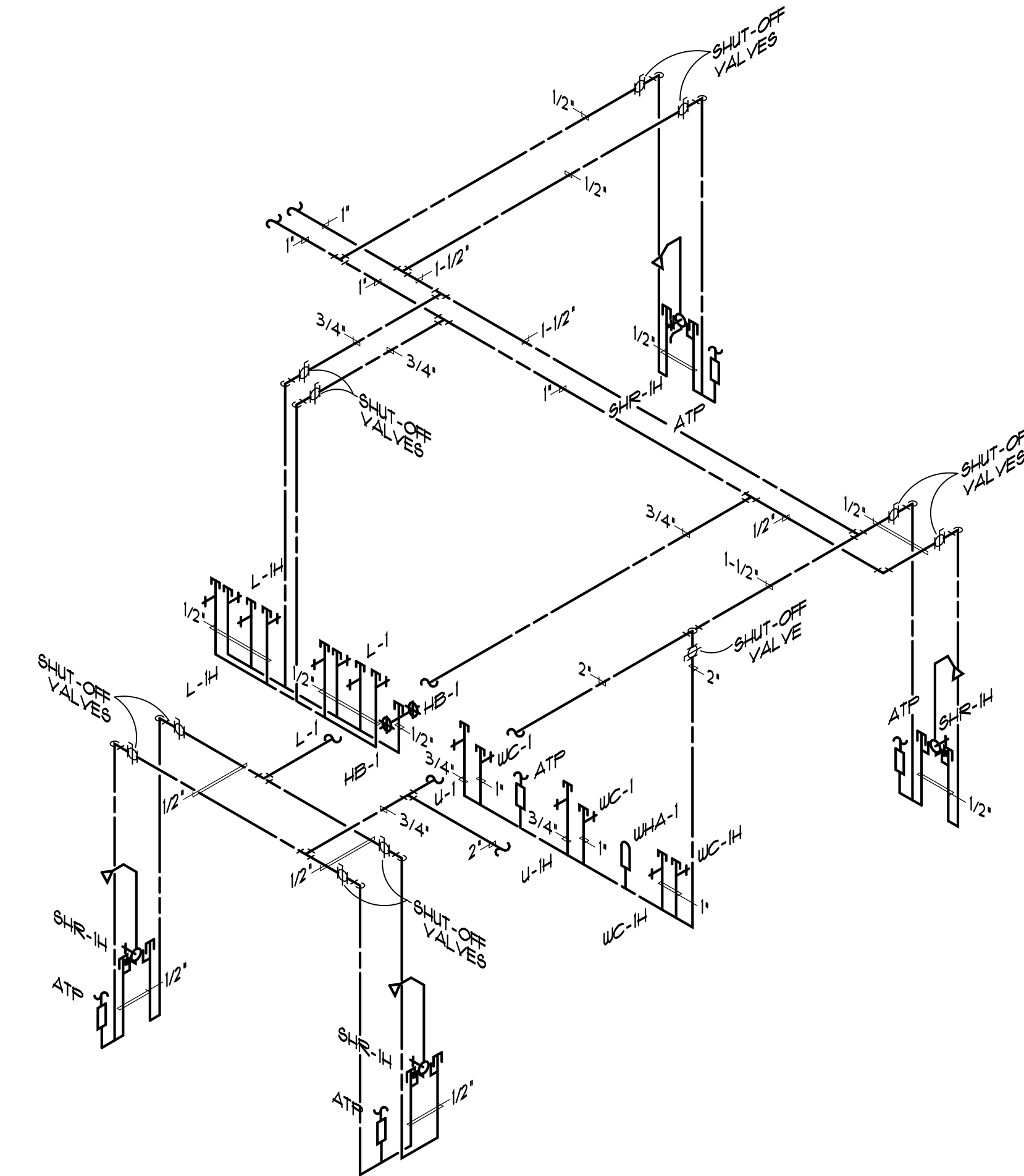
2 ENLARGED PLUMBING PLAN
 P3.0 SCALE: 1/4" = 1'-0"



1 WASTE & WATER RISER
 P3.0 SCALE: NTS

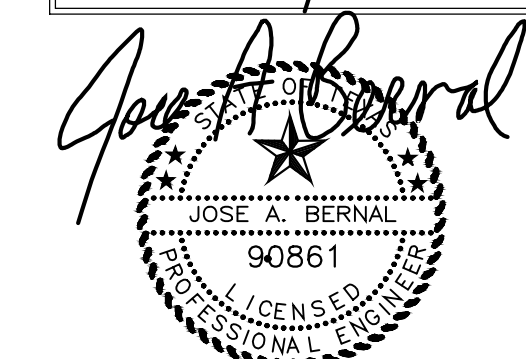


2 WASTE & WATER RISER
 P3.0 SCALE: NTS



NTS

The seal appearing on this document
 was authorized by JOSE A. BERNAL
 P.E. 90861, on 10/08 2018



FLUID SYSTEMS, INC.
 CONSULTING MECHANICAL ENGINEERS
 REGISTRATION NUMBER: F-1161
 12244 BATHMORE DR. • EL PASO, TEXAS 79928
 OFFICE: (915) 856-9420



EMPLOYEE FITNESS & WELLNESS CENTER
 500 E SAN ANTONIO ST. EL PASO, TEXAS

CONSTRUCTION DOCUMENTS

NO.	DATE:	REVISION:

DATE: SEPTEMBER 22 - 2018

SHEET:
P3.0
 ENLARGED PLUMBING WASTE & WATER RISER