

FIRE PROTECTION DESIGN CRITERIA:

61015-32.003 (1) (2) (5)
(1) SCOPE OF WORK
NEW CONSTRUCTION BUILDING
FIRE PROTECTION SYSTEM FOR NEW CONSTRUCTION 2 STORY FIRE STATION BUILDING
BUILDING SHALL BE PROTECTED WITH A WET AUTOMATIC FIRE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA 13, 2019 EDITION.
(2) ACCEPTANCE TEST CRITERIA
TESTING OF FIRE PROTECTION SYSTEM AND ITS COMPONENTS SHALL COMPLY WITH ALL APPLICABLE TESTS PER NFPA 13, 2019 EDITION, FIGURES 8.0.1 AND 28.1. CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVE AND UNDERGROUND PIPING.
SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE FOR 2 HOURS, OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE WHEN THE MAXIMUM PRESSURE TO BE MAINTAINED IN THE SYSTEM IS IN EXCESS OF 150 PSI.
THE TESTING PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED.
THE CONTRACTOR SHALL PERFORM ALL REQUIRED ACCEPTANCE TESTS IN ACCORDANCE WITH NFPA 13, 2019 EDITION. COMPLETE THE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S) AND FORWARD THE APPROVED CERTIFICATE(S) TO THE ARCHITECT/ENGINEER FOR APPROVAL OF THE INSTALLATION.
ALL TEST CERTIFICATE(S) SHALL BE DATED, SIGNED AND WITNESSED BY AHJ. SUBMIT ONE COPY OF EACH TEST CERTIFICATE TO ARCHITECT/ENGINEER.
(3) STRUCTURAL SUPPORT AND STRUCTURAL OPENINGS
THE SUPPORT SYSTEMS FOR THIS BUILDING SHALL BE DESIGNED BY A STATE LICENSED STRUCTURAL ENGINEER IN ACCORDANCE WITH F.A.C. PLEASE REFER TO STRUCTURAL DRAWINGS FOR LIVE AND DEAD LOADING INFORMATION. THESE ARE NO SIGNIFICANT STRUCTURAL OPENINGS THAT WILL BE REQUIRED FOR THIS FIRE SPRINKLER SYSTEM.
ALL TEST CERTIFICATE(S) SHALL BE DATED, SIGNED AND WITNESSED BY AHJ. SUBMIT ONE COPY OF EACH TEST CERTIFICATE TO ARCHITECT/ENGINEER.
(4) POINT OF SERVICE
POINT OF CONNECTION SHALL BE TO AN EXISTING WATER SUPPLY MAIN ON SITE. POINT OF SERVICE OCCURS WHEN THE UNDERGROUND PIPING FOR THE FIRE SPRINKLER SYSTEM ENDS AND IS CONNECTED TO AN EXISTING WATER SUPPLY MAIN. ONE FIRE DEPARTMENT CONNECTION SHALL LOCATED ON SITE. REFER TO CIVIL UTILITY SITE DRAWINGS FOR LOCATION OF POS AND PDC.
B. APPLICABLE NFPA STANDARD TO BE APPLIED
FLORIDA FIRE PREVENTION CODE 8TH EDITION
NFPA 13, 2019 EDITION
NFPA 24, 2019 EDITION
NFPA 25, 2020 EDITION
C. CLASSIFICATION OF HAZARD OCCUPANCY OF EACH AREA OR ROOM
LIGHT HAZARD OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: PUBLIC AREAS, OFFICE SPACES, BUNKS, BATHROOMS AND CORRIDORS.
ORDINARY HAZARD GROUP I OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: STORAGE ROOMS, ELECTRICAL ROOMS, MECHANICAL ROOMS, SPINRIALS BAY, AND IT ROOMS.
ORDINARY HAZARD GROUP II OCCUPANCIES INCLUDE OCCUPANCIES HAVING USES AND CONDITIONS SIMILAR TO THE FOLLOWING: ELEVATOR HOISTWAYS.
REFER TO FIRE PROTECTION DRAWINGS FOR ALL ROOM HAZARD OCCUPANCY CLASSIFICATIONS.
D. DESIGN APPROACH
DENSITY/AREA
LIGHT HAZARD
0.10 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. AREA OF SPRINKLER OPERATION. AREA OF OPERATION MAY BE REDUCED FOR LISTED QUICK RESPONSE SPRINKLER HEADS PER NFPA 13, 2019 EDITION SECTION 19.3.3.2.3.1. AN ADDITIONAL 100 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.
ORDINARY HAZARD GROUP I
0.15 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. AREA OF SPRINKLER OPERATION. AREA OF OPERATION MAY BE REDUCED FOR LISTED QUICK RESPONSE SPRINKLER HEADS PER NFPA 13, 2019 EDITION SECTION 19.3.3.2.3.1. AN ADDITIONAL 250 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.
ORDINARY HAZARD GROUP II
0.20 GPM/SQ.FT. OVER THE MOST DEMANDING 1500 SQ. FT. AREA OF SPRINKLER OPERATION. AREA OF OPERATION MAY BE REDUCED FOR LISTED QUICK RESPONSE SPRINKLER HEADS PER NFPA 13, 2019 EDITION SECTION 19.3.3.2.3.1. AN ADDITIONAL 250 GPM SHALL BE ADDED FOR A TOTAL COMBINED INSIDE AND OUTSIDE HOSE STREAM DEMAND.
SPRINKLER HEADS
QUICK RESPONSE, 155°F UNLESS OTHERWISE NOTED.
SPACING
STANDARD COVERAGE HEADS
PENDENT AND UPRIGHT SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 225 SQ. FT. FOR ALL LIGHT HAZARD AREAS, AND 130 SQ. FT. FOR ALL ORDINARY HAZARD GROUP I AND II AREAS. (MAXIMUM SPACING SHALL BE 15'-0" AND MINIMUM SPACING SHALL BE 6'-0")
SIDEWALL SPRINKLER HEADS, MAXIMUM PROTECTION SHALL BE 100 SQ. FT. FOR ALL ORDINARY HAZARD GROUP II AREAS. (MAXIMUM SPACING SHALL BE 10'-0" AND MINIMUM SPACING SHALL BE 6'-0")
E. CHARACTERISTICS OF THE WATER SUPPLY TO BE USED
THE EX. WATER MAIN IS AN 12" CIRCULATING MAIN LOCATED ON SANIBEL CAPTIVA RD. BASED ON THE FLOW TEST DATA RECEIVED. THE DURATION WILL SUPPORT THE DESIGN CRITERIA. A NEW 6" UNDERGROUND WATER MAIN CONNECTS TO AN EX. 12" UNDERGROUND WATER SUPPLY ADJACENT THE BUILDING. THE NEW 6" UNDERGROUND MAIN EXTENDS TO THE NEW BUILDING BACKFLOW PREVENTER PRIOR TO THE FIRE DEPARTMENT CONNECTION. THE NEW 6" UNDERGROUND SUPPLY MAIN THEN EXTENDS TO THE BUILDING'S FIRE SPRINKLER RISER.
F. FLOW TEST DATA
FLOW TEST RESULTS PERFORMED ON XX-XX-20XX. REFER TO FIRE HYDRANT FLOW TEST DATA THIS SHEET FOR CLARIFICATION.
G. VALVE AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPEDIMENTS AND UNRECOGNIZED FLOW OF WATER
ALL PADDLE TYPE WATER FLOW INDICATORS SHALL HAVE A FLOW SWITCH. ALL VALVES CONTROLLING THE FIRE SPRINKLER SYSTEMS, INCLUDING BACKFLOW DEVICES, SHALL HAVE TAMPER SWITCHES. ALL ELECTRICAL DEVICES SHALL BE MONITORED BY CENTRAL STATION OR SIMILAR AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION AND SHALL BE IN COMPLIANCE WITH NFPA 72.
H. MICROBIAL INDUCED CORROSION (MIC)
CONTRACTOR SHALL ORDER AND OBTAIN A TEST LAB REPORT INDICATING THAT NO MIC IS PRESENT IN THE SYSTEM.
PROVIDE WITH TYCO TAV-W AUTOMATIC AIR VENT. LOCATE AT HIGHEST REMOTE PART OF SPRINKLER SYSTEM.
I. BACKFLOW PREVENTION AND METERING SPECIFICATIONS
THE BACKFLOW PREVENTION AND METERING EQUIPMENT SHALL BE INSTALLED BY A MINIMUM OF A CLASS V CONTRACTOR AS LICENSED BY THE STATE FIRE MARSHAL. THE MAXIMUM ALLOWABLE PRESSURE LOSS ACROSS THE DEVICE SHALL BE 3 PSI AT SYSTEM DEMAND.
J. QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS
ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS SHALL BE FM APPROVED AND UL LISTED.
K. FIRE PUMP REQUIREMENTS
FIRE PUMP SYSTEM WILL NOT BE REQUIRED.
L. WATER STORAGE TANK
WATER STORAGE TANK WILL NOT BE REQUIRED.
M. STORAGE OCCUPANCY REQUIREMENTS
MISCELLANEOUS STORAGE OCCUPANCY IN ACCORDANCE WITH NFPA 13, 2019 EDITION CHAPTER 4, WITH STORAGE BELOW 6'-0" FOR O.H.I. AND 12'-0" FOR O.H.2.
OWNER'S INFORMATION CERTIFICATE AS DEPICTED IN NFPA 13 FIGURE A.27.1(b) SHALL BE PROVIDED BY OWNER FOR AHJ REVIEW AND VERIFICATION OF ANY POSSIBLE STORAGE.

FIRE PROTECTION GENERAL NOTES:

- 1. THE FIRE PROTECTION SYSTEM SHOWN REPRESENT THE DESIGN INTENT OF THE ENGINEER OF THE RECORD IN ACCORDANCE WITH STATE REGULATION 61015-32. CONTRACTOR SHALL PROVIDE LAYOUT DRAWINGS AND ASSOCIATED HYDRAULIC CALCULATIONS PER DESIGN CRITERIA PROVIDED BY THE ENGINEER OF THE RECORD.
2. DESIGN AND INSTALLATION OF FIRE PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
- FLORIDA FIRE PREVENTION CODE 8TH EDITION
- NFPA 13, 2019 EDITION
- NFPA 24, 2019 EDITION
- NFPA 25, 2020 EDITION
3. ALL HANGERS & MATERIALS SHALL BE IN ACCORDANCE WITH NFPA 13 STANDARDS.
4. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE APPROVED BY NFPA 13. ALL HANGERS ON 4" PIPE AND LARGER IS TO BE CLEVIS TYPE HANGERS. POWER DRIVEN STUDS SHALL NOT BE PERMITTED. ALL HANGERS SHALL BE U.L./F.M. APPROVED.
5. FIRE PROTECTION CONTRACTOR SHALL UTILIZE ONLY U.L. LISTED AND FM APPROVED MATERIALS AND EQUIPMENT THROUGHOUT THE FIRE SPRINKLER SYSTEM.
6. ALL YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND FM APPROVED. THE YARD UNDERGROUND SERVICE LINE SHALL BE TYPE DR-14 5500 CPVC PIPE. INTERIOR MAIN PIPING, 2-1/2" AND LARGER, SHALL BE SCHEDULE 40 BLACK STEEL WITH GROoved END FITTINGS AND WELDED BRANCH LINE OUTLETS. BRANCH LINE PIPING, 2" AND SMALLER, SHALL BE SCHEDULE 40 BLACK STEEL WITH GROoved END FITTINGS AND WELDED OUTLETS AND/OR SCHEDULE 40 WITH THREADED ENDS. SPRINGS, ARM-OVERS AND DROPS SHALL BE SCHEDULE 40 STEEL WITH THREADED ENDS. ALL PIPING EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED MATCHING THE CRITERIA ABOVE.
7. HANGERS EXPOSED TO THE OUTSIDE ELEMENTS ALL METAL HANGERS, SUPPORTS, THREADED ROD, ETC. SHALL BE HOT DIPPED GALVANIZED.
8. ALL UNDERGROUND PIPING SHALL BE ADEQUATELY SUPPORTED. ALL UNDERGROUND PIPING SHALL BE BURIED AT LEAST 12 INCHES BELOW THE FROST LINE FOR THE LOCALITY OR A MINIMUM OF 36 INCHES BELOW FINISH GRADE IF FROST IS NOT APPLICABLE.
9. SPRINKLER SYSTEMS SHALL HAVE AN UNDERGROUND FLUSH COMPLETED AT THE TIME OF HYDROSTATIC TEST. FLUSHING SHALL BE COMPLETED PRIOR TO CONNECTING THE UNDERGROUND PIPING TO THE OVERHEAD PIPING.
10. SPRINKLER SYSTEMS SHALL BE HYDROSTATICALLY TESTED FOR 2 HOURS AT 200 PSI OR 50 PSI IN EXCESS OF NORMAL WORKING PRESSURE WHEN NORMAL WORKING PRESSURE EXCEEDS 150 PSI.
11. SUITABLY PROTECT ALL EQUIPMENT FURNISHED DURING CONSTRUCTION ALL RUBBISH OCCASIONED BY THE INSTALLATION SHALL BE PERIODICALLY REMOVED FROM THE PREMISES AND ALL EXPOSED WORK SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL ACCEPTANCE. RESTORE ANY DAMAGED SURFACES AND ITEMS TO "LIKE NEW" CONDITION BEFORE A REQUEST FOR FINAL ACCEPTANCE.
12. UNTIL SYSTEM IS COMPLETED, TESTED AND ACCEPTED, THIS CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF LEAKS, AND ACCIDENTAL BREAKS.
13. CONTRACTOR SHALL GUARANTEE IN WRITING, HIS RESPONSIBILITY FOR DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE ISSUED BY THE ARCHITECT AND CORRECT ANY DEFICIENCIES, LABOR AND MATERIALS, WITHOUT ADDITIONAL COST TO OWNER.
14. ALL EXPOSED SPRINKLER PIPING SHALL BE PAINTED, COORDINATE ALL PAINTING REQUIREMENTS/ COLORS.
15. FIRE SPRINKLER CONTRACTOR SHALL NOT ROUTE ANY FIRE PROTECTION PIPING ABOVE ELECTRICAL PANELS, OFFSET OR REROUTE AS REQUIRED.
16. ALL SPRINKLER HEADS EXPOSED TO THE OUTSIDE ELEMENTS SHALL BE UL LISTED CORROSION RESISTANT.
17. PROVIDE ADDITIONAL SPRINKLER HEADS UNDER HVAC DUCT WORK OR OBSTRUCTION EQUAL TO AND EXCEEDING 4" IN WIDTH.
18. ALL SPRINKLER HEADS SHALL BE CENTERED TO THE CEILING TILES.
19. ALIGN ALL SPRINKLER HEADS WITH CEILING LIGHT FIXTURES AND MECHANICAL OFFENSERS.
20. PROVIDE SPRINKLER HEAD GUARDS THAT ATTACH ONLY TO THE PIPE AND NOT THE FIRE SPRINKLER HEAD (SPRINKLAUDR OR APPROVED EQUAL) FOR ALL HEADS LOCATED WITHIN MECHANICAL ROOMS, ELECTRICAL ROOMS, ELEVATOR PITs, BENEATH STAIRS, STORAGE ROOMS OR LOCATED BELOW 7'-0".
21. FIRE SPRINKLER HEADS IN EXPOSED OBSTRUCTED CONSTRUCTION AREAS (AREAS CONTAINING STRUCTURAL BEAMS) SHALL BE INSTALLED BELOW THE STRUCTURAL MEMBERS UP TO A MAXIMUM OF 2" BELOW THE CEILING AVOIDING OBSTRUCTION TO DISCHARGE IN CONFORMANCE WITH NFPA 13, 2019 EDITION SECTION 8.6.4.1.2 (1), (2), AND (4).
22. FIRE PROTECTION CONTRACTOR SHALL COMPLY WITH NFPA 13, 2019 EDITION TABLES 19.2.7.1 (A), (B), & (C) TO AVOID OBSTRUCTION TO SPRINKLER HEAD DISCHARGE. FIRE PROTECTION CONTRACTOR SHALL THOROUGHLY COORDINATE FIRE SPRINKLER HEAD PLACEMENTS WITH ALL STRUCTURAL/ ARCHITECTURAL OBSTRUCTIONS.
23. ONLY NEW SPRINKLERS SHALL BE EMPLOYED IN THE INSTALLATION OF SPRINKLER SYSTEMS. AT LEAST TWELVE SPARE SPRINKLER HEADS OF EACH TYPE, TEMPERATURE RATING, AND ORIFICE SIZE USED IN THE SYSTEMS SHALL BE KEPT IN THE PREMISES. REPLACEMENT SPRINKLERS SHALL HAVE THE SAME OPERATING CHARACTERISTICS AS THE SPRINKLER HEADS BEING REPLACED.
24. PROVIDE ADEQUATE DRAIN PER NFPA - 13.
25. EACH SPRINKLER SYSTEM SHALL HAVE A DRAIN AND TEST CONNECTION WITH A VALVE ON THE SYSTEM SIDE OF THE CONTROL VALVE.
26. WATER FLOW TEST CONNECTIONS SHALL BE PROVIDED AT LOCATIONS THAT ALLOW FLOW TESTING OF WATER SUPPLIES, CONNECTIONS, AND ALARM MECHANISMS.
27. PROVIDE FLUSHING CONNECTIONS AT REMOTE END OF ALL CROSS MAINS AND AT ALL LOW ENDS. ROUTE ALL DRAIN PIPING TO THE GROUND LEVEL, AND DISCHARGE TO THE EXTERIOR OF THE BUILDING OR STORM DRAINAGE SYSTEM.
28. SPRINKLER ZONES WITH DEAD END MAINS OR MORE THAN ONE REMOTE END, PROVIDE WITH INSPECTORS TEST AND DRAINS TO EACH END MAIN AND REMOTE END. ROUTE ALL DRAIN PIPING TO THE GROUND LEVEL AND DISCHARGE TO THE EXTERIOR OF THE BUILDING OR STORM DRAINAGE SYSTEM.
29. FIRE PROTECTION CONTRACTOR SHALL THOROUGHLY COORDINATE ALL HEADS, HANGERS, PIPING AND ALL OTHER ASSOCIATED MATERIAL LOCATIONS WITH MECHANICAL, PLUMBING, ELECTRICAL AND ALL STRUCTURAL OBSTRUCTIONS. IT IS THE RESPONSIBILITY OF THE FIRE PROTECTION CONTRACTOR TO COORDINATE WITH ALL OTHER TRADES TO AVOID CONFLICTS.
30. REFER TO ARCHITECTURAL REFLECTED CEILING AND ELECTRICAL LIGHTING DRAWINGS FOR CEILING DESCRIPTIONS AND HEIGHTS.
31. ALL VALVES SHALL HAVE A PERMANENTLY AFFIXED SIGN INDICATION ITS FUNCTION.
32. ALARMS SHALL BE OF SUFFICIENT INTENSITY TO BE CLEARLY AUDIBLE IN OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED.
33. (2) 2-1/2" FIRE DEPARTMENT CONNECTIONS SHALL BE PROVIDED.
34. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY.
35. NOT ALL PIPING, VALVES AND APPURTENANCES ARE SHOWN ON PLANS. REFER TO PIPING RISER DIAGRAMS, DETAILS, AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
36. THE SYSTEM SHALL BE DESIGNED AND HYDRAULICALLY CALCULATED IN ACCORDANCE WITH NFPA 13 AND SPRINKLERS MANUFACTURER REQUIREMENTS.
37. ALL WIRING OF FLOW SWITCHES AND ANY FIRE PROTECTION DEVICES IS DONE BY ELECTRICAL SUBCONTRACTOR.
38. SEPARATE FIRE SPRINKLER PERMIT DRAWINGS SHALL BE SUBMITTED BY INSTALLING CONTRACTOR FOR REVIEW.

UNDERGROUND GENERAL NOTES

- 1. ALL UNDERGROUND SHALL BE INSTALLED BY A STATE OF FLORIDA MINIMUM CLASS 5 LICENSED UNDERGROUND CONTRACTOR.
2. ALL UNDERGROUND PIPING TO BE C-900 PVC CLASS 200 DR-14
3. ALL PVC PIPE TO BE MARKED WIDETECTABLE UNDERGROUND MARKING TAPE.
4. ALL ABOVE GROUND STEEL PIPING TO BE PAINTED FOR CORROSION PROTECTION.
5. ALL MATERIALS, TESTING, METHOD OF RESTRAINT & INSPECTION SHALL CONFORM TO THE REQUIREMENTS OF NFPA 13 & 24.
6. FITTING RESTRAINTS, THRUST BLOCKS AND ROODING SHALL CONFORM TO NFPA 24.
7. MINIMUM BURY DEPTH SHALL NOT BE LESS THAN 3'-0"
8. ALL WATER LINES FOR FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 PSI FOR TWO (2) HOURS MINIMUM.
9. ALL EXTERIOR MATERIALS SHALL BE PROPERLY PROTECTED AGAINST EXPOSURE.
10. ALL WIRING BY OTHERS.
11. UNDERGROUND PIPING SHALL BE FLUSHED AS PER NFPA 24 BEFORE CONNECTING TO THE OVERHEADS FIRE SPRINKLER SYSTEM PIPING.
12. COMPLY WITH ALL LOCAL CODE REQUIREMENTS PRIOR CONNECTION TO THE FIRE SERVICE WATER SYSTEM.

ABBREVIATIONS

Table with 2 columns: Abbreviation and Description. Includes terms like ABV, APPROX, ASP, ASSY, BFF, BFV, CONT, DAVA, DN, EL, FCA, PRFCA, FDC, FHV, FHC, FS, GPM, MAX, MECH, MIN, POC, PRFHV, PRFHV, PRV, PSI, RM, SPCA, SPR, TYP, UG, RN.

FIRE PROTECTION DATA

Table with 2 columns: Category and Value. Includes sections for LIGHT HAZARD OCCUPANCY CLASSIFICATION (L.H.), ORDINARY HAZARD GROUP I OCCUPANCY CLASSIFICATION (O.H.1), and ORDINARY HAZARD GROUP II OCCUPANCY CLASSIFICATION (O.H.2). Values include occupancy classification, system type, design density, hydraulic remote area, sprinkler orifice size, duration of supply, max. coverage/sprinkler head, and hose stream allowance.

Sanibel Fire Rescue District Fire Flow Test Record form. Includes fields for Street Name, Date, Time, Static PSI, Residual PSI, Discharge GPM, and Flow Available. Includes handwritten data and signatures.

FIRE HYDRANT FLOW TEST DATA



SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 172

PROJECT LOCATION:

5171 SANIBEL-CAPTIVA ROAD
SANIBEL, FLORIDA 33957



9510 Corkscrew Palms Circle, Unit 1
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This item has been electronically signed and sealed by Jason Smith, PE on 01/05/2024 using a Digital Signature.
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JASON L. SMITH, P.E.
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SARASOTA, FL 34237
FL REG. NO. 10015

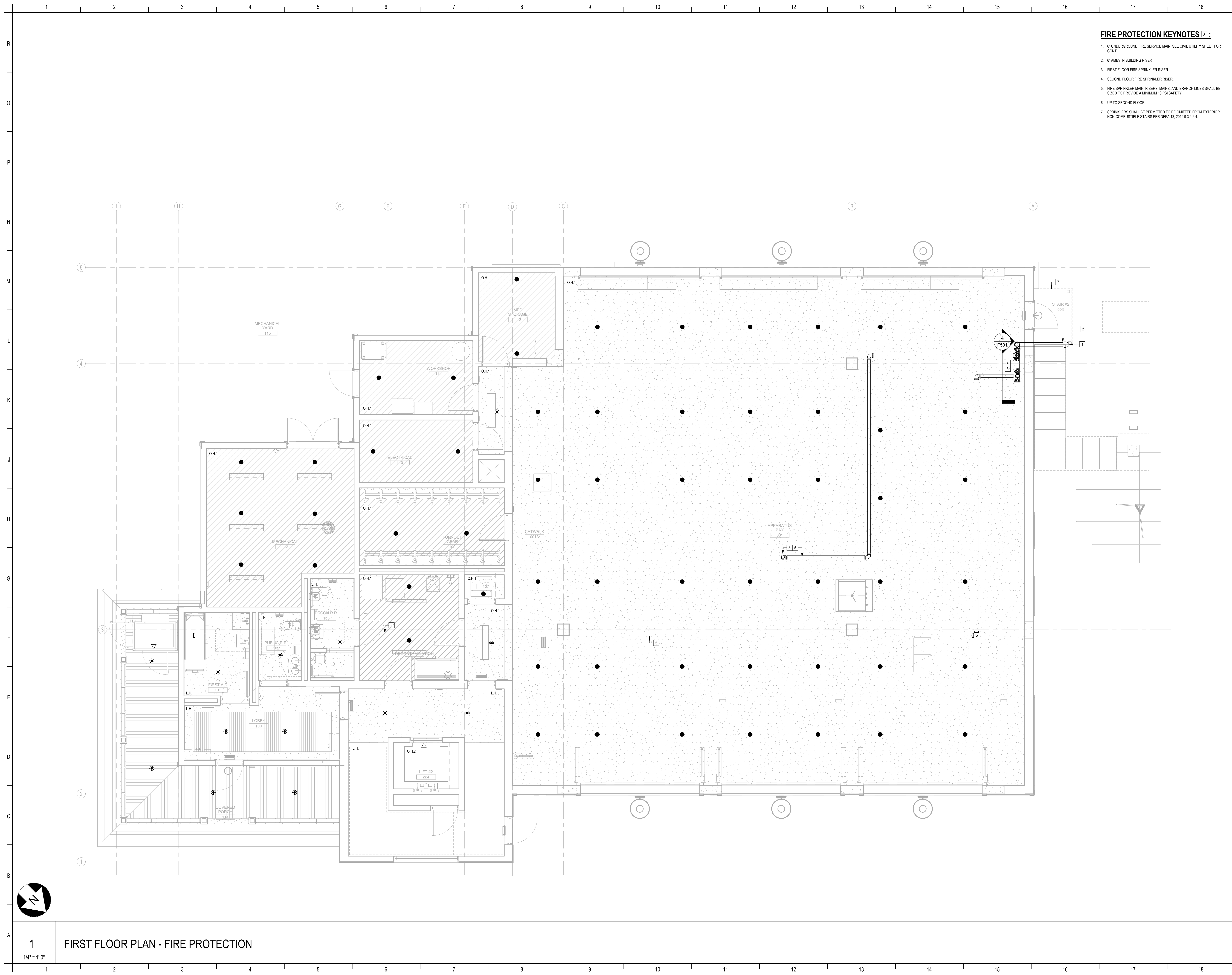
Table with 3 columns: MARK, DESCRIPTION, DATE

COMM. NO.: 2023820
ISSUE DATE: 01.05.2024
DRAWN BY: KPB

GENERAL NOTES & DESIGN CRITERIA - FIRE PROTECTION

F001

100% CONSTRUCTION DOCUMENTS



FIRE PROTECTION KEYNOTES

1. 6" UNDERGROUND FIRE SERVICE MAIN. SEE CIVIL UTILITY SHEET FOR CONT.
2. 6" AMES IN BUILDING RISER
3. FIRST FLOOR FIRE SPRINKLER RISER
4. SECOND FLOOR FIRE SPRINKLER RISER
5. FIRE SPRINKLER MAIN, RISERS, MANS, AND BRANCH LINES SHALL BE SIZED TO PROVIDE A MINIMUM 10 PSI SAFETY.
6. UP TO SECOND FLOOR.
7. SPRINKLERS SHALL BE PERMITTED TO BE OMITTED FROM EXTERIOR NON-COMBUSTIBLE STAIRS PER NFPA 13, 2019.3.3.4.2.



SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

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STATION 172**

PROJECT LOCATION:

5171 SANIBEL-CAPTIVA ROAD
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REVISIONS

MARK	DESCRIPTION	DATE

COMM. NO.: 2023820
ISSUE DATE: 01.05.2024
DRAWN BY: KPB

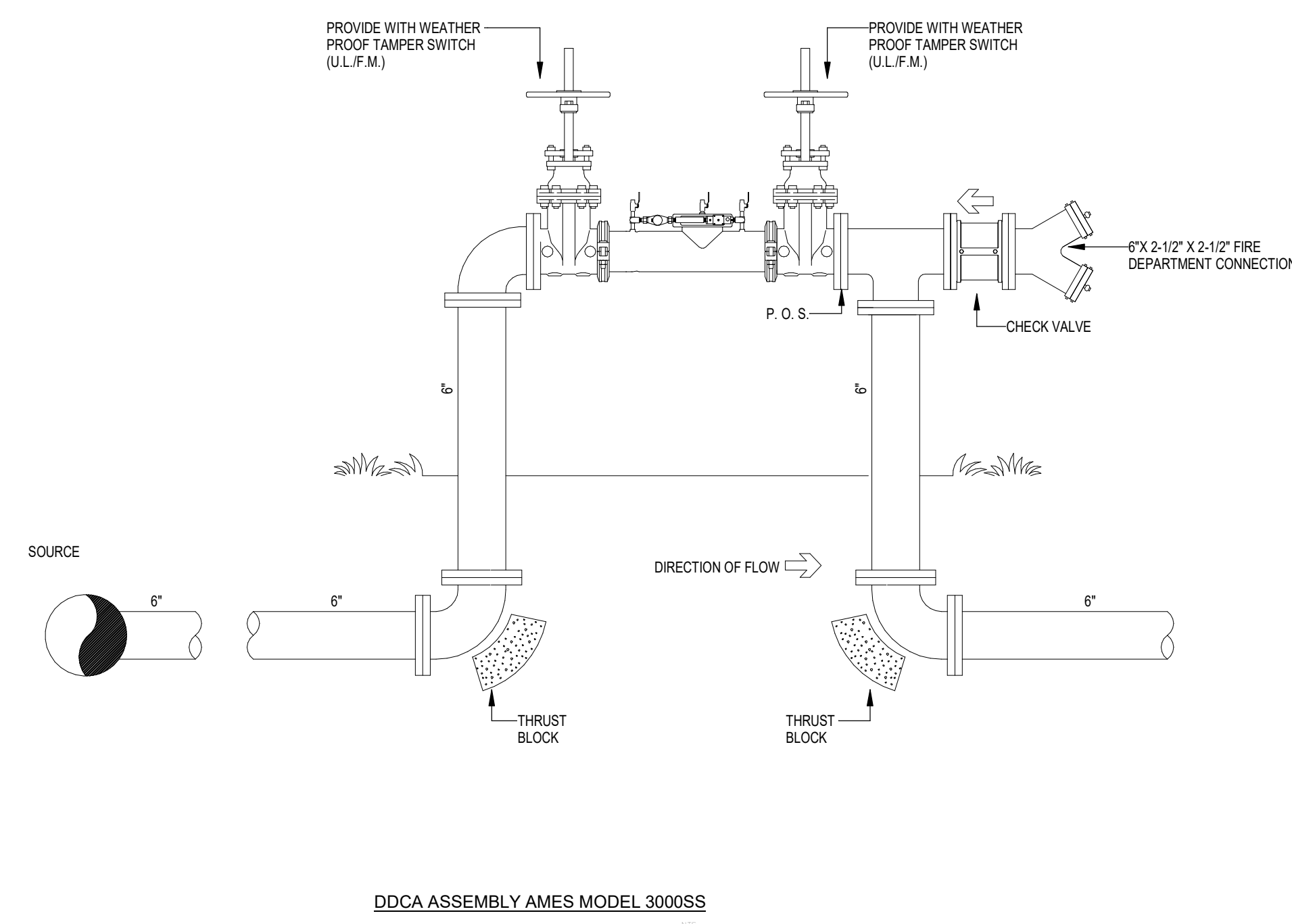
**FLOOR PLAN - FIRST FLOOR
- FIRE PROTECTION**

1 FIRST FLOOR PLAN - FIRE PROTECTION

1/4" = 1'-0"

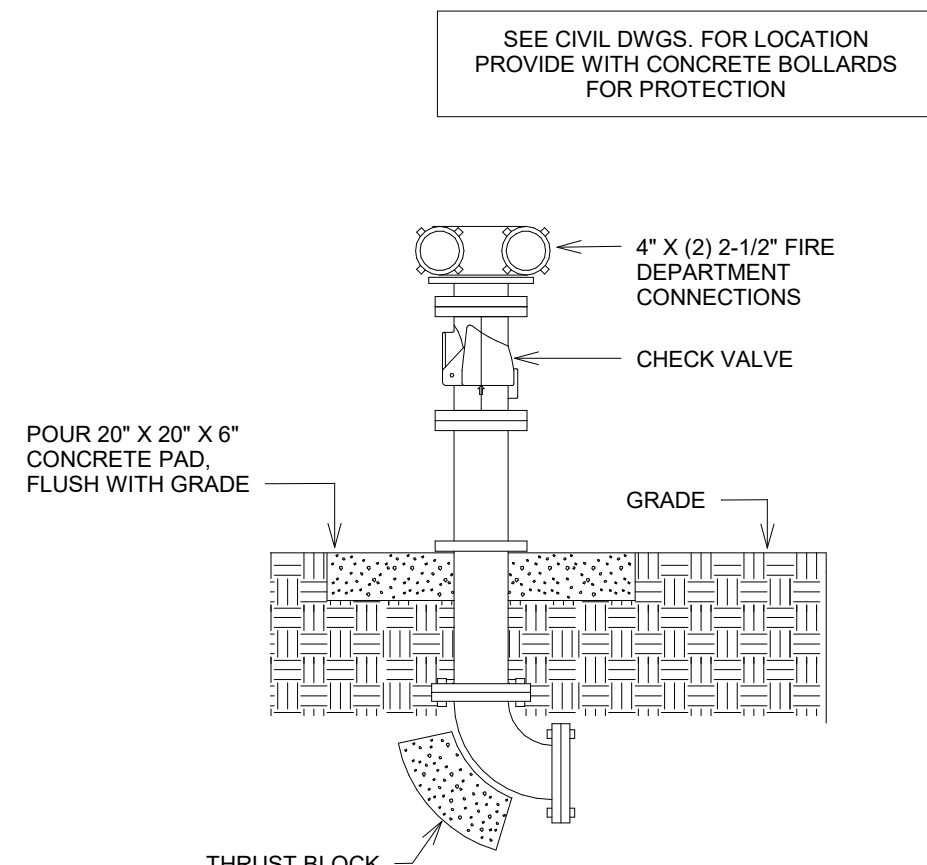
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3 DOUBLE CHECK DETECTOR ASSEMBLY DETAIL
N.T.S.

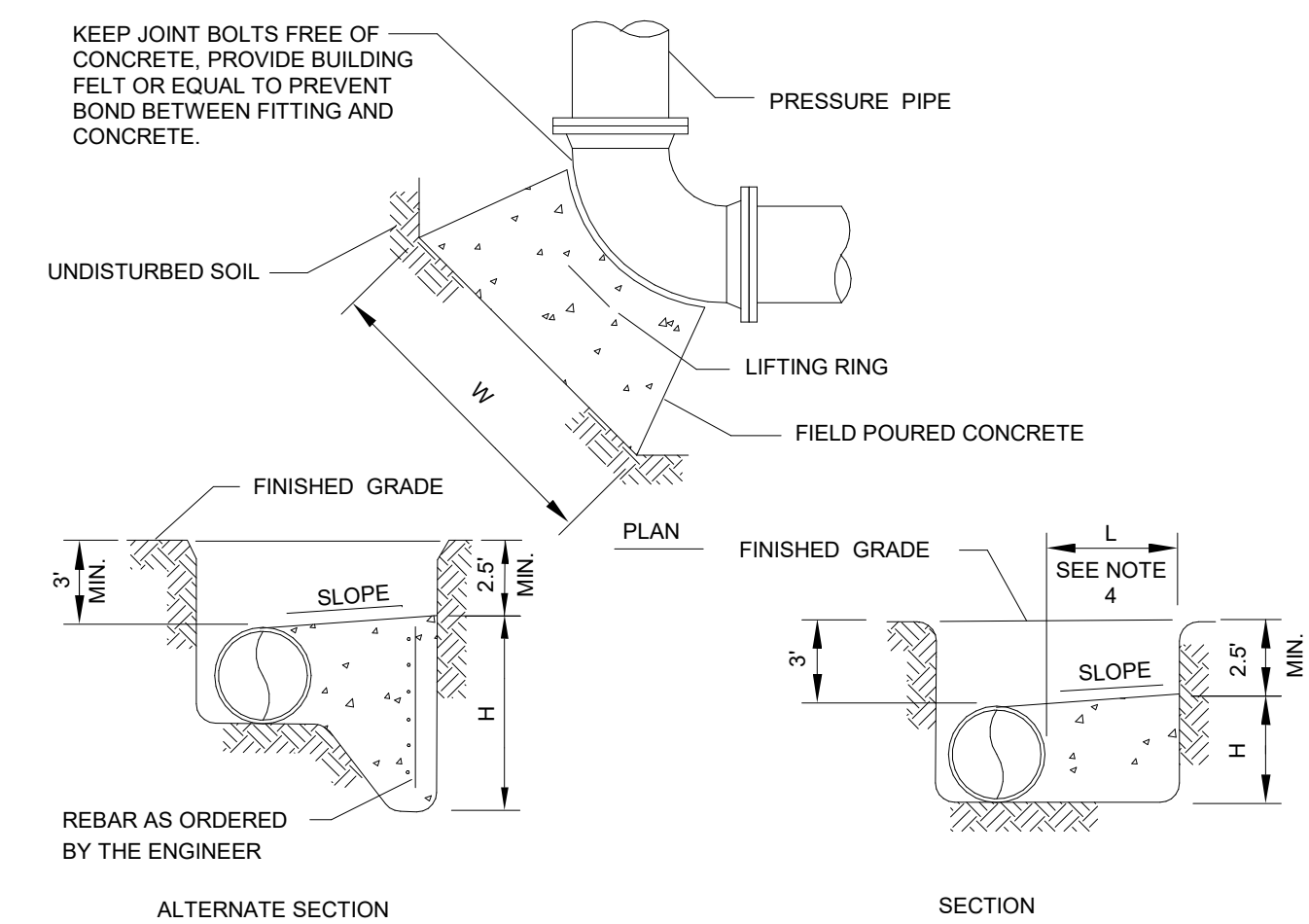
DDCA ASSEMBLY AMES MODEL 3000SS
SEE CIVIL DWGS. FOR LOCATION
PROVIDE WITH CONCRETE BOLLARDS FOR PROTECTION
PROVIDE CHAIN AND LOCK FOR GATE VALVES ON BACKFLOW PREVENTER



2 FIRE DEPARTMENT CONNECTION DETAIL
N.T.S.

FDC GENERAL NOTES

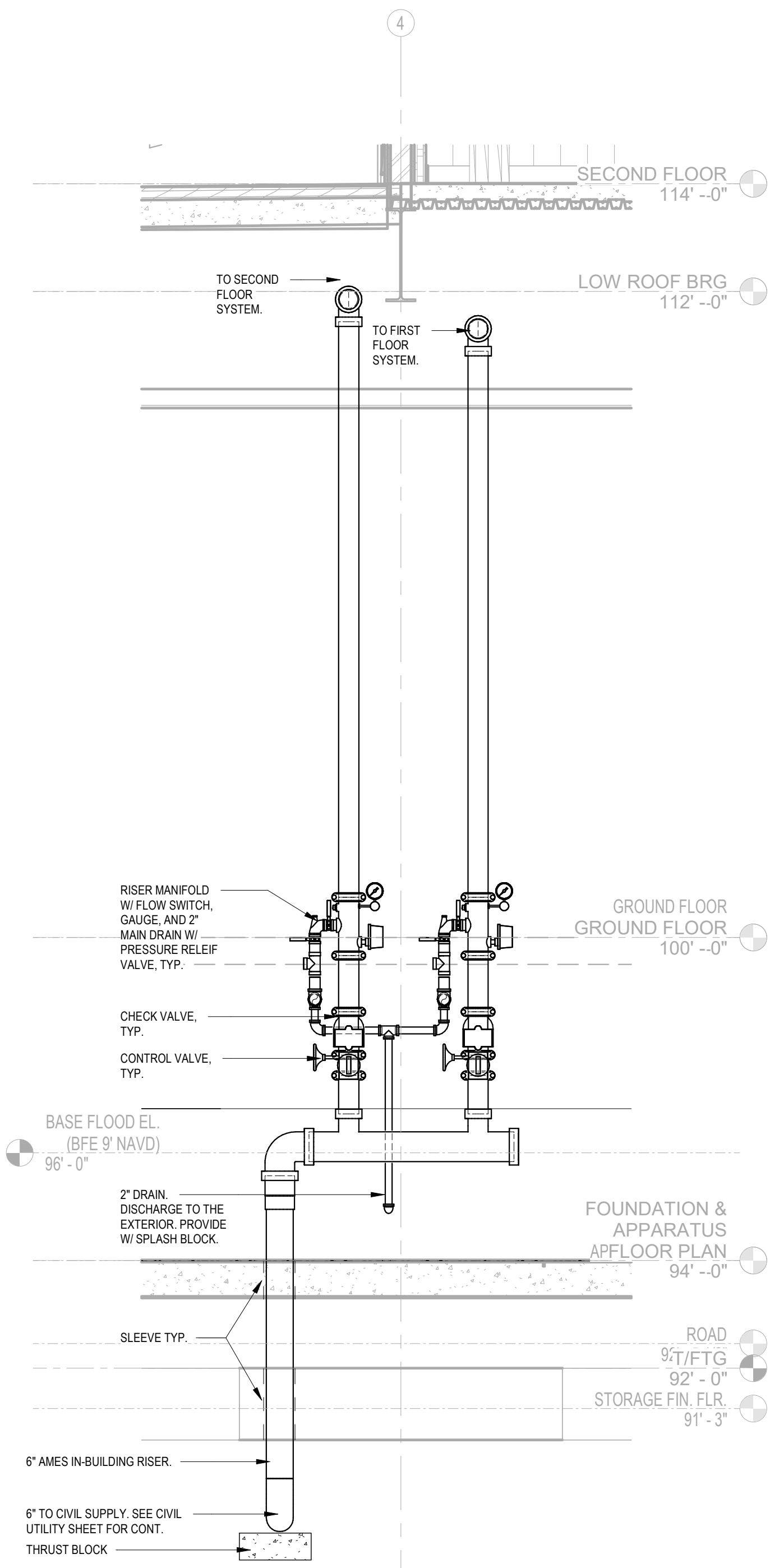
1. FIRE DEPARTMENT CONNECTION SHALL HAVE RAISED OR ENGRAVED 1" LETTERS STATING "AUTOSPRK" ON FITTING. SEE CIVIL FOR FDC REGULATORY TRAFFIC SIGN.
2. PROVIDE FIRE DEPARTMENT CONNECTION WITH A MINIMUM CLEARANCE OF 7'-10" TO THE FRONT AND TO THE SIDES.
3. FIRE DEPARTMENT CONNECTIONS (FDC) SHALL BE LOCATED ON THE STREET SIDE OF BUILDINGS, FULLY VISIBLE, A SIGN INDICATING WHAT BUILDINGS THEY PROTECT AND RECOGNIZABLE FROM THE STREET OR NEAREST POINT OF FIRE DEPARTMENT ACCESSIBILITY, AND SHALL BE LOCATED AND ARRANGED SO THAT HOSE LINES CAN BE ATTACHED TO THE INLETS WITHOUT INTERFERENCE FROM NEARBY OBJECTS, INCLUDING BUILDINGS, FENCES, POST, OR OTHER FIRE DEPARTMENT CONNECTIONS.
4. FIRE DEPARTMENT CONNECTION SHALL NOT BE LESS THAN 18" FROM A.F.F. AND NOT EXCEED MORE THAN 36" FROM A.F.F.
5. PROVIDE SIGN 12" WIDE X 18" HIGH MOUNTED 7'-0" A.F.F. STATING NO PARKING - FIRE DEPARTMENT CONNECTION.
6. REFER TO CIVIL SITE DRAWINGS FOR REQUIRED BUILDING # AND FDOT REGULATORY SIGNAGE. SIGNAGE SHALL COMPLY WITH NFPA 24, 2019 EDITION.
7. FIRE DEPARTMENT CONNECTION MUST BE PRESSURE TESTED AT NOT LESS THAN 200 PSI FOR 2 HOURS WITH A ZERO DROP IN PRESSURE.



PIPE SIZE INCH	DEFLECTION ANGLE																			
	11-1/4"				22-1/2"				45°				TEE/PLUG				90°			
	H	W	H	W	H	W	H	W	H	W	H	W	H	W	H	W				
6	1'-0"	1'-0"	1'-0"	1'-6"	1'-6"	2'-6"	1'-6"	3'-0"	2'-0"	2'-0"	3'-6"	3'-6"	2'-0"	3'-6"	2'-0"	3'-6"				
8	1'-0"	1'-6"	1'-6"	2'-6"	2'-0"	3'-6"	2'-6"	2'-6"	2'-6"	2'-6"	3'-6"	3'-6"	2'-6"	3'-6"	2'-6"	4'-0"				
10	1'-0"	2'-0"	1'-6"	3'-0"	2'-6"	4'-0"	3'-0"	3'-0"	3'-0"	4'-6"	3'-6"	5'-0"	3'-0"	4'-6"	3'-6"	5'-0"				
12	1'-6"	2'-6"	2'-6"	3'-6"	3'-0"	5'-0"	3'-6"	5'-6"	3'-6"	5'-6"	4'-0"	6'-6"	3'-6"	5'-6"	4'-0"	6'-6"				
16	2'-6"	4'-0"	3'-6"	5'-6"	5'-0"	7'-0"	5'-6"	8'-0"	5'-6"	8'-0"	6'-6"	9'-0"	5'-6"	8'-0"	6'-6"	9'-0"				
20	3'-0"	5'-6"	4'-6"	6'-6"	6'-0"	8'-6"	6'-6"	9'-6"	6'-6"	9'-6"	7'-6"	11'-0"	6'-6"	9'-6"	7'-6"	11'-0"				
24	3'-6"	6'-0"	5'-0"	8'-0"	7'-0"	9'-6"	7'-6"	11'-6"	7'-6"	11'-6"	9'-0"	12'-6"	7'-6"	11'-6"	9'-0"	12'-6"				

- NOTES:
1. TEST PRESSURE FOR 6" THROUGH 12" IS 100 PSI.
 2. TEST PRESSURE FOR 16" THROUGH 24" IS 150 PSI.
 3. THRUST BLOCKS ARE DESIGNED FOR A MINIMUM 3" OF COVER OVER THE PIPE. IF LESS COVER EXISTS, BLOCKS SHALL BE ENLARGED AS DIRECTED BY THE ENGINEER.
 4. L = 3' MAXIMUM FOR ROADWAYS - POUR TO UNDISTURBED SOIL.

1 THRUST BLOCK DETAIL
N.T.S.



4 FIRE SPRINKLER RISER DETAIL
1/2" = 1'-0"



SANIBEL FIRE & RESCUE DISTRICT
2351 PALM RIDGE ROAD, SANIBEL, FLORIDA 33957

SANIBEL FIRE AND RESCUE STATION 172

PROJECT LOCATION:

5171 SANIBEL-CAPTIVA ROAD
SANIBEL, FLORIDA 33957



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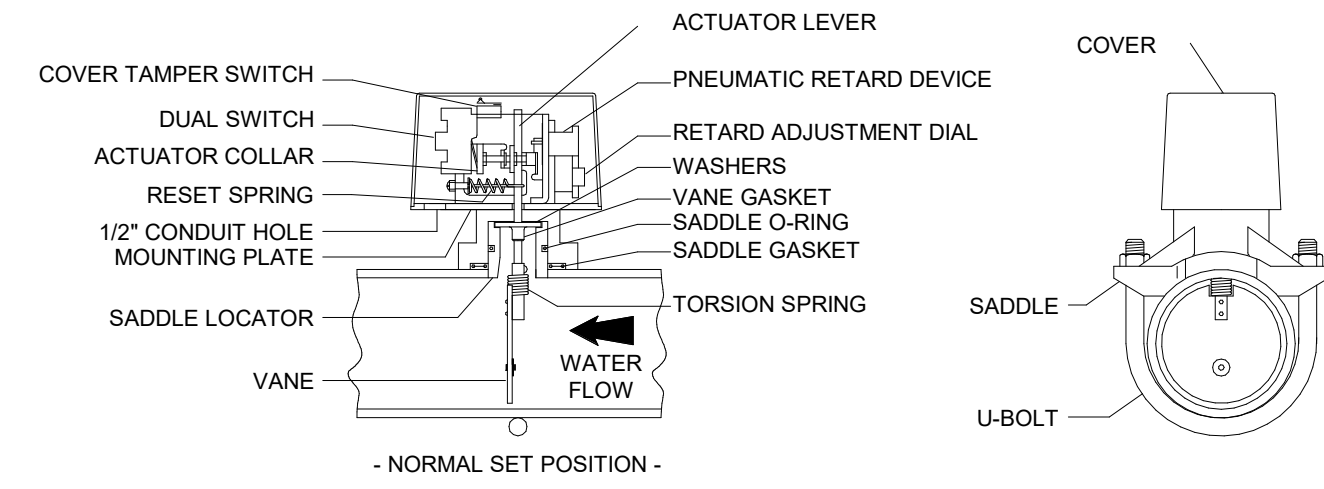
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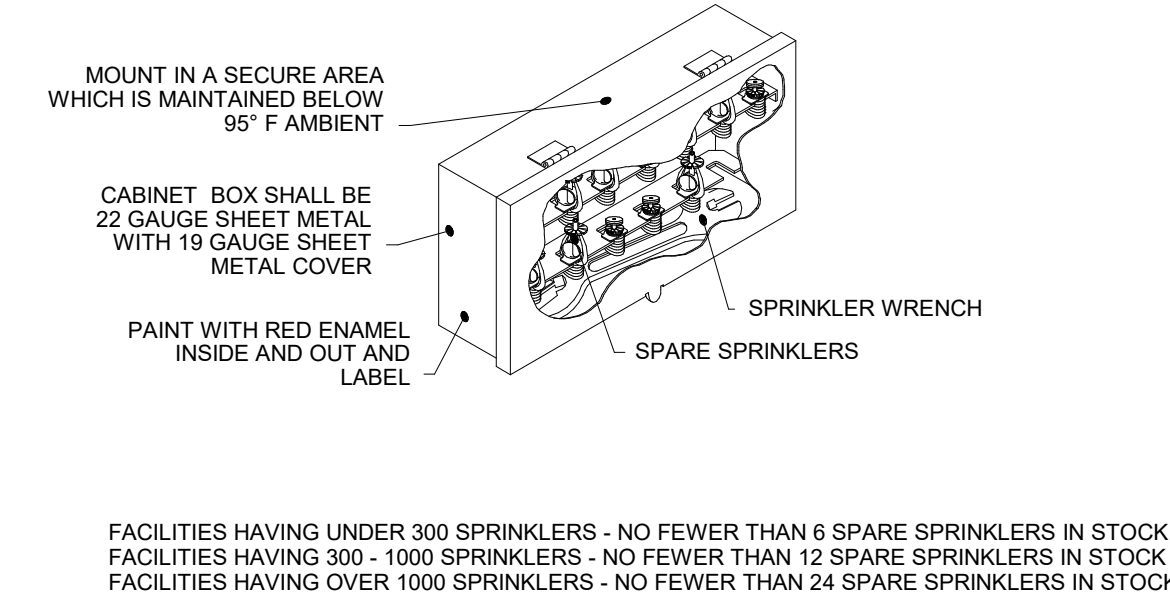
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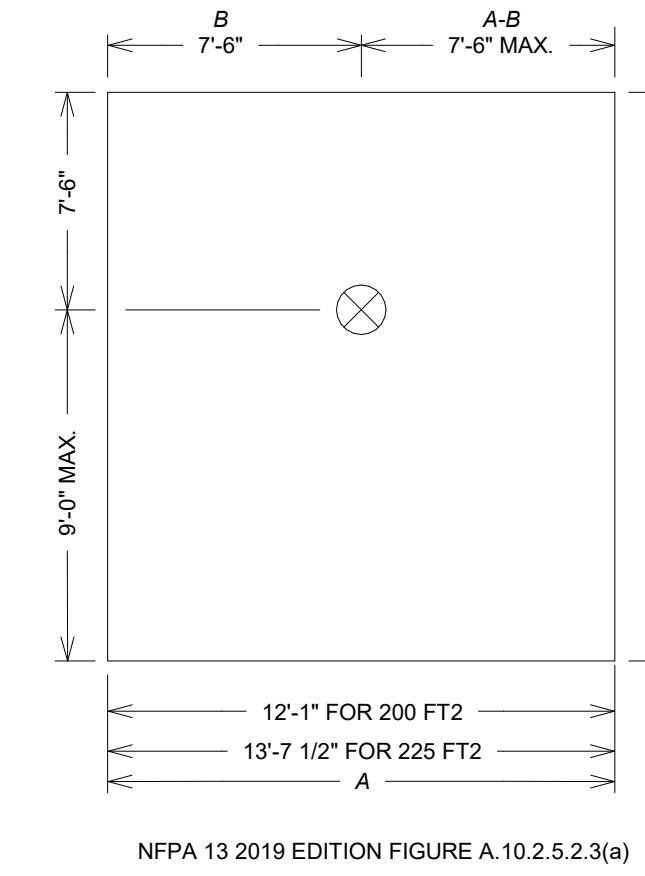
DETAILS - FIRE PROTECTION



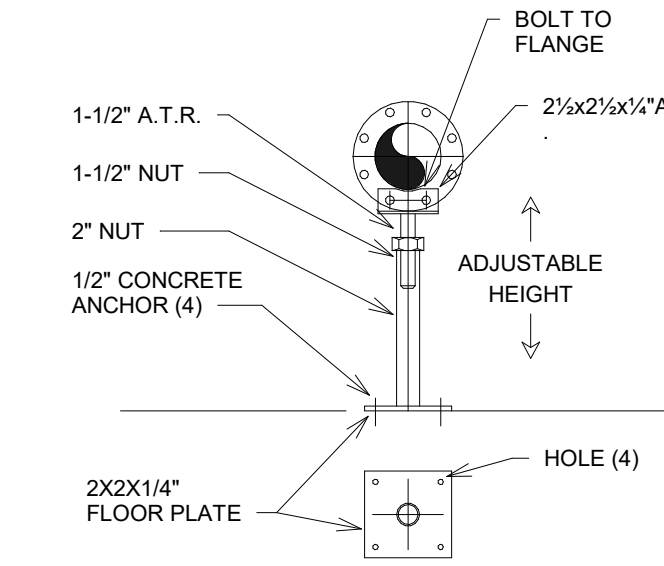
1 FLOW SWITCH DETAIL
N.T.S.



2 SPARE HEAD CABINET DETAIL
N.T.S.



3 SMALL ROOM RULE DETAIL
N.T.S.



4 PIPE SUPPORT DETAIL
N.T.S.

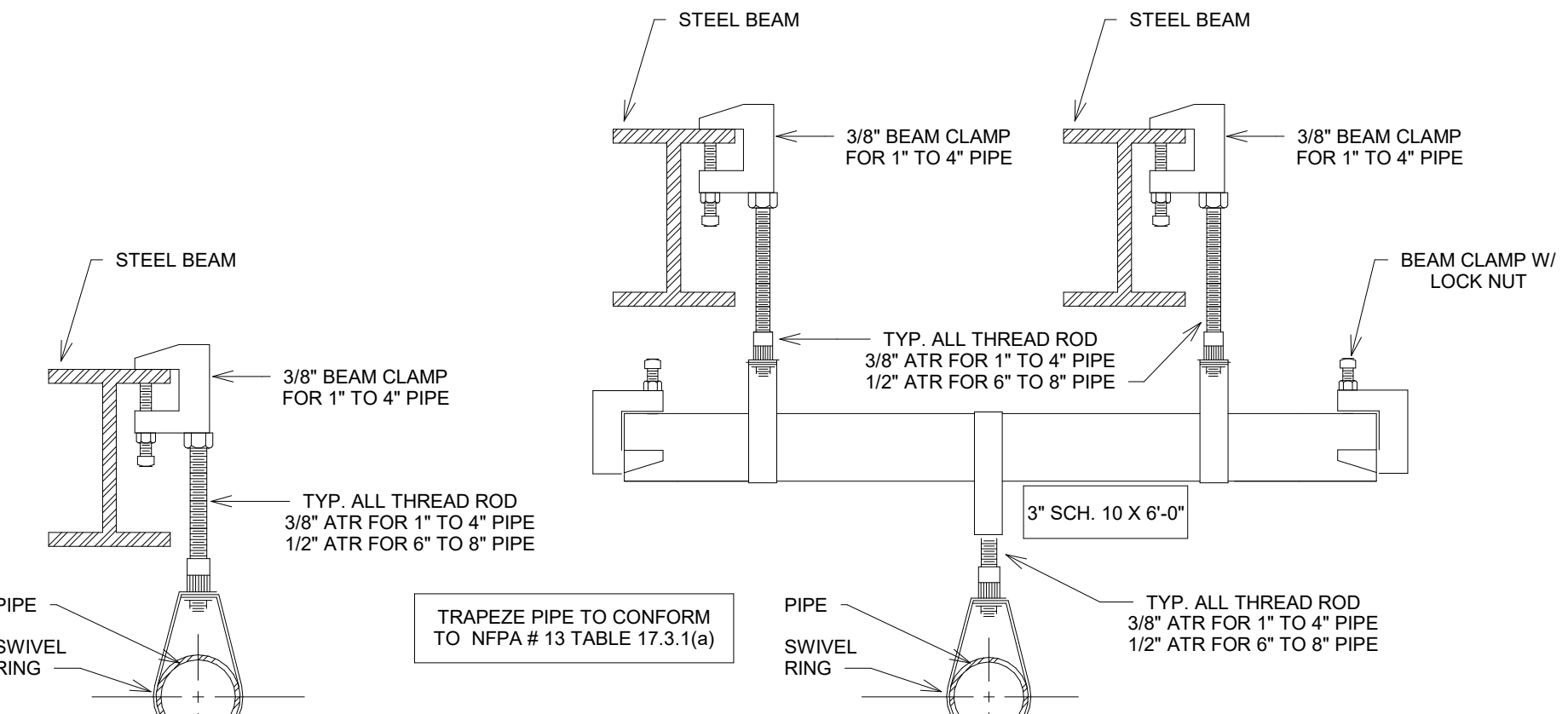
NFPA 13 TABLE 17.4.2.1(b) AND SECTIONS 17.4.3.3 AND 17.4.3.4.1
NFPA SPACING REQUIREMENTS HANGER LOCATION DETAIL

PIPE SIZE	A	B*	C
1"	3'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/4"	4'-0" MAX.	12'-0" MAX.	3" MIN.
1-1/2"-8"	5'-0" MAX.	15'-0" MAX.	3" MIN.

NOTES:
* MAXIMUM HANGER SPACING FOR STEEL PIPE
THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMORER TO A SPRINKLER OR SPRINKLER DROP SHALL NOT EXCEED 24".

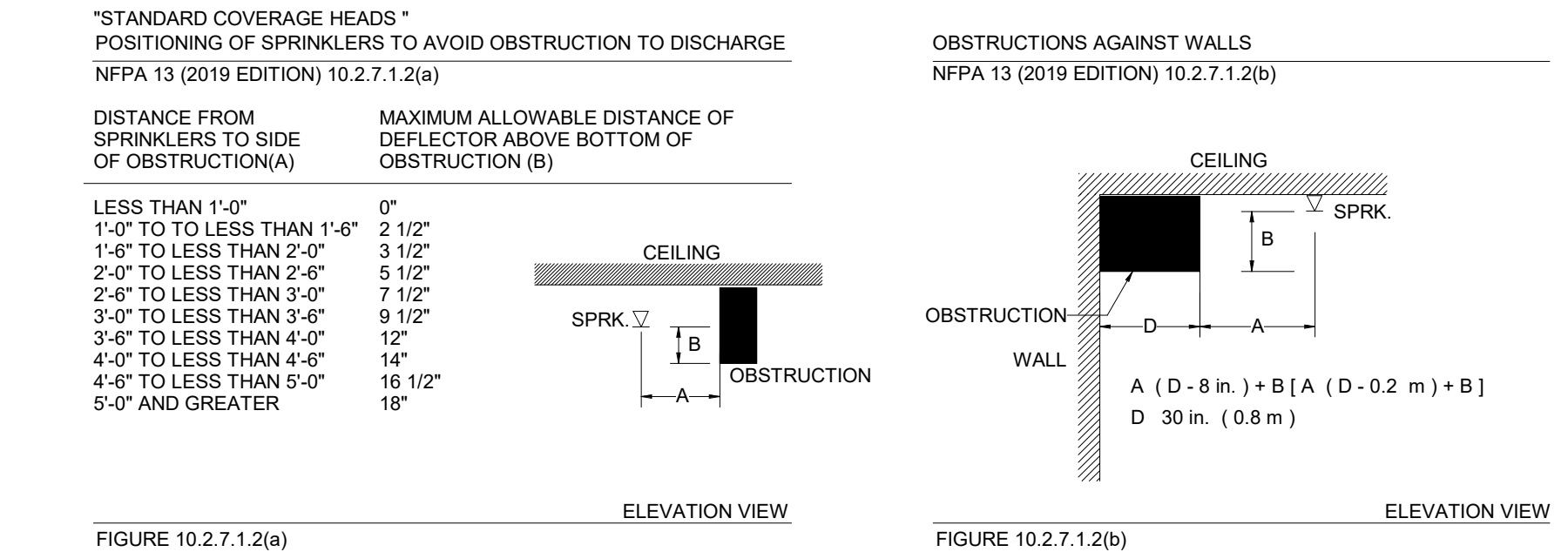
Pipe Size	Rod Size	Type of Fastener	Min. 'C' Dim.	Max. 'C' Dim.
3/4"			1/2"	1 5/8"
1"			3/8"	1 3/4"
1 1/4"			1 3/16"	1 7/8"
1 1/2"			15/16"	2"
2"			1 3/16"	2 3/8"
2 1/2"			1 7/16"	2 3/4"
3"			1 3/4"	3 1/4"
3 1/2"			2"	3 5/8"
4"			2 1/4"	3 7/8"
5"			2 3/4"	4 3/4"
6"	1/2"	1 - 1/2 x 2 1/32" DROP-IN	3 5/16"	5 1/2"
8"			N/A	N/A

Pipe Size	Rod Size	Min. 'C' Dim.	Max. 'C' Dim.
3/4"		1/2"	1 5/8"
1"		3/8"	1 3/4"
1 1/4"		1 3/16"	1 7/8"
1 1/2"		15/16"	2"
2"		1 3/16"	2 3/8"
2 1/2"		1 7/16"	2 3/4"
3"		1 3/4"	3 1/4"
3 1/2"		2"	3 5/8"
4"		2 1/4"	3 7/8"
5"		2 3/4"	4 3/4"
6"	1/2"	3 5/16"	5 1/2"
8"		4 5/16"	6 3/4"



6 HANGER PIPE SUPPORT DETAIL
N.T.S.

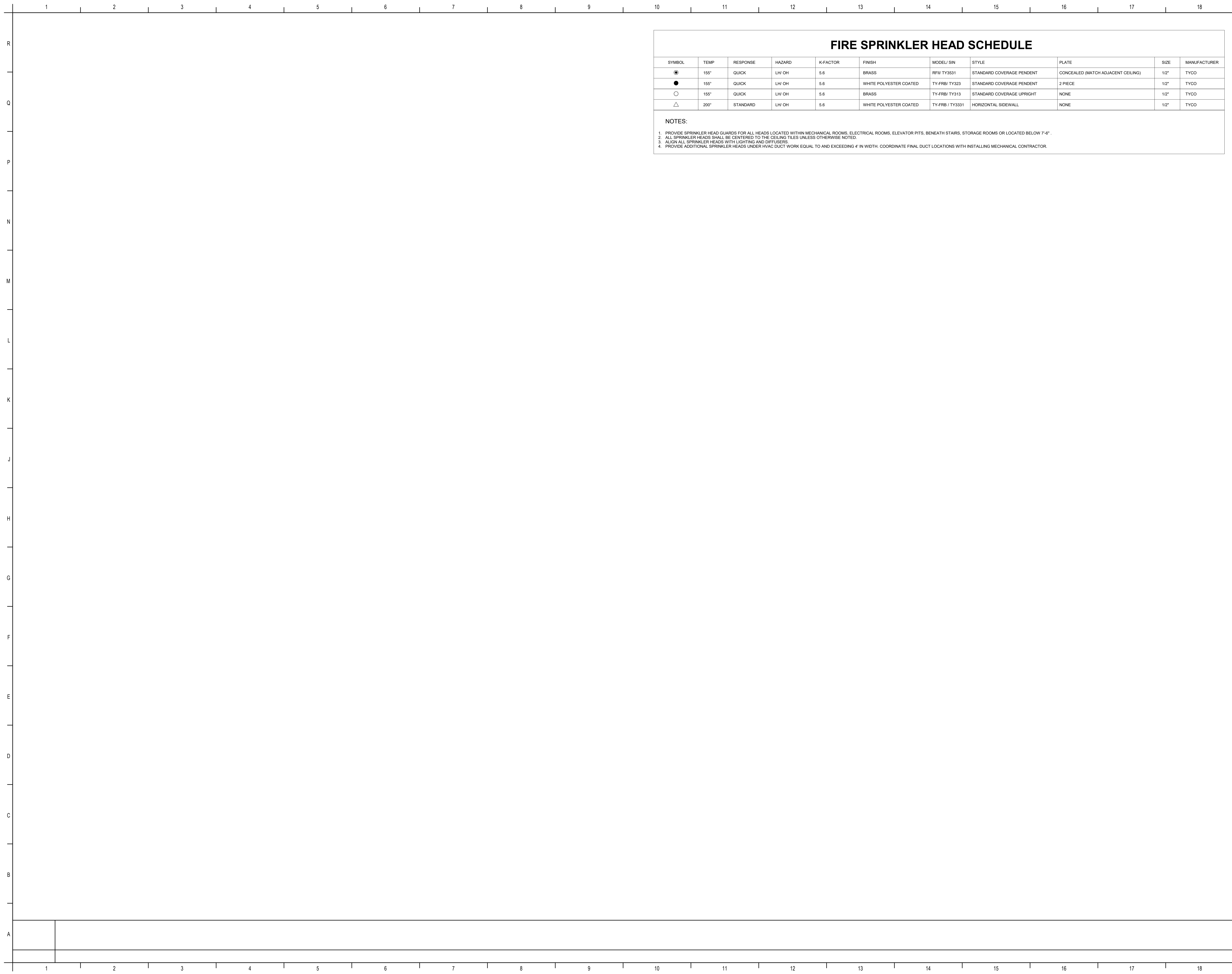
5 HANGER LOCATION DETAIL
N.T.S.



7 OBSTRUCTION DETAIL
N.T.S.

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FIRE SPRINKLER HEAD SCHEDULE

SYMBOL	TEMP	RESPONSE	HAZARD	K-FACTOR	FINISH	MODEL/ SIN	STYLE	PLATE	SIZE	MANUFACTURER
⊙	155°	QUICK	LH/ OH	5.6	BRASS	RFII/ TY3331	STANDARD COVERAGE PENDENT	CONCEALED (MATCH ADJACENT CEILING)	1/2"	TYCO
●	155°	QUICK	LH/ OH	5.6	WHITE POLYESTER COATED	TY-FRB/ TY323	STANDARD COVERAGE PENDENT	2 PIECE	1/2"	TYCO
○	155°	QUICK	LH/ OH	5.6	BRASS	TY-FRB/ TY313	STANDARD COVERAGE UPRIGHT	NONE	1/2"	TYCO
△	200°	STANDARD	LH/ OH	5.6	WHITE POLYESTER COATED	TY-FRB / TY3331	HORIZONTAL SIDEWALL	NONE	1/2"	TYCO

- NOTES:**
1. PROVIDE SPRINKLER HEAD GUARDS FOR ALL HEADS LOCATED WITHIN MECHANICAL ROOMS, ELECTRICAL ROOMS, ELEVATOR PITS, BENEATH STAIRS, STORAGE ROOMS OR LOCATED BELOW 7'-6" .
 2. ALL SPRINKLER HEADS SHALL BE CENTERED TO THE CEILING TILES UNLESS OTHERWISE NOTED.
 3. ALIGN ALL SPRINKLER HEADS WITH LIGHTING AND DIFFUSERS.
 4. PROVIDE ADDITIONAL SPRINKLER HEADS UNDER HVAC DUCT WORK EQUAL TO AND EXCEEDING 4' IN WIDTH. COORDINATE FINAL DUCT LOCATIONS WITH INSTALLING MECHANICAL CONTRACTOR.



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SCHEDULE - FIRE PROTECTION

F601

100% CONSTRUCTION DOCUMENTS