

FIRE PROTECTION GENERAL NOTES

1. MATERIAL & WORKMANSHIP FOR FIRE PROTECTION SYSTEM SHALL BE DESIGNED, INSTALLED, & TESTED IN ACCORDANCE WITH N.F.P.A. #13 2019 EDITION AND LOCAL FIRE MARSHAL'S REQUIREMENTS.
2. ALL FITTINGS & DEVICES SHALL BE UL LISTED.
3. PIPE 1 1/4" & SMALLER SHALL BE GRADE "A" GALVANIZED STEEL, SCH. 40 PIPE PER ASTM A53. FITTINGS SHALL BE CLASS #150 MALLEABLE IRON PATTERN A.N.S.I. B 16.4 OR FACTORY PAINTED VICTALIC GROOVED FITTINGS CONFORMING TO ASTM A-150 CLASS A.
4. PIPE 1 1/2" & LARGER SHALL BE GRADE "A" GALVANIZED STEEL SCH. 10 WITH ROLL-GROOVED ENDS. FITTINGS SHALL BE OF THE FACTORY PAINTED VICTALIC FLOLOCK AND INSTALLATION READY TYPE.

APPROPRIATE SIGNS SHALL BE INSTALLED ON ALL VALVES, DRAINS, INSPECTOR'S TEST, ETC., INCLUDING HYDRAULIC PLUGS ON RISER.

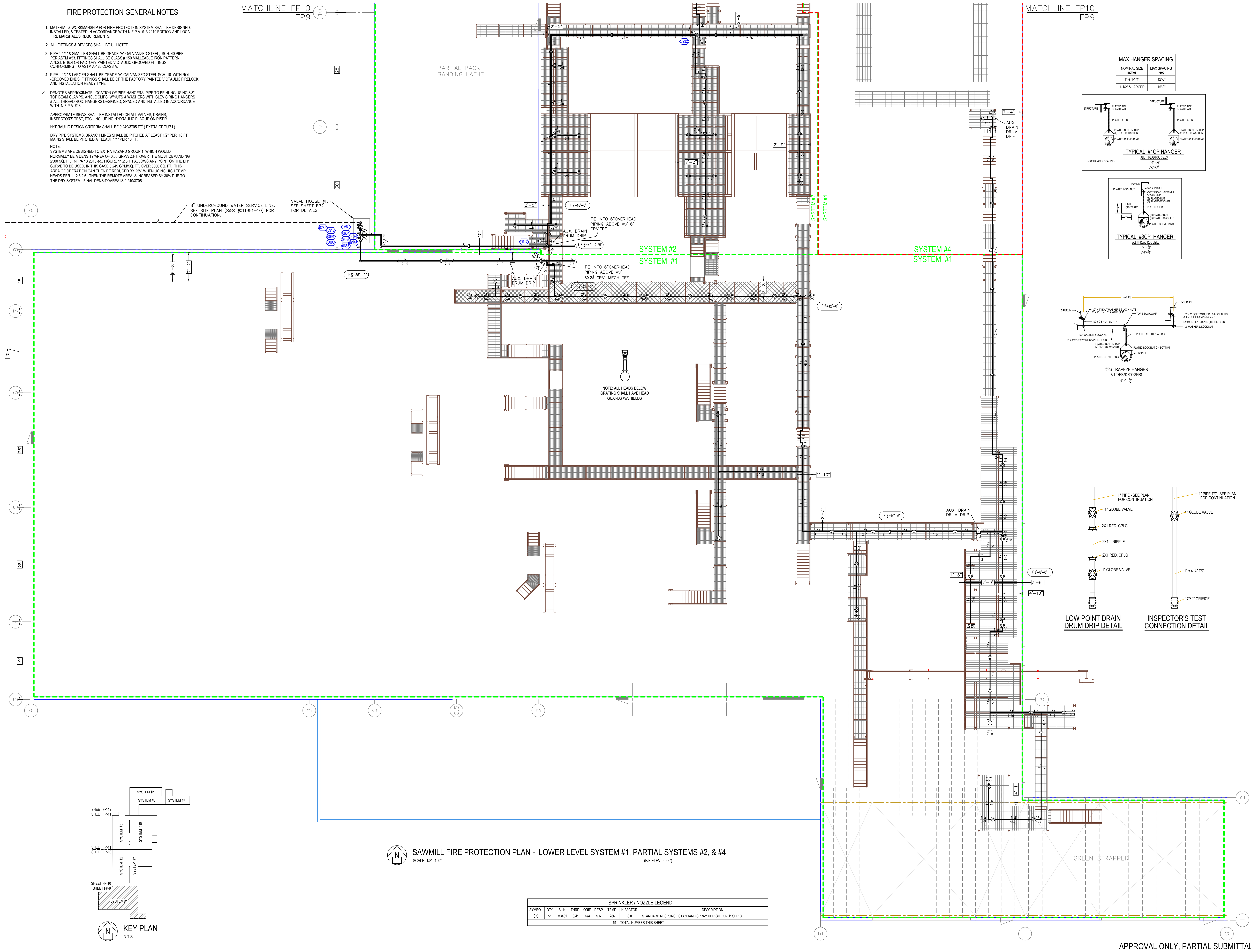
HYDRAULIC DESIGN CRITERIA SHALL BE 0.249/3705 FT² (EXTRA GROUP 1)

DRY PIPE SYSTEMS BRANCH LINES SHALL BE PITCHED AT LEAST 1/2" PER 10 FT. MAINS SHALL BE PITCHED AT LEAST 1/4" PER 10 FT.

NOTE:
SYSTEMS ARE DESIGNED TO EXTRA HAZARD GROUP 1, WHICH WOULD NORMALLY BE A DENSITY AREA OF 0.20 GPM/SQ. FT. OVER THE MOST DEMANDING 2500 SQ. FT. NFPA 13 2016 ed., FIGURE 11.2.3.1.1 ALLOWS ANY POINT ON THE EHI CURVE TO BE USED, IN THIS CASE 0.249 GPM/SQ. FT. OVER 3800 SQ. FT. THIS AREA OF OPERATION CAN THEN BE REDUCED BY 25% WHEN USING HIGH TEMP HEADS PER 11.2.3.2.6. THEN THE REMOTE AREA IS INCREASED BY 30% DUE TO THE DRY SYSTEM. FINAL DENSITY AREA IS 0.249/3705.

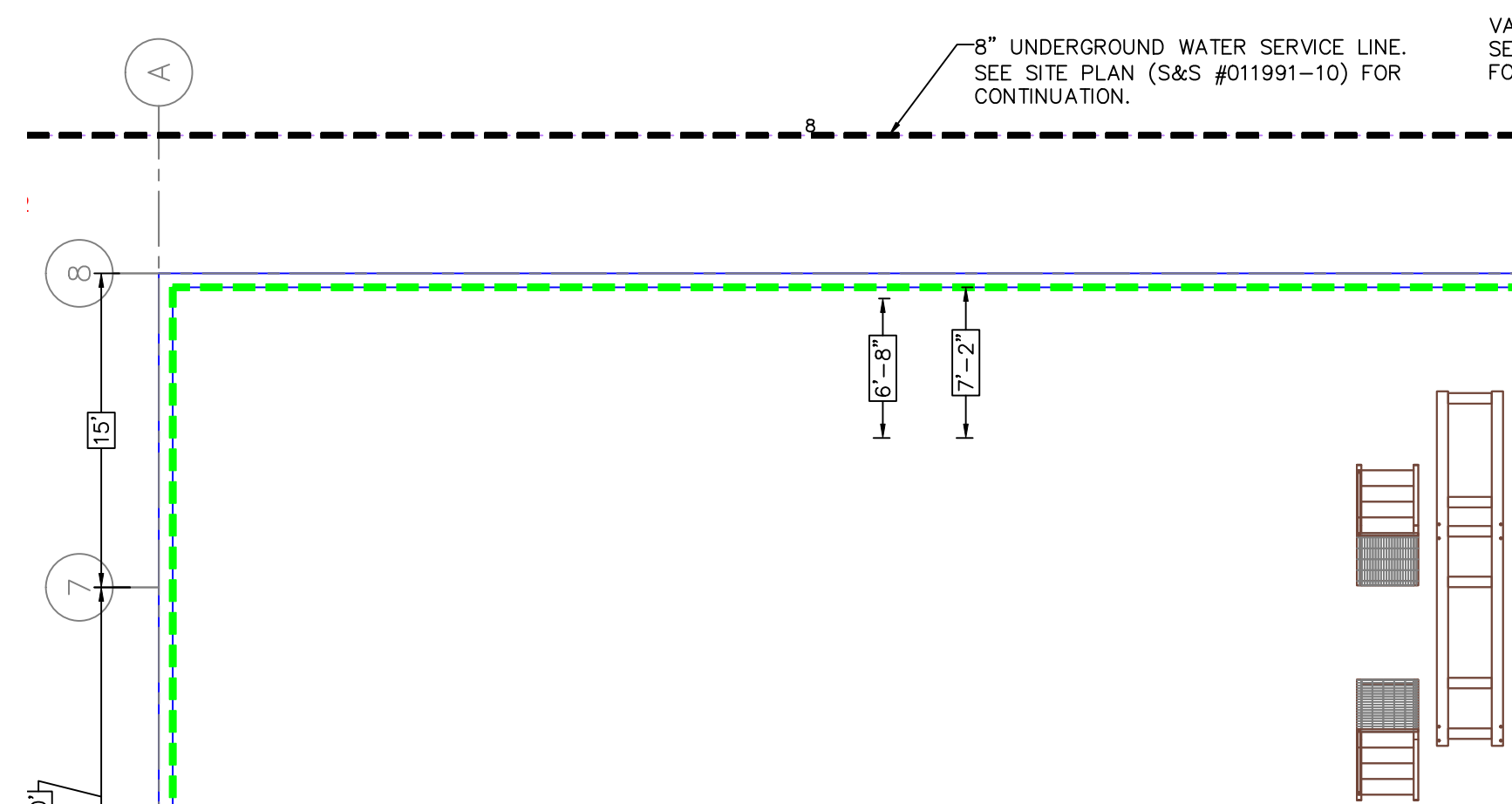
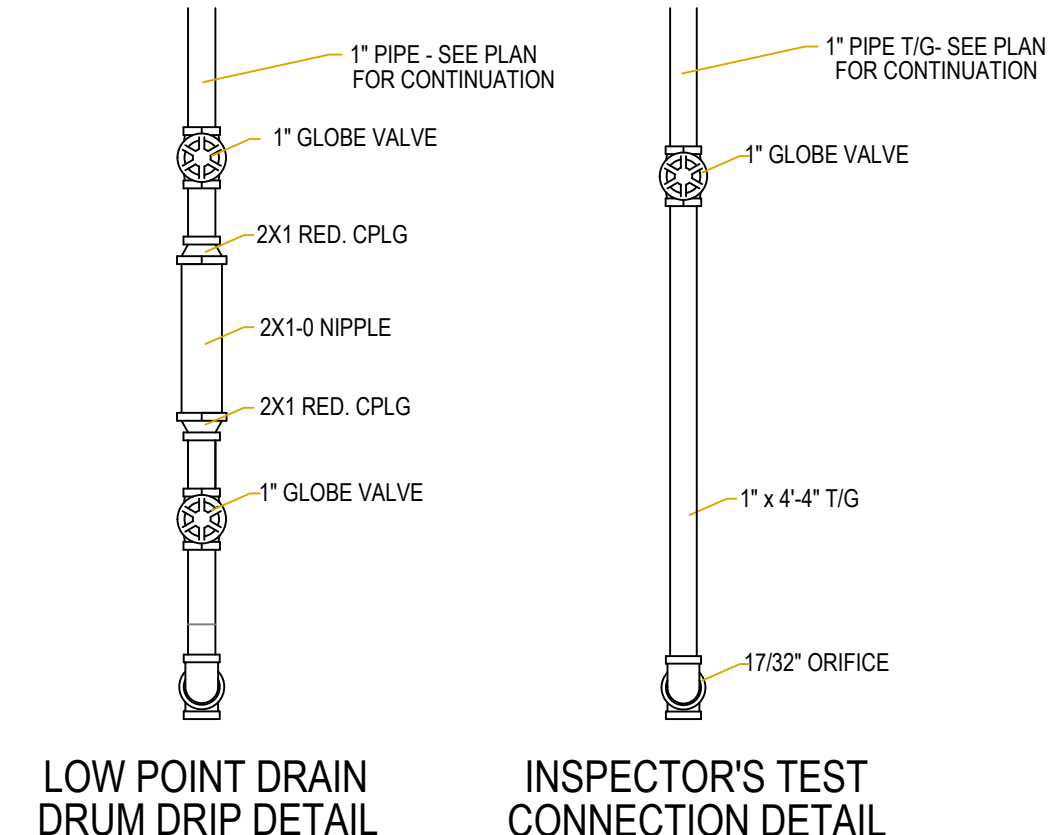
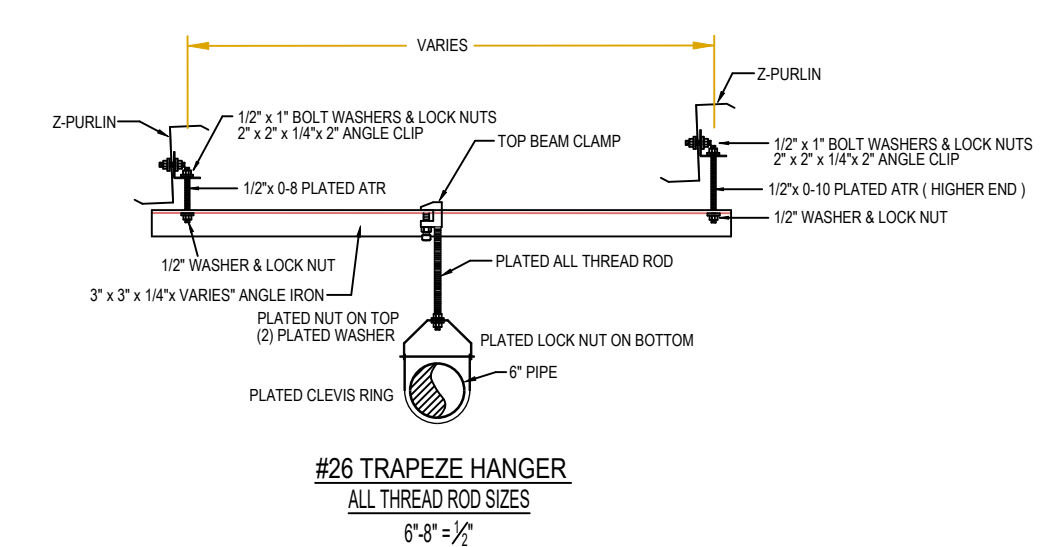
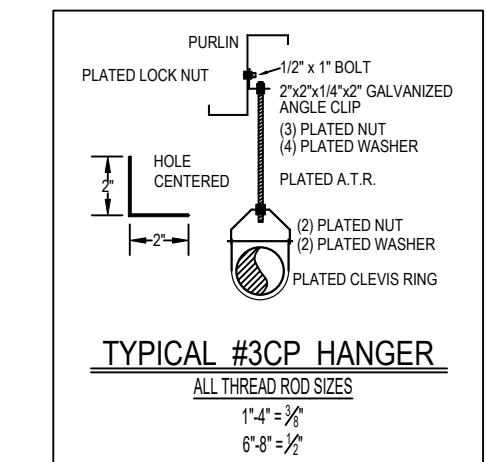
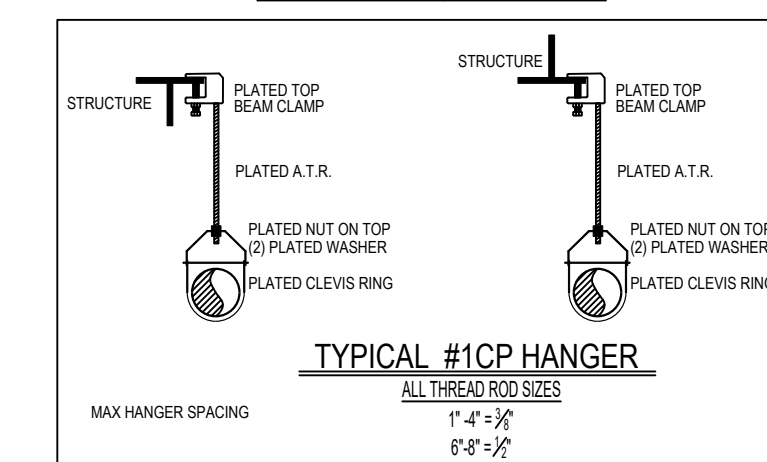
MATCHLINE FP10
FP9

MATCHLINE FP10
FP9

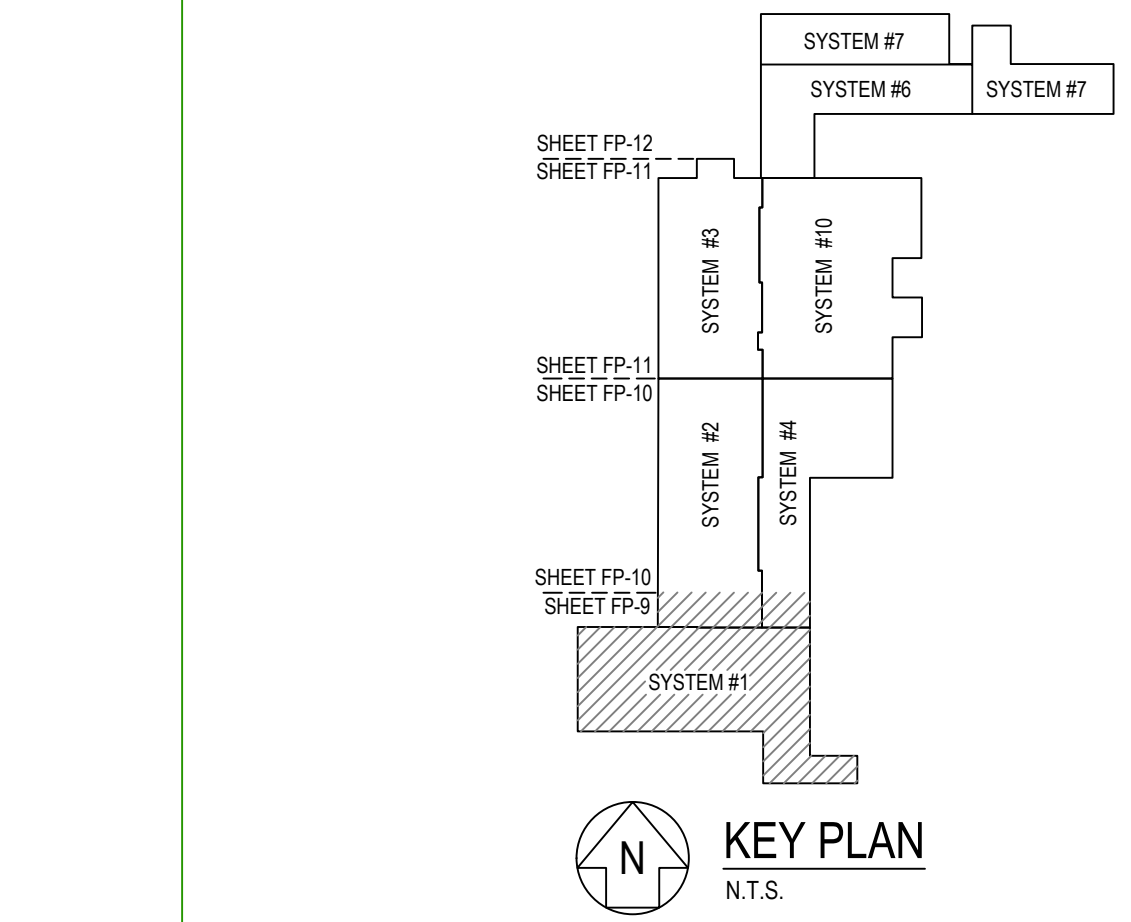


MAX HANGER SPACING

NOMINAL SIZE	MAX SPACING
1" & 1-1/4"	12'-0"
1-1/2" & LARGER	15'-0"



NOTE: ALL HEADS BELOW GRATING SHALL HAVE HEAD GUARDS W/SHIELDS



SAWMILL FIRE PROTECTION PLAN - LOWER LEVEL SYSTEM #1, PARTIAL SYSTEMS #2, & #4
SCALE: 1/8"=1'-0" (F.F. ELEV.=0.00)

SPRINKLER / NOZZLE LEGEND

SYMBOL	QTY	S.I.N.	THRD	ORIF.	RESP.	TEMP.	K-FACTOR	DESCRIPTION
⊙	51	V3401	3/4"	NA	S.R.	286	8.0	STANDARD RESPONSE STANDARD SPRAY UPRIGHT ON 1" SPRIG

S1 = TOTAL NUMBER THIS SHEET

REVISION TABLE

#	DATE	BY	DESCRIPTION
0	03/12/2023	DS	EQUIPMENT PLATFORMS LOWER LEVEL
1	03/15/2023	DS	OVERHEAD SYSTEM TIE-IN LOCATIONS NOTED
2	04/12/2023	DS	ADDED DIMENSIONS

**ROSEBURG FOREST PRODUCTS
SAWMILL FIRE PROTECTION**
290 POWER PLACE
WELDON, NC 27880

APPROVAL ONLY, PARTIAL SUBMITTAL

MATCHLINE
FP11
FP10

MATCHLINE FP11
FP10

ROLLING STOCK
MAINTENANCE

MAINT SHOP

PARTIAL PACK,
BANDING LATHE

Design Area # 22
Occupancy: Extra Hazard Group 1
Flowing Orifice: 29
Density: 0.30 gpm/sq.ft.
Area: 2,256 sq. ft.
Hose Stream Allowance: 500 gpm
Sq. Ft. per Sprinkler: 100
System Total Area: 5,677 sq. ft.
Sprinkler K-Factor: 8.0
Required at Base of Riser: 890.9 gpm @ 111.2 psi
Safety Margin: 21.6 psi

NOTE: ALL HEADS BELOW
GRATING SHALL HAVE HEAD
GUARDS W/SHIELDS

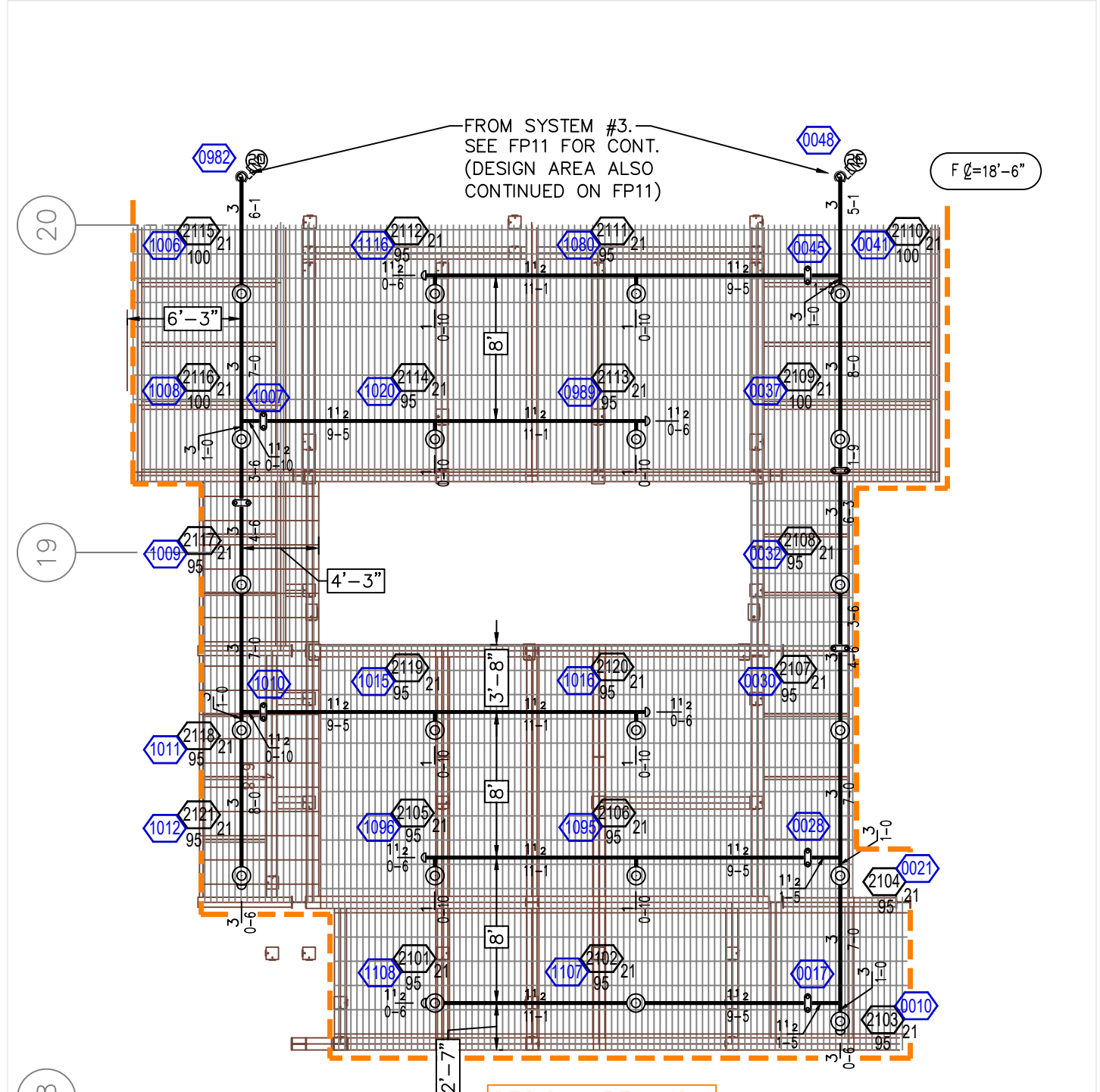
SYSTEM #3
SYSTEM #2

SYSTEM #10
SYSTEM #4

SYSTEM #3
SYSTEM #2

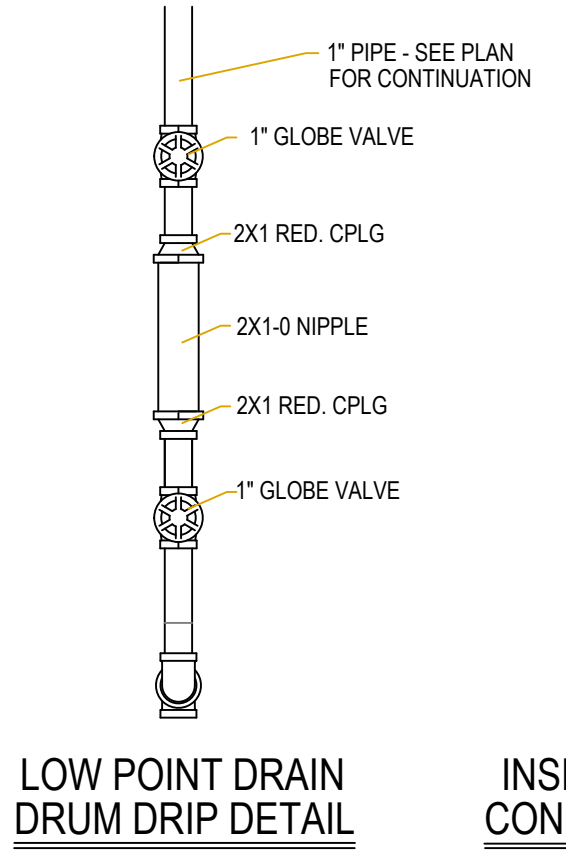
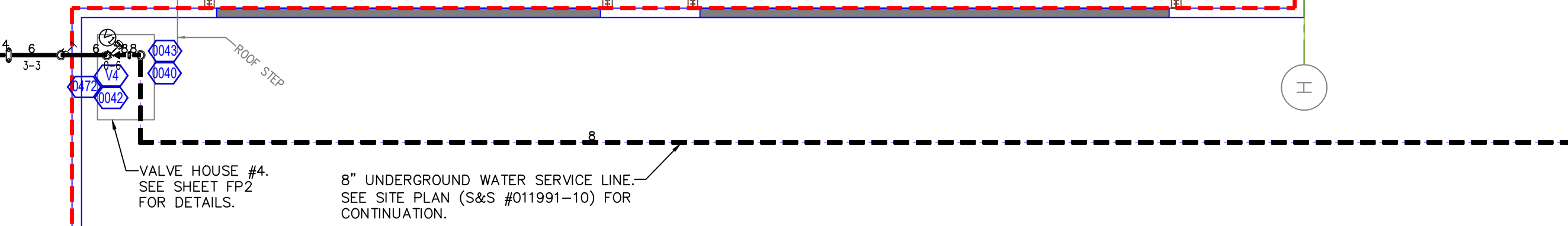
SYSTEM #2
SYSTEM #4

SYSTEM #2
SYSTEM #4

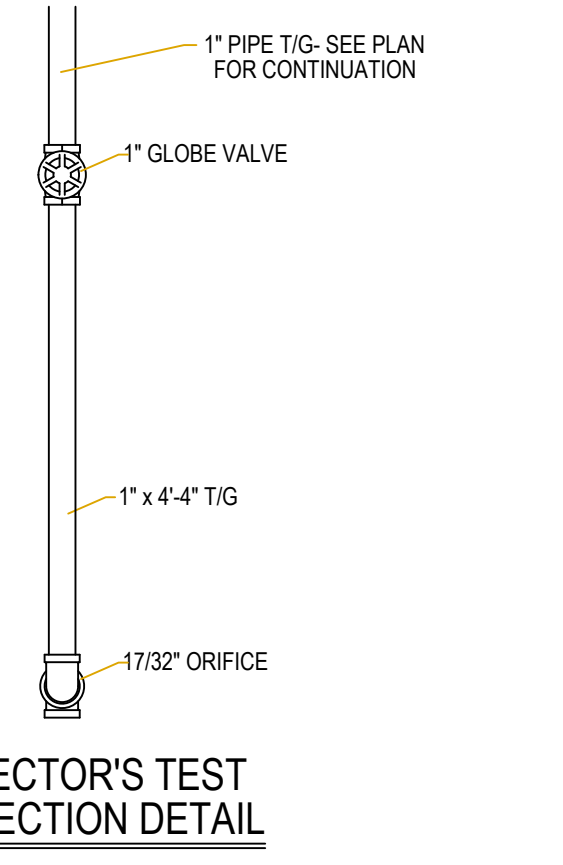


Design Area # 21
Occupancy: Extra Hazard Group 1
Flowing Orifice: 29
Density: 0.30 gpm/sq.ft.
Area: 2,445 sq. ft.
Hose Stream Allowance: 500 gpm
Sq. Ft. per Sprinkler: 100
System Total Area: 5,532 sq. ft.
Sprinkler K-Factor: 8.0
Required at Base of Riser: 1163.6 gpm @ 112.8 psi
Safety Margin: 20.3 psi

A SYSTEM #3 LOWER LEVEL PLAN
SCALE: 1/8"=1'-0"

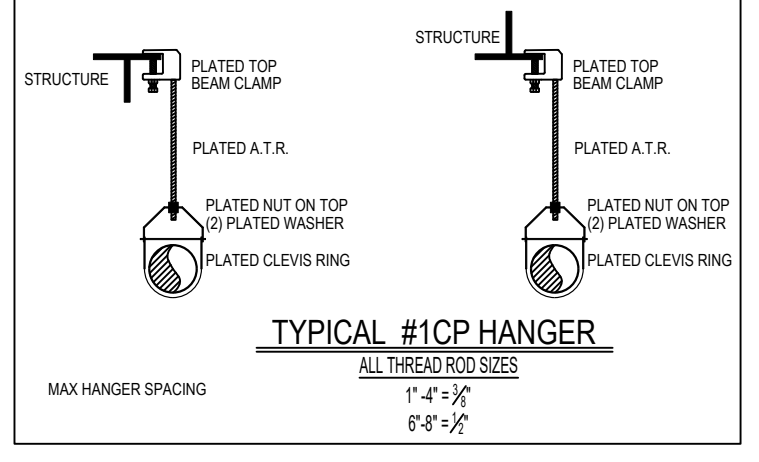


LOW POINT DRAIN
DRUM DRIP DETAIL

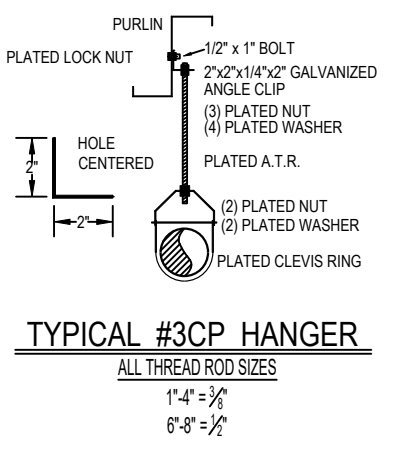


INSPECTOR'S TEST
CONNECTION DETAIL

MAX HANGER SPACING	
NOMINAL SIZE Inches	MAX SPACING feet
1" & 1-1/4"	12'-0"
1-1/2" & LARGER	15'-0"



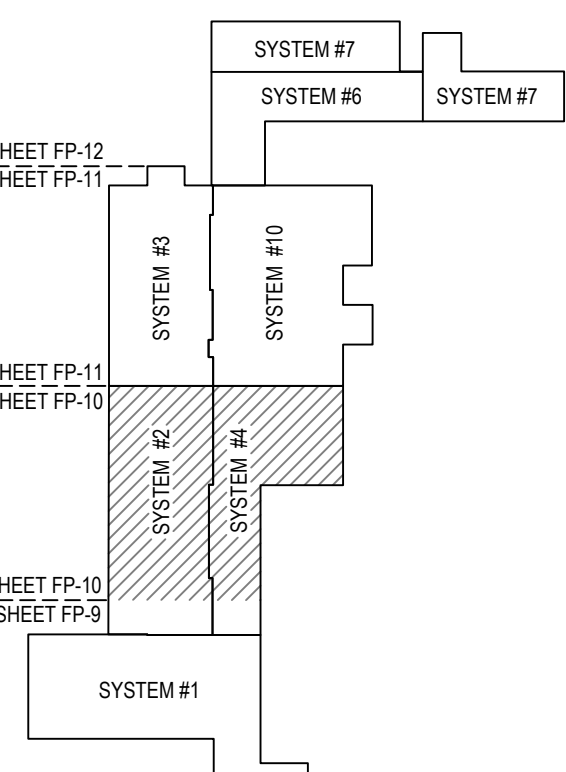
TYPICAL #1CP HANGER
ALL THREAD ROD SIZES
1"-4 1/2"
6" & 8"



TYPICAL #3CP HANGER
ALL THREAD ROD SIZES
1 1/2"-4 1/2"
6" & 8"

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 - ALL FITTINGS & DEVICES SHALL BE UL LISTED.
 - PIPE 1 1/4" & SMALLER SHALL BE GRADE "A" GALVANIZED STEEL, SCH. 40 PIPE PER ASTM A53. FITTINGS SHALL BE CLASS # 150 MALLEABLE IRON PATTERN A.N.S.I. B 16.4 OR FACTORY PAINTED VICTAULIC GROOVED FITTINGS CONFORMING TO ASTM A-126 CLASS A.
 - PIPE 1 1/2" & LARGER SHALL BE GRADE "A" GALVANIZED STEEL SCH. 10 WITH ROLL GROOVED ENDS. FITTINGS SHALL BE OF THE FACTORY PAINTED VICTAULIC FIRELOOK AND INSTALLATION READY TYPE.
- ✓ DENOTES APPROXIMATE LOCATION OF PIPE HANGERS. PIPE TO BE HUNG USING 3/8" TOP BEAM CLAMPS, ANGLE CLIPS, W/NUITS & WASHERS WITH CLEVIS RING HANGERS & ALL THREAD ROD. HANGERS DESIGNED, SPACED AND INSTALLED IN ACCORDANCE WITH N.F.P.A. #13.
- APPROPRIATE SIGNS SHALL BE INSTALLED ON ALL VALVES, DRAINS, INSPECTOR'S TEST, ETC., INCLUDING HYDRAULIC PLAQUE ON RISER.
- HYDRAULIC DESIGN CRITERIA SHALL BE 0.24(93705 FT)² (EXTRA GROUP 1)
- DRY PIPE SYSTEMS, BRANCH LINES SHALL BE PITCHED AT LEAST 1/2" PER 10 FT. MAINS SHALL BE PITCHED AT LEAST 1/4" PER 10 FT.
- NOTE:
SYSTEMS ARE DESIGNED TO EXTRA HAZARD GROUP 1, WHICH WOULD NORMALLY BE A DENSITY/AREA OF 0.30 GPM/SQ. FT. OVER THE MOST DEMANDING 2500 SQ. FT. N.F.P.A. 13 2019 ed., FIGURE 11.2.3.1.1 ALLOWS ANY POINT ON THE E.H. CURVE TO BE USED, IN THIS CASE 0.249 GPM/SQ. FT. OVER 3800 SQ. FT. THIS AREA OF OPERATION CAN THEN BE REDUCED BY 25% WHEN USING HIGH TEMP HEADS PER 11.2.3.2.8. THEN THE REMOTE AREA IS INCREASED BY 30% DUE TO THE DRY SYSTEM. FINAL DENSITY/AREA IS 0.249/3705.



KEY PLAN
N.T.S.

SAWMILL FIRE PROTECTION PLAN - LOWER LEVEL PARTIAL SYSTEMS #2, & #4
SCALE: 1/8"=1'-0" (FF ELEV.=0.00)

SPRINKLER / NOZZLE LEGEND									
SYMBOL	QTY.	S.I.N.	THRD.	ORIF.	RESP.	TEMP.	K-FACTOR	DESCRIPTION	
⊙	67	V3401	3/4"	N/A	S.R.	286	8.0	8.0	STANDARD RESPONSE STANDARD SPRAY UPRIGHT ON T SPRIG
67 = TOTAL NUMBER THIS SHEET									

REVISION TABLE		DESCRIPTION
#	DATE	BY
0	03/01/2023	DS
1	03/13/2023	DS
2	03/27/2023	DS
3	04/17/2023	DS

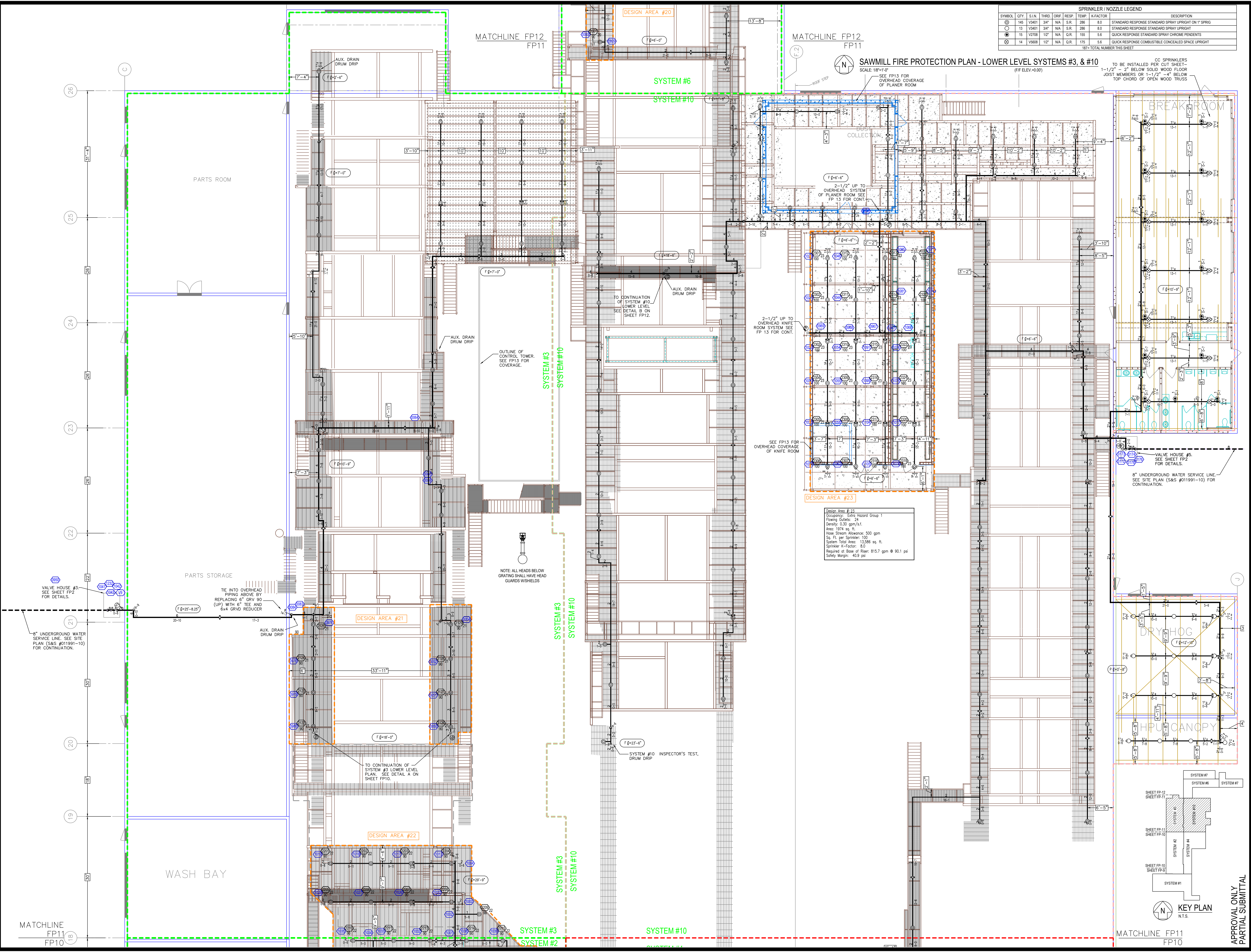
**ROSEBURG FOREST PRODUCTS
SAWMILL FIRE PROTECTION**
290 POWER PLACE
WELDON, NC 27890

APPROVAL ONLY
PARTIAL SUBMITTAL

SPRINKLER / NOZZLE LEGEND									
SYMBOL	QTY.	S.I.N.	THRD.	ORIF.	RESP.	TEMP.	K.FACTOR	DESCRIPTION	
⊙	145	V3401	3/4"	NA	S.R.	286	8.0	STANDARD RESPONSE STANDARD SPRAY UPRIGHT ON 1 SPRIG	
⊙	13	V3401	3/4"	NA	S.R.	286	8.0	STANDARD RESPONSE STANDARD SPRAY UPRIGHT	
⊙	15	V2708	1/2"	NA	Q.R.	155	5.6	QUICK RESPONSE STANDARD SPRAY CHROME PENDENTS	
⊙	14	V5608	1/2"	NA	Q.R.	175	5.6	QUICK RESPONSE COMBUSTIBLE CONCEALED SPACE UPRIGHT	

SAWMILL FIRE PROTECTION PLAN - LOWER LEVEL SYSTEMS #3, & #10
(F.F. ELEV. = 0.00)

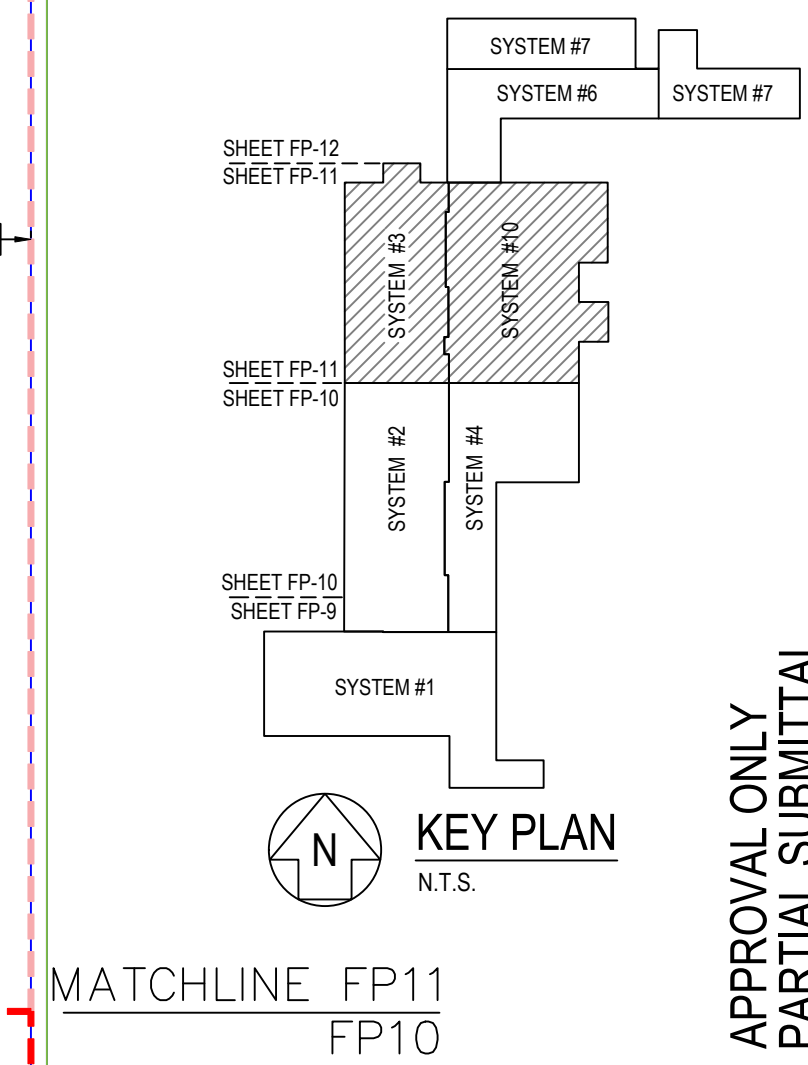
CC SPRINKLERS TO BE INSTALLED PER CUT SHEET 1-1/2" x 2" BELOW SOLID WOOD FLOOR JOIST MEMBERS OR 1-1/2" - 4" BELOW TOP CHORD OF OPEN WOOD TRUSS



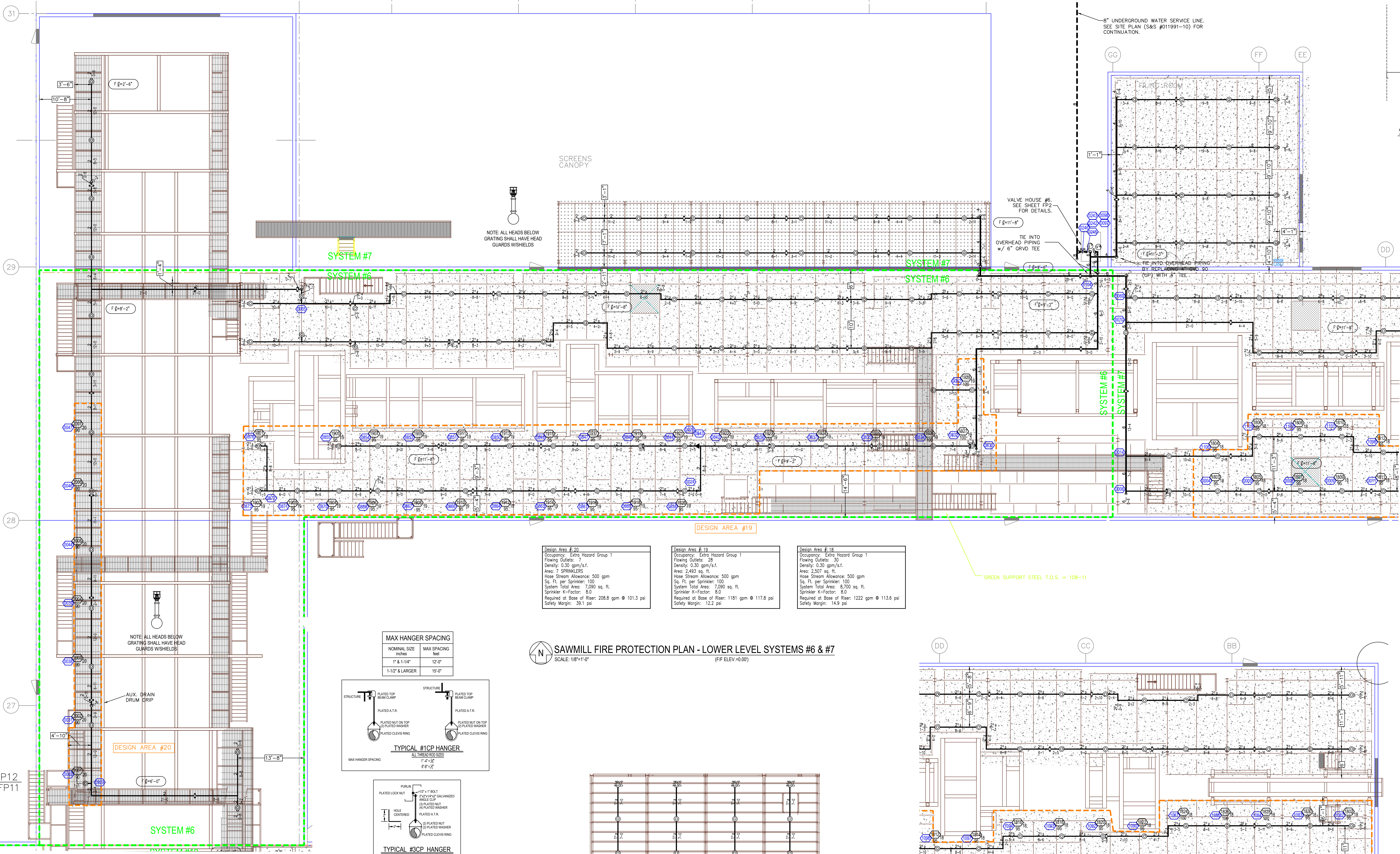
Design Area #23
Occupancy: Extra Hazard Group 1
Flowing Orifices: 24
Density: 0.30 gpm/s.f.
Area: 1974 sq. ft.
Hose Stream Allowance: 500 gpm
So. Fl. per Sprinkler: 100
System Total Area: 13,586 sq. ft.
Sprinkler K-Factor: 8.0
Required at Base of Rise: 815.7 gpm @ 90.1 psi
Safety Margin: 40.0 psi

REVISION TABLE	
#	DATE BY DESCRIPTION
0	03/17/2023 DS EQUIPMENT PLATFORMS OVER LEVEL
1	03/17/2023 DS OVERHEAD SYSTEM TIE IN LOCATIONS NOTED
2	03/17/2023 DS LOWER LEVEL OF SYSTEM #5 NOW SYSTEM #10 / DRY HOG / DRUM DRAIN / CANOPY COVERAGE ADDED
3	04/04/2023 DS DESIGN AREA #23 CALC. ADDED / BREAKROOM - DRY HOG - HPU CANOPY COVERAGE ADDED
4	04/17/2023 DS ADDED CC COVERAGE ABOVE SUSPENDED CEILING OF BREAKROOM AREAS AND NOTED ZONE #10 INSPECTOR'S TEST LOCATION

**ROSEBURG FOREST PRODUCTS
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290 POWER PLACE
WELDON, NC 27890

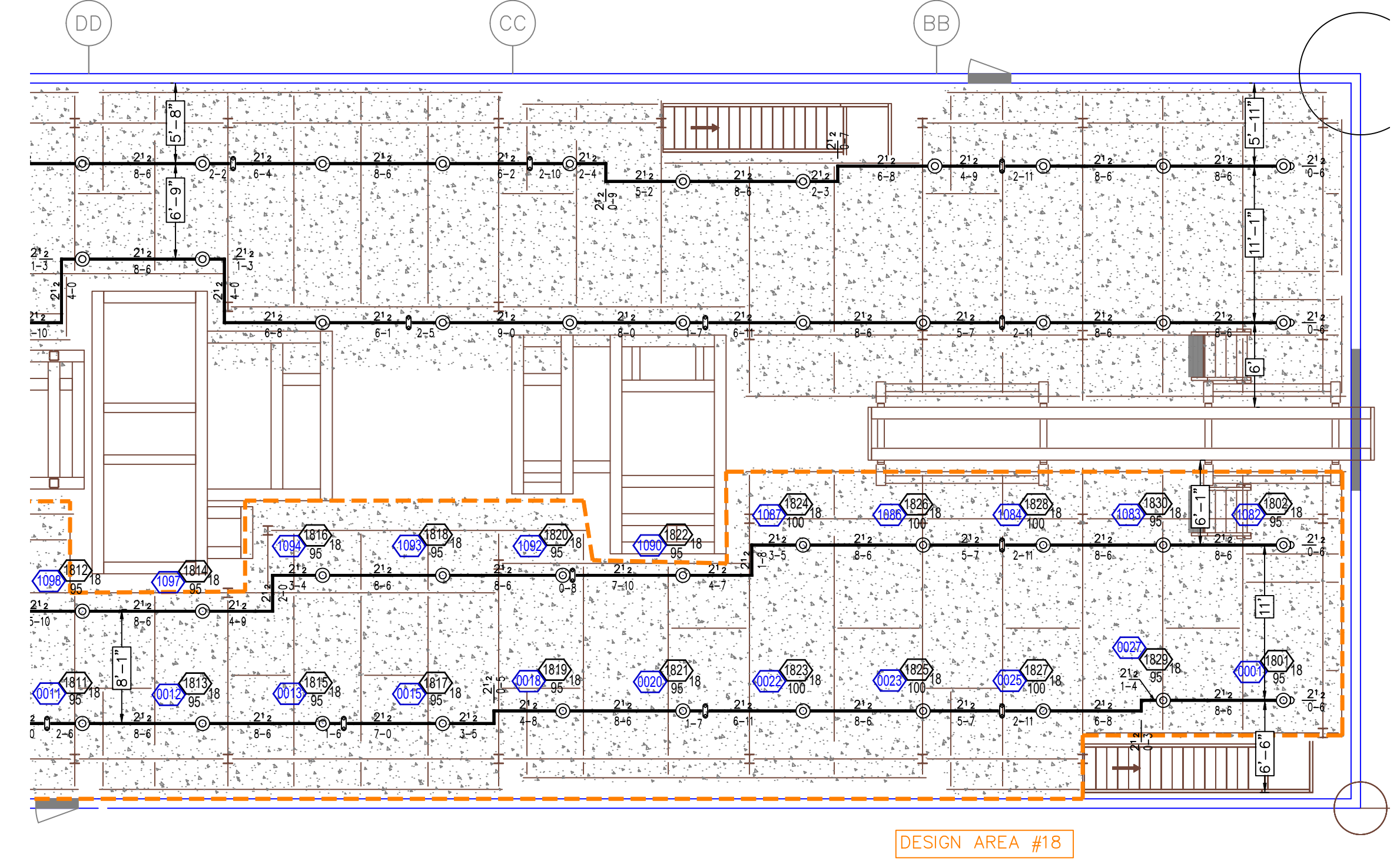
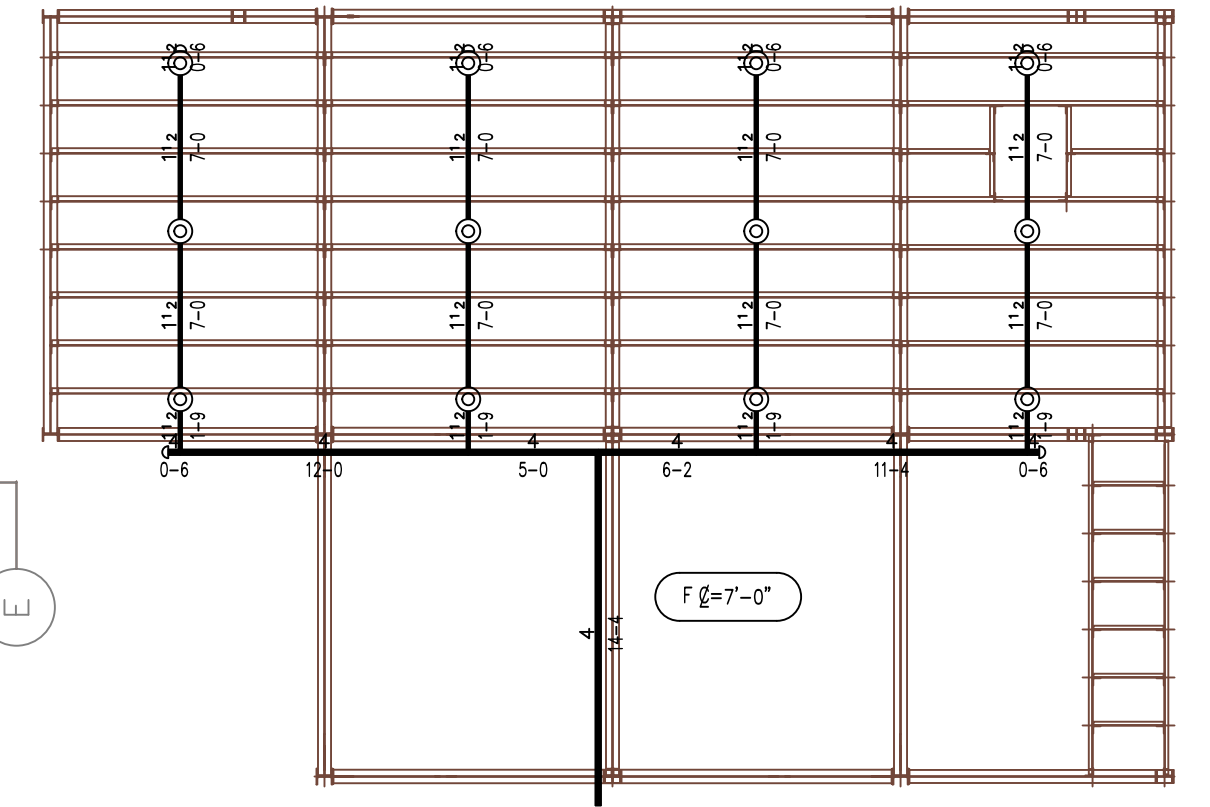
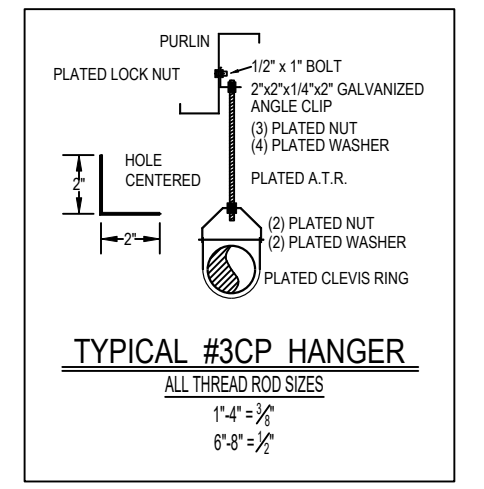
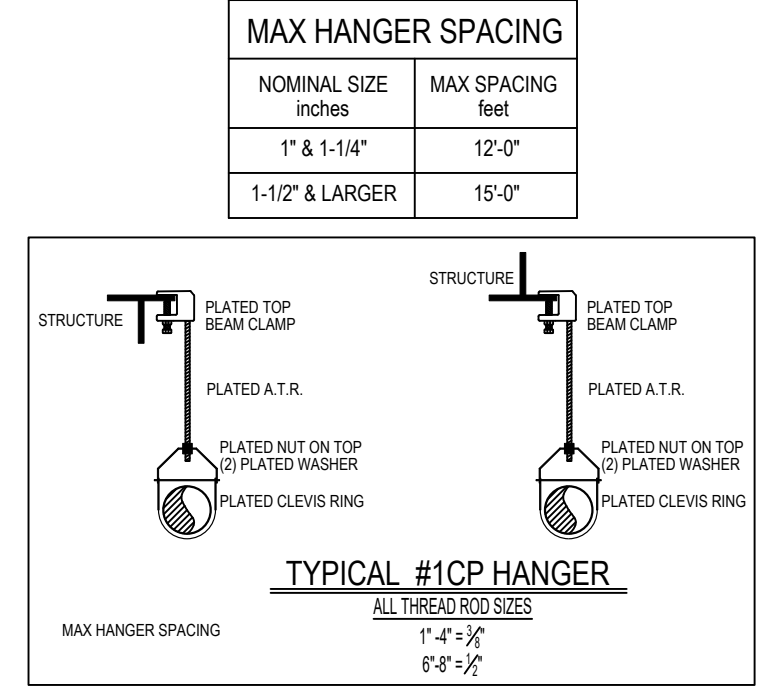


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<p>Design Area #20 Occupancy: Extra Hazard Group 1 Flowing Outlet: 7 Density: 0.30 gpm/s.f. Area: 7 SPRINKLERS Hose Stream Allowance: 500 gpm Sq. Ft. per Sprinkler: 100 System Total Area: 7,000 sq. ft. Sprinkler K-factor: 8.0 Required at Base of Riser: 208.8 gpm @ 101.3 psi Safety Margin: 39.1 psi</p>	<p>Design Area #19 Occupancy: Extra Hazard Group 1 Flowing Outlet: 29 Density: 0.30 gpm/s.f. Area: 2,493 sq. ft. Hose Stream Allowance: 500 gpm Sq. Ft. per Sprinkler: 100 System Total Area: 7,000 sq. ft. Sprinkler K-factor: 8.0 Required at Base of Riser: 1181 gpm @ 117.8 psi Safety Margin: 12.2 psi</p>	<p>Design Area #18 Occupancy: Extra Hazard Group 1 Flowing Outlet: 30 Density: 0.30 gpm/s.f. Area: 2,507 sq. ft. Hose Stream Allowance: 500 gpm Sq. Ft. per Sprinkler: 100 System Total Area: 8,100 sq. ft. Sprinkler K-factor: 8.0 Required at Base of Riser: 1222 gpm @ 113.6 psi Safety Margin: 14.9 psi</p>
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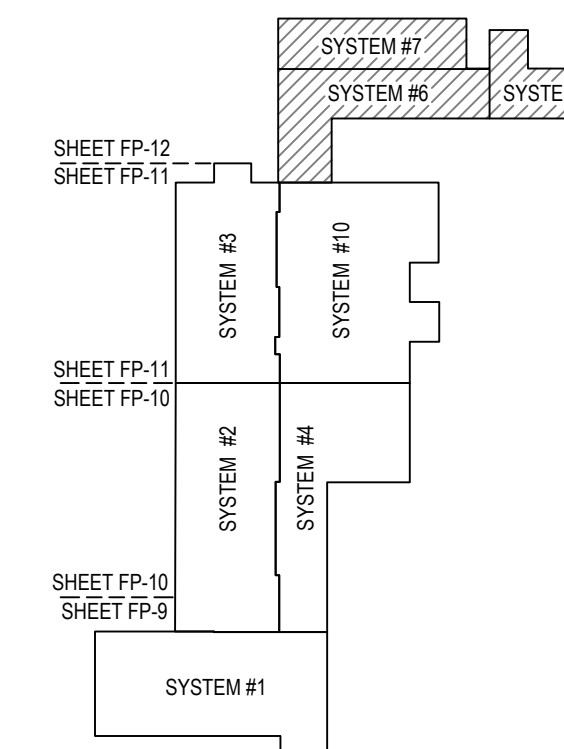
SAWMILL FIRE PROTECTION PLAN - LOWER LEVEL SYSTEMS #6 & #7
SCALE: 1/8"=1'-0"



SPRINKLER / NOZZLE LEGEND

SYMBOL	QTY.	S.I.N.	THRD.	CRIF.	RESP.	TEMP.	K-FACTOR	DESCRIPTION
⊙	190	V3401	3/4"	NA	S.R.	286	8.0	STANDARD RESPONSE STANDARD SPRAY UPRIGHT ON 1" SPRIG
190 = TOTAL NUMBER THIS SHEET								

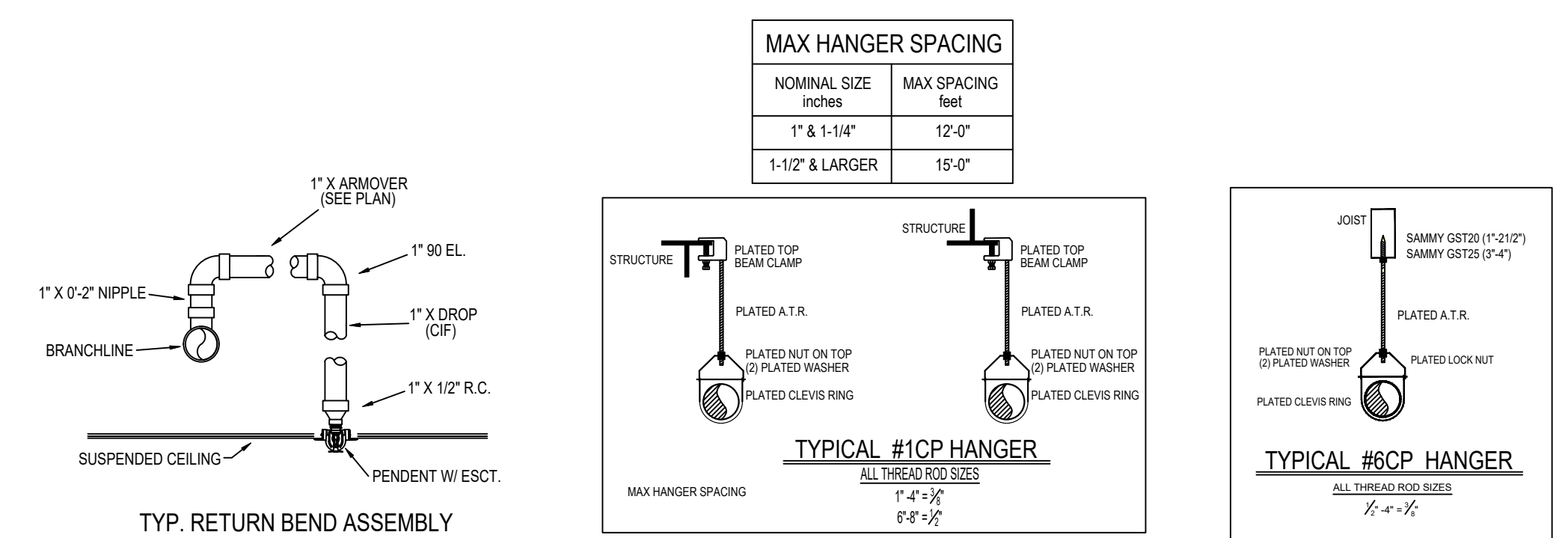
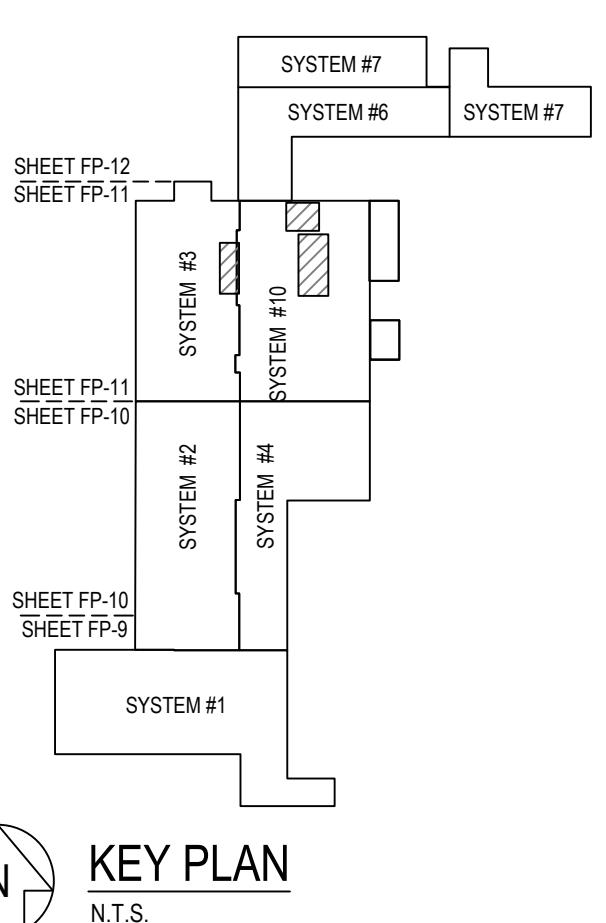
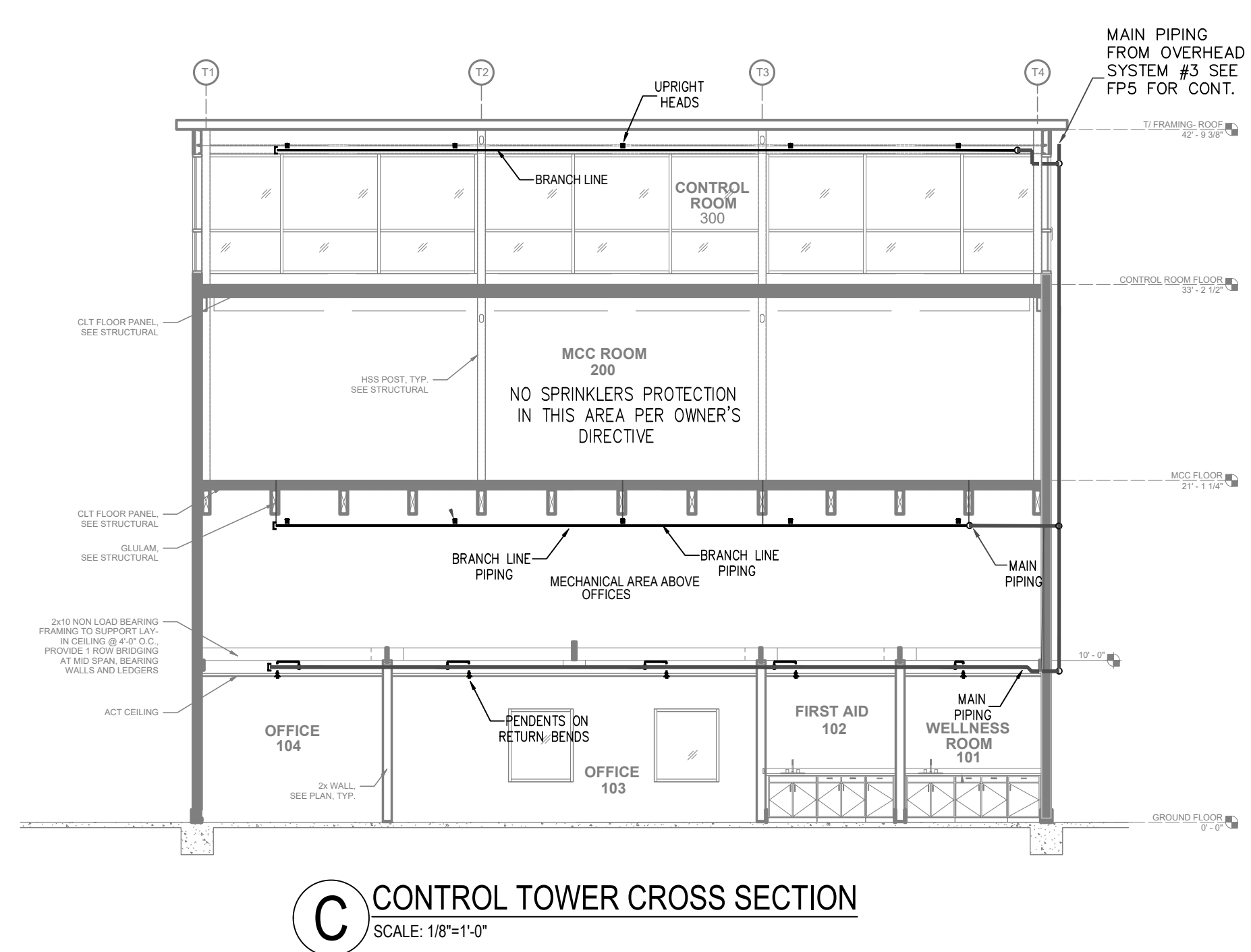
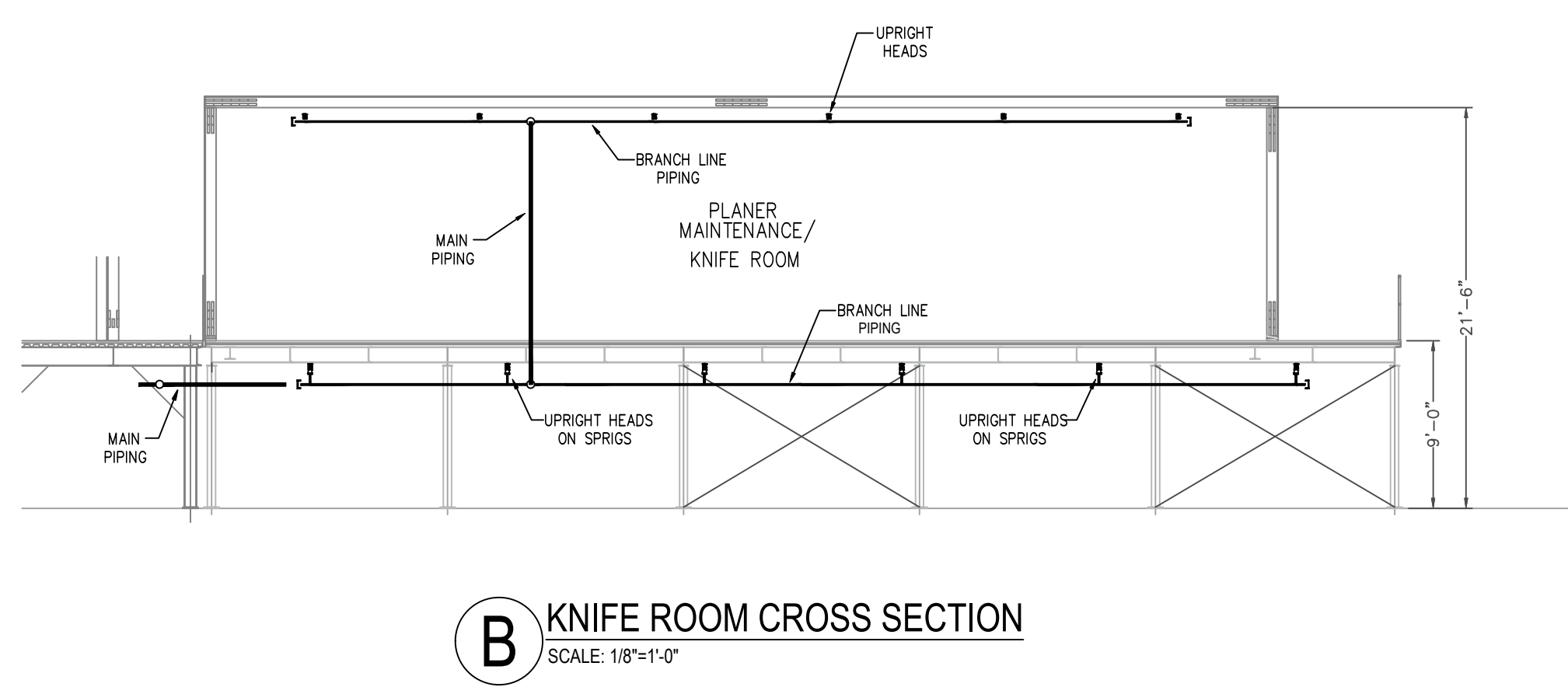
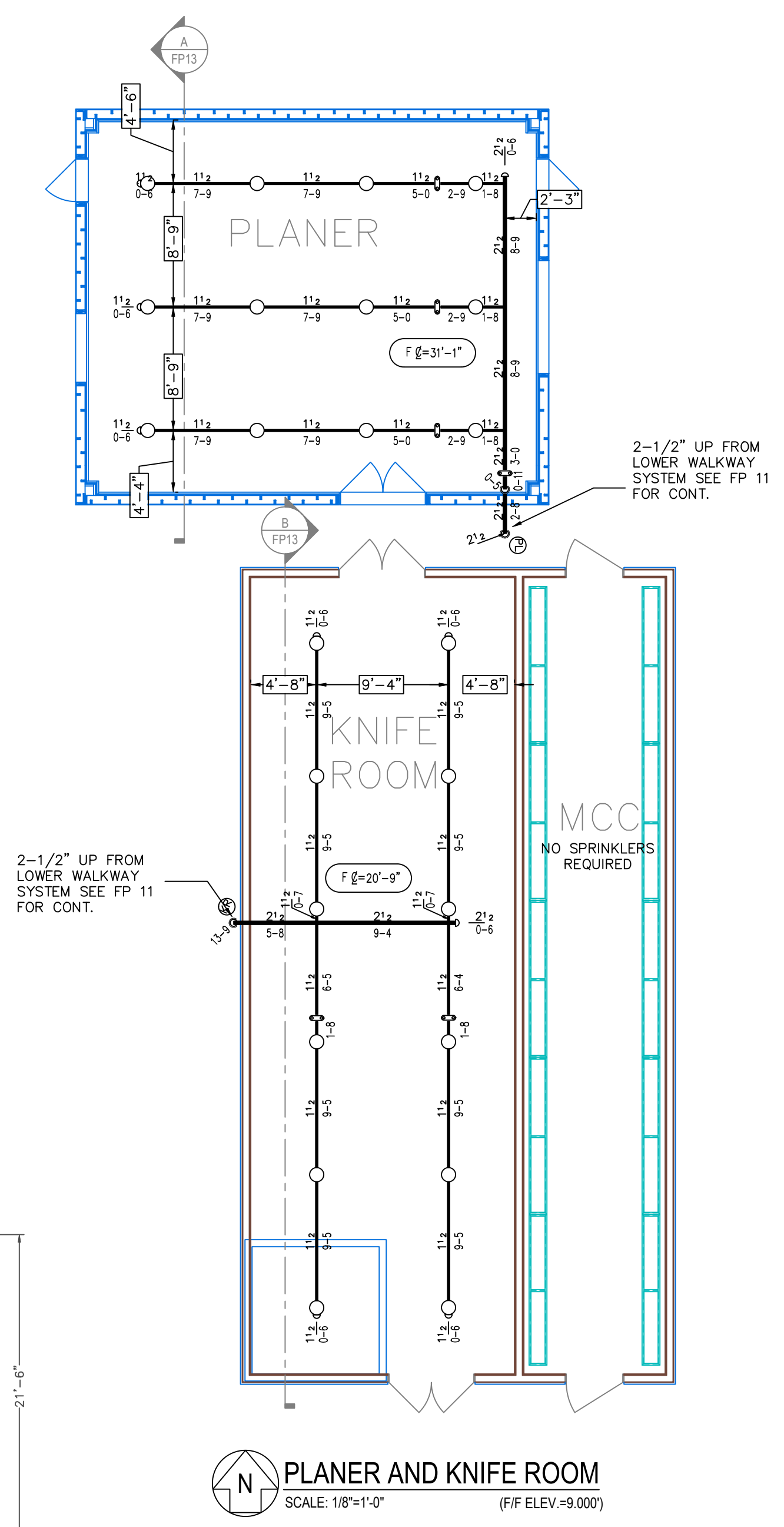
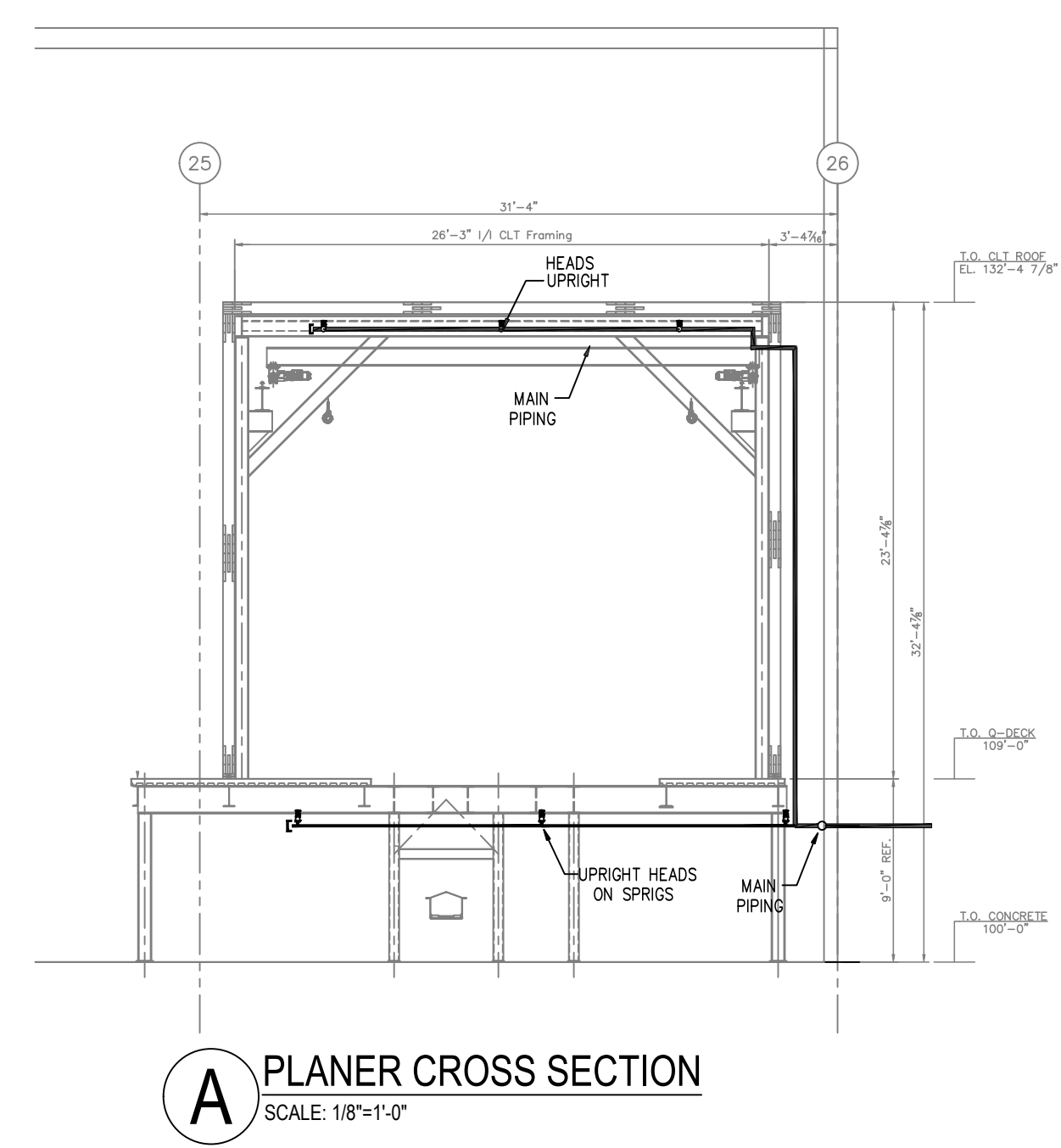
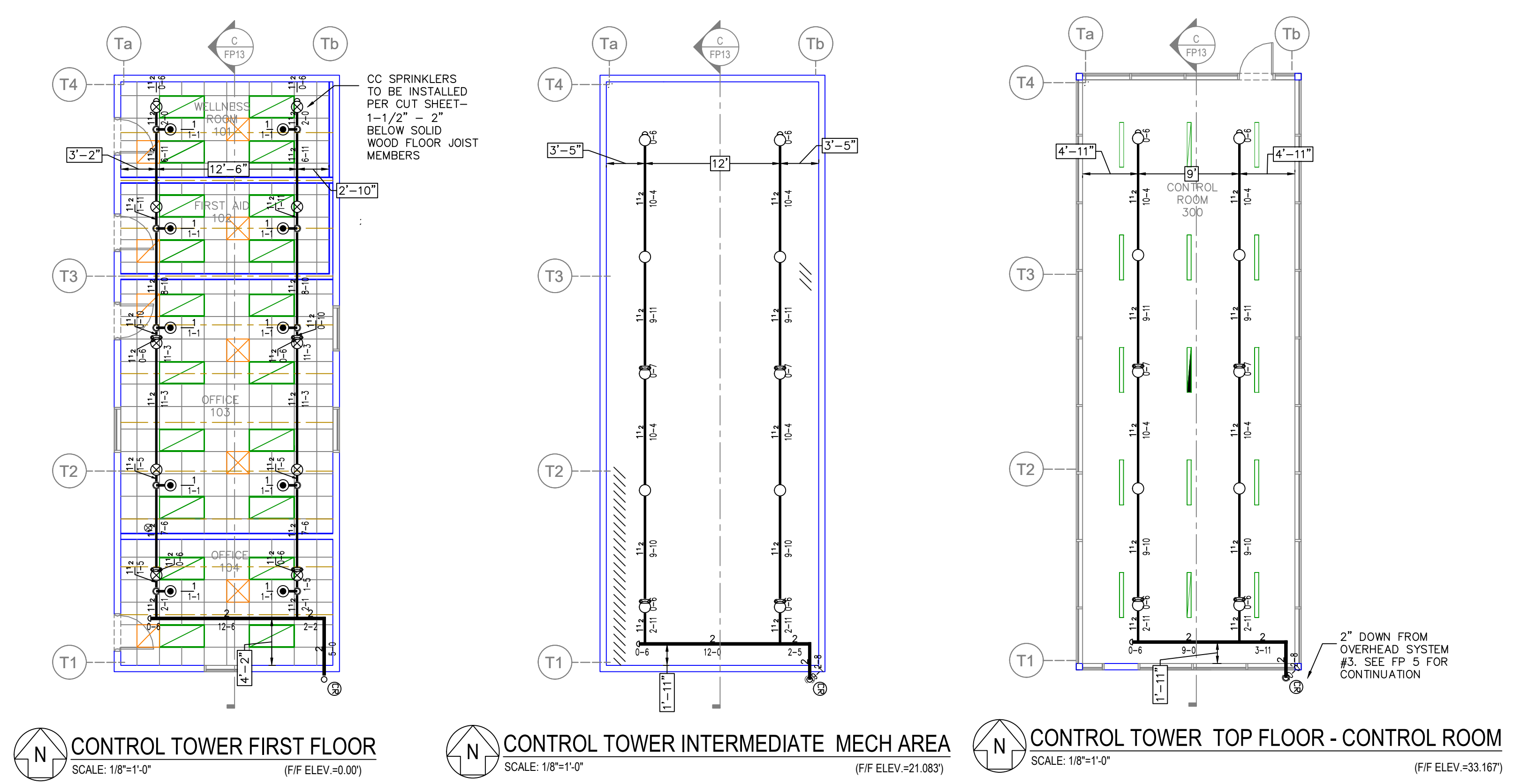
MATCHLINE FP12
FP11



REVISION TABLE

#	DATE	BY	DESCRIPTION
0	03/12/2023	DS	EQUIPMENT PLATFORMS OVER LEVEL
1	03/12/2023	DS	OVERHEAD SYSTEM TIE IN LOCATIONS NOTED
2	03/12/2023	DS	HYDRAULIC INFO BLOCKS ADDED INTO VIEW
3	04/17/2023	DS	ADDED DIMENSIONS

**ROSEBURG FOREST PRODUCTS
SAWMILL FIRE PROTECTION**
290 POWER PLACE
WELDON, NC 27890



FIRE PROTECTION GENERAL NOTES

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 - ALL FITTINGS & DEVICES SHALL BE UL LISTED.
 - PIPE 1 1/4" & SMALLER SHALL BE GRADE "A" GALVANIZED STEEL, SCH. 40 PIPE PER ASTM A53. FITTINGS SHALL BE CLASS #150 MALLEABLE IRON PATTERN A.N.S.I. B 16.4 OR FACTORY PAINTED VITALLUC GROOVED FITTINGS CONFORMING TO ASTM A-126 CLASS A.
 - PIPE 1 1/2" & LARGER SHALL BE GRADE "A" GALVANIZED STEEL SCH. 10 WITH ROLL-GROOVED ENDS. FITTINGS SHALL BE OF THE FACTORY PAINTED VITALLUC FIRE-ROLL AND INSTALLATION READY TYPE.
- ✓ DENOTES APPROXIMATE LOCATION OF PIPE HANGERS. PIPE TO BE HUNG USING 3/8" TOP BEAM CLAMPS, ANGLE CLIPS, W/ NUTS & WASHERS WITH CLEVIS RING HANGERS & ALL THREAD ROD HANGERS DESIGNED, SPACED AND INSTALLED IN ACCORDANCE WITH N.F.P.A. #13.
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SPRINKLER / NOZZLE LEGEND						
SYMBOL	QTY	S.I.N.	THRD.	DRIP	RESP.	DESCRIPTION
○	44	12401	3/4"	N/A	S.R.	STANDARD RESPONSE STANDARD SPRAY UPRIGHT
⊙	10	12708	1/2"	N/A	Q.R.	QUICK RESPONSE STANDARD SPRAY CHROME PENDENTS
⊗	10	15608	1/2"	N/A	Q.R.	QUICK RESPONSE COMBUSTIBLE CONCEALED SPACE UPRIGHT

64 = TOTAL NUMBER THIS SHEET

**ROSEBURG FOREST PRODUCTS
SAWMILL FIRE PROTECTION**
290 POWER PLACE
WELDON, NC 27890

REVISION TABLE		
#	DATE	DESCRIPTION
0	03/12/23	CONTROL TOWER, KNIFE ROOM, PLANER, COVERAGE
1	04/03/23	ADDED CC COVERAGE ABOVE CONTROL TOWER FIRST FLOOR SUSPENDED CEILING
2	04/17/23	ADDED DIMENSIONS