

the 12-in. main at Broadview Ave., and to a new main included in this project at Sherbourne St. It will also be connected with the 16-in. main on St. George St. All of these connections will have valves.

The discharge pressure on the pumps at the High Level Station supplying the middle district is 65 lbs. per sq. in., and hence, after making allowance for friction and difference of level, the pressure at the Victoria Park Station on the pump supplying the above 42-in. main will be approximately 137 lbs. per sq. in. While this pressure is higher than usual, yet the pipe rises rapidly after leaving the station, and there will be only about 2,000 ft. of it subjected to a pressure of over 100 lbs.

2. The second 42-in. main will run from the park across two lots to Kingswood Ave., then up Kingswood Ave. to Kingston Rd. to Heyworth Cres. to Woodbine Ave., across two lots to Patricia Rd. and through two lots to Small St., to Gerrard St., and then along Gerrard to Sackville St. This main will connect with the 12-in. main on Beach Ave., the 12-in. main on Leslie St., the 12-in. main on Carlaw Ave., the 12-in. main on Broadview, the 24-in. main on Sumach St., and the proposed 42-in. main on Sackville St.

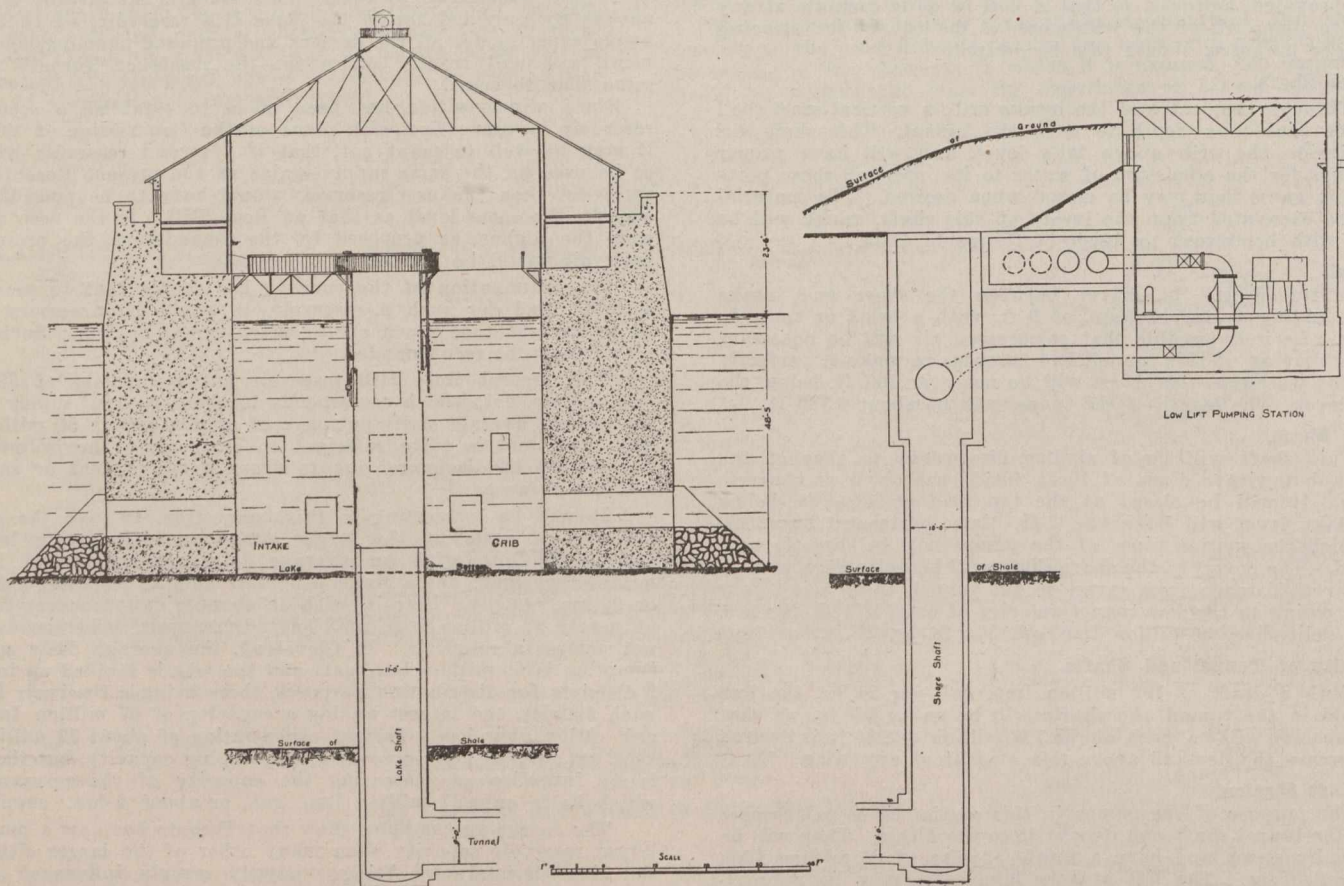


Fig. 3.—Section of Proposed Intake Crib, Lake and Shore Shafts.

3. The third 42-in. main will run from the park across the lots mentioned south of Queen St. to Scarborough Rd., north to Pine Ave., to Balsam, to Pine Cres., to extension of Williamson Rd. to Lee Ave. It will then run north on Lee Ave. to the proposed extension of Norway Pl., along Norway Pl. to Woodbine Ave. to Dixon St., across Kingston Rd. to Edge-wood, to Hemlock, to Maughan Cres., to Ashbridge, to Apple-grove, to Wilton Ave. extension, and along Wilton Ave. to Sackville St. This main will connect with the 12-in. main on Coxwell Ave., the 12-in. main on Leslie St., the 12-in. main on Carlaw Ave., the 12-in. main on Broadview Ave., the 24-in. main on Sumach St., and the proposed 42-in. main on Sackville St.

4. The fourth 42-in. main will run along the same streets as the third, to Maughan Cres. It will then run south to Orchard Park Rd., across Queen St., through a corner of the Ontario Jockey Club grounds to Eastern Ave., and along this street to Cherry St., thence to Front St., to Wellington St., to Simcoe St. This main will connect with the 12-in. main on Kingston Rd., the 12-in. main on Leslie St., the 12-in. main on Carlaw Ave., the 12-in. main on Broadview Ave., the 24-in. main on Sumach St., the proposed 42-in. main at Sackville St.,

the 12-in. main at Sherbourne St., the 12-in. main at Jarvis St., the 12-in. main on Yonge St., and the 24-in. and 36-in. mains on Simcoe St.

5. In order to make this system most effective, a new 42-in. main will be laid up Sackville St. from the corner of Eastern Ave. and Cherry St. to Wellesley St., thence along Wellesley St. to Parliament St. or Rose Ave., to Howard St., to Sherbourne St., to Bloor St. This main will connect with the proposed new 42-in. main at Cherry St., Wilton Ave., Gerrard St. and Bloor St., but at the latter point there will be a closed valve normally, as the Bloor Street main will work on the middle district. It will also connect with the present system at the 12-in. main on Queen St., the 12-in. main on Wilton Ave., the 36-in. main on Gerrard St., the 12-in. main on Carlton St., and the 12-in. main on Wellesley St.

A study of Fig. 1, showing these mains, and their connections to the present system, will make it perfectly obvious, that this distribution plan will give ample accommodation for the water from the new station to reach all points of the city, and will enable the new station to work in perfect harmony with the present plant.

An examination of the report of the Commission indicates that they contemplated only one supply main, and that through the northern section of the city a considerable distance removed from the point at which maximum consumption occurs. Therefore, even if their scheme were workable, it would be necessary for the municipality still to spend upwards of \$2,000,000 upon a distribution scheme within the city limits, and \$250,000 for additions and steam reserve at the high level pumping station.

In this project, in addition to the supply feature, provision is made for 32 miles of large distributing mains, at a cost of approximately \$2,393,000. This will provide an almost ideal system of distribution, covering the needs of the city for many years to come.

Estimated Cost of Project as Recommended.

Lake crib—complete and placed.....	\$ 400,000 00
Lake shaft, tunnel, and shore shaft.....	800,000 00
Site and buildings	500,000 00
Pumping equipment	380,000 00
Boilers and stokers	80,000 00
Coal and ash handling machinery.....	30,000 00