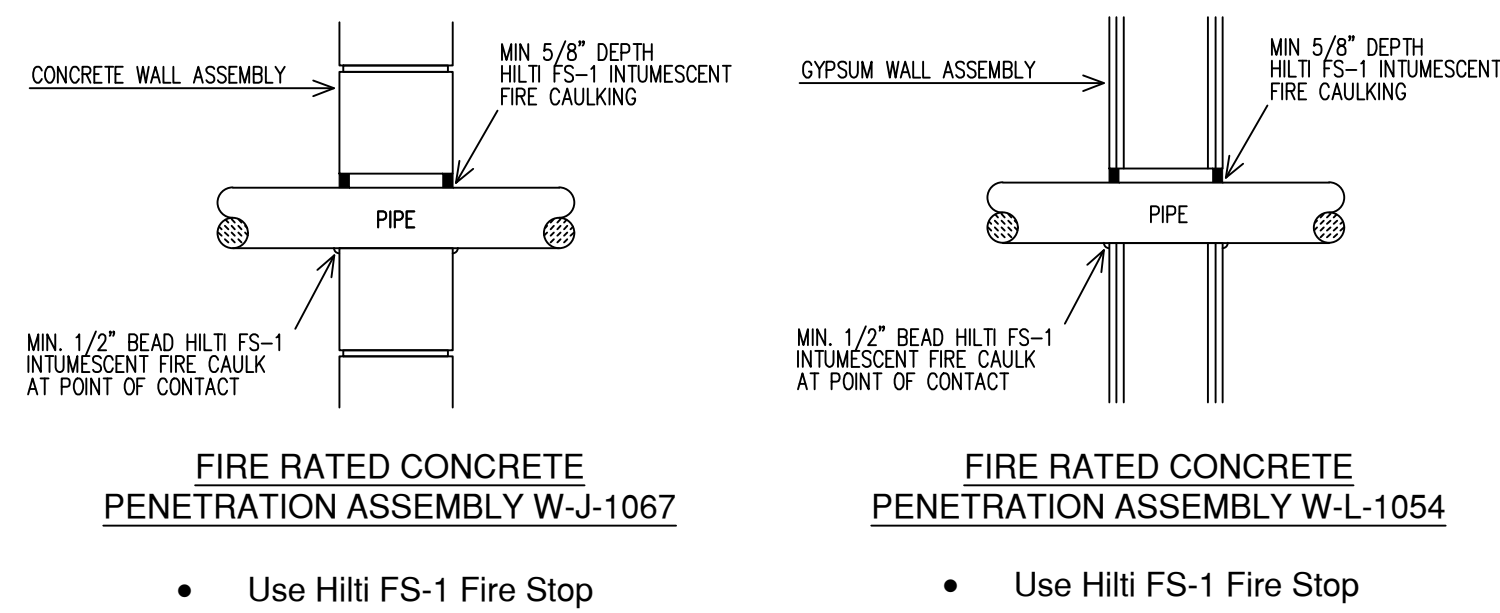


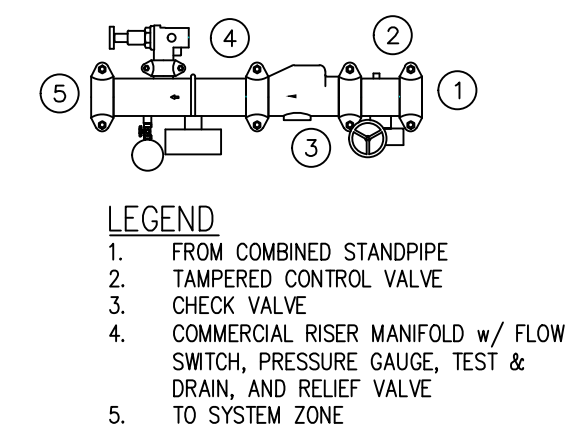
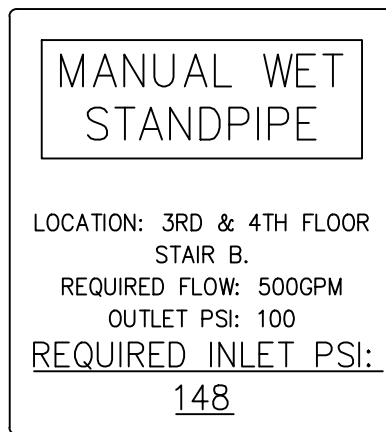
SECTION - A-
SCALE = 1/8" = 1'-0"



FIRESTOPPING DETAILS

STEEL PIPE EXCEPT THREADED LIGHTWALL BLAZEMASTER CPVC	MAXIMUM DISTANCE BETWEEN HANGERS (FT.-IN.)									
	3/4"	1"	1 1/2"	2"	2 1/2"	3"	4"	6"	8"	15-0"
NA	12-0	12-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0	15-0
BLAZEMASTER CPVC	5-6	6-0	6-6	7-0	8-0	9-0	10-0	NA	NA	NA

NFPA 13 HANGER SPACING

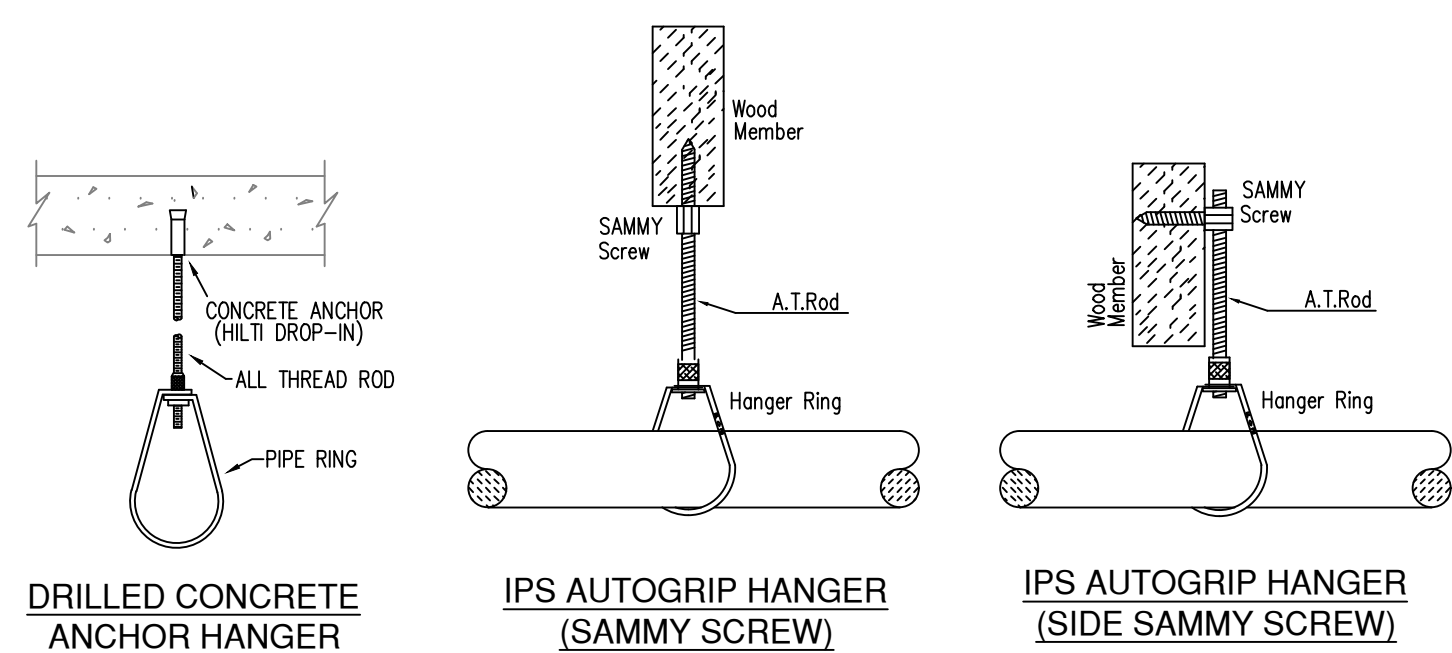


ZONE CONTROL DETAIL

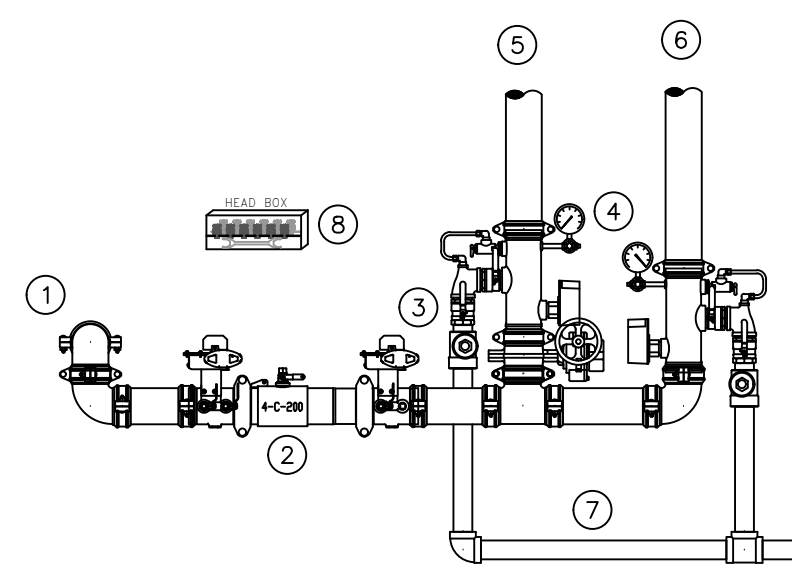


SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MPG.	MODEL#	ESCUTCHEON	HEAD BOX (2 min)
73		PENDENT	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
980		PENDENT	WHITE	155	4.90	1/2"	TY2324	TYCO	LFII	SEMI RECESS	2
185		PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
64		PENDENT	WHITE	155	5.60	1/2"	RA5814	RELIABLE	LT56	SEMI RECESS	2
10		SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI RECESS	2
11		SIDEWALL	WHITE	155	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2
350		SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFII	SEMI RECESS	2
63		SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2
4		SIDEWALL	WHITE	155	11.20	3/4"	TY5332	TYCO	ELOS20	SEMI RECESS	2
269		UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2
23		PENDENT	WHITE	155	11.20	3/4"	TY5237	TYCO	EC-11	SEMI RECESS	2
31		SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2
20		UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2
11		SIDEWALL	WHITE	155	5.80	1/2"	VK460	VKING	FREEDOM	SEMI RECESS	2
2		PENDENT	WHITE	286	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
21		SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI RECESS	2
2117 TOTAL SPRINKLERS											

SPRINKLER HEAD LEGEND



HANGER DETAILS

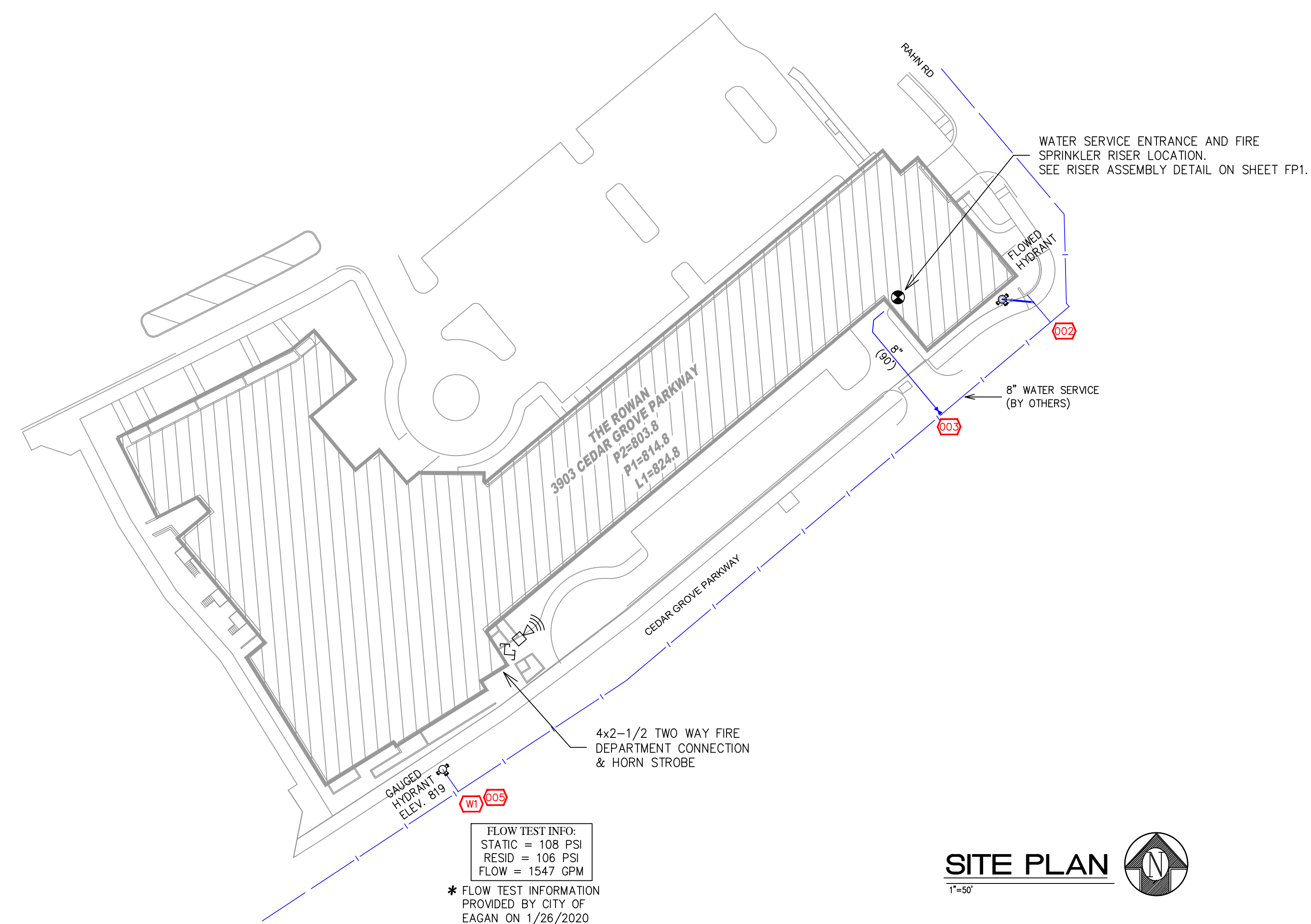


RISER ASSEMBLY DETAIL

SCALE: 1/2" = 1'-0"

GENERAL NOTES

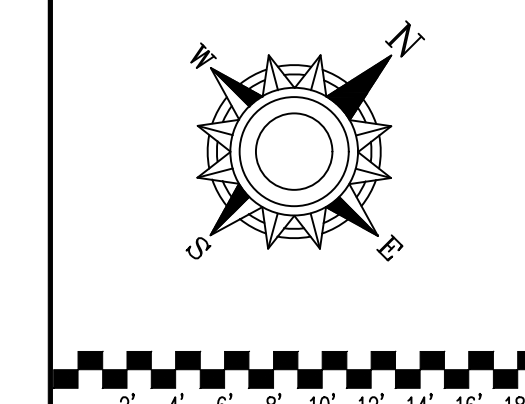
- INTERNATIONAL BUILDING CODE (2012)
 - OCCUPANCY: PARKING GARAGE: S-2, UNITS: R-2, COMMUNITY ROOMS: A-3
 - TYPE OF CONSTRUCTION: LEVELS P1-P2: TYPE 1-A, LEVELS 1-4: TYPE V-A
 - SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
 - ZONE 1 (P2)=40,426 S.F.
 - ZONE 2 (P2)=6,135 S.F.
 - ZONE 3 (P1)=40,426 S.F.
 - ZONE 4 (LEVEL 1)=42,760 S.F.
 - ZONE 5 (LEVEL 2)=40,317 S.F.
 - ZONE 6 (LEVEL 3)=40,317 S.F.
 - ZONE 6 (LEVEL 4)=40,317 S.F.
 - TOTAL = 256,833 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2016), NFPA-14 (2016)
 - SPRINKLER PIPE TYPES:
 - 1" BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1 1/2" THROUGH 2-1/2" MAIN & BRANCH LINES TO BE BLAZEMASTER CPVC PIPING WITH CEMENTED FITTINGS
 - 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
 - 1 1/2" THROUGH 6" MAIN & BRANCH LINES TO BE BLK SCHEDULE 10 PIPING WITH SHORT RADIUS GROOVED FITTINGS
- DESIGN CRITERIA
 - UNITS, CORRIDORS, COMMUNITY ROOMS AND SIMILAR AREAS DESIGNED TO LIGHT HAZARD.
 - PARKING GARAGE, ELECTRICAL ROOMS, STORAGE ROOMS AND SIMILAR AREAS DESIGNED TO ORDINARY HAZARD GROUP 1.
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016) - SEE PLAN FOR HANGING REQUIREMENTS
- SYMBOLS USED ON DRAWINGS:
 - 6x20: PIPE ELEVATION A.F.F
 - 4x22: PIPE ELEVATION BELOW B.O.D
 - GH: ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HC: HYDRAULIC CALCULATION JUNCTION POINT
 - 9'-0": CEILING HEIGHT
- SCOPE OF WORK:
 - TO INSTALL NEW SPRINKLER SYSTEM ZONED PER FLOOR WITH 2 STANDPIPES IN NEW BUILDING AS SHOWN ON THESE DRAWINGS.
 - ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)



SITE PLAN

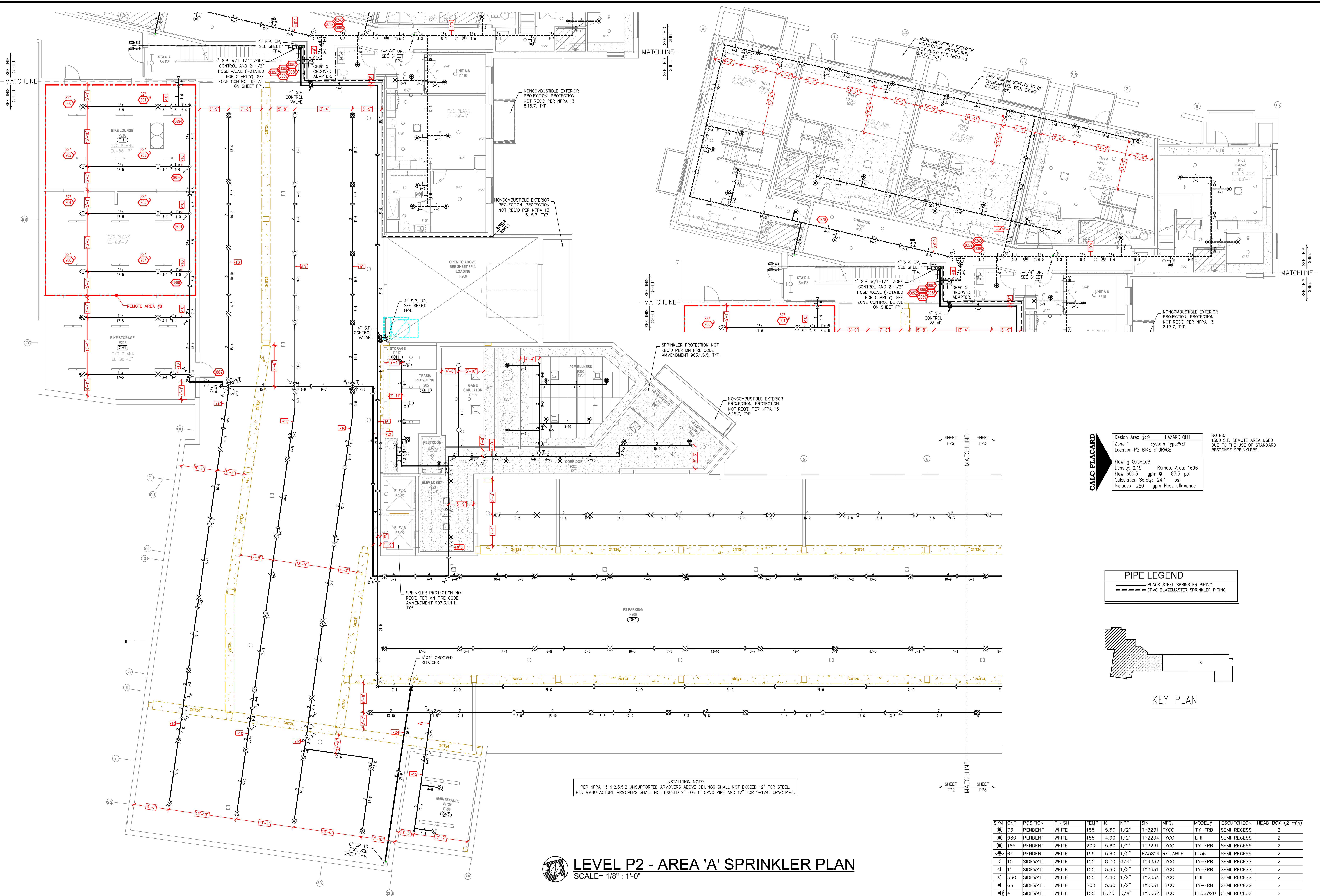
APPROVAL STAMPS

General Notes
 1. System installed per NFPA-13 (2016 Edition) and State Fire Marshal
 2. All equipment for this system shall be U.L. listed
 3. All piping shall be galvanized steel
 4. All 1/2" and 3/4" CPVC piping has welded outlets & grooved fittings
 5. All 1/2" and 3/4" CPVC piping has welded outlets & grooved fittings
 6. All Pipe Locations are to be Field Measured Prior to Fabrication
 7. All Pipe Locations are to be Field Measured Prior to Fabrication
 8. High Temperature Heads are to be Field Located Where Required.
 9. Provide one spare head cabinet w/ 6 hrs. & one hd wrench.
 10. Provide one spare head cabinet w/ 6 hrs. & one hd wrench.
 11. Electrical wiring, alarm, detection and supervisory by owner.
 12. Owner's responsibility to provide adequate heating to prevent wet system piping from freezing.



THE ROWAN
 3903 CEDAR GROVE PARKWAY
 EAGAN, MN 55121

FIRE PROTECTION PLAN
 Drawing Title:
 Contract No. **C20-93**
 Drawing Date: 03/23/2021
 Scale: 1/8" = 1'-0"
 Drawn By:
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP1 OF FP9**

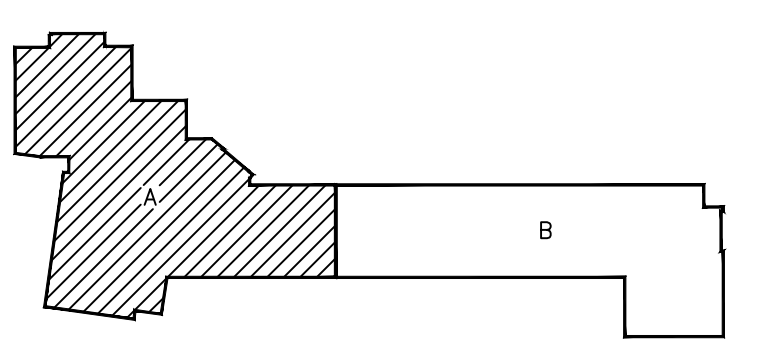


INSTALLATION NOTE:
 PER NFPA 13 9.2.3.5.2 UNSUPPORTED ARMORERS ABOVE CEILINGS SHALL NOT EXCEED 12" FOR STEEL.
 PER MANUFACTURE ARMORERS SHALL NOT EXCEED 9" FOR 1" CPVC PIPE AND 12" FOR 1-1/4" CPVC PIPE.

LEVEL P2 - AREA 'A' SPRINKLER PLAN
 SCALE = 1/8" = 1'-0"

HAZARD: OH1
 Zone: 1 System Type: WET
 Location: P2 BIKE STORAGE
 Flowing Outlets: 8
 Density: 0.15 Remote Area: 1696
 Flow 660.5 gpm @ 83.5 psi
 Calculation Safety: 24.1 psi
 Includes 250 gpm Hose allowance

PIPE LEGEND
 — BLACK STEEL SPRINKLER PIPING
 - - - CPVC BLAZEMASTER SPRINKLER PIPING



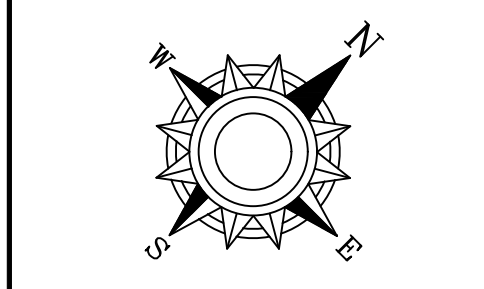
SYM	CN	POSITION	FINISH	TEMP	K	NPY	SIN	MFG.	MODEL#	ESCUICHEON	HEAD BOX (2 min)
73	PENDENT	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS		2
980	PENDENT	WHITE	155	4.90	1/2"	TY2234	TYCO	LFIH	SEMI RECESS		2
185	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS		2
64	PENDENT	WHITE	155	5.60	1/2"	RA5814	RELIABLE	LTS6	SEMI RECESS		2
10	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI RECESS		2
11	SIDEWALL	WHITE	155	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS		2
350	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFIH	SEMI RECESS		2
63	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS		2
4	SIDEWALL	WHITE	155	11.20	3/4"	TY5332	TYCO	ELOS20	SEMI RECESS		2
269	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		2
23	PENDENT	WHITE	155	11.20	3/4"	TY5237	TYCO	EC-11	SEMI RECESS		2
31	SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A		2
20	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A		2
11	SIDEWALL	WHITE	155	5.80	1/2"	VK460	VIKING	FREEDOM	SEMI RECESS		2
2	PENDENT	WHITE	286	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS		2
21	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI RECESS		2

2117 TOTAL SPRINKLERS

SPRINKLER HEAD LEGEND

APPROVAL STAMPS

General Notes
 1. System installed per NFPA-13 (2010 Edition) and State Fire Marshal
 2. All equipment for this system shall be U.L. listed
 3. All piping shall be installed in accordance with NFPA-13
 4. All Schedule 40 & 80 Pipe Flow Piping has welded outlets & grooved fittings
 5. All welding per NFPA-13 (2010 Ed.) shall be performed by a qualified welder
 6. All Pipe Locations are to be Field Measured Prior to Fabrication
 7. All Pipe Locations are to be Field Measured Prior to Fabrication
 8. High Temperature Heads are to be Field Located Where Required.
 9. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 10. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 11. Electrical wiring, alarm, detection and supervisory by owner.
 12. Owner's responsibility to provide adequate heating to prevent wet system piping from freezing.



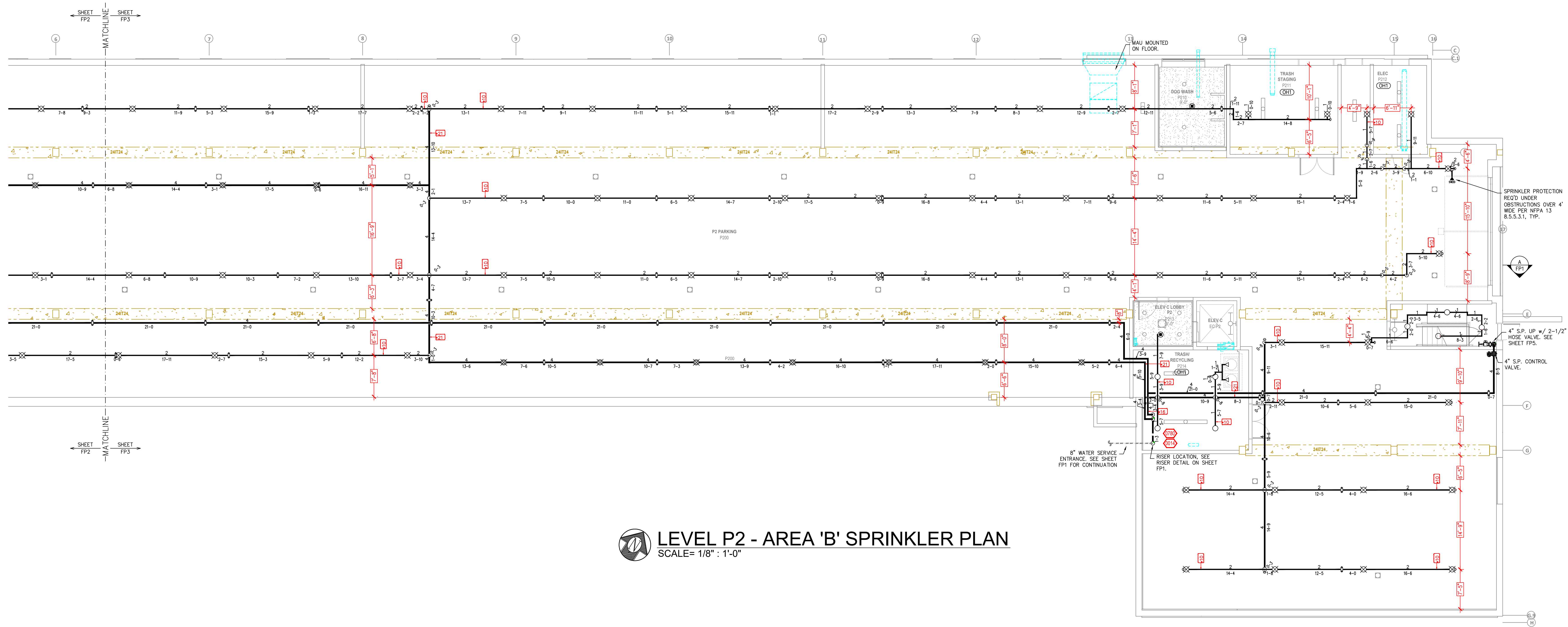
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Drawing Title: FIRE PROTECTION PLAN

THE ROWAN
 3903 CEDAR GROVE PARKWAY
 EAGAN, MN 55121

Contract No. **C20-93**
 Drawing Date: 03/23/2021
 Scale: 1/8" = 1'-0"
 Drawn By: [Signature]
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP2 OF FP9**

INSTALLATION NOTE:
 PER NFPA 13 9.2.3.5.2 UNSUPPORTED ARMOVERS ABOVE CEILINGS SHALL NOT EXCEED 12" FOR STEEL.
 PER MANUFACTURE ARMOVERS SHALL NOT EXCEED 9" FOR 1" CPVC PIPE AND 12" FOR 1-1/4" CPVC PIPE.



LEVEL P2 - AREA 'B' SPRINKLER PLAN
 SCALE= 1/8" = 1'-0"

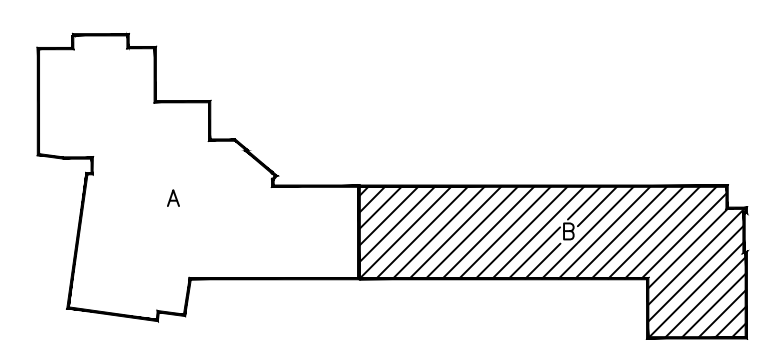
PIPE LEGEND

	BLACK STEEL SPRINKLER PIPING
	CPVC BLAZEMASTER SPRINKLER PIPING

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	HEAD BOX (2 min)
73	PENDENT	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2	
980	PENDENT	WHITE	155	4.90	1/2"	TY2234	TYCO	LFII	SEMI RECESS	2	
185	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2	
64	PENDENT	WHITE	155	5.60	1/2"	RA5814	RELIABLE	LTS6	SEMI RECESS	2	
10	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI RECESS	2	
11	SIDEWALL	WHITE	155	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2	
350	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFII	SEMI RECESS	2	
63	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2	
4	SIDEWALL	WHITE	155	11.20	3/4"	TY5332	TYCO	ELOS20	SEMI RECESS	2	
269	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2	
23	PENDENT	WHITE	155	11.20	3/4"	TY5237	TYCO	EC-11	SEMI RECESS	2	
31	SPRIG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2	
20	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2	
11	SIDEWALL	WHITE	155	5.80	1/2"	VK460	VIKING	FREEDOM	SEMI RECESS	2	
2	PENDENT	WHITE	286	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2	
21	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI RECESS	2	
2117 TOTAL SPRINKLERS											

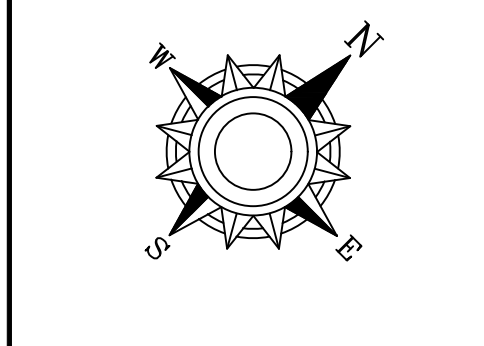
SPRINKLER HEAD LEGEND



KEY PLAN

APPROVAL STAMPS

General Notes
 1. System installed per NFPA-13 (2010 Edition) and State Fire Marshal.
 2. All equipment for this system shall be U.L. listed.
 3. All piping shall be installed in accordance with NFPA-13.
 4. All Schedule 40 & 80 Pipe Flow Piping has welded outlets & grooved fittings.
 5. All welding per NFPA-13 (2010 Edition) shall be performed by a qualified welder.
 6. All Pipe Locations are to be Field Measured Prior to Fabrication and Installation by Sprinkler Contractor.
 7. All High Temperature Heads are to be Field Located Where Required.
 8. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 9. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 10. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 11. Electrical wiring, alarm, detection and supervisory by owner.
 12. Owner's responsibility to provide adequate heating to prevent wet system piping from freezing.



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Drawing Title: **FIRE PROTECTION PLAN**

Contract No. **C20-93**

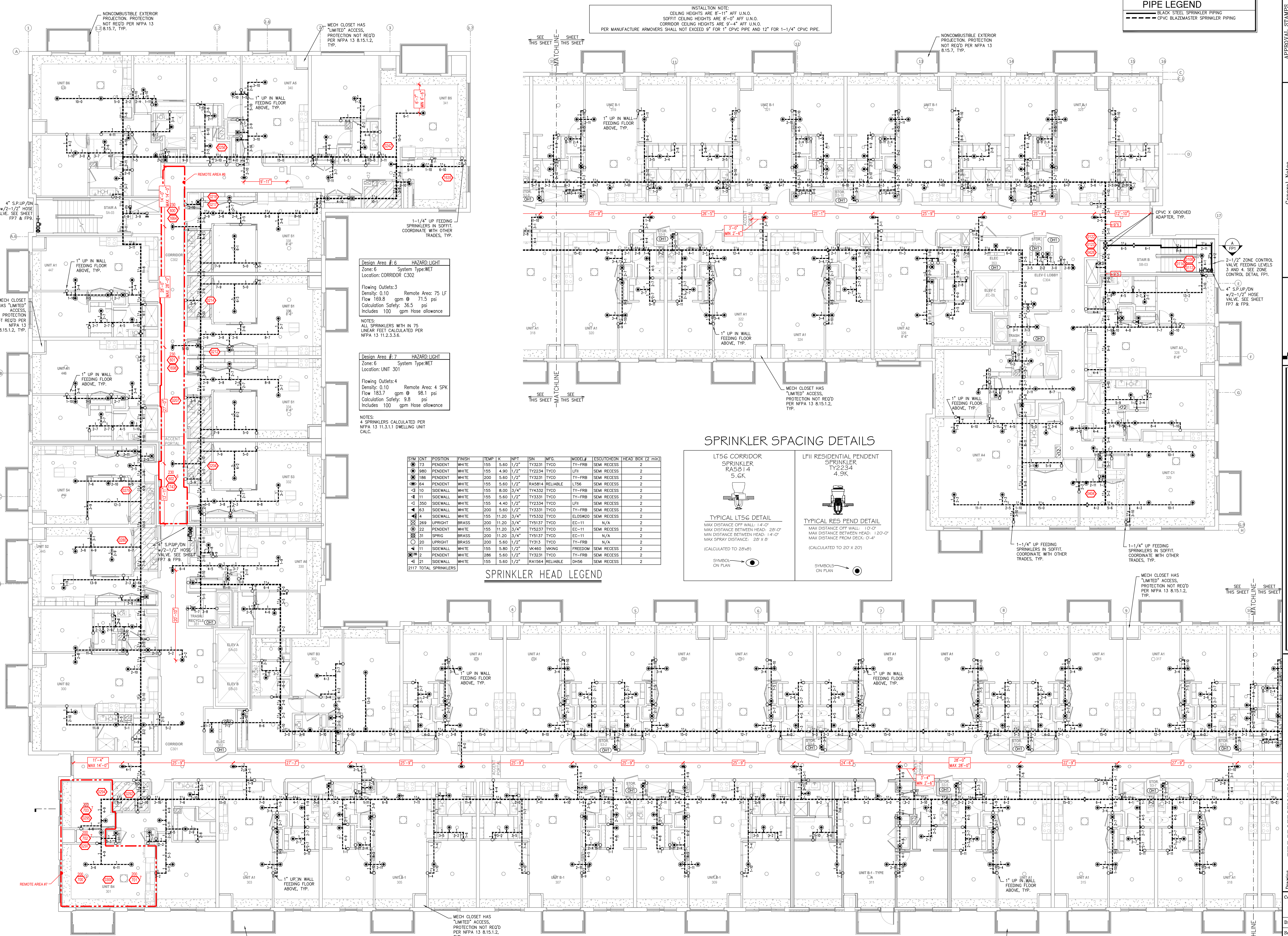
Drawing Date: **03/23/2021**

Scale: **1/8" = 1'-0"**

Approval By: **STATE FIRE MARSHAL DIV.**

SHEET NO. **FP3 OF FP9**

THE ROWAN
 3903 CEDAR GROVE PARKWAY
 EAGAN, MN 55121



INSTALLATION NOTE:
 CEILING HEIGHTS ARE 8'-11" AFF U.N.O.
 SOFFIT CEILING HEIGHTS ARE 8'-0" AFF U.N.O.
 CORRIDOR CEILING HEIGHTS ARE 9'-4" AFF U.N.O.
 PER MANUFACTURE ARMOVERS SHALL NOT EXCEED 9" FOR 1-1/4" CPVC PIPE AND 12" FOR 1-1/4" CPVC PIPE.

PIPE LEGEND	
	BLACK STEEL SPRINKLER PIPING
	CPVC BLAZEMASTER SPRINKLER PIPING

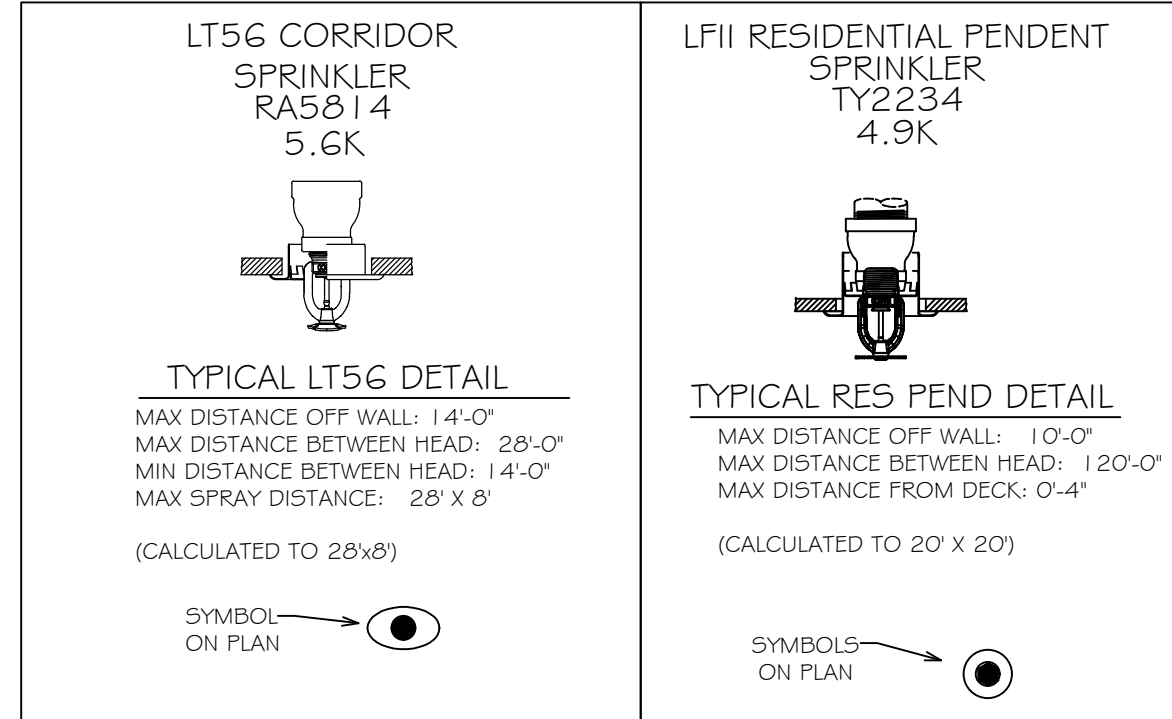
Design Area # 6 HAZARD LIGHT
 Zone: 6 System Type: WET
 Location: CORRIDOR C302
 Flowing Outlets: 3
 Density: 0.10 Remote Area: 75 LF
 Flow 189.8 gpm @ 71.5 psi
 Calculation Safety: 36.5 psi
 Includes 100 gpm Hose allowance

Design Area # 7 HAZARD LIGHT
 Zone: 6 System Type: WET
 Location: UNIT 301
 Flowing Outlets: 4
 Remote Area: 4 SPK
 Flow 183.7 gpm @ 98.1 psi
 Calculation Safety: 9.8 psi
 Includes 100 gpm Hose allowance

SYMBOL	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MFG.	MODEL#	ES/CS/CHRON	HEAD BOX (2 min)
○	73	PENDENT	WHITE	155	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
○	880	PENDENT	WHITE	155	4.90	1/2"	TY2234	TYCO	LFI	SEMI RECESS	2
○	186	PENDENT	WHITE	200	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
○	84	PENDENT	WHITE	155	5.60	1/2"	RA5814	RELIABLE	LT56	SEMI RECESS	2
○	10	SIDEWALL	WHITE	155	8.00	3/4"	TY4332	TYCO	TY-FRB	SEMI RECESS	2
○	11	SIDEWALL	WHITE	155	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2
○	1	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFI	SEMI RECESS	2
○	63	SIDEWALL	WHITE	200	5.60	1/2"	TY3331	TYCO	TY-FRB	SEMI RECESS	2
○	4	SIDEWALL	WHITE	155	11.20	3/4"	TY5332	TYCO	ELOS20	SEMI RECESS	2
○	269	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2
○	22	PENDENT	WHITE	155	11.20	3/4"	TY5237	TYCO	EC-11	SEMI RECESS	2
○	31	SPRG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2
○	20	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2
○	11	SIDEWALL	WHITE	155	5.80	1/2"	VK460	WIKING	FREEDOM	SEMI RECESS	2
○	2	PENDENT	WHITE	286	5.60	1/2"	TY3231	TYCO	TY-FRB	SEMI RECESS	2
○	21	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI RECESS	2

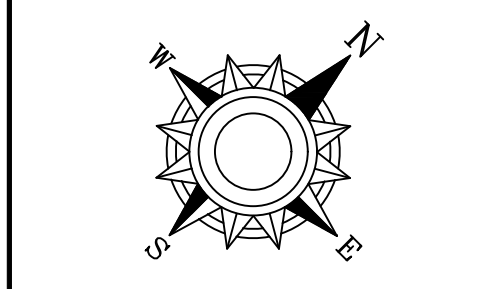
SPRINKLER HEAD LEGEND

SPRINKLER SPACING DETAILS



APPROVAL STAMPS

General Notes
 1. System installed per NFPA-13 (2010 Edition) and State Fire Marshal
 2. All equipment for this system shall be U.L. listed
 3. All piping shall be installed in accordance with NFPA-13 (2010 Edition)
 4. All Schedule 40 & 80 Pipe Flow piping has welded outlets & grooved fittings
 5. All welding per NFPA-13 (2010 Edition) shall be performed by a qualified welder
 6. All Pipe Locations are to be Field Measured Prior to Fabrication
 7. All Installations by Sprinkler Contractor
 8. High Temperature Heads are to be Field Located Where Required
 9. Provide one spare hand cabinet w/ 6 lbs. & one hd wrench.
 10. Electrical wiring, alarm, detection and supervisory by owner.
 11. Electrical wiring, alarm, detection and supervisory by owner.
 12. Owner's responsibility to provide adequate heating to prevent wet system piping from freezing.



THE ROWAN
 3903 CEDAR GROVE PARKWAY
 EAGAN, MN 55121

Contract No. **C20-93**
 Drawing Date: 03/23/2021
 Scale: 1/8" = 1'-0"
 Drawn By: [Signature]
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP8 of FP9**

LEVEL 3 SPRINKLER PLAN
 SCALE= 1/8" = 1'-0"

INSTALLATION NOTE:
 CEILING HEIGHTS ARE 8'-11" AFF U.L.O.
 SOFFIT CEILING HEIGHTS ARE 8'-0" AFF U.L.O.
 CORRIDOR CEILING HEIGHTS ARE 9'-4" AFF U.L.O.
 PER MANUFACTURE ARMOVERS SHALL NOT EXCEED 9" FOR 1" CPVC PIPE AND 12" FOR 1-1/4" CPVC PIPE.

PIPE LEGEND

---	BLACK STEEL SPRINKLER PIPING
---	CPVC BLAZEMASTER SPRINKLER PIPING

Design Area #2 HAZARD-LIGHT
 Zone: 6 System Type:WET
 Location: UNIT 441
 Flowing Outlets: 4
 Density: 0.01 Remote Area: 4 SPK
 Flow 182.7 gpm @ 99.8 psi
 Calculation Safety: 8.2 psi
 Includes 100 gpm Hose allowance

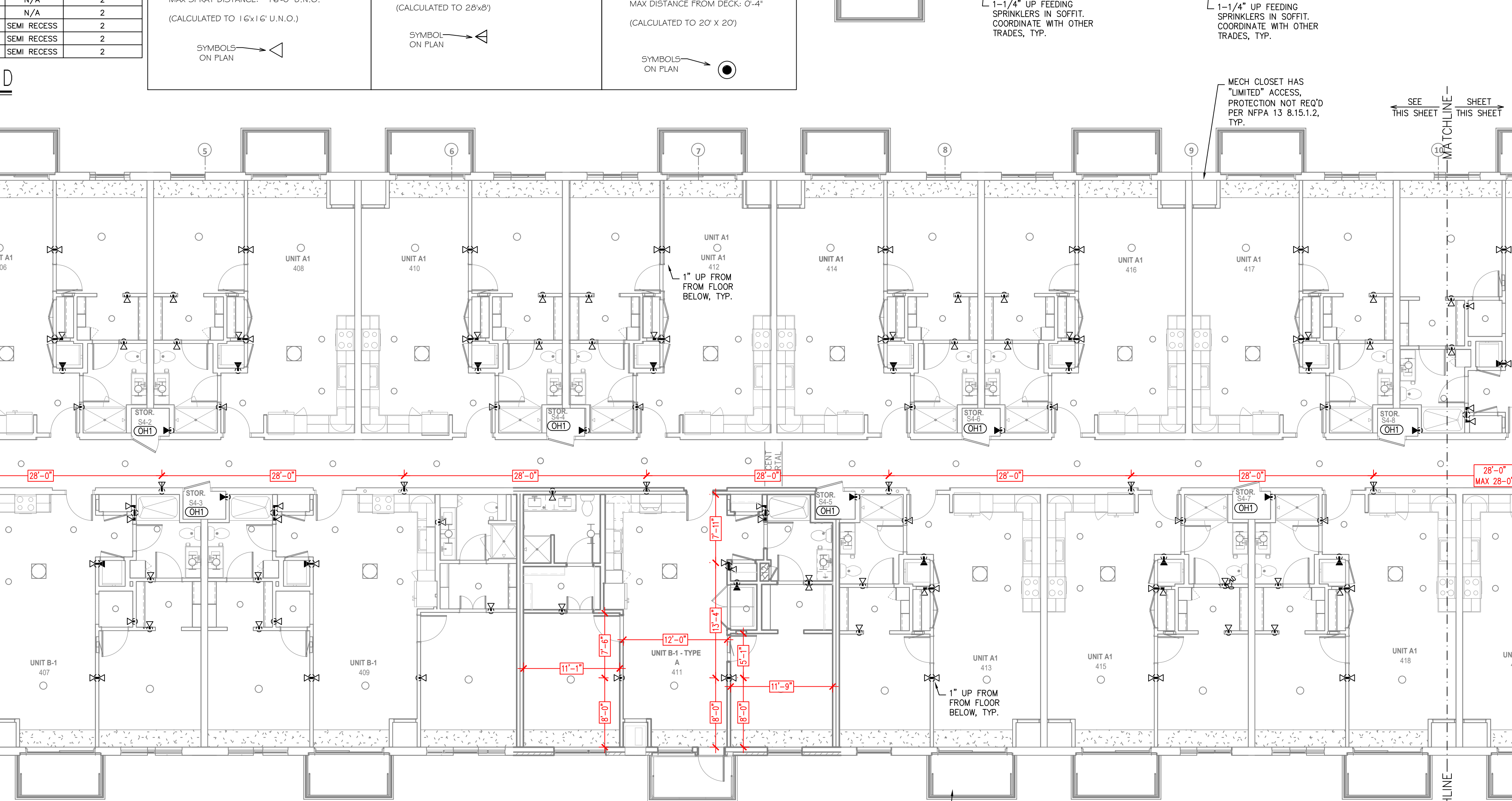
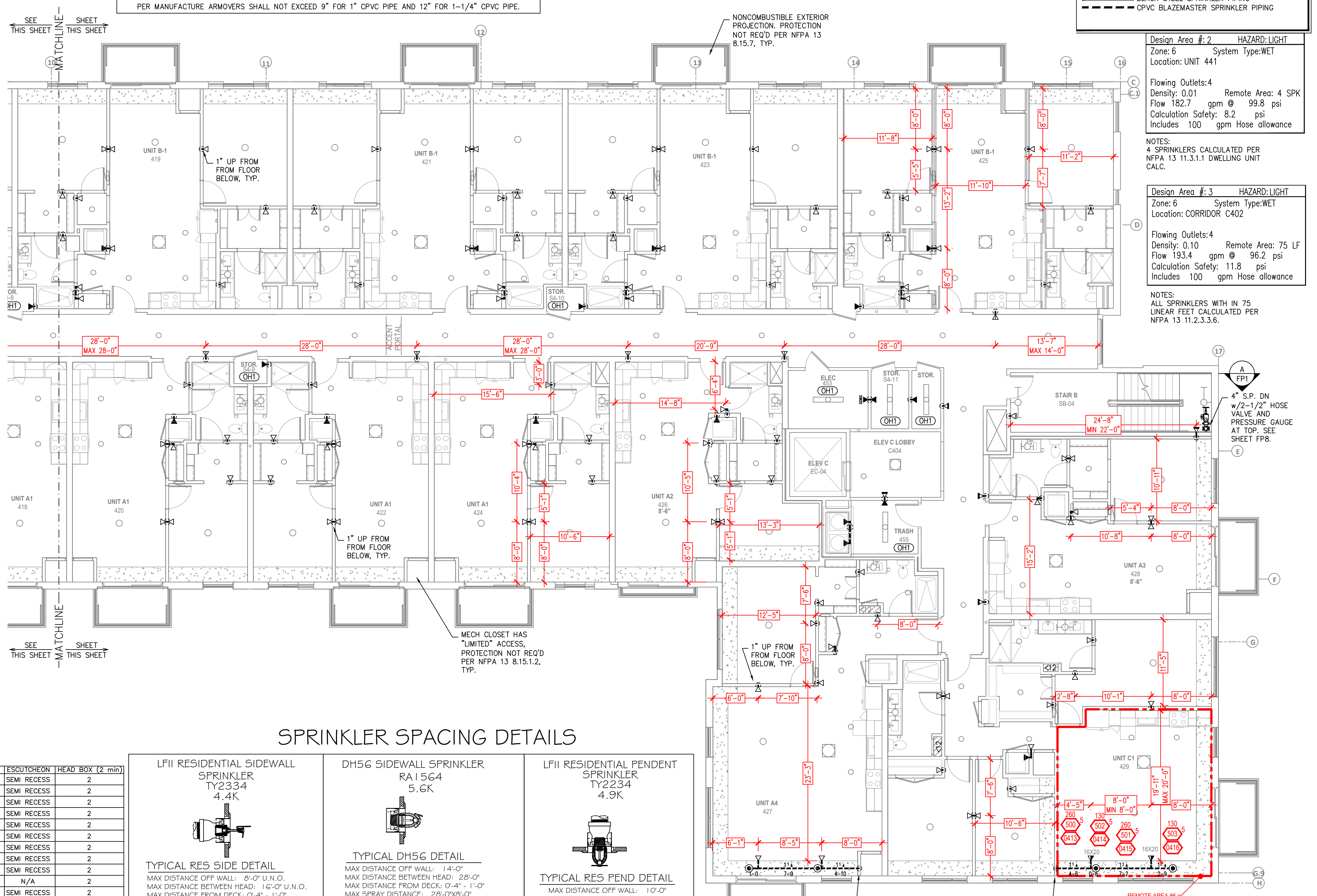
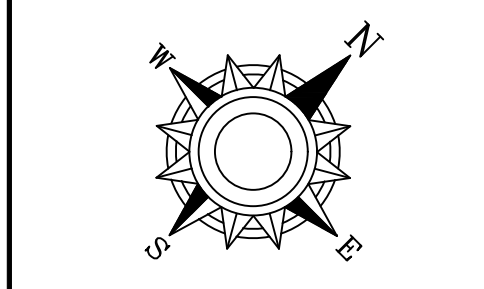
Design Area #3 HAZARD-LIGHT
 Zone: 6 System Type:WET
 Location: CORRIDOR C402
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 75 LF
 Flow 193.4 gpm @ 96.2 psi
 Calculation Safety: 11.8 psi
 Includes 100 gpm Hose allowance

Design Area #4 HAZARD-LIGHT
 Zone: 6 System Type:WET
 Location: UNIT 445
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 4 SPK
 Flow 181.9 gpm @ 96.8 psi
 Calculation Safety: 11.2 psi
 Includes 100 gpm Hose allowance

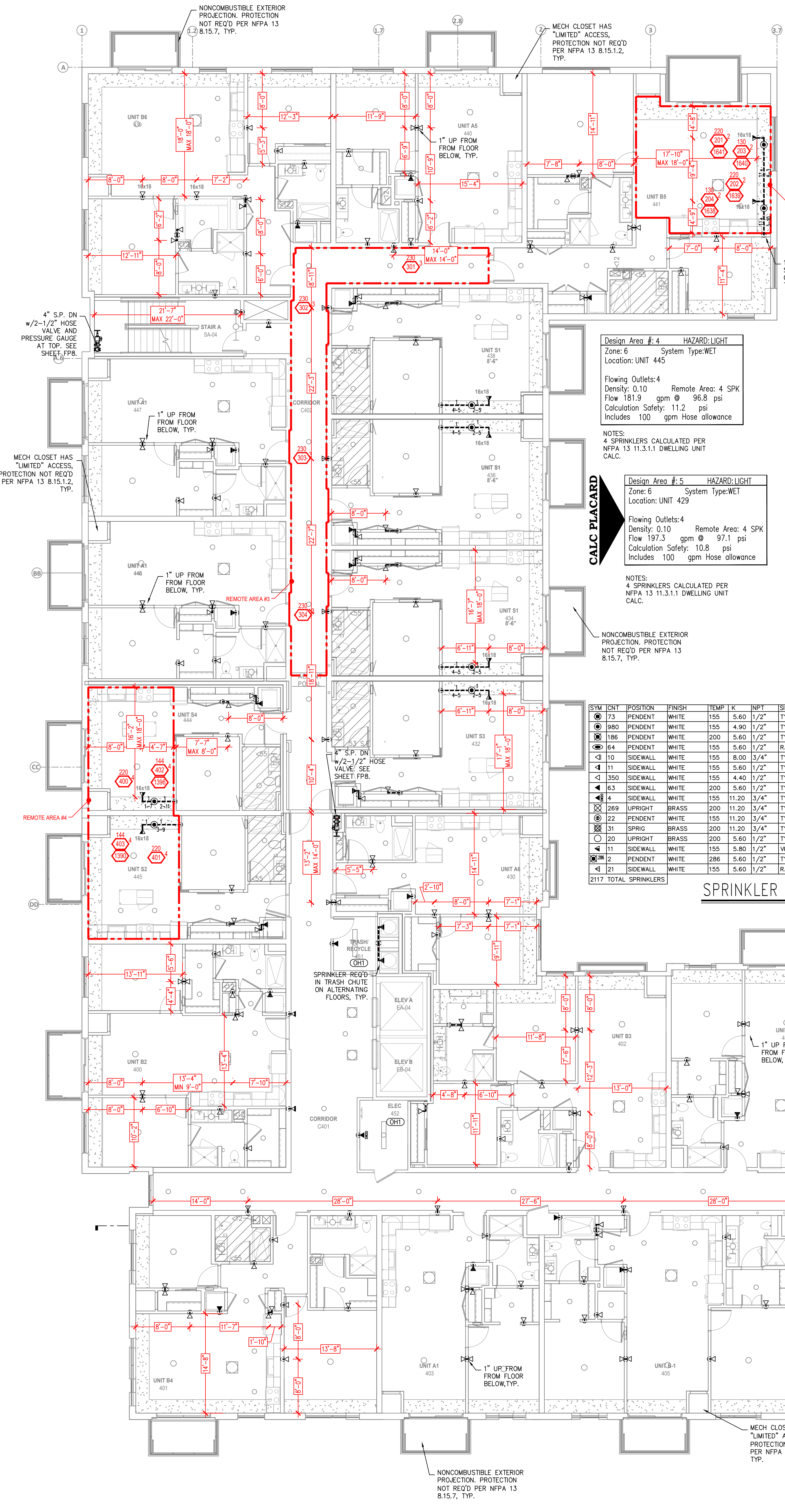
Design Area #5 HAZARD-LIGHT
 Zone: 6 System Type:WET
 Location: UNIT 429
 Flowing Outlets: 4
 Density: 0.10 Remote Area: 4 SPK
 Flow 197.3 gpm @ 97.1 psi
 Calculation Safety: 10.8 psi
 Includes 100 gpm Hose allowance

NOTES:
 1. ALL SPRINKLERS WITH IN 75 LINEAR FEET CALCULATED PER NFPA 13 11.3.1.1 DWELLING UNIT CALC.
 2. SYSTEM TYPE: WET
 3. REMOTE AREA: 4 SPK
 4. SPRINKLERS CALCULATED PER NFPA 13 11.3.1.1 DWELLING UNIT CALC.
 5. ALL SPRINKLERS WITH IN 75 LINEAR FEET CALCULATED PER NFPA 13 11.3.3.3.6.

General Notes
 1. System installed per NFPA-13 (2010 Edition) and State Fire Marshal
 2. All equipment for this system shall be U.L. listed
 3. All piping shall be U.L. listed
 4. All 1/2" and 3/4" B&B Flow piping has welded outlets & grooved fittings
 5. All welding per NFPA-13 (2010 Edition) shall be performed by a qualified welder
 6. All Pipe Locations are to be Field Measured Prior to Fabrication
 7. All Pipe Locations are to be Field Measured Prior to Fabrication
 8. High Temperature Heads are to be Field Located Where Required
 9. Provide one space head cabinet w/ 6 hrs. & one hd wrench.
 10. Provide one space head cabinet w/ 6 hrs. & one hd wrench.
 11. Electrical wiring, alarm, detection and supervisory by owner.
 12. Owner's responsibility to provide adequate heating to prevent wet system piping from freezing.



LEVEL 4 SPRINKLER PLAN
 SCALE= 1/8" = 1'-0"



LEVEL 4 SPRINKLER PLAN
 SCALE= 1/8" = 1'-0"

SPRINKLER SPACING DETAILS

SYM	QTY	POSITION	FINISH	TEMP	K	NPT	SN	MPG	MODEL#	ESSENTIAL	HEAD	BOX (2 min)
73	PENDENT	WHITE	155	5.60	1/2"	TY2321	TYCO	TY-FRB	SEMI RECESS	2		
980	PENDENT	WHITE	155	4.90	1/2"	TY2334	TYCO	LFI	SEMI RECESS	2		
186	PENDENT	WHITE	200	5.60	1/2"	TY2331	TYCO	TY-FRB	SEMI RECESS	2		
64	PENDENT	WHITE	155	5.60	1/2"	RA8614	RELIABLE	LT56	SEMI RECESS	2		
10	SIDEWALL	WHITE	155	8.00	3/4"	TY2332	TYCO	TY-FRB	SEMI RECESS	2		
11	SIDEWALL	WHITE	155	5.60	1/2"	TY2331	TYCO	TY-FRB	SEMI RECESS	2		
350	SIDEWALL	WHITE	155	4.40	1/2"	TY2334	TYCO	LFI	SEMI RECESS	2		
63	SIDEWALL	WHITE	200	5.60	1/2"	TY2331	TYCO	TY-FRB	SEMI RECESS	2		
4	SIDEWALL	WHITE	155	11.20	3/4"	TY5332	TYCO	ELOS20	SEMI RECESS	2		
269	UPRIGHT	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2		
22	PENDENT	WHITE	155	11.20	3/4"	TY5237	TYCO	EC-11	SEMI RECESS	2		
31	SPRNG	BRASS	200	11.20	3/4"	TY5137	TYCO	EC-11	N/A	2		
20	UPRIGHT	BRASS	200	5.60	1/2"	TY313	TYCO	TY-FRB	N/A	2		
11	SIDEWALL	WHITE	155	5.80	1/2"	WK460	WIKING	FREEDOM	SEMI RECESS	2		
2	PENDENT	WHITE	286	5.60	1/2"	TY2321	TYCO	TY-FRB	SEMI RECESS	2		
21	SIDEWALL	WHITE	155	5.60	1/2"	RA1564	RELIABLE	DH56	SEMI RECESS	2		
2117 TOTAL SPRINKLERS												

SPRINKLER HEAD LEGEND

	LFI RESIDENTIAL SIDEWALL SPRINKLER TY2334 4.4K
	DHS6 SIDEWALL SPRINKLER RA1564 5.6K
	LFI RESIDENTIAL PENDENT SPRINKLER TY2334 4.9K

TYPICAL RES SIDE DETAIL
 MAX DISTANCE OFF WALL: 8'-0" U.L.O.
 MAX DISTANCE BETWEEN HEAD: 16'-0" U.L.O.
 MAX DISTANCE FROM DECK: 0'-4" - 1'-0"
 MAX SPRAY DISTANCE: 16'-0" U.L.O.
 (CALCULATED TO 16'x16' U.L.O.)

TYPICAL DHS6 DETAIL
 MAX DISTANCE OFF WALL: 14'-0"
 MAX DISTANCE BETWEEN HEAD: 28'-0"
 MAX DISTANCE FROM DECK: 0'-4" - 1'-0"
 MAX SPRAY DISTANCE: 28'-0" U.L.O.
 (CALCULATED TO 28'x28')

TYPICAL RES PEND DETAIL
 MAX DISTANCE OFF WALL: 10'-0"
 MAX DISTANCE BETWEEN HEAD: 120'-0"
 MAX DISTANCE FROM DECK: 0'-4"
 (CALCULATED TO 20'x20')

THE ROWAN
 3903 CEDAR GROVE PARKWAY
 EAGAN, MN 55121

FIRE PROTECTION PLAN

Contract No. **C20-93**
 Drawing Date: 03/23/2021
 Scale: 1/8" = 1'-0"
 Drawn By: STATE FIRE MARSHAL DIV.
 Approval By: STATE FIRE MARSHAL DIV.
 SHEET NO. **FP9 of FP9**