

NORTHEAST UTILITIES



THE CONNECTICUT LIGHT AND POWER COMPANY
WESTERN MASSACHUSETTS ELECTRIC COMPANY
HOLYOKE WATER POWER COMPANY
NORTHEAST UTILITIES SERVICE COMPANY
NORTHEAST NUCLEAR ENERGY COMPANY

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MILLSTONE UNIT NO. 3

FIRE LOOP FLOW TEST

On July 9, 1984, Generation Fire Protection Engineering conducted a water flow test of the 12 inch underground fire water loop at Millstone Unit No. 3. The purpose of this flow test was to determine the water supply/pressure available, in order to provide a reference point for determining gpm/psi throughout MP-III's underground loop.

The flow test was conducted utilizing two hydrants located within the northeast portion of the fire loop (North of Waste Disposal Building & North of Maintenance Shop). Please refer to the attached sketch. Two 2½" fire hoses (150' in length each) were connected to the flow hydrant. Attached to each hose was a standard Underwriters Laboratories (UL) playpipe (1 3/4" tip). Static and residual pressure readings were obtained using a calibrated pressure gage installed within the flow path.

The rate of flow in gallons per minute (GPM) was determined by measuring the velocity pressure of each stream utilizing a calibrated pitot gage. The test findings were as follows:

Static Pressure	124 psi
Residual Pressure	119 psi
Hose #1 Pitot Reading	36 psi or 546 gpm
Hose #2 Pitot Reading	40 psi or 575 gpm

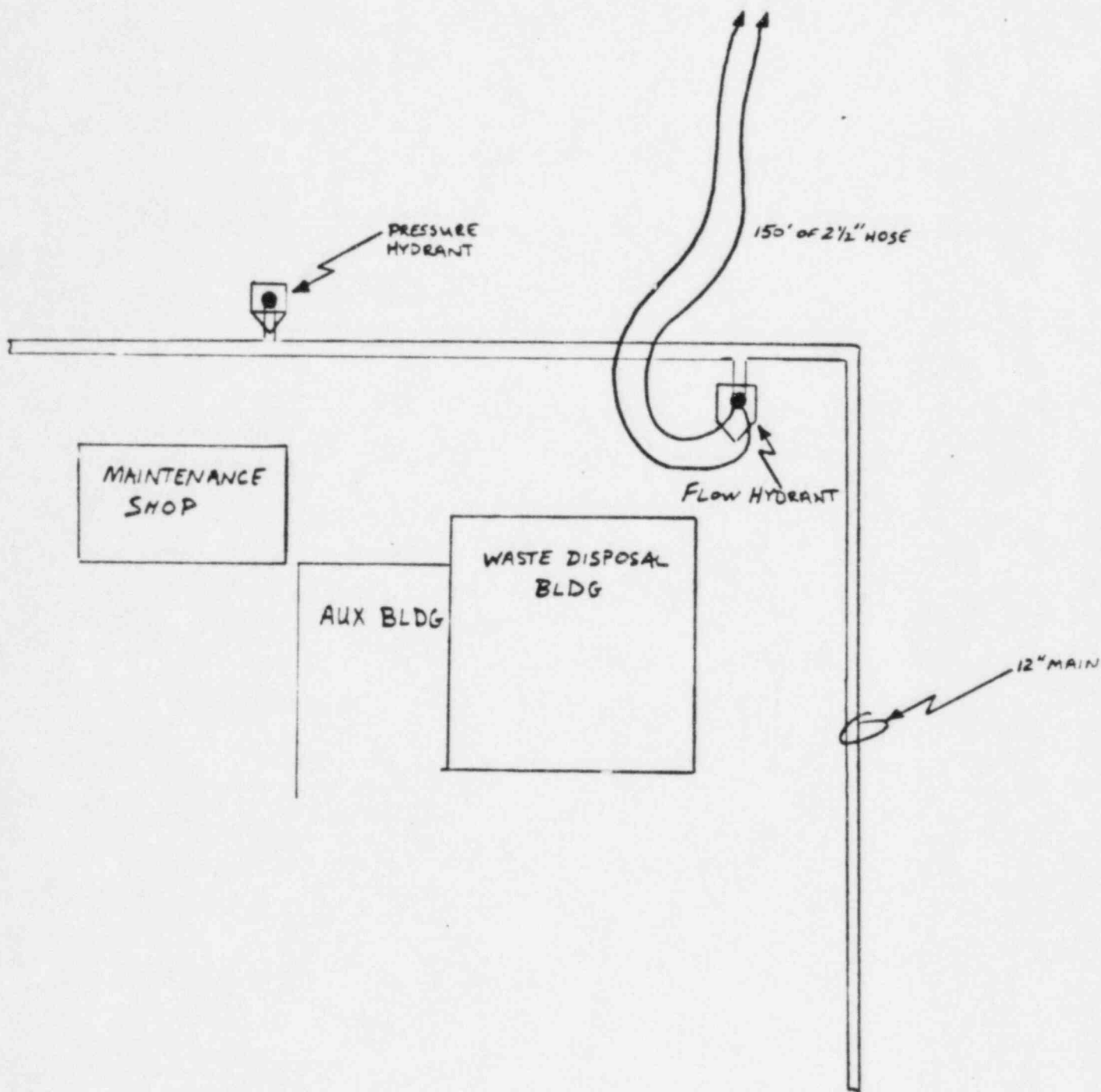
It was concluded that this remote hydrant is capable of delivering 1121 gpm at a pressure of 119 psi.

Richard S. Warriner 7/9/84
RICHARD S. WARRINER

Generation Fire Protection Engineering
Generation Engineering Department

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F PDR

MILLSTONE 3 FLOW TEST



SCALE: NONE

RSW 7/9/84

Waterflow Analysis

Flow TEST 6/15/84
 " " 7/9/84
 → Millstone 1 & 2 (2 Hydrants - 1000 ft)
 → Millstone 3 (1 Hydrant - see attached sketch)
 Highest Sprinkler Bldg. No. _____ Ft. Abv. Residual Pressure

Property **MP-3** Location **VARIOUS 2" UG Laid** Date _____ By _____
 Building No. _____ Area of Application _____ Design Density **GPM/Sq. Ft.**

Remarks **Hydrant Flow demand - for deviation requests**

