

PART 11.—A BRIEF GENERAL DESCRIPTION OF THE BREAKWATER HARBOUR.

(a) AS TO LOCALITY.

The Breakwater Harbour is situated at the foot of a rocky eminence known as the Bluff, about a mile, via the Marine Parade, from the business centre of Napier. The coast, which in general is running nearly north-and-south, makes at this point a nearly rectangular turn to the west, and the breakwater runs out into the sea from the point of the angle. The exact position in relation to the town and the Inner Harbour can be seen by reference to the plan appearing as A in Commission's Exhibit No. 3, where the breakwater is shown at the bottom right-hand corner of the plan.

(b) AS TO CONSTRUCTIONAL DETAILS.

The breakwater itself is to-day 2,830 ft. in length, and it is built to a height of 6 ft. above high water. It is built on a rubble foundation of concrete blocks (12 ft. by 6 ft. by 6 ft.) up to a height of 2 ft. above low water, and this is capped by a monolithic block of concrete made *in situ*. The base was originally protected from scour on weather side by an apron of large rubble blocks thrown in pell-mell; later, further protection was afforded by throwing in large concrete blocks deposited pell-mell. The breakwater is first thrown out from the shore in a north-easterly direction at an angle of 120° to the set of the prevalent south-east seas. This is designed to divert or reflect the seas, causing them to run in along this first cant of the breakwater and create a backwash that will drive the shingle back from the works and retard the shingle travelling from south of the breakwater. From seaward end of this first cant the breakwater turns in a more northerly direction and again in a north-westerly direction to enclose a basin and give protection from north-easterly seas. Inside this breakwater there is built a wharf, known as the Glasgow Wharf, about 580 ft. in length, which is used by vessels drawing up to 26 ft. There is also a breastwork wharf available for vessels drawing up to 18 ft. A railway-track serves both wharves, but the wharves have no vehicular road and no goods-sheds. A lithographic plan prepared to illustrate Mr. Furkert's 1924 report appears as Map B in Commission's Exhibit No. 3. On this map the existing works are outlined in red; the rest of the works sketched thereon indicate suggested future extensions. The photograph, Plan K, Commission's Exhibit No. 3, shows the present state of the breakwater. We wish to state that this photograph was chosen from a number of existing photographs as being the best and clearest of those submitted to us of the breakwater itself. The amount of shipping at the wharves on the occasion at which this was taken must, according to the evidence tendered to us, be considered as quite exceptional, and is probably the reason why this particular photograph was taken. We therefore, with this explanation, present it here as a good photograph of the breakwater and wharves.

(c) AS IN RELATION TO EXISTING TRANSPORT FACILITIES AND TERMINI.

In the term "existing transport facilities" we would include roads, railways, and such buildings as warehouses, storehouses, and goods-sheds which have been erected as adjuncts to the system of cargo collection and distribution. The Breakwater Harbour is somewhat at a disadvantage in relation to existing transport facilities, particularly railway facilities. On the Plan A of Commission's Exhibit No. 3 we show, coloured in brown, the roads that completely encircle that part of the Napier Borough known as Scinde Island, which might now be well described as a rocky promontory from 200 ft. to 300 ft. high. From the Breakwater wharf, running nearly south along the sea-front, is the Marine Parade, which supplies the shortest route from the breakwater to the town, and also from and to Hastings and the country south of Napier. From the breakwater, running nearly in a westerly direction, is a road that runs parallel with the Harbour Board's railway and then turns in a south-westerly direction along the south-west face of Scinde Island. On the seaward side of this road, about 35 chains from the root of the breakwater, will be seen the Harbour Board's goods-shed known as the E shed. At the root of the breakwater there is at present practically no land available, and the road which skirts the angle of Scinde Island is at this point close up to the rocky sides of the Bluff, and any land required between, say, the junction of Byron Street and Marine Parade to the south of the breakwater and the point where the Harbour Board's railway begins to leave the sea front to the west of the breakwater will have to be made by reclamation. On the Plan A, Commission's Exhibit No. 3, a little to the south of the Iron Pot, on part of the Inner Harbour, will be seen the terminus of the Government railways. It is marked "Spit Railway-station." The Harbour Board's railway runs from there to the breakwater, and it is over this railway that goods arriving by rail are transported to the breakwater, a distance of about a mile. The Board's railway is of the same gauge as the State railway, so that the Government rolling-stock can be used when it is desired or possible to avoid handling goods by transshipping them into the Board's trucks. The small strip of land bounded on the south by Hardinge Road, on the west by the eastern mole of the Inner Harbour entrance, and on the north by the sea-front, contains an area which has been set apart as the dangerous-goods area, and on this are erected oil-stores. (This area is shown lightly shaded in red on Plan A, Commission's Exhibit No. 3.) Various warehouses, general stores, and wool-stores are erected either facing or contiguous to the West Quay, which is shown on Plan A as a part of the Inner Harbour. The offices of the Harbour Board and the Port offices of the shipping companies are all situated close to the various quays that comprise the Inner Harbour.

The following table shows the distances from various points to the Breakwater Harbour :—

To Breakwater Harbour—		Approximate
		Feet.
Per road from Napier Railway-station, via Marine Parade, to Glasgow	..	14,300
Wharf	..	17,300
Per railway from Napier Railway-station to E cargo-shed ..	..	19,800
Per railway from Napier Railway-station to Glasgow Wharf ..	..	

(NOTE.—Shorter road route to Hastings and country south of Napier.)