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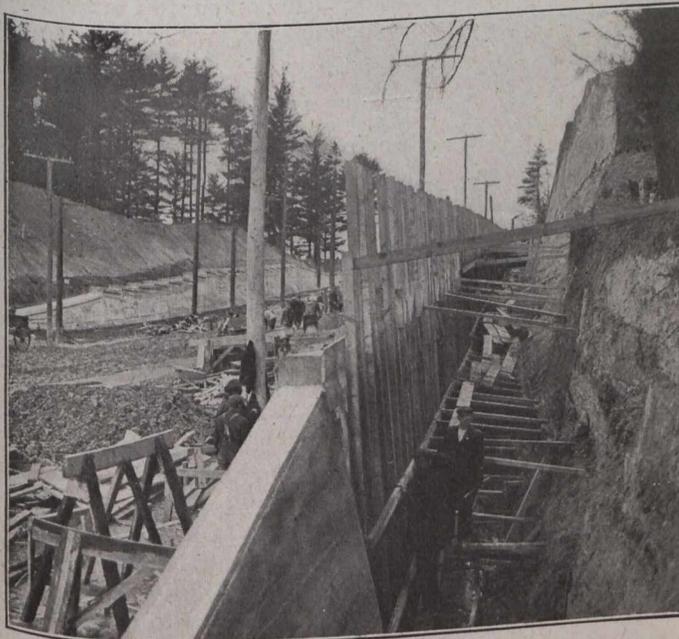
RETAINING WALLS ON BATHURST STREET HILL, TORONTO

A DISCUSSION ON THE DESIGN AND CONSTRUCTION OF THESE RETAINING WALLS WHICH WERE BUILT TO IMPROVE THE ROAD AND PROVIDE BETTER ACCESS TO THE RAPIDLY GROWING NORTHWEST SECTION OF THE CITY.

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It is at once apparent from a glance at the sketch map of the city of Toronto, as shown in Fig. 1, that a good road connecting up the newer sections of the city north of the Hill, which runs along the old northern boundary, is an absolute necessity for the proper de-

velopment of this district. It did not matter much, and it took quite a severe rainfall to cause any damage. The ramp, which was of macadam, led from the top of the hill at Bathurst Street and had a maximum grade of 14.2 per cent. in dropping down to the elevation of Davenport Road, which is the road running



East Wall—Reinforced Concrete Section.



West Wall—Concrete Gravity Section.

velopment of this district. It will also be seen that the centre of population of the city is rapidly approaching the vicinity of the intersection of Bathurst and College Streets, although perhaps the latter is not so evident to the person who is unacquainted with the city and the spreading out of its boundaries to take in the fast-growing suburbs. Before the city improved this roadway on account Bathurst Street hill was a thing to be avoided on account of its steepness, although a ramp from Davenport Road on the east made matters easier for horse-drawn vehicles. The old road—that is, Bathurst Street proper—was of corduroy and the only drainage provided was in gutters on the side. As the material was of hard clay this

along the foot of the hill. Such conditions, however, could not last long if the future development of the district was to be taken into account. It was necessary to go to Yonge Street, which was $1\frac{1}{4}$ miles east, in order to find a good road for taking up heavy loads, so that the improvement of Bathurst Street hill was obviously the duty of the city to the district.

Work was commenced in March of 1914, the grading giving relief work to the local unemployed. Approximately 17,200 yards were handled, the spoil being used for fill at the foot of the hill. The maximum cut on the hill, exclusive of the old works, was 11.5 feet, and the maximum fill on the Davenport intersection was 7 feet.