

IF SPRINKLER CONTRACTOR USES PLASTIC PIPING THEN THE FOLLOWING IS APPLICABLE.

NOTE: CONTRACTOR TO INSTALL PLASTIC PIPING AS PER MANUFACTURER'S SPECIFICATIONS INCLUDING EXPANSION LOOP.

**O.B.C. SECTION 3.2.5.14 COMBUSTIBLE SPRINKLER PIPING**

- COMBUSTIBLE SPRINKLER PIPING SHALL BE USED ONLY FOR WET SYSTEMS IN RESIDENTIAL OCCUPANCIES AND OTHER LIGHT HAZARD OCCUPANCIES. (SEE APPENDIX A.)
- COMBUSTIBLE SPRINKLER PIPING SHALL MEET THE REQUIREMENTS OF ULC/ORD-199P-M, "COMBUSTIBLE PIPING FOR SPRINKLER SYSTEMS".
- COMBUSTIBLE SPRINKLER PIPING SHALL BE SEPARATED FROM THE AREA SERVED BY THE SPRINKLER SYSTEM AND FROM ANY OTHER FIRE COMPARTMENT BY CEILINGS, WALLS, OR SOFFITS CONSISTING AS A MINIMUM,
  - LATH AND PLASTER,
  - GYP-SUM BOARD NOT LESS THAN 9.5 MM (3/8 IN) THICK
  - PLYWOOD NOT LESS THAN 13 MM (1/2 IN) THICK OR
  - A SUSPENDED MEMBRANE CEILING WITH
    - STEEL SUSPENSION GRID, AND
    - LAY-IN PANELS OR TILES HAVING A MASS NOT LESS THAN 1.7 KG/SQUARE METRE ( 0.35 LB/SQUARE FOOT)
- IF COMBUSTIBLE SPRINKLER PIPING IS LOCATED ABOVE A CEILING, AN OPENING THROUGH THE CEILING THAT IS NOT PROTECTED IN CONFORMANCE WITH SENTENCE (3) SHALL BE LOCATED SO THAT THE DISTANCE BETWEEN THE EDGE OF THE OPENING AND THE NEAREST SPRINKLER IS NOT MORE THAN 300 MM (11 3/4").
- THE PROTECTION REQUIRED BY SENTENCES (3) AND (4) IS PERMITTED TO BE WAIVED WHERE COMBUSTIBLE SPRINKLER PIPING HAS BEEN TESTED IN CONFORMANCE WITH ULC/ORD-199P-M, "COMBUSTIBLE PIPING FOR SPRINKLER SYSTEMS", AND HAS BEEN SHOWN TO MEET THE REQUIREMENTS IN THAT DOCUMENT WITHOUT ADDITIONAL PROTECTION.

**GENERAL NOTES**

NOTE 1: IN BUILDINGS SPRINKLERED IN ACCORDANCE WITH NFPA 13, CLOSETS LESS THAN 12 SQ.FT. IN AREA IN INDIVIDUAL DWELLING UNITS SHALL NOT BE REQUIRED TO BE SPRINKLERED. CLOSETS THAT CONTAIN EQUIPMENT SUCH AS WASHERS, DRYERS, FURNACES, OR WATER HEATERS SHALL BE SPRINKLERED REGARDLESS OF SIZE. AS PER NFPA-13 (2007) CLAUSE 21.20.19.2.1

NOTE 2: SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS THAT ARE LOCATED WITHIN DWELLING UNITS, THAT DO NOT EXCEED 55 SQ.FT. IN AREA, AND THAT HAVE WALLS AND CEILINGS OF NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIALS WITH A 15-MINUTE THERMAL BARRIER RATING, INCLUDING THE WALLS AND CEILINGS BEHIND ANY SHOWER ENCLOSURE OR TUB. AS PER NFPA-13 (2007) CLAUSE 8.15.8.1.1

NOTE 3: WHERE SIDEWALL SPRINKLER IS INSTALLED AT SOFFIT (BULKHEAD) EXCEEDING MORE THAN 8" IN WIDTH, PENDENT SPRINKLERS SHALL BE INSTALLED UNDER THE SOFFIT (BULKHEAD).

NOTE 4: RESIDENTIAL SIDEWALL SPRINKLERS SHALL BE PERMITTED TO BE INSTALLED IN THE FACE OF A SOFFIT LOCATED DIRECTLY OVER CABINETS WITHOUT REQUIRING ADDITIONAL SPRINKLERS BELOW THE SOFFIT OR CABINETS WHERE THE SOFFIT DOES NOT PROJECT HORIZONTALLY MORE THAN 12" FROM THE WALL.

NOTE 5: IF CPVC PIPE IS USED, CONTRACTOR TO PROVIDE "EXPANSION OFFSET LOOP" ON STRAIGHT RUNS EXCEEDING 100 FT IN LENGTH.

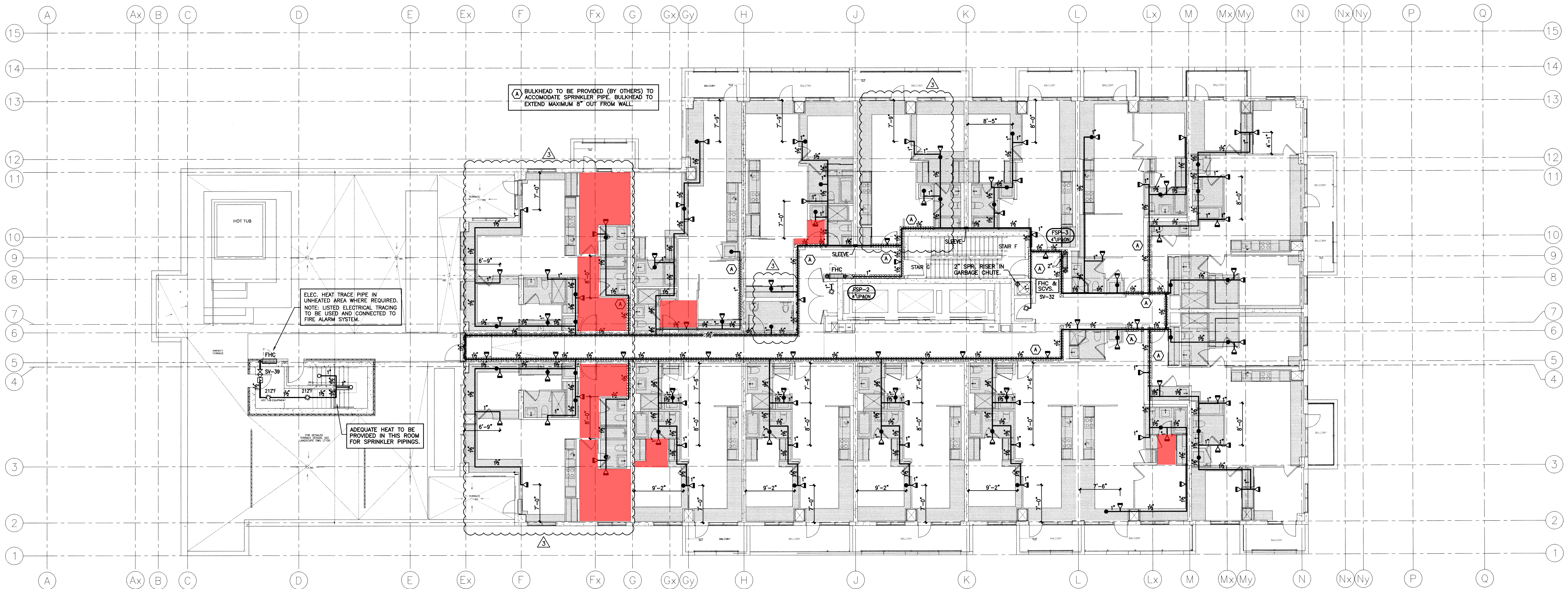
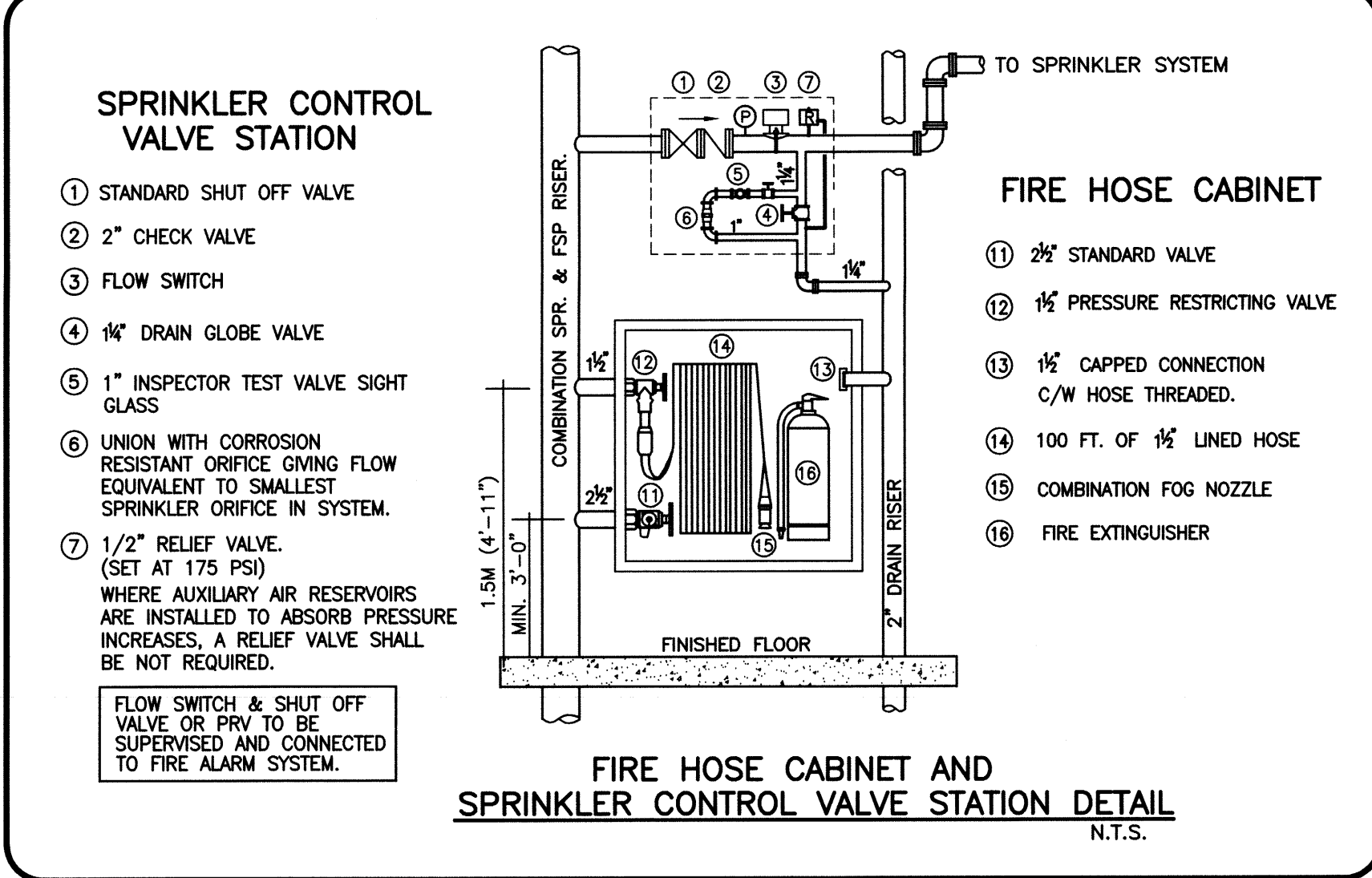
NOTE 6: ANY FIRE STOPPING, ACOUSTIC SEALANT AND MATERIALS USED IN THIS PROJECT WHICH COME IN CONTACT WITH CPVC SPRINKLER PIPING IS TO BE COMPATIBLE WITH CPVC PIPING

NOTE 7: SPRINKLERS TO BE A MINIMUM 3"-0" FROM EDGE OF ALL SURFACE MOUNTED LIGHT FIXTURE.

SPRINKLER LAYOUT BASED ON BULKHEADS BEING MAXIMUM 12" DEEP. ADDITIONAL SIDEWALL SPRINKLERS MAY BE REQUIRED IF BULKHEAD DEPTH EXCEEDS 12".

PROTECTION AREA PER RESIDENTIAL CONCEALED PENDENT SPRINKLER SHALL NOT EXCEED 300 SQ.FT. MAX. SPACING IS 20 FT. PROTECTION AREA PER RESIDENTIAL CONCEALED SIDEWALL SPRINKLER SHALL NOT EXCEED 256 SQ.FT. (16 FT. X 16 FT.)

CONTRACTOR SHALL COORDINATE WITH LIGHTING, DIFFUSER & INTERIOR DESIGN DRAWINGS PRIOR TO INSTALLATION OF SPRINKLER SYSTEM.



| REVISIONS   | DATE         |
|---|--------------|
| 1. ISSUED FOR REVIEW & PERMIT.  | JULY 30 2014 |
| 2. RE-ISSUED FOR PERMIT.  | AUG. 15 2014 |
| 3. REVISED LAYOUT AS PER PEOPLE ARCHITECTS COMMENTS DATED IN JUNIOR. 2015 | JUN. 08 2015 |

**NOTES**

--- THIS DRAWING ASSOCIATED CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF THE DESIGNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK OR UPON REQUEST.

--- DIMENSIONS HAVE BEEN PROVIDED FOR ALL ELEMENTS.

--- THE SPRINKLER SYSTEM IS TO BE INSTALLED AS PER N.F.P.A. STANDARD # 13 AND O.B.C. STANDARDS.

--- CONTRACTOR TO INCLUDE FOR OFFSETS IN BRANCH LINES AND MAINS WHERE REQUIRED.

--- ALL MATERIALS TO BE U.L.C. LISTED AND APPROVED BY LOCAL AUTHORITIES.

--- UNDERGROUND WATERMAIN TO BE INSTALLED ACCORDING TO LOCAL AUTHORITIES AND INSURANCE CO. STANDARDS.

--- LOCAL AUTHORITY PERMITS TO BE INSTALLED.

--- CONTRACTOR TO VISIT SITE TO DETERMINE EXACT LOCATION AND ELEVATION OF MAINS TO BE INSTALLED AS INDICATED ON DRAWINGS. ANY MAJOR DISCREPANCIES TO BE REPORTED TO THE DESIGNER PRIOR TO FABRICATION AND INSTALLATION.

--- ALL INTERIOR GRID LINE MEASUREMENTS ARE GIVEN AS CENTER LINE TO CENTER LINE DIMENSIONS. (C/C TO P/C)

**OWNER (OR OTHERS) TO PROVIDE ADEQUATE HEAT IN ALL AREAS OF BUILDING SUBJECT TO FREEZING THAT ARE PROTECTED BY A WET TYPE SPRINKLER SYSTEM.**

**ALL GLASS BULB TYPE SPRINKLERS TO BE MANUFACTURE DATE OF AT LEAST YEAR 2013.**

| S/R=STANDARD RESPONSE Q/R=QUICK RESPONSE C/W GUARD |  |
|--|--|
| ○  | 1/2" 155F STANDARD COVERAGE CONCEALED PENDENT (K=5.6) Q/R 00             |
| ○  | 1/2" 155F STANDARD COVERAGE UPRIGHT (K=5.6) Q/R 00                       |
| ●  | 1/2" 155F RESIDENTIAL CONCEALED PENDENT (K=4.0) 00                       |
| ●  | 1/2" 155F RESIDENTIAL CONCEALED SIDEWALL (K=4.0) 00                      |
| ○  | 1/2" 212F STANDARD COVERAGE UPRIGHT (K=5.6) Q/R 00                       |
| ○  | 1/2" 212F STANDARD COVERAGE UPRIGHT (K=5.6) Q/R 00                       |
| ○  | FIRE HOSE RACK - 100 FT OF 1/2" LINED HOSE C/W COMBINATION FOG NOZZLE 00 |

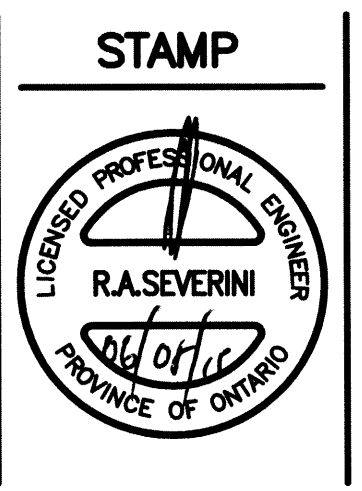
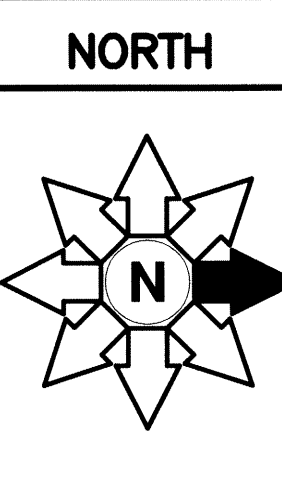
**DESIGN CRITERIA**

DESIGNED FOR RESIDENTIAL SPRINKLERS AS PER NFPA 13 SECTION 11.3.1 (2010 ED.).

DESIGN AREA TO INCLUDE THE FOUR ADJACENT SPRINKLERS THAT PRODUCE THE GREATEST HYDRAULIC DEMAND.

THE REQUIRED DISCHARGE FROM EACH SPRINKLER SHALL BE THE GREATER OF THE FOLLOWING:

- MIN. FLOW RATES INDICATED IN SPR. LISTING.
- MIN. 0.10 GPM/SQ.FT. OVER DESIGN AREA.



**TRIDEL**  
4800 DUFFERIN STREET  
TORONTO ONTARIO

**PROJECT**  
SQ ALEXANDRA PARK  
BLOCK 11  
38 CAMERON ST. TORONTO

**DWG TITLE**  
9TH FLOOR  
SPRINKLER & STANDPIPE SYSTEM

**DATE**  
JULY 2014

**SCALE**  
1:100

**DWN BY**  
H.W.

**ISSUED FOR REVISION NO.**

**PROJECT NO.**  
14-10224

**DWG NO.**  
SP-12

**OF**  
16