

1. SCOPE OF WORK UNDER THIS CONTRACT SHALL INCLUDE THE REMOVAL OF ALL EXISTING SPRINKLER HEADS, BRANCHES AND MAINS IN AREA OF WORK.
2. PROVIDE ALL LABOR APPARATUS, ETC., FOR THE REMOVAL OF ALL EXISTING SPRINKLER HEADS, PIPING, HANGERS, ETC. EXCEPT AS INDICATED.
3. MAINTAIN CONTINUOUS OPERATION OF EXISTING RISERS SO AS NOT TO INCONVENIENCE OTHER BUILDING TENANTS.
4. CONTRACTOR SHALL UTILIZE CAPPED PIPING FOR CONNECTION OF NEW BRANCHES.
5. SPRINKLER CONTRACTOR SHALL VISIT THE PREMISES PRIOR TO SUBMITTING ITS PROPOSAL AND EXAMINE THE AREAS EFFECTED BY THIS WORK. HE IS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND WITH POSSIBLE DIFFICULTIES THAT MAY ATTEND THE EXECUTION OF THIS WORK.
6. PERFORM THIS WORK SIMULTANEOUSLY WITH THAT OF OTHER TRADES SO AS NOT TO DELAY OVERALL PROGRESS OF WORK.
7. OWNER'S OCCUPANCY REGULATIONS MAY REQUIRE THAT CERTAIN PORTIONS OF WORK BE DONE AFTER REGULAR WORKING HOURS. COORDINATE WITH BUILDING MANAGEMENT. COST OF OVERTIME IS TO BE INCLUDED IN THE CONTRACTOR'S PROPOSAL.
8. REMOVE ALL DEMOLITION MATERIALS FROM PROJECT SITE, EXCEPT ITEMS DESIGNATED BY ARCHITECT/OWNER TO REMAIN OWNER'S PROPERTY AND BE STORED.
9. NO DEAD ENDS SHALL BE LEFT ON PIPING.
10. EXISTING EXPOSED PIPING NOT BEING REUSED, AND NOT SPECIFICALLY NOTED OR SHOWN ON DRAWING TO BE ABANDONED SHALL BE COMPLETELY REMOVED.
11. THE EXISTING SYSTEM SHALL BE LEFT IN PERFECT WORKING ORDER AT COMPLETION OF NEW WORK.
12. NO REMOVED EXISTING PIPING SHALL BE REUSED.
13. DO NOT USE ANY PART OF THE BUILDING AS A SHOP EXCEPT PARTS DESIGNATED FOR SUCH PURPOSES.
14. REROUTE OR REMOVE ALL EXISTING PIPING EXPOSED TO VIEW WHERE NECESSARY TO AVOID NEW EQUIPMENT, STRUCTURAL OR MASONRY WORK AS REQUIRED BY THE PROPOSED ALTERATIONS.
15. ALL SPRINKLER WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF N.F.P.A. - 13 AND ALL LOCAL AUTHORITIES.
16. CONTRACTOR SHALL FIELD VERIFY EXACT ELEVATION, LOCATION AND PIPE SIZES OF EXISTING SPRINKLER HEADS AND PIPING BEFORE INSTALLATION OF NEW WORK.
17. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND SHALL INSTALL NEW WORK TO CLEAR DUCTWORK AND LIGHTING FIXTURES.
18. ALL SPRINKLER WORK SHALL COMPLY WITH BUILDING STANDARDS AND REQUIREMENTS.
19. GENERAL CONTRACTOR SHALL COORDINATE FINAL FURNITURE/EQUIPMENT HEIGHT ELEVATIONS AND LOCATIONS WITH SPRINKLER INSTALLATION. ENGINEER SHALL BE NOTIFIED WHEN FURNITURE/EQUIPMENT IS LESS THAN 18" TO UNDERSIDE OF CEILING.
20. A FIRE WATCH GUARD WITH A CERTIFICATE OF FITNESS SHALL BE MAINTAINED DURING SHUT DOWNS.
21. ERECT TEMPORARY SPRINKLER LOOP IN AND AROUND BUILDING CORE AREA (IN AREA OF WORK) TO PROTECT THE FACILITY DURING REMOVALS AND SUBSEQUENT CONSTRUCTION ACTIVITIES AND REMOVAL OF THE SAME AFTER ENTIRE FLOOR IS COMPLETELY SPRINKLERED AND ACTIVATED.
22. PIPE SIZES SHOWN ARE BASED ON DESIGN PIPING LAYOUT ONLY. ACTUAL PIPE SIZES SHALL BE DETERMINED BY CONTRACTORS HYDRAULIC CALCULATIONS BASED ON HIS INSTALLATION DRAWINGS. CONTRACTOR SHALL ALLOW FOR THIS AND INCLUDE THIS IN HIS CONTRACT PRICE.
23. DRAWING INDICATES SPRINKLER SYSTEM DESIGN ONLY. CONTRACTOR IS RESPONSIBLE FOR OFFSETS, DROPS AND RISES FOR COORDINATION WITH OTHER TRADES.
24. PROVIDE AUXILIARY DRAINS AT TRAPPED SECTIONS OF PIPING AS REQUIRED BY N.F.P.A. - 13.
25. PIPE SIZE TO BE MINIMUM OF ONE INCH (1").
26. ALL SERVICE SHUTDOWNS SHALL BE BY BASE BUILDING ENGINEERS. MINIMUM OF 48 HOURS NOTICE IS REQUIRED TO THE BUILDING OFFICE PRIOR TO SHUT DOWN.
27. ALL WORK TO BE DONE DURING THE HOURS DESIGNATED BY OWNER.
28. CONTRACTORS SHALL TAKE SPECIAL CARE TO DEMOLISH ONLY THAT WORK WHICH IS REQUIRED TO BE DEMOLISHED AND NOT TO DISTURB ANY WORK WHICH IS TO REMAIN. IF IN THE COURSE OF THE DEMOLITION, THE CONTRACTOR DESTROYS OR DISTURBS ANY WORK WHICH IS TO REMAIN, THEN HE SHALL, AT HIS OWN EXPENSE, REPAIR OR REPLACE SUCH WORK AS NECESSARY.
29. EXISTING PIPING SERVING ADJACENT AREAS NOT IN AREA OF WORK SHALL REMAIN ACTIVE AND WITHOUT DISTURBANCE.

- ENTIRE SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED TO MEET FOLLOWING CRITERIA:
 1. ORDINARY (GROUP1) HAZARD OCCUPANCY – STORAGE ROOMS, MECHANICAL AND ELECTRICAL ROOMS. DENSITY .15 GPM PER SQ. FT. OVER MOST HYDRAULICALLY REMOTE 1500 SQ. FT., MAXIMUM COVERAGE PER SPRINKLER HEAD 130 SQ. FT.
 2. ORDINARY (GROUP2) HAZARD OCCUPANCY – LABORATORIES & STORAGE AREAS, >12FT. DENSITY .20 GPM PER SQ. FT. OVER MOST HYDRAULICALLY REMOTE 1500 SQ. FT., MAXIMUM COVERAGE PER SPRINKLER HEAD 130 SQ. FT.
 3. LIGHT HAZARD OCCUPANCY – ALL OTHER AREAS. DENSITY .10 GPM PER SQ.FT. OVER MOST HYDRAULICALLY REMOTE 1500 SQ. FT., MAXIMUM COVERAGE PER STANDARD SPRINKLER HEAD 225 SQ. FT. FOR EXTENDED COVERAGE SPRINKLERS REFER TO MANUFACTURER'S CRITERIA.
 4. MINIMUM PRESSURE AT STANDARD SPRINKLER HEAD 7 PSI.
- WHENEVER ROLL GROOVED CONNECTIONS ARE USED, ALLOWANCE FOR ADDITIONAL PRESSURE LOSS AT GROOVES SHALL BE MADE AS FOLLOWS:
 - A. FOR EACH COUPLING ON STRAIGHT RUN INCLUDING STRAIGHT FLOW THROUGH TEE OR CROSS: ADD 1 EQUIVALENT FOOT OF PIPE.
 - B. FOR EACH COUPLING AT ELBOW, TEE OR CROSS WHERE DIRECTION OF FLOW CHANGES: ADD 2 EQUIVALENT FEET OF PIPE.
- EQUIVALENT FITTING LENGTHS USED IN HYDRAULIC CALCULATIONS SHALL BE IN ACCORDANCE WITH NFPA STANDARD NO. 13.
 - A. WHEREVER FITTINGS ARE USED IN CONJUNCTION WITH LIGHTWALL PIPE, EQUIVALENT FITTING LENGTHS INDICATED IN NFPA-13 SHALL BE INCREASED IN ACCORDANCE WITH PARAGRAPH 14.4.3.1.3.
- DISCHARGE FROM EACH SPRINKLER HEAD SHALL NOT BE LESS THAN REQUIRED FOR AREA COVERED BY THIS HEAD. AREA COVERAGE PER HEAD SHALL BE DETERMINED IN ACCORDANCE WITH NFPA STANDARD NO. 13.
- HYDRAULIC CALCULATIONS SHALL BE BROUGHT BACK TO CONNECTION TO WATER SUPPLY.
- RESULT OF HYDRAULIC CALCULATIONS SHALL INDICATE MINIMUM 5% PRESSURE SAFETY MARGIN, I.E. EXCESS OF PRESSURE AVAILABLE OVER PRESSURE REQUIRED.

REFERENCES: BUILDING CODE, 2008 EDITION AND NFPA-13-2002 AS MODIFIED BY THE BUILDING CODE APPENDIX Q, SECTION BC Q102.

1. THE INSTALLATION COMPONENTS, SPACING, LOCATION, CLEARANCES, POSITION AND TYPE OF SYSTEMS SHALL CONFORM TO APPENDIX Q BC Q102 AND BC 903.
2. AS PER PARAGRAPH BC 903.2 AND CHAPTER 6 OF APPENDIX Q SECTION BC Q102 ONLY APPROVED MATERIALS WILL BE USED.
3. DIRECT CONNECTION OF SPRINKLERS TO THE PUBLIC WATER SYSTEM SHALL CONFORM TO APPENDIX Q BC Q102 SECTIONS 15.1.1(d), 15.1.8 & 15.2.1.
4. SPRINKLERS WILL BE PROTECTED AGAINST FREEZING AND INJURY AS PER SECTIONS 6.2.8 AND 8.15.3 OF APPENDIX Q BC Q102.
5. INSPECTION AND TESTS OF SPRINKLER SYSTEM SHALL BE CONDUCTED AS SPECIFIED IN BC 901.5 AND APPENDIX Q SECTION BC Q102 CHAPTER 16.
6. THE OCCUPANCY OF THE AREAS TO BE SPRINKLERED IN ACCORDANCE WITH CHAPTER 5 OF APPENDIX Q SECTION BC Q102 SHALL BE THOSE SPECIFIED ON THE PLANS.
7. WATER SUPPLY TEST PIPES AND GAUGES PROVIDED AS SPECIFIED IN SECTION 8.16.3 AND 8.16.4 OF APPENDIX Q BC Q102.
8. PIPING SPECIFICATIONS, SYSTEM TEST PIPES, PROTECTION AGAINST CORROSION, DAMAGE, FITTINGS, VALVES, HANGERS, SPRINKLERS, GUARDS AND SHIELDS SHALL BE IN ACCORDANCE WITH CHAPTERS 6 AND 9 OF APPENDIX Q SECTION BC Q102.
9. STOCK OF EXTRA SPRINKLERS WILL BE FURNISHED AS PER SECTION 6.2.9 OF APPENDIX Q BC Q102 (REQUIRED FOR EACH TEMPERATURE RATING).
10. SPRINKLER ALARMS IN ACCORDANCE WITH SECTION 8.16.1 OF APPENDIX Q BC Q102.
11. SPACING, LOCATION AND POSITION OF SPRINKLERS WILL BE IN ACCORDANCE WITH CHAPTER 8 OF APPENDIX Q SECTION BC Q102.
12. ALL BLIND SPACES EXCEEDING 6 IN. IN WIDTH OR DEPTH WHICH CONTAIN COMBUSTIBLE MATERIALS WILL BE SPRINKLERED.
13. ALL PIPING PASSING THROUGH RATED CONSTRUCTION WILL COMPLY WITH BC 712.
14. THERE IS NO PILED HIGH STORAGE AS DEFINED IN SECTION 3.3.12 OF APPENDIX Q BC Q102.
15. DISTANCE OF SPRINKLERS FROM HEAT SOURCES SHALL BE IN ACCORDANCE WITH TABLES 8.3.2.5(A), (B), (C) AND APPENDIX Q BC Q102.
16. AS PER PARAGRAPH BC 903.1.2 PROVIDE PROTECTION OF ENVIRONMENTAL PROTECTION WATER SUPPLY LETTER WITH FLOW TEST DATA IF THERE IS DIRECT CONNECTION TO THE STREET WATER SUPPLY.

1. MINIMUM SPRINKLER PIPE SIZE SHALL BE 1" DIAMETER.
2. SPRINKLER HEADS SHALL BE CAST BRASS, CLOSED FUSIBLE LINK SPRAY TYPE WITH 1/2" DISCHARGE ORIFICE.
3. ALL PENDANT TYPE SPRINKLER HEADS SHALL BE PLACED IN CENTER OF TILES.
4. SPRINKLER CONTRACTOR SHALL PARTICIPATE IN THE PREPARATION OF A OVERALL COORDINATED CEILING PLAN WITH THE MECHANICAL CONTRACTOR WHICH WOULD INDICATE ALL CEILING COMPONENTS SUCH AS DUCTWORK, LIGHTING FIXTURES AND ASSOCIATED SUSPENSION GRID, PLUMBING PIPING, SPRINKLER HEADS AND ASSOCIATED PIPING.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR FILING CONSTRUCTION DOCUMENTS INCLUDING RISER DIAGRAM AND HYDRAULIC CALCULATIONS TO DEPARTMENT OF BUILDING. CONTRACTOR ALSO RESPONSIBLE FOR THE OBTAINING ALL PERMITS INSPECTIONS AND SIGN-OFFS.
6. ALL WORK SHALL CONFORM TO THE BUILDING STANDARDS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MEET WITH BUILDING CONSTRUCTION MANAGER IN ORDER TO BECOME TOTALLY FAMILIAR WITH BUILDING CONSTRUCTION RULES. THERE SHALL BE NO DEVIATION FROM THE BUILDING STANDARDS WITHOUT PRIOR WRITTEN APPROVAL FROM THE CONSTRUCTION MANAGER.
7. TESTS
 - A. TEST ENTIRE SYSTEM PIPING HYDROSTATICALLY FOR TWO HOURS AT 200 PSI OR AT 50 PSI ABOVE MAXIMUM WORKING PRESSURE (WHICHEVER IS GREATER) AND IN ACCORDANCE WITH ALL REQUIREMENTS OF NEW YORK CITY BUILDING CODE AND NFPA #13. SUBMIT RESULTS OF THE TESTS TO OWNER.
8. PERMITS
 - A. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS, APPROVALS AND INSPECTIONS.

THIS SECTION OF THE PROJECT CONSISTS OF WORK PERTAINING SOLELY TO THE LIFE SAFETY SYSTEMS OF THE BUILDING AND THEREFORE IS NOT REQUIRED TO COMPLY WITH THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE ACCORDING TO CHAPTER 1 PARAGRAPH 101.3, AND CHAPTER 8 PARAGRAPH 803.1 OF THE ENERGY CONSERVATION CONSTRUCTION CODE OF NEW YORK STATE.

The site map shows the Main Hospital Building and the adjacent Parking Garage. The building is situated between East 140 Street to the north and East 144 Street to the south. Park Avenue runs along the west side, and Morris Avenue runs along the east side. Key features include the Emergency Entry on the west side, the Service Entry on the south side, and the Mark Entry on the east side. A compass rose in the bottom left corner indicates that North is oriented towards the top-left of the map. A specific area on the east side of the building is marked as the 'AREA OF WORK "2D2"'. The map also shows the Boiler Plant and the OPD Entry.

ABBREVIATIONS	
ABD	AUTOMATIC BALL DRIP
AD	AREA DRAIN
AFF	ABOVE FINISHED FLOOR
BOP	BOTTOM OF PIPE
CFM	CUBIC FEET PER MINUTE
CV	CHECK VALVE
DIA	DIAMETER
DR	DRAIN
DN	DOWN (PENETRATES FLOOR SLAB)
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FHV	FIRE HOSE VALVE
FHVC	FIRE HOSE VALVE CABINET
AHR	AUXILIARY FIRE HOSE
FD	FLOOR DRAIN
FL	FLOOR
FSP	FIRE STANDPIPE
FT.	FEET
GV	GATE VALVE
GALL	GALLONS
GPM	GALLONS PER MINUTE
IN.	INCH
NTS	NOT TO SCALE
OS&Y	OUTSIDE SCREW & YOKE GATE VALVE
PSIA	POUNDS PER SQUARE INCH (ABSOLUTE)
PSI	POUNDS PER SQUARE INCH (GAUGE)
PRV	PRESSURE REGULATING VALVE
SPKR	SPRINKLER
TOP	TOP OF PIPE
TS	TAMPER SWITCH
WFS	WATER FLOW SWITCH

	FIRE STANDPIPE PIPING
	DRAIN PIPING
	SPRINKLER PIPING
	EXISTING SPRINKLER PIPING
	EXISTING SPRINKLER PIPING TO BE REMOVED
	SPRINKLER HEAD TO BE DEMOLISHED
	EXISTING SPRINKLER HEAD
	NEW CONCEALED SPRINKLER HEAD
	EXIST SPKR HEAD TO BE RELOCATED (DO NOT REUSE SPKR)
	UNION
	SLEEVE
	SPRINKLER FLOOR CONTROL VALVE ASSEMBLY
	FIRE DEPARTMENT SIAMESE CONNECTION
	BOTTOM PIPE CONNECTION
	TOP PIPE CONNECTION
	ELBOW TURNED DOWN
	ELBOW TURN UP / CONN. TO VERTICAL LINE
	VALVE IN VERTICAL
	CHECK VALVE W/AUTO BALL DRIP
	OS&Y (OUTSIDE SCREW & YOKE) VALVE
	GATE/GLOBE VALVE
	CHECK VALVE
	AUTOMATIC BALL DRIP
	FIRE HOSE VALVE
	PUMP
	ALARM CHECK VALVE
	RISER DESIGNATION
	RISER SERVICE
	RISER NUMBER
	TAMPER SWITCH (TS)

DRAWING NO.	DRAWING TITLE
SP-001.00	SPRINKLER NOTES, SYMBOLS LIST & ABBREVIATIONS
SP-101.00	SECOND FLOOR SPRINKLER PLAN
SP-201.00	SPRINKLER RISER DIAGRAM
SP-301.00	SPRINKLER DETAILS

THIS PLAN IS APPROVED ONLY FOR WORK INDICATED ON THE APPLICATION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN ARE NOT TO BE RELIED UPON, OR TO BE CONSIDERED AS EITHER BEING APPROVED OR IN ACCORDANCE WITH APPLICABLE CODES.

[illegible]