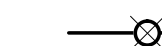
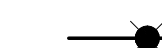
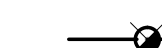



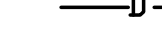
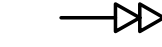
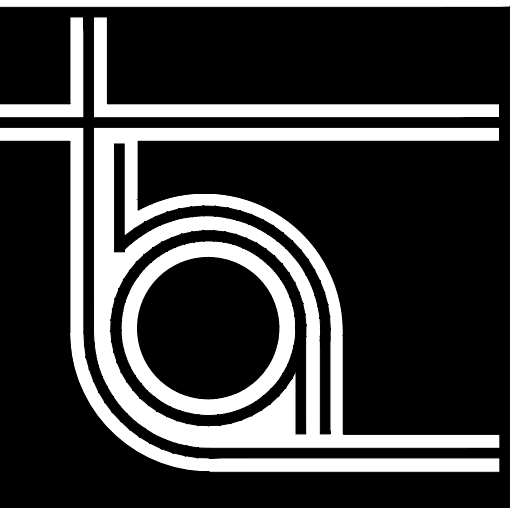


## SPRINKLER SPECIFICATIONS

1. THE SPRINKLER CONTRACTOR SHALL FURNISH AND INSTALL ALL SPRINKLER EQUIPMENT SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED. EQUIPMENT ITEMS NOT SHOWN OR CALLED FOR SUCH AS FITTINGS, VALVES, DRAINS, SWITCHES, VALVES, ETC. SHALL ALSO BE INSTALLED TO MAKE A COMPLETE AND WORKABLE SPRINKLER SYSTEM.
2. THE SPRINKLER CONTRACTORS WORK SHALL INCLUDE, BUT NOT NECESSARILY LIMITED TO THE FOLLOWING:
  - A. BACKFLOW PREVENTER, O.S. & Y. AND PIV VALVES.
  - B. WET PIPE SPRINKLER SYSTEM.
  - C. ALARM AND INDICATOR VALVES.
  - D. PRESSURE, FLOW AND SUPERVISORY SWITCHES.
  - E. SIGNAL DEVICES.
  - F. SIAMESE CONNECTIONS AND CHECK VALVE.
  - G. ALL REQUIRED TEST AND CONNECTIONS.
  - H. HYDRAULIC CALCULATIONS.
  - I. FIRE DEPARTMENT APPROVED WORKING DRAWINGS.
  - J. INSPECTOR TEST STATIONS.
  - K. PERMITS, APPLICATIONS, BACK CHARGES AND FEES.
  - L. SPARE SPRINKLER HEADS AND CABINET.
  - M. NAME TAGS.
3. THE FOLLOWING WORK IS TO BE DONE BY OTHER TRADES:
  - A. EXCAVATION AND BACKFILL.
  - B. CONCRETE WORK.
  - C. PAINTING.
  - D. ACCESS PANELS.
  - E. CUTTING AND PATCHING.
  - F. ELECTRICAL WIRING.
4. OBTAIN AND PAY FOR ALL REQUIRED TEST, PERMITS, INSPECTIONS AND BACK CHARGES. ALL COST FOR OBTAINING TEMPORARY SERVICES FOR TEST, FLUSHING AND FILLING SHALL BE THE SPRINKLER CONTRACTORS RESPONSIBILITY. COORDINATE WITH THE LATEST RULES OF THE FIRE DEPARTMENT.
5. ALL WORK SHOWN ON THE PLANS IS INTENDED TO BE APPROXIMATELY CORRECT TO SCALE, BUT FIGURED DIMENSIONS AND DETAILED DRAWINGS ARE TO BE FOLLOWED IN EVERY CASE. THE DRAWINGS SHALL BE TAKEN IN A SENSE AS DIAGRAMMATIC. METHODS OF RUNNING PIPES ARE SHOWN BUT IT IS NOT INTENDED TO SHOW OFFSETS AND FITTINGS, OR EVERY STRUCTURAL DIFFICULTY THAT MAY BE ENCOUNTERED.
6. MATERIAL, INSTALLATIONS AND WORKMANSHIP SHALL BE IN FULL ACCORD WITH THE MOST MODERN SPRINKLER CONSTRUCTION REQUIREMENTS. ALL MATERIALS SHALL BE NEW. THE SPRINKLER CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, BOCA AND NATIONAL CODES INCLUDING N.F.P.A. 13 AND 101.
7. THE SPRINKLER CONTRACTOR SHALL INSPECT THE SITE AND SHALL INVESTIGATE ALL CONDITIONS UNDER WHICH HIS WORK WILL BE PERFORMED. HE SHALL COORDINATE HIS WORK SO THAT IT DOES NOT INTERFERE WITH THE WORK OF OTHER TRADES AND THE GENERAL CONTRACTORS BUILDING SCHEDULE.
8. THE SPRINKLER CONTRACTOR SHALL GUARANTEE HIS WORK FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE. IF ANY DEFECTS IN MATERIALS OR WORKMANSHIP OCCUR WITHIN THIS PERIOD, THEY SHALL BE CORRECTED AT NO COST TO THE OWNER.
9. BEFORE PURCHASING THE FOLLOWING EQUIPMENT, SUBMIT FIVE (5) COMPLETE COPIES OF DESCRIPTIVE EQUIPMENT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE ARCHITECT/ENGINEER THROUGH THE GENERAL CONTRACTOR.
  - A. SPRINKLER HEADS.
  - B. CONTROL AND ALARM VALVES.
  - C. HYDRAULIC CALCULATIONS.
  - D. FINAL WORKING INSTALLATION DRAWINGS.
  - E. BACKFLOW PREVENTER AND O.S.&Y. VALVES.
  - F. FIRE DEPARTMENT CONNECTIONS.
  - G. ELECTRIC BELLS.
  - H. PRESSURE, FLOW AND SUPERVISORY SWITCHES.
10. ALL SHOP DRAWINGS SHALL BE SUBMITTED AT ONE TIME. ANY EQUIPMENT SUBSTITUTED THAT REQUIRES EXTRA WORK OR COST BY OTHER TRADES SHALL BE COMPENSATED BY THE SPRINKLER CONTRACTOR TO THE APPLICABLE TRADES INVOLVED.
11. FURNISH AND INSTALL ALL REQUIRED HANGERS, STRUCTURAL SUPPORTS, RIGGING, SLEEVES, LADDERS, HOIST AND OTHER REQUIREMENTS FOR THE INSTALLATION OF ALL SPRINKLER EQUIPMENT.
12. THE SPRINKLER CONTRACTOR SHALL INSTRUCT THE OWNERS REPRESENTATIVE ON THE PROPER OPERATION OF ALL EQUIPMENT AND GIVE ANY LITERATURE FURNISHED BY THE MANUFACTURER, REGARDING PROPER OPERATING AND MAINTENANCE PROCEDURES, TO THE OWNER.
13. THE BACKFLOW PREVENTER SHALL BE AS MANUFACTURED BY AMES SERIES 3000 SS, DOUBLE CHECK WITH DOUBLE O.S. & Y. GATE VALVE SHUT-OFFS.
14. FIRE DEPARTMENT CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF NFPA STANDARD NO. 13. THE CONNECTION SHALL BE THE WALL MOUNTED TYPE CAST FROM HIGHLY CORROSION RESISTANT ALUMINUM ALLOY PAINTED RED, HOSE CONNECTION THREADED TO MATCH THOSE ON THE LOCAL FIRE PROTECTION SERVICE FITTED WITH INDIVIDUAL DROP CLAPPER, BALL DRIP VALVE AND PROTECTIVE PLUG WITH CHAIN. THE UNIT SHALL BE SECO, STANDARD GENERAL, POTTER-ROMER OR ELKHART. FIRE DEPARTMENT CONNECTION SHALL BE U.L. LABELED. ACTUAL LOCATION SHALL BE COORDINATED WITH THE FIRE DEPARTMENT.
15. EACH FIRE DEPARTMENT CONNECTION SHALL BE LABELED "SPRINKLER SYSTEM" & "GARAGE MANUAL STANDPIPE" COORDINATE WITH FIRE DEPARTMENT.
16. SUPERVISORY SWITCHES SHALL MONITOR THE OPEN POSITION OF THE SPRINKLER INDICATING VALVES AT ALL SPRINKLER CONTROL VALVES. CONTACTS SHALL MATCH WITH THE AUTOMATIC FIRE ALARM SYSTEM.
17. FLOW SWITCHES SHALL BE VANE TYPE WITH ADJUSTABLE PNEUMATIC RETARD AS MANUFACTURED BY RELIABLE SPRINKLER OR APPROVED EQUAL. FLOW SWITCHES SHALL BE INSTALLED ON ALL ZONES. CONTACTS SHALL MATCH THE AUTOMATIC FIRE ALARM SYSTEM.
18. PRESSURE SWITCH SHALL MONITOR LOW PRESSURE. SWITCHES SHALL CLOSE IF WATER OR AIR PRESSURE DROPS BELOW DESIGN CONDITIONS.
19. VALVES
  - A. GATE VALVES (NON-BURIED) SHALL BE APPROVED INDICATING TYPE WITH IRON BODY FLANGE ENDS WITH BRASS TRIM AND SHALL BE DESIGNED FOR 175 POUNDS WATER WORKING PRESSURE. SCREWED-END GATE VALVES SHALL BE BRONZE AND SHALL CONFORM TO THE LATEST SPRINKLER EQUIPMENT SPECIFICATIONS.
  - B. CHECK VALVES SHALL BE A TYPE HAVING IRON BODY, BRASS SEAT AND DISCS, CLEARWAY SWINGING, WITH DRIP CONNECTIONS, DESIGNED FOR 175 POUNDS WATER WORKING PRESSURE.
  - C. SCREWED-END ANGLE, CHECK AND GLOBE VALVES SHALL BE BRONZE AND SHALL CONFORM TO THE LATEST SPRINKLER EQUIPMENT SPECIFICATION.
  - D. CONTROL VALVES 2" AND LARGER SHALL BE OUTSIDE SCREW AND YOKE TYPE. VALVES SMALLER THAN 2" MAY BE BUTTERFLY TYPE.
  - E. POST INDICATING VALVE (PIV) SHALL BE LOCKED WITH BREAK AWAY TYPE LOCK, AND PROVIDED WITH A MONITORED TAMPER SWITCH.
20. SPRINKLER HEADS SHALL BE TYCO, VICTAULIC, SENJU OR AG.
  - A. SPRINKLER HEADS CONNECTED TO PIPING LOCATED ABOVE FINISHED CEILINGS, SHALL BE RECESSED PENDANT 165 DEGREES F., 1/2".
  - B. SPRINKLER HEADS IN AREAS WITHOUT CEILINGS SHALL BE UPRIGHT 165 DEGREES F., BRASS 1/2" WITH DEFLECTOR UP.
  - C. SPRINKLER HEADS UNDER RAMP SHALL BE SIDEWALL, 165 DEGREES F., BRASS 1/2".
  - D. FURNISH A SPRINKLER HEAD CABINET, SPRINKLER HEAD WRENCH AND 3 SPARE HEADS OF EACH TYPE.
21. THE ELECTRIC BELL SHALL BE 12" DIAMETER FOR EXTERIOR MOUNTING AS MANUFACTURED BY VIKING OR EQUAL.
22. PIPE SUPPORTS, METAL PIPE SUPPORTS, SWAY BRACES, HANGERS, CLAMPS AND ALL OTHER ACCESSORIES SHALL BE OF AN APPROVED PATTERN PLACED TO CONFORM TO THE REQUIREMENTS OF N.F.P.A. STANDARD #13. ALL SUPPORTS AND HANGERS SHALL BE NON-FERROUS MATERIALS.
23. SLEEVES
  - A. SLEEVES SHALL BE INSTALLED AROUND ALL PIPING PASSING THROUGH MASONRY FOUNDATIONS, WALLS, SLABS, PARTITIONS OR OTHER BUILDING CONSTRUCTION. SLEEVE SHALL BE SET IN NEW CONCRETE CONSTRUCTION BEFORE POURING.
  - B. THE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, SETTING AND ANCHORING OF SLEEVES IN A SUBSTANTIAL MANNER. ALL SLEEVES SHALL BE CONSTRUCTED OF STANDARD PVC SCHEDULE 40.
  - C. SLEEVES IN FLOORS OR EXTERIOR BUILDING WALLS BELOW GRADE SHALL BE INSTALLED WITH APPROVED CAULKING BETWEEN SLEEVES AND PIPING TO MAKE IT WATERPROOF. SLEEVE PROVIDED FOR PIPING BETWEEN FLOOR SHALL BE INSTALLED WITH APPROVED PACKING BETWEEN SLEEVES AND PIPING TO PROVIDE FOR SMOKE STOP. ALL FLASHING AND COUNTER-FLASHING TO BE INCLUDED.
24. UPON COMPLETION AND PRIOR TO THE ACCEPTANCE OF THE INSTALLATION, THE SPRINKLER CONTRACTOR SHALL SUBJECT THE SPRINKLER SYSTEM TO THE TEST REQUIRED BY NATIONAL FIRE PROTECTION ASSOCIATION SECTION 13 AND TEST REQUIRE BY THE FIRE DEPARTMENT.
25. THE SPRINKLER SYSTEMS SHALL BE HYDRAULICALLY CALCULATED FOR ORDINARY HAZARD GROUP 2. SUBMIT CALCULATIONS AS PART OF SHOP DRAWING REVIEW.
26. THE SPRINKLER CONTRACTOR SHALL PREPARE FINAL WORKING INSTALLATION DRAWINGS AND SUBMIT TO THE FIRE DEPARTMENT FOR APPROVAL. AFTER APPROVAL, SUBMIT DRAWINGS AS PART OF SHOP DRAWING REVIEW.

## SPRINKLER LEGEND

-  UPRIGHT SPRINKLER HEAD
-  PENDANT SPRINKLER HEAD
-  UPRIGHT HEAD ABOVE CEILING, PENDANT HEAD BELOW CEILING
-  SIDEWALL TYPE SPRINKLER HEAD
-  SUPPLY PIPING (WET SYSTEM)
-  SUPPLY PIPING (GARAGE STANDPIPE)
-  BACKFLOW PREVENTER
-  FLOW SWITCH



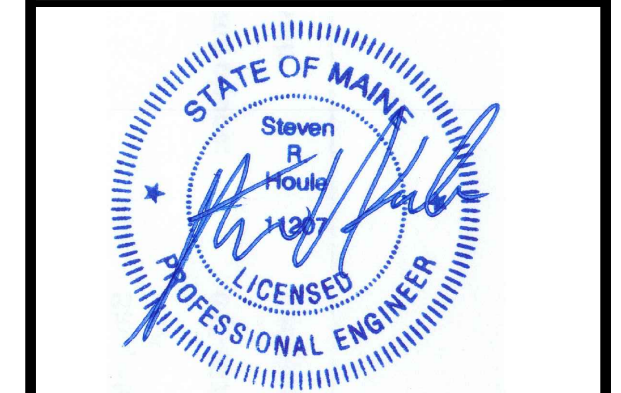
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ARCHITECTS, LLC**

ARCHITECTURE ■ DESIGN ■ PLANNING ■ INTERIOR DESIGN

105 WILLOW BROOK AVENUE  
STRATHAM, NEW HAMPSHIRE 03885

Tel: (603) 770-2491 Fax: (603) 773-0238  
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midtown Portland

Somerset Street  
Elm Street  
Portland, ME

**Building 2  
Sprinkler  
Specifications  
& Legend**

Structural Engineer  
**Becker Engineering**  
MEP ENGINEER  
**McCabe Associates**  
FP Engineer  
**McCabe Associates**

SCALE: None

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2/8/16

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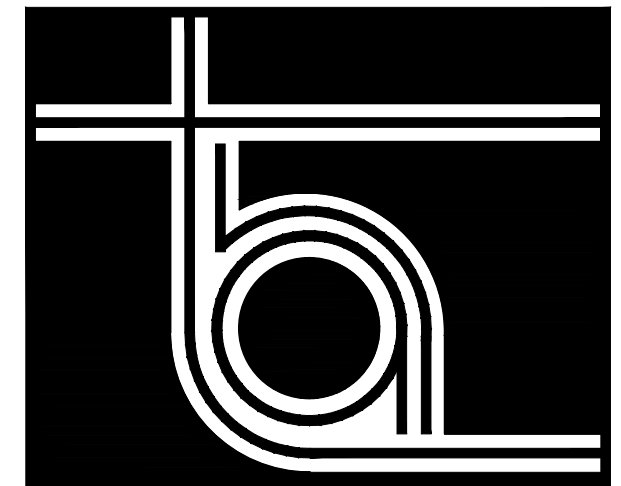
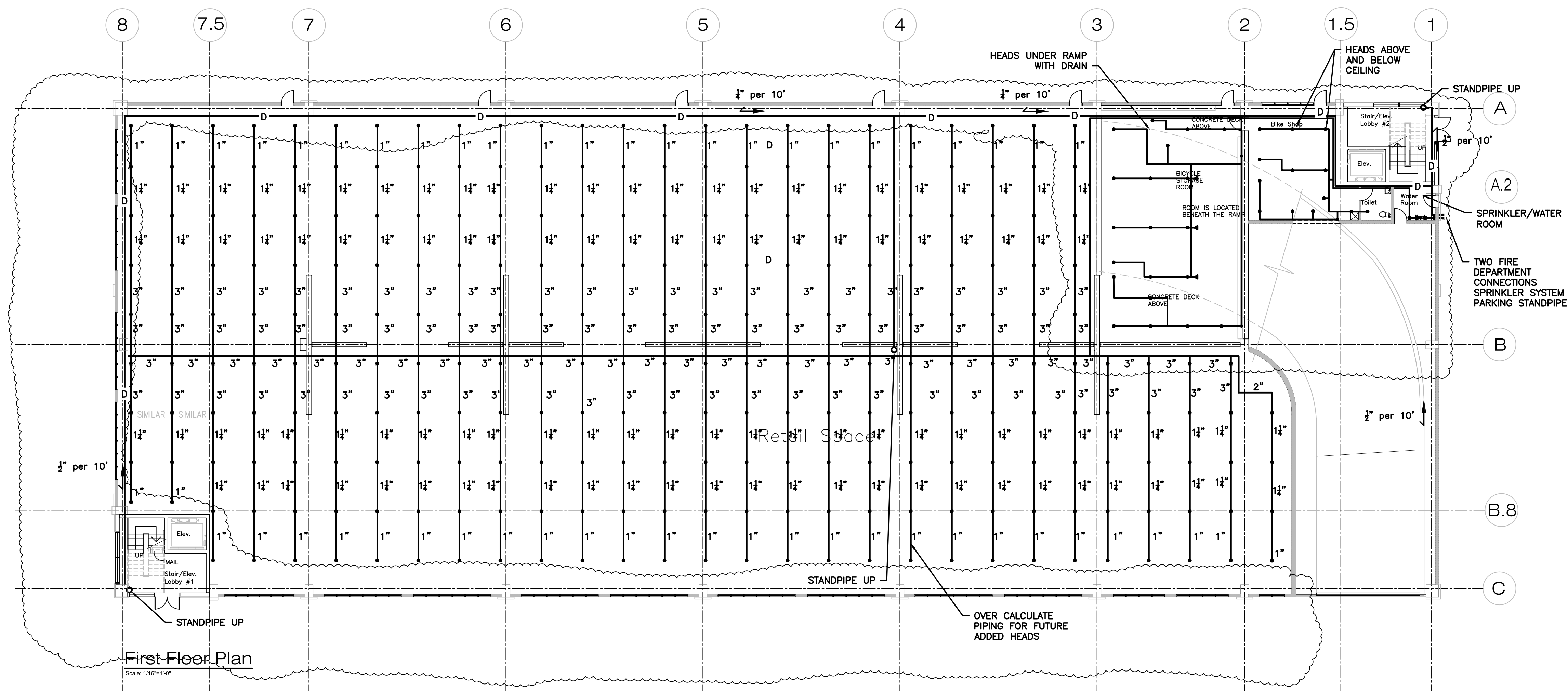
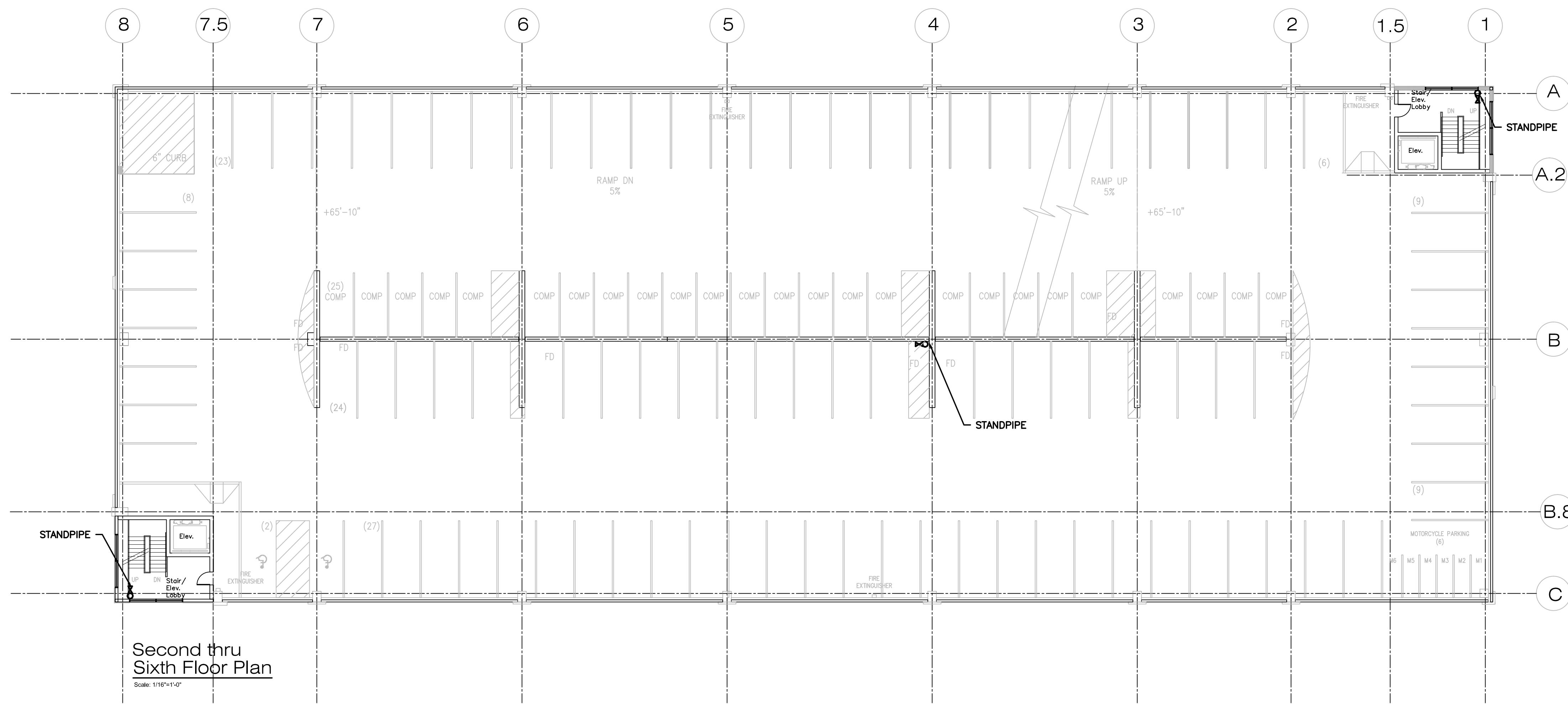
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JOB NO: 15001

SHEET NUMBER

**SP-0.1**

PRELIMINARY  
4/5/16  
Revised Permit Set April 15, 2016  
Permit Set February 8, 2016



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midtown Portland

Somerset Street  
Elm Street  
Portland, ME

Building 2  
First floor  
2nd - 6th Level  
Sprinkler Plans

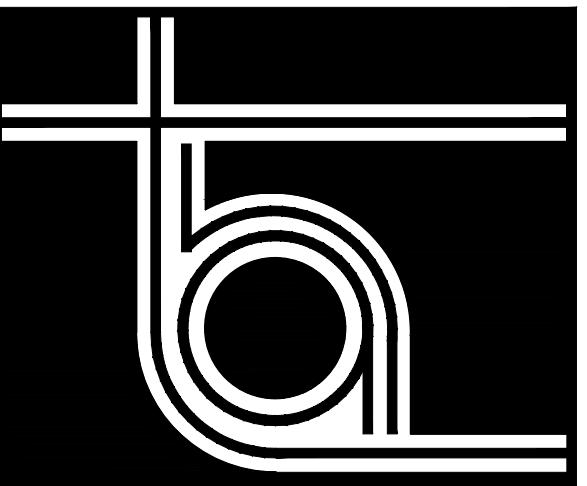
Structural Engineer  
Becker Engineering  
MEP ENGINEER  
McCabe Associates  
FP Engineer  
McCabe Associates

SCALE: 1/16"=1'-0"  
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2/8/16  
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JOB NO: 15001

SHEET NUMBER  
**SP-1.1**

Revised Permit Set April 13, 2016  
Permit Set February 8, 2016



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midtown Portland

Somerset Street  
Elm Street  
Portland, ME

Building 2  
ROOF & 7TH  
SPRINKLER  
PLAN & DETAILS

Structural Engineer  
Becker Engineering  
MEP ENGINEER  
McCabe Associates  
FP Engineer  
McCabe Associates

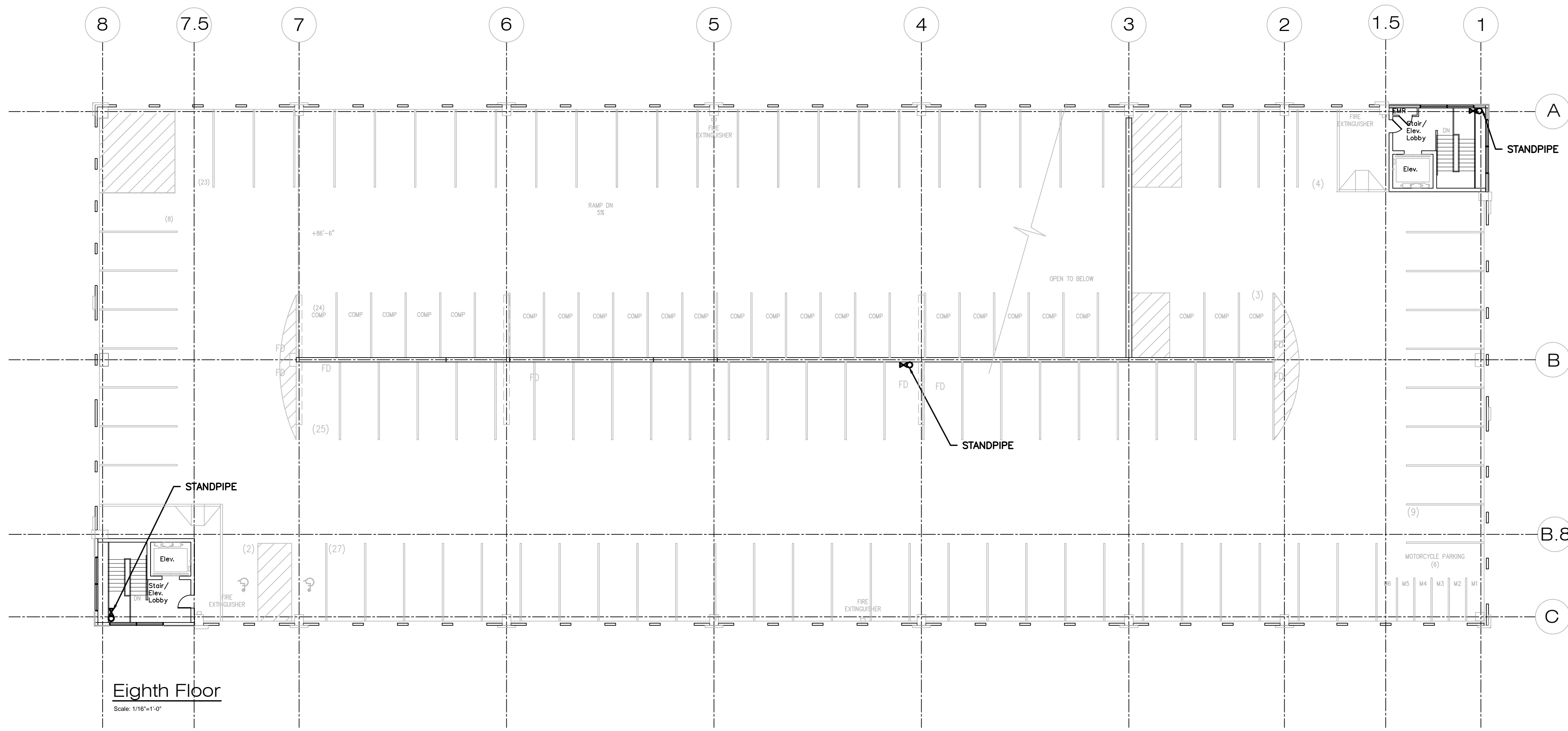
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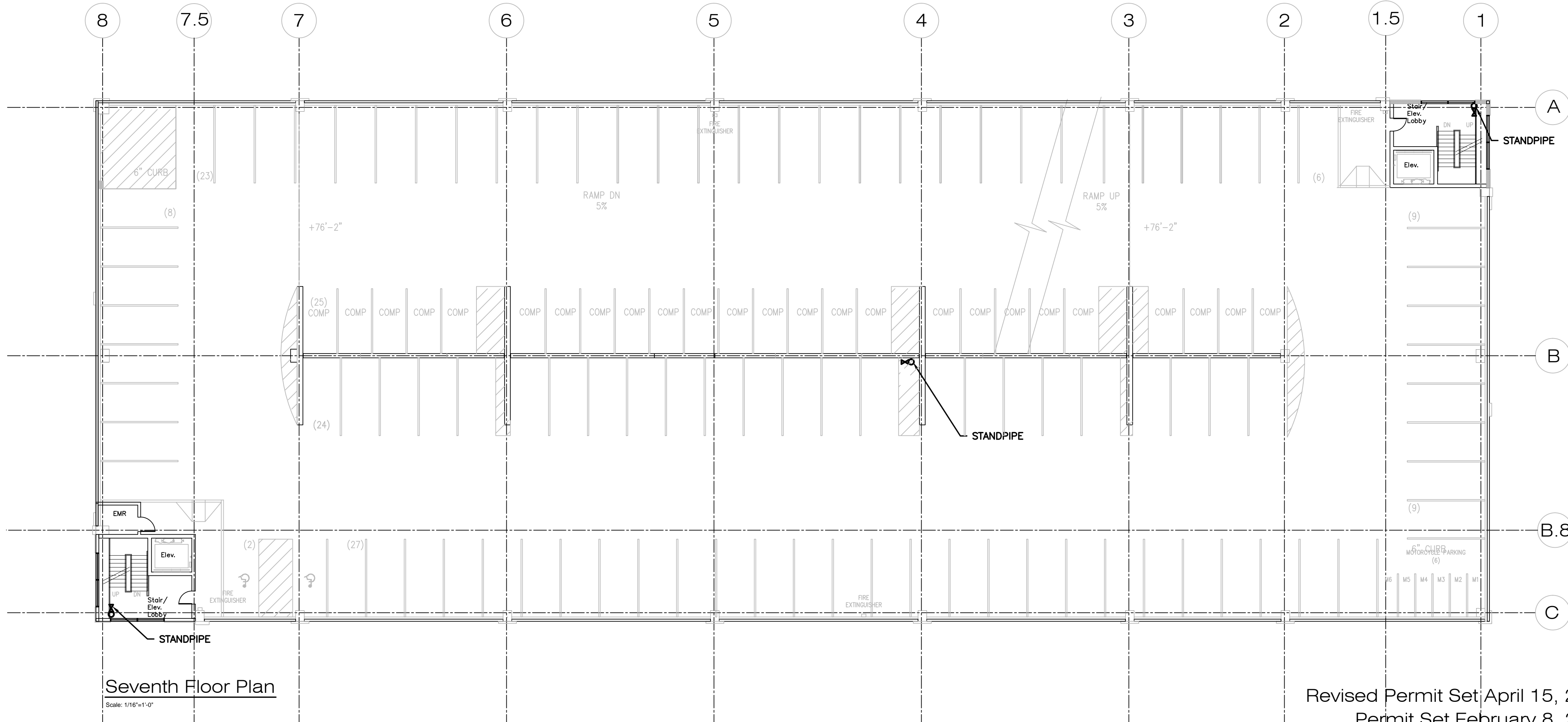
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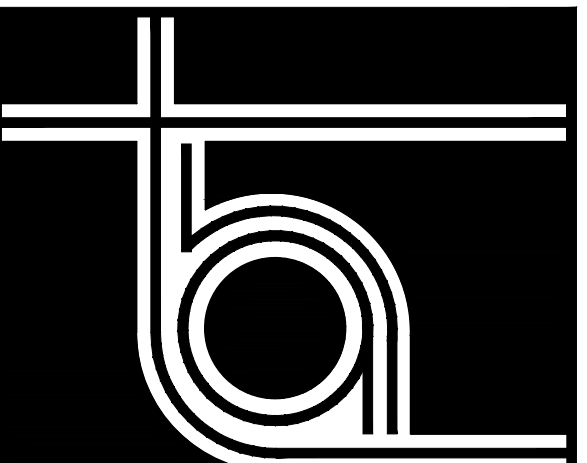


Eighth Floor  
Scale: 1/16"=1'-0"



Seventh Floor Plan  
Scale: 1/16"=1'-0"

Revised Permit Set, April 15, 2016  
Permit Set February 8, 2016



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midtown Portland

Somerset Street  
Elm Street  
Portland, ME

Building 2  
SPRINKLER  
RISER &  
Details

Structural Engineer  
Becker Engineering  
MEP ENGINEER  
McCabe Associates  
FP Engineer  
McCabe Associates

SCALE: NONE

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2/8/16

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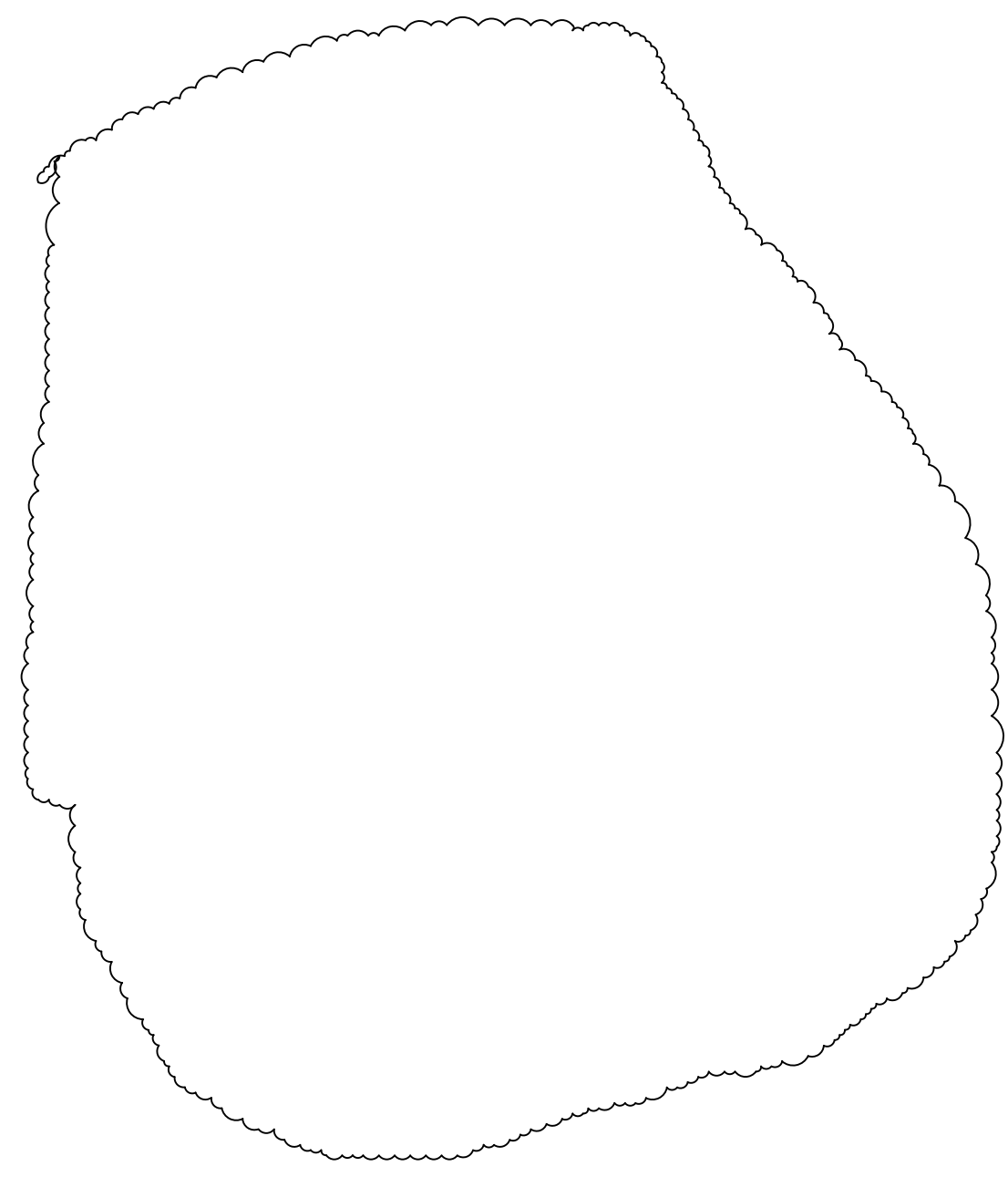
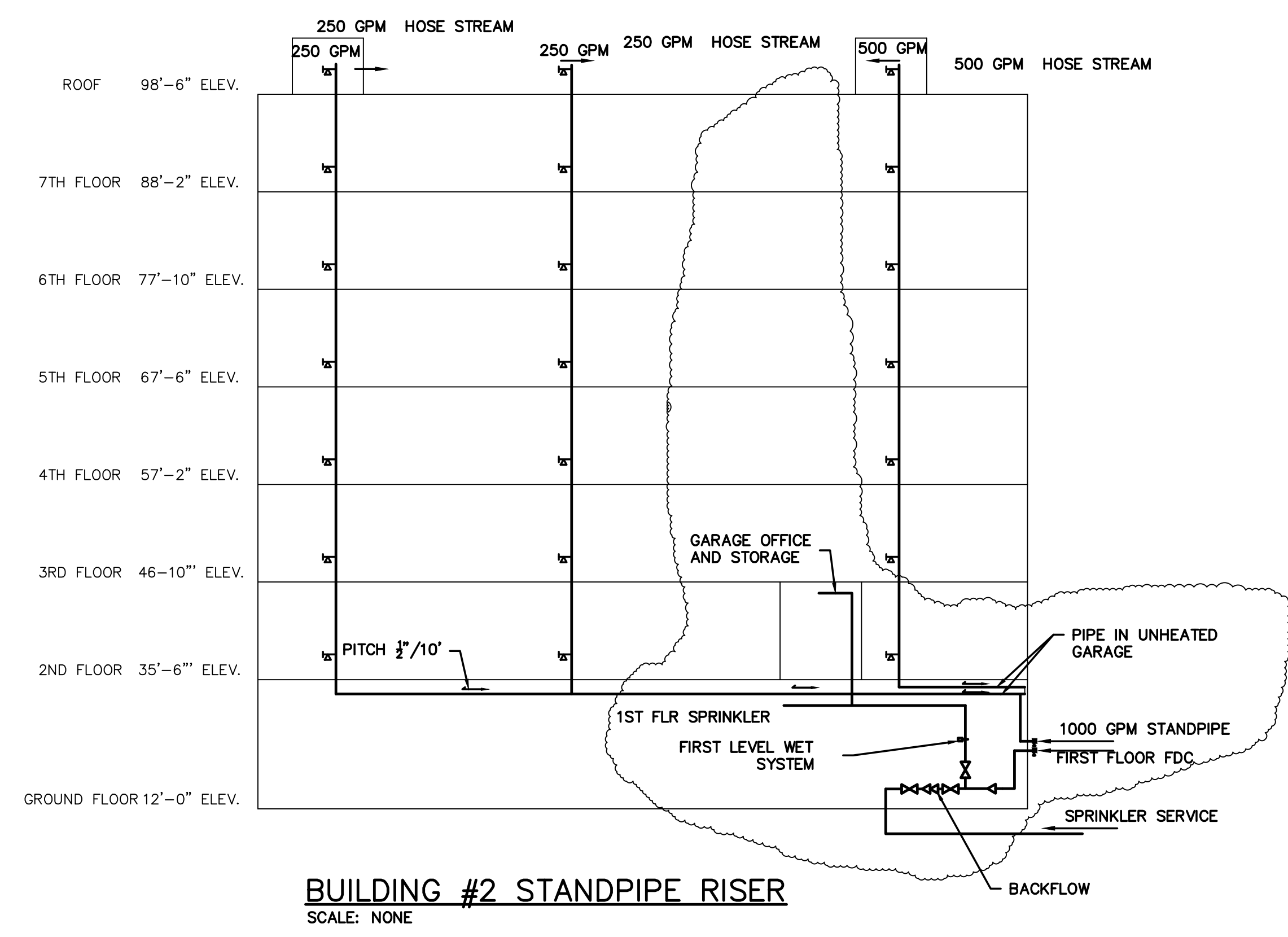
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