NEWFOUND GOLD
BAIRD AVE, GANDER, NL

SITE PLAN

NTS

VICINITY MAP

NTS

P & P Sprinklers Ltd.

Ph: (709) 592-2029 **General Delivery, Chapel Arm, NL A0B 1L0** **Fax: (709)592-2019**

WATER SUPPLY TEST

Name of risk: NEWFOUND GOLD File No: _____
Address: Baird Ave Tested By: Mike Power
Municipality: Gander, NL Date: DEC 8, 2021

SYSTEM DATA:
Size of Main: 12" Dead End: _____ Two Ways: _____ Loop: X
Source Reliable: X If not explain: _____
Comments: _____
TEST DATA:
Location of test hydrants: Residual: Hydrant 52
Flow: Hydrant 54

Static pressure: 65 Time: 10:00 A.M. 2:30 P.M.

Test No.	No. of Outlets	Orifice Size (in.)	Pitot Reading (psig)	Equivalent Flow gpm (U.S.)	Total Flow gpm (U.S.)	Residual Pressure (psig)	Comments
1	1	2.5	38	1034	1034	40	

GENERAL NOTES :

1. OUR WORK CONSISTS OF INSTALLING A NEW SPRINKLER SYSTEM CONSISTING OF 3 ZONES FOR PROTECTION THROUGHOUT THE BUILDING AS SHOWN ON THE DRAWINGS.

   ZONE 1: WET SYSTEM : LEVEL 1
   ZONE 2: WET SYSTEM : LEVEL 2
   ZONE 3: DRY SYSTEM : ATTIC

2. OUR WORK STARTS IN THE MECHANICAL ROOM OFF THE NEW 6" CLDI STUB UP. A NEW 6" HEADER WILL BE INSTALLED WITH A NEW 6" DCVA BACKFLOW PREVENTER
3. THE TOWN WATER SUPPLY WILL BE PROTECTED WITH A DOUBLE CHECK TYPE BACKFLOW PREVENTER.
4. ALL WORK AND MATERALS SHALL BE INSTALLED IN ACCORDANCE WITH NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) CODES (NFPA 13 2019), AND THE CANADIAN BUILDING CODE. REQUIREMENTS.
5. SPRINKLER SYSTEMS AND HYDRAULIC REQUIREMENTS ARE PER NFPA 13 (2019), CURRENT CANADIAN BUILDING AND FIRE CODE, AND THE AUTHORITIES HAVING JURISDICTIONS. (SEE HYDRAULIC NOTES)
6. THE REMOTE AREAS SHOWN ON THE PLANS REPRESENT THE HYDRAULICALLY MOST DEMANDING REMOTE AREA OF THE BUILDING. (THIS MAY NOT ALWAYS BE THE PHYSICALLY MOST REMOTE LOCATION OF THE BUILDING).
7. SEE THE SPRINKLER LEGEND FOR SPRINKLER CHARACTERISTICS, FINISHES, AND TEMPERATURE RATINGS. ALL SPRINKLERS SHALL CONFORM TO THIS LEGEND UNLESS SPECIFICALLY NOTED ON THE PLANS.
8. QUICK RESPONSE SEMI-RECESSED CHROME PENDENT SPRINKLERS ARE TO BE INSTALLED AS NOTED IN FINISHED CEILINGS WHERE PIPE IS CONCEALED
   QUICK RESPONSE BRASS UPRIGHT SPRINKLERS WILL BE INSTALLED IN EXPOSED AREAS.
10. WIRE GUARDS SHALL BE PROVIDED FOR SPRINKLERS IN AREAS SUSCEPTIBLE TO DAMAGE AND SPRINKLERS LOWER THAN 7 FT AFF
11. SPARE SPRINKLERS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA ADJACENT TO THE MAIN RISER. AT LEAST ONE SPRINKLER OF ALL TYPES IN THE BUILDING SHALL BE FURNISHED FOR THE CABINETS (NOT INCLUDING DRY TYPE SPRINKLERS WHICH NO SPARES WILL BE PROVIDED). A WRENCH FOR ALL TYPES OF SPRINKLERS SHALL ALSO BE FURNISHED. **THESE SPRINKLER WRENCHES ARE FOR USE ONLY ON THE SPRINKLERS FOR WHICH THEY ARE MADE AND FOR NO OTHER USE. ANY OTHER TOOL (INCLUDING BUT NOT LIMITED TO. 'CHANNEL-LOCKS') SHALL NOT BE USED TO REMOVE OR INSTALL SPRINKLERS **
12. ALL HANGERS SHALL BE SPACED ACCORDING TO NFPA 13 (2019) CHAPTER 17
13. PIPING IS TO BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH NFPA 13 FOR 2 HOURS AT 200 PSI (OR 50 PSI IN EXCESS OF SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER) AT THE SYSTEM RISER. ALL TESTING MUST BE WITNESSED AND SIGNED BY AN AUTHORIZED REPRESENTATIVE OF THE OWNER.
15. ANY TAMPER, PRESSURE, AND WATER FLOW SWITCHES AS WELL AS ANY ANNUNCIATION DEVICES WILL BE PROVIDED AND INSTALLED BY THIS CONTRACTOR BUT THE WIRING IS TO BE DONE BY THE ELECTRICAL CONTRACTOR.
16. FIRE DEPARTMENT CONNECTIONS SHALL BE BRASS FINISH 4" x 2 1/2" x 2 1/2" EXPOSED MOUNTED STYLE AT 32-35" ABOVE GRADE.
17. NO COMBUSTIBLE CONSTRUCTION OR STORAGE IS ALLOWED ABOVE THE CEILING, BELOW FLOORS, OR IN ANY CONCEALED SPACE UNLESS PROTECTED BY SPRINKLERS.
18. SESMIC PROVISIONS OF NFPA 13 ARE NOT REQUIRED AS THIS IS NOT A SESMIC AREA AND IS NOT INCLUDED IN THIS SCOPE OF WORK.
19. WHERE SPRINKLERS DO NOT MEET THE MINIMUM DISTANCE SPACING, NON-COMBUSTIBLE BAFFLES SHALL BE INSTALLED IN BETWEEN.
20. TEST/DRAIN CONNECTION TO DISCHARGE TO A SUITABLE LOCATION (FLOOR DRAIN CAPABLE OF HANDLING DRAIN VOLUME OR TO THE OUTSIDE OF THE BUILDING).
21. FIRESTOPPING SHALL BE PROVIDED ON ALL PIPE PENETRATIONS THROUGH FIRE RATED ASSEMBLIES.
22. SLEEVING FOR PIPING SHALL NOT BE REQUIRED WHERE HOLES ARE DRY CORED AND BARE A SMOOTH BORE.

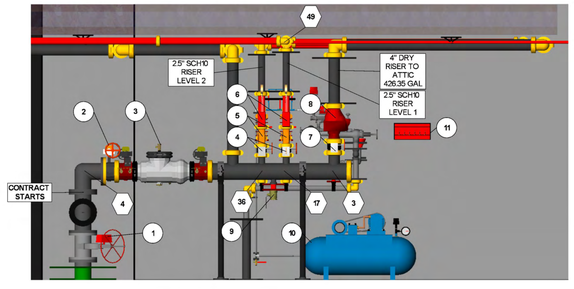
SYSTEM PIPING AND FITTINGS :

WET, BLACK STEEL TO NFPA 13 REQUIREMENTS, C-=120
WET, CPVC TO NFPA 13 REQUIREMENTS, C-=150
DRY, GALVANIZED STEEL TO NFPA 13 REQUIREMENTS, C-=100

UNDERGROUND PVC TO NFPA 13 REQUIREMENTS, C-=150
UNDERGROUND CLDI TO NFPA 13 REQUIREMENTS, C-=140

1 1/4" - 6" SCHEDULE 10, GROOVED FITTINGS
1" - 2" SCHEDULE 40, THREADED FITTINGS
1" - 2" CPVC, CPVC FITTINGS

TOTAL SPRINKLERS THIS PROJECT: 441



1 SPRINKLER ROOM SECTION
SCALE 1/2" = 1'-0"

Maximum Water Supply Pressure psi	System Air Pressure Range psi
20	10
60	15 - 23
80	20 - 28
100	25 - 33
120	30 - 38
145	35 - 43
165	40 - 48
185	45 - 53
205	50 - 58
225	55 - 63
250	60 - 68

TABLE B
SYSTEM AIR PRESSURE REQUIREMENTS

Supply Flow Test Data

Static Pressure	65 PSI
Residual Pressure:	40 PSI
Flow	1034 GPM

8.2.6.7 System Air Pressure.
8.2.6.7.1 The system air pressure shall be maintained in accordance with the instruction sheet furnished with the dry pipe valve, or shall be 20 psi (14 bar) in excess of the calculated trip pressure of the dry pipe valve, based on the highest normal water pressure of the system supply.

TYCO DPV-1 DRY PIPE VALVE:
1 PSI OF AIR HOLDS BACK 5.5 PSI OF WATER

CALCULATED TRIP PRESSURE BASED ON 65 PSI STATIC:
65 PSI / 5.5 PSI = 11.8 PSI

SPRINKLER ROOM PART LIST

Key Note	Size	Description	Quantity
1	NA	TAMPER SWITCH	1
2	6	BUTTERFLY VALVE C/W T.SWITCH	1
3	6	ZURN 350 ASTA DBL CHK ASSY	1
4	2.5	BUTTERFLY VALVE C/W T.SWITCH	2
5	2.5	CHECK VALVE	2
6	2.5	TYCO RM-1 C/W WFS (4.2K TEST ORIFICE C/W PRV=175PSI)	2
7	4	BUTTERFLY VALVE C/W T.SWITCH	1
8	4	Tyco DPV-1	1
9	2	BALL VALVE	1
10	1 HP	FS-0120 OMEGA TANKMOUNT AIR COMPRESSOR	1
11	NA	12 SPRINKLER CABINET	1

SPRINKLER ZONING LEGEND

DEVICE LOCATION	NAME	ALARM/SUPERVISORY
LEVEL 1 MECH ROOM	BUILDING MAIN CONTROL VALVE	SUPERVISORY
LEVEL 1 MECH ROOM	SPRINKLER SYSTEM MAIN CONTROL VALVE	SUPERVISORY
LEVEL 1 MECH ROOM	BACKFLOW CONTROL VALVE 1	SUPERVISORY
LEVEL 1 MECH ROOM	BACKFLOW CONTROL VALVE 2	SUPERVISORY
LEVEL 1 MECH ROOM	LEVEL 1 CONTROL VALVE	SUPERVISORY
LEVEL 1 MECH ROOM	LEVEL 1 FLOW SWITCH	ALARM
LEVEL 1 MECH ROOM	LEVEL 2 CONTROL VALVE	SUPERVISORY
LEVEL 1 MECH ROOM	LEVEL 2 FLOW SWITCH	ALARM
LEVEL 1 MECH ROOM	ATTIC CONTROL VALVE	SUPERVISORY
LEVEL 1 MECH ROOM	ATTIC ALARM PRESSURE SWITCH (PS-10)	ALARM
LEVEL 1 MECH ROOM	ATTIC LOW PRESSURE SWITCH (PS-40)	SUPERVISORY
LEVEL 1 MECH ROOM	AIR COMPRESSOR PRESSURE SWITCH	POWER ONLY

Drawing Title: NOTES / SPECIFICATIONS
Job No. 21-17
Drawn By CP
Scale AS NOTED
Date 26/03/22
Approval By GOV'T SERVICES, NL
Revision Number: 1
Date: 30/03/22

NICET Certification: NICET CERTIFIED WBSL III #147300

Professional Engineer

Compass: N

Design Standards(s)

	Edition and Year
	NFPA 13, 2019
X	NFPA 13R, 2019
	NFPA 13D, 2019
	NFPA 14, 2019
	NFPA 20, 2019
	NFPA 22, 2019
	NFPA 24, 2019
	NFPA 25, 2019
	NFPA 101, 2019
	SPECIAL MEANS / EGRESS

Sheet Symbols: NEW STEEL PIPE; EXISTING STEEL PIPE; NEW CPVC PIPE; EXISTING CPVC PIPE; EL. FINISHED FLOOR; EL. TOP OF STEEL; EL. BOTTOM OF BEAM; DIAMETER / LENGTH; PIPE HANGER; SESMIC BRACING; FOUR-WAY BRACE; HYDRAULIC NODE; RISER UP / DOWN; SECTION CALL-OUT

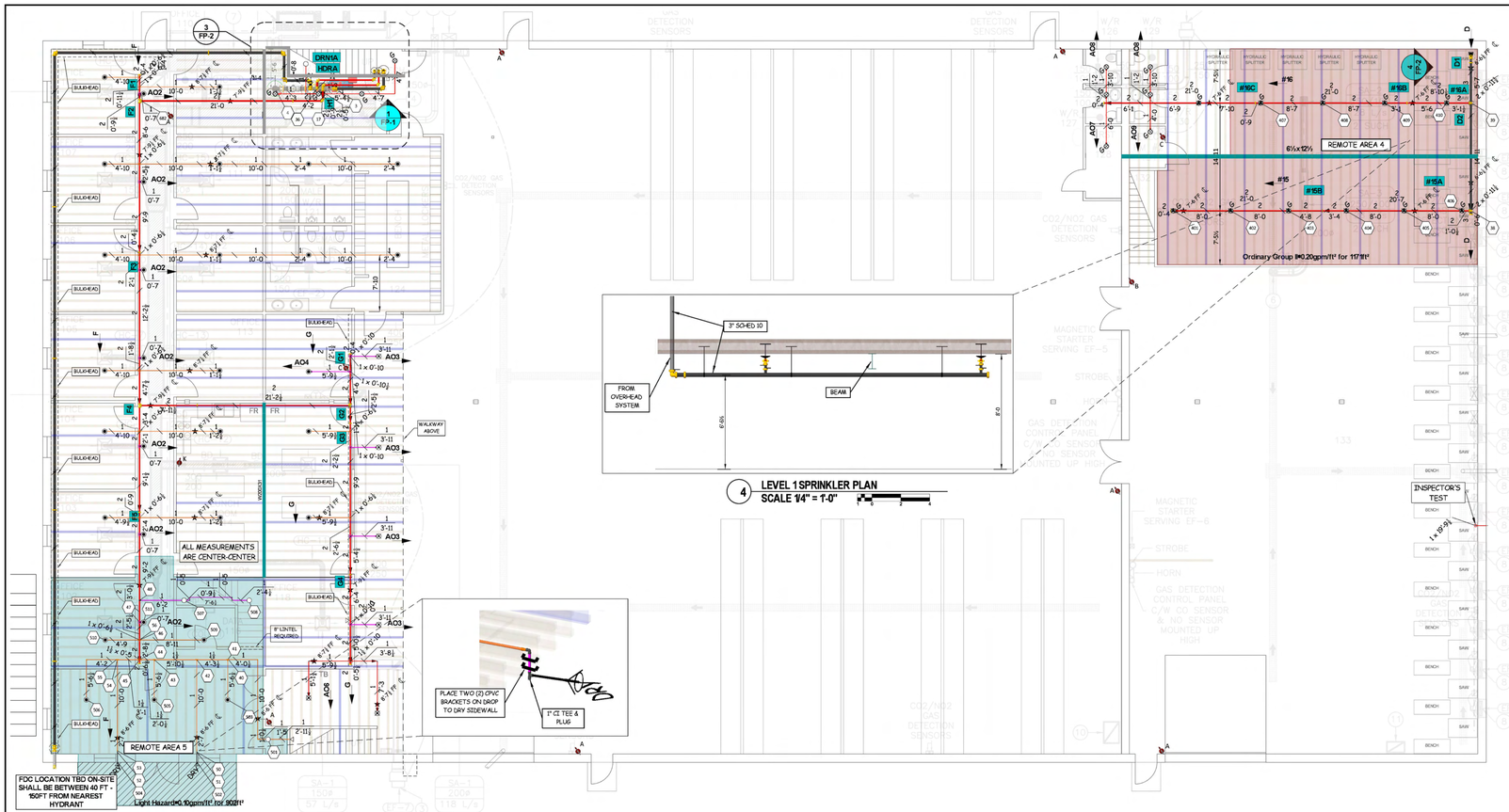
Project Address:
NEWFOUND GOLD
BAIRD AVE, GANDER, NL

Installing Contractor:
P & P SPRINKLERS LTD
6 MAIN RD
CHAPEL ARM, NL, A0B 1L0
Phone - (709) 592-2029

P&P Sprinklers Ltd.

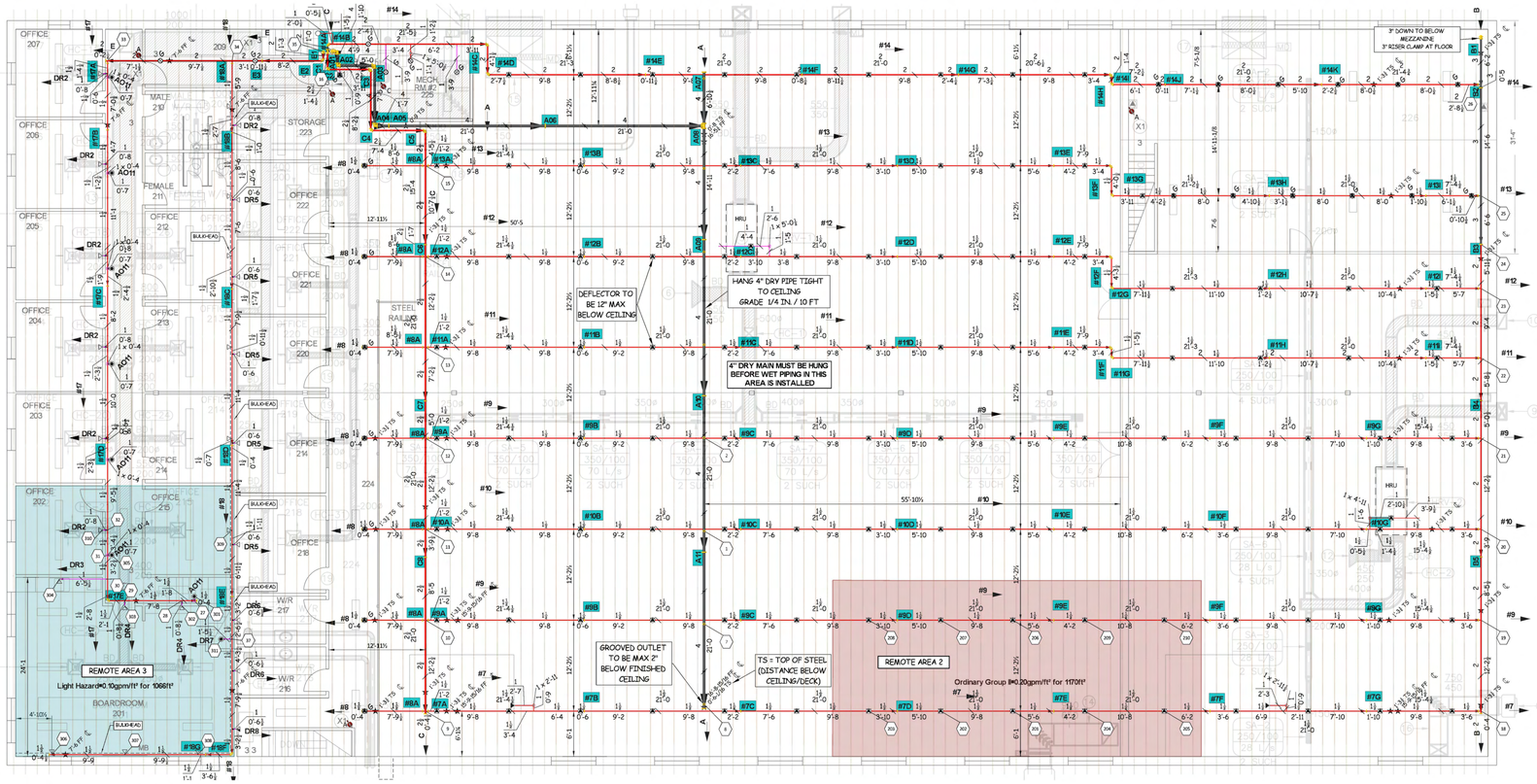
SITE PLAN NOTES & DETAILS

FP-1



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

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



2 LEVEL 2 SPRINKLER PLAN
SCALE 1/8" = 1'-0"

Hydraulic Information

Remote Area 4	
OCCUPANCY CLASSIFICATION	Ordinary Group II
DENSITY (gpm/ft²)	0.20 for 1500ft² (Actual 117ft²)
QUICK RESPONSE REDUCTION	17'-3 Ceiling (29.1%) 1063ft²
TOTAL HOSE STREAMS	250.00
TOTAL HEADS FLOWING	10
K-FACTOR	8
TOTAL WATER REQUIRED	508.73
TOTAL PRESSURE REQUIRED	56.358
BASE of RISER (gpm)	259.73
BASE of RISER (psi)	51.216
SAFETY MARGIN (psi)	+1.886 (3.2%)

Hydraulic Information

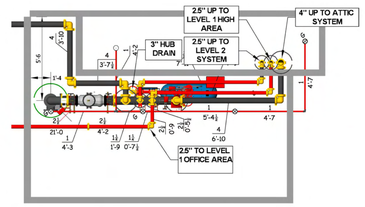
Remote Area 5	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.10 for 1500ft² (Actual 902ft²)
QUICK RESPONSE REDUCTION	8'-0 Ceiling (40.0%) 900ft²
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	11
K-FACTOR	5.6
TOTAL WATER REQUIRED	279.64
TOTAL PRESSURE REQUIRED	54.160
BASE of RISER (gpm)	179.64
BASE of RISER (psi)	49.515
SAFETY MARGIN (psi)	+8.615 (13.7%)

Sprinkler Legend

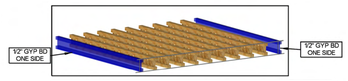
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Tyco	TY3131	TY-FRB	10	5.6	Upright	½	Quick	Natural Brass	200°F	WIRE GUARD
	Tyco	TY3231	TY-FRB	31	5.6	Pendent	½	Quick	Chrome	200°F	
	Tyco	TY3131	TY-FRB	4	5.6	Upright	½	Quick	Natural Brass	200°F	
	Tyco	TY3331	TY-FRB	1	5.6	Sidewall	½	Quick	Chrome	200°F	
	Tyco	TY4231	TY-FRB	6	8	Pendent	¾	Quick	Chrome	200°F	
	Tyco	TY4131	TY-FRB	11	8	Upright	¾	Quick	Natural Brass	200°F	WIRE GUARD
	Tyco	TY3338	DS-1	2	5.6	Sidewall	1	Quick	Chrome	200°F	
	Tyco	TY3331	TY-FRB	1	5.6	Sidewall	½	Quick	Chrome	200°F	
				Total = 66							

FIRE EXTINGUISHER LEGEND

Key Note	Size	Description	Quantity
A	5 LB	ABC DRY CHEMICAL	10
B	10 LB	ABC DRY CHEMICAL	1
C	5 LB	CO2	3
K	6L	K TYPE WET CHEMICAL	1



3 SPRINKLER ROOM
SCALE 1/4" = 1'-0"



NFPA 13, 2019: 9.3.3.15.2
THE FOLLOWING UNSPRINKLERED CONCEALED SPACES SHALL NOT REQUIRE A MINIMUM AREA OF SPRINKLER OPERATION OF 3000 FT2 (280 M2):

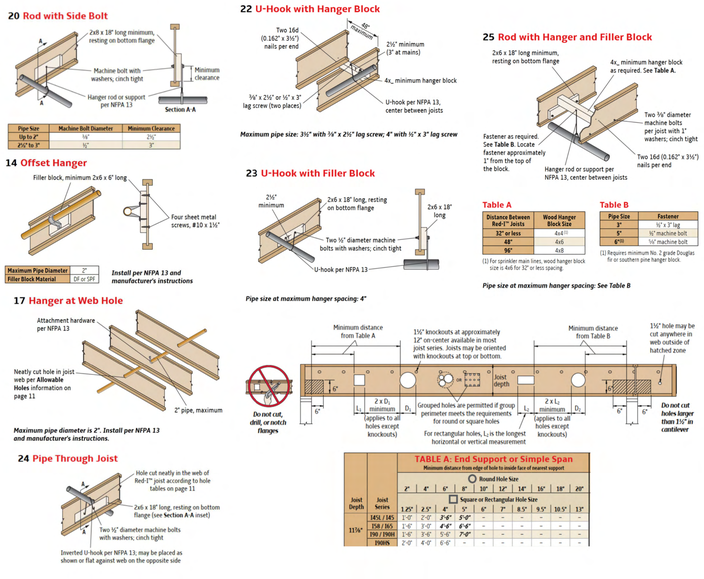
NFPA 13, 2019: 9.3.3.15.2(10):
COMPOSITE TJI JOISTS TO BE FIRESTOPPED INTO VOLUMES NOT EXCEEDING 160 CU-FT USING MATERIALS EQUIVALENT TO 1/2 IN. (13 MM) GYPSUM BOARD, AND AT LEAST 31/2 IN. (90 MM) OF BATT INSULATION IS INSTALLED AT THE BOTTOM OF THE JOIST CHANNELS WHEN THE CEILING IS ATTACHED UTILIZING METAL CHANNELS.

OR

NFPA 13, 2019: 9.3.3.15.2(3):
COMBUSTIBLE CONCEALED SPACES FILLED ENTIRELY WITH NONCOMBUSTIBLE INSULATION.

SEE PLAN JOISTS COLORED BLUE REQUIRE GB ON ONE SIDE

4 COMBUSTIBLE CONCEALED SPACE REQUIREMENTS FOR TJI
SCALE 1/4" = 1'-0"



Pipe Size	Machine Bolt Diameter	Minimum Clearance
Up to 2"	¼"	2½"
2½" to 3"	⅜"	3"

Maximum pipe size: 3½" with ⅜" x 2½" lag screw; 4" with ½" x 3" lag screw

Maximum Pipe Diameter	2"
Filler Block Material	DF or SPF

Install per NFPA 13 and manufacturer's instructions

Pipe size at maximum hanger spacing: 4"

Table A

Distance Between Rod (1") Joists	Wood Hanger Block Size
32" or less	4x4[1]
48"	4x6
96"	4x8

(1) For sprinkler main lines, wood hanger block size is 4x6 for 32" or less spacing

Table B

Pipe Size	Fastener
2"	½" x 3" lag
5"	½" machine bolt
6"[1]	½" machine bolt

(1) Requires minimum No. 2 grade Douglas fir or southern pine hanger block

Pipe size at maximum hanger spacing: See Table B

Maximum pipe diameter is 2". Install per NFPA 13 and manufacturer's instructions.

Do not cut, drill, or notch flanges

TABLE A: End Support or Simple Span
Minimum distance from edge of hole to inside face of nearest support

Joist Depth	Joist Series	2"	4"	6"	8"	10"	12"	14"	16"	18"	20"
		Square or Rectangular Hole Size									
		Round Hole Size									
		1.25"	2.5"	4"	5"	6"	7"	8.5"	9.5"	10.5"	11"
11¾"	145i / 145	1'-0"	2'-0"	3'-6"	5'-0"	-	-	-	-	-	-
	150 / 150	1'-0"	3'-0"	4'-6"	6'-6"	-	-	-	-	-	-
	150 / 150SI	1'-0"	3'-6"	5'-6"	7'-0"	-	-	-	-	-	-
	150SCR	2'-0"	6'-0"	6'-6"	-	-	-	-	-	-	-

Inverted U-hook per NFPA 13; may be placed as shown or flat against web on the opposite side

Hydraulic Information

Remote Area 2	
OCCUPANCY CLASSIFICATION	Ordinary Group II
DENSITY (gpm/ft²)	0.20 for 1500ft² (Actual 1170ft²)
QUICK RESPONSE REDUCTION	17'-3 Ceiling (29.1%) 1063ft²
TOTAL HOSE STREAMS	250.00
TOTAL HEADS FLOWING	10
K-FACTOR	8
TOTAL WATER REQUIRED	489.61
TOTAL PRESSURE REQUIRED	54.114
BASE of RISER (gpm)	239.61
BASE of RISER (psi)	49.111
SAFETY MARGIN (psi)	+4.615 (7.9%)

Hydraulic Information

Remote Area 3	
OCCUPANCY CLASSIFICATION	Light Hazard (Room Design)
DENSITY (gpm/ft²)	0.10 for 1500ft² (Actual 1066ft²)
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	11
K-FACTOR	5.6
TOTAL WATER REQUIRED	279.43
TOTAL PRESSURE REQUIRED	54.987
BASE of RISER (gpm)	179.43
BASE of RISER (psi)	50.343
SAFETY MARGIN (psi)	+7.791 (12.4%)

Sprinkler Legend

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Tyco	TY3331	TY-FRB	2	5.6	Sidewall	½	Quick	Natural Brass	200°F	
	Tyco	TY3331	TY-FRB	26	5.6	Sidewall	½	Quick	Chrome	200°F	
	Tyco	TY3131	TY-FRB	1	5.6	Upright	½	Quick	Natural Brass	200°F	
	Tyco	TY3131	TY-FRB	6	5.6	Upright	½	Quick	Natural Brass	200°F	WIRE GUARD
	Tyco	TY4131	TY-FRB	110	8	Upright	¾	Quick	Natural Brass	200°F	
	Tyco	TY3231	TY-FRB	8	5.6	Pendent	½	Quick	Chrome	200°F	
	Tyco	TY5332	SW-20	1	11.2	Sidewall	¾	Quick	Chrome	200°F	
	Tyco	TY4131	TY-FRB	20	8	Upright	¾	Quick	Natural Brass	200°F	WIRE GUARD
				Total = 174							

Drawing Title: NOTES / SPECIFICATIONS
Job No. 21-17
Drawn By CP
Scale AS NOTED
Date 26/03/22
Approval By GOV'T SERVICES, NL
Revision Number: 1
Date: 26/03/22

NICET Certification: NICET CERTIFIED WBSL III #147300

Professional Engineer

Compass

Design Standard(s) Edition and Year

	NFPA 13, 2019	
	NFPA 13R, 2019	
	NFPA 13D, 2019	
X	NFPA 14, 2019	
	NFPA 20, 2019	
	NFPA 22, 2019	
	NFPA 24, 2019	
	NFPA 25, 2019	
	NFPA 101, 2019	
	BP/EAGAL MEANS / EGRESS	

Sheet Symbols

NEW STEEL PIPE	DIAMETER / LENGTH
EXISTING STEEL PIPE	PIPE HANGER
NEW CPVC PIPE	SESMIC BRACING
EXISTING CPVC PIPE	FOUR WAY BRACE
EL. FINISHED FLOOR	HYDRAULIC NODE
EL. TOP OF STEEL	RISER UP / DOWN
EL. BOTTOM OF BEAM	SECTION CALL-OUT

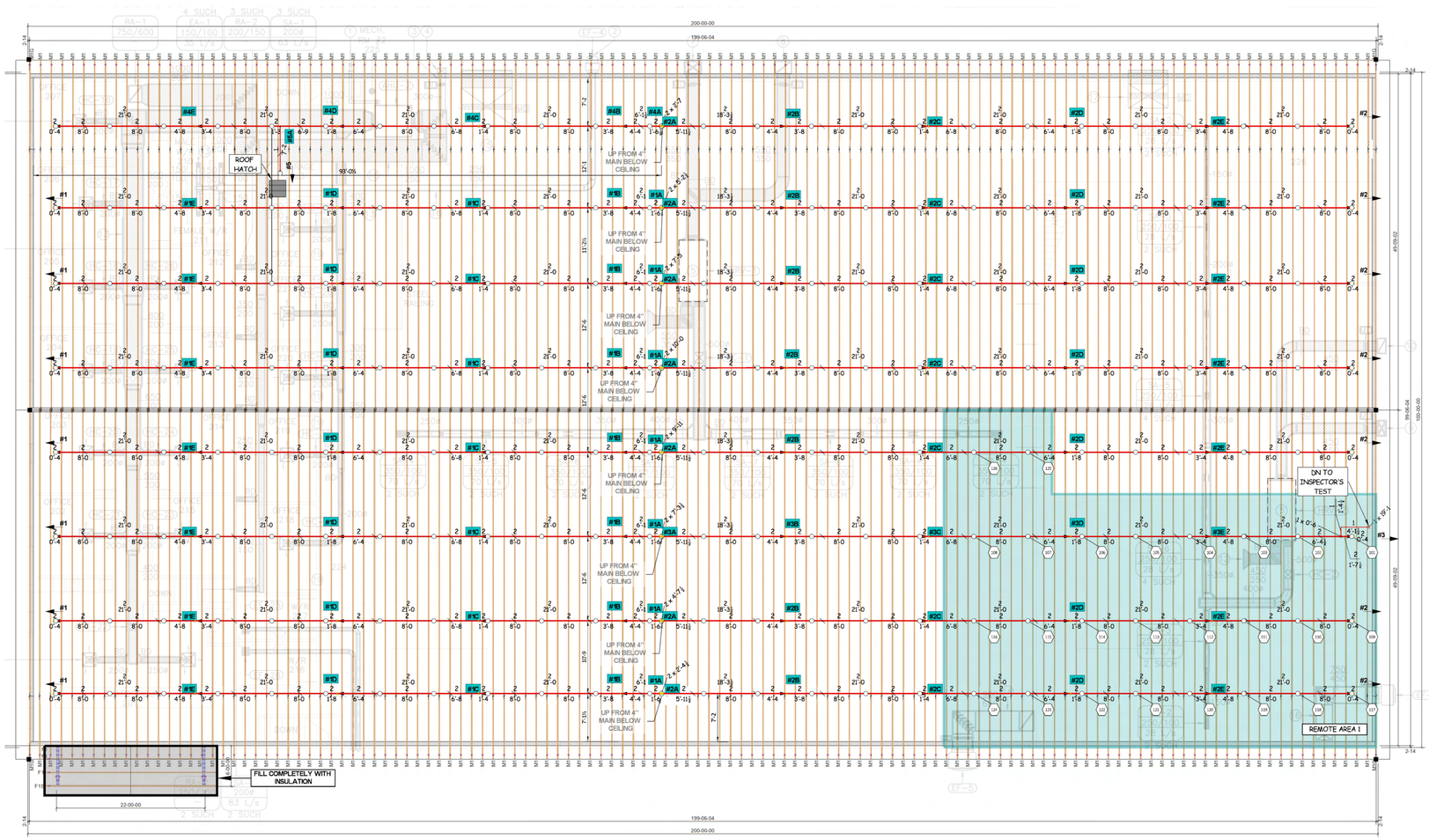
Project Address:
NEWFOUND GOLD
BAIRD AVE, GANDER, NL

Installing Contractor:
P & P SPRINKLERS LTD
6 MAIN TRAIL
SHAPELEAN, NL A0B 1L0
Phone : (709) 592-2029

P&P Sprinklers LTD

LEVEL 1 & 2 SPRINKLER LAYOUT

FP-2



Sprinkler Legend											
Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
◯	Tyco	TY3131	TY-FRB	201	5.6	Upright	½	Quick	Natural Brass	200°F	
				Total = 201							

Hydraulic Information	
Remote Area 1	
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.10 for 2535ft² (Actual 2720ft²)
TOTAL HOSE STREAMS	100.00
DRY CAPACITY	426.25gal
TOTAL HEADS FLOWING	26
K-FACTOR	5.6
TOTAL WATER REQUIRED	536.63
TOTAL PRESSURE REQUIRED	55.585
BASE of RISER (gpm)	436.63
BASE of RISER (psi)	48.820
SAFETY MARGIN (psi)	+1985 (3.4%)

ADDITIONAL SPRINKLER NOTES AND CODE REFERENCES:

REMINDER NOTES TO FITTER:
FITTER TO CONFIRM LIGHTING & CEILING TYPES/LOCATION/HEIGHT WITH CONTRACTOR ONSITE AND ENSURE SPRINKLERS ARE INSTALLED APPROPRIATELY AND MEET OBSTRUCTION RULES. (TYPICAL)

HEAD GUARDS SHALL BE INSTALLED IN AREAS SUCH AS MECHANICAL ROOMS, SERVICE ROOMS, ELEVATOR SHAFTS, BELOW LOWER STAIR LANDINGS, EXTERIOR LOCATIONS, ETC. WHERE SPRINKLERS ARE SUSCEPTIBLE TO MECHANICAL DAMAGE OR VANDALISM. (TYPICAL)

HANGER NOTES:
NFPA 13 (13) - 9.2.3.4 - END OF LINE HANGERS SHALL BE INSTALLED MAXIMUM:
- 36" FROM END HEAD FOR 1" STEEL PIPE
- 48" FOR 1 1/4" STEEL PIPE
- 60" FOR 1 1/2" STEEL PIPE OR LARGER

<NOTE: UNSUPPORTED LENGTH BETWEEN END PENDENT SPRINKLER OR DROP AND LAST HANGER ON LINE SHALL NOT BE GREATER THAN 12" FOR STEEL PIPE.>

NFPA 13 (13) - 9.2.3.5 - MAX CUMULATIVE HORZONTAL LENGTH OF UNSUPPORTED ARMOVERS TO A SPRINKLER FOR STEEL PIPE SHALL NOT EXCEED 24" (TYPICAL)

TEST CONNECTIONS - WET PIPE SYSTEMS - NFPA 13 (2013)
8.17.4.2 - A TEST CONNECTION SHALL BE PROVIDE TO ENSURE FLOW.
8.17.4.1 - TEST CONNECTION PIPING SHALL BE MIN. 1 PIPE
8.17.4.2.2 - TEST CONNECTION VALVE SHALL BE READILY ACCESSIBLE
8.17.4.2.4 - TEST CONNECTION MAY BE INSTALLED IN ANY LOCATION ON THE SYSTEM DOWNSTREAM OF WATERFLOW ALARM.
(TYPICAL)

OR REDUCTION RULE - NFPA 13 (2013) - 11.2.3.2.3
HYDRAULIC DESIGN AREA MAY BE REDUCED TO UP TO 40%/%% WHEN IT IS A WET PIPE SYSTEM, LIGHT OR ORDINARY HAZARD OCCUPANCY, MAX 20FT CEILING HEIGHT, AND THERE ARE NO UNPROTECTED CEILING POCKETS EXCEEDING 32 SQ. FT.

SMALL ROOM RULE - NFPA 13 (2013) - 8.6.3.2.4
STANDARD COVERAGE SPRINKLERS MAY BE INSTALLED MAX 9FT FROM ONE WALL IN LIGHT HAZARD OCCUPANCIES
(TYPICAL THROUGHOUT)

OBSTRUCTIONS - NFPA 13 (2013) - 8.5.5.3.1
SPRINKLER COVERAGE TO BE PROVIDED UNDER FIXED OBSTRUCTIONS OVER 4FT WIDE SUCH AS DUCTS, OPEN GRATE FLOORING, AND OVERHEAD DOORS. (CONFIRM LOCATIONS ONSITE) (TYPICAL)

NFPA 13 (2013) - 8.5.5.4. CLOSETS
IN ALL CLOSETS AND COMPARTMENTS, INCLUDING THOSE CLOSETS HOUSING MECHANICAL EQUIPMENT, THAT ARE NOT LARGER THAN 400 CU. FT. IN SIZE, A SINGLE SPRINKLER AT THE TOP OF THE HIGHEST CEILING SPACE SHALL BE SUFFICIENT WITHOUT REGARD TO OBSTRUCTIONS OR MINIMUM DISTANCE TO THE WALL.

OVERHANGS - NFPA 13 (2013) - 8.15.7
SPRINKLERS ARE NOT REQUIRED UNDER NON OR LIMITED COMBUSTIBLE OVERHANGS PROVIDED THERE WILL BE NO STORAGE OF COMBUSTIBLES AND AREA UNDERNEATH IS RESTRICTED TO PEDESTRIAN USE OR BRIEF STOPPING OF AUTOMOBILES. (TYPICAL)

SHAFTS - NFPA 13 (2013) - 8.15.2.1.1
SPRINKLERS ARE NOT REQUIRED IN NON & LIMITED COMBUSTIBLE SHAFTS WHICH ARE NOT ACCESSIBLE.
(CONFIRM ONSITE)(TYPICAL)

TEMPERATURE RATINGS - NFPA 13 (2013) - TABLE 8.3.2.5
200° SPRINKLERS TO BE INSTALLED AROUND DIFFUSERS AND HEATING UNITS (VERIFY LOCATIONS ONSITE)(TYPICAL)
(REFER TO UNIT HEATER DETAIL)

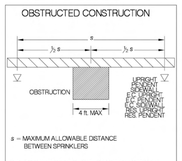
NOTE:
GC TO ENSURE ADEQUATE HEAT IS PROVIDED FOR WET SPRINKLER LINES THROUGHOUT THE BUILDING.

SPRIGS - NFPA 13 (2013) - 9.2.3.7
SPRIGS 4 ft OR LONGER SHALL BE RESTRAINED AGAINST LATERAL MOVEMENT

CLEARANCE - NFPA 13 (2013) - 8.5.6
THE CLEARANCE BETWEEN THE DEFLECTOR AND THE TOP OF STORAGE OR CONTENTS OF THE ROOM SHALL BE 18 in. OR GREATER.

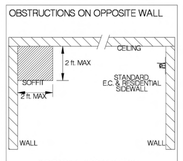
STANDARD, E.C. & RESIDENTIAL SPRINKLERS:

OBSTRUCTED CONSTRUCTION



OPPOSITE SIDES OF OBSTRUCTION
SCALE: NTS

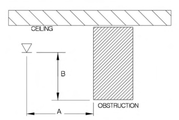
OBSTRUCTIONS ON OPPOSITE WALL



SIDEWALL SPRINKLERS
SCALE: NTS

STANDARD SPRAY UPRIGHT & PENDENT SPRINKLERS:

POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTIONS TO DISCHARGE



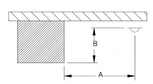
DISTANCE FROM SPRINKLER TO SIDE OF CEILING OBSTRUCTION (DIMENSION A)	MAX DISTANCE OF DEFLECTOR ABOVE OBSTRUCTION (DIMENSION B)
LESS THAN 1'-0"	0"
1'-0" TO LESS THAN 1'-6"	2½"
1'-6" TO LESS THAN 2'-0"	3½"
2'-0" TO LESS THAN 2'-6"	5½"
2'-6" TO LESS THAN 3'-0"	7½"
3'-0" TO LESS THAN 3'-6"	9½"

(DIMENSION A)	(DIMENSION B)
3'-6" TO LESS THAN 4'-0"	12"
4'-0" TO LESS THAN 4'-6"	14"
4'-6" TO LESS THAN 5'-0"	16½"
5'-0" TO LESS THAN 5'-6"	18"
5'-6" TO LESS THAN 6'-0"	20"
6'-0" TO LESS THAN 6'-6"	24"
6'-6" TO LESS THAN 7'-0"	30"
7'-0" TO LESS THAN 7'-6"	35"

STANDARD SPRAY UPRIGHT & PENDENT SPRINKLER OBSTRUCTIONS
SCALE: NTS

STANDARD SIDEWALL SPRAY SPRINKLERS:

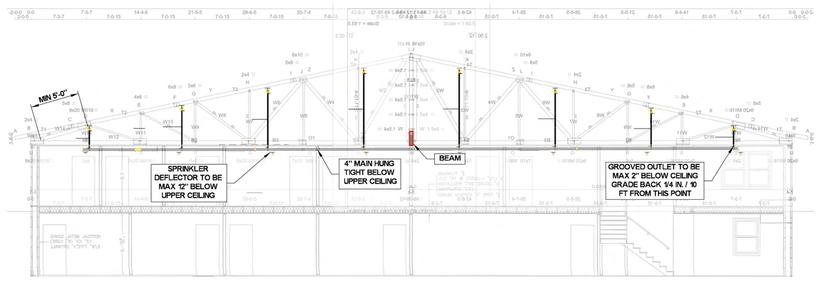
POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTION ALONG WALL



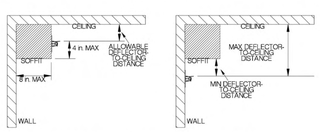
DISTANCE FROM SPRINKLER TO SIDE OF CEILING OBSTRUCTION (DIMENSION A)	MAX DISTANCE OF DEFLECTOR ABOVE OBSTRUCTION (DIMENSION B)
0'-4" TO LESS THAN 0'-6"	1"
0'-6" TO LESS THAN 1'-0"	2"
1'-0" TO LESS THAN 1'-6"	3"
1'-6" TO LESS THAN 2'-0"	4½"
2'-0" TO LESS THAN 2'-6"	5½"
2'-6" TO LESS THAN 3'-0"	7"
3'-0" TO LESS THAN 3'-6"	8"

(DIMENSION A)	(DIMENSION B)
3'-6" TO LESS THAN 4'-0"	9½"
4'-0" TO LESS THAN 4'-6"	10"
4'-6" TO LESS THAN 5'-0"	11½"
5'-0" TO LESS THAN 5'-6"	12½"
5'-6" TO LESS THAN 6'-0"	14"
6'-0" TO LESS THAN 6'-6"	15"
6'-6" TO LESS THAN 7'-0"	16½"
7'-0" TO LESS THAN 7'-6"	17½"

STANDARD SIDEWALL SPRAY SPRINKLER OBSTRUCTIONS
SCALE: NTS

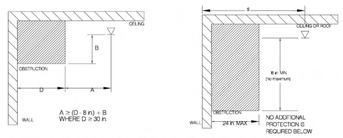


LINTELS & SOFFITS



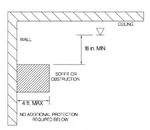
STANDARD, E.C. & RESIDENTIAL SIDEWALL SPRINKLERS
SCALE: NTS

OBSTRUCTIONS AGAINST WALL



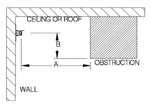
STANDARD SPRAY UPRIGHT & PENDENT SPRINKLER OBSTRUCTIONS
SCALE: NTS

OBSTRUCTION AGAINST WALL



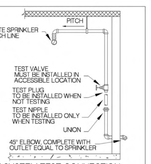
STANDARD UPRIGHT & PENDENT
SCALE: NTS

POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTION



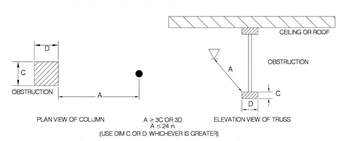
DISTANCE FROM SPRINKLER TO SIDE OF OBSTRUCTION (DIMENSION A)	MAX DISTANCE OF DEFLECTOR ABOVE OBSTRUCTION (DIMENSION B)
LESS THAN 4'-0"	NOT ALLOWED
4'-0" TO LESS THAN 5'-0"	1"
5'-0" TO LESS THAN 5'-6"	2"
5'-6" TO LESS THAN 6'-0"	3"
6'-0" TO LESS THAN 6'-6"	4"
6'-6" TO LESS THAN 7'-0"	6"
7'-0" TO LESS THAN 7'-6"	7"
7'-6" TO LESS THAN 8'-0"	9"
8'-0" TO LESS THAN 8'-6"	11"
8'-6" OR GREATER	14"

STANDARD SIDEWALL SPRAY SPRINKLER OBSTRUCTIONS
SCALE: NTS



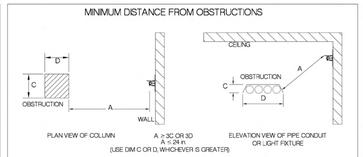
DRY SYSTEM TEST CONNECTION
SCALE: NTS

MINIMUM DISTANCE FROM OBSTRUCTIONS

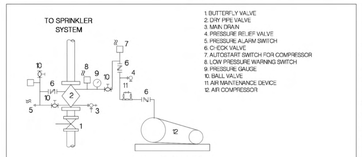


STANDARD SPRAY UPRIGHT & PENDENT SPRINKLER OBSTRUCTIONS
SCALE: NTS

MINIMUM DISTANCE FROM OBSTRUCTIONS



STANDARD SIDEWALL SPRAY SPRINKLER OBSTRUCTIONS
SCALE: NTS

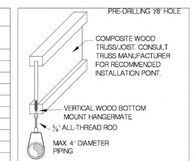


1. BUTTERFLY VALVE
2. DRY PIPE VALVE
3. MAIN DRAIN
4. PRESSURE RELIEF VALVE
5. PRESSURE ALARM SWITCH
6. CHECK VALVE
7. AUTOSTART SWITCH FOR COMPRESSOR
8. LOW PRESSURE WARNING SWITCH
9. PRESSURE GAUGE
10. BALL VALVE
11. AIR MAINTENANCE DEVICE
12. AIR COMPRESSOR

DRY VALVE DETAIL
SCALE: NTS

STEEL HANGER SPACING

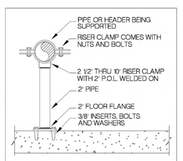
NOMINAL PIPE SIZE (INCHES)	MAXIMUM DISTANCE (FEET)
¾"	N/A
1"	12'-0"
1 ¼"	12'-0"
1 ½"	15'-0"
2"	15'-0"
2½"	15'-0"
3"	15'-0"
3½"	15'-0"
4"	15'-0"
5"	15'-0"
6"	15'-0"
8"	15'-0"



WOOD BOTTOM MOUNT HANGER
SCALE: NTS

WOOD SIDE MOUNT HANGER
SCALE: NTS

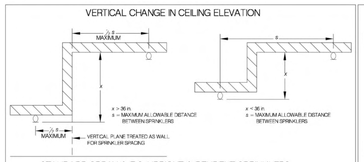
WOOD BOTTOM MOUNT HANGER
SCALE: NTS



PIPE STAND DETAIL
SCALE: NTS

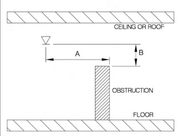
STANDARD SPRAY & E.C. UPRIGHT & PENDENT SPRINKLERS:

VERTICAL CHANGE IN CEILING ELEVATION



STANDARD SPRAY & E.C. UPRIGHT & PENDENT SPRINKLERS
SCALE: NTS

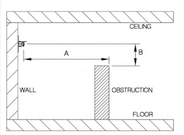
SUSPENDED OR FLOOR-MOUNTED OBSTRUCTION IN LIGHT HAZARD



HORIZONTAL DISTANCE (DIMENSION A)	MINIMUM VERTICAL DISTANCE BELOW DEFLECTOR (DIMENSION B)
6" OR LESS	3"
MORE THAN 6" TO 9"	4"
MORE THAN 9" TO 12"	6"
MORE THAN 12" TO 15"	8"
MORE THAN 15" TO 18"	9½"
MORE THAN 18" TO 24"	12½"
MORE THAN 24" TO 30"	15½"
MORE THAN 30"	18"

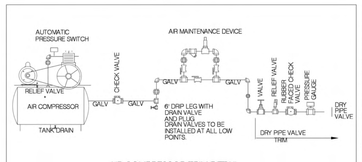
STANDARD SPRAY UPRIGHT & PENDENT SPRINKLER OBSTRUCTIONS
SCALE: NTS

SUSPENDED OR FLOOR-MOUNTED OBSTRUCTION IN LIGHT HAZARD



HORIZONTAL DISTANCE (DIMENSION A)	MINIMUM VERTICAL DISTANCE BELOW DEFLECTOR (DIMENSION B)
6" OR LESS	3"
MORE THAN 6" TO 9"	4"
MORE THAN 9" TO 12"	6"
MORE THAN 12" TO 15"	8"
MORE THAN 15" TO 18"	9½"
MORE THAN 18" TO 24"	12½"
MORE THAN 24" TO 30"	15½"
MORE THAN 30"	18"

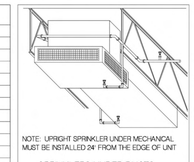
STANDARD SIDEWALL SPRAY SPRINKLER OBSTRUCTIONS
SCALE: NTS



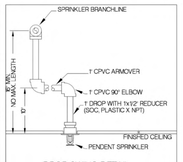
AIR COMPRESSOR TRIM DETAIL
SCALE: NTS

Maximum Water Supply Pressure (psi)	System Air Pressure Range (psi)
20	10
60	15-23
80	20-28
100	25-33
120	30-38
145	35-43
165	40-48
185	45-53
205	50-58
225	55-63
250	60-68

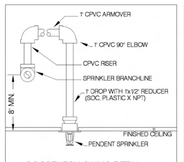
SYSTEM AIR PRESSURE REQUIREMENTS - TYCO DPV-1



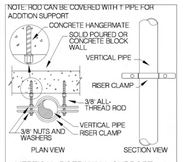
SPRINKLERS UNDER DUCTS
SCALE: NTS



DROP SWING DETAIL
SCALE: NTS



GOOSENECK SWING DETAIL
SCALE: NTS



VERTICAL RISER WALL SUPPORT
SCALE: NTS

Project Address:
NEWFOUND GOLD
BAIRD AVE, GANDER, NL

Installing Contractor:
P & P SPRINKLERS LTD
6 MAIN RD
CHAPEL ARM, NL A0B 1L0
Phone : (709) 592-2029

P&P Sprinklers Ltd.

ATTIC SPRINKLER LAYOUT

FP-3

Drawing Title: NOTES / SPECIFICATIONS
Job No. 21-17
Drawn By CP
Scale AS NOTED
Date 26/03/22
Approval By GOV'T SERVICES, NL
Revision Number: 1
Date: 26/03/22

NICET Certification: NICET CERTIFIED WBSL III #147300

Professional Engineer

Compass: N

Design Standard(s) Edition and Year

	NFPA 13, 2013
X	NFPA 13R, 2019
	NFPA 13D, 2019
	NFPA 14, 2019
	NFPA 20, 2019
	NFPA 22, 2018
	NFPA 24, 2019
	NFPA 25, 2019
	NFPA 101, 2019
	SPECIAL MEANS EGRESS

Sheet Symbols

NEW STEEL PIPE	DIAMETER / LENGTH
EXISTING STEEL PIPE	PIPE HANGER
NEW CPVC PIPE	SESMIC BRACING
EXISTING CPVC PIPE	FOUR-WAY BRACE
EL. FINISHED FLOOR	HYDRAULIC NODE
EL. TOP OF STEEL	RISER UP / DOWN
EL. BOTTOM OF BEAM	SECTION CALL-OUT