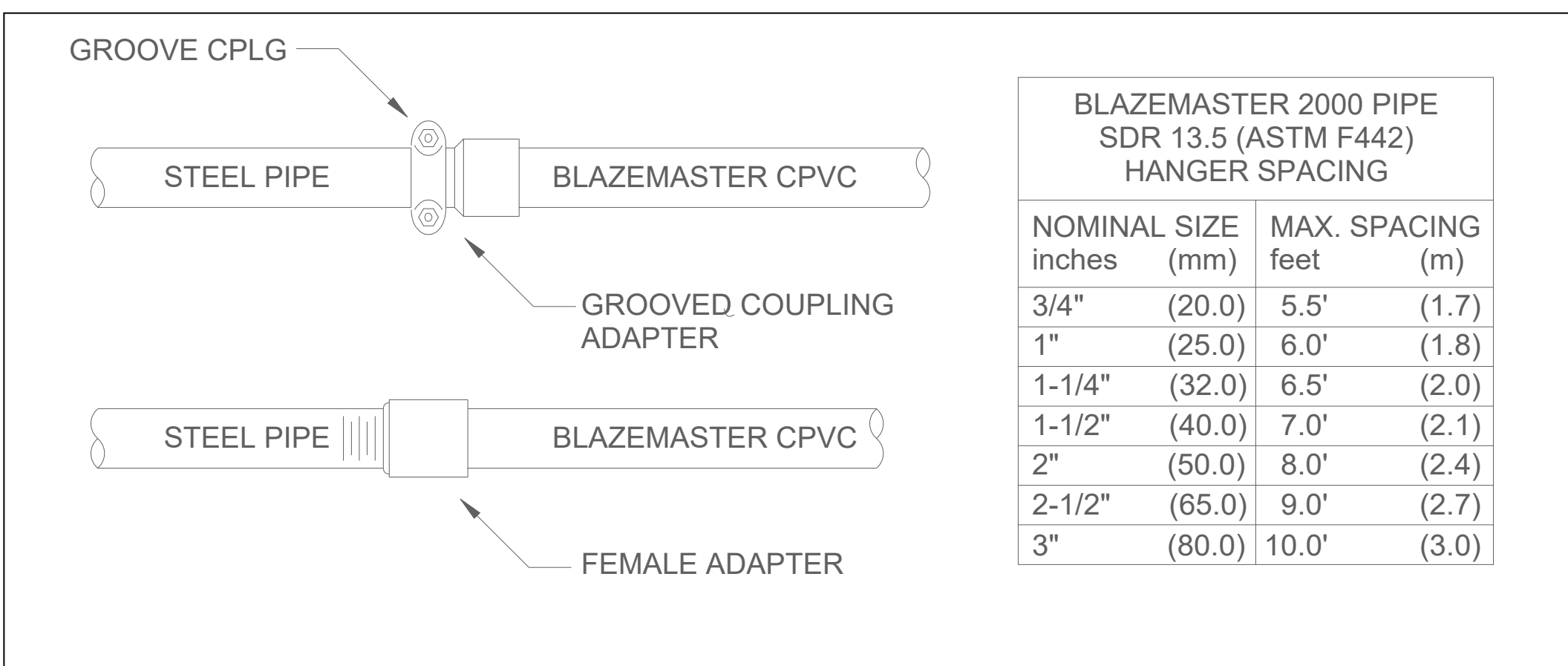
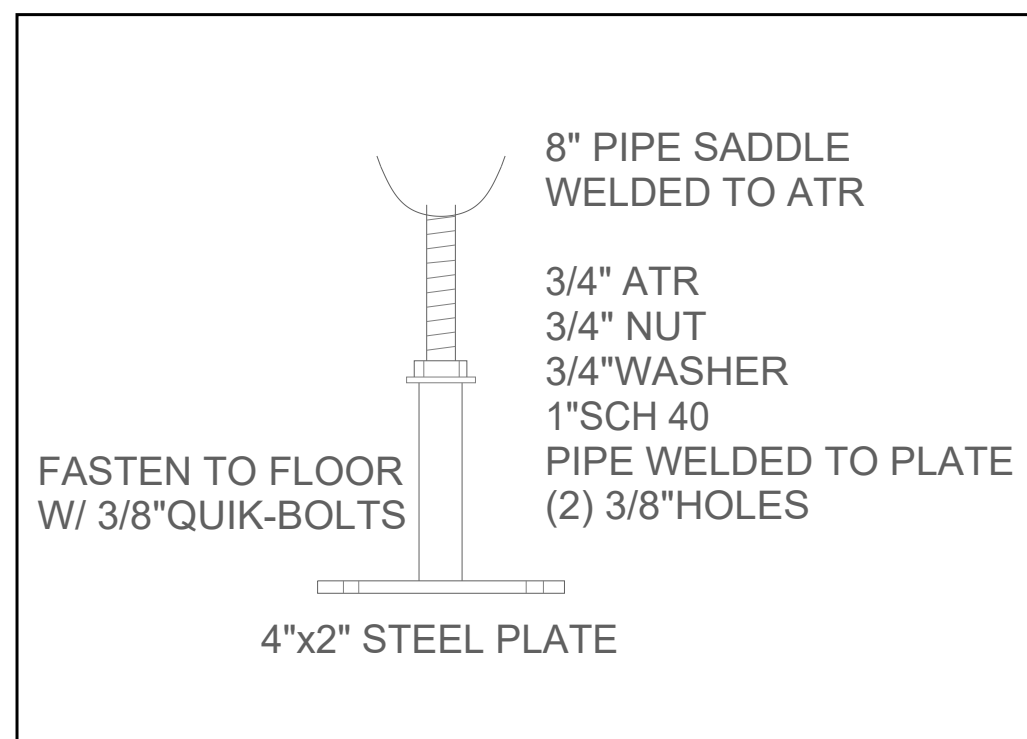


DIMENSIONS IN F. DIAMETERS IN INCHES.
ANY TYPE OF CUTTING IN TUBES MUST BE DONE WITH A HOLE SAW
AND NOT WITH A TORCH.
BRANCHLINE PIPING 2" & SMALLER TO BE ANSI / ASTM A-795
"DYNA-THREAD" SPRINKLER PIPING WITH THREADED ENDS & CAST
IRON FITTINGS.
STEEL CUTTING LENGTHS SHOWN CENTER TO CENTER.
CONNECTIONS MUST BE OF THE COUPLING TYPE (GROOVED) FOR
PIPES EQUAL TO AND ABOVE Ø2.1/2" (Ø65MM), BSP THREADED TYPE
CONNECTIONS FOR PIPES EQUAL TO OR SMALLER THAN Ø2" (Ø50MM).
ALL PIPES MUST BE CLEANED INTERNALLY BEFORE ASSEMBLY.
ALL MEASUREMENTS MUST BE CONFIRMED ON SITE BEFORE
PRE-MANUFACTURING.
SYSTEM TO BE HYDROSTATICALLY TESTED @ 200PSI FOR 2 HOURS -
PER N.F.P.A. #13.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER
CPVC PIPING, UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

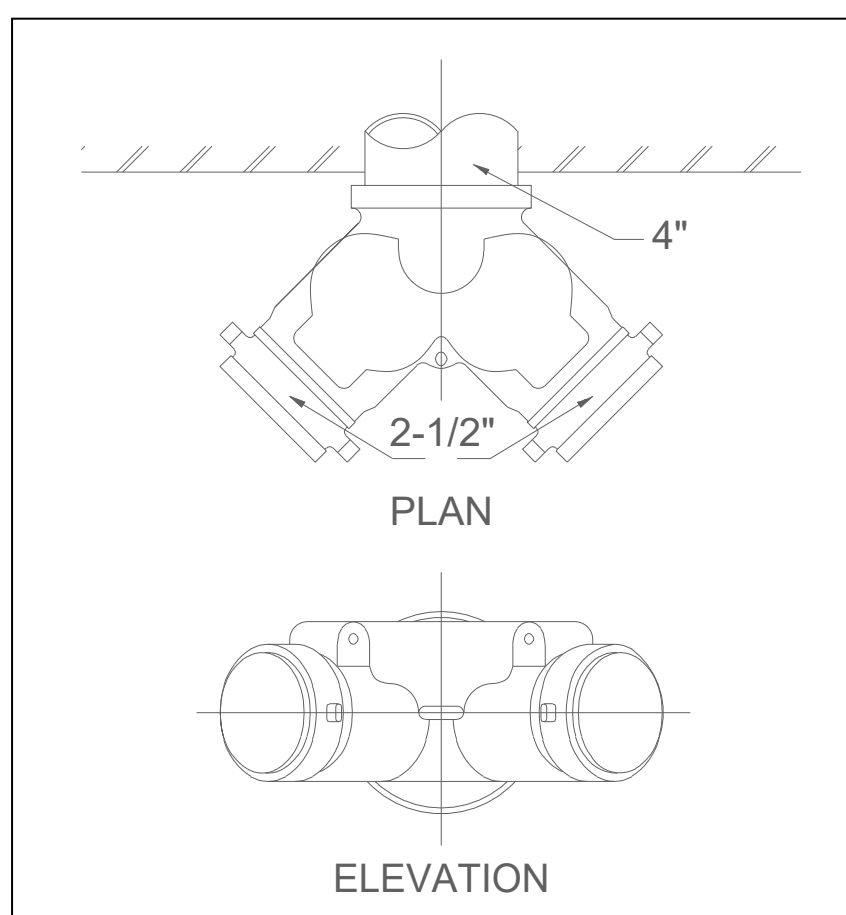
DRAWING INDEX	
SPR-00	PROJECT INFORMATION
SPR-01	GROUND FLOOR PLAN - FIRE SPRINKLER LAYOUT
SPR-02	GROUND FLOOR PLAN - UNDERGROUND PIPELINE
SPR-03	SECOND FLOOR PLAN - FIRE SPRINKLER LAYOUT
SPR-04	THIRD FLOOR PLAN - FIRE SPRINKLER LAYOUT
SPR-05	FOURTH FLOOR PLAN - FIRE SPRINKLER LAYOUT
SPR-06	FIFTH FLOOR PLAN - FIRE SPRINKLER LAYOUT
SPR-07	SIXTH FLOOR PLAN - FIRE SPRINKLER LAYOUT



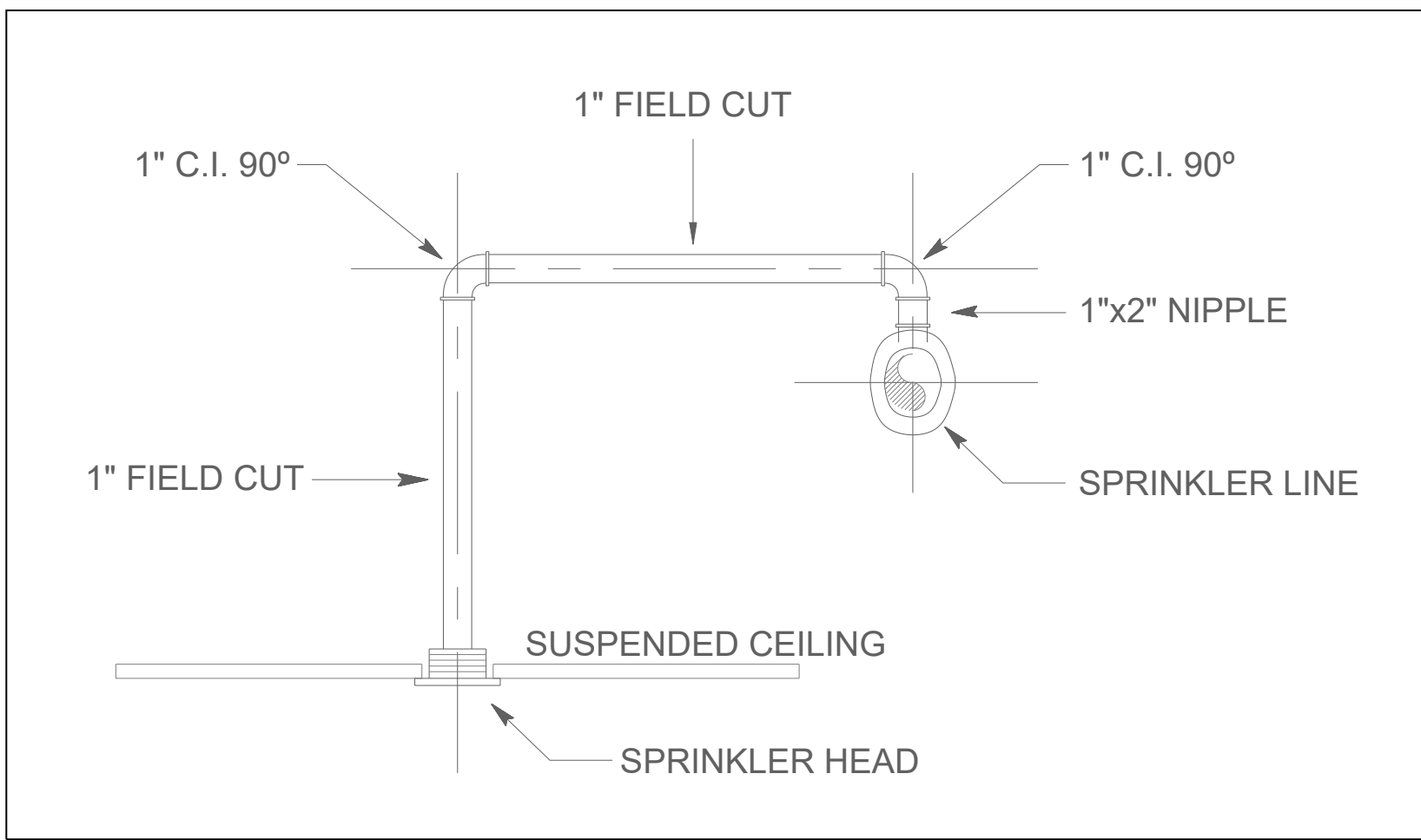
1 BLAZEMASTER PIPE DETAIL
NOT TO SCALE



5 PIPE SUPPORT DETAIL
NOT TO SCALE



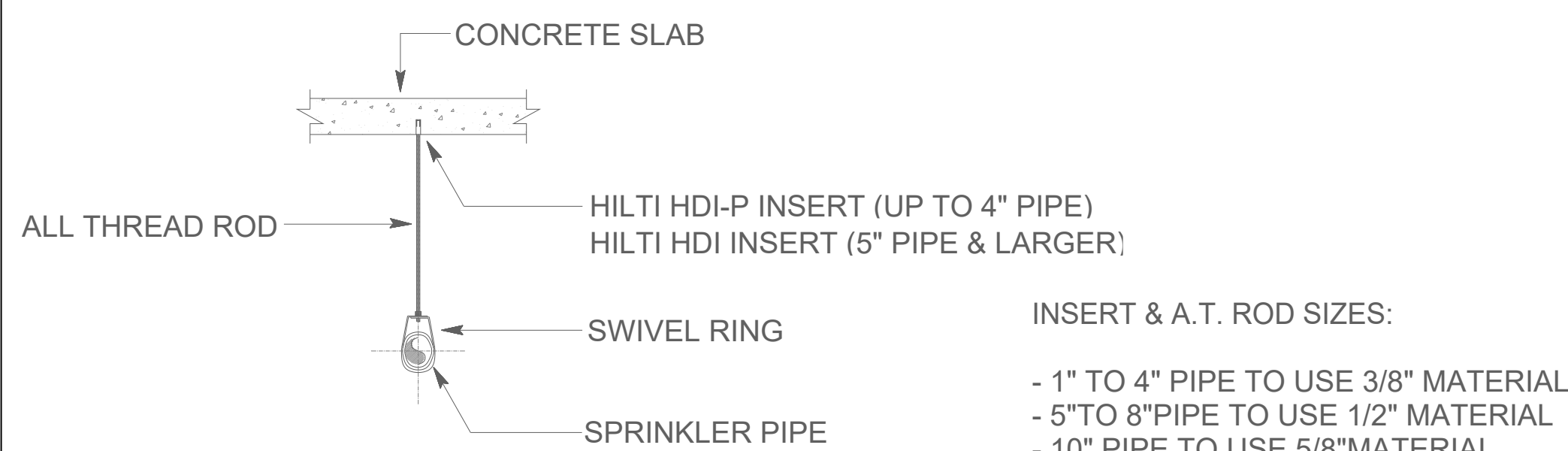
6 FIRE DEPARTMENT CONNECTION DETAIL
NOT TO SCALE



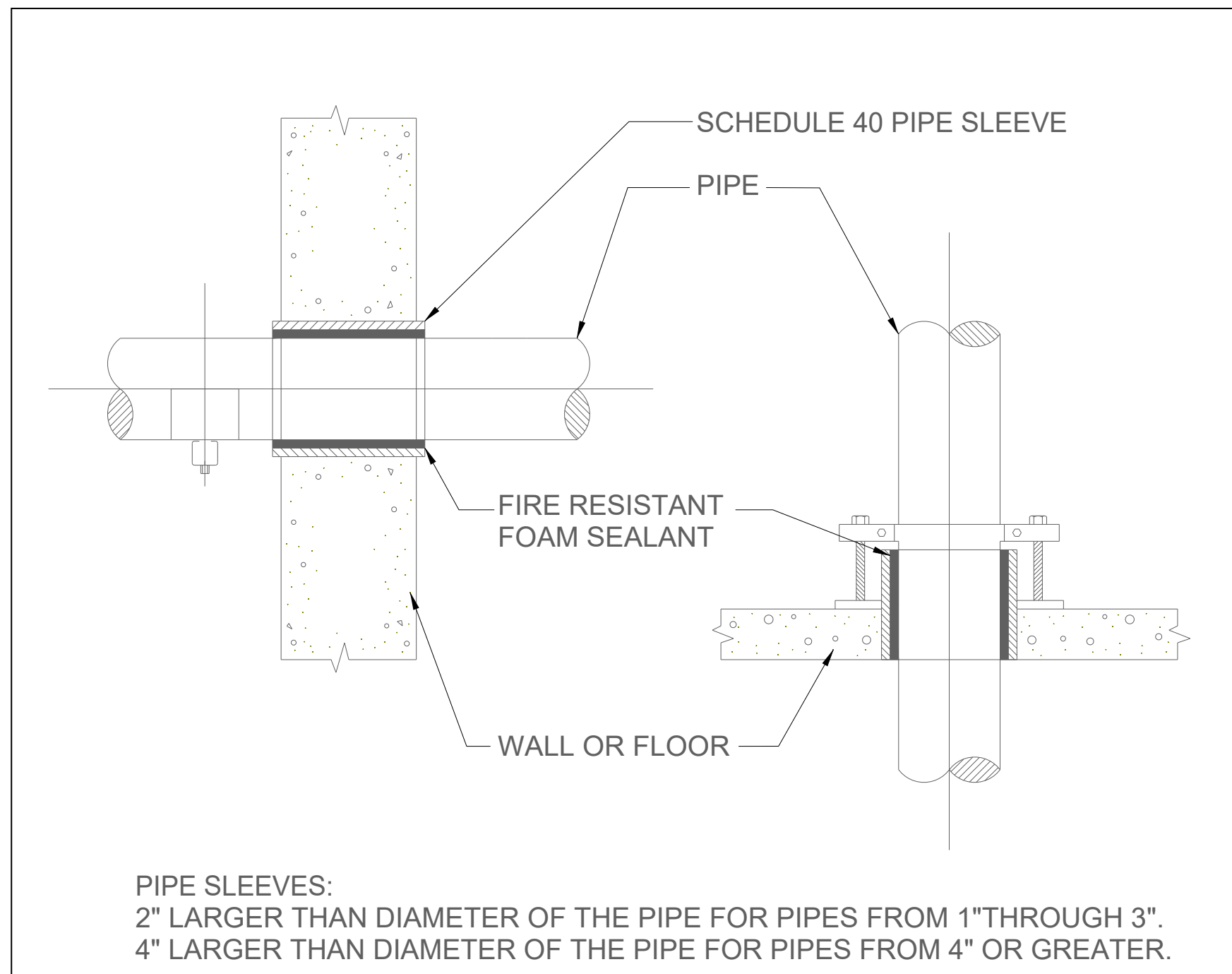
2 TYPICAL SPRINKLER HEAD DROP INSTALLATION DETAIL

DUE TO PRESSURE EXCEEDING 100 psi THE FOLLOWING RULES FROM NFPS #13 TP BE ADHERED TO:

- HANGER ASSEMBLY SUPPLYING AN END SPRINKLER OR ARMOR IN A PENDENT POSITION SHALL HAVE ROD
- TIGHTENED DOWN TO WITHIN 1/16" OF TOP OF PIPE TO PREVENT UPWARD MOVEMENT OF PIPE
- PLACEMENT OF HANGER TO BE WITHIN 12" FROM END OF LINE.
- ARMORERS TO PENDENT SPRINKLERS GREATER THAN 12" SHALL HAVE HANGER INSTALLED.

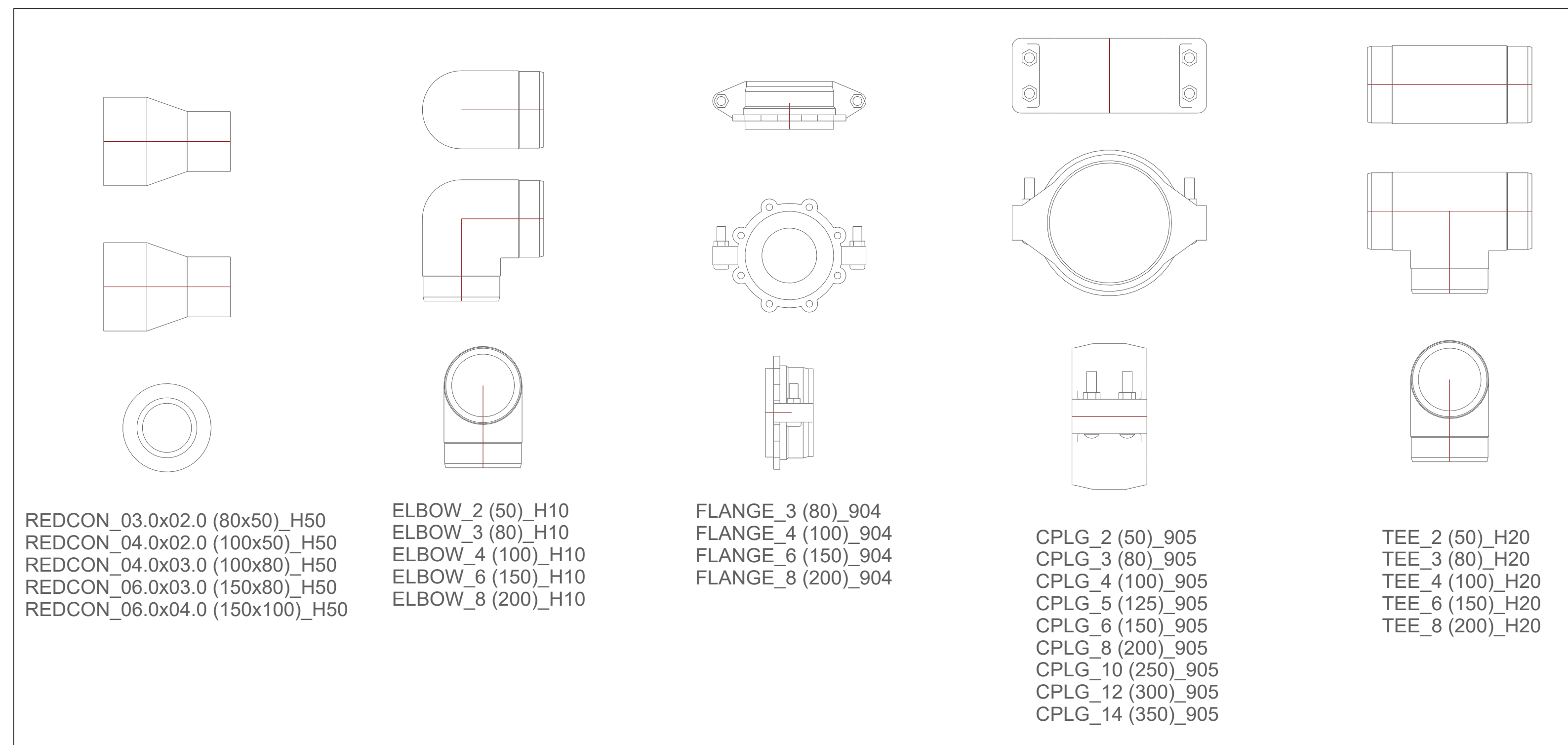


3 HANGER DETAIL
NOT TO SCALE

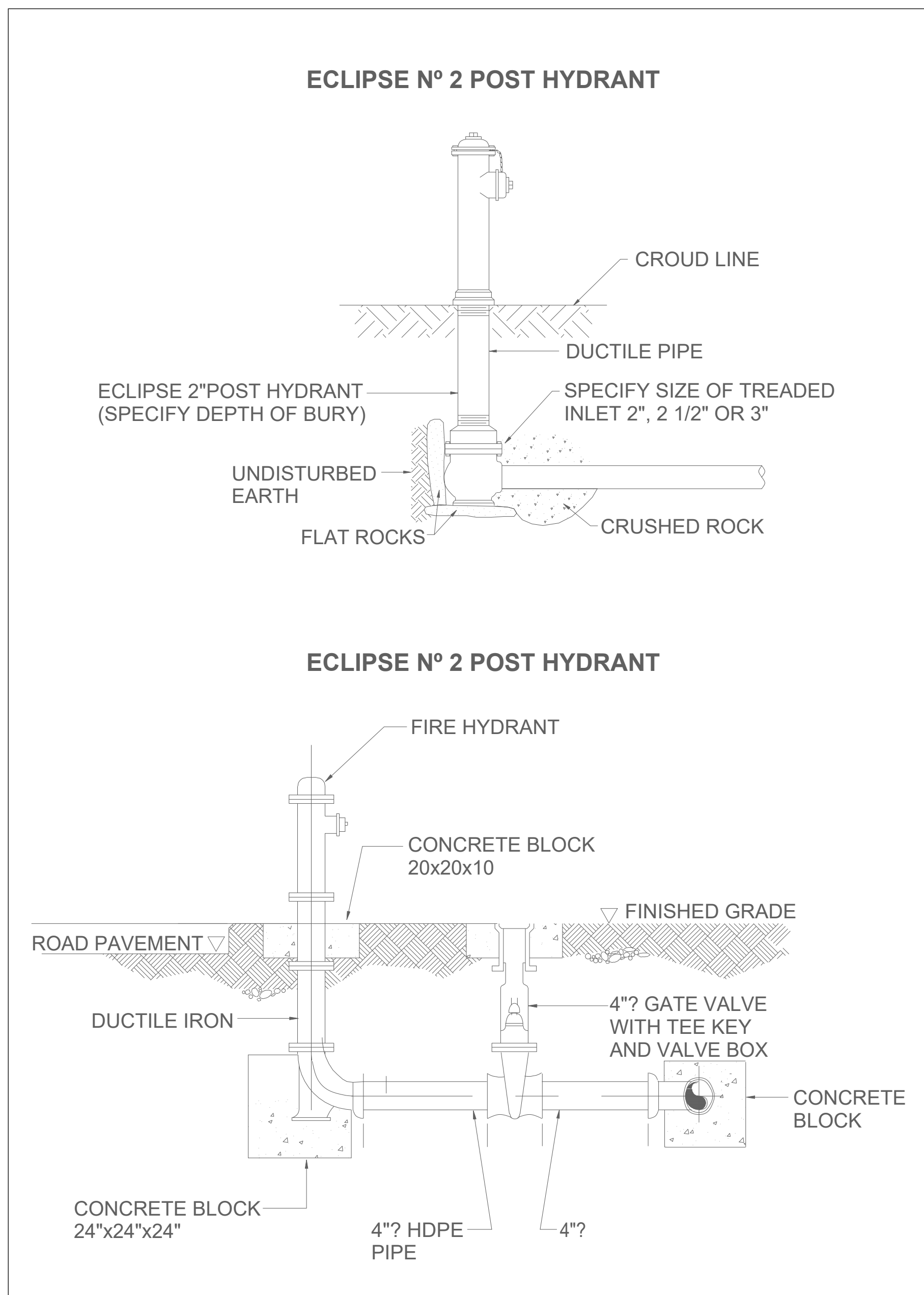


4 PIPE SLEEVE DETAILS

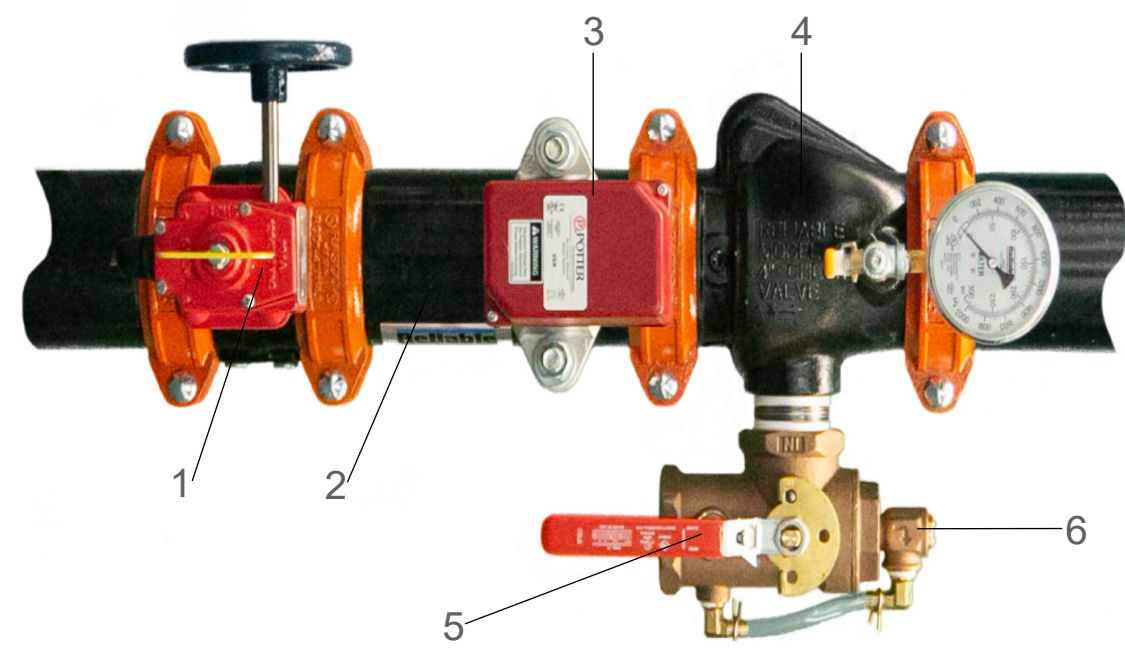
NOT TO SCALE



7 VITAULIC HDPE FITTINGS
NOT TO SCALE

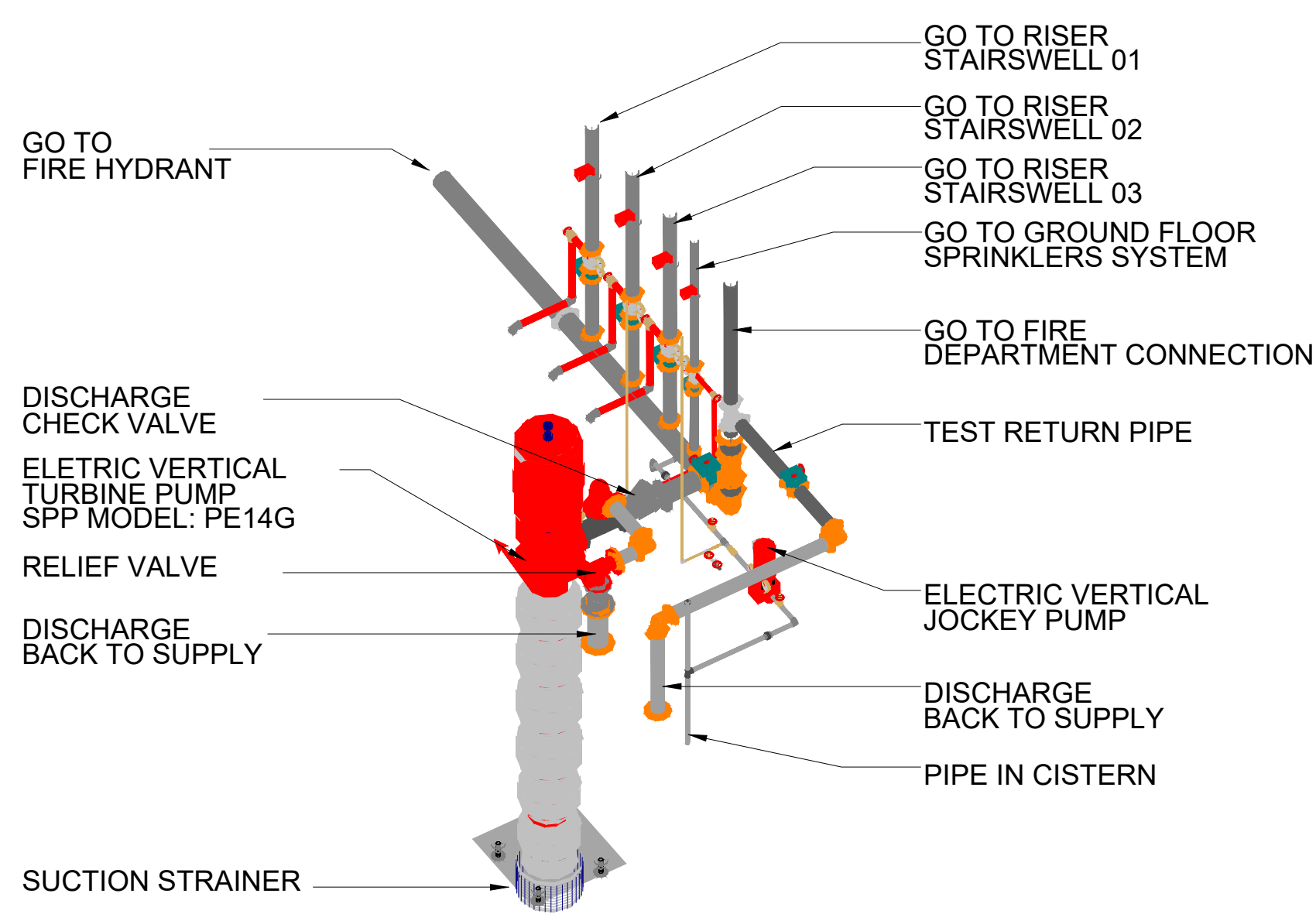


10 FIRE HYDRANT INSTALLATION DETAIL
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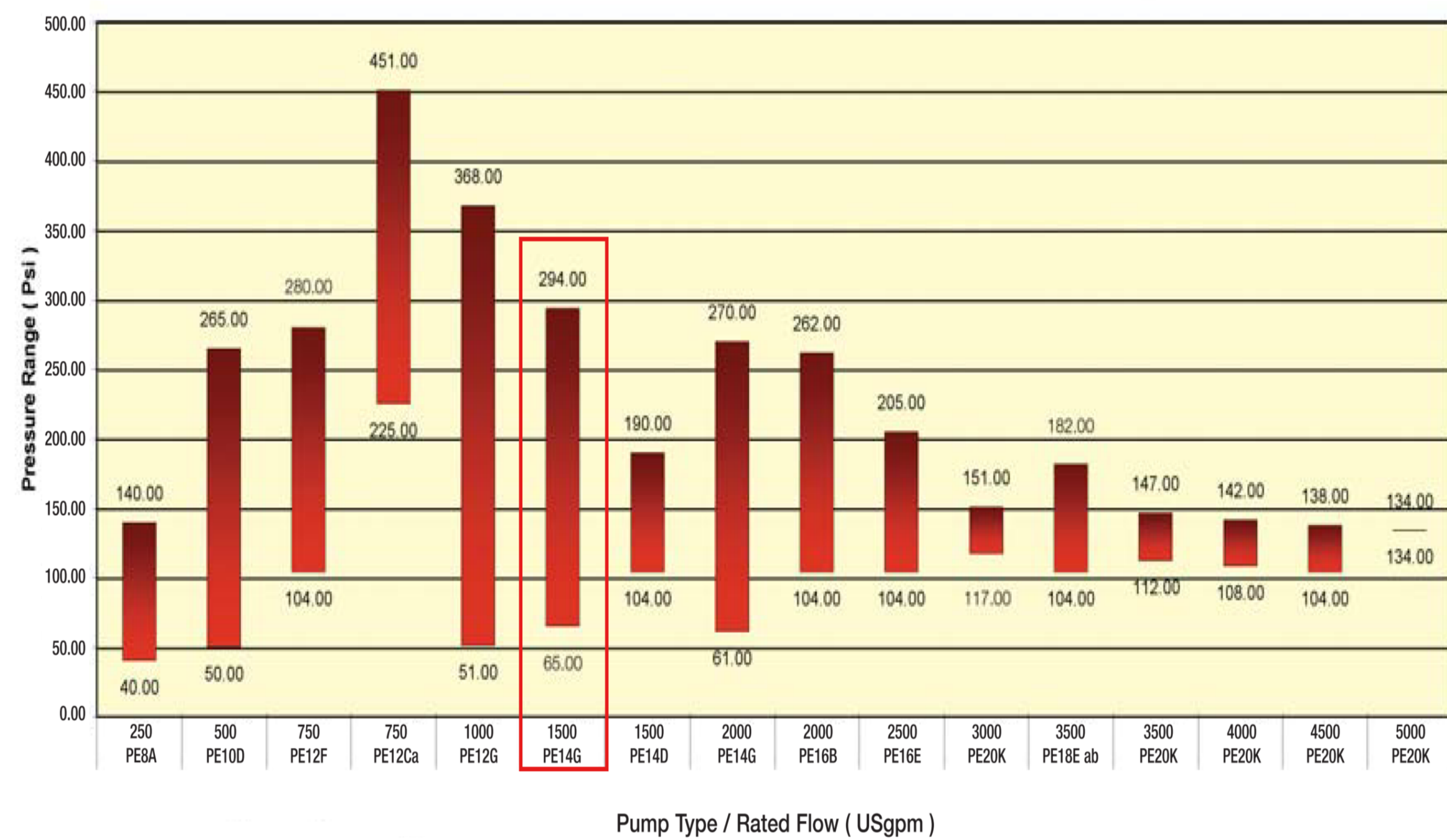


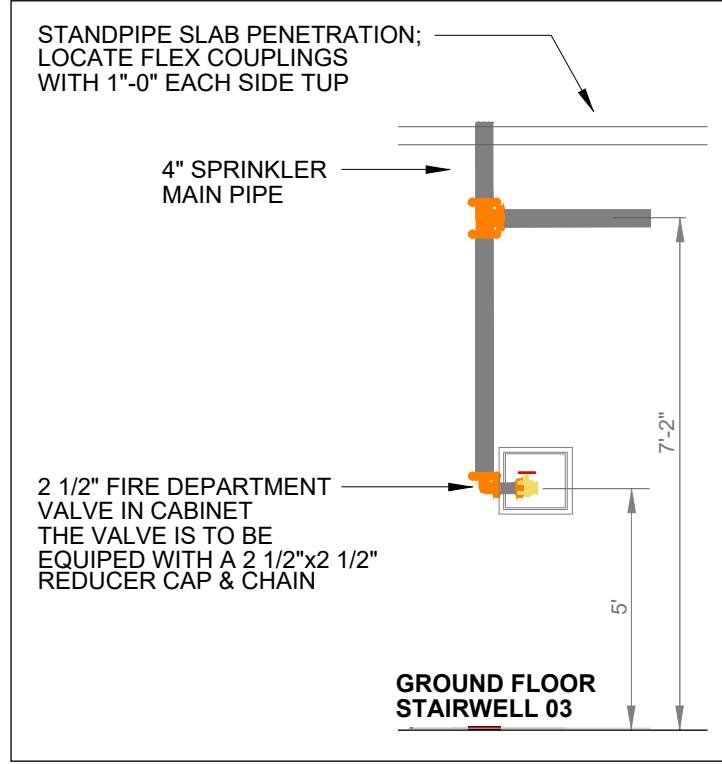
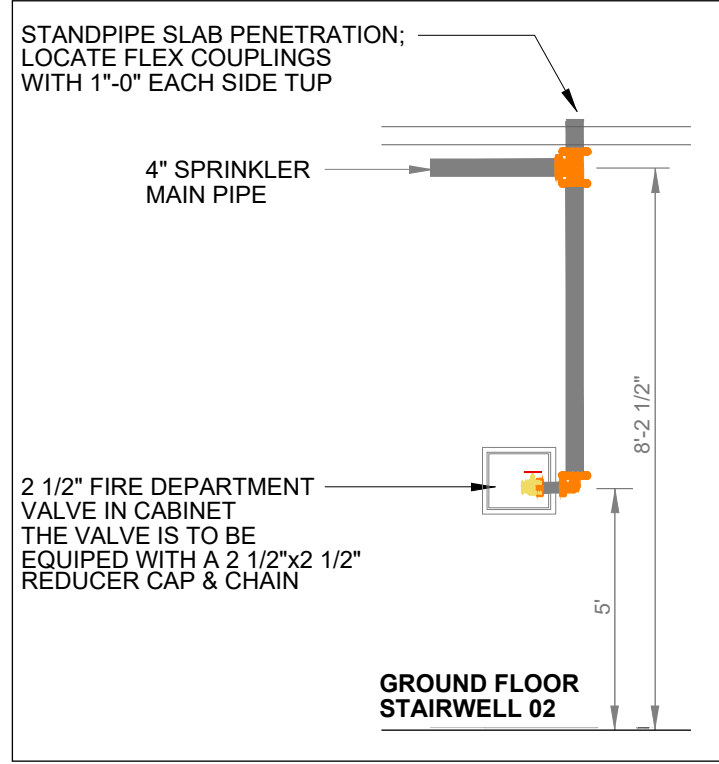
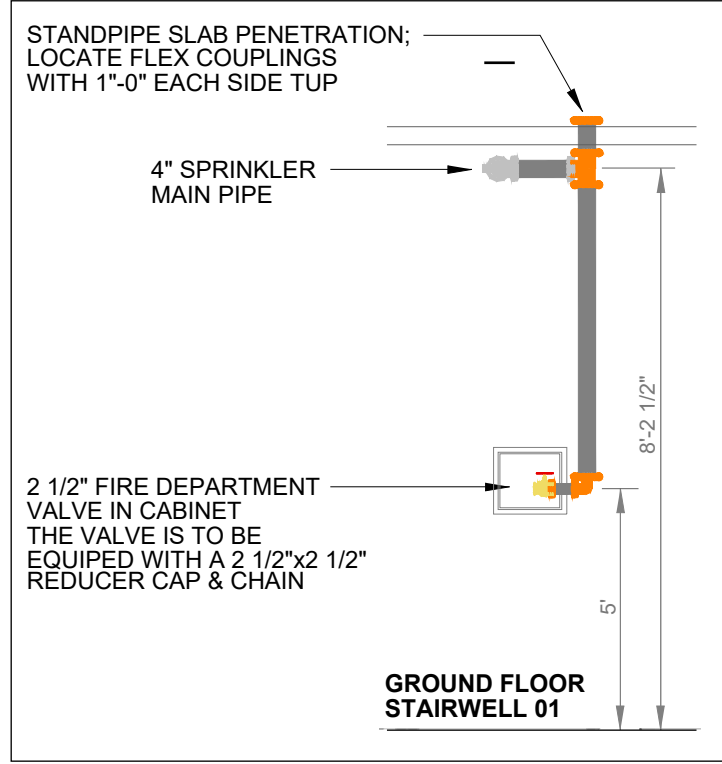
Components (Refer to Figure 1)		Table D
Item	Description	
1	Grooved Butterfly Valve	
2	Manifold	
3	Water Flow Switch	
4	Riser Check Valve	
5	Test and Drain Valve	
6	Pressure Relief Valve	

8 CONTROL VALVE ASSEMBLY RELIABLE - MODEL FCA
NOT TO SCALE



9 FIRE PUMP - SPP PE14G VERTICAL TURBINE DETAIL
NOT TO SCALE





2 SECTION 01 - STAIRWELL 01

3 SECTION 02 - STAIRWELL 02

4 SECTION 03 - STAIRWELL 03

0 1' 5' 10'
1/4" = 1'-0"

0 1' 5' 10'
1/4" = 1'-0"

0 1' 5' 10'
1/4" = 1'-0"

FABRICATION NOTES: WET PIPING

EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING
UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
PIPING 2.1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED
OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED
FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING,
UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

CISTERN NOTE:

- LOW WATER ALARM:
LOW WATER LEVEL ALARM IS REQUIRED FOR THE CISTERN.
THE ALARM SHOULD PROVIDE BOTH AUDIBLE AND VISUAL SIGNALS.
- AUTOMATIC REFILL SYSTEM:
THE CISTERN MUST BE INTEGRATED WITH AN AUTOMATIC REFILL
MECHANISM.
THE SYSTEM SHOULD ACTIVATE TO REPLENISH THE TANK AS SOON AS
THE WATER LEVEL FALLS BELOW THE SET THRESHOLD, ENSURING
ADEQUATE WATER AVAILABILITY AT ALL TIMES.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

FIRE DEPARTMENT CONNECTION - BOM

Size	Description	Quantity
4	Rigid Coupling, Org. E Gasket	8
4	Grooved Short Radius, 90° Elbow, DI, Org	2
4	Grooved, 90° Elbow, DI	2
4 x 2 1/2 x 2 1/2	FDC, Exposed, Two-Way, Double Clapper, PB, Back	1
4	Swing Check Valve, G-G	1

HOSE CABINET - BOM

Size	Description	Quantity
2 1/2	Rigid Coupling, Org. E Gasket	2
4	Rigid Coupling, Org. E Gasket	2
2 1/2	Hosevalve, Adj. PCP, T(F)-T(M)	1
4 x 4 x 2 1/2	Grooved Reducing Tee, DI	1
18x18x8	Valve Cabinet FR2024	1

FIRE PUMP ROOM - BOM

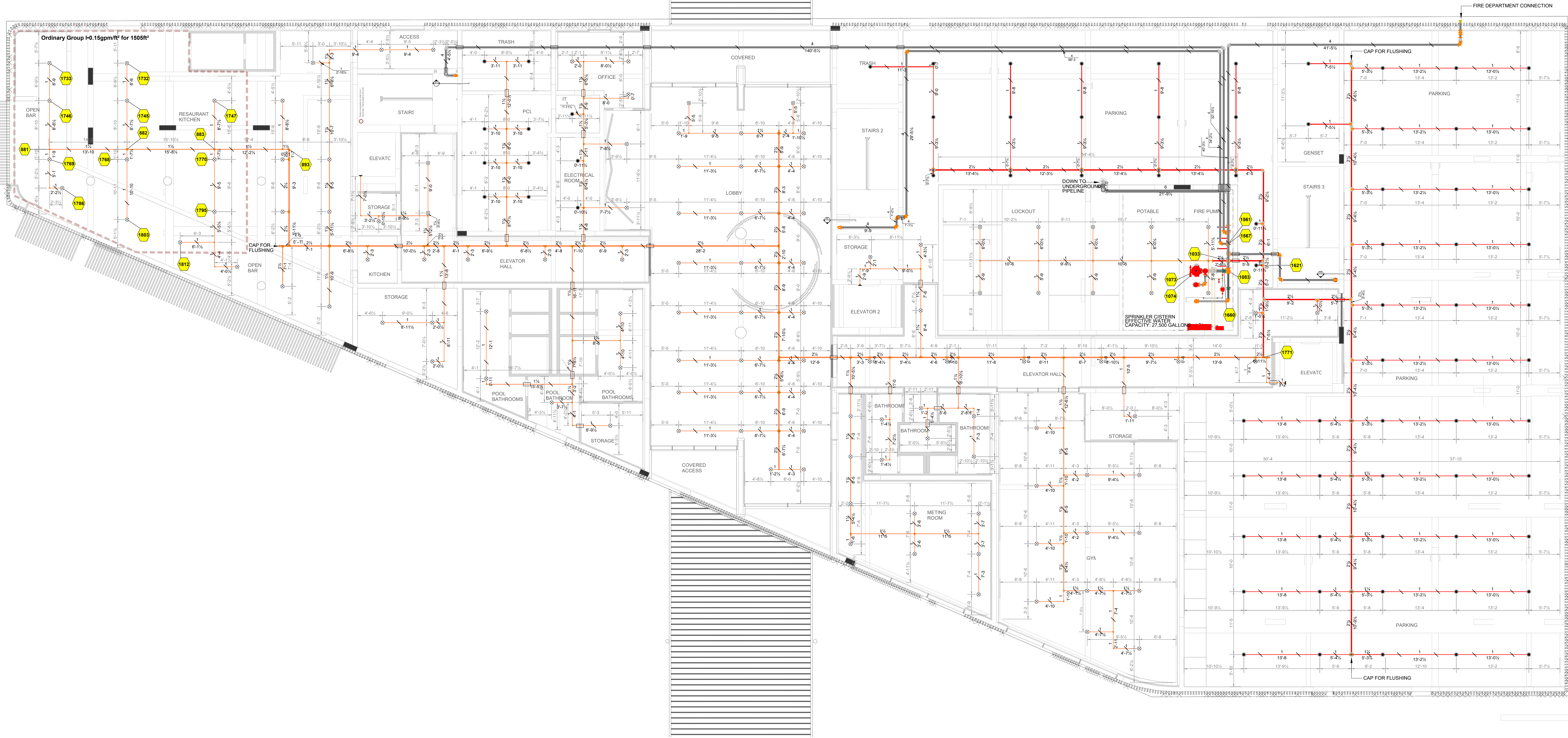
Size	Description	Quantity
1 1/4	Threaded 90° Elbow, GMI	3
1 1/4	Gate Valve, OS&Y, T-T, 175lb	2
1 1/4 x 6	Threaded Reducing Flange, CI	2
1 1/4	150lb Union, CI	1
1 1/4	150lb Union, GMI	1
1 1/4	Valve, T-T Swing Check	1
1 1/4	M-Threaded Square Plug, DI	1
1 1/4	Globe Valve, T-T	8
1 1/4	Threaded Straight Tee, SS	4
1 1/4 x 1 1/4 x 1 1/4	Threaded Reducing Tee, GMI	4
1 1/4	Valve, T-T Swing Check	3
1 1/4	Threaded Cap, GMI	4
1 1/4	Threaded, 90° Elbow, SS	8
1 1/4	150lb Union, GMI	2
1 1/4 x 1 1/4 x 1 1/4	Threaded Reducing Tee, GMI	1
1 1/4	Gauge	5
12 x 6	Pump, Vertical Turbine	1
4	Butterfly Valve, G-G	4
2 1/2	Swing Check Valve, G-G	1
4	Swing Check Valve, G-G	3
2	Angle Valve, T-T	3
2 1/2	Butterfly Valve, G-G	1
1 1/4	Angle Valve, T-T	1
2 1/2	Rigid Coupling, Org. E Gasket	4
2	M-Threaded Square Plug, CI	3
4	Rigid Coupling, Org. E Gasket	25
4 x 2	Waterflow Detector	3
2	Threaded, 90° Elbow, CI	3
1 1/4	Threaded, 90° Elbow, CI	1
1 1/4	Threaded, 45° Elbow, CI	1
2	Threaded, 45° Elbow, CI	3
1	M-Threaded Square Plug, CI	1
2 1/2 x 1 1/4	Waterflow Detector	1
4	Grooved Tee, DI, Org	1
6	Rigid Coupling, Org. E Gasket	7
1 1/4	Threaded Cap, CI	1
6 x 4	Rigid Coupling, Reducing, Org. E Gasket	1
1 1/4	Threaded Cap, MI, Galv	1
4	Grooved, 90° Elbow, DI	4
1 1/4	Threaded Straight Tee, CI	1
6	F-Grooved, Low Pressure Flange, DI	2
4	F-Grooved, Low Pressure Flange, DI	3
6	Swing Check Valve, F-F	1
6	Grooved, 90° Elbow, DI	1
6	Grooved Tee, DI	1
6	Flanged Tee, CI	1
6	Butterfly Valve, G-G	1
	Jockey Pump	1

Hydraulic Information

Remote Area 02 - GROUND FLOOR	
OCCUPANCY CLASSIFICATION	Ordinary Group 1 (NFPA13-4.3.2)
DENSITY (gpm/ft²)	0.15 for 1500ft² (Actual 1500ft²)
TOTAL HEADS FLOWING	12
K-FACTOR	5.8
TOTAL WATER REQUIRED	282.56
TOTAL PRESSURE REQUIRED	155.133
BASE OF RISER (gpm)	282.56
BASE OF RISER (psi)	155.133
SAFETY MARGIN (psi)	+21.863 (12.4%)
AREA OF APPLICATION (ft²)	1500ft²
HOSE STREAM DEMAND (gpm)	250

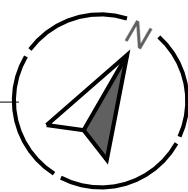
Sprinkler Legend

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Reliable	RA0613	RFC58	123	5.8	Concealed Pendent	1/2	Fast	Brass	168°F	CONCEALED
	Reliable	RA1425	F1FR56	74	5.6	Upright	3/4	Quick	EN7	175°F	INSTALLED 5" FROM CEILING
	Reliable	RA1435	F1FR56	3	5.6	Horizontal Sidewall	1/2	Quick	White Polyester	175°F	INSTALLED 5" FROM CEILING
				Total = 200							



1 GROUND FLOOR PLAN - FIRE SPRINKLER LAYOUT

0 1' 5' 10'
1/8" = 1'-0"



PROJECT: GROUND FLOOR PLAN - FIRE SPRINKLER LAYOUT

GENERAL CONTRACTOR:

FIRE SPRINKLER CONTRACTOR:

JOB NUMBER:

SHEET

SPR-01

FABRICATION NOTES: WET PIPING

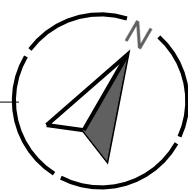
EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS. PIPING 2.1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING, UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

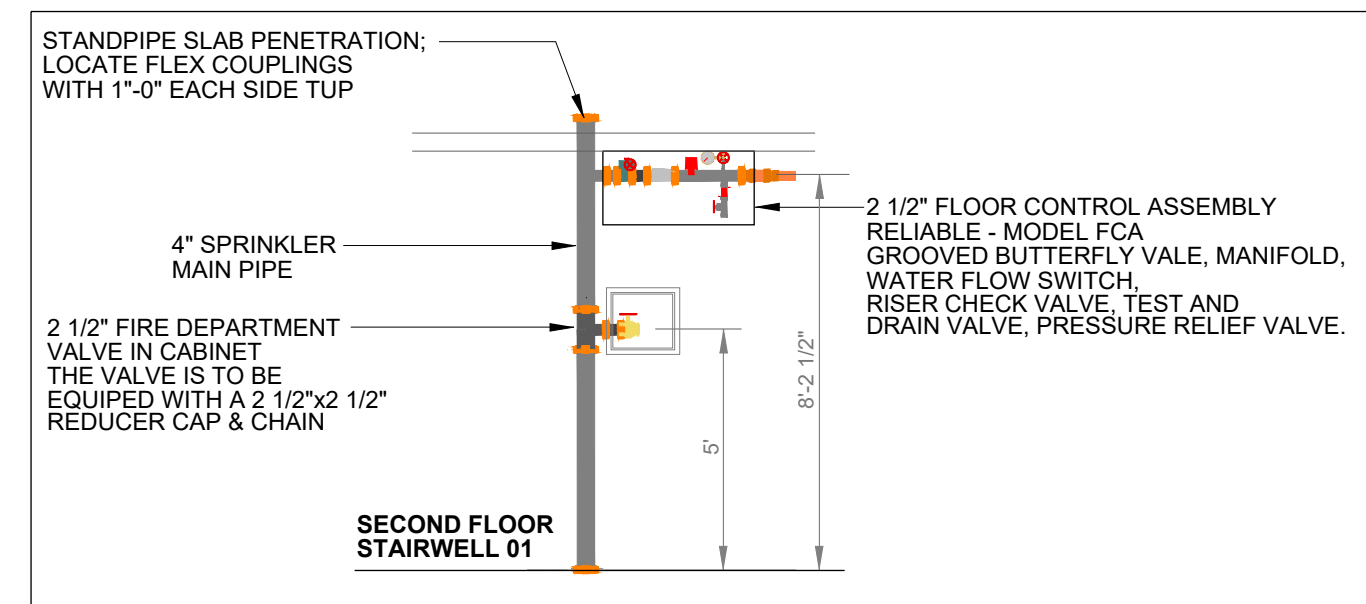


HYDRANT - BOM		
Size	Description	Quantity
6	Gate Valve, NRS, MJ-MJ	3
6	Threaded, 90° Elbow, CI	3
1 x 1/4	Slip-On Plastic Reducer Coupling, CPVC	1
4	Fire Hydrant, Two Outlet	3

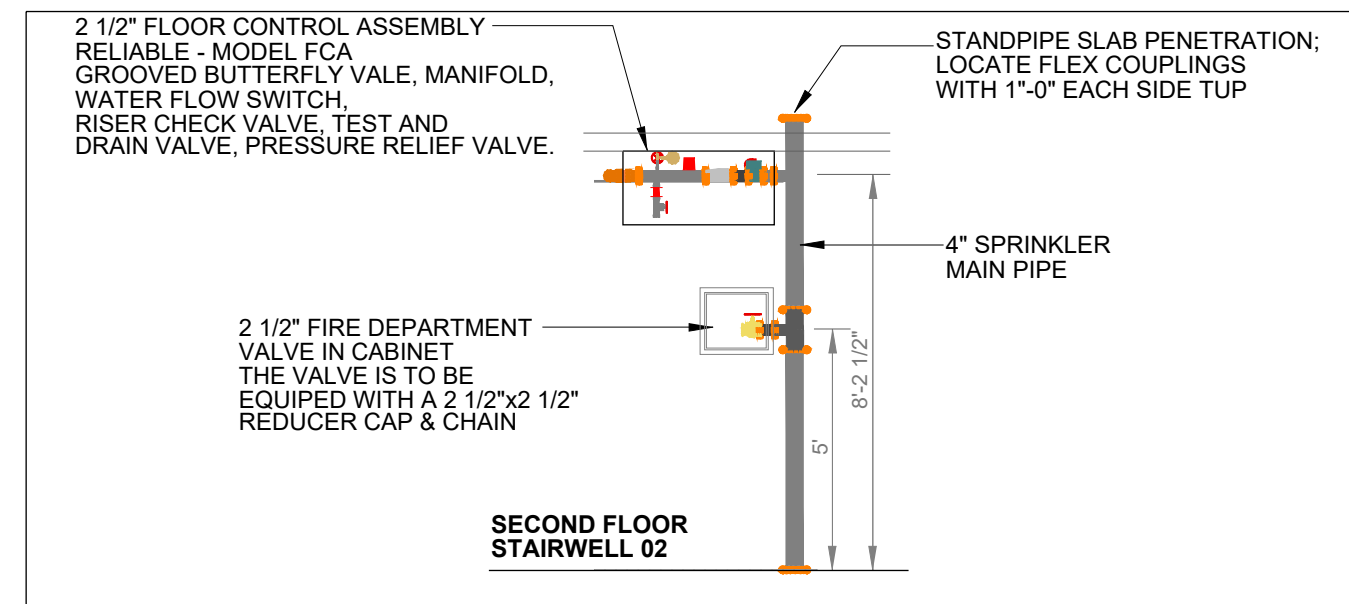
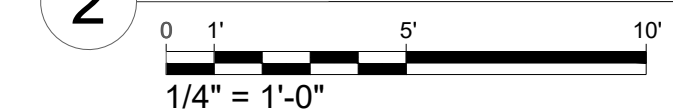
1 GROUND FLOOR PLAN - UNDERGROUND PIPELINE - FIRE SPRINKLER LAYOUT



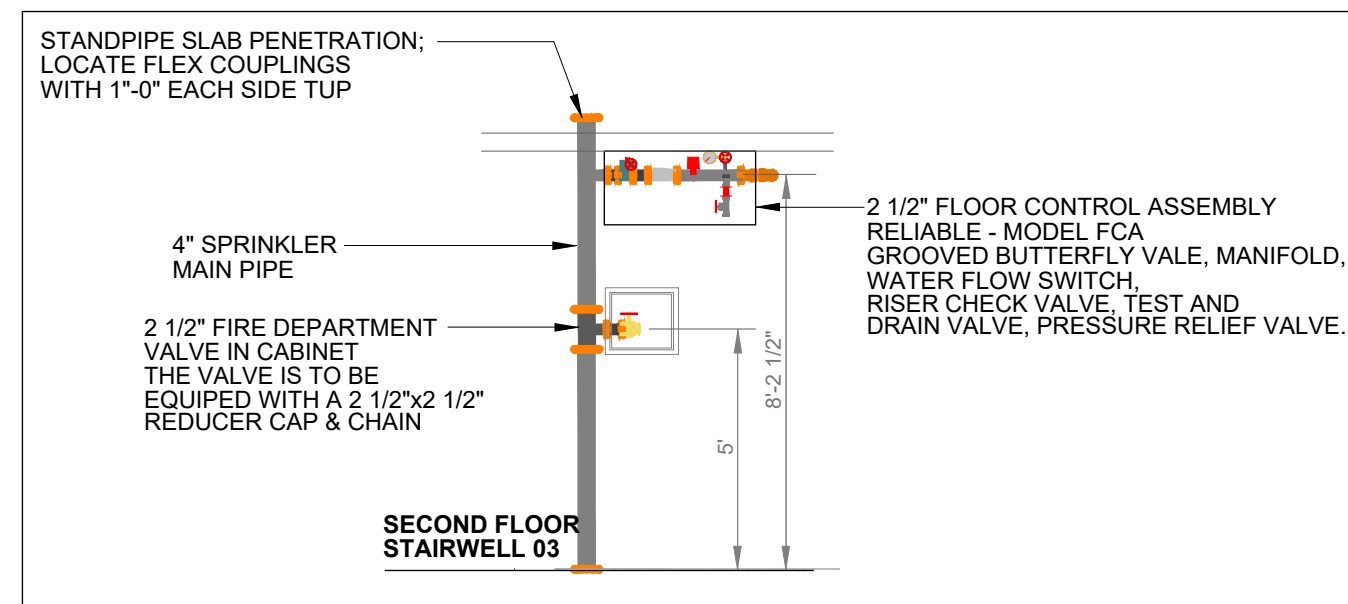
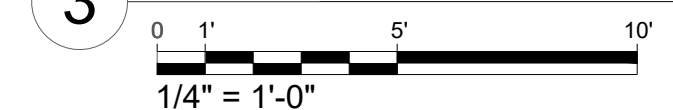
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DATE:	DATE:	DATE:	DATE:	DATE:
REV:	1	2	3	4
PROJECT:	GROUND FLOOR PLAN - UNDERGROUND PIPELINE - FIRE SPRINKLER LAYOUT			
GENERAL CONTRACTOR:				
FIRE SPRINKLER CONTRACTOR:				
JOB NUMBER:				
SHEET:	SPR-02			



2 SECTION 01 - STAIRWELL 01



2 SECTION 02 - STAIRWELL 02



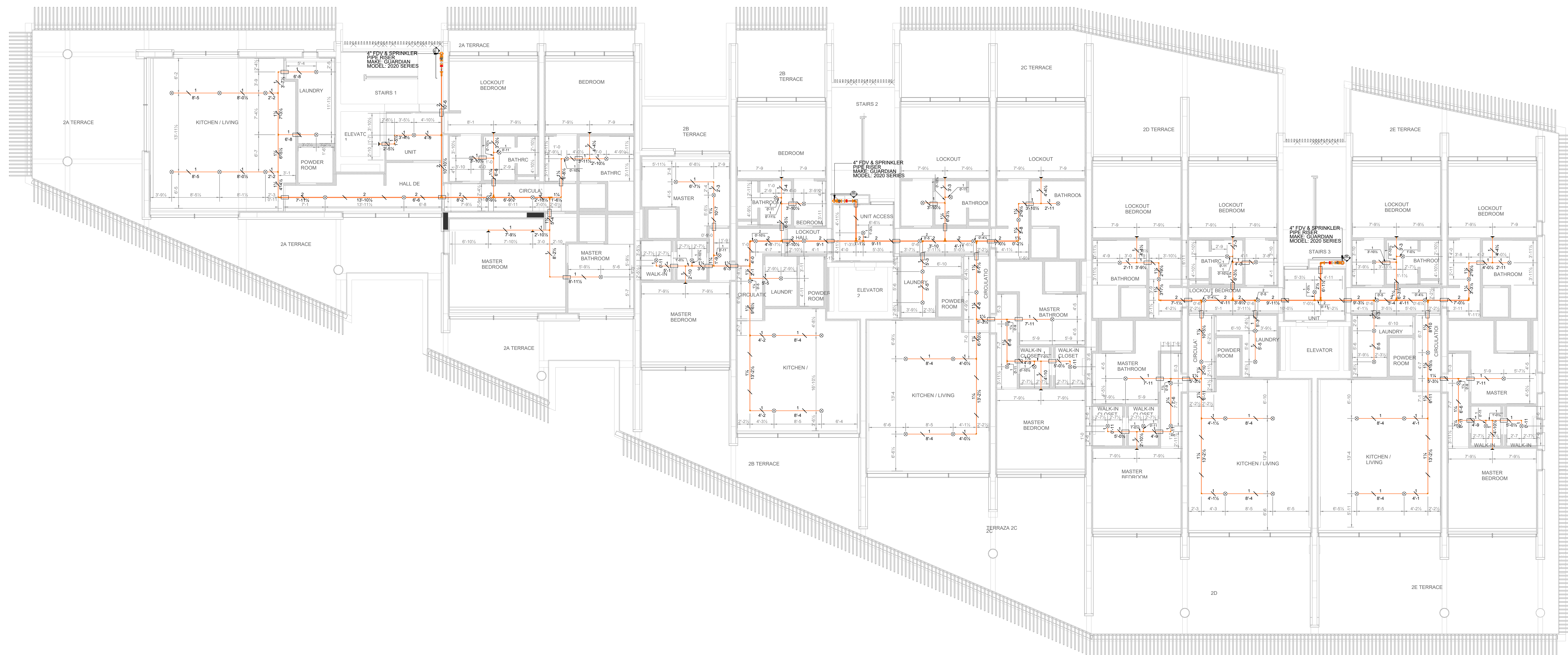
4 SECTION 03 - STAIRWELL 03



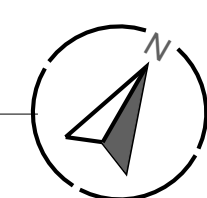
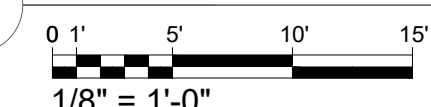
FABRICATION NOTES: WET PIPING

EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING
UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
PIPING 2 1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED
OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED
FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING,
UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

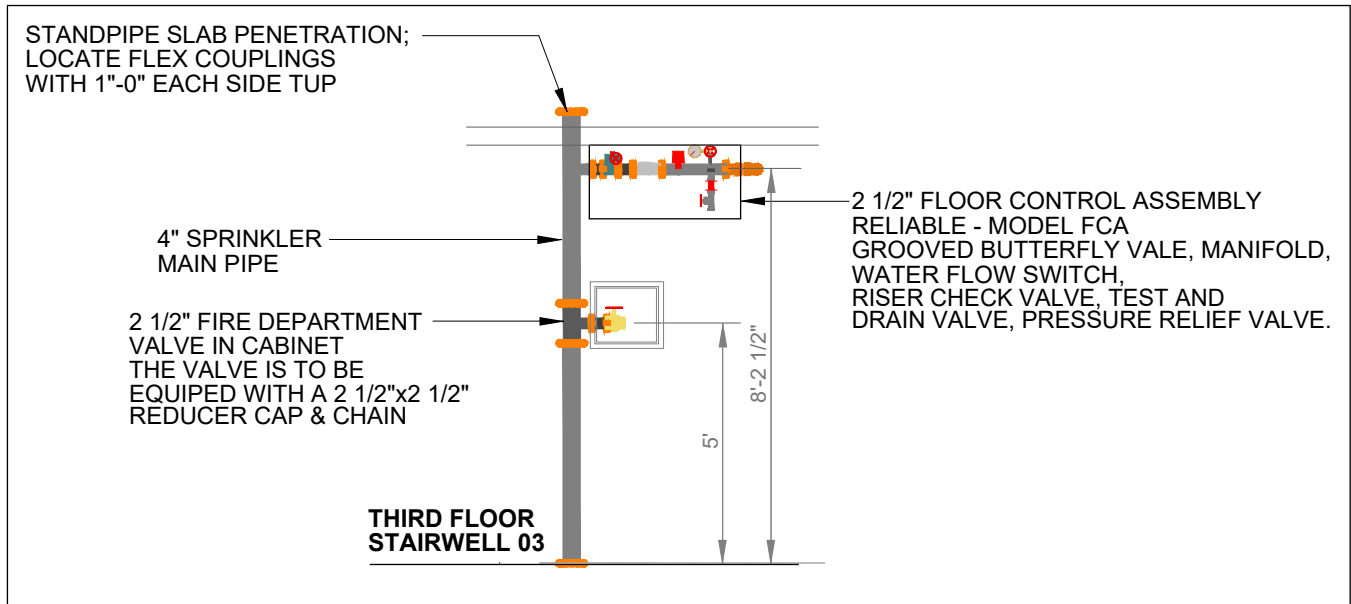
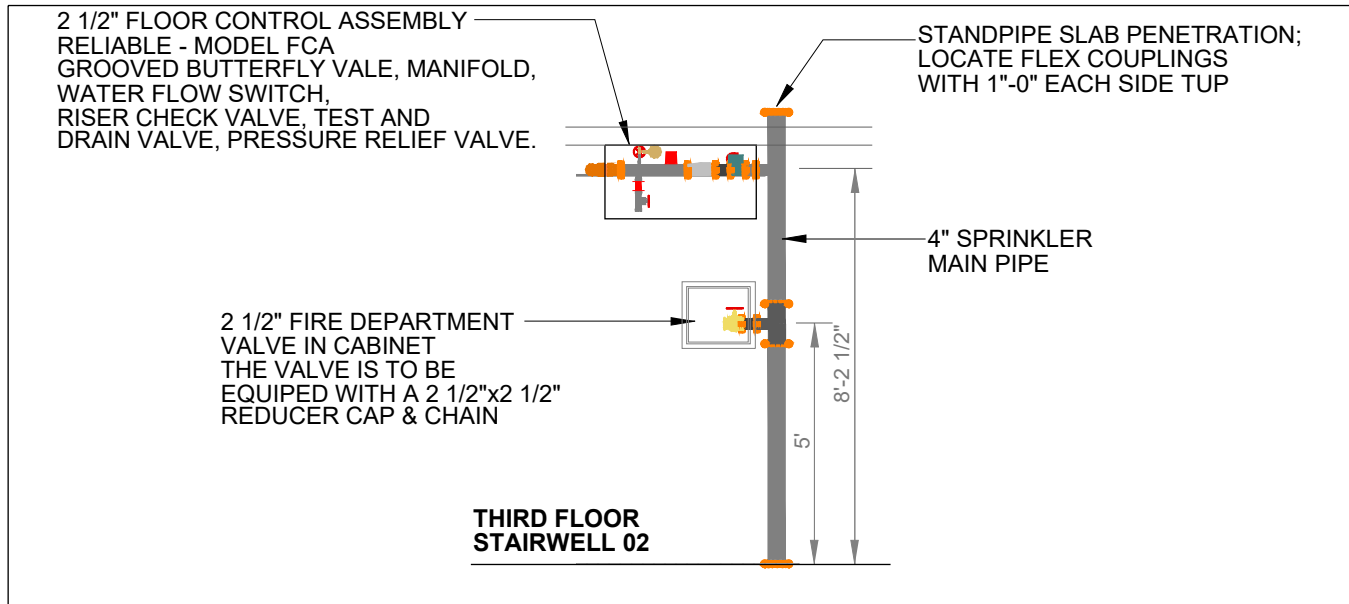
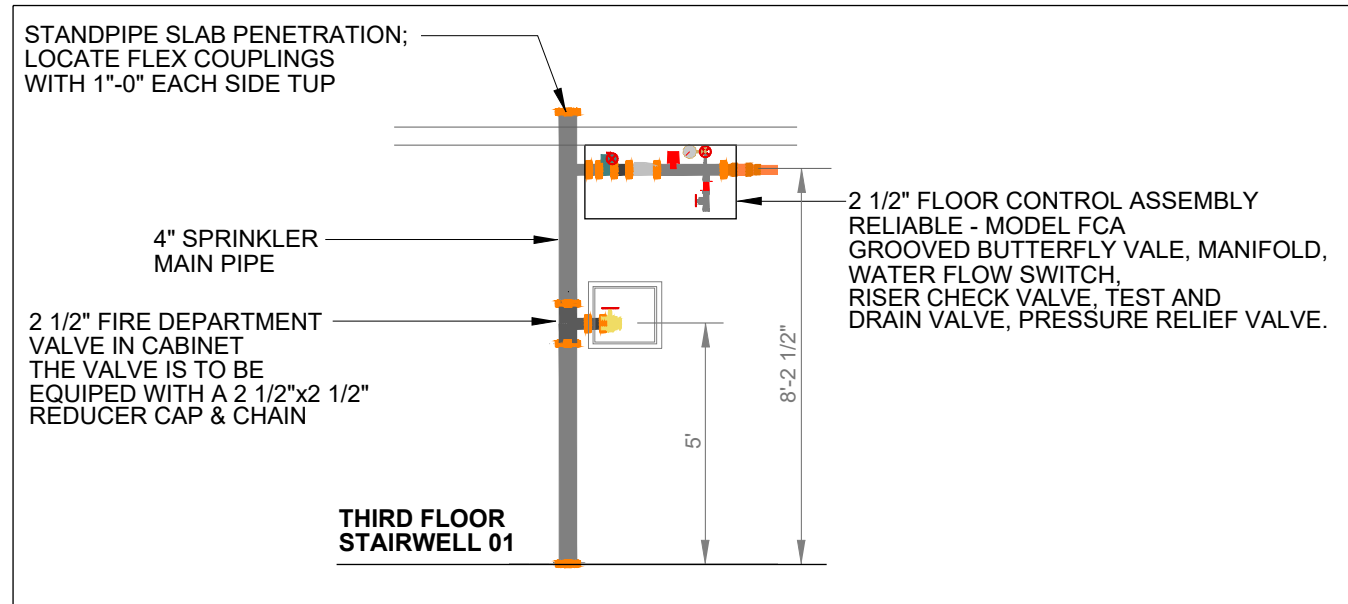


SECOND FLOOR PLAN - FIRE SPRINKLER LAYOUT

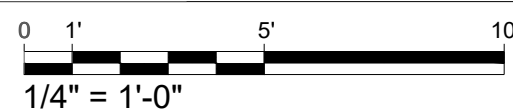


Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	QTY	K-Factor	Type	Size	Response	Finish	Temperature	Note
 	Reliable	RA0613	RFCS8	89	5.8	Concealed Pendent	1/2"	Fast	Brass	165°F	CONCEALED
	Reliable	RA1435	1FR56	16	5.6	Horizontal Sidewall	1/2"	Quick	White Polyester	175°F	INSTALLED 5" FROM CEILING
	Total = 105										

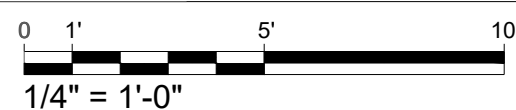
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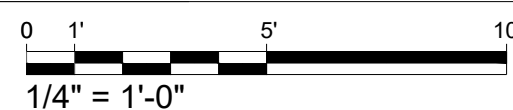
2 SECTION 01 - STAIRWELL 01



3 SECTION 02 - STAIRWELL 02



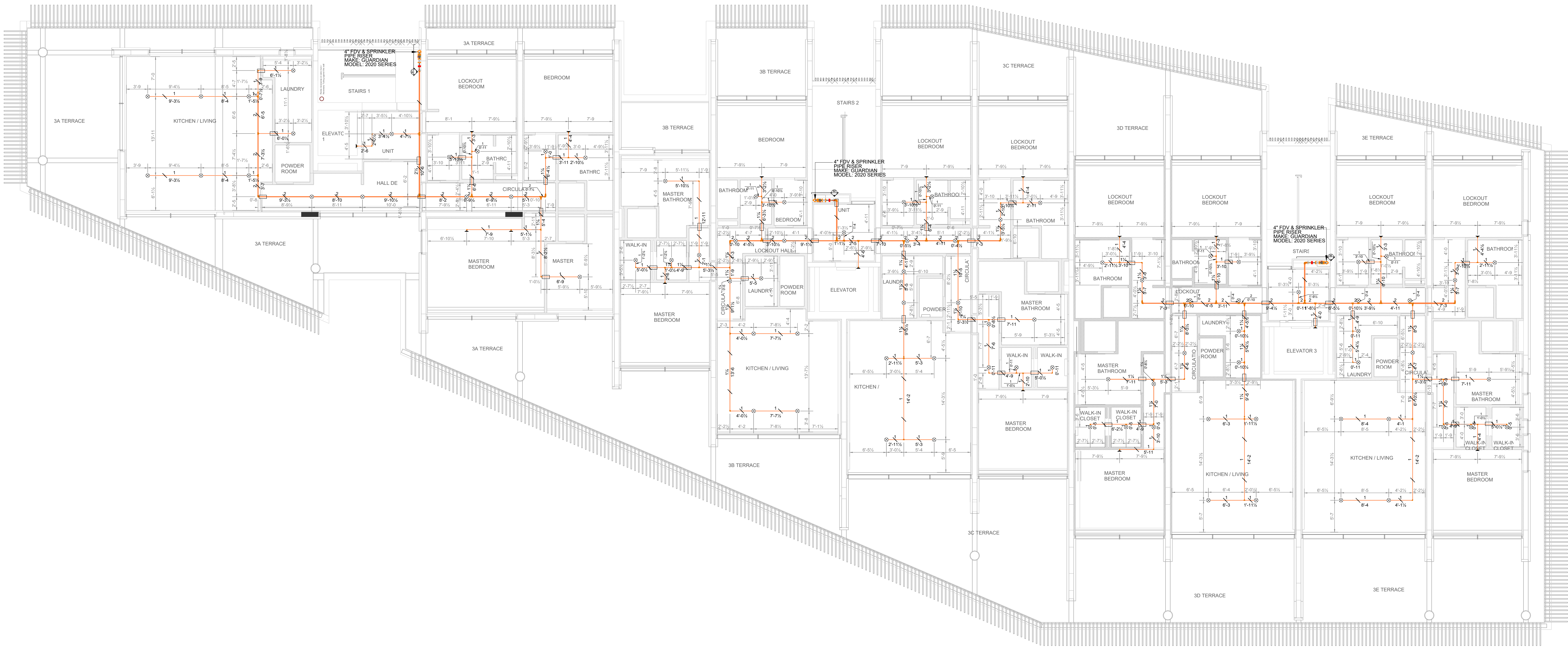
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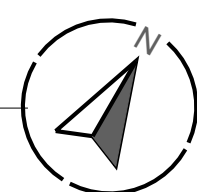
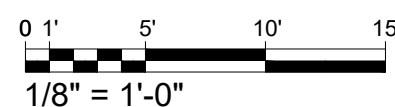
LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
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	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

FABRICATION NOTES: WET PIPING

EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING
UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
PIPING 2 1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED
OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED
FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING,
UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.



1 THIRD FLOOR PLAN - FIRE SPRINKLER LAYOUT



Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Reliable	RA0613	RFCS8	88	5.8	Concealed Pendant	1/2"	Fast	Brass	168°F	CONCEALED
	Reliable	RA1435	F1FR56	16	5.6	Horizontal Sidewall	1/2"	Quick	White Polyester	175°F	INSTALLED 5" FROM CEILING
				Total =	106						

PROJECT:

GENERAL CONTRACTOR:

FIRE SPRINKLER CONTRACTOR:

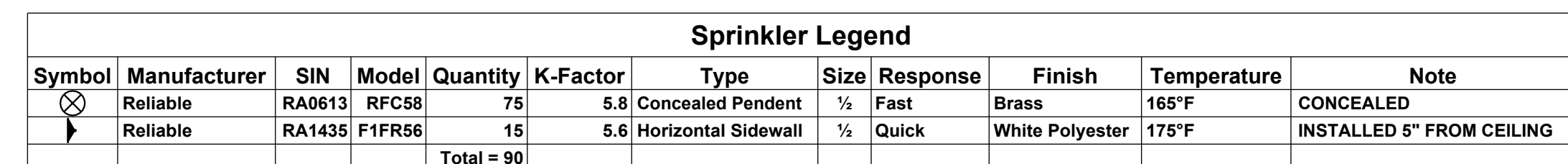
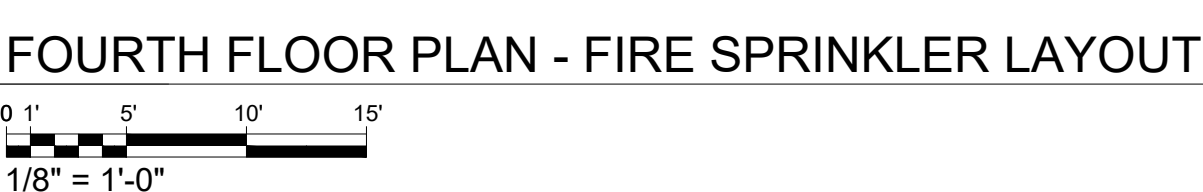
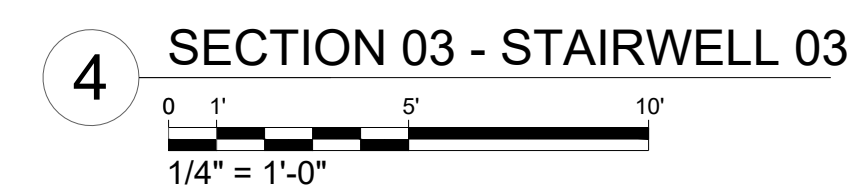
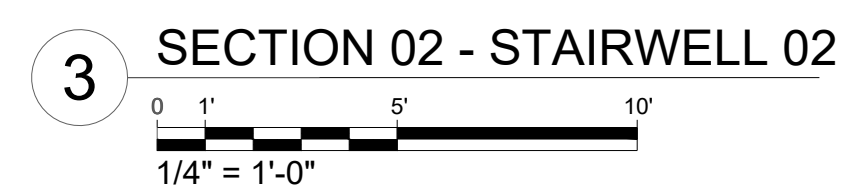
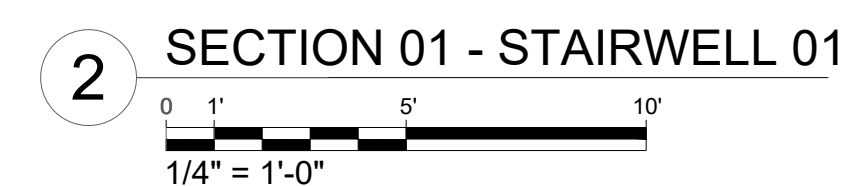
JOB NUMBER:

SHEET

SPR-04

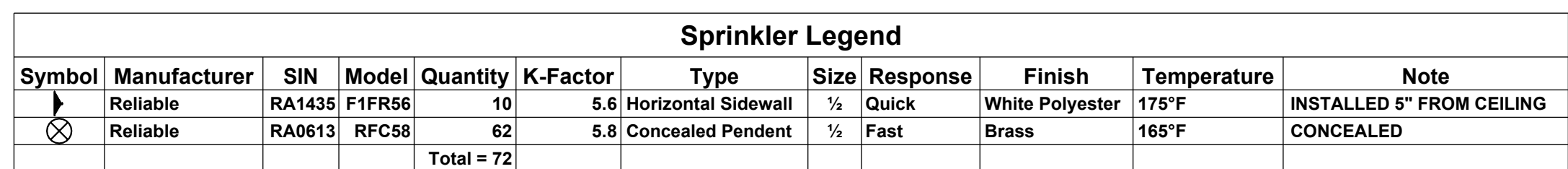
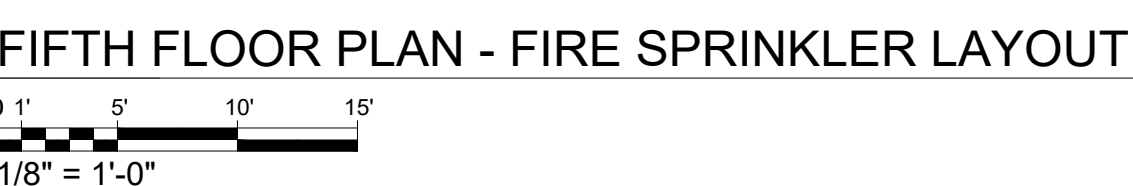
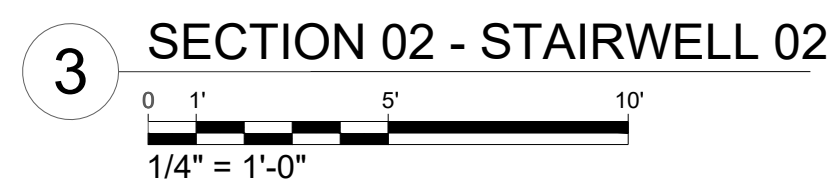
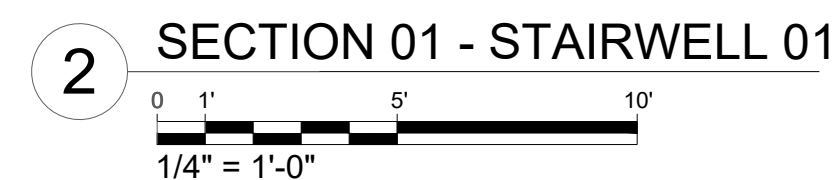
SHEET DESCRIPTION:
THIRD FLOOR PLAN - FIRE SPRINKLER LAYOUT

SHEET 5-9
SCALE: 1/8" = 1'-0"
CADD FILE NAME:



LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

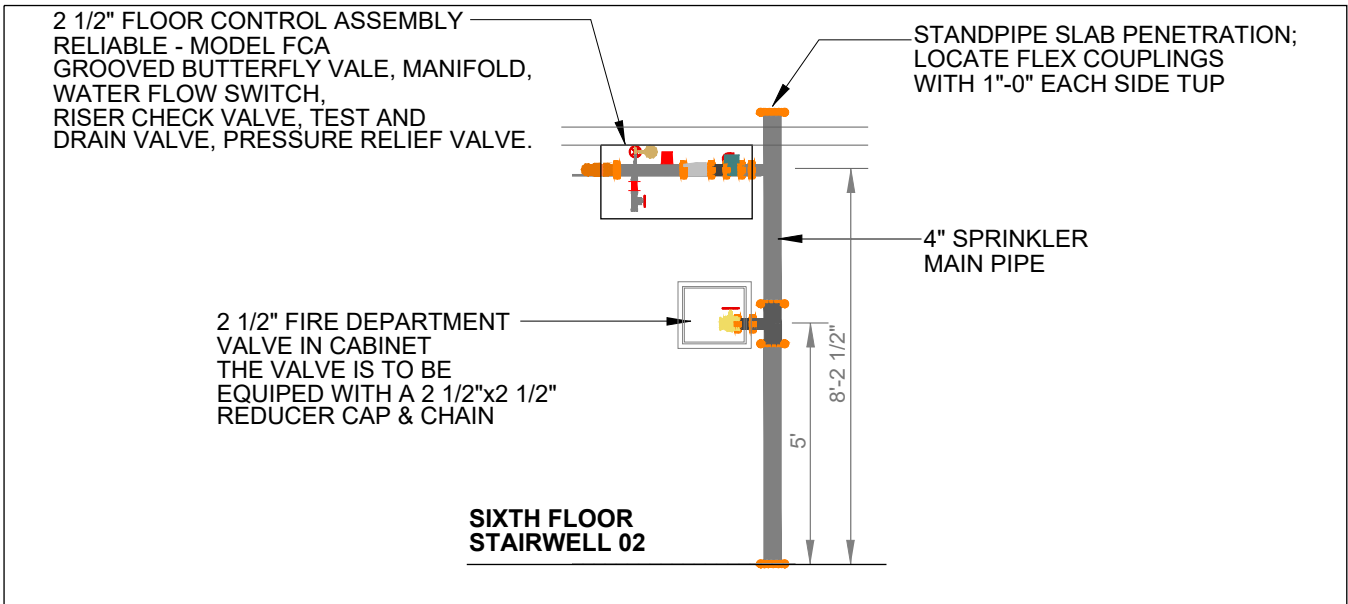
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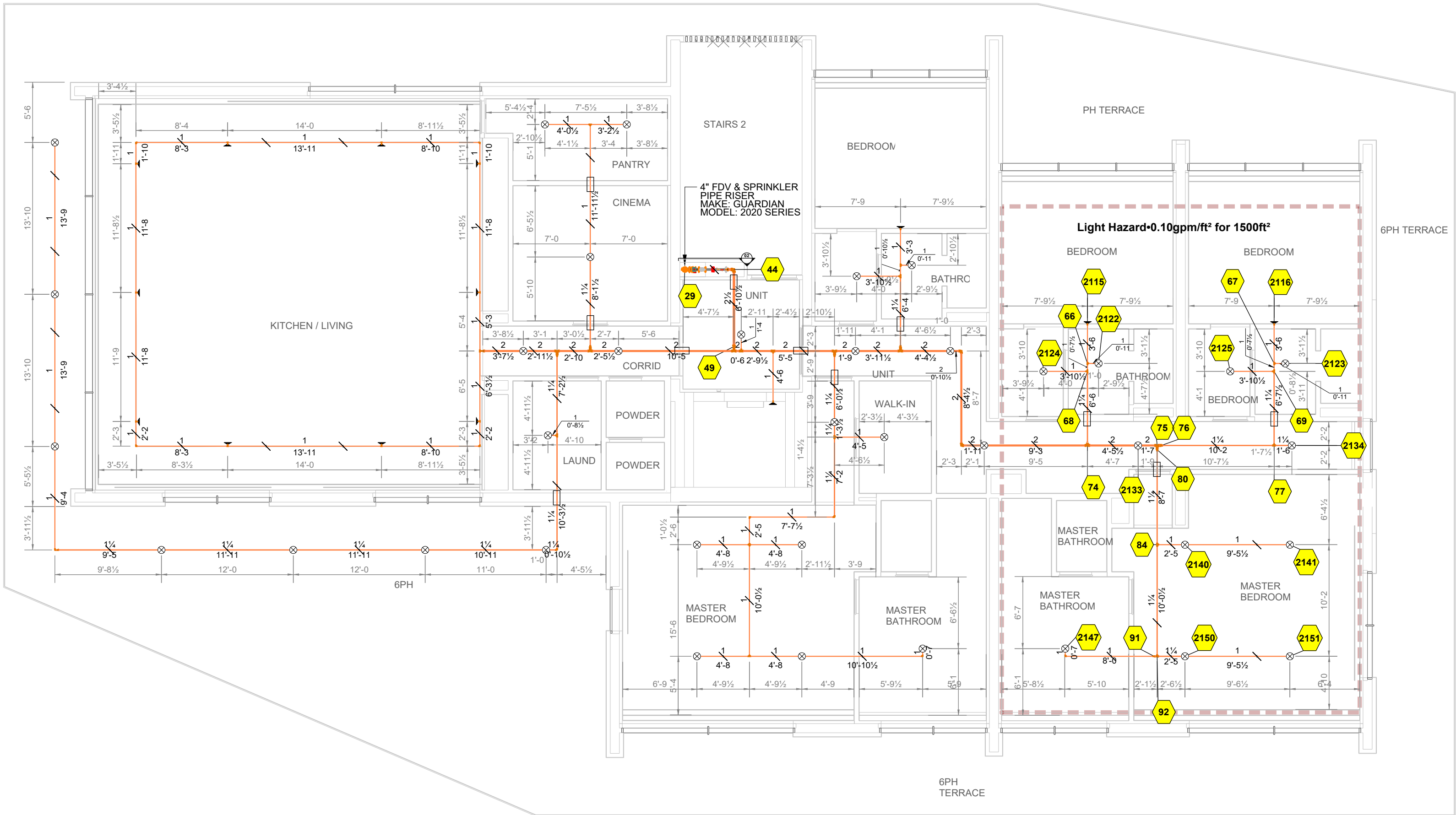
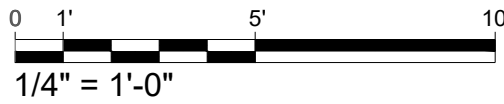
EXPOSED PIPE:
GROOVED MAINS: PIPING 2" AND SMALLER TO BE SCHEDULE 40 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
PIPING LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WEIGHT CAST IRON SCREWED FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING, UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

SHEET		JOB NUMBER		FIRE SPRINKLER CONTRACTOR:		GENERAL CONTRACTOR:		PROJECT:		REV.		DATE	COMMENTS	APPROVED BY:	DRAWN BY:	CHECKED BY:	DATE	
SPR-06										1								
										2								
										3								
										4								
										5								



2 SECTION 01 - STAIRWELL 01

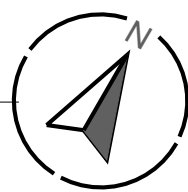
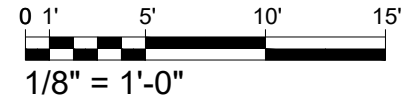


FABRICATION NOTES: WET PIPING

EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING
UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
PIPING 2.1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED
OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED
FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING,
UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

1 SIXTH FLOOR PLAN - FIRE SPRINKLER LAYOUT



Sprinkler Legend										
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature
	Reliable	RA1435	F1FR56	14	5.6	Horizontal Sidewall	1/2"	Quick	White Polyester	175°F
	Reliable	RA0613	RFC58	97	5.8	Concealed Pendant	1/2"	Fast	Brass	165°F
				Total = 111						

Hydraulic Information	
Remote Area 01 - SIXTH FLOOR	
OCCUPANCY CLASSIFICATION	Light Hazard (NFPA13-4.3.2)
DENSITY (gpm/ft ²)	0.10 for 1500ft ² (Actual 1500ft ²)
TOTAL HEADS FLOWING	13
K-FACTOR	5.6
TOTAL WATER REQUIRED	221.90 gpm
TOTAL PRESSURE REQUIRED	90.892 psi
BASE OF RISER (gpm)	221.90
BASE OF RISER (psi)	90.892
SAFETY MARGIN (psi)	+87.148 (48.9%)
AREA OF APPLICATION (ft ²)	1500ft ²
HOSE STREAM DEMAND (gpm)	100

PROJECT:

GENERAL CONTRACTOR:

FIRE SPRINKLER CONTRACTOR:

JOB NUMBER

SHEET

SIXTH FLOOR PLAN - FIRE SPRINKLER LAYOUT

SPR-07

FABRICATION NOTES: WET PIPING

EXPOSED PIPE:
GROOVED MAINS: PIPING 2"AND SMALLER TO BE SCHEDULE 40 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS. PIPING 2.1/2" AND LARGER TO BE SCHEDULE 10 BLACK PIPING UTILIZING WELDED OUTLETS AND JOINED BY GROOVED FITTINGS AND COUPLINGS.
TREADED LINES:
SCHEDULE 40 BLACK PIPING UTILIZING STANDARD WIEGHT CAST IRON SCREWED FITTINGS.
CONCEALED PIPE: PIPING 3" AND SMALLER TO BE BLAZEMASTER CPVC PIPING, UTILIZING BLAZEMASTER FITTINGS AND COUPLINGS.

LEGEND	
	CONCEALED PENDANT SPRINKLER
	SIDEWALL SPRINKLER EXPOSED
	UPRIGHT SPRINKLER EXPOSED
	CALCULATION POINT
	CONCEALED PIPELINE
	EXPOSED PIPELINE
	UNDERGROUND PIPE
	REMOTE AREA BOUNDARY
	HYDRANT LANDING VALVE
	FIRE DEPARTMENT CONNECTION
	PIPE SLEEVE (DETAIL AT SPR-00)
	PIPE HANGER
	FIRE PUMP - VERTICAL TURBINE
	JOCKEY PUMP
	DISCHARGE CHECK VALVE
	BUTTERFLY VALVE
	RELIEF VALVE ELBOW
	RELIEF VALVE

FIRE PUMP ROOM - BOM			
Key Note	Size	Description	Quantity
1	1 1/4"	Threaded 90° Elbow, GMI	3
2	1 1/4"	Gate Valve, OS&Y, T-T, 175lb	2
3	1 1/4" x 6"	Threaded Reducing Flange, CI	2
4	1 1/4"	150lb Union, CI	1
5	1 1/4"	150lb Union, GMI	1
6	1 1/4"	Valve, T-T Swing Check	1
7	1/2"	M-Threaded Square Plug, DI	4
8	1/2"	Globe Valve, T-T	8
9	1/2"	Threaded Straight Tee, SS	4
10	1/2" x 1/2" x 1/2"	Threaded Reducing Tee, GMI	4
11	1/2"	Valve, T-T Swing Check	3
12	1/4"	Threaded Cap, GMI	4
13	1/2"	Threaded, 90° Elbow, SS	8
14	1/2"	150lb Union, GMI	2
15	1 1/4" x 1 1/2" x 1/2"	Threaded Reducing Tee, GMI	1
16	1/2"	Gauge	5
17	12 x 6	Pump, Vertical Turbine	1
18	4"	Butterfly Valve, G-G	4
19	2 1/2"	Swing Check Valve, G-G	1
20	4"	Swing Check Valve, G-G	3
21	2"	Angle Valve, T-T	3
22	2 1/2"	Butterfly Valve, G-G	1
23	1 1/4"	Angle Valve, T-T	1
24	2 1/2"	Rigid Coupling, Org. E Gasket	4
25	2"	M-Threaded Square Plug, CI	3
26	4"	Rigid Coupling, Org. E Gasket	25
27	4 x 2"	Waterflow Detector	3
28	2"	Threaded, 90° Elbow, CI	3
29	1 1/4"	Threaded, 90° Elbow, CI	1
30	1 1/4"	Threaded, 45° Elbow, CI	1
31	2"	Threaded, 45° Elbow, CI	3
32	1 1/4"	M-Threaded Square Plug, CI	1
33	2 1/2" x 1 1/2"	Waterflow Detector	1
34	4"	Grooved Tee, DI, Org	1
35	6"	Rigid Coupling, Org. E Gasket	7
36	1 1/4"	Threaded Cap, CI	1
37	6 x 4"	Rigid Coupling, Reducing, Org. E Gasket	1
38	1/2"	Threaded Cap, MI, Galv	1
39	4"	Grooved, 90° Elbow, DI	4
40	1 1/4"	Threaded Straight Tee, CI	1
41	6"	F-Grooved, Low Pressure Flange, DI	2
42	4"	F-Grooved, Low Pressure Flange, DI	3
43	6"	Swing Check Valve, F-F	1
44	6"	Grooved, 90° Elbow, DI	1
45	6"	Grooved Tee, DI	1
46	6"	Flanged Tee, CI	1
47	6"	Butterfly Valve, G-G	1
48		Jockey Pump	1

