Please read and send in as full discussion as possible at earliest date

The Canadian Society of Civil Engineers

INCORPORATED 1887.

ADVANCE PROOF—(Subject to revision)

N.B.—This Society, as a body, does not hold itself responsible for the statements and opinions advanced in any of its publications.

THE PROTECTION OF THE FORESHORE AT DALLAS ROAD, VICTORIA, B.C.

By G. M. DUNCAN; Junior Can. Soc. C.E.

TO BE READ BEFORE THE MONTHLY MEETING, NOVEMBER 7TH, 1912.

For several years the sea had been encroaching upon a part of this roadway, which runs along the coast overlooking the Strait of Fuca, with the consequence that the banks were gradually being eroded. In 1903 the City Authorities commenced to build a low concrete wall to form some protection, and they continued building it in sections until it was about 1,500 feet in length in 1906. This wall, which had a height of 6 feet above high water, a section of which is shown in Fig. 1, Plate 1 did not, however, prove of much service against the heavy seas which are prevalent during certain parts of the year. In 1910 the roadway was getting into a serious condition and the City Authorities saw they would have to take immediate steps to form some permanent protection. A by-law was passed authorizing the expenditure of \$75,000 which was augmented by the sum of \$20,000 from the Provincial Government for the purpose of erecting more suitable protection works. The City Authorities were in favour, and had the intention of building on top of the old wall, a proposal of which the Public Works Engineer did not approve on account of the unstable condition of the foundations and general state of the wall.

After close investigation into the local conditions and a careful study of the various types of walls elsewhere constructed with similar objects, the conclusion was arrived at that protection could be most effectively and economically attained by a vertical wall carried down into solid ground below low water mark, except at its termination where it was anticipated the depth might be materially reduced. Trial sections of a solid and of a reinforced concrete wall were made and it was found that the cost of the former would considerably exceed that of the latter.