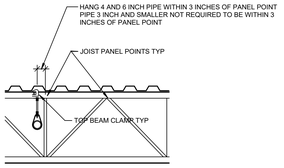
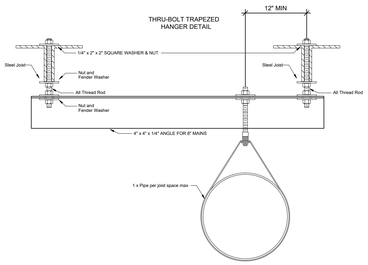


MAXIMUM HANGER SPACING FOR PIPING PERPENDICULAR TO JOISTS		
BEAM CLAMP NOT TRAPEZED	BEAM CLAMP NOT TRAPEZED (ROOF FRAMING PLAN SHADED AREA)	THRU-BOLT NOT TRAPEZED
2" & 2-1/2" PIPE EVERY 10'-0" EVERY OTHER JOIST	2" & 2-1/2" PIPE EVERY 10'-0" EVERY OTHER JOIST	2" & 2-1/2" PIPE EVERY 10'-0" EVERY OTHER JOIST
3" & 4" PIPE EVERY 6'-0" EVERY JOIST	3" & 4" PIPE EVERY 12'-0" EVERY OTHER JOIST	3" & 4" PIPE EVERY 12'-0" EVERY OTHER JOIST
6" PIPE EVERY 6'-0" EVERY JOIST	6" PIPE EVERY 6'-0" EVERY JOIST	6" PIPE EVERY 12'-0" EVERY OTHER JOIST
8" PIPE NOT ALLOWED	8" PIPE NOT ALLOWED	8" PIPE EVERY 6'-0" EVERY JOIST

TRAPEZE HANGERS ARE ANTICIPATED TO BE INSTALLED ON 8" PIPING RUNNING PARALELL TO JOISTS ON THIS PROJECT ONLY. ALL OTHER PIPE SIZES SHOWN IN THIS SUBMITTAL DO NOT REQUIRE TRAPEZE MEMBERS PER HANGER SCHEDULE PROVIDED BY THE DESIGN TEAM

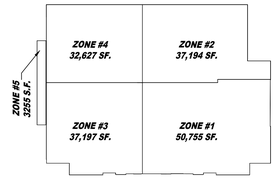
MAXIMUM HANGER SPACING FOR PIPES PARALLEL TO JOISTS			
2" & 2-1/2" PIPE EVERY 10'-0" NOT TRAPEZED BEAM CLAMP	3" & 4" PIPE EVERY 12'-0" NOT TRAPEZED BEAM CLAMP	6" PIPE EVERY 6'-0" NOT TRAPEZED BEAM CLAMP	8" PIPE EVERY 12'-0" TRAPEZED THRU-BOLT

HANGER DETAILS

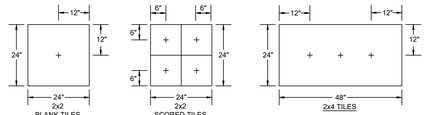


8" HANGER DETAILS

SHEET MAP



ZONE MAP



LOCATE SPRINKLER AT CENTER OF TILE

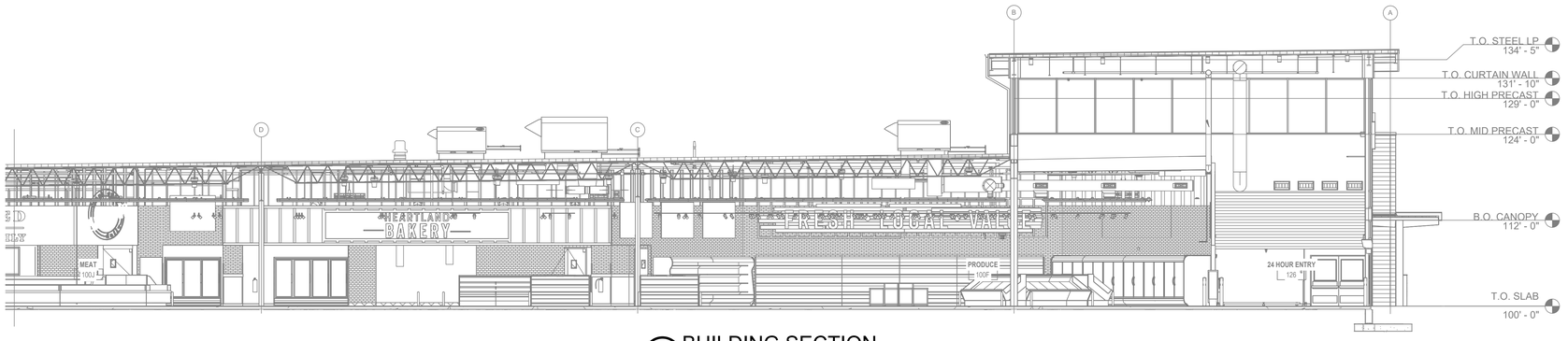
LOCATE SPRINKLER 6 INCHES FROM TWO GRID LINES

LOCATE SPRINKLER AT CENTER OR 12 INCHES FROM THE TWO ADJACENT GRID LINES

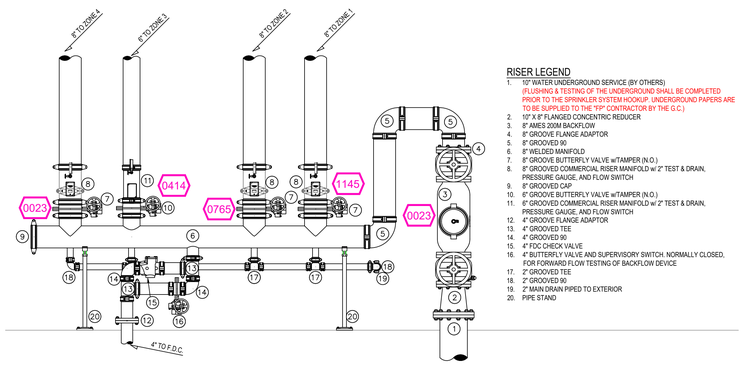
SPRINKLER PLACEMENT DETAIL

GENERAL NOTES

1. INDIANA BUILDING CODE (2014)
   - 1.1. OCCUPANCY:BUSINESS (B); ASSEMBLY (A2&A3)
   - 1.2. TYPE OF CONSTRUCTION:IIB
   - 1.3. SPRINKLERED AREAS (APPROXIMATE – SEE ARCHITECTURAL PLANS FOR ACTUAL)
     - TOTAL = 161,028 S.F.
     - ZONE #1 WET = 50,755 S.F.
     - ZONE #2 WET = 37,194 S.F.
     - ZONE #3 WET = 37,197 S.F.
     - ZONE #4 WET = 32,627 S.F.
     - ZONE #5 DRY = 3,255 S.F.
   - 1.4. INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2010)
2. SPRINKLER PIPE TYPES:
   - —WET—
   - 2.1. 1" BRANCH LINES TO BE BLK MEGA THREAD PIPING WITH THREADED FITTINGS
   - 2.2. 1¼" THROUGH 4" MAIN & BRANCH LINES TO BE BLK MEGA FLOW PIPING WITH GROVED FITTINGS
   - 2.3. 6" THROUGH 8" MAINS TO BE BLK SCH 10 PIPING WITH GROOVED FITTINGS
   - —DRY—
   - 2.4. 1" BRANCH LINES TO BE THREADED GALV SCHEDULE 40 WITH GALV THREADED FITTINGS
   - 2.5. 1¼" THROUGH 4" MAIN & BRANCH LINES TO BE GROOVED GALV SCHEDULE 10 WITH GALV GROOVED FITTINGS
3. DESIGN CRITERIA
   - 3.1. AREAS NOT MARKS BY A HAZARD TAG WILL BE DESIGNED AS A LIGHT HAZARD, AREAS WILL BE DESIGNED TO DELIVER 0.10 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
   - (OH1) 3.2. ORDINARY HAZARD GROUP 1 AREAS DESIGNED TO DELIVER 0.15 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F
   - (OH2) 3.3. SALES FLOOR AREAS WILL BE DESIGNED AS AN ORDINARY HAZARD GROUP 2, AREAS WILL BE DESIGNED TO DELIVER 0.20 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
   - (SPC) 3.4. STOCK ROOM AND STORAGE AREAS DESIGNED WITH EC–25 UPRIGHT SPRINKLERS TO AN OWNER PROVIDED DESIGN DENSITY OF 0.60 GPM/S.F. OVER THE MOST DEMANDING 2000 S.F.
   - (GAR) 3.5. THE GARDEN CENTER DRY SYSTEM WILL BE DESIGNED TO AN OWNER PROVIDED DESIGN DENSITY OF 0.20 GPM/S.F. OVER THE MOST REMOTE 3250 S.F. OR THE ENTIRE DRY SYSTEM
   - 3.6. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 11.2.3.2.3
4. NOTES:
   - 4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
   - 4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2010) – SEE PLAN FOR HANGING REQUIREMENTS
   - 4.3. DRY SYSTEM PIPE SLOPE INSTALLATION: SPRINKLER MAINS TO BE ¼" PER 10 FEET; SPRINKLER BRANCH LINES TO BE ½" PER 10 FEET
   - 4.4. DRY SYSTEM CAPACITY
     - 4.4.1. 187 GAL.
5. SYMBOLS USED ON DRAWINGS:
   - +9'5" PIPE ELEVATION A.F.F
   - -12" PIPE ELEVATION BELOW B.O.D
   - (OH1) ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
   - (J1) HYDRAULIC CALCULATION JUNCTION POINT
   - 9'-0" CEILING HEIGHT
6. SCOPE OF WORK:
   - 6.1. INSTALL WATER BASED PROTECTION THROUGHOUT THE FACILITY AS INDICATED ON THE PLANS PROVIDED
   - 6.2. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2010)



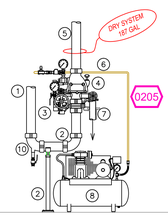
A BUILDING SECTION
SCALE: ⅛" = 1'-0"



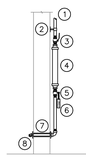
RISER LEGEND
1. 10" WATER UNDERGROUND SERVICE (BY OTHERS) (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE G.C.)
2. 10" X 8" FLANGED CONCENTRIC REDUCER
3. 8" AMES 200M BACKFLOW
4. 8" GROOVE FLANGE ADAPTOR
5. 8" GROOVED 90
6. 8" WELDED MANIFOLD
7. 8" GROOVE BUTTERFLY VALVE w/TAMPER (N.O.)
8. 8" GROOVED COMMERCIAL RISER MANIFOLD w/ 2" TEST & DRAIN, PRESSURE GAUGE, AND FLOW SWITCH
9. 8" GROOVED CAP
10. 6" GROOVE BUTTERFLY VALVE w/TAMPER (N.O.)
11. 6" GROOVED COMMERCIAL RISER MANIFOLD w/ 2" TEST & DRAIN, PRESSURE GAUGE, AND FLOW SWITCH
12. 4" GROOVE FLANGE ADAPTOR
13. 4" GROOVED TEE
14. 4" GROOVED 90
15. 4" FDC CHECK VALVE
16. 4" BUTTERFLY VALVE AND SUPERVISORY SWITCH, NORMALLY CLOSED, FOR FORWARD FLOW TESTING OF BACKFLOW DEVICE
17. 2" GROOVED TEE
18. 2" GROOVED 90
19. 2" MAIN DRAIN PIPED TO EXTERIOR
20. PIPE STAND

1 RISER DETAIL
SCALE: ½" = 1'-0"

DRY RISER LEGEND
1. FED FROM ZONE #4 4" FLOAT MAIN
2. 4" GROOVED 90 ELBOW
3. 4" GROOVED BUTTERFLY VALVE W/ TAMPER
4. 4" GROOVED DRY VALVE DPV1 W/ GALV TRIM
5. TO DRY SYSTEM IN GARDEN CENTER
6. 2" COPPER AIR LINE TO DRY VALVE
7. 2" MAIN DRAIN TO BE PIPED TO FLOOR DRAIN/ OUT SIDE. COORDINATE ON SITE.
8. AIR COMPRESSOR
9. PIPE STAND
10. 4" DRAIN 90 WITH 1" BALL VALVE FOR LOW POINT DRAIN



2 DRY VALVE DETAIL
SCALE: ½" = 1'-0"

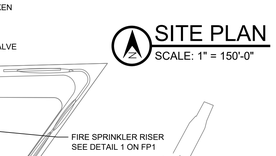


DRUM DRIP DETAIL LEGEND
1. 1" FROM DRY SYSTEM LOW POINT
2. SECURE 1" TO EXTERIOR WALL
3. 1" BALL VALVE (N.O.)
4. 2" DRUM RIP BARREL, 12" MIN LENGTH
5. 1" BALL VALVE (N.C.)
6. DRUM DRIP SIGNAGE
7. 1" GALV. PIPE TO EXTERIOR
8. 1" GALV. 45 WITH WALL PLATE

3 DRUM DRIP DETAIL
SCALE: ½" = 1'-0"

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG	MODEL#	ESCUTCHEON	SPACING
⊗	66	UPRIGHT / SPRIG	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
⊗	144	UPRIGHT	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
◉	22	PENDENT	WHITE	200°	5.60	1/2"	TY3531	TYCO	RFII	CONCEALED	130 S.F. OH - 225 S.F. LH
◉	19	PENDENT	WHITE	200°	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-REC	130 S.F. OH - 225 S.F. LH
○	48	UPRIGHT	BRASS	200°	5.60	3/4"	TY4131	TYCO	TY-FRB	NONE	130 S.F. OH - 225 S.F. LH
▣	56	PENDENT	WHITE	200°	11.20	3/4"	VK536	VIKING	MIRAGE	CONCEALED	16x16 U.N.O.
⊗	369	UPRIGHT	BRASS	200°	14.00	3/4"	TY6137	TYCO	EC-14	NONE	20x20 U.N.O.
▲	41	PENDENT / DRY	WHITE	200°	5.60	1"	TY3255	TYCO	DS-1	FLUSH	130 S.F. OH - 225 S.F. LH
▲	9	PENDENT / DRY	WHITE	200°	11.20	1"	TY5238	TYCO	DS-2 EC	FLUSH	14x14 U.N.O.
◁	7	SIDEWALL	BRASS	200°	5.60	1/2"	TY3351	TYCO	TY-FRB	NONE	10x10
	781	TOTAL									



FLEXIBLE SPRINKLER DROP ASSEMBLY

INSTALLATION DETAILS

A SITE PLAN
SCALE: 1" = 150'-0"

GENERAL NOTES

1. ALL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA #13, THE STATE AND LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL BRANCH LINE PIPING SHALL BE THREADABLE, THINWALL, OR SCH. 40 WITH CAST IRON FITTINGS.
3. ALL MAIN PIPING SHALL BE SCH. 10 BLACK STEEL THINWALL WITH GROOVED FITTINGS AND WELDED OUTLETS.
4. ALL PIPING SHALL BE PROVIDED WITH APPROVED HANGERS CONFORMING TO STANDARDS OUTLINED IN NFPA#13.
5. PIPING SHALL BE INSPECTED, AND TESTED IN ACCORDANCE WITH NFPA#13.

ALARM SYSTEM BY OWNER, TO BE CENTRAL STATION per NFPA, STATE and LOCAL REQUIREMENTS

THIS SPRINKLER WORK IS DESIGNED IN ACCORDANCE WITH N.F.P.A. PAMPHLET 13 2010 EDITION

CONTRACTOR:

ADDRESS:

REVISION

DATE	DESCRIPTION	BY

IMPORTANT
TO PREVENT FREEZING OF WATER IN WET PIPE SPRINKLER PIPING, OWNERS TO PROVIDE SUFFICIENT HEAT THROUGHOUT AREAS WHERE SPRINKLER PIPES ARE INSTALLED, UNLESS AN ANTI–FREEZE SYSTEM.

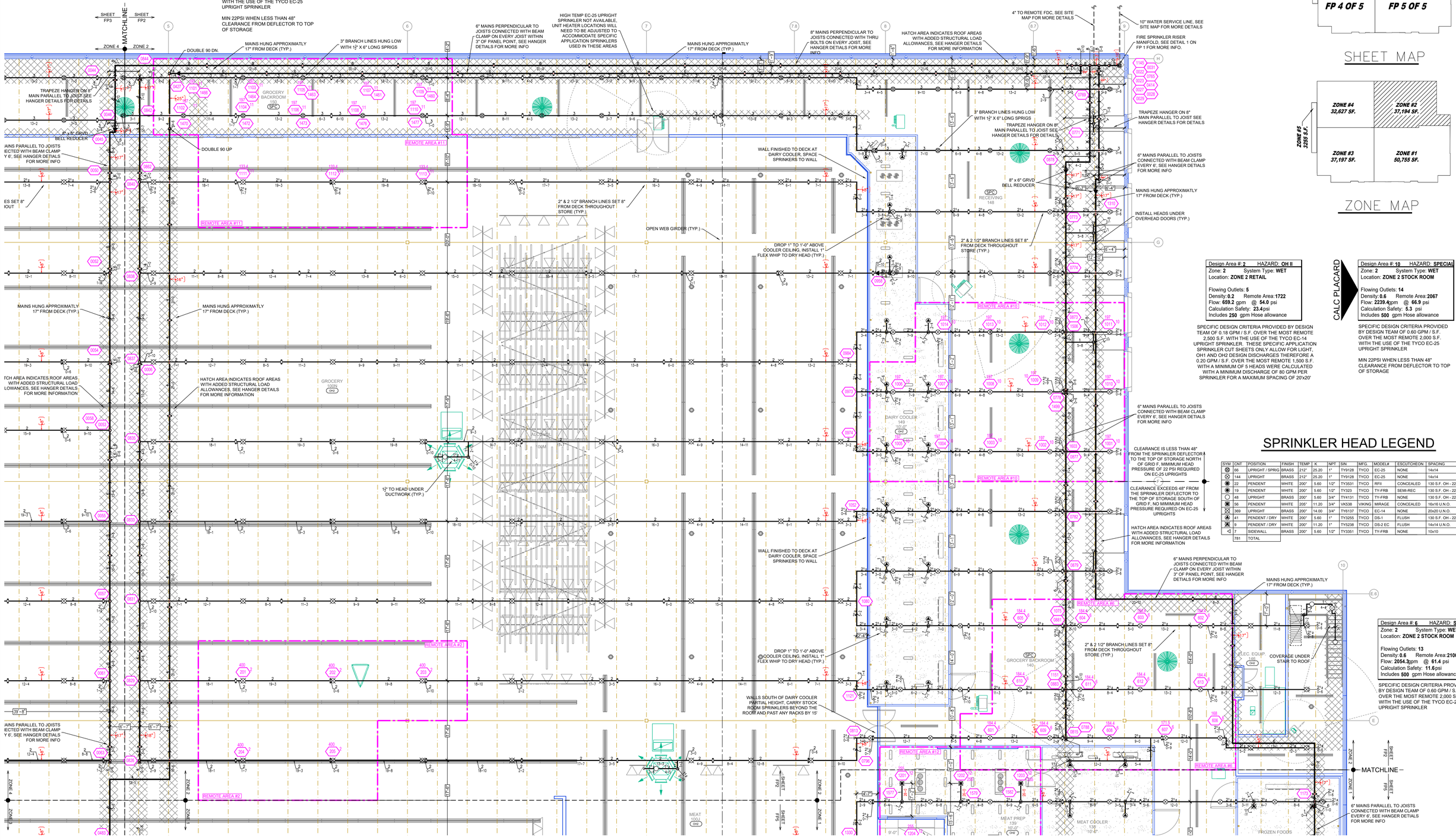
NORTH

DESIGNER	J.V.G.
SCALE	1/8 " = 1'-0"
CHECK BY	R.G.
FILE NUMBER	
APPROVAL	STATE & LOCAL
DATE	03–31–25
DRAWING NO.	FP 1 OF 5

Design Area #: **11** HAZARD: **SPECIAL**
Zone: **2** System Type: **WET**
Location: **ZONE 2 STOCK ROOM**
Flowing Outlets: **13**
Density: **0.6** Remote Area:**2299**
Flow: **2027.0**gpm @ **69.8** psi
Calculation Safety: **3.3** psi
Includes **500** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.60 GPM / S.F. OVER THE MOST REMOTE 2,000 S.F. WITH THE USE OF THE TYCO EC-25 UPRIGHT SPRINKLER

MIN 22PSI WHEN LESS THAN 48" CLEARANCE FROM DEFLECTOR TO TOP OF STORAGE



MAIN FLOOR – AREA 'B'

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

SHEET MAP

ZONE MAP

Design Area #: **2** HAZARD: **OH II**
Zone: **2** System Type: **WET**
Location: **ZONE 2 RETAIL**
Flowing Outlets: **5**
Density: **0.2** Remote Area:**1722**
Flow: **659.2** gpm @ **54.0** psi
Calculation Safety: **23.4**psi
Includes **250** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.18 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 UPRIGHT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 80 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 20'x20'

CALC PLACARD

Design Area #: **10** HAZARD: **SPECIAL**
Zone: **2** System Type: **WET**
Location: **ZONE 2 STOCK ROOM**
Flowing Outlets: **14**
Density: **0.6** Remote Area:**2067**
Flow: **2239.4**gpm @ **66.9** psi
Calculation Safety: **5.3** psi
Includes **500** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.60 GPM / S.F. OVER THE MOST REMOTE 2,000 S.F. WITH THE USE OF THE TYCO EC-25 UPRIGHT SPRINKLER

MIN 22PSI WHEN LESS THAN 48" CLEARANCE FROM DEFLECTOR TO TOP OF STORAGE

Design Area #: **6** HAZARD: **SPECIAL**
Zone: **2** System Type: **WET**
Location: **ZONE 2 STOCK ROOM**
Flowing Outlets: **13**
Density: **0.6** Remote Area:**2100**
Flow: **2054.3**gpm @ **61.4** psi
Calculation Safety: **11.6**psi
Includes **500** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.60 GPM / S.F. OVER THE MOST REMOTE 2,000 S.F. WITH THE USE OF THE TYCO EC-25 UPRIGHT SPRINKLER

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	S/N	MFG.	MODEL#	ESCUTCHEON	SPACING
⊗	66	UPRIGHT / SPRIG	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
⊗	144	UPRIGHT	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
◉	22	PENDENT	WHITE	200°	5.60	1/2"	TY3531	TYCO	RFII	CONCEALED	130 S.F. OH - 225 S.F. LH
◉	19	PENDENT	WHITE	200°	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-REC	130 S.F. OH - 225 S.F. LH
○	48	UPRIGHT	BRASS	200°	5.60	3/4"	TY4131	TYCO	TY-FRB	NONE	130 S.F. OH - 225 S.F. LH
⊗	56	PENDENT	WHITE	205°	11.20	3/4"	VK538	VIKING	MIRAGE	CONCEALED	16x16 U.N.O.
⊗	369	UPRIGHT	BRASS	200°	14.00	3/4"	TY9137	TYCO	EC-14	NONE	20x20 U.N.O.
◭	41	PENDENT / DRY	WHITE	200°	5.60	1"	TY3255	TYCO	DS-1	FLUSH	130 S.F. OH - 225 S.F. LH
◭	9	PENDENT / DRY	WHITE	200°	11.20	1"	TY5238	TYCO	DS-2 EC	FLUSH	14x14 U.N.O.
◁	7	SIDEWALL	BRASS	200°	5.60	1/2"	TY3351	TYCO	TY-FRB	NONE	10x10
	781	TOTAL									

GENERAL NOTES

1. ALL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA #13, THE STATE AND LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL BRANCH LINE PIPING SHALL BE THREADABLE THINWALL, OR SCH. 40 WITH CAST IRON FITTINGS.
3. ALL MAIN PIPING SHALL BE SCH. 10 BLACK STEEL THINWALL WITH GROOVED FITTINGS AND WELDED OUTLETS.
4. ALL PIPING SHALL BE PROVIDED WITH APPROVED HANGERS CONFORMING TO STANDARDS OUTLINED IN NFPA#13.
5. PIPING SHALL BE INSPECTED, AND TESTED IN ACCORDANCE WITH NFPA#13.

ALARM SYSTEM BY OWNER, TO BE CENTRAL STATION per NFPA, STATE and LOCAL REQUIREMENTS

THIS SPRINKLER WORK IS DESIGNED IN ACCORDANCE WITH N.F.P.A. PAMPHLET 13 2010 EDITION

CONTRACTOR:

ADDRESS:

REVISION

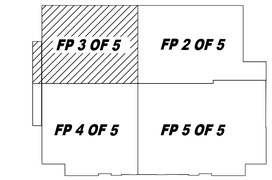
DATE	DESCRIPTION	BY

IMPORTANT

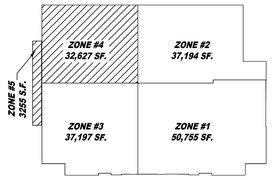
TO PREVENT FREEZING OF WATER IN WET PIPE SPRINKLER PIPING, OWNERS TO PROVIDE SUFFICIENT HEAT THROUGHOUT AREAS WHERE SPRINKLER PIPES ARE INSTALLED, UNLESS AN ANTI-FREEZE SYSTEM.

NORTH

DESIGNER	J.V.G
SCALE	1/8 " = 1'-0"
CHECK BY	R.G.
FILE NUMBER	
APPROVAL	STATE & LOCAL
DATE	03-31-25
DRAWING NO	**FP 2 OF 5**



SHEET MAP



ZONE MAP

CALC PLACARD

Design Area #: 7	HAZARD: SPECIAL
Zone: 4	System Type: WET
Location: ZONE 4 STOCK ROOM	
Flowing Outlets: 12	
Density: 0.6	Remote Area: 2013
Flow: 1928.4 gpm @ 66.3 psi	
Calculation Safety: 7.3 psi	
Includes 500 gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.60 GPM / S.F. OVER THE MOST REMOTE 2,000 S.F. WITH THE USE OF THE TYCO EC-25 UPRIGHT SPRINKLER

MIN 22PSI WHEN LESS THAN 48" CLEARANCE FROM DEFLECTOR TO TOP OF STORAGE

Design Area #: 4	HAZARD: OH II
Zone: 4	System Type: WET
Location: ZONE 4 RETAIL	
Flowing Outlets: 5	
Density: 0.2	Remote Area: 1722
Flow: 659.3 gpm @ 54.4 psi	
Calculation Safety: 23.0 psi	
Includes 250 gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.18 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 UPRIGHT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 80 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 20'x20'

CALC PLACARD

Design Area #: 9	HAZARD: OH II
Zone: 5	System Type: DRY
Location: GARDEN CENTER	
Flowing Outlets: 34	
Density: 0.2	Remote Area: 3256
Flow: 961.9 gpm @ 55.2 psi	
Calculation Safety: 21.6 psi	
Includes 250 gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.20 GPM / S.F. OVER THE MOST REMOTE 3,250 S.F.

OPEN TO ATMOSPHERE, NO PROTECTION REQUIRED

HATCH AREA INDICATES ROOF AREAS WITH ADDED STRUCTURAL LOAD ALLOWANCES, SEE HANGER DETAILS FOR MORE INFORMATION

HIGH TEMP EC-25 UPRIGHT SPRINKLER NOT AVAILABLE, UNIT HEATER LOCATIONS WILL NEED TO BE ADJUSTED TO ACCOMMODATE SPECIFIC APPLICATION SPRINKLERS USED IN THESE AREAS

3" BRANCH LINES HUNG LOW WITH ½" X 6" LONG SPRIGS

REMOTE AREA #7

REMOTE AREA #6

REMOTE AREA #4

4" REMOTE DRY VALVE, SEE DETAIL 2 ON FP 1 FOR MORE INFO

FIRE PROTECTION RISER ROOM OH1 163

MAINS HUNG APPROXIMATLY 17" FROM DECK (TYP.)

DROP 1" TO 1'-0" ABOVE LAY IN CEILING, FLEX TO DROP (TYP.)

WALL FINISHED TO DECK, SPACE SPRINKERS TO WALL

½" TO HEAD UNDER DUCTWORK (TYP.)

OPEN WEB GIRDER (TYP.)

TRAPEZE HANGER ON 8" MAIN PARALLEL TO JOIST SEE HANGER DETAILS FOR DETAILS

8" x 6" GRVD BELL REDUCER

6" MAINS PARALLEL TO JOISTS CONNECTED WITH BEAM CLAMP EVERY 6', SEE HANGER DETIALS FOR MORE INFO

2" & 2 1/2" BRANCH LINES SET 6" FROM DECK THROUGHOUT STORE (TYP.)

DOUBLE 90 DN

MATCHLINE — SHEET FP3 / SHEET FP2 / SHEET FP4

ZONE 4 / ZONE 2 / ZONE 3 / ZONE 5

GARDEN CENTER 164 (OAR)

PETS 1005 (OH2)

BOOKS 1007 (OH2)

ELECTRONICS 1005 (OH2)

SCHOOL / OFFICE 1007 (OH2)

TOYS 100W (OH2)

AUTOMOTIVE 1006 (OH2)

DIY 100D (OH2)

BREAKROOM 162

LEARNING CENTER 160

TEAM CENTER 161

LEADERSHIP OFFICE 159

RAA OFFICE 158

STORE DIRECTOR OFFICE 156

CONFERENCE / LACTATION ROOM 157

WOMEN 154

MEN 155

RESTROOM VESTIBULE 153

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
⊗	66	UPRIGHT / SPRIG	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
⊗	144	UPRIGHT	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
◉	22	PENDENT	WHITE	200°	5.60	1/2"	TY3531	TYCO	RFII	CONCEALED	130 S.F. OH - 225 S.F. LH
◉	19	PENDENT	WHITE	200°	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-REC	130 S.F. OH - 225 S.F. LH
○	48	UPRIGHT	BRASS	200°	5.60	3/4"	TY4131	TYCO	TY-FRB	NONE	130 S.F. OH - 225 S.F. LH
◉	56	PENDENT	WHITE	205°	11.20	3/4"	VK538	VIKING	MIRAGE	CONCEALED	16x16 U.N.O.
⊠	369	UPRIGHT	BRASS	200°	14.00	3/4"	TY6137	TYCO	EC-14	NONE	20x20 U.N.O.
◉	41	PENDENT / DRY	WHITE	200°	5.60	1"	TY3255	TYCO	DS-1	FLUSH	130 S.F. OH - 225 S.F. LH
⊠	9	PENDENT / DRY	WHITE	200°	11.20	1"	TY5238	TYCO	DS-2 EC	FLUSH	14x14 U.N.O.
◁	7	SIDEWALL	BRASS	200°	5.60	1/2"	TY3351	TYCO	TY-FRB	NONE	10x10
	781	TOTAL									

MAIN FLOOR — AREA 'A'

SCALE: ⅛"=1'-0"

GENERAL NOTES

1. ALL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA #13, THE STATE AND LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL BRANCH LINE PIPING SHALL BE THREADABLE THINWALL, OR SCH. 40 WITH CAST IRON FITTINGS.
3. ALL MAIN PIPING SHALL BE SCH. 10 BLACK STEEL THINWALL WITH GROOVED FITTINGS AND WELDED OUTLETS.
4. ALL PIPING SHALL BE PROVIDED WITH APPROVED HANGERS CONFORMING TO STANDARDS OUTLINED IN NFPA#13.
5. PIPING SHALL BE INSPECTED, AND TESTED IN ACCORDANCE WITH NFPA#13.

ALARM SYSTEM BY OWNER, TO BE CENTRAL STATION per NFPA, STATE and LOCAL REQUIREMENTS

THIS SPRINKLER WORK IS DESIGNED IN ACCORDANCE WITH N.F.P.A. PAMPHLET 13 2010 EDITION

CONTRACTOR:

ADDRESS:

REVISION

DATE	DESCRIPTION	BY

IMPORTANT

TO PREVENT FREEZING OF WATER IN WET PIPE SPRINKLER PIPING, OWNERS TO PROVIDE SUFFICIENT HEAT THROUGHOUT AREAS WHERE SPRINKLER PIPES ARE INSTALLED, UNLESS AN ANTI-FREEZE SYSTEM.

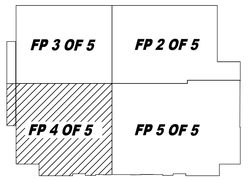
NORTH

DESIGNER	J.V.G.
SCALE	1/8 " = 1'-0"
CHECK BY	R.G.
FILE NUMBER	
APPROVAL	STATE & LOCAL
DATE	03-31-25
DRAWING NO	FP 3 OF 5

CALC PLACARD

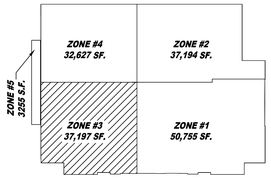
Design Area #: **9**	HAZARD: **OH II**
Zone: **5**	System Type: **DRY**
Location: **GARDEN CENTER**	
Flowing Outlets: **34**	
Density: **0.2**	Remote Area: **3256**
Flow: **961.9** gpm	@ **55.2** psi
Calculation Safety:	**21.6** psi
Includes **250** gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.20 GPM / S.F. OVER THE MOST REMOTE 3,250 S.F.

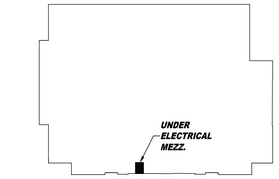


SHEET MAP

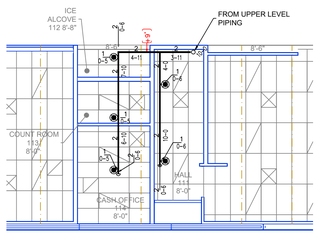
OPEN TO ATMOSPHERE, NO PROTECTION REQUIRED



ZONE MAP



KEY MAP



UNDER ELECT. MEZZ. FIRE SPRINKLER PLAN
SCALE: ⅛"=1'-0"

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
⊠	66	UPRIGHT / SPRIG	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
⊗	144	UPRIGHT	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
◉	22	PENDENT	WHITE	200°	5.60	1/2"	TY3531	TYCO	RFII	CONCEALED	130 S.F. OH - 225 S.F. LH
◉	19	PENDENT	WHITE	200°	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-REC	130 S.F. OH - 225 S.F. LH
○	48	UPRIGHT	BRASS	200°	5.60	3/4"	TY4131	TYCO	TY-FRB	NONE	130 S.F. OH - 225 S.F. LH
⊠	56	PENDENT	WHITE	205°	11.20	3/4"	VK538	VIKING	MIRAGE	CONCEALED	16x16 U.N.O.
⊠	369	UPRIGHT	BRASS	200°	14.00	3/4"	TY6137	TYCO	EC-14	NONE	20x20 U.N.O.
◉	41	PENDENT / DRY	WHITE	200°	5.60	1"	TY3255	TYCO	DS-1	FLUSH	130 S.F. OH - 225 S.F. LH
◉	9	PENDENT / DRY	WHITE	200°	11.20	1"	TY5238	TYCO	DS-2 EC	FLUSH	14x14 U.N.O.
◁	7	SIDEWALL	BRASS	200°	5.60	1/2"	TY3351	TYCO	TY-FRB	NONE	10x10
	781	TOTAL									

Design Area #: **3**	HAZARD: **OH II**
Zone: **3**	System Type: **WET**
Location: **ZONE 3 RETAIL**	
Flowing Outlets: **5**	
Density: **0.2**	Remote Area: **1965**
Flow: **654.8** gpm	@ **69.6** psi
Calculation Safety:	**7.8** psi
Includes **250** gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.18 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 UPRIGHT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 80 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 20'x20'

CALC PLACARD

Design Area #: **8**	HAZARD: **OH II**
Zone: **2**	System Type: **WET**
Location: **ZONE #4 - 24 HR ENTRY**	
Flowing Outlets: **6**	
Density: **0.2**	Remote Area: **1601**
Flow: **646.4** gpm	@ **72.2** psi
Calculation Safety:	**5.2** psi
Includes **250** gpm Hose allowance	

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.18 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 UPRIGHT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 65 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 18'x18'

MAIN FLOOR – AREA 'C'
SCALE: ⅛"=1'-0"

GENERAL NOTES

1. ALL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF NFPA #13, THE STATE AND LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL BRANCH LINE PIPING SHALL BE THREADABLE THINWALL, OR SCH. 40 WITH CAST IRON FITTINGS.
3. ALL MAIN PIPING SHALL BE SCH. 10 BLACK STEEL THINWALL WITH GROOVED FITTINGS AND WELDED OUTLETS.
4. ALL PIPING SHALL BE PROVIDED WITH APPROVED HANGERS CONFORMING TO STANDARDS OUTLINED IN NFPA#13.
5. PIPING SHALL BE INSPECTED, AND TESTED IN ACCORDANCE WITH NFPA#13.

ALARM SYSTEM BY OWNER, TO BE CENTRAL STATION per NFPA, STATE and LOCAL REQUIREMENTS

THIS SPRINKLER WORK IS DESIGNED IN ACCORDANCE WITH N.F.P.A. PAMPHLET 13 2010 EDITION

CONTRACTOR:

ADDRESS:

REVISION

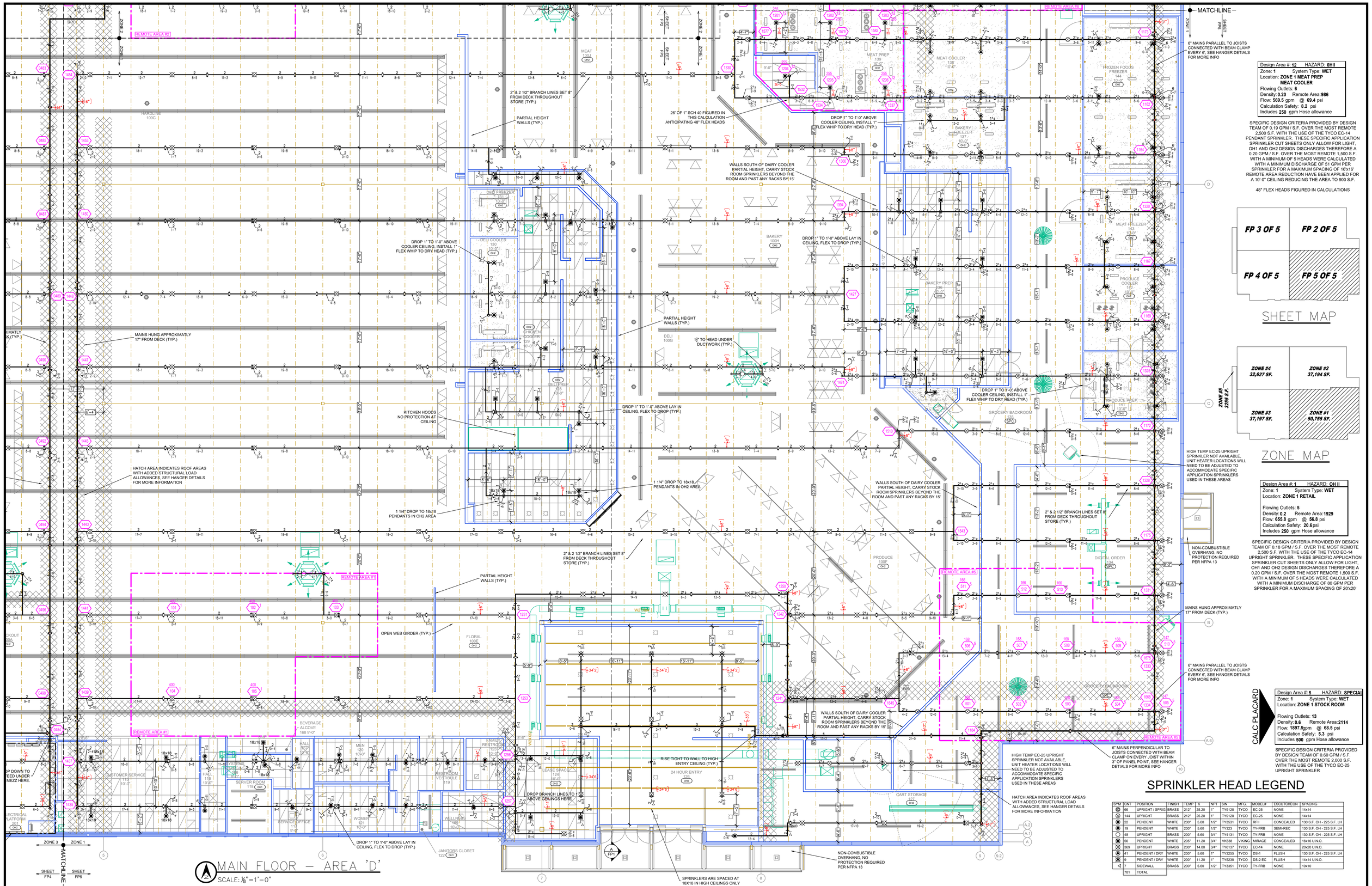
DATE	DESCRIPTION	BY

IMPORTANT
TO PREVENT FREEZING OF WATER IN WET PIPE SPRINKLER PIPING, OWNERS TO PROVIDE SUFFICIENT HEAT THROUGHOUT AREAS WHERE SPRINKLER PIPES ARE INSTALLED, UNLESS AN ANTI-FREEZE SYSTEM.

NORTH

DESIGNER	J.V.G.
SCALE	1/8 " = 1'-0"
CHECK BY	R.G.
FILE NUMBER	
APPROVAL	STATE & LOCAL
DATE	03-31-25

DRAWING NO **FP 4 OF 5**



MAIN FLOOR – AREA 'D'

SCALE: ⅛" =1'–0"

Design Area #: **12** HAZARD: **0HII**
Zone: **1** System Type: **WET**
Location: **ZONE 1 MEAT PREP** **MEAT COOLER**
Flowing Outlets: **6**
Density: **0.20** Remote Area: **986**
Flow: **569.5** gpm @ **69.4** psi
Calculation Safety: **8.2** psi
Includes **250** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.19 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 PENDANT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 51 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 16'x16' REMOTE AREA REDUCTION HAVE BEEN APPLIED FOR A 10'-0" CEILING REDUCING THE AREA TO 900 S.F.

48" FLEX HEADS FIGURED IN CALCULATIONS

SHEET MAP

ZONE MAP

Design Area #: **1** HAZARD: **OH II**
Zone: **1** System Type: **WET**
Location: **ZONE 1 RETAIL**
Flowing Outlets: **5**
Density: **0.2** Remote Area: **1929**
Flow: **655.8** gpm @ **56.8** psi
Calculation Safety: **20.6** psi
Includes **250** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.18 GPM / S.F. OVER THE MOST REMOTE 2,500 S.F. WITH THE USE OF THE TYCO EC-14 UPRIGHT SPRINKLER. THESE SPECIFIC APPLICATION SPRINKLER CUT SHEETS ONLY ALLOW FOR LIGHT, OH1 AND OH2 DESIGN DISCHARGES THEREFORE A 0.20 GPM / S.F. OVER THE MOST REMOTE 1,500 S.F. WITH A MINIMUM OF 5 HEADS WERE CALCULATED WITH A MINIMUM DISCHARGE OF 80 GPM PER SPRINKLER FOR A MAXIMUM SPACING OF 20'x20'

CALC PLACARD

Design Area #: **5** HAZARD: **SPECIAL**
Zone: **1** System Type: **WET**
Location: **ZONE 1 STOCK ROOM**
Flowing Outlets: **13**
Density: **0.6** Remote Area: **2114**
Flow: **1897.5**gpm @ **68.5** psi
Calculation Safety: **5.3** psi
Includes **500** gpm Hose allowance

SPECIFIC DESIGN CRITERIA PROVIDED BY DESIGN TEAM OF 0.60 GPM / S.F. OVER THE MOST REMOTE 2,000 S.F. WITH THE USE OF THE TYCO EC-25 UPRIGHT SPRINKLER

SPRINKLER HEAD LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON	SPACING
⊗	66	UPRIGHT / SPRIG	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
⊗	144	UPRIGHT	BRASS	212°	25.20	1"	TY9128	TYCO	EC-25	NONE	14x14
◉	22	PENDENT	WHITE	200°	5.60	1/2"	TY3531	TYCO	RFII	CONCEALED	130 S.F. OH - 225 S.F. LH
◉	19	PENDENT	WHITE	200°	5.60	1/2"	TY323	TYCO	TY-FRB	SEMI-REC	130 S.F. OH - 225 S.F. LH
○	48	UPRIGHT	BRASS	200°	5.60	3/4"	TY4131	TYCO	TY-FRB	NONE	130 S.F. OH - 225 S.F. LH
◉	56	PENDENT	WHITE	205°	11.20	3/4"	VK538	VIKING	MIRAGE	CONCEALED	16x16 U.N.O.
⊗	369	UPRIGHT	BRASS	200°	14.00	3/4"	TY6137	TYCO	EC-14	NONE	20x20 U.N.O.
◭	41	PENDENT / DRY	WHITE	200°	5.60	1"	TY3255	TYCO	DS-1	FLUSH	130 S.F. OH - 225 S.F. LH
◭	9	PENDENT / DRY	WHITE	200°	11.20	1"	TY5238	TYCO	DS-2 EC	FLUSH	14x14 U.N.O.
◁	7	SIDEWALL	BRASS	200°	5.60	1/2"	TY3351	TYCO	TY-FRB	NONE	10x10
	781	TOTAL									

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NORTH

DESIGNER	J.V.G.
SCALE	1/8 " = 1'–0"
CHECK BY	R.G.
FILE NUMBER	
APPROVAL	STATE & LOCAL
DATE	03–31–25

DRAWING NO **FP 5 OF 5**