



FIRE PROTECTION LEGEND:

- BREAK
- PIPE DOWN
- PIPE UP
- BALL VALVE
- PRESSURE SENSOR
- CHECK VALVE
- ZONE VALVE
- END CAP
- EXISTING PENDANT SPRINKLER HEAD
- RELOCATED PENDANT SPRINKLER HEAD
- NEW PENDANT SPRINKLER HEAD
- NEW CONCEALED SPRINKLER HEAD
- EXISTING SPRINKLER PIPING
- SPRINKLER AREAS AFFECTED BY RENOVATIONS

FIRE PROTECTION PLAN LAYOUT



GENERAL NOTES:

1. INSTALL IN ACCORDANCE WITH NATIONAL BUILDING CODE (LATEST EDITION), NATIONAL PLUMBING CODE OF CANADA (LATEST EDITION), AND LOCAL AUTHORITY HAVING JURISDICTION.
2. CONSTRUCTION WORK SHALL CONFORM TO SMACNA'S "IAQ GUIDELINES FOR OCCUPIED BUILDINGS UNDER CONSTRUCTION". OTHER AREAS OF THE BUILDING WILL BE OCCUPIED AND THE AIR SYSTEMS REMAIN IN USE FOR THE DURATION OF CONSTRUCTION. THE CONTRACTOR IS TO PROVIDE A PLAN TO CONSULTANTS OUTLINING HOW CONTAMINANTS WILL BE KEPT OUT OF CEILING SPACES, DUCTWORK, AIR HANDLING EQUIPMENT AND NON-CONSTRUCTION AREAS OF THE BUILDING. IT SHALL FOLLOW THE FIVE BASIC STRATEGIES FOR:
  1. HVAC PROTECTION
  2. SOURCE CONTROL
  3. PATHWAY INTERRUPTION
  4. HOUSEKEEPING
  5. SCHEDULING
3. PROVIDE INFORMATION TO THE ENGINEER ON INTERFERENCES PRIOR TO INSTALLATION.
4. DRAWINGS DO NOT SHOW ALL REQUIRED CHANGES IN ELEVATION OF PIPING AND DUCTWORK.

NOTES: VENTILATION

1. DUCTWORK SHALL BE INSULATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS AND THE MNECB.
2. ALL DUCTS TO BE PROPERLY SEALED IN ACCORDANCE WITH SMACNA STANDARDS. DETERMINE THE OPERATING PRESSURE FOR THE SEAL STANDARD BASED ON 1.5 TIMES THE TOTAL FAN STATIC INDICATED ON THE EQUIPMENT SCHEDULES.
3. PROVIDE TURNING VANES FOR ALL 90° SQUARE ELBOWS, REGARDLESS OF WHETHER OR NOT THIS IS DRAWN ON THE PLANS.

4. PROVIDE MAINTENANCE ACCESS TO ALL MECHANICAL COMPONENTS, PROVIDE INSULATED DUCT ACCESS DOORS AS REQUIRED.

5. SECURELY FASTEN ALL MECHANICAL EQUIPMENT TO THE BUILDING STRUCTURE. PROVIDE ALL NECESSARY SECONDARY STRUCTURAL STEEL SUPPORTS. NOTE THAT MECHANICAL SHAFT SHAPES AND SIZES WILL NOT PERMIT THE USE OF STANDARD SMACNA DETAILS FOR PROPER SUPPORT OF MECHANICAL EQUIPMENT. DESIGN AND PROVIDE SECONDARY SUPPORT STEEL TO ENSURE PROPER SUPPORT OF ALL MECHANICAL COMPONENTS WITHIN DUCT SHAFTS

6. PROVIDE OPPOSED BLADE BALANCING DAMPERS AT ALL FINAL BRANCH DUCT TAKEOFFS, REGARDLESS OF WHETHER OR NOT THESE ARE SHOWN ON THE PLANS. LOCATE DAMPERS TO FACILITATE PROPER BALANCING OF THE SYSTEM.

7. CONFORM WITH MANUFACTURERS REQUIREMENTS AND THE RECOMMENDATIONS & REQUIREMENTS OF THE NATIONAL BUILDING CODE, SMACNA, AND ASHRAE.

FIRE PROTECTION NOTES:

1. THE THE SCOPE OF THIS PROJECT SHALL INCLUDE DESIGN & PHYSICAL MODIFICATIONS TO THE EXISTING SPRINKLER HEADS AND PIPING TO SUIT THE RENOVATED AREAS. SPRINKLER WORK SHALL BE PERFORMED BY A FULLY QUALIFIED SPRINKLER CONTRACTOR WITH NOVA SCOTIA PROFESSIONAL ENGINEER EMPLOYED BY THE CONTRACTOR ON STAFF.
2. ALL SPACES ABOVE CEILING TO BE NON COMBUSTIBLE.
3. PROVIDE SHOP DRAWINGS FOR NEW AND RELOCATED SPRINKLER HEADS c/w SPRINKLER LAYOUT DRAWINGS STAMPED & SIGNED BY PROFESSIONAL ENGINEER REGISTERED OR LICENSED IN NOVA SCOTIA.
4. EXISTING SPRINKLER LAYOUT IS SHOWN BUT IS APPROXIMATE. CONTRACTOR TO VERIFY CONDITIONS ON SITE AND TO COORDINATE WITH BUILDING DEPARTMENTAL REPRESENTATIVE TO OBTAIN ANY AS-BUILT INFORMATION. PROVIDE NEW HEADS & PIPING AS REQUIRED BY NFPA 13 & TO SUIT THE RENOVATED AREAS.
5. SPRINKLER SYSTEM DESIGN AND INSTALLATION SHALL CONFORM TO THE VERSION OF NFPA 13 AS REFERENCED IN THE CURRENT PROVINCIAL RECOGNIZED EDITION OF THE NBC AND NFC.
6. ALL SPRINKLER PIPES TO BE KEPT AS HIGH AS POSSIBLE AND COORDINATED WITH ALL OTHER TRADES. PROVIDE PIPE OFFSETS AS REQUIRED TO LOCATE SPRINKLER PIPING AND HEADS AS REQUIRED.
7. ALL HEADS TO BE LOCATED IN CENTER OF CEILING TILES. COORDINATE HEAD LOCATIONS WITH ARCHITECTURAL REFLECTED CEILING PLANS.
8. REFLECTED CEILING PLANS MAY INDICATE THE PREFERRED LOCATIONS OF THE SPRINKLER HEADS,

CONTRACTOR TO ENSURE THAT THE PLACEMENT OF THE SPRINKLER HEADS MEET ALL CODE REQUIREMENTS, ARE COORDINATED WITH OTHER ITEMS AND THE ARCHITECTURAL DESIGN INTENT.

9. USE SEMI RECESSED HEADS IN ALL AREAS WITH CEILINGS.
10. MAINS AND BRANCH LINES TO BREAK AROUND BEAMS.
11. ALL PIPE SHALL BE CONCEALED EXCEPT IN AREAS WITHOUT FINISHED CEILINGS.
12. TEMPERATURE RATING OF SPRINKLER HEADS IN MECHANICAL SPACES, ELECTRICAL ROOMS, ETC. TO BE 100° C.
13. ALL LOW POINT DRAINS AND ZONE VALVE DRAINS TO BE PIPED TO BUILDING DRAINS, 50MM MAIN DRAIN AND DRY PIPE INSPECTORS TEST TO BE PIPED TO OUTSIDE OF BUILDING. PIPING OF DRAINS SHALL BE THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR.
14. ALL REQUIRED SWITCHES, MONITORED VALVES AND OTHER ANCILLARIES TO BE PROVIDED AND INSTALLED BY THIS CONTRACTOR. COORDINATE WITH THE FIRE ALARM CONTRACTOR.
15. COORDINATE WITH THE ELECTRICAL CONTRACTOR FOR THE PROVISION OF ALL NECESSARY WIRING.
16. PROVIDE PROTECTION CAGES ON ALL EXPOSED HEADS BELOW 3180MM A.F.F.
17. EXISTING SPRINKLER PIPING SHOWN FOR REFERENCE. EXISTING MAY DIFFER. CONTRACTOR TO FIELD VERIFY ACTUAL PIPING/HEAD LOCATIONS & SIZES.

18. SPRINKLER HEADS, PIPE, FITTINGS, VALVES AND HANGERS TO ANSI/NFPA13 AND ULC LISTED FOR FIRE SERVICE.

19. INSTALL, INSPECT AND TEST TO ACCEPTANCE IN ACCORDANCE WITH ANSI/NFPA -13 AND NATIONAL BUILDING CODE.

3	ISSUED FOR ADDENDUM #1	18/12 2019
2	ISSUED FOR TENDER	12/12 2019
1	ISSUED FOR 99% REVIEW	11/15 2019
0	ISSUED FOR 50% REVIEW	09/06 2019
revisions		date
project		projet

GC CO-WORKING SITE,  
PILOT PROGRAM AT  
BIO FACILITY  
1 CHALLENGER DRIVE,  
DARTMOUTH, NS

drawing dessin

FIRE  
PROTECTION  
PLAN

designed	AGM	conçu
date	SEPT. 2019	
drawn	RDC	dessiné
date	SEPT. 2019	
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Tender		Soumission
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