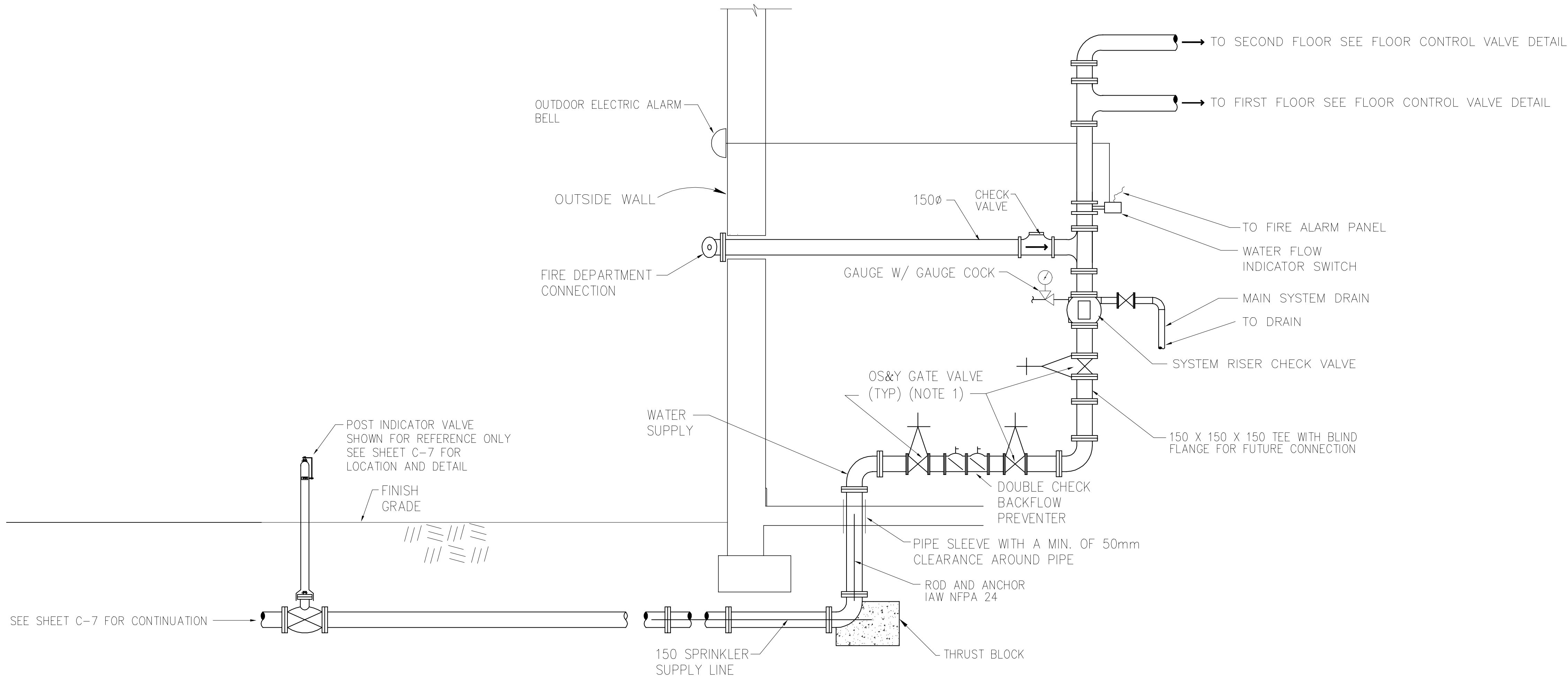
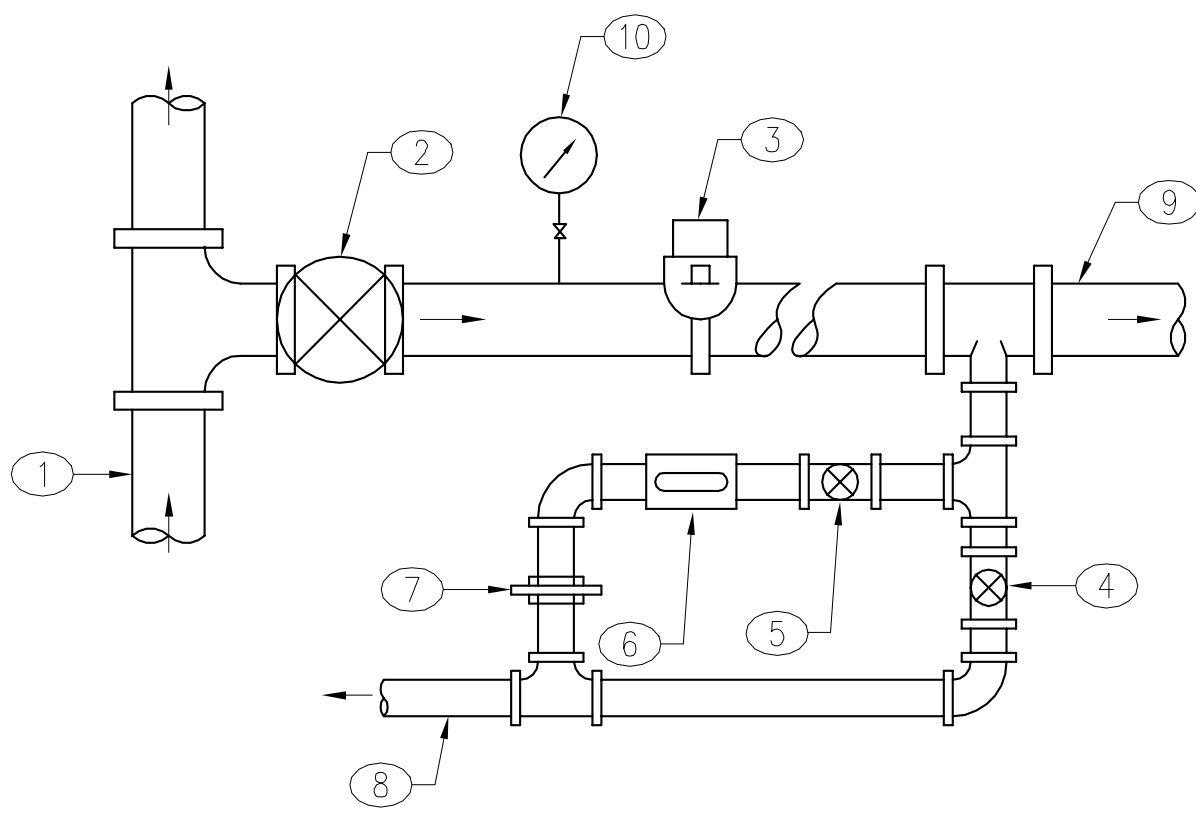


REVISIONS				
SYM	DESCRIPTION	PREPARED BY	DATE	APPROVED



NOTES:  
1. PROVIDE SUPERVISORY SWITCHES ON INDICATED VALVES

**WET PIPE SPRINKLER RISER DIAGRAM**  
NOT TO SCALE

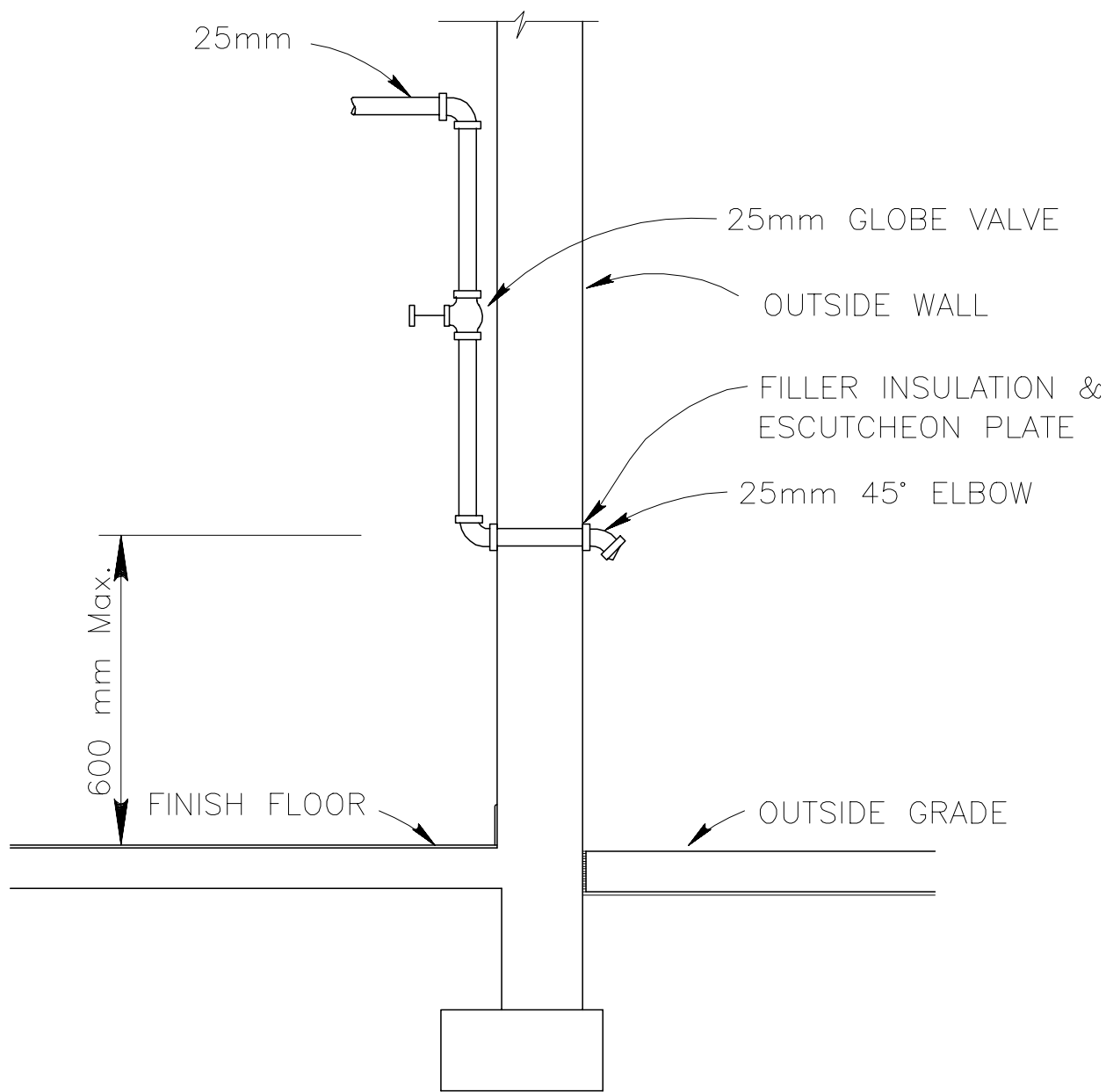


**FLOOR CONTROL VALVE DETAIL**  
NOT TO SCALE

- ① SPRINKLER SYSTEM RISER
- ② OS & Y GATE VALVE WITH SUPERVISORY SWITCH
- ③ WATER FLOW SUPERVISORY SWITCH
- ④ ZONE DRAIN VALVE
- ⑤ GATE VALVE (TEST VALVE)–LOCATE 2.1m ABOVE THE FLOOR
- ⑥ SIGHT GLASS
- ⑦ UNION WITH CORROSION RESISTANT ORFICE GIVING FLOW EQUIVALENT TO THE SMALLEST SPRINKLER ORFICE IN THE ZONE.
- ⑧ TO DRAIN
- ⑨ TO SPRINKLER ZONE
- ⑩ PRESSURE GAUGE WITH GAUGE COCK

**FIRE PROTECTION BASIS OF DESIGN**

1. THE NEW BUILDING SHALL BE FULLY SPRINKLERED WITH A WET PIPE SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13 AND THE FOLLOWING CRITERIA:
- a. OCCUPANCY CLASSIFICATIONS SHALL BE AS INDICATED:
  - b. HYDRAULIC CALCULATIONS FOR THE NEW SPRINKLER SYSTEM (INCLUDING THE OUTSIDE LATERAL TO POINT OF CONNECTION AT THE MAIN) SHALL BE BASED ON THE FOLLOWING CRITERIA:
    - 1) DESIGN AREA = 278.7 SQUARE METERS (3000 SQUARE FEET)
    - 2) DESIGN DENSITY:
      - a. LIGHT HAZARD = 4.07 L/MIN/SQUARE METER (0.10 GPM/SQUARE FOOT)
      - b. ORDINARY HAZARD, GROUP 1 = 6.11 L/MIN/SQUARE METER (0.15 GPM/SQUARE FOOT)
      - c. ORDINARY HAZARD, GROUP 2 = 8.15 L/MIN/SQUARE METER (0.20 GPM/SQUARE FOOT)
    - 3) USE HAZEN-WILLIAMS "C" COEFFICIENT AS SPECIFIED IN SPECIFICATION 15330 FOR CALCULATING FRICTION IN LATERAL PIPE BETWEEN POINT OF CONNECTION AT THE WATER SUPPLY MAIN AND THE BUILDING LINE. LENGTH OF LATERAL IS APPROXIMATELY 50 METERS. SEE CIVIL DRAWINGS AND VERIFY SIZE/LENGTH OF PIPE, NUMBER AND TYPE OF FITTINGS AND LOCATION OF POINT OF CONNECTION OF THE LATERAL TO THE MAIN.
2. THE CONTRACTOR SHALL BASE THE NEW FIRE SUPPRESSION DESIGN ON THE FOLLOWING WATER SUPPLY AND DEMAND DATA:
- a. THE AVAILABLE WATER SUPPLY AT POINT OF CONNECTION OF THE FIRE LATERAL TO THE WATER SUPPLY MAIN IS AS FOLLOWS:
    - 1) STATIC PRESSURE = 760 kPa (110 PSIG)
    - 2) FLOW RATE AT 744 kPa (108 PSIG) RESIDUAL PRESSURE = 4618 L/MIN (1220 GPM)
  - b. SIMULTANEOUS WATER FLOW DEMANDS IN ADDITION TO THE SPRINKLER DEMAND SHALL INCLUDE THE FOLLOWING:
    - 1) OUTSIDE HOSE = 1892.5 L/MIN (500 GPM)
3. PROVIDE SEISMIC BRACING OF SPRINKLER SYSTEM AS SPECIFIED AND AS PER NFPA 13.
4. PROVIDE PIPE HANGERS AND ATTACHMENTS OF SPRINKLER SYSTEM AS SPECIFIED AND AS PER NFPA 13.



**INSPECTORS TEST CONNECTION  
FOR WET PIPE SPRINKLER SYSTEM**  
NOT TO SCALE

IF SHEET IS LESS THAN 28"x42", IT IS A REDUCED PRINT. SCALE REDUCED ACCORDINGLY.

P9-3

MEDICAL/DENTAL CLINIC			
FIRE PROTECTION DETAILS			
SIZE	CODE IDENT. NO.	DRAWING NO.	
F	XXXXX	8144716	
CONST. CONTR. NO.		SHEET 211 OF 316	
SCALE: AS SHOWN		SPEC. 11996048	