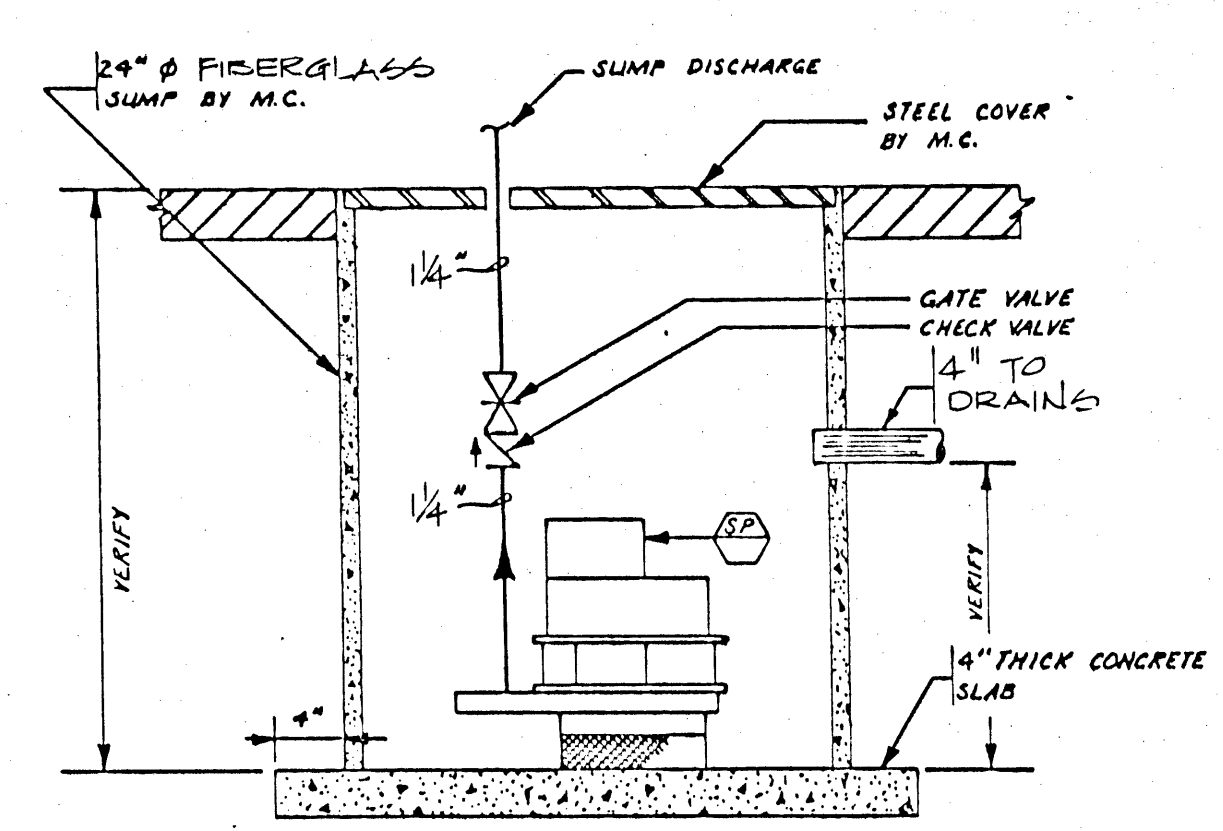
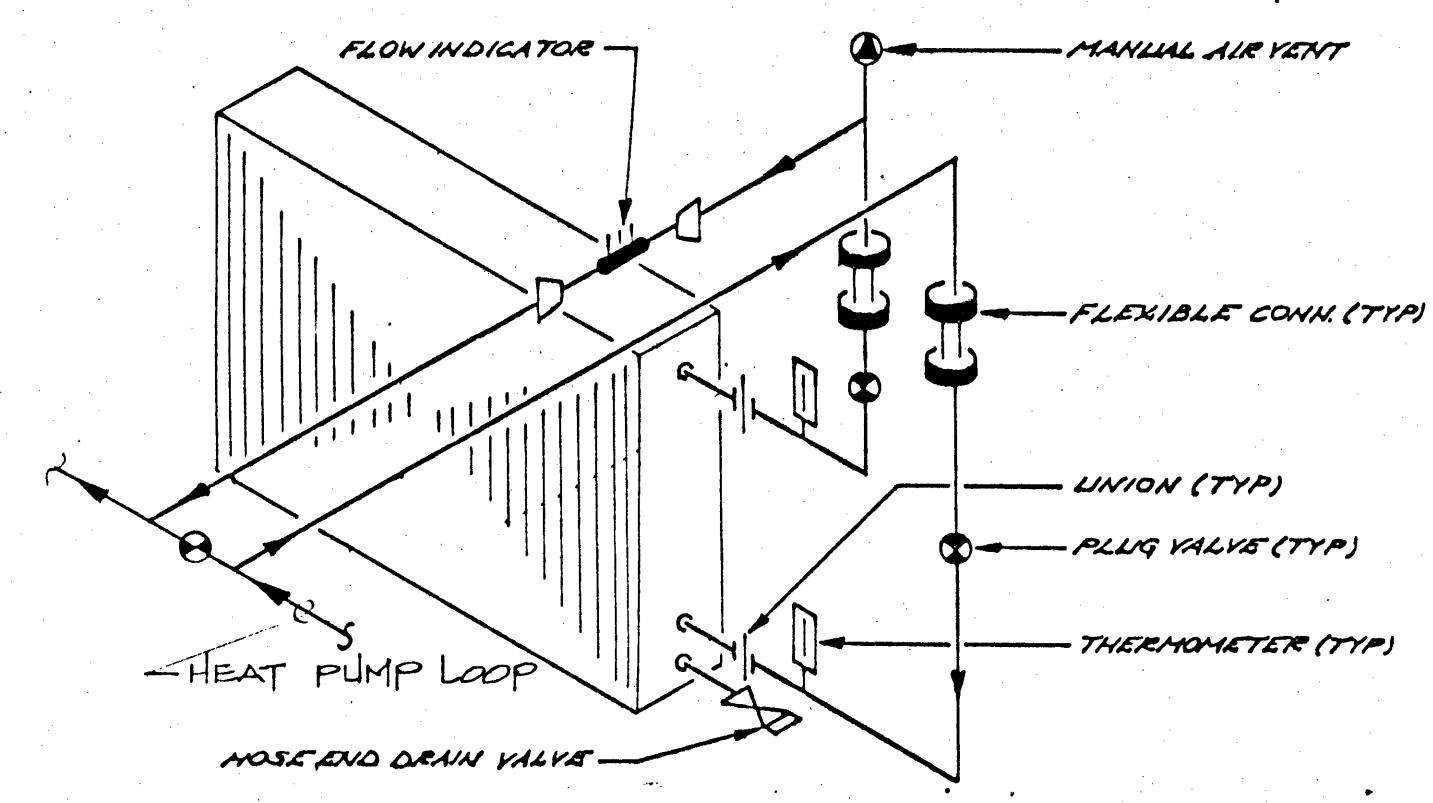


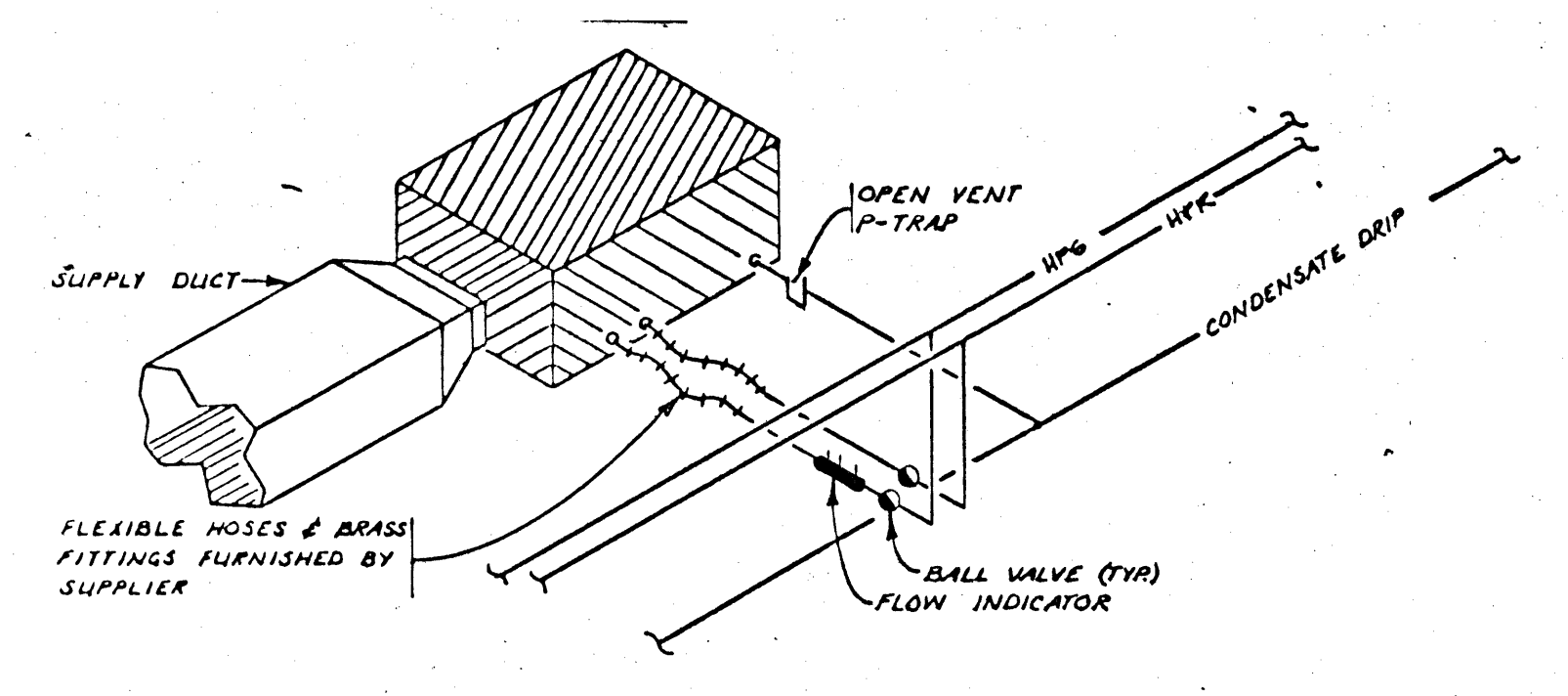
**1** WATER HEATER DETAIL  
NTS



**2** SUMP PUMP DETAIL  
NTS

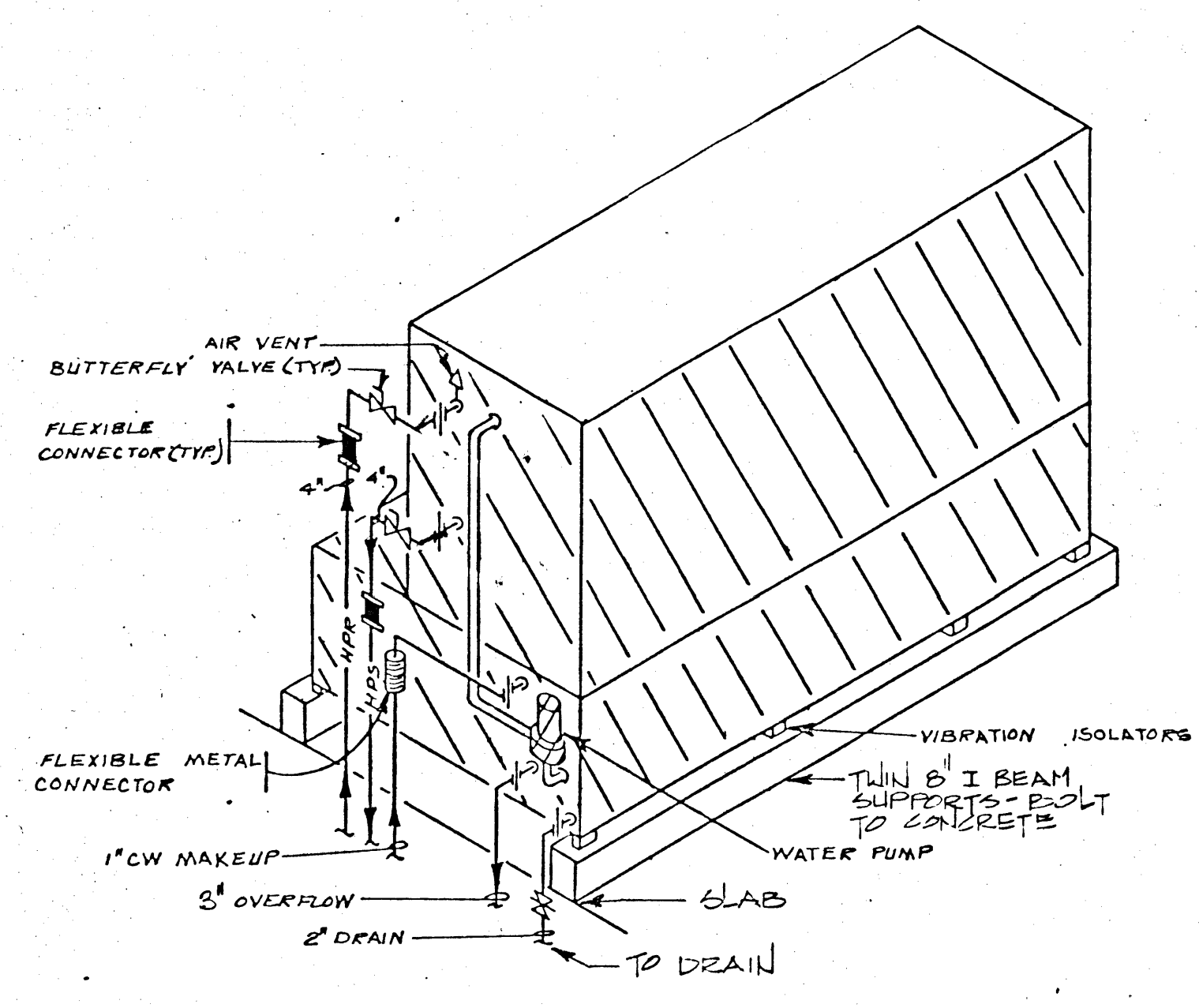


**3** AH-1 HOT WATER COIL DETAIL  
NTS

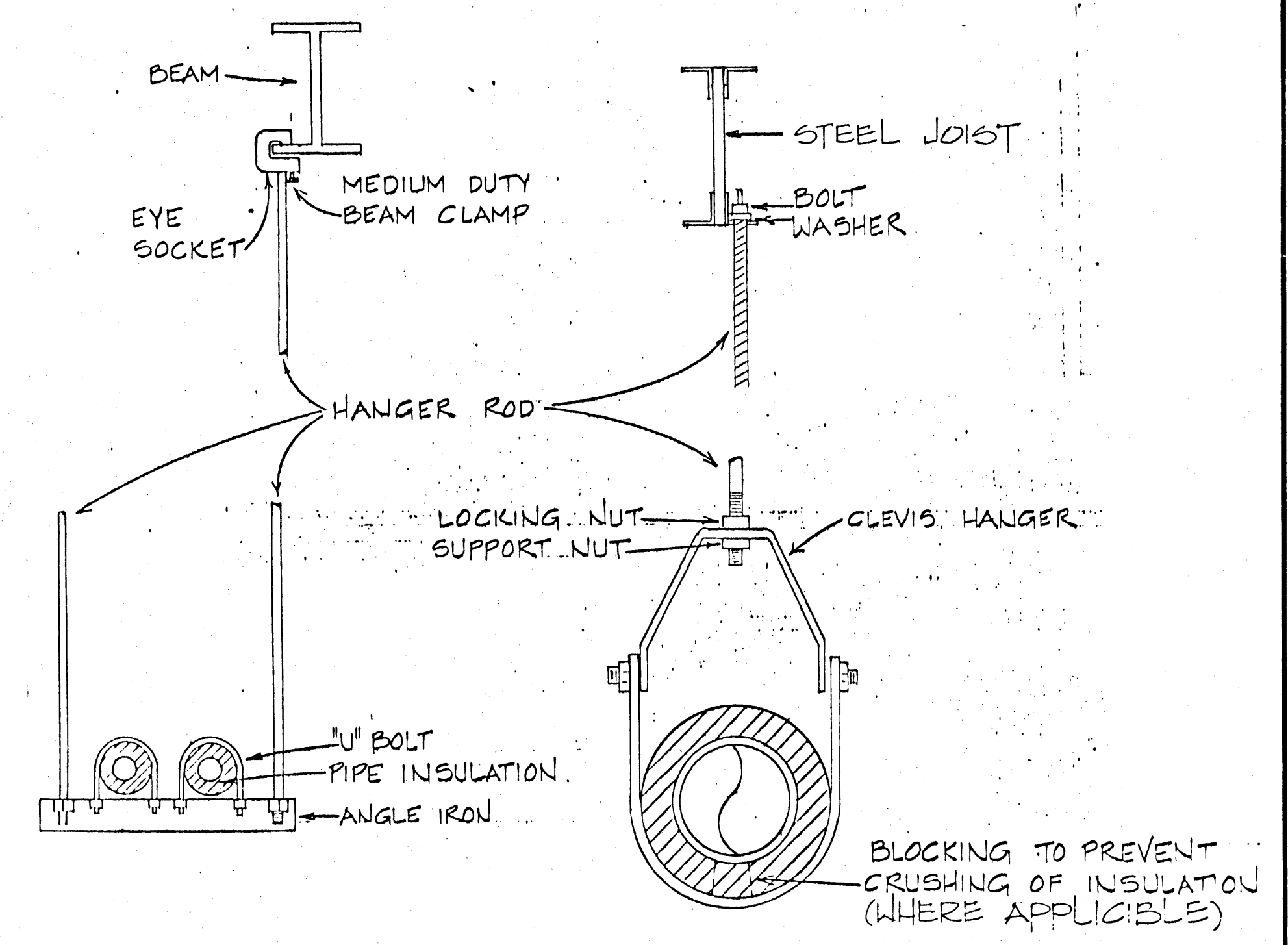


NOTE: SUSPEND HEAT PUMPS FROM 2"x2"x1/8" ANGLE IRON WELDED TO STEEL JOIST'S SUPPORTING (4) 3/8" THREADED RODS WITH NEOPRENE-IN-SHEAR VIBRATION ISOLATORS AT UNIT.

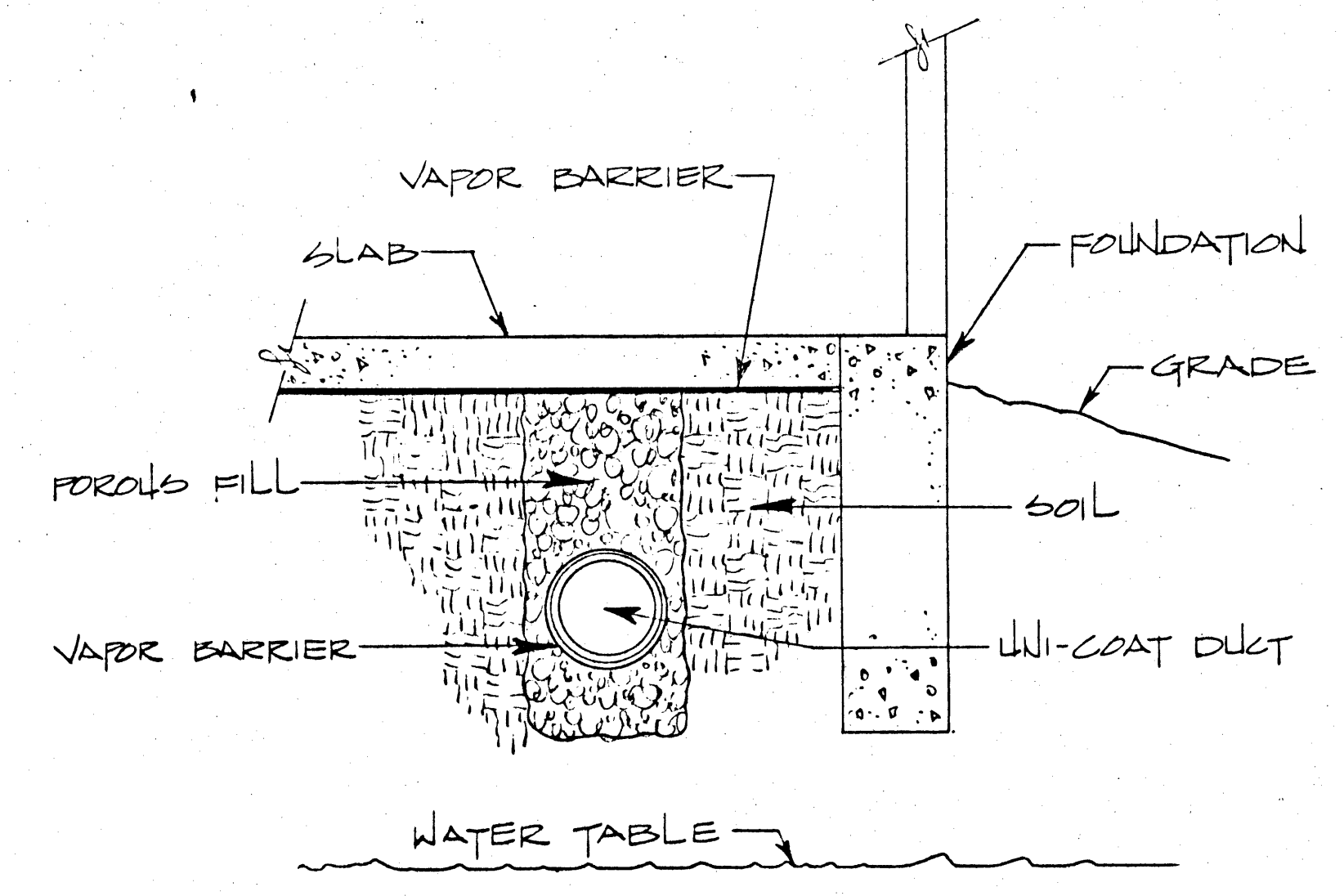
**4** HEAT PUMP PIPING DETAIL  
NTS



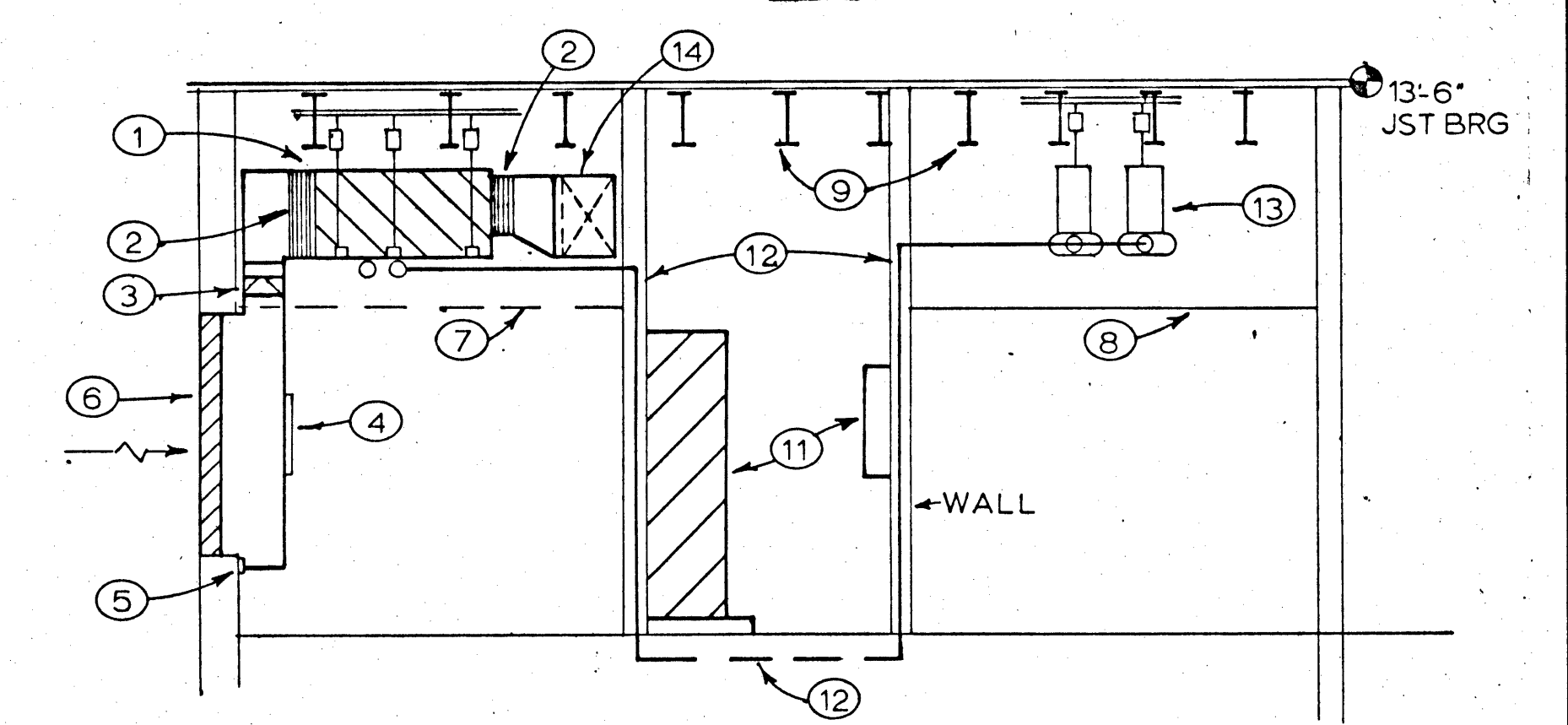
**5** EC-1 DETAIL  
NTS



**6** PIPE SUPPORT DETAILS  
NTS

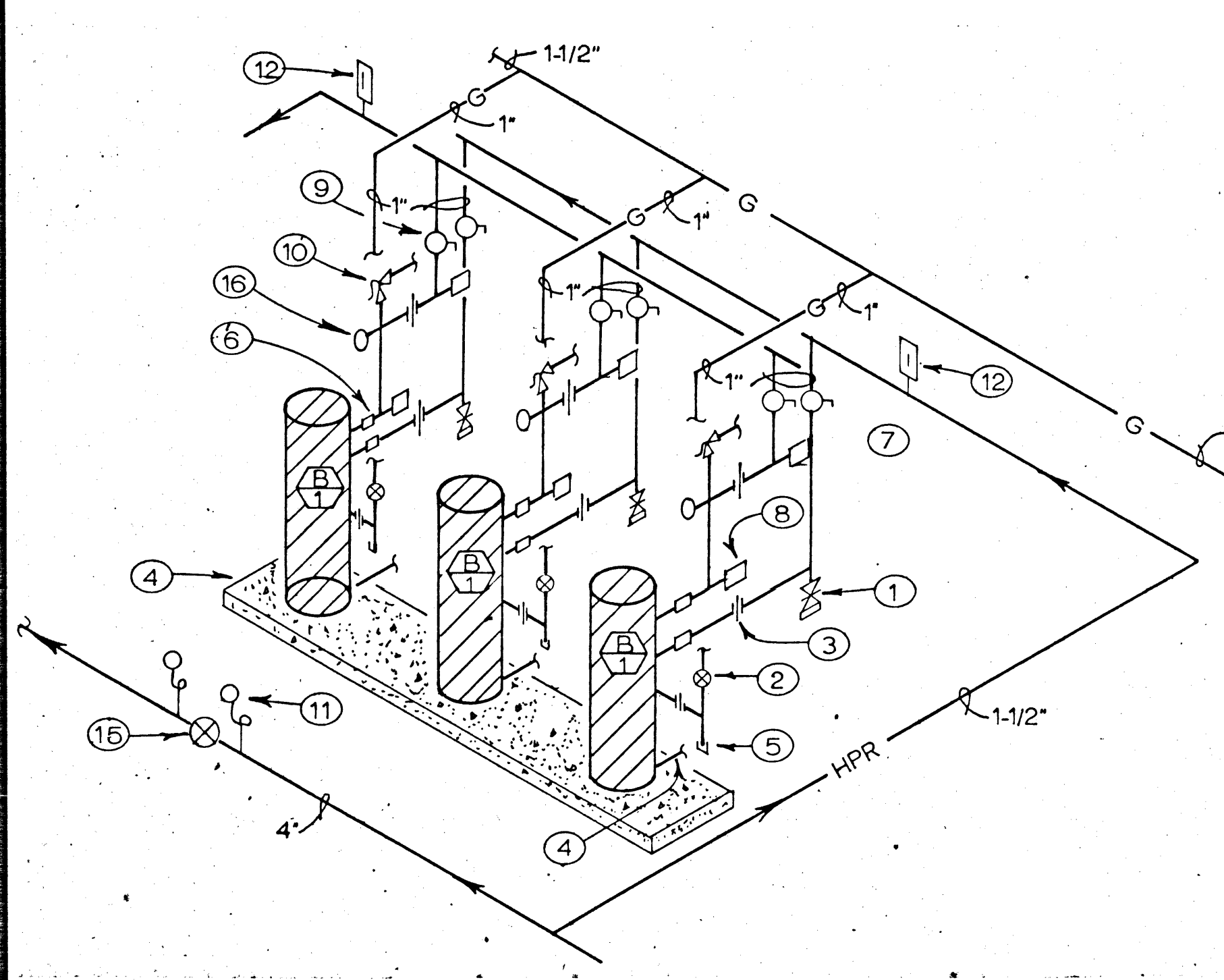


**7** UNDERGROUND DUCT DETAIL  
NTS



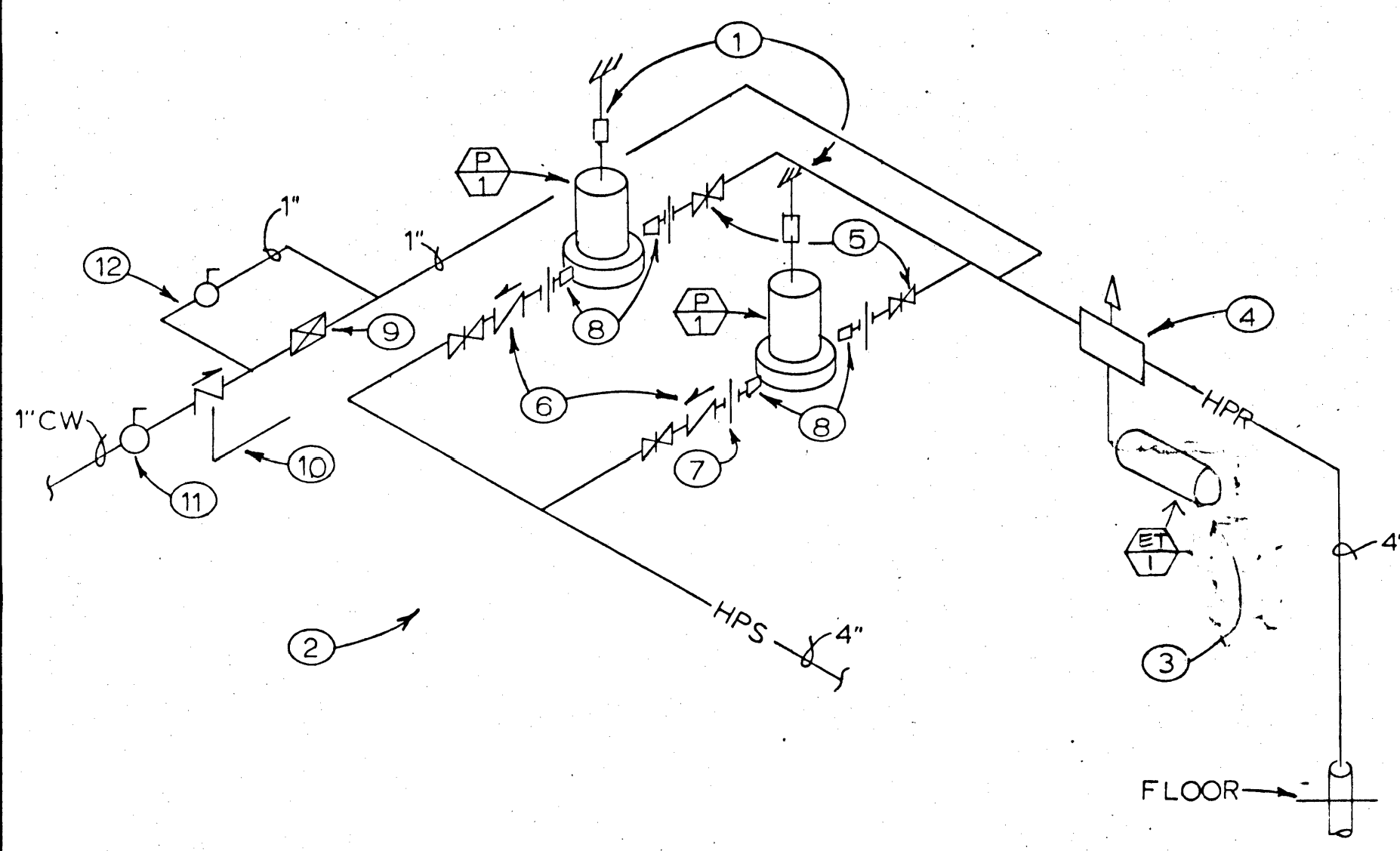
- SECTION CUT KEYED NOTES:
- SUSPEND AH-1 FROM CEILING JOISTS W/3"x3"x5/16" ANGLE IRON, 5/8" THREADED RODS & VIBRATION ISOLATORS.
  - FLEXIBLE DUCT CONNECTION.
  - 12" x 48" AUTOMATIC OUTDOOR AIR DAMPER IN 12" x 48" OUTDOOR AIR DUCT.
  - ACCESS DOOR.
  - 2" DRIP PAN - SOLDER WATERTIGHT.
  - 6'-0" x 4'-0" WIDE OUTDOOR AIR INTAKE LOUVER. VERIFY COLOR & FRAMING REQUIREMENTS.
  - 8'-0" CEILING IN HALLWAY BEYOND.
  - 8'-0" CEILING.
  - ROOF STRUCTURE.
  - ELECTRICAL ROOM - NO PIPING IN OR ABOVE THIS ROOM PER N.E.C.
  - DIV. 16 SWITCH GEAR.
  - 4" HPR PIPING.
  - CIRCULATING PUMPS.
  - 15" x 24" SUPPLY AIR DUCT BANK THRU WALL.

**8** SECTION CUT  
NTS



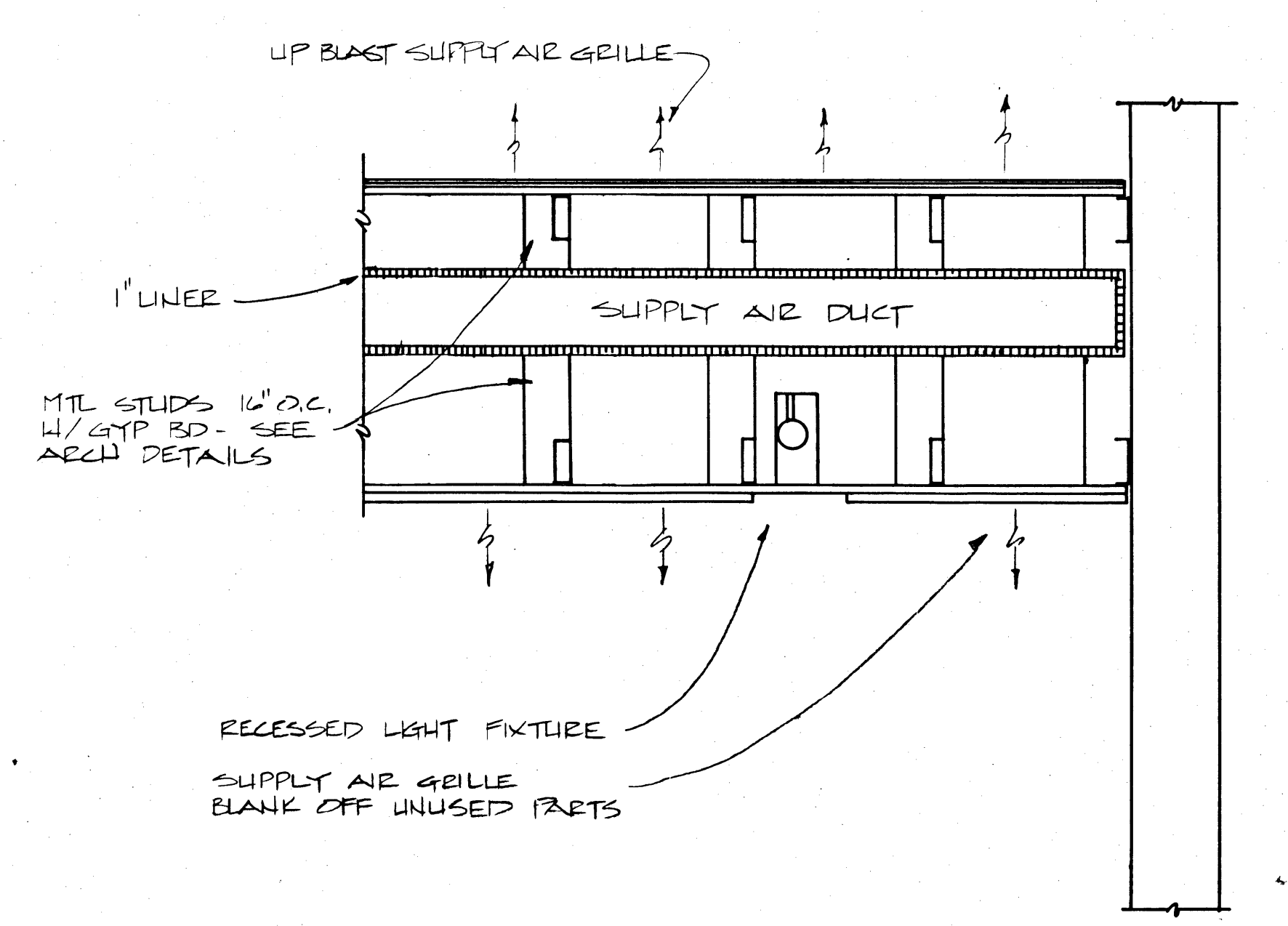
- BOILER PIPING DETAIL KEYED NOTES
- HOSE END DRAIN VALVE (TYPICAL)
  - 1" GAS SHUTOFF VALVE.
  - TYPICAL UNION.
  - 3/4" CONDENSATE DRIP - PIPE TO FLOOR SINK (TYPICAL OF 3).
  - 6" DIRT LEG (TYPICAL).
  - 1 of 6 VIBRATION ISOLATORS FURNISHED WITH UNITS.
  - LOW WATER CUT OFF (TYPICAL)
  - MI LIMIT AQUASTAT (TYPICAL)
  - TYPICAL BALL VALVE
  - PRESSURE RELIEF VALVE - PIPE DISCHARGE FULL SIZE TO FLOOR SINK.
  - PIGTAIL, STOPCOCK & PRESSURE GAUGE (TYPICAL).
  - THERMOMETER (TYPICAL).
  - BALL VALVE (TYPICAL).
  - 3/4" WATTS 90 BACKFLOW PREVENTER PIPE DISCHARGE TO FLOOR SINK IN MECH. ROOM.
  - TYPICAL BALL VALVE.
  - 1" BYPASS FOR QUICK FILL.
  - TEMP/PRESSURE GAUGE (TYPICAL).
  - PROVIDE 2" CPVC INLET & OUTLETS FOR COMBUSTION AIR MUFFLERS AS REQUIRED BY MFR., AND TRANSITION TO CAST IRON AT ROOF PENETRATIONS. PROVIDE DRAINS AT BOTTOM OF STACKS. PAINT ALL PIPING ABOVE ROOF TO MATCH ROOF.

**9** BOILER PIPING DETAIL  
NTS



- CIRCULATING PUMP DETAIL KEYED NOTES
- PUMPS SHALL BE SUPPORTED FROM JOISTS ABOVE WITH 3"x3"x3/16" ANGLE IRON SPANNING THE JOISTS, SUPPORTING 5/8" ROD AND VIBRATION ISOLATORS.
  - PUMPS, AIR PURGER, VALVES, ETC. SHALL BE MOUNTED ABOVE CEILING OF STORAGE ROOM.
  - EXPANSION TANK MOUNTED ON HPR STAND IN ATTIC. SUPPORT WITH 2" W/ SHIP DINGS.
  - TACO #437 AIR SCOOP WITH AUTOMATIC AIR VENT.
  - TYPICAL GATE VALVE.
  - TYPICAL CHECK VALVE.
  - TYPICAL UNION OR FLANGE.
  - ECCENTRIC DEDUCER.
  - TACO #335 3/4" PRESSURE REDUCING VALVE.
  - 3/4" WATTS 90 BACKFLOW PREVENTER PIPE DISCHARGE TO FLOOR SINK IN MECH. ROOM.
  - TYPICAL BALL VALVE.
  - 1" BYPASS FOR QUICK FILL.

**10** CIRCULATING PUMP DETAIL  
NTS



**11** LINEAR GRILLE DETAIL  
NTS

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