

DESCRIPTION AND SIZE OF SEWERS.

The sewers on all side streets will be 9 inches in diameter the smallest size it has been found prudent by experience to make them.

The Aylmer street sewer, which is the trunk sewer, will be 12 inches in diameter at the north end, increasing to 18 inches at Hunter street.

At King street it will increase to an oval or egg shape 1 ft. 6 in. by 2 ft. 3 ins., till it reaches Townsend, where it will discharge its cellar and roof water, and then continue on a grade at 1 in 900, of oval form 2 ft. 0 ins. by 3 ft. 0 ins.

The intercepting sewer on Townsend street will be oval 2 ft. 0 ins. by 3 ft. 0 ins., a tumbling bay will be constructed at the intersection with Aylmer street of sufficient size to discharge only the sewage into Aylmer street, the rest of the water being discharged into the mill stream or creek at its crossing of Townsend. The ordinary flow at the Edison works will be limited to the capacity of a 9 inch pipe, running full, laid on a grade of 1 in 300, all above that quantity is treated as storm water, and will be discharged by the Townsend street overflow.

The main outfall sewer commences at Townsend street on Aylmer which it follows to Lake street; at the intersection of George street, it will receive the sewage only, of that district and then follow down Lock street to the river where the discharge will be pure sewage. It will be oval in shape, 2 ft. 2 ins. by 3 ft. 3 ins. I have carefully kept in view the question of pollution to the river and the possibility arising at some date of purification being required. When occasion arises to consider this, the sewage only, practically unmixed with rain water will have to be treated.

GRADES AND DISCHARGE OF SEWAGE.

The grades are all favorable to the rapid discharge of water; sewage should be discharged into the river within 2 hours of entering the sewers.

It must be borne in mind that these sewers will not be self-flushing until the quantity flowing through them can give a velocity of about $2\frac{1}{2}$ feet per second, or 150 feet in the minute and even then it will be necessary to flush the higher ends of every street, as there will be frequent dry periods when the sewage alone will be insufficient to keep them clean. Water for flushing purposes can be obtained from the creek and Water Works Co'y. quite readily.