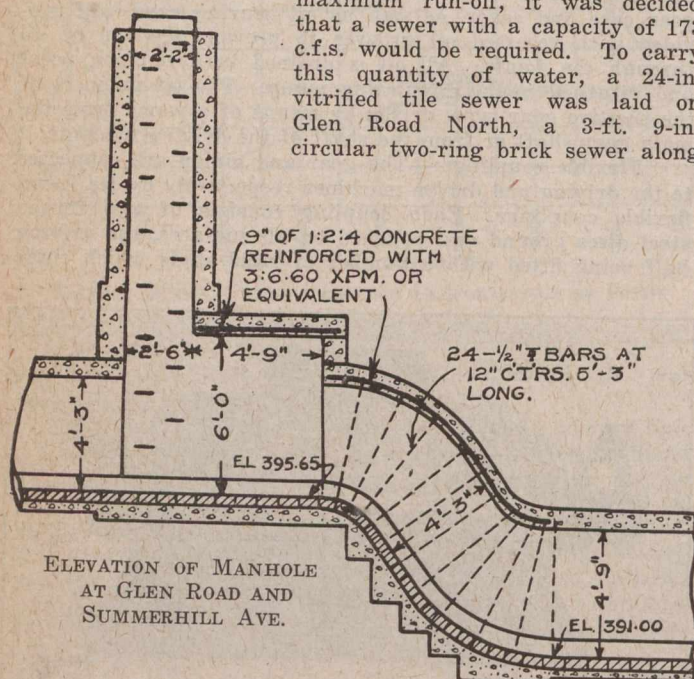


MOORE PARK DRAINAGE SYSTEM, TORONTO

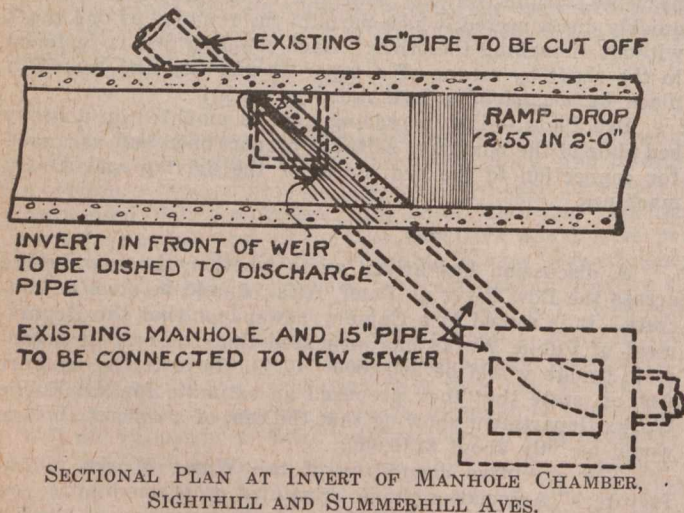
TORONTO'S Moore Park drainage system, the construction of which was commenced in November, 1917, and completed in February, 1919, consists essentially of three parts: The first section, along Summerhill Ave., from Sighthill Ave. to Glen Road; the second, down Glen Road North; and the third, the combined outlet of the other two, down Glen Road to the Rosedale Ravine.

The third section was described in detail in *The Canadian Engineer*, issue of February 27th, 1919, and will be merely summarized briefly in this article.

The district to be drained comprised an area of 233.5 acres. After making the necessary calculations for the maximum run-off, it was decided that a sewer with a capacity of 173 c.f.s. would be required. To carry this quantity of water, a 24-in. vitrified tile sewer was laid on Glen Road North, a 3-ft. 9-in. circular two-ring brick sewer along

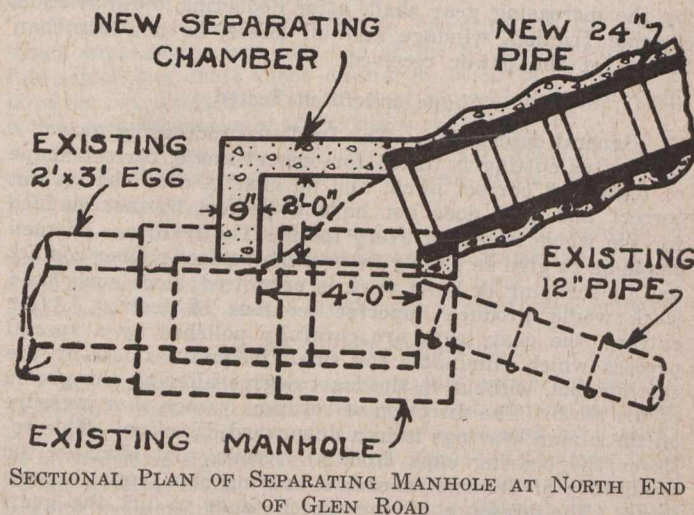


Summerhill Ave. from Glen Road North to Glen Road South, and a 4-ft. 3-in. circular two-ring brick sewer along the western section of Summerhill Ave. from Glen Road South to Sighthill Ave. From the junction of these two branches a special culvert type concrete sewer was constructed in tunnel down Glen Road South to the Rosedale Ravine. On page 251 of



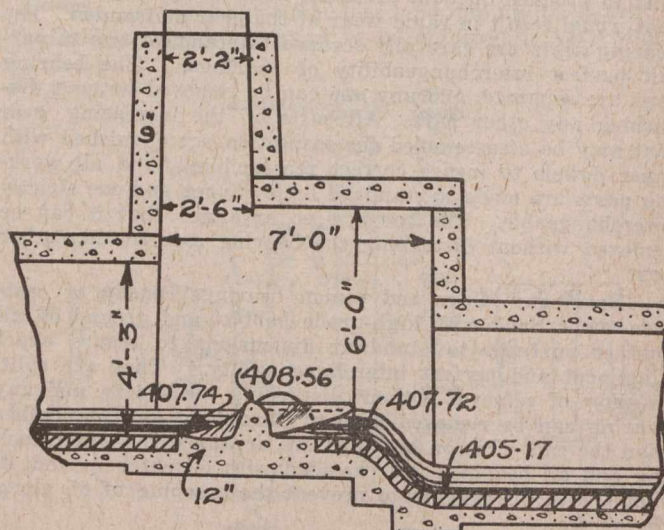
The *Canadian Engineer* for February 27th, 1919, there was published two photographs of the junction chamber at Glen Road South and Summerhill Ave., showing connection at the right for the easterly contract along to and extending up Glen Road North as far as the Canadian Pacific Railway Co.'s right-of-way; and at the left for the westerly contract to Sighthill Ave.

Two contracts were let for the entire system. The first was for the combined outlet down Glen Road South to the Rosedale Ravine. The special culvert shape was adopted for this section after due consideration of the detailed costs for the equivalent egg and circular sections. In excavating this tunnel section, for about 1,800 lin. ft. north from the Ravine there was found soft, dry, blue clay, and about 10



lin. ft. a day was the average daily progress. Further north, the nature of the ground changed, and it was necessary to construct a 10-ft. ramp. This change in elevation brought the line of the sewer into very hard, sandy clay for a short distance, followed by light, sandy earth for the remainder of the contract, which terminated at the corner of Summerhill Ave.

Concrete was poured through 8-in. diameter borings from the surface of the roadway above, 1-in. screened gravel being used exclusively as the stone aggregate.



LONGITUDINAL SECTION OF MANHOLE CHAMBER AT SIGHTHILL AND SUMMERHILL AVES.

The second contract, as previously intimated, was divided into two parts, east and west from the intersection of Glen Road South with Summerhill Ave.

For the eastern part or 24-in. vitrified tile sewer, the grade was found to be so flat that it was necessary to change the design for the last 411 ft. to a 3-ft. 9-in. circular sewer. The 24-in. pipe was laid in open cut, but the 3 ft. 9 in. section was built in tunnel.

The excavation for the 24-in. pipe was mostly through a sandy clay loam with a small section of gray shale clay. The depth of the trench was approximately 7 ft. and the length, including short sections of tunnel under sidewalks, etc., was 792 ft. Daily progress averaged 16 to 18 lin. ft. a