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During the winter months drift ice is frequentiy piled up by gales to a height of fifteen feet or more above the level of the lake, the loose ice being cemented together by the freezing of spray and waves.

The ice accumulations may extend to a depth of twenty feet of water, and siush lee may occasionally be found at greater depths.

The inlet of the existing 20 lnch intake is subject to interference from ice, and may be blocked any winter. This intake must also convey to the basin large quantitles of sand in suspension, which can only be removed by dredging.

We would therefore recommend that a new intake be laid from the southerly end of the basin, this pipe to be 18 inches in diameter and 2,000 feet ln length, the water end to terminate in a timber crib 24 feet square and 12 feet in helght, provided with inlet screens.

The openings ln crib for the entrance of the water should be of sufficient area to prevent a too rapid current in the vicinity.

The plpe should be of riveted steel, laid in a dredged channel well beneath the bed of the lake, the trench to be refilled after the pipe has been laid. It will be necessary to provide flexible joints and expansion joints at proper intervals, and within the basin a concrete gate house should be built, with gate provided to close intake.

We would further recommend that the existing 20-inch intake and crib should be examined by a diver, and repairs made if required. After the new 48 inch pipe has been laid a 20 inch branch pipe should be laid to the discharge at the north end of basin, and thus eliminate the dead water at this point.

We estimate that the foregoing works will cost as follows:

1.	Intake crib	\$5,000 00
2.	Intake pipe laid	10,000 00
3.	Gate house and gate	1,500 00
4.	Extension of 20 lnch, with gate house and gate	5,500 00
5.	Contingencies, 10 per cent	5,000 00
6	Engineering and superintendence, 6 per cent,	3,000 00

\$60,000 00

High Level Station. The steam pumping machinery at the Ferguson **Avenue Station is of low duty type, of insufficient capacity, and old enough to be retired to the reserve list.**

We would recommend that a new pumping station be constructed adjoining the present building, in which new machinery be installed.

For the existing service two electrically operated units should be adopted, each with a capacity of one million gallons per 24 hours.

For the area now known as the high level district north of and below the Mountain turbine pumps may be adopted. For service to the high Mountain plateau above, force pumps, operated by gearing, would prove

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