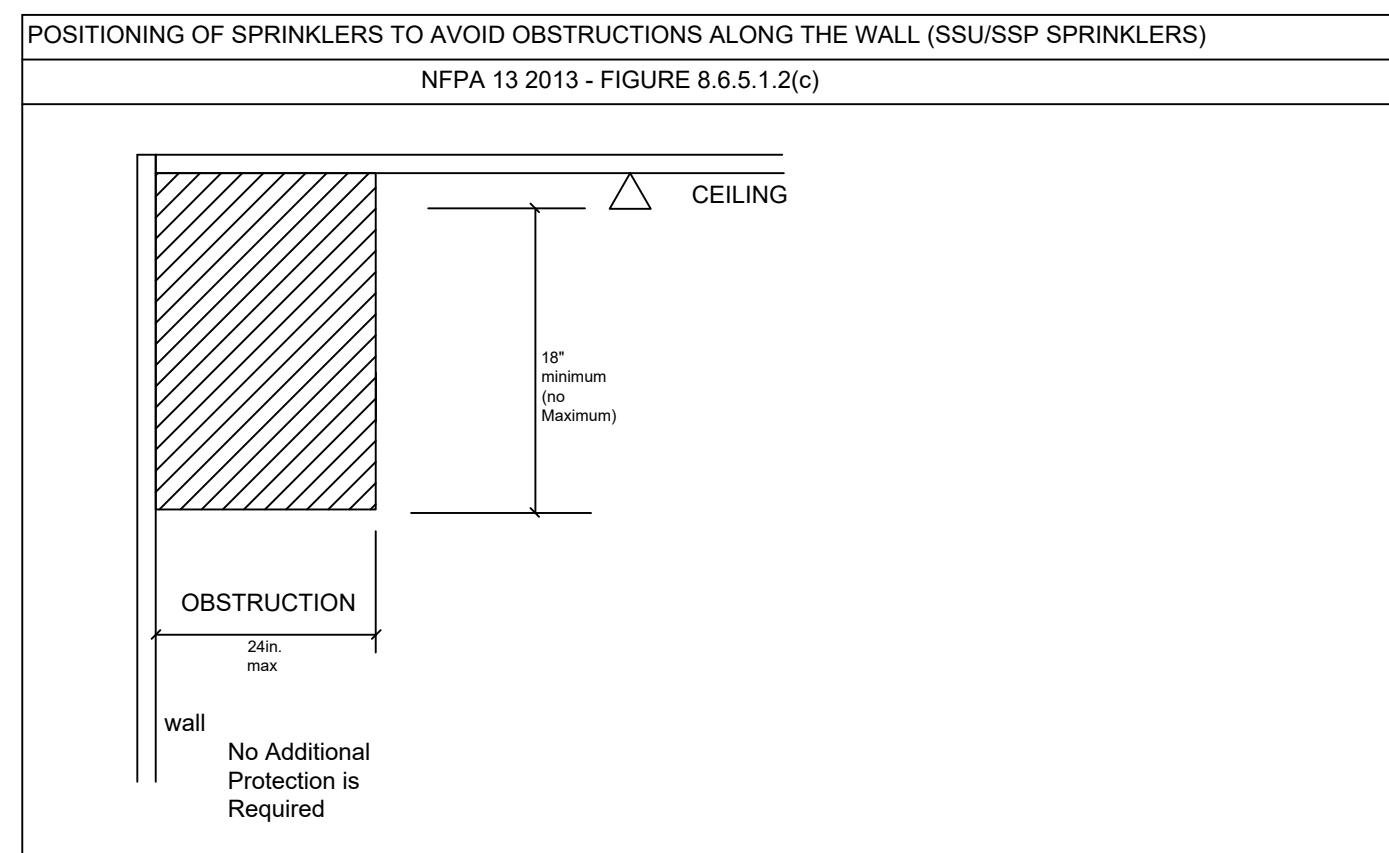
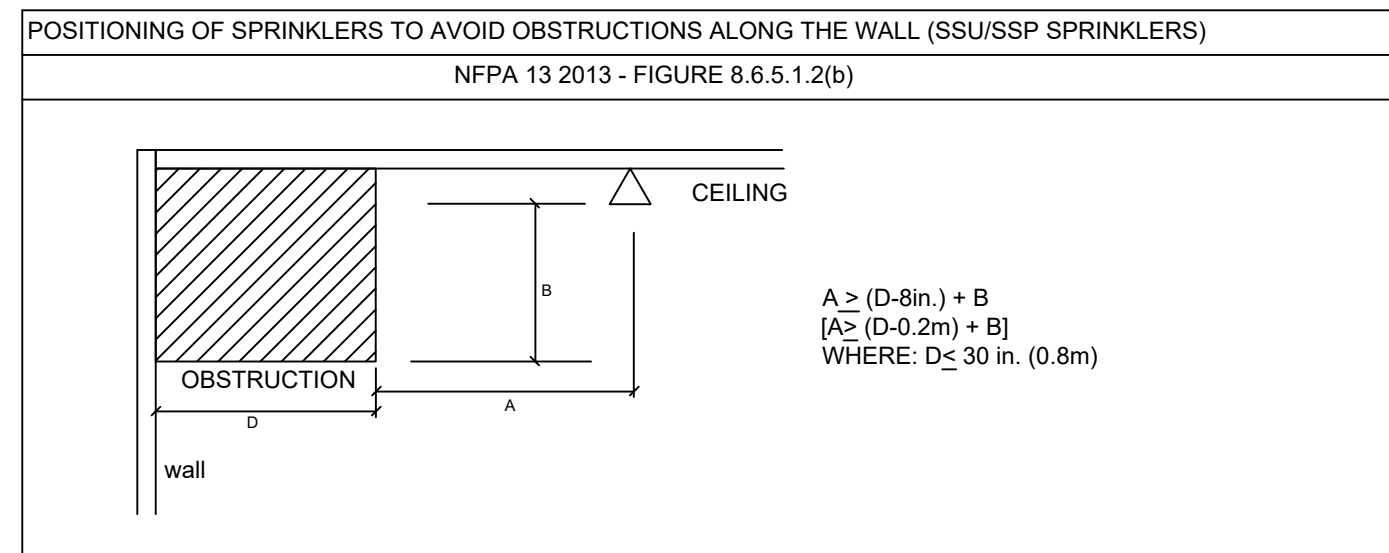


NFPA 13 2013 - TABLE 8.6.5.1.2		NFPA 13 2013 - FIGURE 8.6.5.1.2(a)	
DISTANCE FROM SIDEWALL SPRINKLERS TO SIDE OF OBSTRUCTION (A)	MAXIMUM ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION (B)		
Less than 1ft	0		
1ft to less than 1ft 6 in.	2-1/2		
1ft 6 in. to less than 2 ft.	3-1/2		
2ft to less than 2ft 6 in.	5-1/2		
2ft 6 in. to less than 3 ft.	7-1/2		
3ft to less than 3ft 6 in.	9-1/2		
3ft 6 in. to less than 4 ft.	12		
4ft to less than 4ft 6 in.	14		
4ft 6 in. to less than 5 ft.	16-1/2		
5ft to less than 5ft 6 in.	18		
5ft 6 in. to less than 6 ft.	20		
6ft to less than 6ft 6 in.	24		
6ft 6 in. to less than 7 ft.	30		
7ft and greater	35		



NFPA 13 2013 - TABLE 8.7.5.1.3		NFPA 13 2013 - FIGURE 8.7.5.1.3	
DISTANCE FROM SIDEWALL SPRINKLERS TO SIDE OF OBSTRUCTION (A)	MAXIMUM ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION (B)		
Less than 4ft	Not Allowed		
4ft to less than 5 ft	1		
5ft to less than 5 ft 6 in.	2		
5ft 6 in. to less than 6 ft.	3		
6ft to less than 6 ft 6 in.	4		
6ft 6 in. to less than 7 ft.	6		
7ft to less than 7 ft 6 in.	7		
7ft 6 in. to less than 8 ft.	9		
8ft to less than 8 ft 6 in.	11		
8ft 6 in. or greater	14		

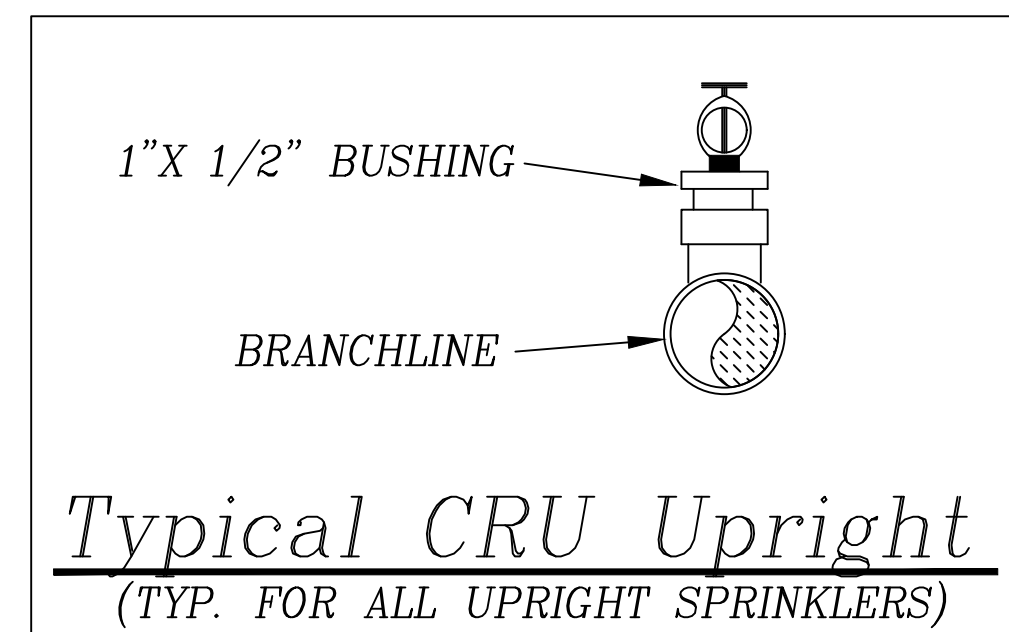
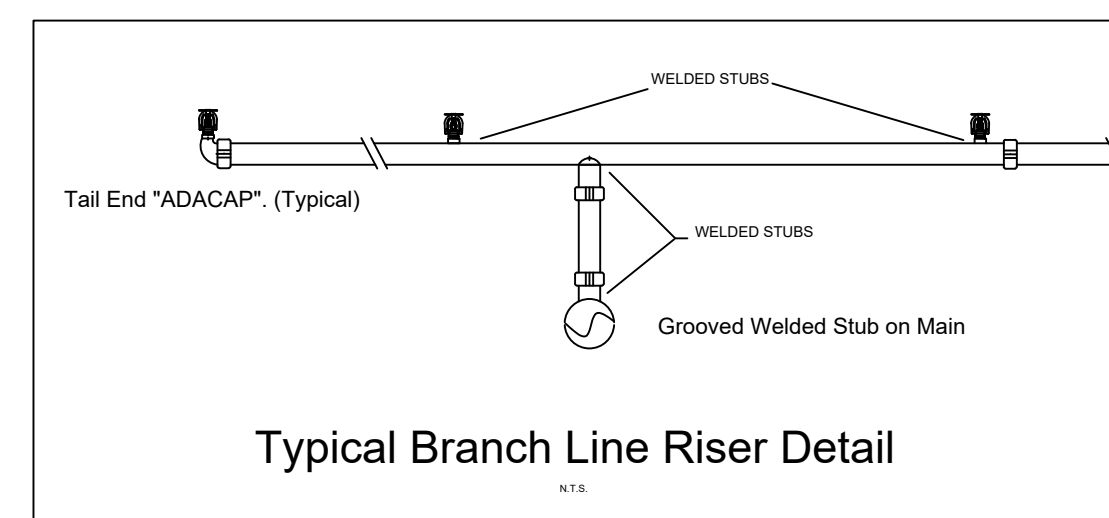
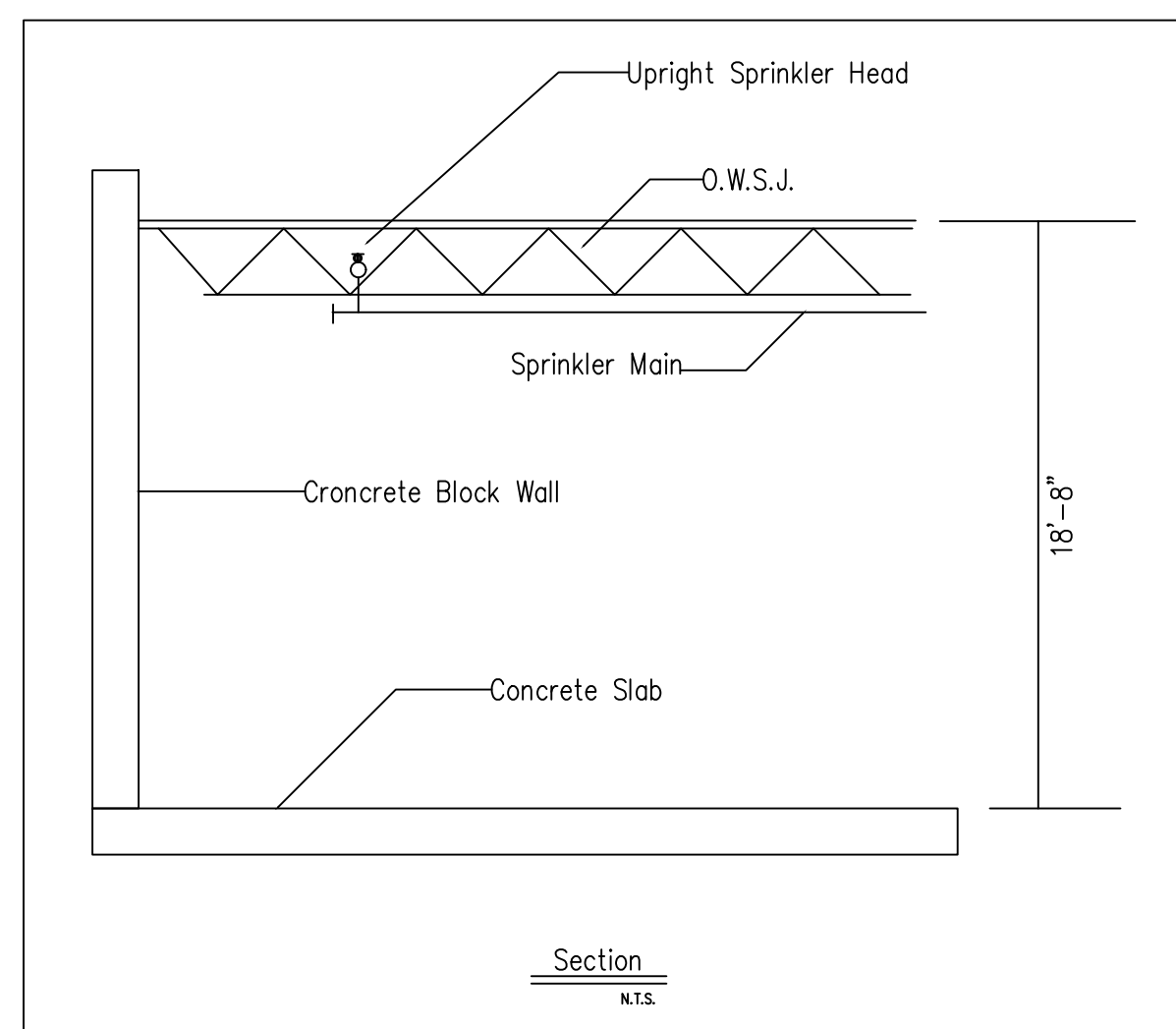
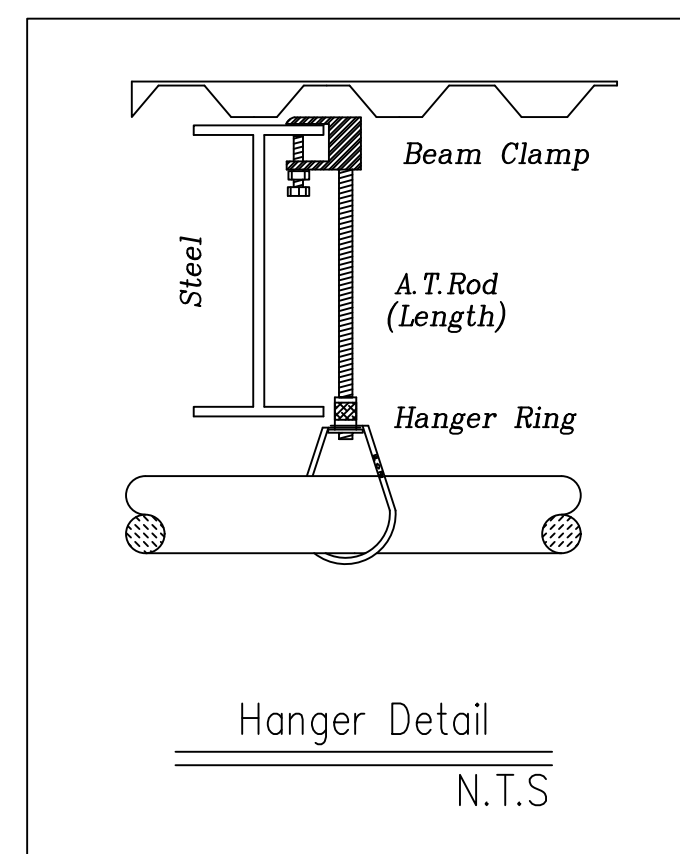
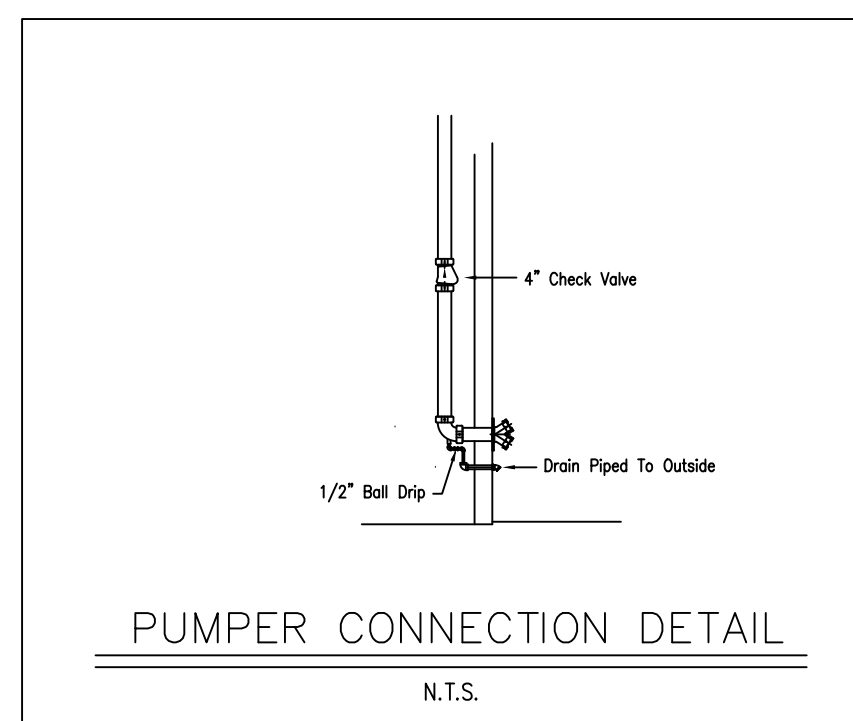
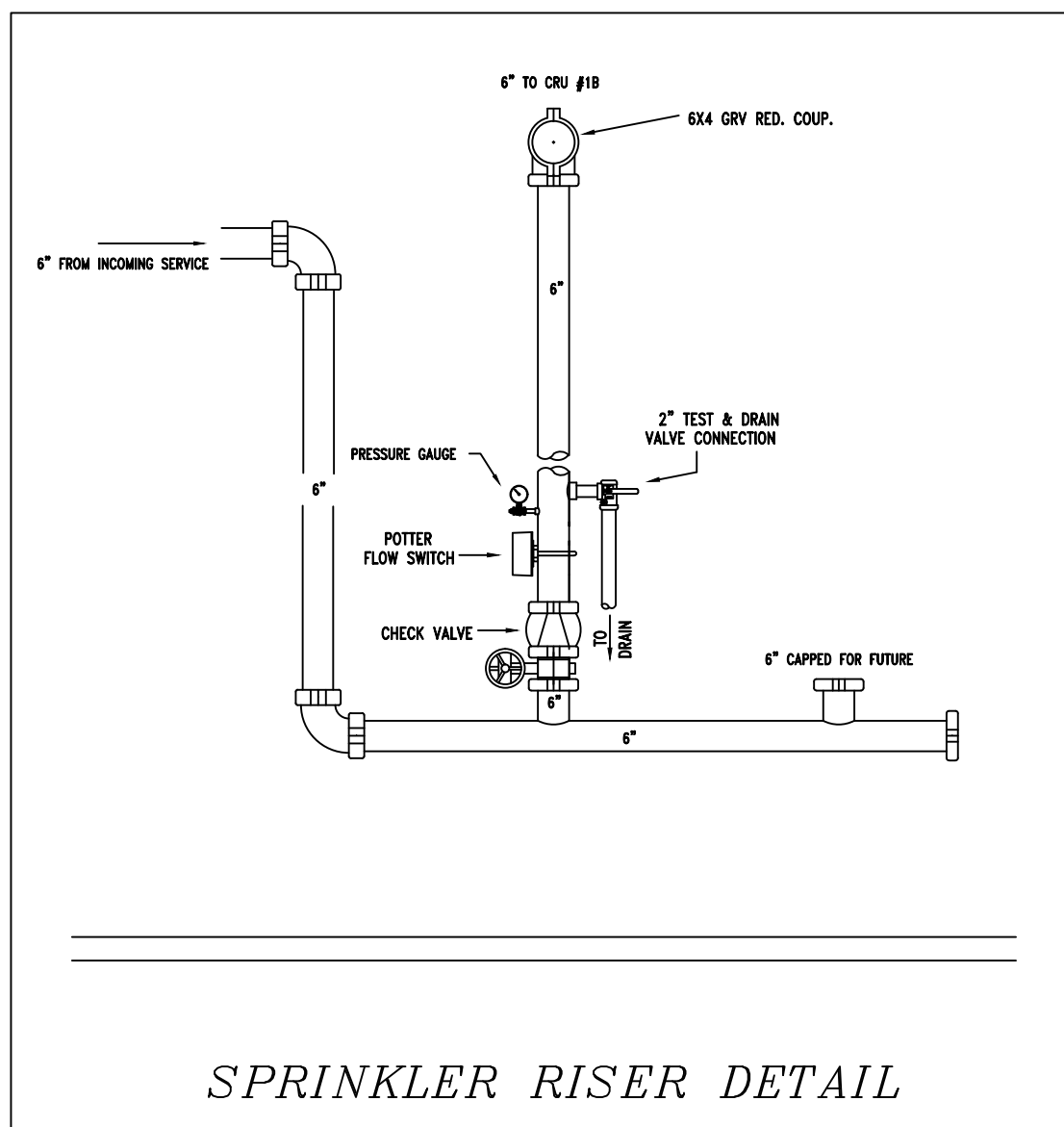
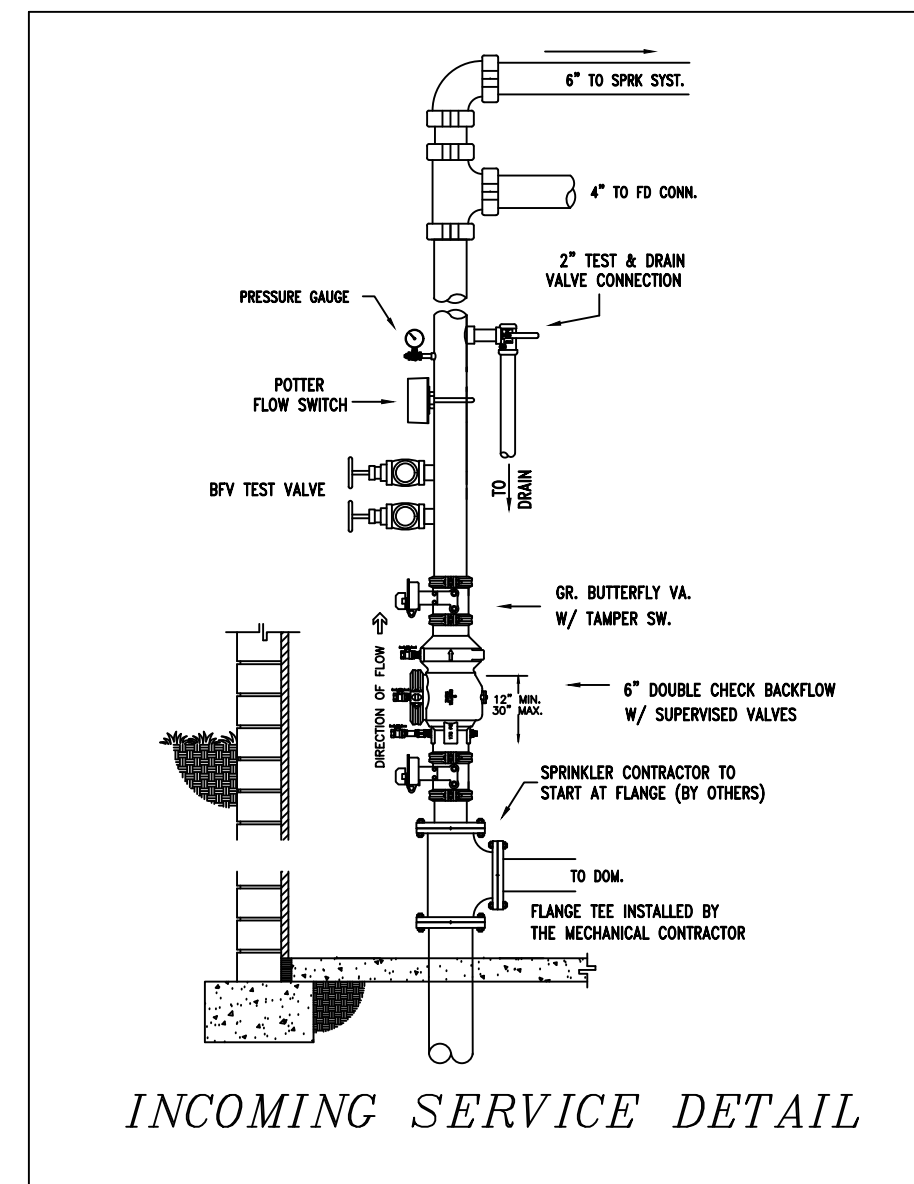
NFPA 13 2013 - TABLE 8.7.5.1.4		NFPA 13 2019 - FIGURE 12.1.11.1(b)	
DISTANCE FROM SIDEWALL SPRINKLERS TO SIDE OF OBSTRUCTION (A)	MAXIMUM ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION (B)		
4 in. to less than 6 in.	1		
6in. to less than 1 ft	2		
1ft to less than 1 ft 6 in.	3		
1 ft 6 in. to less than 2 ft.	5		
2 ft to less than 2 ft 6 in.	7		
2 ft 6 in. to less than 3 ft.	9		
3 ft to less than 3 ft 6 in.	11		
3ft 6 in. to less than 4 ft.	14		
4ft 6 in. to less than 5 ft.			
5ft to less than 5 ft 6 in.			
5ft 6 in. to less than 6 ft.			
6ft to less than 6 ft 6 in.			
6ft 6 in. to less than 7 ft.			
7ft to less than 7 ft 6 in.			

NOTES TO THE OWNER / OCCUPANTS:

1. OWNER/OCCUPANT IS RESPONSIBLE FOR SUPPLYING & MAINTAINING ADEQUATE HEAT (4°C, 40°F) TO ALL AREAS WHERE WET SPRINKLER PIPE IS INSTALLED IN ORDER TO PREVENT THE WET SPRINKLER PIPE FROM FREEZING.

INSTALL HIGH TEMPERATURE SPRINKLERS AROUND ALL UNIT HEATERS COORDINATE FINAL LOCATIONS ON SITE PRIOR TO INSTALLATION

SPRINKLERS ARE TO BE INSTALLED UNDER ALL OBSTRUCTIONS AS PER NFPA 13, TABLE 8.12.5.1.1 AND FIGURE 8.12.5.1.1, AND COMPLIES WITH 8.12.5.2(2)



DWG. NOTES:

- FIRE PROTECTION TO BE PROVIDED VIA NEW WET SPRINKLER SYSTEM TO BE DESIGNED IN ACCORDANCE WITH NFPA 13, 2013 AND THE OBC 2012 GUIDELINES AND RECOMMENDATIONS.
- IF APPLICABLE, COMMISSIONING OF INTEGRATED TESTING OF FIRE PROTECTION AND LIFE SAFETY SYSTEM TO BE COMPLETED BY OTHERS
- SHOP DRAWINGS TO BE SUBMITTED TO OWNERS INSURANCE COMPANY.
- MATERIALS TO BE ULC LISTED AND MEET NFPA 13, 2013 REQUIREMENTS
- COORDINATE SPRINKLER PIPE WITH EXISTING SITE CONDITIONS PRIOR TO INSTALLATION
- ALL PIPING SHALL BE BLACK STEEL PIPE C/W WELDED RISER OUTLETS OR MECHANICAL TEE JOINTS
- SPRINKLER HEADS SHALL BE EQUAL TO TYPE LISTED IN SPRINKLER SYMBOL BOX

DESIGN CRITERIA:

- INSTALLATION OF AUTOMATIC SPRINKLERS TO MEET THE REQUIREMENTS FOR ORDINARY GROUP 2, MAXIMUM HEAD SPACING OF 130SQ.FT. THE BACK STORAGE AREA AND LOADING DOCK TO BE DESIGNED TO 0.28/2000SQ.FT FOR STORAGE UP TO 17FT

NOTES:

- 1.) The Building's occupancy are COMMERCIAL RETAIL COMPLEX, (Ordinary Hazard Group II)
- 2.) Sprinkler Protection is via WET PIPE SYSTEMS, with standard and quick response sprinklers, hydraulically calculated as shown herein.
- 3.) Sprinkler Design Criteria: Proposed Retail Area – Design density 0.20 usgpm/FT² over 1500 ft² + 250 gpm total hose allowance. Back Storage and Loading Dock – Design density 0.28usgpm/ft² over 2000 ft² + 500gpm total hose allowance.
- 4.) Construction Classification:
 - unobstructed construction as per NFPA 13, 2013
 - Deflector of sprinklers to be a minimum of 25 mm (1") to a maximum of 300 mm (12") below deck.
- 5.) System design is to NFPA 13, 2013, the Ontario Building Code guidelines and recommendations.
- 6.) Water supply: Static : 68 PSI
Residual: 64 PSI
Flow: 1840 usgpm

NOTE: SPRINKLER CONTRACTOR TO COMPLETE HYDRANT FLOW TESTING AS PER NFPA 291, 2013 EDITION, CHAPTER 4, FIG. 4.3.4 AT LEAST ONE RESIDUAL HYDRANT AND ONE FLOW HYDRANT MUST BE USED, PITOT AND RESIDUAL PRESSURE FROM BOTH SINGLE AND TWO PORTS FLOWING.

Sprinklers: As Noted in Sprinkler Symbol Box.

a.) Spare sprinkler head cabinet to be provided as per NFPA 13, 2013

Material:

- 1.) Alarm Valves: Flow Detection switch.
- 2.) Fire Department Connection: Standard red 4x2-1/2x2-1/2 c/w break away caps.
- 3.) Piping: 1-1/2" to 6" Schedule 10 roll grooved, black, ULC, FM Approved
1" Schedule 40, threaded, black, ULC, FM Approved.
- 4.) Fittings: 1-1/2" to 6" – Grooved Fittings & Couplings
1" cast iron fittings, black, threaded
- 5.) Welded: Outlet off mains and branch lines are welded in accordance with AWS B 2.1 Standards.
- 6.) Hangers: Beam Clamps off O.W.S.J.
Finish on rod – black
Rings – adjustable swivel loop type
Pipe hanger shall be installed as required by NFPA for supporting sprinkler piping. No other piping and/or devices are to be attached to the sprinkler pipe hanger system unless the hanger has been specially designed for the additional loading.

THIS CONTRACT DOES NOT INCLUDE ANY MATERIAL OR DEVICES TO IMPROVE THE STRUCTURAL STRENGTH OF THE BUILDING TO ENABLE IT TO CARRY THE LOAD OF THE FIRE PROTECTION SYSTEM.

GENERAL NOTES:

- 1.) All materials and installation to conform to the Ontario Building Code, applicable NFPA Standards, and local Fire Department.
- 2.) All dimensions shown on drawings are center dimensions unless otherwise specified.
- 3.) All piping locations to be verified upon a site visit prior to any fabrication and installation.
- 4.) Coordinate between sprinkler piping and other trades.
- 5.) Sprinkler protection must be provided under all fixed obstructions over 4'-0" wide (ducts, bulkheads, overhead doors, etc.) as per NFPA 13, 2013.
- 6.) Adequate heat must be provided by the owner or occupant in all areas where wet sprinkler piping is installed.
- 7.) Yard Fire Hydrant and incoming water service to flange above finish floor by others.

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REV.	DATE	DESCRIPTION
01	APR 6 2024	ISSUED FOR PERMIT

REGISTERED PROFESSIONAL ENGINEER
Apr. 6, 2024
G. N. CATT
PROVINCE OF ONTARIO

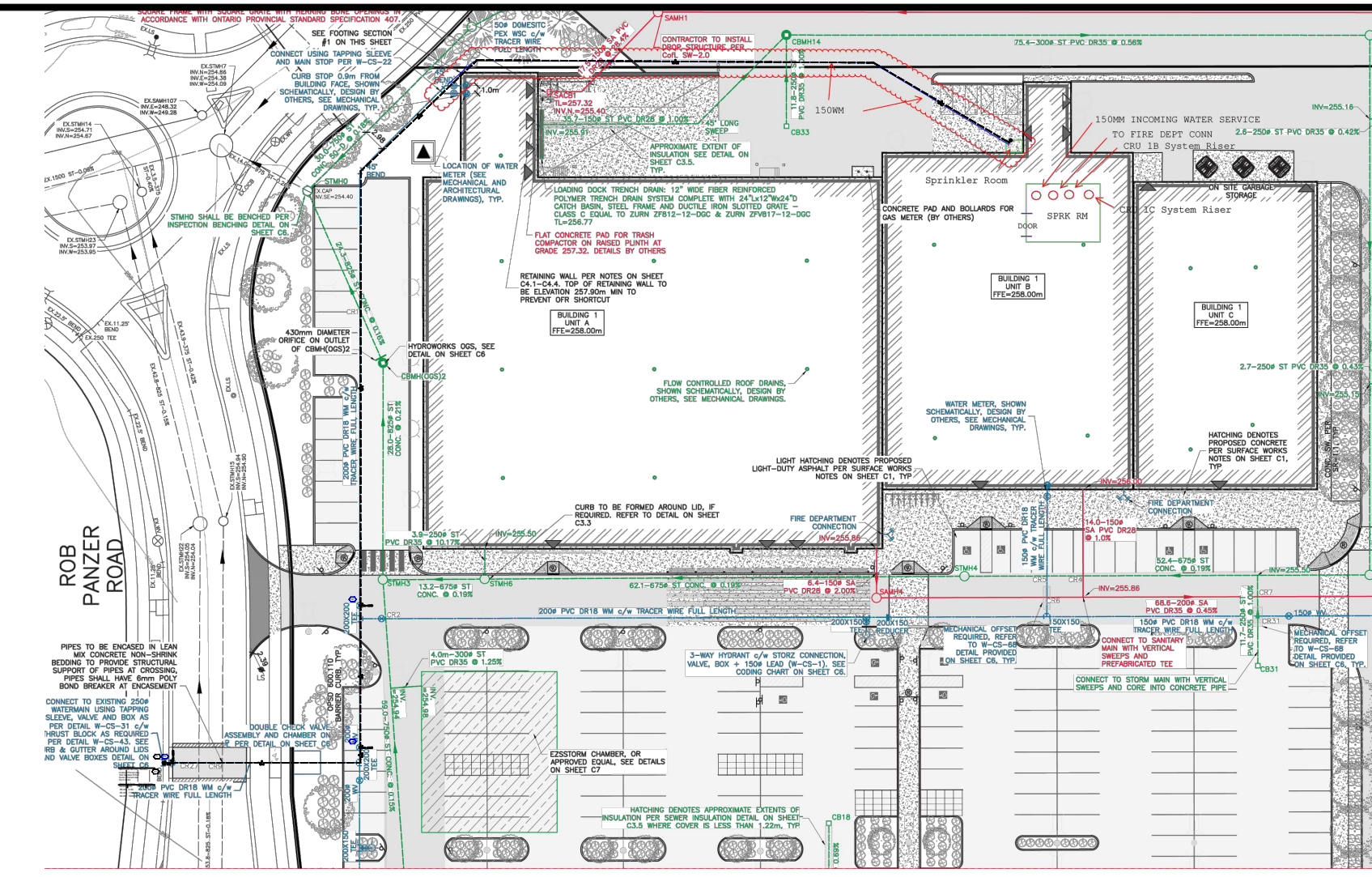
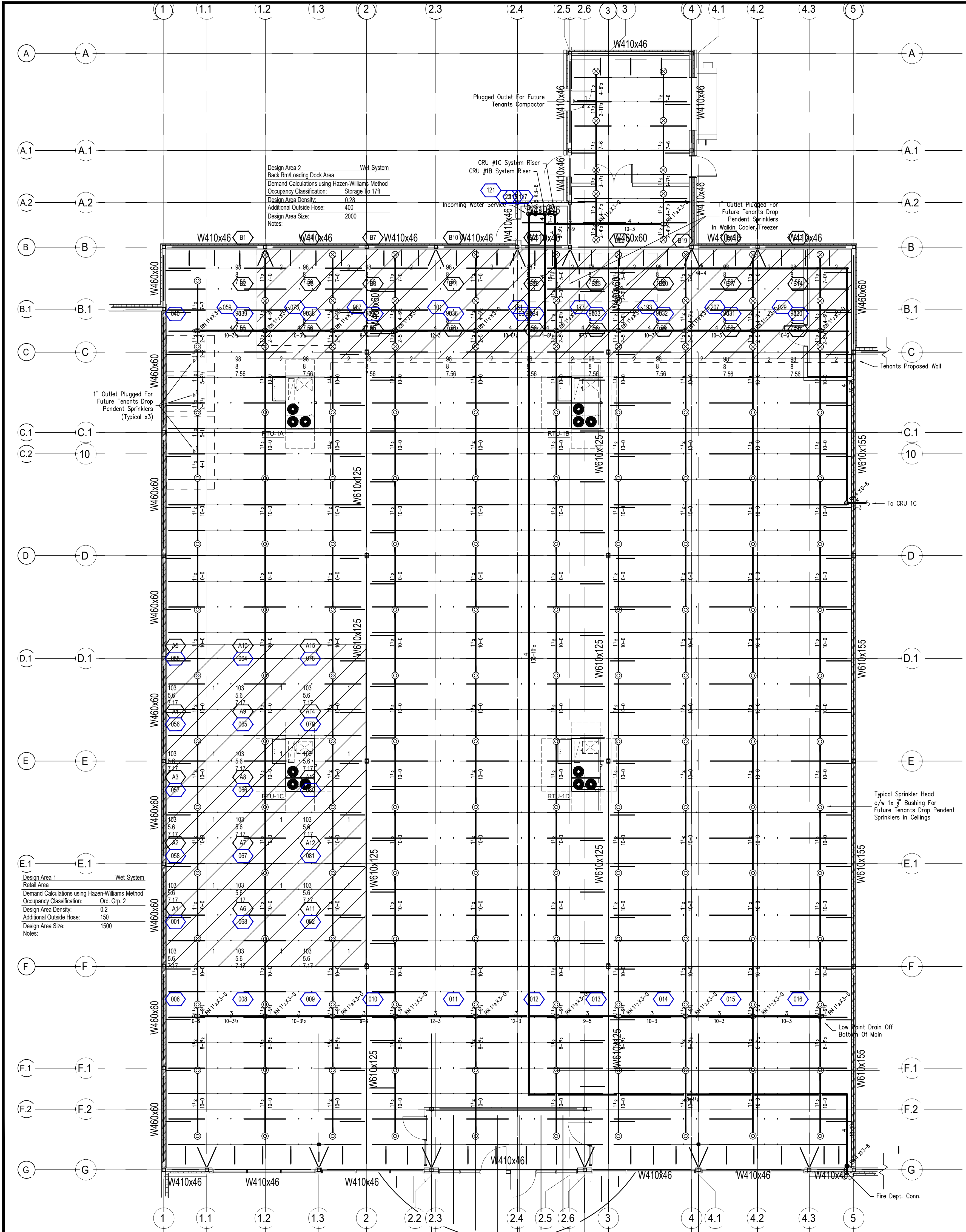
S/D/C
SPRINKLER DESIGN CONSULTING
23 TURNBULL DRIVE
BRANTFORD, ONTARIO
N3T 0K4
PHONE: 226-388-1503
EMAIL: jhayhurst@hotmail.ca

DRAWN BY: J.H.	CHECKED BY: G.C.
----------------	------------------

PROJECT #: 062-040424

PROJECT:
WESTDELL DEVELOPMENT CORP
COMMERCIAL BUILDING 1-CRU 1B
1300 FANSHAWE PARK ROAD EAST
LONDON, ONTARIO

SCALE: 1/8" = 1'-0"	DWG #: FP - 1
DATE: APRIL 6, 2024	



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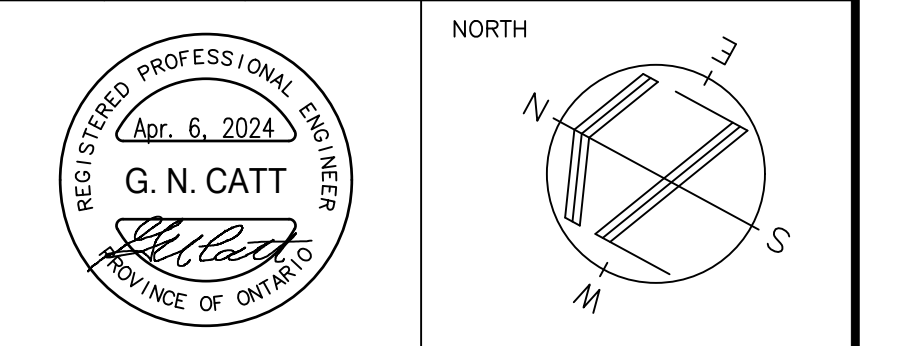
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122	UPR		BRASS	155	5.60	1/2"	TY3151	Tyc	TY-B
134	UPR		BRASS	286	5.60	1/2"	TY3151	Tyc	TY-B

Job: Westdell - CRU #1B
 Address: 1300 Fanshawe Pk Rd East, London, Ontario, Zip/Postal Code:
 Contract #: 062-040424, Date: Apr 4/24, Designer: JSH
 Contractor: SDC
 Address: 23 Turnbull Drive, Brantford, Ontario, Zip/Postal Code: N3T 0K4
 Phone: 226-388-1503, Fax: , Email: jhayhurst@hotmail.ca
 Approving Authority: Local Bldg Dept.
 Design Defaults: Standards: NFPA13
 Default Sprig Size: 1, Default Drop Size: 1
 Default Sprig Material: 40, Default Drop Material: 40
 Default Sprig Elevation: 1711, Default Drop Elevation:

Calculation results for Design Area 1 - Retail Area
 This system as shown on SDC _____ company print no _____ dated Apr 4/24 for Westdell - CRU #1B at 1300 Fanshawe Pk Rd East, contract no 062-040424 is designed to discharge at a rate of 0.2 _____ gpm/ft² (L/min/m²) of floor area over a maximum area of 1500 ft² when supplied with water at a rate of 411 gpm at 35.8 psi at the base of the riser. Hose stream allowance of _____ is included in the above.
 Occupancy classification: Ord. Grp. 2, Number of heads flowing: 15
 Commodity classification: _____, System Type: Wet
 Maximum storage height: _____, Maximum velocity: 7.77 ft/s
 Storage arrangement: _____
 Flow from In-Rack sprinklers: 0 gpm, Pressure Required at Source: 35.8 psi
 Flow from Overhead sprinklers: 311 gpm, Pressure Available at Source: 67.2 psi
 Flow from Inside Hoses: 100 gpm, Surplus Pressure at Source: 31.5 psi
 Flow from Outside Hoses: 0 gpm
 Other fixed flows: 0 gpm
 Total flow in system piping: 411 gpm
 Additional flow at/beyond source: 150 gpm
 Total of all flows: 561 gpm

Calculation results for Design Area 2 - Back Rm/Loading Dock Area
 This system as shown on SDC _____ company print no _____ dated Apr 4/24 for Westdell - CRU #1B at 1300 Fanshawe Pk Rd East, contract no 062-040424 is designed to discharge at a rate of 0.28 _____ gpm/ft² (L/min/m²) of floor area over a maximum area of 2000 ft² when supplied with water at a rate of 1156.8 gpm at 43.6 psi at the base of the riser. Hose stream allowance of _____ is included in the above.
 Occupancy classification: Storage To 17ft, Number of heads flowing: 27
 Commodity classification: _____, System Type: Wet
 Maximum storage height: _____, Maximum velocity: 17.04 ft/s
 Storage arrangement: _____
 Flow from In-Rack sprinklers: 0 gpm, Pressure Required at Source: 43.6 psi
 Flow from Overhead sprinklers: 756.8 gpm, Pressure Available at Source: 67.2 psi
 Flow from Inside Hoses: 400 gpm, Surplus Pressure at Source: 20.9 psi
 Flow from Outside Hoses: 0 gpm
 Other fixed flows: 0 gpm
 Total flow in system piping: 1156.8 gpm
 Additional flow at/beyond source: 400 gpm
 Total of all flows: 1556.8 gpm

REV.	DATE	DESCRIPTION
01	APR 6 2024	ISSUED FOR PERMIT



S/D/C
SPRINKLER DESIGN CONSULTING
 23 TURNBULL DRIVE
 BRANTFORD, ONTARIO
 N3T 0K4
 PHONE: 226-388-1503
 EMAIL: jhayhurst@hotmail.ca

DRAWN BY: J.H. CHECKED BY: G.C.

PROJECT #: 062-040424

PROJECT:
 WESTDELL DEVELOPMENT CORP
 COMMERCIAL BUILDING 1-CRU 1B
 1300 FANSHAW PARK ROAD EAST
 LONDON, ONTARIO

SCALE: 1/8" = 1'-0" DWG #: FP - 2
 DATE: APRIL 6, 2024