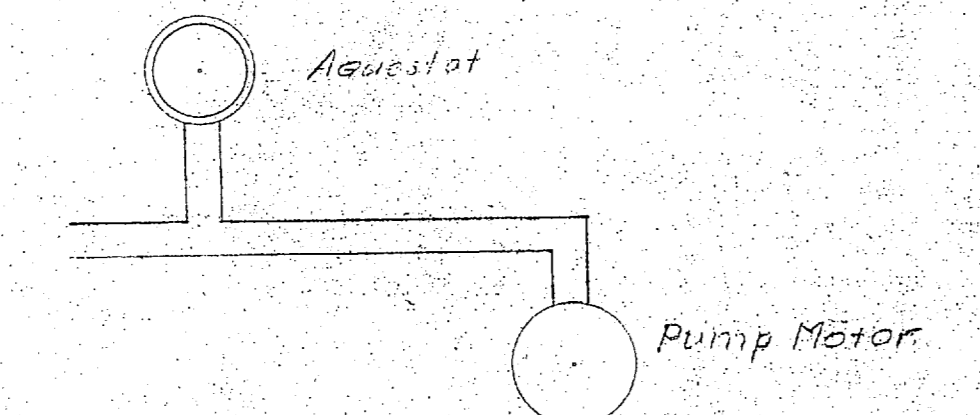
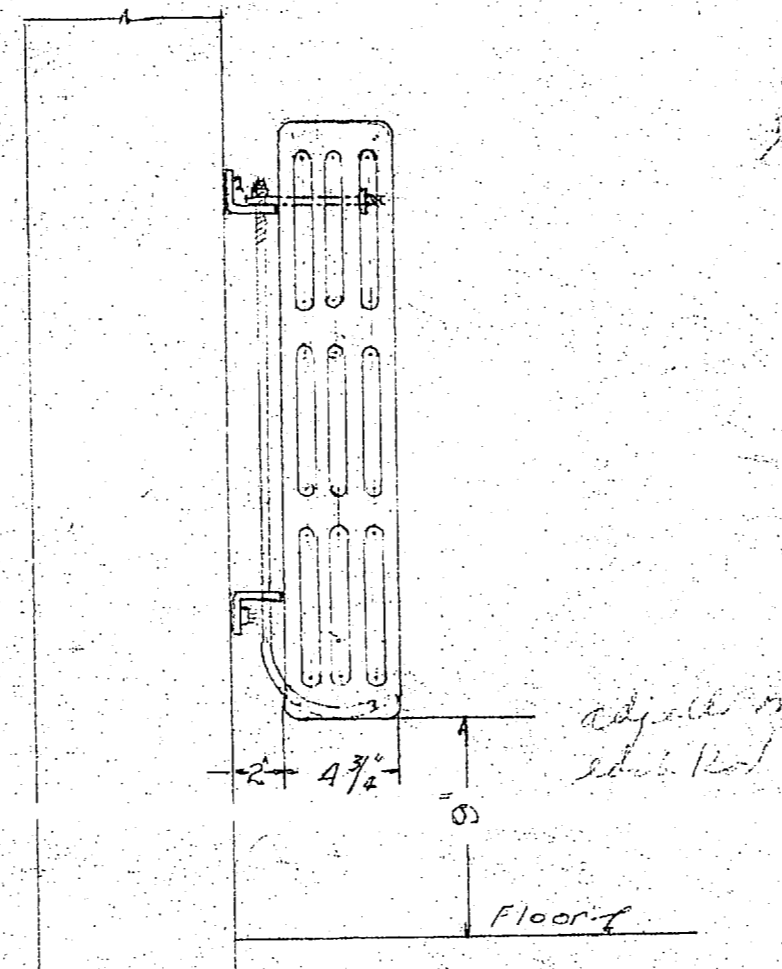


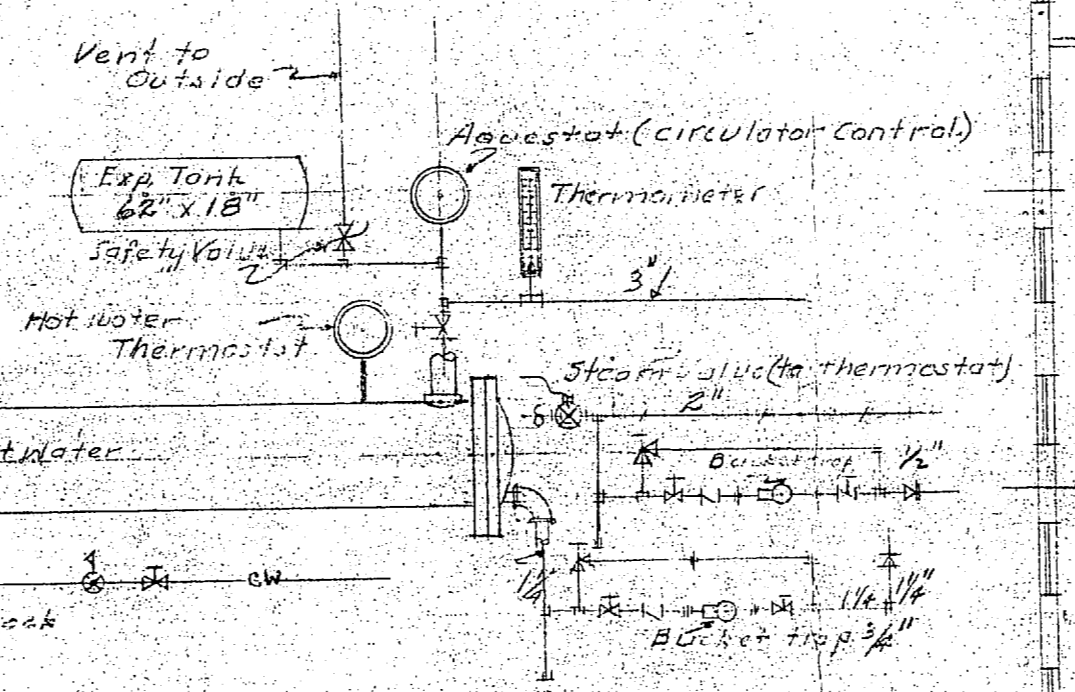
SCHEMATIC WIRING DIAGRAM TEMPERATURE CONTROL



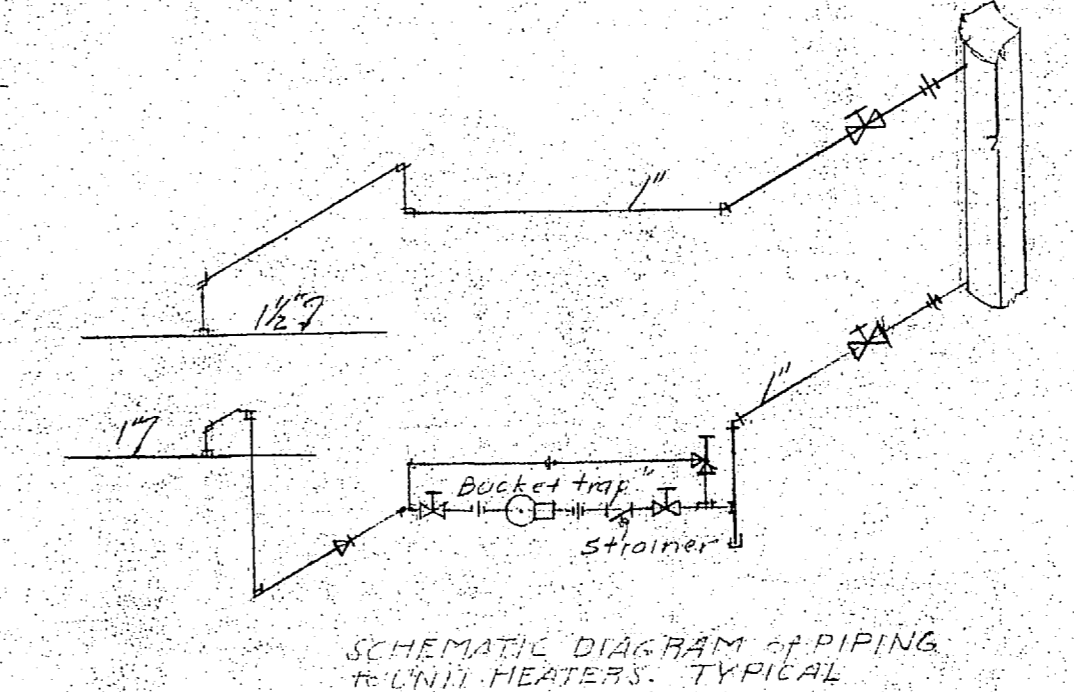
SCHEMATIC WIRING DIAGRAM CIRCULATING PUMP



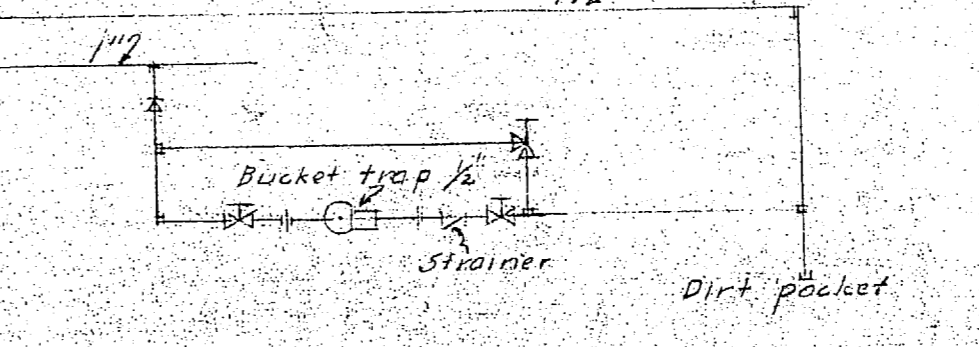
TYPICAL RADIATOR MOUNTING. NO SCALE.



SCHEMATIC DIAGRAM PIPING AT CONVERTER.



SCHEMATIC DIAGRAM PIPING IN UNIT HEATERS. TYPICAL



SCHEMATIC DIAGRAM END OF LINE DRIP

HEATING PLAN

LOADS  
Direct Standing 133,000  
Indirect (Unit heaters) 163,000

**DIRECT RADIATION.**  
All radiators 4 tube 25" high legless set 9" above the floor. Connections to radiators 89" and less 1/2" 40" and above 3/4". All elbows required are UNIT HEATERS.

All unit heaters equal in capacity & quality to Unit No. 10PL Manufactured by the Trane Co. La Crosse, Wis. For 50° Steam.

**METHOD:**  
Divided system.  
A. Hot water. See specification No. 1019. Forced hot water, radiator flow 240 BTU's per square foot with minimum outside temperature of 15°F.  
B. Steam. Unit heaters, 50° steam. See Specification No. 1026.

**CONTROL:**  
Hot water temperature of water to be controlled by an outside thermostat (compensating control) resetting the hot water thermostat in accordance with a predetermined schedule depending upon the outside temperature and a bulb located in the hot water line leaving the generator. Steam Valve connected to the compensating instrument. Adjuster with bulb located in the tank to float the valve to pump when the water in converter reaches a temperature of 95°F and to operate continuously. Controls shall be the product of a single manufacturer.

**GENERATOR:**  
See specification 1026, Section 1022. Generator to provide water at 235°F for maximum conditions (12° outside, 70° inside).

**CIRCULATION:**  
3 connections 70 gpm, 10.5 total head, 235°F water. Specification 1019, 120V-1-8-20. **PRESSURE RELIEF VALVES:**  
Pressure relief valves vented to outside of building.

**INSULATION OF GENERATOR:**  
Insulate generator as specified for boiler hot water piping Specification 1019 Section 30.

**DRAIN:** Locate drain cocklet outlets as shown.

**UNIT HEATER CONTROL:**  
Individual thermostats required for Developing, Blue Print and Surveyors rooms, Wing 2. Remainder of unit heaters grouped as shown, with one thermostat each wing (other marked U), one for group (marked G) and one thermostat for heaters marked S.

Each thermostat to be provided with an "on" or "automatic" switch.  
Blower for Blue Print & Developing Rooms 4500 CFM. Locate on platform above perimeter of room and discharge through roof. 1/2 HP Motor Direct Connected 208V, 60 Hz.

Checked with Contractors Plan 700-42

Issue	Date	Checked by
1	11/1/43	RL
2	11/1/43	RL
3	11/1/43	RL

Bldg 1005

DRAWN BY: [Signature] CHECKED BY: [Signature] CHIEF ENGINEER: [Signature] IN CHARGE: [Signature] DATE: 2/2/43 SCALE: AS SHOWN 1/4" = 1'-0" DRAWING NO.	<b>287853</b> APPROVED: [Signature] DATE: 2/2/43 NO. 1026	<b>CARR &amp; J. E. GREINER CO.—ARCHITECTS</b> DURHAM, N. C. CAMPBELL JUNE—NEW RIVER BUREAU OF YARDS AND DOCKS—U. S. N. A. BARRACKS—INDUSTRIAL AREA HEATING
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