

FIRE PROTECTION NOTES:

1.

ALL WORK SHOWN ON THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
2.

THIS CONTRACT REQUIRES THE PLUMBING, FIRE PROTECTION, AND MECHANICAL SUBCONTRACTORS TO CAREFULLY COORDINATE THEIR WORK WITH EACH OTHER, THE GENERAL CONTRACTOR AND OTHER TRADES. PRIORITY SHALL BE GIVEN IN THE FOLLOWING ORDER:

A.

GRAVITY FLOW: SEWER, STORM DRAIN, DOWNSPOUT AND CONDENSATE DRAIN PIPING.

B.

EQUIPMENT AND DUCTWORK.

C.

FORCED AND PRESSURE PIPING SUCH AS WATER AND FIRE SPRINKLER PIPING.
3.

ALL UNDERGROUND PRESSURE PIPING WITH MECHANICAL JOINTS SHALL HAVE CONCRETE REACTION BLOCKS AT ALL ELBOWS, TEES AND DEAD END PLUGS.
4.

FOR ALL FLOOR, WALL PARTITION, CEILING AND ROOF PENETRATIONS, SEE ARCHITECTURAL DRAWINGS FOR DETAILS.
5.

ALL PENETRATIONS OF REQUIRED FIRE RATED WALLS, PARTITIONS AND FLOORS SHALL BE PROVIDED WITH FIRE STOPPING MATERIAL PER IBC.
6.

NO CUTTING OR DRILLING OF ANY STRUCTURAL MEMBERS WILL BE PERMITTED WITHOUT THE APPROVAL OF THE STRUCTURAL ENGINEER. REFER TO STRUCTURAL DRAWING DETAILS FOR ALL MECHANICAL EQUIPMENT AND PIPING ATTACHMENTS TO STRUCTURAL MEMBERS.
7.

ALL FASTENERS, SUPPORTS, PIPE HANGERS, SPRING ISOLATORS, AND MISCELLANEOUS STEEL ITEMS INCLUDING BUT NOT LIMITED TO BOLTS, NUTS, SCREWS, RODS, PLATES, AND ANGLES, ETC. SHALL BE GALVANIZED UNLESS OTHERWISE NOTED OR SPECIFIED.
8.

PROVIDE ACCESS PANELS IN NON-ACCESSIBLE CEILINGS FOR ALL MECHANICAL ITEMS REQUIRING SERVICING AND MAINTENANCE. VOLUME DAMPERS, FIRE/ SMOKE DAMPERS, FIRE DAMPERS, CONDENSATE DRAINS, VALVES, ETC. PROVIDE FIRE RATED ACCESS PANELS AS REQUIRED. COORDINATE TYPE OF ACCESS PANEL WITH WALL OR CEILING CONTRACTOR. ACCESS PANELS SHALL BE 30"x30" MINIMUM UNLESS OTHERWISE NOTED.
9.

CONTRACTOR SHALL PERFORM THE FOLLOWING BEFORE INSTALLATION. NO INSTALLATION SHALL BEGIN UNLESS THE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS HAVE BEEN APPROVED.

A.

SUBMIT SIX (6) SETS OF COMPLETE WORKING DRAWINGS TO THE ENGINEER FOR REVIEW AND APPROVAL.

B.

SUBMIT SIX (6) SETS OF HYDRAULIC CALCULATIONS TO THE ENGINEER FOR REVIEW AND APPROVAL. IF COMPUTER CALCULATIONS ARE USED, SUBMITTAL SHALL INCLUDE LEGEND OF ALL ABBREVIATIONS AND STEP-BY-STEP DETAILED EXPLANATION OF PRINTOUTS. INCOMPLETE SUBMITTAL WILL BE RETURNED WITHOUT REVIEW.

C.

HYDRAULIC CALCULATION SHALL ADD 10% SAFETY FACTOR TO TOTAL REQUIRED WATER PRESSURE AT REQUIRED FLOW.

D.

ALL DRAWINGS AND CALCULATIONS SHALL BE STAMPED BY HAWAII INSURANCE RATING BUREAU AND FIRE SPRINKLER CONTRACTOR'S LICENSED ENGINEER.
10.

TWO (2) SETS OF COMPLETE WORKING PLANS AND HYDRAULIC CALCULATIONS STAMPED AND SIGNED BY A HAWAII LICENSED MECHANICAL ENGINEER SHALL BE SUBMITTED TO THE FIRE PROTECTION SPECIAL INSPECTOR (FPSI) FOR CODE COMPLIANCE REVIEW. ONE (1) SET WITH THE FPSI APPROVAL STAMP SHALL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND PERMITTING (DPP) BUILDING DIVISION ALONG WITH THE FPSI FINAL REPORT/LETTER PRIOR TO CLOSING OF THE BUILDING PERMIT.
11.

PROVIDE COMPLETE WET PIPE FIRE SPRINKLER PROTECTION FOR ENTIRE BUILDING PER NFPA 13 AND IBC, INCLUDING EXPOSED OR FINISHED CEILING SPACE, OCCUPIED OR UNOCCUPIED ROOM.
12.

OCCUPANCY HAZARD CLASSIFICATION SHALL BE IN ACCORDANCE WITH NFPA 13.
13.

SITE WATER DATA (BASED ON UNNUMBERED HYDRANT FLOW TEST PERFORMED BY SS DANNWAY ASSOCIATES INC ON JANUARY 27, 2009 AT KONA AIRPORT ON PAOO STREET):

STATIC PRESSURE = 100 PSI

RESIDUAL PRESSURE = 30 PSI

FLOW = 3038 GPM
14.

FIRE PROTECTION CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR AND PLUMBING CONTRACTOR AND OFFSET PIPING TO FIT WORK FROM ALL DISCIPLINES IN SPACE AVAILABLE.
15.

FIRE SPRINKLER HEADS AND PIPING INDICATED ON FLOOR PLANS ARE INTENDED TO SHOW GENERAL ROUTING OF PIPING AND TO PROVIDE CONTROL OF CEILING APPEARANCE. THEY SHOULD NOT BE INTERPRETED TO MEAN COMPLETE LAYOUT OF SPRINKLER SYSTEM (REFER TO NOTE NO. 3 ABOVE). FIRE SPRINKLER HEAD LOCATIONS SHALL NOT BE ALTERED EXCEPT WITH THE APPROVAL OF THE ARCHITECT AND ENGINEER.
16.

WHERE FIRE SPRINKLER HEADS ARE NOT SHOWN, THE CONTRACTOR SHALL DESIGN AND INSTALL A COMPLETE LAYOUT OF FIRE SPRINKLER HEADS TO PROVIDE AN EFFICIENT LAYOUT AND COVERAGE.
17.

ALL FIRE SPRINKLER CONTROL VALVES AND WATER FLOW SWITCHES, SHALL BE ELECTRICALLY SUPERVISED IN ACCORDANCE WITH THE 2006 IBC, SECTION 903.4.
18.

FIRE SPRINKLER SYSTEM ALARMS SHALL BE SUPERVISED, CONFORMING TO 2006 IBC, SECTION 903.4.2.
19.

WHEN VALVES ARE INSTALLED IN A HORIZONTAL POSITION, VALVE STEM SHALL BE INSTALLED IN AN UPRIGHT POSITION. IF THIS IS NOT POSSIBLE BECAUSE OF SPACE AND HEADROOM CONSTRAINTS, VALVE STEM SHALL BE INSTALLED IN AN INCLINED POSITION ABOVE THE HORIZONTAL CENTERLINE OF THE PIPE.
20.

BUTTERFLY VALVES MAY BE USED INSTEAD OF OUTSIDE SCREW AND YOKE GATE VALVES WHERE PERMITTED BY NFPA.
21.

SOLENOID VALVES AND LOCAL ALARMS SHALL BE SUITABLE FOR 115 VOLTS, SINGLE PHASE.
22.

EXPOSED PIPING SHALL PROVIDE MAXIMUM HEADROOM CLEARANCE. OFFSET SHALL BE PROVIDED TO ACHIEVE MAXIMUM HEADROOM CLEARANCE.
23.

ELEVATOR FIRE PROTECTION NOTES (SEE DIAGRAM 1/F5.01)

A.

FIRE SPRINKLER CONTRACTOR SHALL FURNISH AND INSTALL:

1)

PROVIDE FIRE SPRINKLER HEADS IN ALL ELEVATOR MACHINE ROOMS, AT TOP OF EACH ELEVATOR HOISTWAY AND IN EACH ELEVATOR PIT. SPRINKLER HEADS SHALL BE FUSIBLE LINK TYPE RATED FOR 250°F. SPRINKLER HEADS IN THE ELEVATOR PITS SHALL BE PROVIDED WITH HEAT SHIELDS.

2)

PROVIDE A SUPERVISED OUTSIDE SCREW AND YOKE (OS&Y) GATE VALVE AND SOLENOID VALVE IN EACH BRANCH LINE FEEDING THE ELEVATOR MACHINE ROOM AND TOP OF ELEVATOR HOISTWAY FIRE SPRINKLERS. FIRE SPRINKLER PIPE INSIDE ELEVATOR MACHINE ROOM AND ELEVATOR HOISTWAY DOWNSTREAM OF THE SOLENOID VALVES SHALL BE DRAINED AFTER PRESSURE TEST.

3)

PROVIDE A FLOW SWITCH AND A SUPERVISED OUTSIDE SCREW AND YOKE GATE VALVE IN EACH BRANCH LINE FEEDING ELEVATOR PIT FIRE SPRINKLERS.

4)

INSTALL ALL VALVES AND FLOW SWITCHES IN ACCESSIBLE LOCATION OUTSIDE ELEVATOR MACHINE ROOMS AND ELEVATOR HOISTWAYS.

5)

BRANCH LINES SHALL SUPPLY SPRINKLERS AT NO MORE THAN ONE FLOOR LEVEL. FIRE SPRINKLER RISERS AND PIPING SERVING OTHER AREAS ARE NOT PERMITTED INSIDE ELEVATOR MACHINE ROOMS AND ELEVATOR HOISTWAYS.

6)

PROVIDE A CONTROL PANEL FOR THE CONTROL OF ELEVATOR FIRE SPRINKLER WATER SUPPLIES, INTERFACE WITH FIRE ALARM SYSTEM AND INTERFACE WITH MAIN POWER SUPPLY TO THE ELEVATOR.

a)

SUPPLY THE CONTROL PANEL WITH STORAGE BATTERY BACKUP AND COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE SECONDARY POWER SUPPLY IN ACCORDANCE WITH PARAGRAPH 4.4.1.5 OF NFPA 72 (2002).

b)

THE CONTROL PANEL SHALL HAVE PROVISIONS FOR THE FIRE ALARM CONTRACTOR TO CONNECT TO THE FIRE ALARM SYSTEM AND FOR THE ELECTRICAL CONTRACTOR TO DISCONNECT THE MAIN POWER TO THE ELEVATOR. ALL ELEVATOR HEAT DETECTORS, VALVE SUPERVISORY SWITCHES, FLOW SWITCHES AND SOLENOID VALVES SHALL BE WIRED TO THE CONTROL PANEL AND MONITORED BY THE FIRE ALARM SYSTEM.

UPON ACTIVATION OF ONE OR MORE HEAT DETECTOR(S) OR FLOW SWITCH(ES), THE PANEL SHALL INITIATE A FIRE ALARM THROUGH THE FIRE ALARM SYSTEM; SHALL DISCONNECT THE MAIN LINE POWER SUPPLY TO THE AFFECTED ELEVATOR(S); AND AFTER THE ELEVATOR POWER IS SHUT OFF, THE CONTROL PANEL SHALL OPEN THE CORRESPONDING SOLENOID VALVE(S) ALLOWING WATER TO FLOW INTO THE SPRINKLER PIPE.

c)

7)

PROVIDE TRANSFORMERS, WIRING, CONDUITS AND ACCESSORIES FOR CONTROL AND INTERFACE OF FIRE PROTECTION SYSTEM WITH OTHER SYSTEMS.

8)

IN EACH ELEVATOR MACHINE ROOM PROVIDE A 10 POUND FIRE EXTINGUISHER, UL RATING 4A:60B:C WITH WALL MOUNTING BRACKET.

9)

COMPLY WITH REQUIREMENTS OF ASME/ANSI 17.1, NFPA 13 AND NFPA 72.

B.

WORK BY OTHER CONTRACTORS:

1)

ELECTRICAL CONTRACTOR SHALL PROVIDE PRIMARY POWER AND SECONDARY POWER SUPPLY TO THE CONTROL PANEL. (SEE PARAGRAPH 6.A. ABOVE.)

2)

ELECTRICAL CONTRACTOR SHALL PROVIDE NECESSARY DEVICES TO DISCONNECT MAIN LINE POWER SUPPLY TO EACH ELEVATOR AS DESCRIBED IN PARAGRAPH 6.C. ABOVE, INCLUDING BUT NOT LIMITED TO WIRING AND CONDUIT FROM THE CONTROL PANEL TO ELEVATOR MAIN POWER SHUTOFF.

3)

FIRE ALARM CONTRACTOR SHALL PROVIDE WIRING AND CONDUIT FROM THE CONTROL PANEL TO FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM SHALL MONITOR THE CONTROL PANEL INCLUDING BUT NOT LIMITED TO SUPERVISION OF OS&Y GATE VALVE, FLOW SWITCHES, HEAT DETECTOR CIRCUITS AND ALARM CONDITIONS.

4)

PROVIDE RATE-OF-RISE HEAT DETECTORS IN ALL ELEVATOR MACHINE ROOMS, AND AT TOP OF EACH ELEVATOR HOISTWAY. LOCATE HEAT DETECTORS IN ACCORDANCE WITH NFPA 72. HEAT DETECTOR CIRCUITS SHALL BE SUPERVISED. FAILURE OF CIRCUIT OR ACTUATION OF DETECTOR SHALL BE ANNUNCIATED AT THE FIRE ALARM PANEL.

24.

ALL HEAT AND SMOKE DETECTORS SHALL BE PROVIDED BY A SEPARATE FIRE ALARM SYSTEM CONTRACTOR, SEE ELECTRICAL SPECIFICATION SECTION.

25.

PROVIDE PRESSURE GAUGES AS REQUIRED BY NFPA 13: INSTALLATION OF SPRINKLER SYSTEMS,

26.

PROVIDE SPARE SPRINKLER HEADS, PROPER STOPPERS, AND SPECIAL SPRINKLER WRENCH STORED IN A METAL CABINET IN THE MECHANICAL ROOM. SPRINKLER WRENCH TO BE USED IN THE REMOVAL AND INSTALLATION OF SPRINKLER HEADS PER NFPA 13-2007, PARAGRAPH 6.2.9.

27.

PROVIDE SEISMIC PROTECTION FOR PIPING TO PREVENT DAMAGE FROM EARTHQUAKES PER BUILDING CODE.

28.

BOTTOM OF FIRE EXTINGUISHER CABINETS SHALL BE INSTALLED AT 26.5" ABOVE THE FINISHED FLOOR; SEE PLANS FOR LOCATIONS.

FIRE PROTECTION LEGEND

	ACV	ALARM CHECK VALVE
	AFF	ABOVE FINISHED FLOOR
	AFFF	AQUEOUS FILM FORMING FOAM
	AFG	ABOVE FINISHED GRADE
	AP	ACCESS PANEL
	BV	BUTTERFLY VALVE
	CONN	CONNECT OR CONNECTION
	CONT	CONTINUATION
	CV	CHECK VALVE
	DCV	DOUBLE CHECK VALVE
	DN	DOWN
	EXST	EXISTING
	FDC	FIRE DEPARTMENT CONNECTION
	FE	FIRE EXTINGUISHER
	FEC-R	FIRE EXTINGUISHER CABINET RECESSED
	FEC-S	FIRE EXTINGUISHER CABINET SURFACE MOUNTED
	FEC-SR	FIRE EXTINGUISHER CABINET SEMI-RECESSED
	FL SW	FLOW SWITCH
	FLXC	FLEXIBLE CONNECTOR
	FSPK	FIRE SPRINKLER
	GC	GENERAL CONTRACTOR
	GLV	GLOBE VALVE
	GV	GATE VALVE
	OS & Y	OUTSIDE SCREW AND YOKE
	PC OR GC	PLUG COCK, OR GAS COCK
		PENDENT FIRE SPRINKLER HEAD
	PG	PRESSURE GAUGE
	PS	PRESSURE SENSOR/PRESSURE SWITCH
	REL D	RELIEF DRAIN
	STR	STRAINER
	SV	SOLENOID VALVE
	TERM	TERMINATE
	TS	TEMPERATURE SENSOR/TAMPER SWITCH
		UPRIGHT FIRE SPRINKLER HEAD
		SIDEWALL FIRE SPRINKLER HEAD

Airports Division
Department of Transportation
State of Hawaii

THE WORK AND PROGRESS OF THIS PROJECT
LEFT UNCOMPLETED ARE THE RESPONSIBILITY OF THE
PROJECT TEAM. THE OWNER AND ENGINEER.

LICENSE EXPIRATION DATE: 04/30/14

DSGN.	DRWN.	CHKD.	APPD.
FFU	RAAC	BH	LC

KEY PLAN / NOTES:

	3/21/12	DCAB COMMENTS
NO.	DATE	REVISION

AS-BUILT

12 - 5 - 2014

PROJECT TITLE:

ARRF FACILITY IMPROVEMENTS
AT KONA INTERNATIONAL
AIRPORT AT KEAHOLE

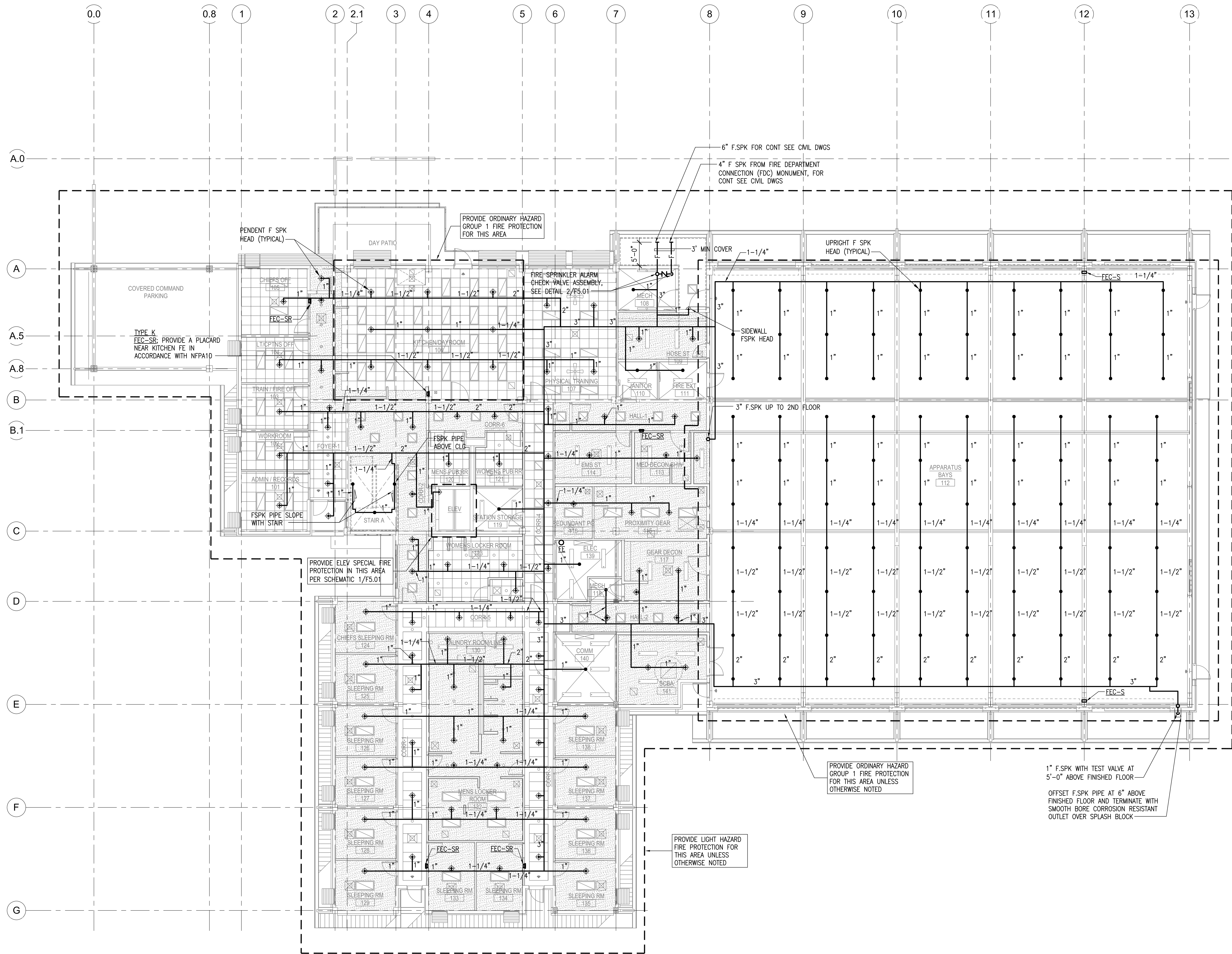
PROJECT NO.:

STATE PROJECT NO. AH2044-19
AIP PROJECT NO. 3-15-0008-XX

SHEET TITLE:

FIRE PROTECTION LEGEND
AND NOTES

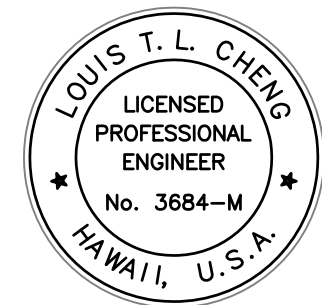
DATE:	02/17/2012	F0.01
DWG. NO.:		
OF		



1 GROUND FLOOR FIRE PROTECTION PLAN
F1.01 SCALE: 1/8" = 1'-0" NORTH



Airports Division
Department of Transportation
State of Hawaii



THE WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND I AM A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF HAWAII.

Louis T. L. Cheng
LICENSE EXPIRATION DATE: 04/30/14

DSGN.	DRWN.	CHKD.	APPD.
FFU	RAAC	BH	LC

KEY PLAN / NOTES:

NO.	DATE	REVISION
1	3/21/12	DCAB COMMENTS

AS-BUILT
12-5-2014

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PROJECT NO.:

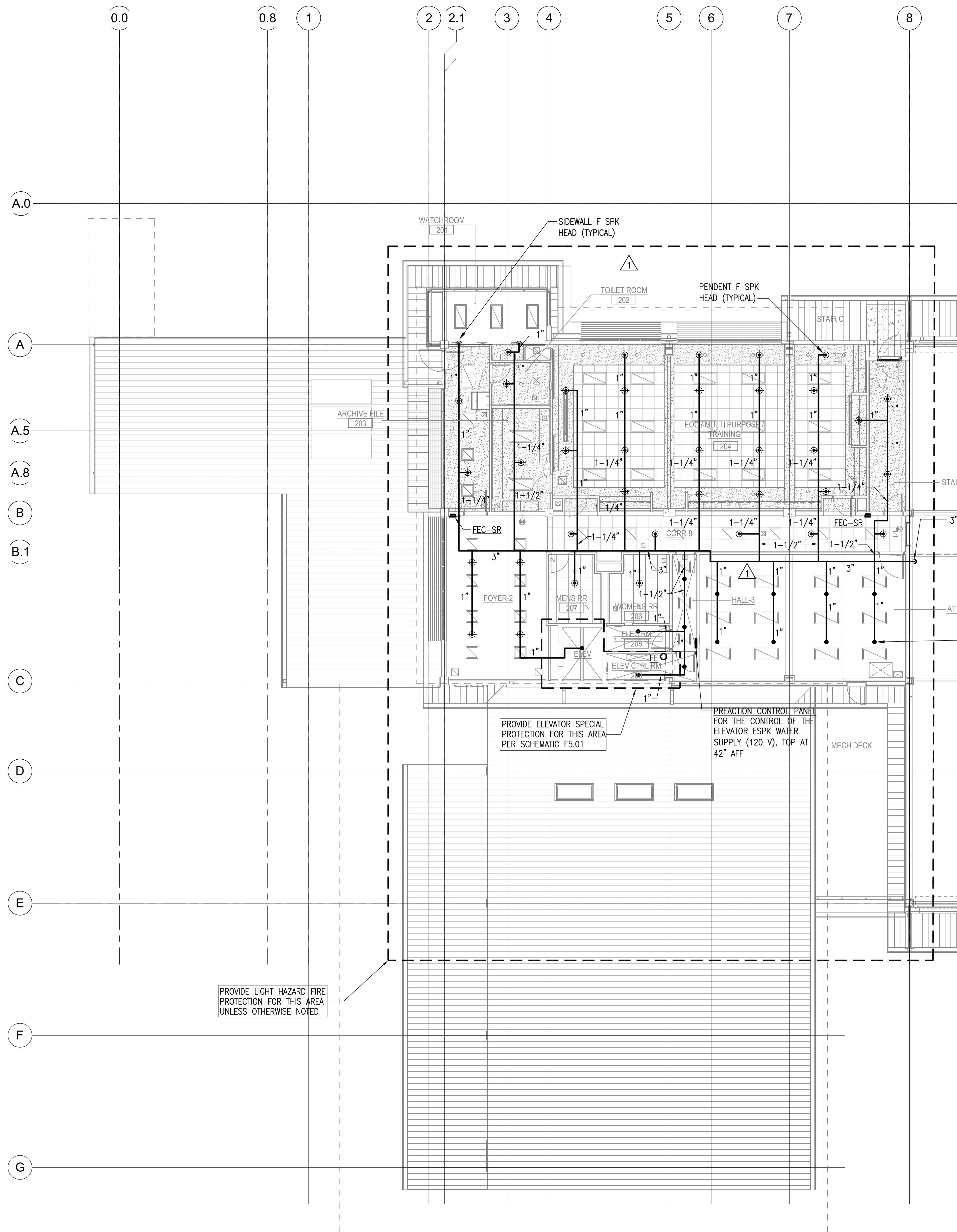
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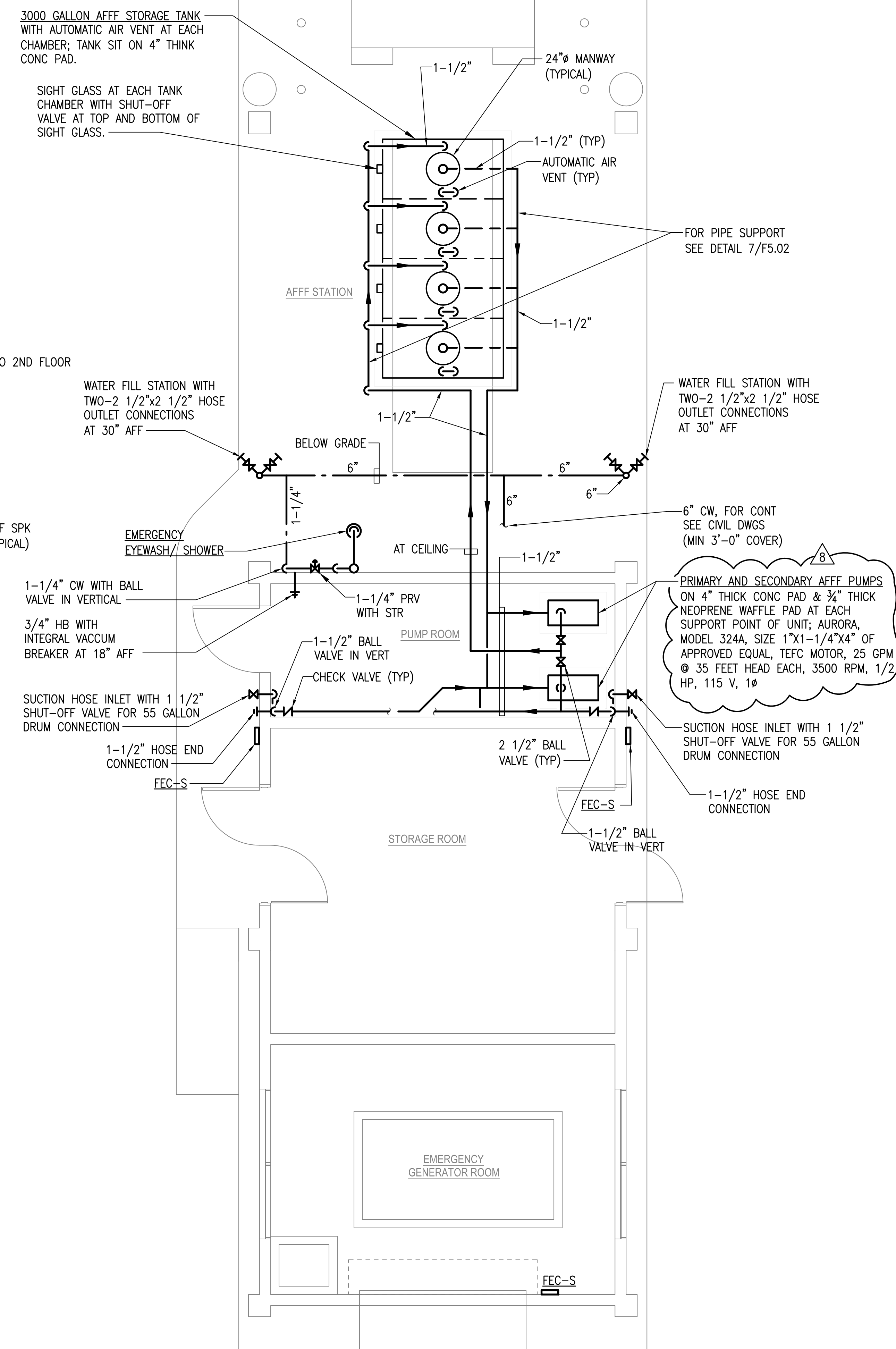
GROUND FLOOR FIRE
PROTECTION PLAN

DATE:	02/17/2012
DWG. NO.:	
OF	

F1.01



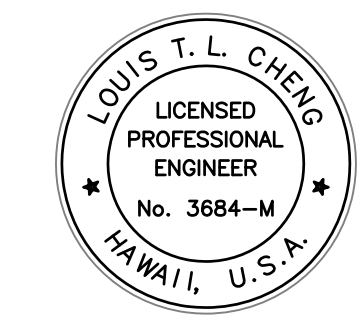
1 SECOND FLOOR FIRE PROTECTION PLAN
 F1.02 SCALE: 1/8" = 1'-0"



2 FUELING ISLAND FIRE PROTECTION PLAN
 F1.02 SCALE: 1/4" = 1'-0"



Airports Division
 Department of Transportation
 State of Hawaii



THE WORK AND PROJECTS OF ME OR MY FIRM
 ARE APPROVED AND CONSTRUCTION OF THE
 PROJECT SHALL BE UNDER MY SUPERVISION

Signature
 LICENSE EXPIRATION DATE: 04/30/14

DSGN.	DRWN.	CHKD.	APPD.
FFU	RAAC	BH	LC

KEY PLAN / NOTES:

	12/03/12	PCD-2
	3/21/12	DCAB COMMENTS
NO.	DATE	REVISION

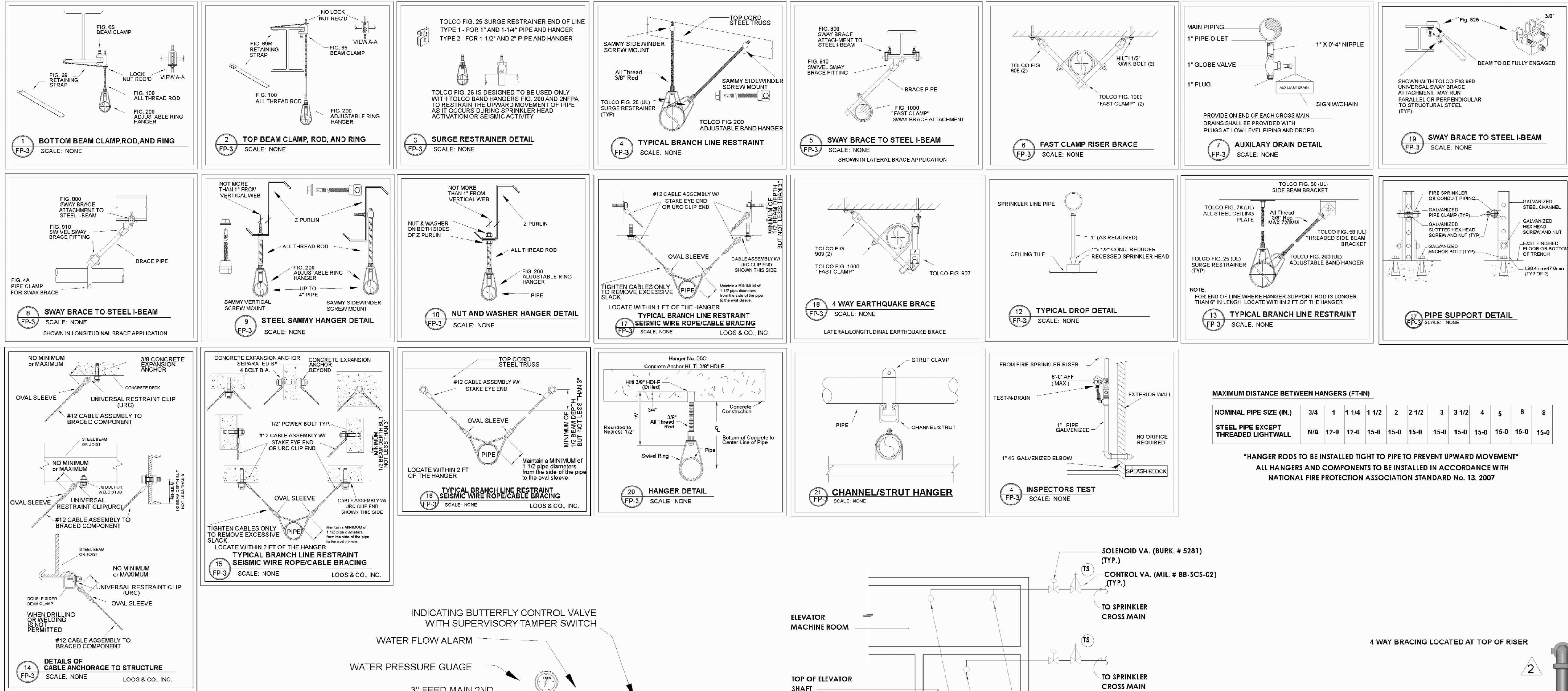
AS-BUILT
 12-5-2014

PROJECT TITLE:
 ARFF FACILITY IMPROVEMENTS
 AT KONA INTERNATIONAL
 AIRPORT AT KEAHOLE

PROJECT NO.:
 STATE PROJECT NO. AH2044-19
 AIP PROJECT NO. 3-15-0008-XX

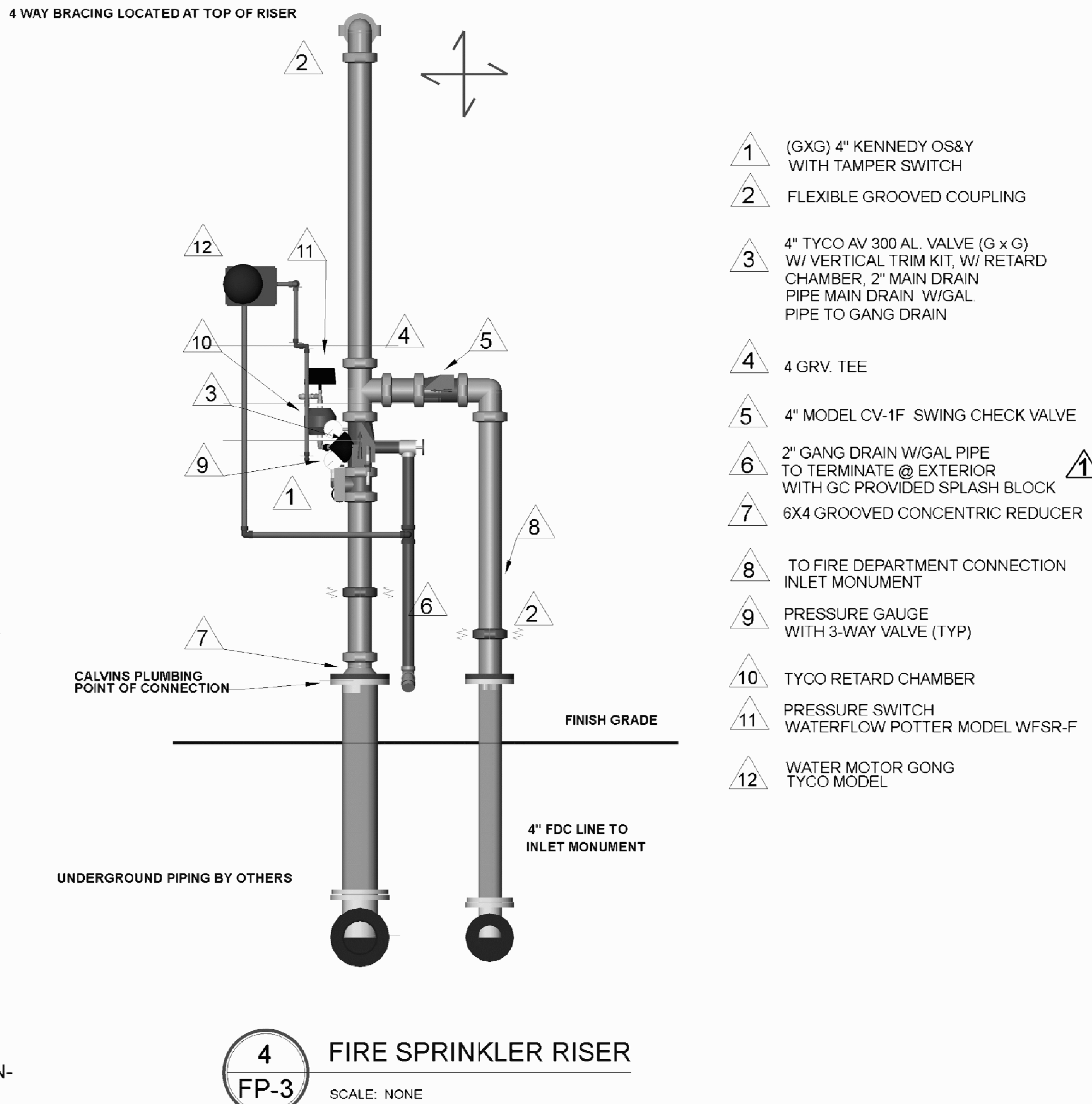
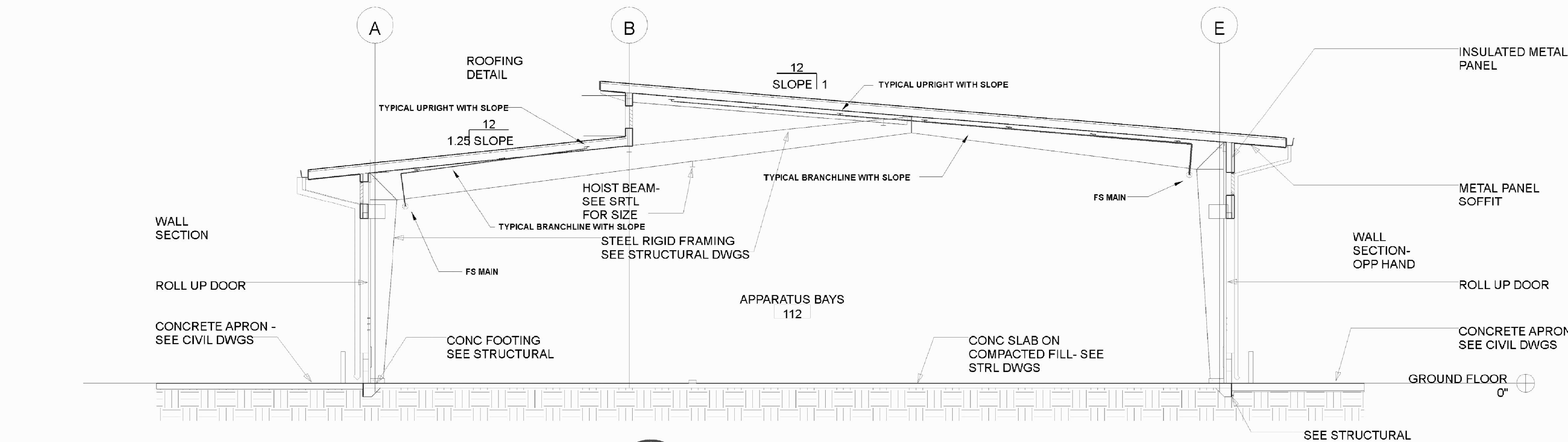
SHEET TITLE:
 SECOND FLOOR FIRE PROTECTION
 PLAN AND FUELING ISLAND FIRE
 PROTECTION PLAN

DATE:	02/17/2012
DWG. NO.:	F1.02
OF	



LEGEND

- DENOTES END OF LINE RESTRAINT
- DENOTES 4-WAY SWAY BRACING
- DENOTES 2-WAY SWAY BRACING
- DENOTES HANGER LOCATION
- DENOTES DISTANCE FROM FINISHED FLOOR
- 1 DENOTES HYDRAULIC REFERENCE POINT

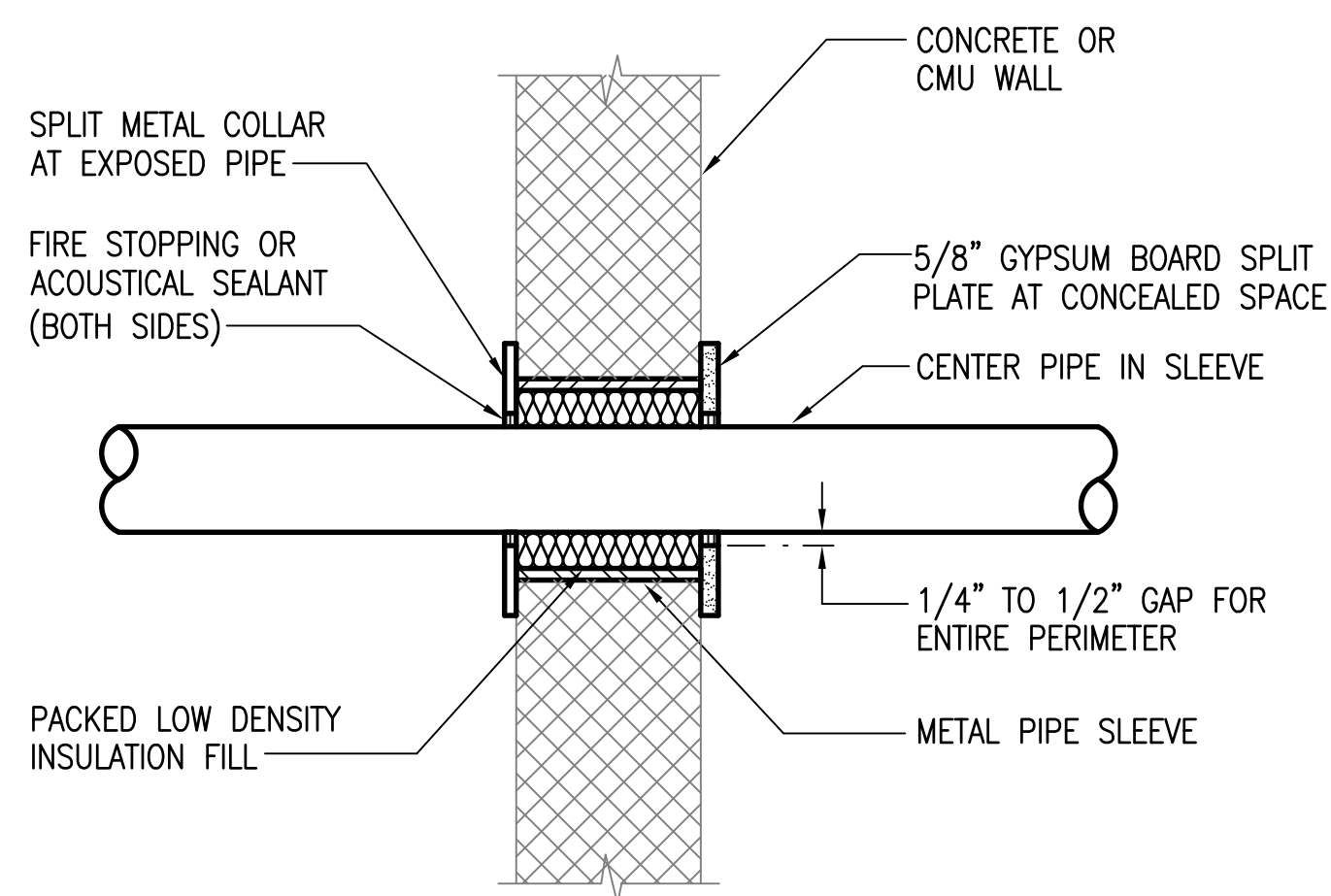


24 FIRE SPRINKLER SECTION

SCALE: 1/8"=1'-0"



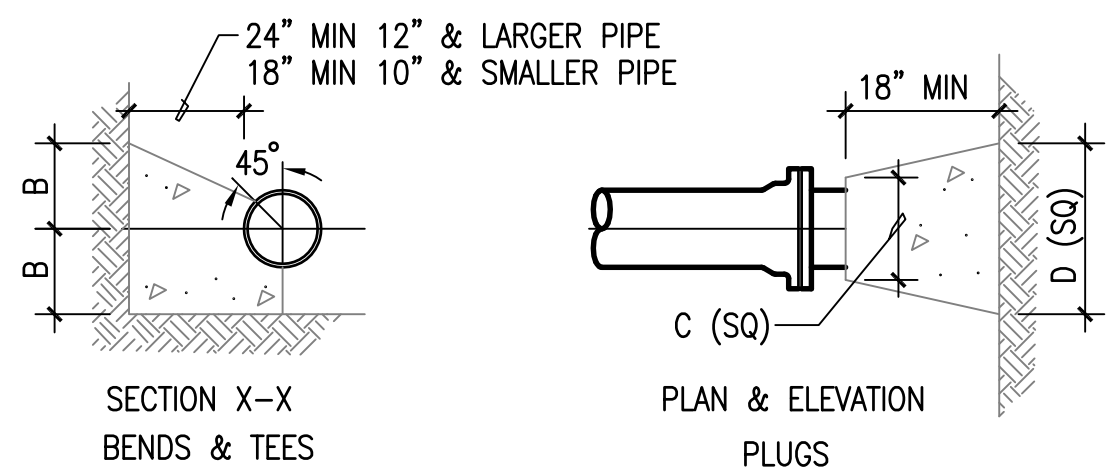
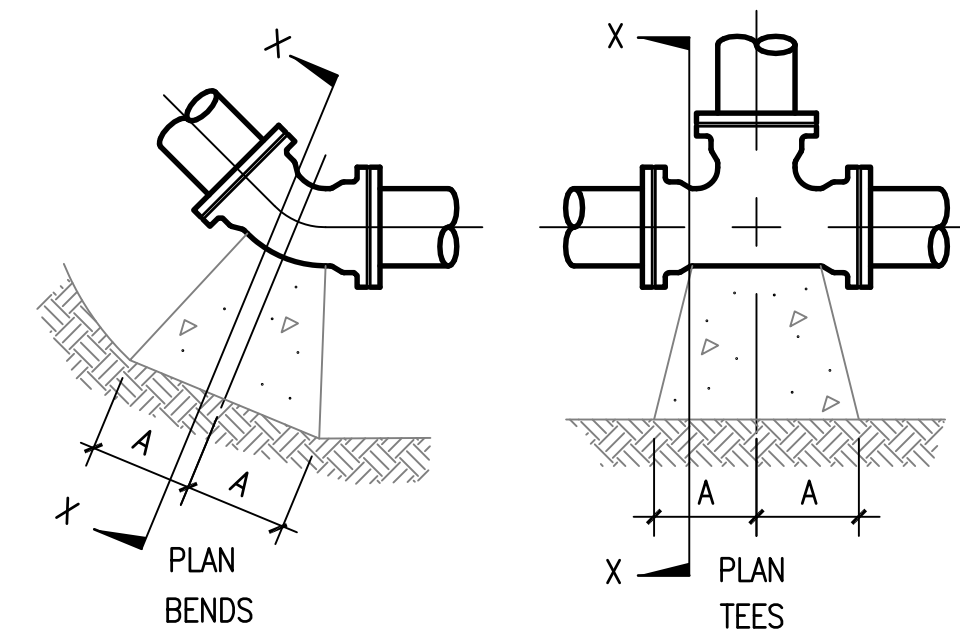
THE WORK AND PROJECTS OF MR. LOUIS T. L. CHENG ARE THE PROPERTY OF LOUIS T. L. CHENG AND COMPANY, INC. NO. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 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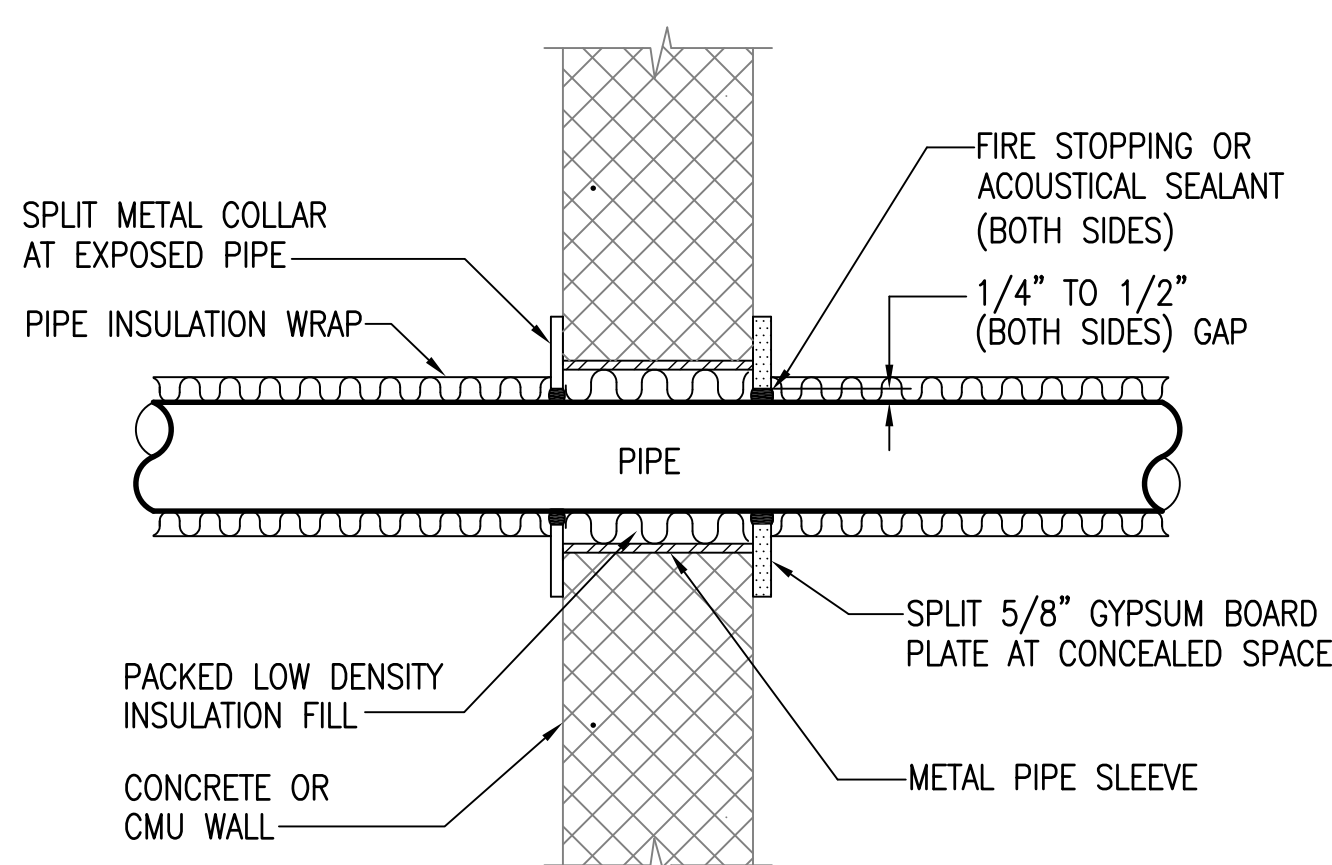
- NOTES:
1. PROVIDE ACOUSTIC SEALANT FOR NON-FIRE RATED FULL HEIGHT PARTITIONS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF NON-FIRE RATED PARTITIONS THAT ARE FULL HEIGHT.
 2. PROVIDE FIRE STOPPING FOR FIRE RATED PARTITIONS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED PARTITIONS AND SPECIFICATION SECTION 078400 FOR FIRE STOPPING SEALANT. ASSEMBLY SHALL BE UL RATED.

1 TYPICAL PIPE PENETRATION DETAIL
F5.02 NOT TO SCALE

PIPE SIZE	1/4 BENDS		1/8 BENDS		1/16 BENDS		TEES		PLUGS	
	A	B	A	B	A	B	A	B	C	D
4"	12"	6"	5"	8"	4"	6"	6"	9"	8"	12"
6"	16"	10"	9"	10"	6"	8"	10"	12"	10"	21"
8"	22"	13"	12"	13"	8"	10"	13"	16"	12"	29"

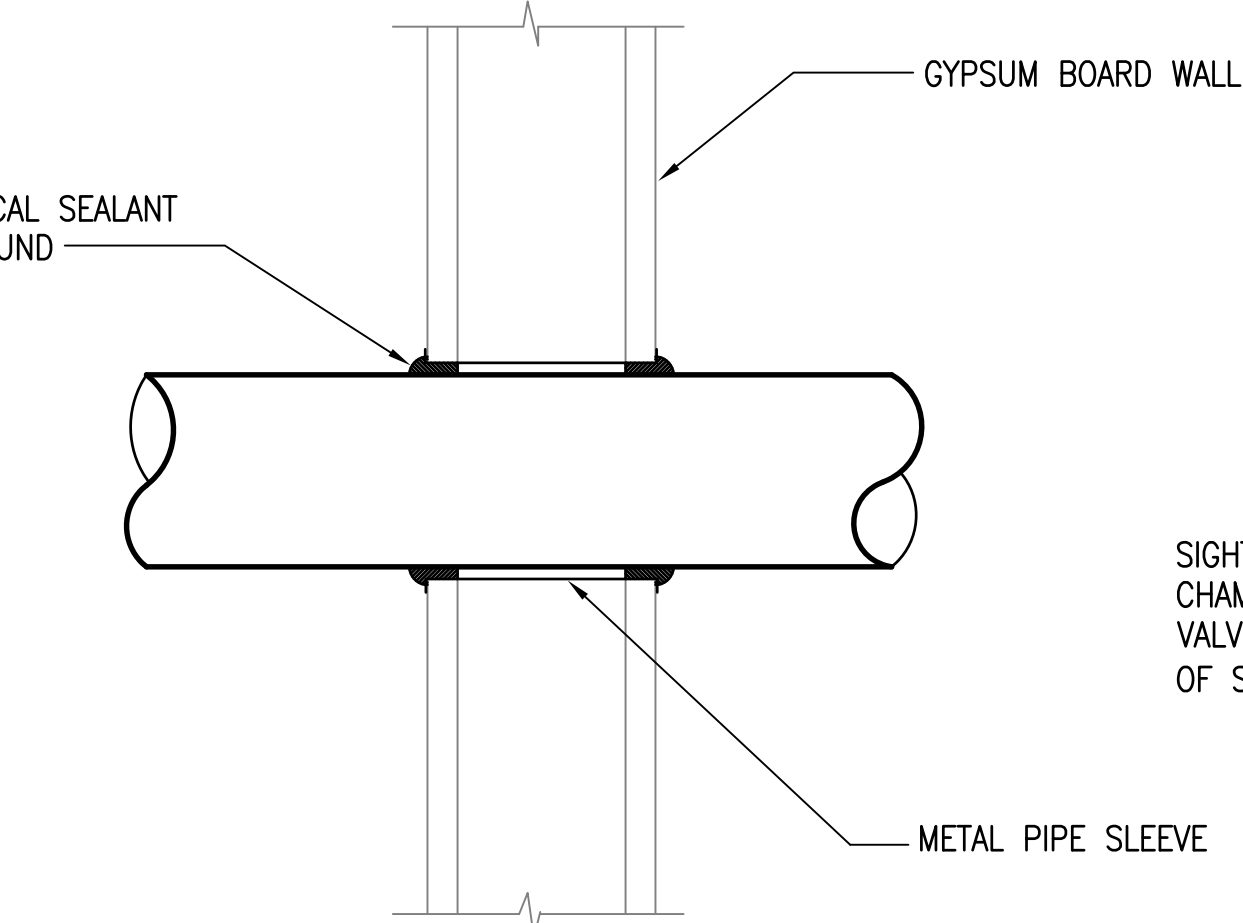


4 TYPICAL UNDERGROUND PIPE REACTION BLOCK DETAIL
F5.02 NOT TO SCALE



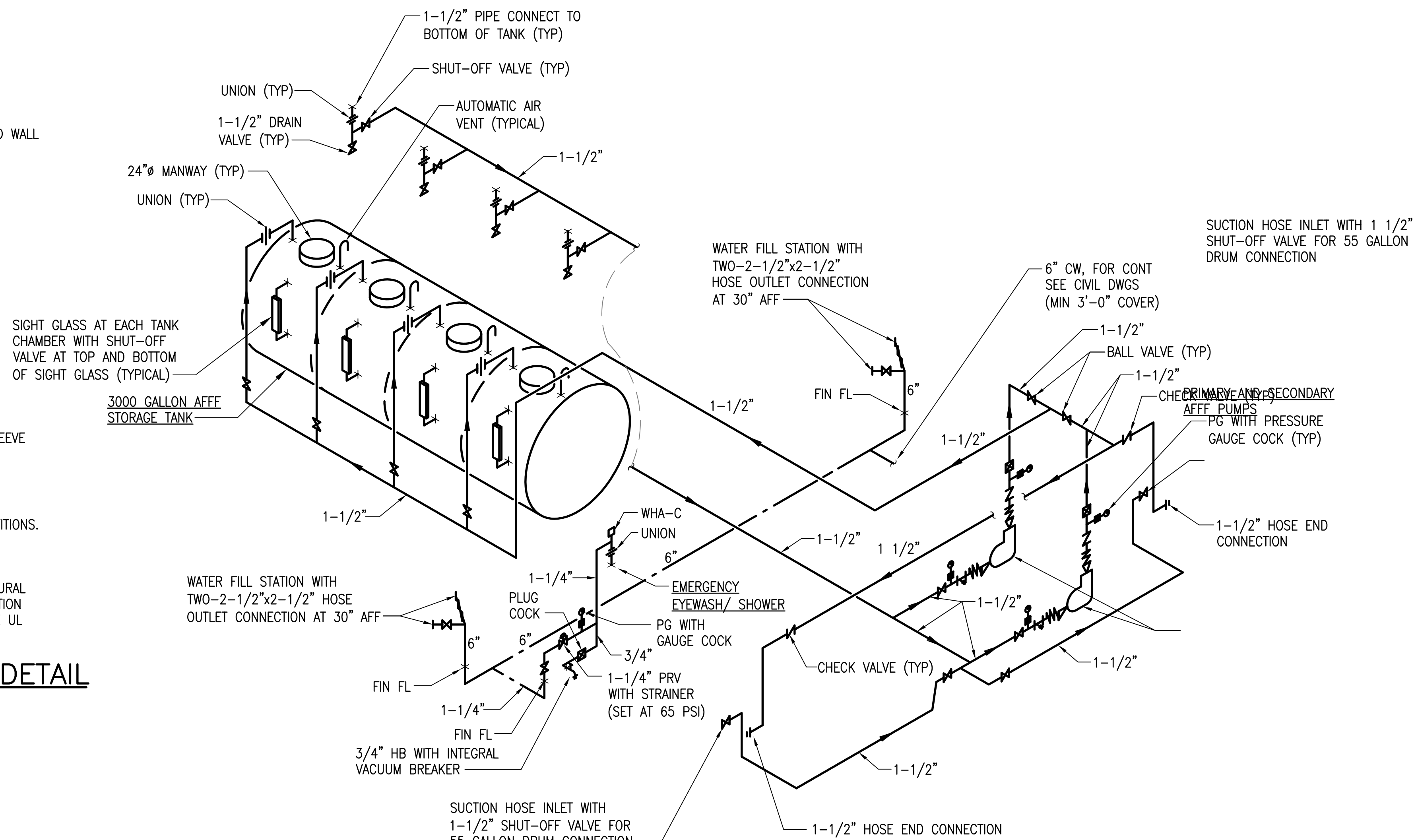
- NOTES:
1. PIPE PENETRATION THRU FIRE RATED WALL SIMILAR.
 2. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED WALLS AND SPECIFICATION SECTION 078400 FOR FIRE STOPPING SEALANT.

5 TYPICAL PIPE PENETRATION DETAIL
F5.02 NOT TO SCALE

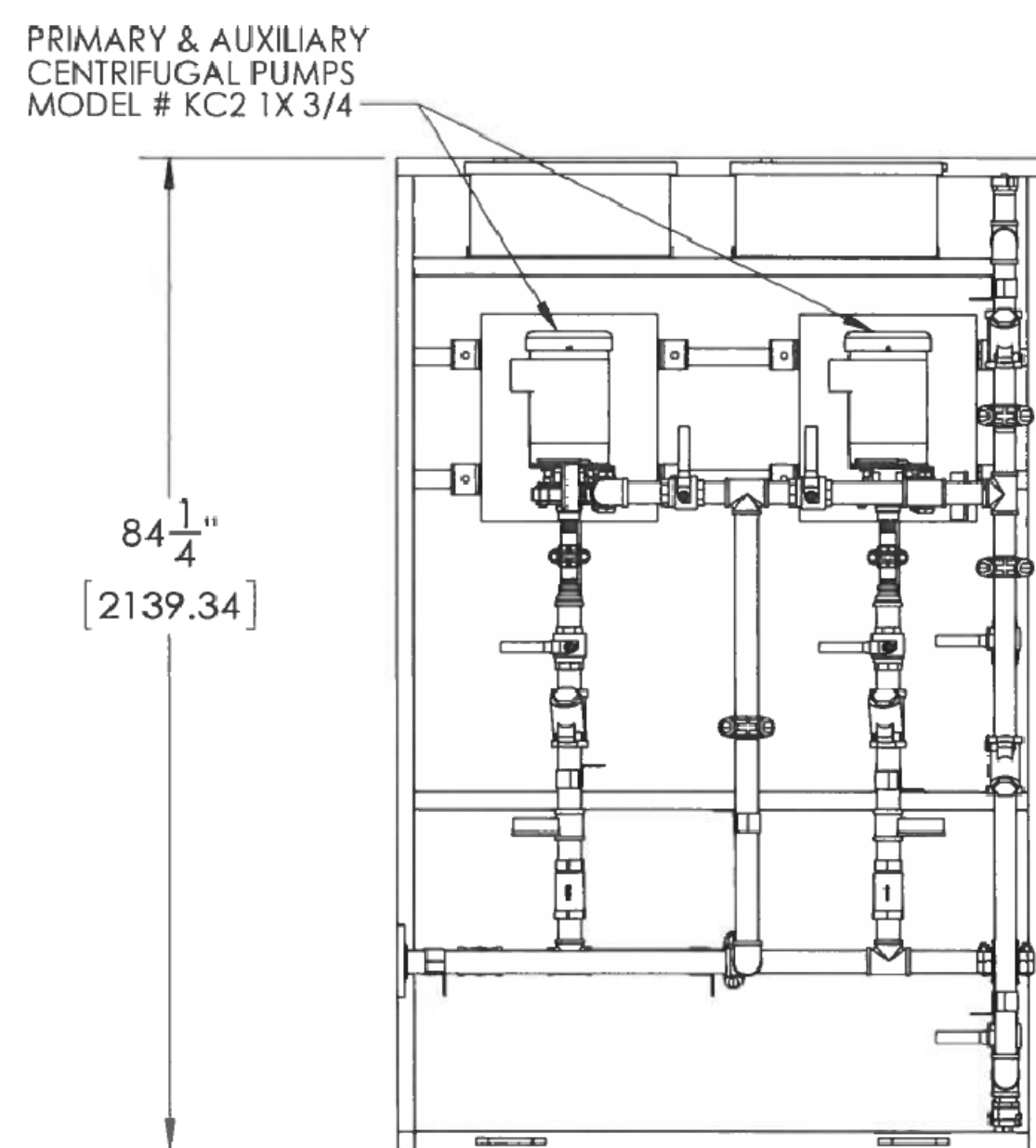


- NOTES:
1. PROVIDE ACOUSTIC SEALANT FOR NON-FIRE RATED FULL HEIGHT PARTITIONS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF NON-FIRE RATED PARTITIONS THAT ARE FULL HEIGHT.
 2. PROVIDE FIRE STOPPING FOR FIRE RATED PARTITIONS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED PARTITIONS AND SPECIFICATION SECTION 078400 FOR FIRE STOPPING SEALANT. ASSEMBLY SHALL BE UL RATED.

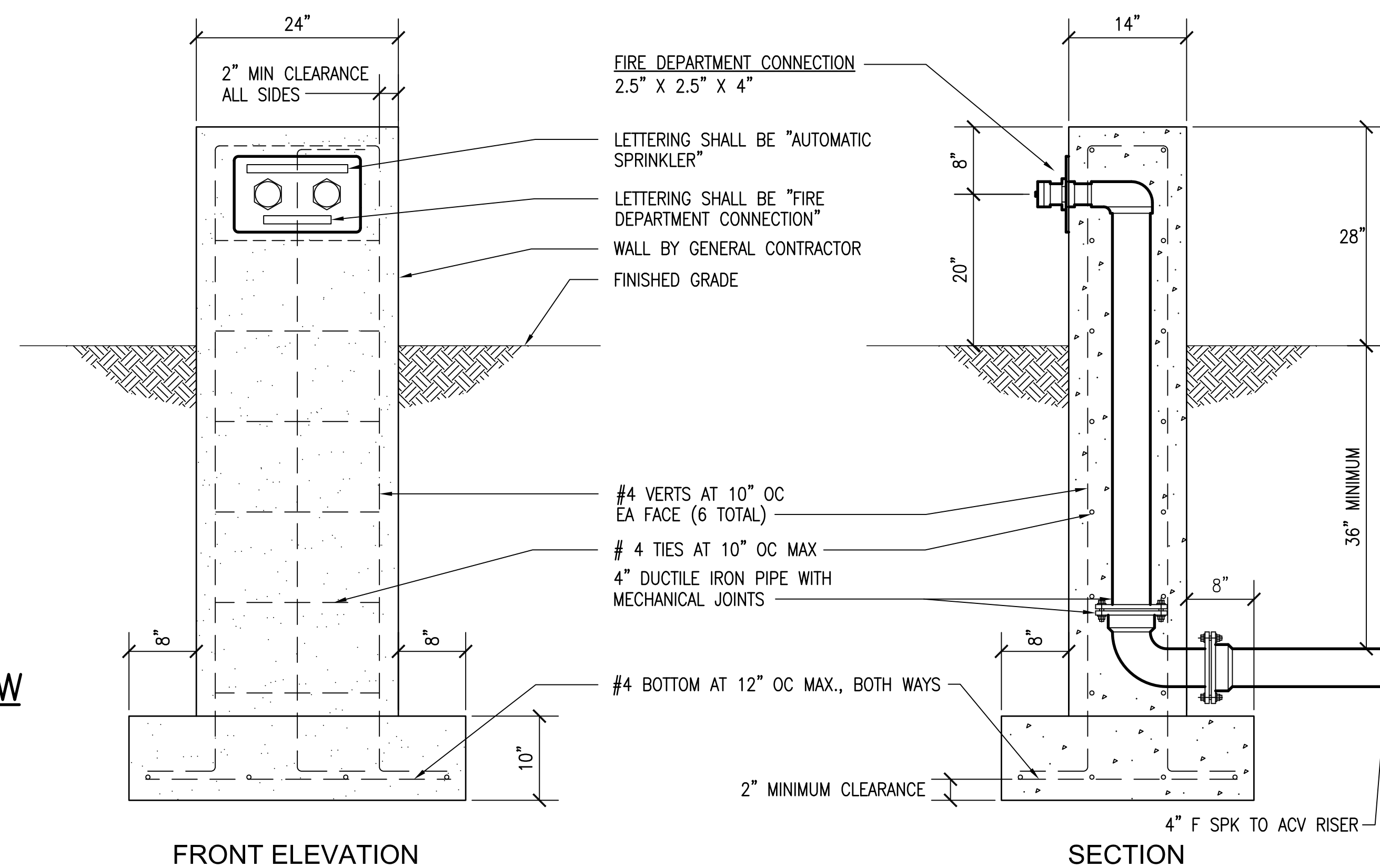
2 TYPICAL PIPE THRU DRYWALL DETAIL
F5.02 NOT TO SCALE



3 AFFF SYSTEM PIPING DIAGRAM
F5.02 NOT TO SCALE

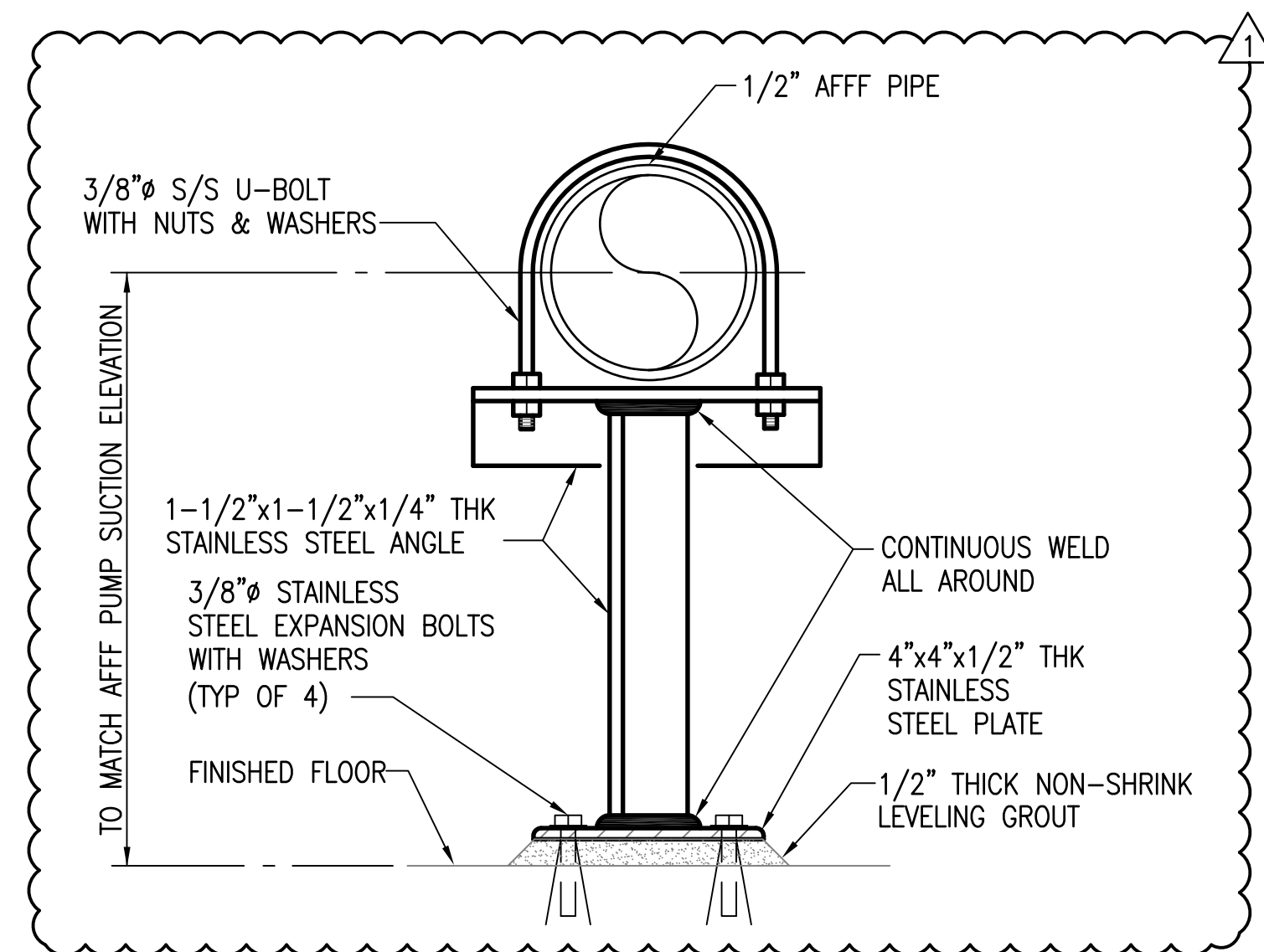


6 PUMP ASSEMBLY PLAN VIEW
F5.02 NOT TO SCALE

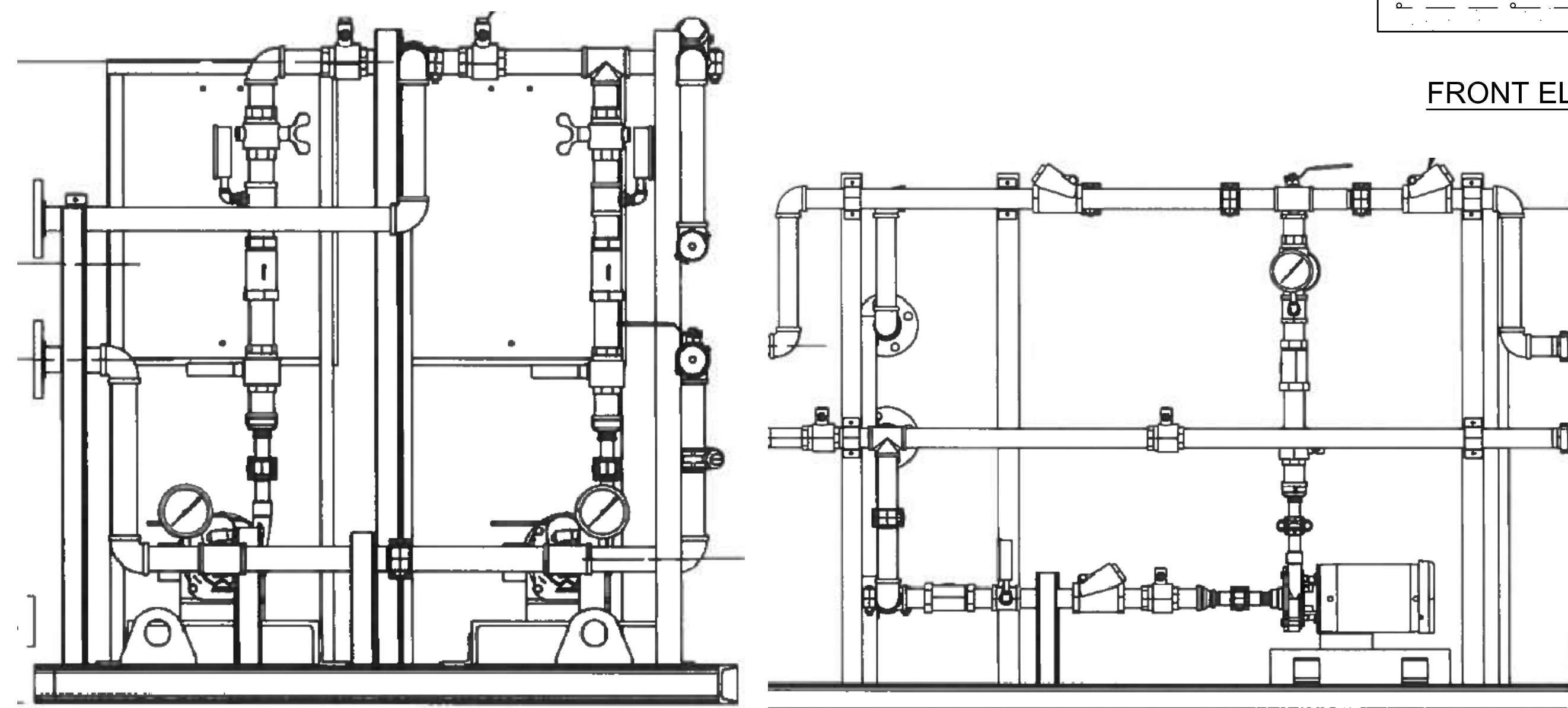


PLAN
NOTE:
FIRE DEPARTMENT CONNECTION MONUMENT SHALL BE LOCATED WITHIN 20'-0" OF FIRE APPARATUS ACCESS ROAD. SEE CIVIL DRAWINGS FOR EXACT LOCATION.

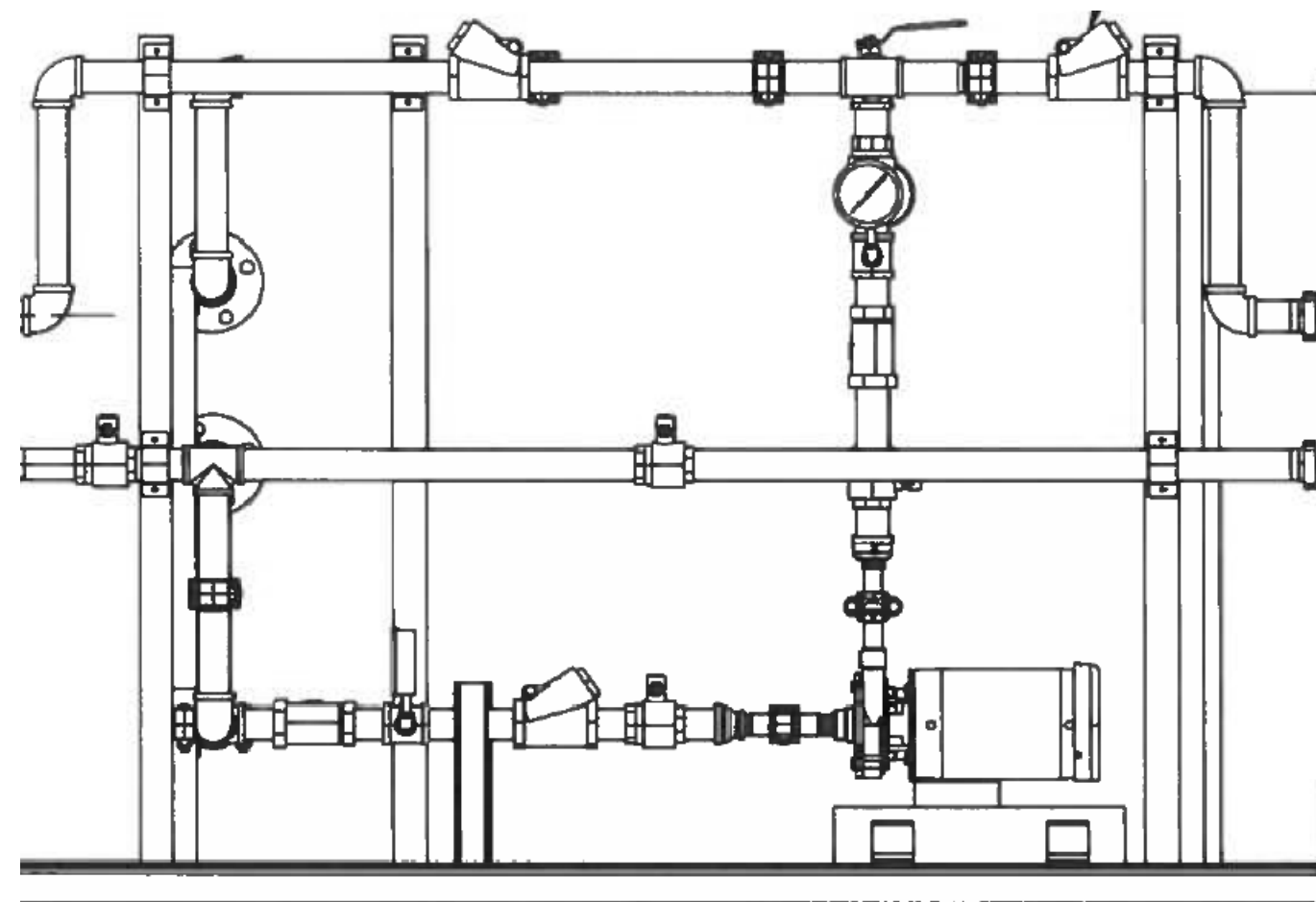
10 FIRE DEPT CONNECTION DETAILS
F5.01 NOT TO SCALE



7 TYPICAL AFFF PIPE SUPPORT ON FLOOR DETAIL
F5.02 NOT TO SCALE



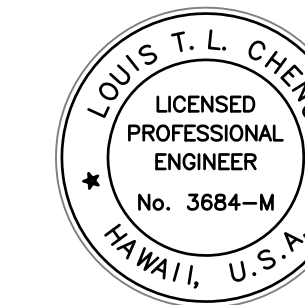
8 PUMP ASSEMBLY SECTION
F5.02 NOT TO SCALE



9 PUMP ASSEMBLY SECTION
F5.02 NOT TO SCALE



Airports Division
Department of Transportation
State of Hawaii



THE WORK AND PROJECTS OF ME OR MY FIRM
ARE HEREBY CERTIFIED TO BE IN ACCORDANCE
WITH THE HAWAIIAN ENGINEERING ACT

LICENSE EXPIRATION DATE: 04/30/14

DSGN.	DRWN.	CHKD.	APPD.
FFU	RAAC	BH	LC

KEY PLAN / NOTES:

NO.	DATE	REVISION
1	3/21/12	DCAB COMMENTS

AS-BUILT
12-5-2014

PROJECT TITLE:

ARFF FACILITY IMPROVEMENTS
AT KONA INTERNATIONAL
AIRPORT AT KEAHOE

PROJECT NO.:

STATE PROJECT NO. AH2044-19
AIP PROJECT NO. 3-15-0008-XX

SHEET TITLE:

DETAILS AND AFFF SYSTEM
PIPING DIAGRAM

DATE:

02/17/2012

DWG. NO.:

OF

F5.02