

REPORT OF THE CITY ENGINEER

To the Honorable City Council of the City of Worcester:—

Gentlemen:—In accordance with Chapter 7, of the Ordinances of the city, I respectfully report with relation to work upon dams and reservoirs under my direction for the year ending November 30, 1915.

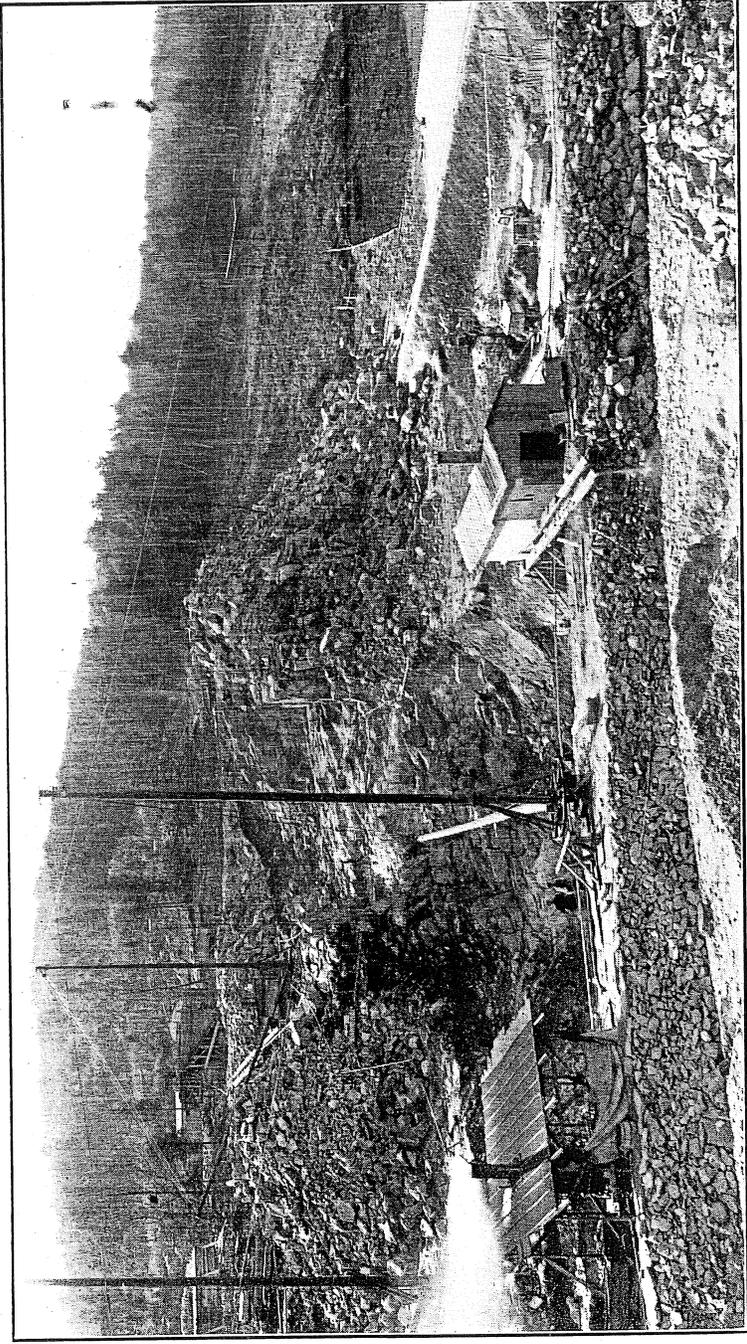
Practically all construction upon dams and reservoirs has been confined to the preliminary work of building the Pine Hill dam. The excavations that were begun this season have proceeded diligently, and considerable quantities of earth and ledge have been removed. Most of the excavations required for the southerly part of the dam have been made, and the underlying ledge is being drilled and tested for soundness and suitability. This feature of the work has progressed sufficiently to promise a beginning of construction the coming season, and in anticipation most of the appliances needed have been installed.

A rather unusual condition in this locality is the absence of sand of a suitable character for the work that is within economical reach, and in consequence a sand roll has been erected with which to manufacture sand from the stone in the vicinity.

A cableway, steam derricks, air compressor, numerous buildings for various purposes, crusher plant with storage for broken stone, sand and cement, with a system of railways reaching to most parts of the work, have been built, and the stream diverted so that the necessary excavations were unwatered.

From several properties in the vicinity 448 acres of land have been taken and a considerable quantity of lumber and wood removed therefrom. Certain other areas yet remain to be taken before the cleaning of the reservoir basin can be finished.

The season was not as satisfactory as some previous years in the procurement of labor, although the general impression seemed to prevail that there was a scarcity of work. At no time could sufficient labor be procured within twenty-five per cent. of the amount needed, and it was not until the season was nearly over that authority was granted to pro-



SITE OF PINE HILL DAM LOOKING SOUTH

cure labor outside of the registered lists. The work is so far removed from the city that objection is made by some to the increased hours due to the journey back and forth, and hence citizen labor was not always available. The work is so well organized at present that a good advance should be evident by another season if the necessary appropriation to its performance is available.

As the ordinance requires the transmission to the Council of "such other information" as may be thought advisable, I respectfully renew the recommendations in a previous report relative to the distribution service in certain sections of the city. Especially would I call attention to the advisability of extending the new low service conduit into Lincoln Square, in order to make use of its full value should occasion require. When it is considered that by doing this, the water capacity for fighting fires in the principal commercial portions of the city is doubled, the merit of the project should be manifest and given preference over work of less material value. The replacing of a portion of the Cambridge Street high service conduit with one of larger capacity also deserves your serious consideration.

Co-operation with the officials of the Water Department in the matter of conduits has been extended throughout the year.

Respectfully submitted,
FRED'K A. McCLURE,
City Engineer.