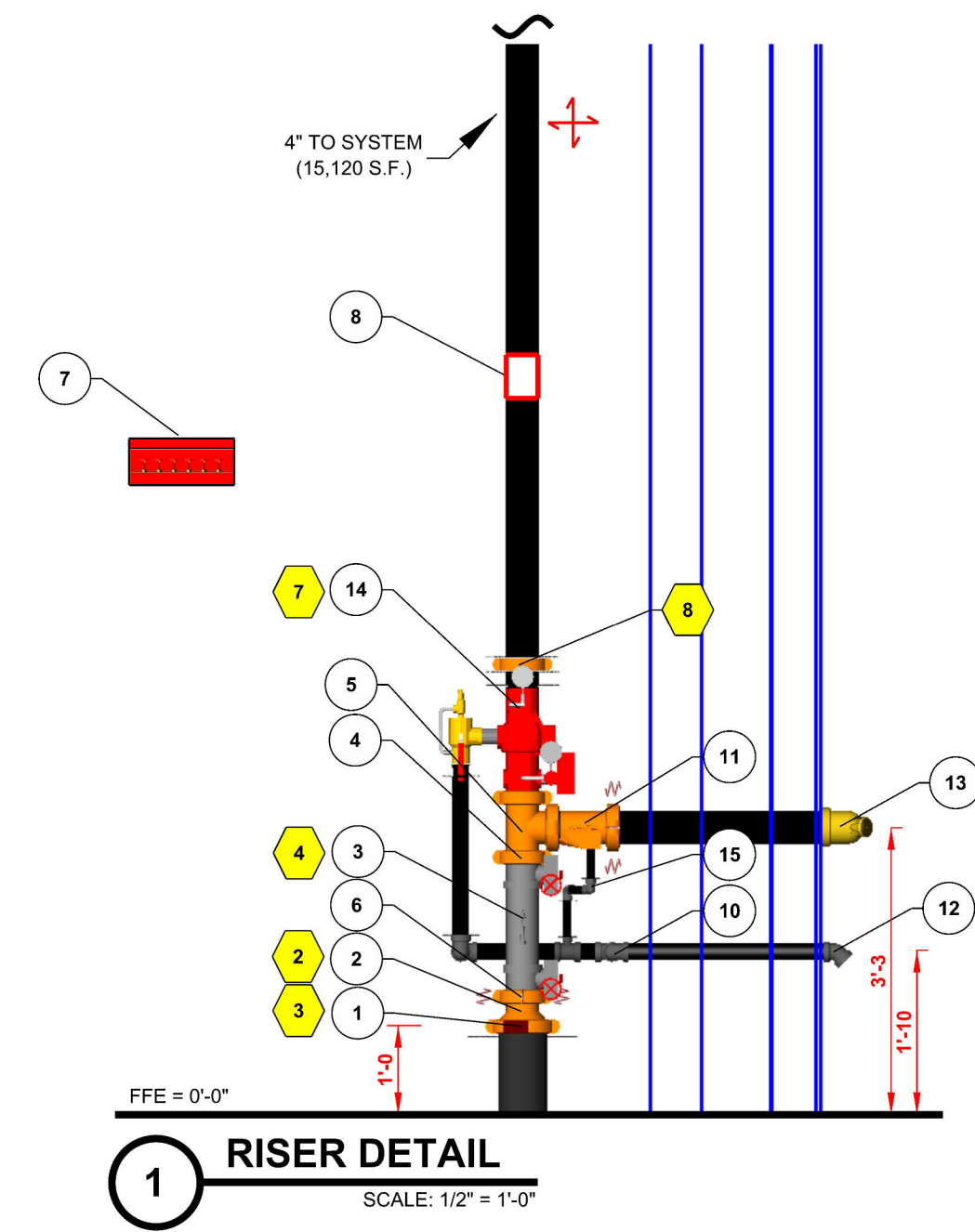


CONFERENCE ROOM	
Remote Area 2	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft ²)	0.10 for 1500ft ² (Actual 904ft ²)
QUICK RESPONSE REDUCTION	9'-0" Ceiling (40.0% 900ft ²)
TOTAL HOSE STREAMS	100.0
TOTAL HEADS FLOWING	9
K-FACTOR	5.6
TOTAL WATER REQUIRED	280.0
TOTAL PRESSURE REQUIRED	55.8
BASE OF RISER (gpm)	150.0
BASE OF RISER (psi)	54.0
SAFETY MARGIN (psi)	+14.0 (20.1%)

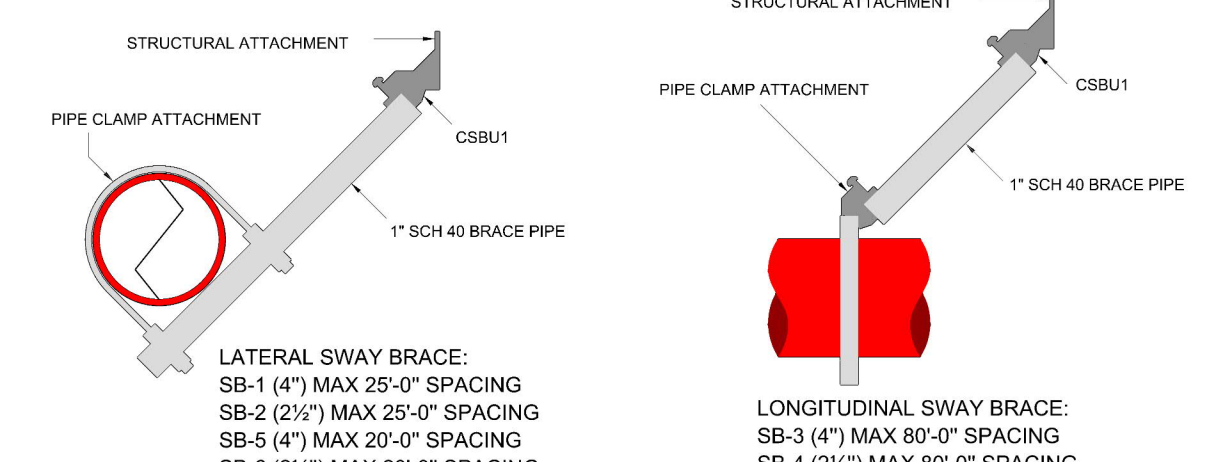
NOTE: REMOTE AREA CALCULATED BY ROOM DESIGN METHOD PER NFPA 13 SEC. 19.3.3.3

SCH. 40 THRD PIPE, O.D. 1.315" FOR 1 1/2" PIPE; STRUCTURAL PENETRATION REQUIRED FOR 1 1/2" PIPE

COORDINATE FIRE PIPE INSTALLATION WITH WALL INSTALL

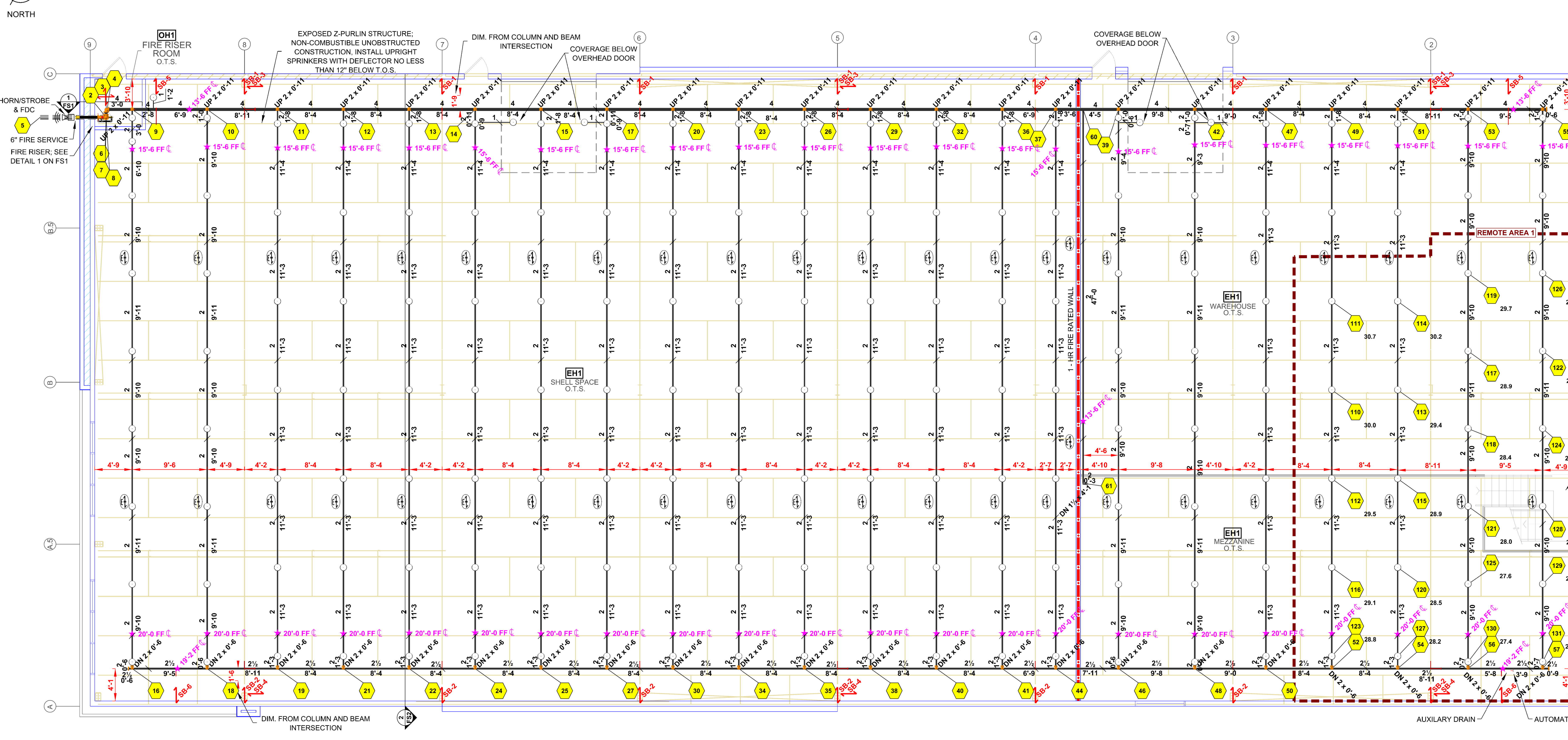


RISER LEGEND			
Key Note	Size	Description	Quantity
1	6	Rigid Coupling, Org. E Gasket	1
2	6 x 4	Grooved Concentric Reducer, DI, Org	1
3	4	Deringer 30, Backflow, DCCA, Butterfly, G-G	1
4	4	Rigid Coupling, Org. E Gasket	5
5	4	Grooved Short Radius Tee Org.	1
6	4	Flexible Coupling, Org. E Gasket	2
7	2	Spare Head Cabinet (Per NFPA 13)	1
8	2	Hydraulic Placard	1
9	4 x 2	Waterflow Detector	1
10	2	Threaded, 90° Elbow, DI	4
11	4	Swing Check Valve, G-G w/ Ball Drip	1
12	2	Threaded, 45° Elbow, DI	4
13	4 x 2 1/2 x 2 1/2	FDC, Exposed, Two-Way, Single Clapper, RB, Back	1
14	4	Victualic - UM	1
15	1	Threaded, 90° Elbow, DI	2



- FLEXIBLE COUPLINGS SHALL BE INSTALLED AS FOLLOWS:
- (a) FLEXIBLE COUPLINGS MAY BE OMITTED ON RISERS LESS THAN 3'-0" IN LENGTH
 - (b) ONLY ONE FLEXIBLE COUPLING ON RISERS 3'-0" TO 7'-0" IN LENGTH
 - (c) WITHIN 12" ABOVE AND WITHIN 24" BELOW THE FLOOR IN MULTISTORY BUILDINGS
 - (d) RISERS UP TO 7'-0" IN LENGTH TERMINATING ABOVE A ROOF ASSEMBLY OR TOP LANDING MAY OMIT FLEXIBLE COUPLING ABOVE LANDING OR ROOF
 - (e) ON BOTH SIDES OF CONCRETE OR MASONRY WALLS WITHIN 1'-0" OF THE WALL SURFACE, UNLESS CLEARANCE IS PROVIDED
 - (f) WITHIN 24" OF BUILDING EXPANSION JOINTS (MORE FLEXIBILITY IS REQUIRED FOR SEISMIC JOINTS)
 - (g) WITHIN 24" OF THE TOP OF DROPS EXCEEDING 15'-0" IN LENGTH TO PORTIONS OF SYSTEMS SUPPLYING MORE THAN ONE SPRINKLER, REGARDLESS OF PIPE SIZE
 - (h) WITHIN 24" ABOVE AND 24" BELOW ANY INTERMEDIATE POINTS OF SUPPORT FOR A RISER OR OTHER VERTICAL PIPE

FIRE PROTECTION PIPING PLAN - OFFICE AREA
SCALE: 1/8" = 1'-0"



WAREHOUSE & MEZZANINE	
Remote Area 1	
OCCUPANCY CLASSIFICATION	Extra Hazard Group 1
DENSITY (gpm/ft ²)	0.39 for 2000ft ² (Actual 2688ft ²)
TOTAL HOSE STREAMS	500.0
TOTAL HEADS FLOWING	22
K-FACTOR	8
TOTAL WATER REQUIRED	1152.0
TOTAL PRESSURE REQUIRED	53.7
BASE OF RISER (gpm)	632.6
BASE OF RISER (psi)	50.7
SAFETY MARGIN (psi)	+12.8 (19.3%)

NOTE: REMOTE AREA CALCULATED BY DENSITY AREA METHOD PER NFPA 13 SEC. 19.3.3.2 & REDUCED W USE OF HIGH TEMP HEADS PER NFPA 13 SEC. 19.3.3.2.6

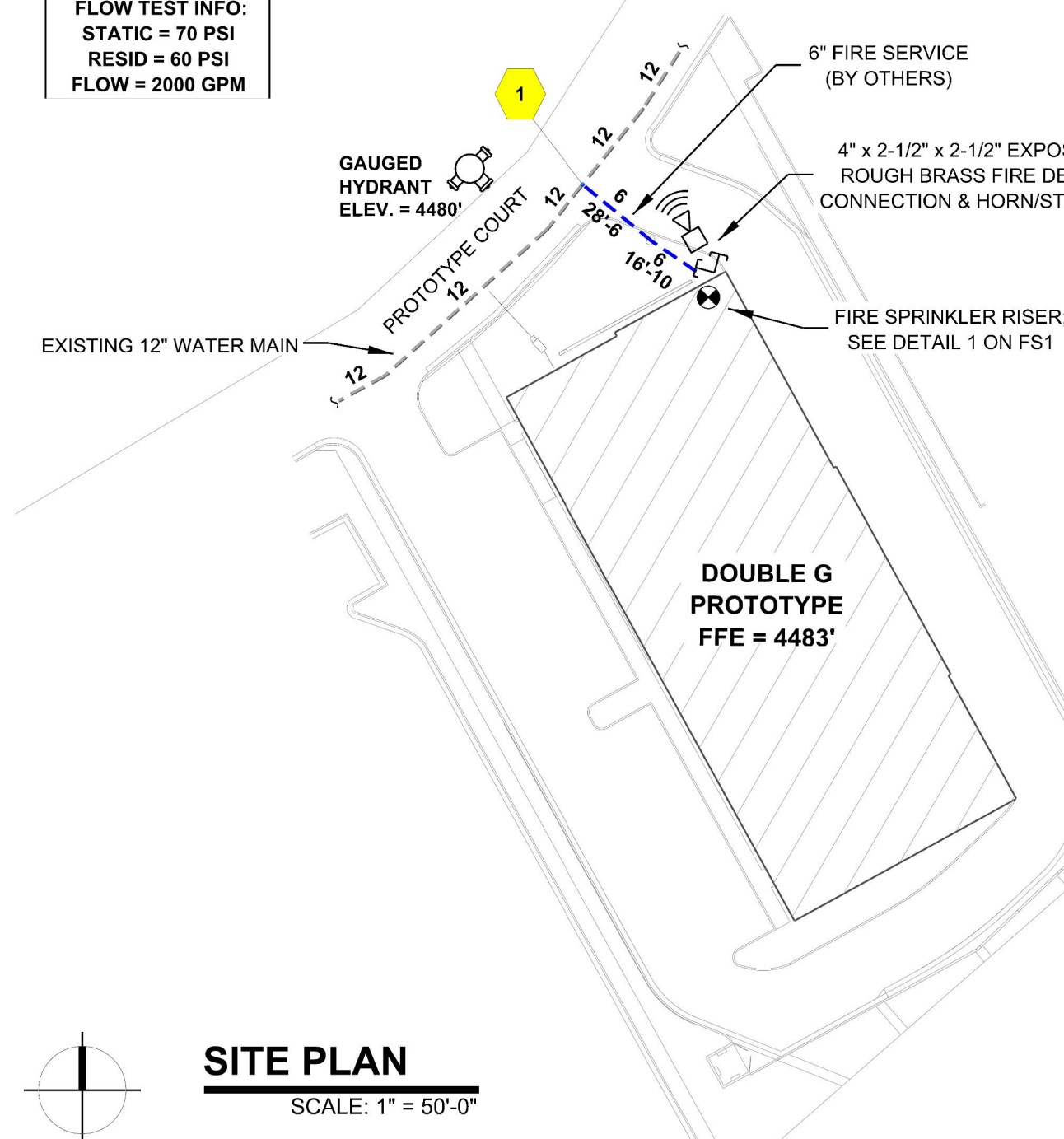
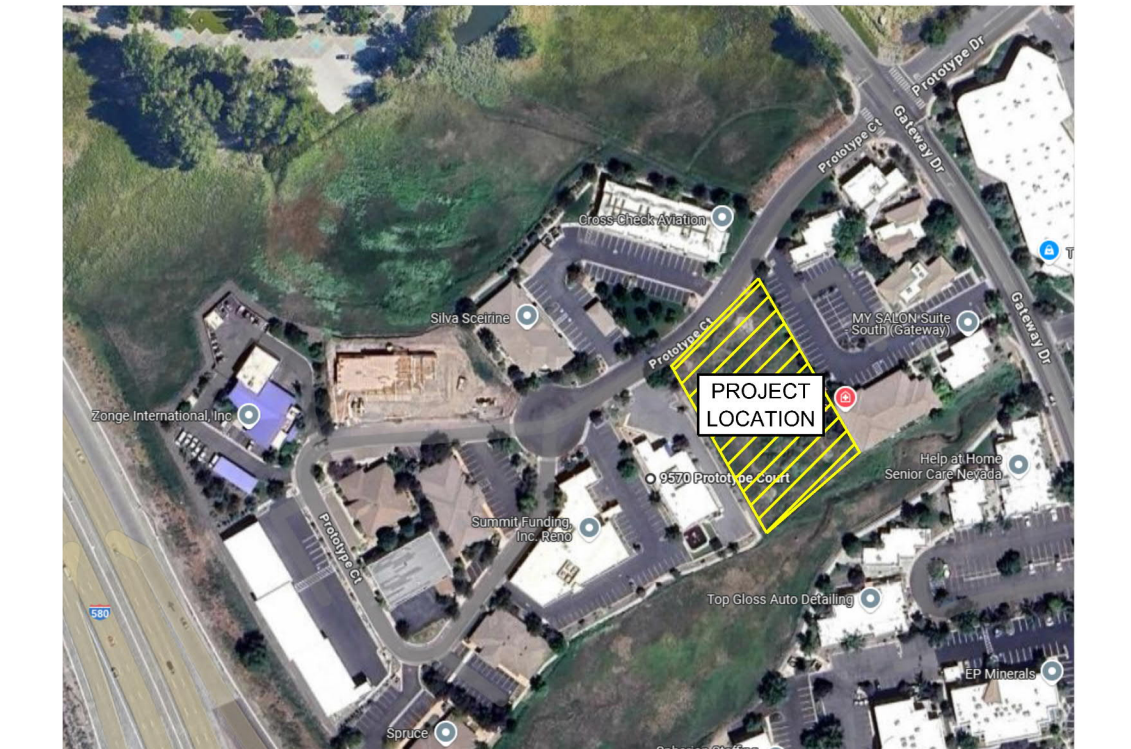
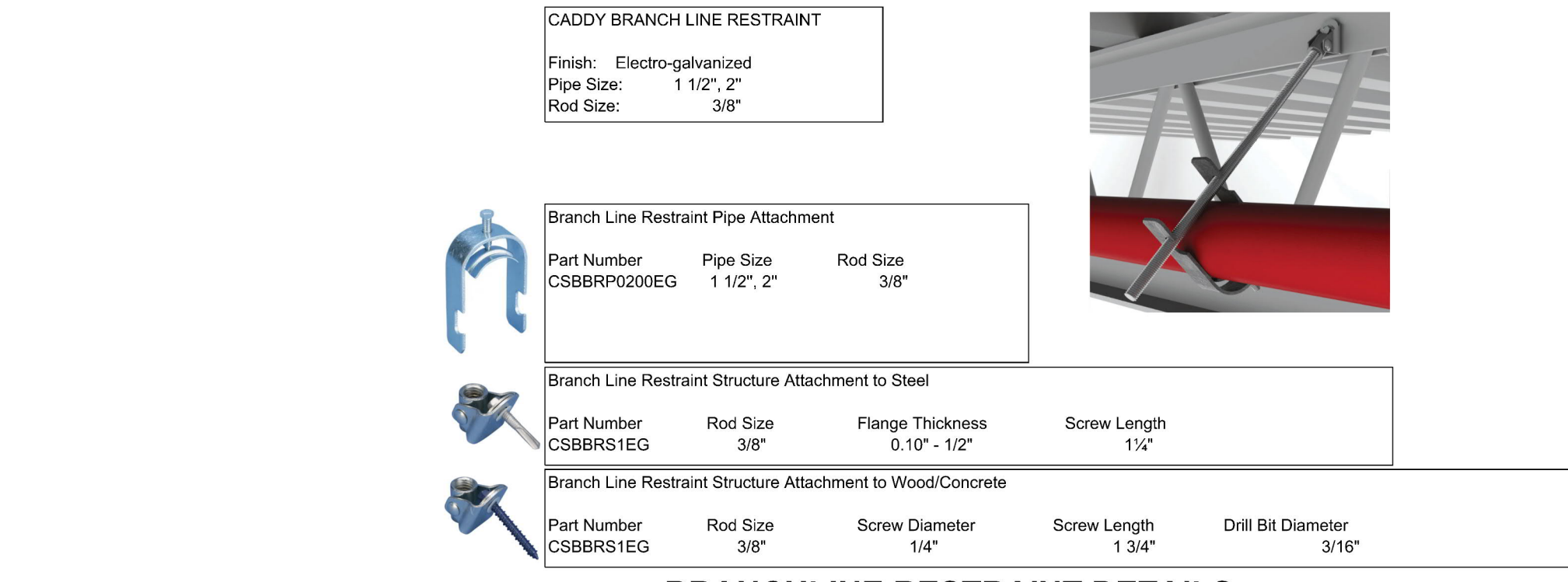
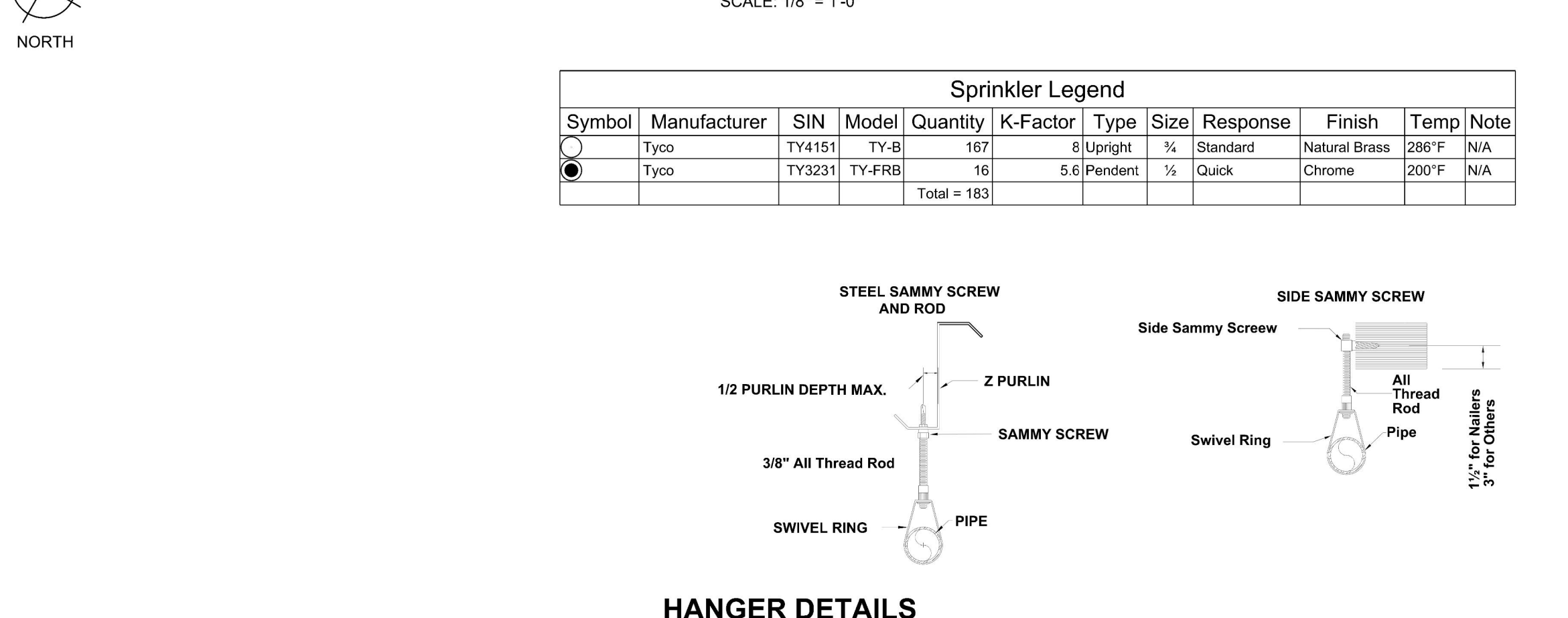
SEISMIC DETAILS
SCOPE OF WORK

HAS BEEN CONTRACTED TO INSTALL A NEW WET PIPE SPRINKLER SYSTEM IN A WAREHOUSE. THE WAREHOUSE WILL BE 15,120 S.F. AND WILL BE EXTRA HAZARD GROUP 1 WITH HIGH TEMP HEADS SPACED AT A MAXIMUM OF 100'-0". THERE WILL BE SSU SPRINKLERS ON A GRIDDED SYSTEM TO PROTECT THE WAREHOUSE. NO WORK WILL BEGIN UNTIL PLANS HAVE BEEN APPROVED.

GENERAL INFORMATION

- INTERNATIONAL BUILDING CODE (2018)
 - OCCUPANCY: STORAGE S-1
 - TYPE OF CONSTRUCTION: V-B
 - AUTHORITY HAVING JURISDICTION (AHJ): RENO FIRE DEPT
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - MAIN FLOOR = 15,120 S.F.
 - DESIGN & INSTALLATION STANDARDS: NFPA-13 (2019)
- SPRINKLER PIPE TYPES:
 - WET:
 - 2.1 1" THROUGH 1 1/2" PIPE TO BE SCHEDULE 40 BLACK STEEL W/ THREADED FITTINGS
 - 2.2 2" THROUGH 4" MAINS & BRANCH LINES TO BE BLK SCHEDULE 10 W/ GROOVED FITTINGS
 - 2.3 MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10
 - 2.4 2" AND LARGER TO USE GROOVED SHORT RADIUS FITTINGS
- DESIGN CRITERIA:
 - 3.1 LIGHT HAZARD AREAS INCLUDE OFFICE/ADMINISTRATIVE, RESTROOMS, AND CORRIDORS
 - 3.2 ORDINARY HAZARD GROUP 1 AREA INCLUDES RISER ROOM
 - 3.3 EXTRA HAZARD GROUP 1 AREAS INCLUDE SHELL SPACE, WAREHOUSE, & MEZZANINE
 - 3.4 REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3
 - 3.5 DESIGN DENSITY EHI PER NFPA 13 FIGURE 19.3.3.1.1
 - 3.6 STORAGE AND USE PER OWNER'S INFORMATION CERTIFICATE (SEE FS2)
 - 3.7 ALLOWABLE STORAGE HEIGHT PER NFPA 13 SEC. 20.1.1 AND 4.3.1.7.1
 - CLASS I/IV UP TO 12'-0"
 - GROUP A PLASTICS UP TO 8'-0"
 - NO SOLID SHELVES
 - NO OPEN TOP CONTAINERS
- NOTES:
 - 4.1 ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - 4.2 HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 - SEE PLAN FOR HANGING REQUIREMENTS
- SYMBOLS USED ON DRAWINGS:
 - ★ x FF PIPE ELEVATION ABOVE FINISH FLOOR
 - ★ x TS PIPE ELEVATION BELOW TOP OF STEEL
 - OH1 ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD U.O.G.)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - 9'-0" CEILING HEIGHT
 - FIRE RATED WALL
 - WET BLACK STEEL PIPE

FIRE PROTECTION PIPING PLAN - WAREHOUSE AREA
SCALE: 1/8" = 1'-0"



FIRE SPRINKLER PLANS

SITE PLAN & DETAILS

DOUBLE G PROTOTYPE

9570 PROTOTYPE CT

RENO, NV 89521

APN 163-072-15

Sheet No: _____

Project: _____

DRAWN BY: Michael Satter

CHECKED BY: ADK

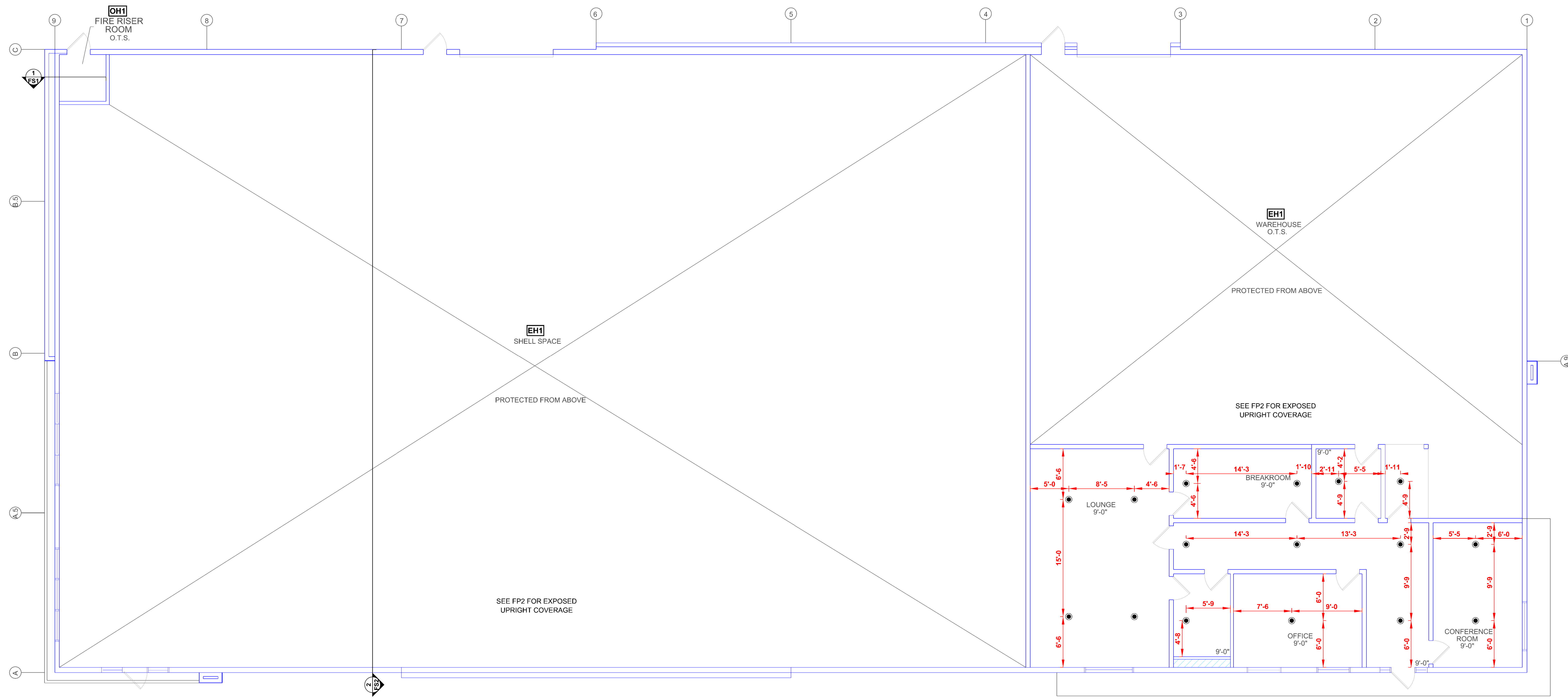
DATE: 11/15/2024

PROJECT NO: 5724255

SCALE: AS NOTED

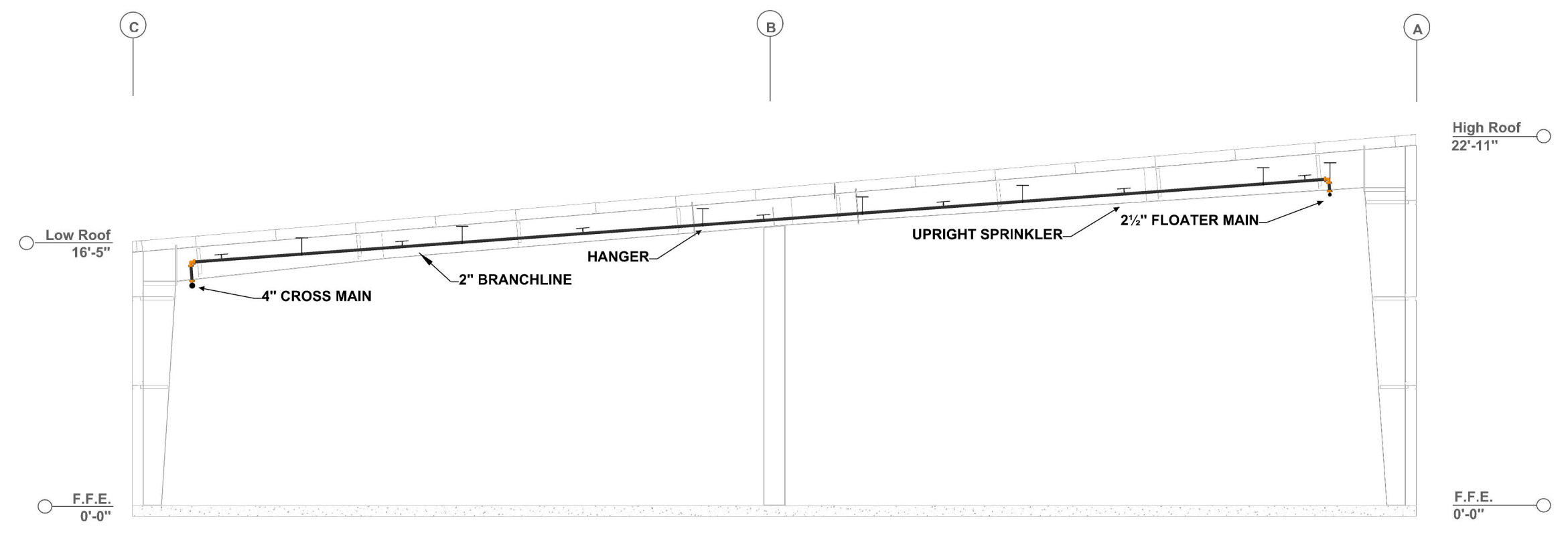
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FS1 of 2



FIRE PROTECTION RCP PLAN - OFFICE AREA
SCALE: 1/8" = 1'-0"

Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temp	Note
○	Tyco	TY4151	TY-8	167	8	Upright	3/4"	Standard	Natural Brass	288°F	N/A
●	Tyco	TY3231	TY-FRB	16	5.6	Pendent	1/2"	Quick	Chrome	200°F	N/A
				Total = 183							



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



HANGER DETAILS

FIRE SPRINKLER PLANS
 FIRE PROTECTION RCP PLAN & SECTION
DOUBLE G PROTOTYPE
 9570 PROTOTYPE CT
 RENO, NV 89521
 APN 163-072-15

DRAWN BY:	Michael Satter
CHECKED BY:	ADK
DATE:	11/15/2024
PROJECT NO.	5724255

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