

There can therefore be no doubt to which of these preference should be given should it be decided that the works shall include a harbour of refuge. Should it, however be considered that a harbour only suitable for local traffic will be sufficient, the proposed extension of the mole at the town site, estimated at £345,000, might be omitted, thus reducing the cost to £393,000. The small harbour at the whaling-station would cost £395,000, including a railway to town, so that these two harbours may be considered to cost practically the same. Its size as compared with that of the town site is nearly the same, being 129 acres as against 123. It has, however three times the room available for quay-accommodation for large shipping, as well as a larger amount for coasting-steamers, in the proportion of 16 to 11. Its other advantages have been already described.

The practical inconvenience of having the harbour two miles from town would not be found very great, as is evidenced by the experience of other ports in New Zealand.

TABLE of Costs, Area, Etc.

	Town Site.			Whaling-station (Small Harbour).			Whaling-station (Large Harbour).		
	£	s.	d.	£	s.	d.	£	s.	d.
Western mole ..	238,920	0	0	274,820	0	0	414,000	0	0
Eastern mole	93,000	0	0	45,000	0	0	50,000	0	0
Proposed extension	345,000	0	0						
Railways at quarry and to town, plant and other works, contingencies	61,000	0	0	75,180	0	0	85,920	0	0
Total	738,000	0	0	395,000	0	0	533,000	0	0
Areas of harbours—	A.	R.	P.	A.	R.	P.	A.	R.	P.
Between 1 and 2 fathoms at low water	35	0	0	38	0	0	52	0	0
" 2 " 3 "	30	0	0	40	0	0	70	0	0
" 3 " 4 "	40	0	0	30	0	0	45	0	0
" 4 " 5 "	16	0	0	21	0	0	41	0	0
Above 5 fathoms at low water	2	0	0	..			50	0	0
Total area	123	0	0	129	0	0	258	0	0
Length available for quays not reckoning 10 chains from entrance—				Chains.	Chains.	Chains.			
Between 2 and 3 fathoms at low water				11	16	16			
Over 3 fathoms at low water				8½	23	36			
Total				19½	39	52			

Prison Labour.—The above estimates have been framed as if the works were to be carried out by free labour. There will be an economy in using the labour of convicts, but it is very difficult to say to what extent. In order to save time, a large amount of preliminary work must be done before the prisoners can be located. We are of opinion that at least two years will elapse before the necessary buildings can be constructed, and this time should be employed in constructing roads, tramways, inclines, &c., and the necessary rolling-stock and machinery, so that on the prisoners being domiciled the actual work of harbour construction may be commenced at once.

Whilst on this subject we deem it necessary to make a statement of the probable expenditure that will be required to accomplish this, viz. :—

Surveys and contingencies	£
Making tramway with gear and plant, cranes, tools, and workshops, &c.	1,000
Roads, fencing, water-supply, and purchase of land (for road only)	21,000
Prison-buildings (of these we cannot form any correct estimate, but assume that the cost will not be less than)	3,000
	35,000
	£60,000

Should the town site be adopted a further immediate expenditure of £20,000 will be required for the tramway into town, making a gross total of £80,000.

A certain proportion of free labour must necessarily be employed during the whole of the time. This cannot be estimated at less than £4,000 per annum. Beyond this an annual charge of about £75,000 will be required for tools, powder, &c.

A site for the prison-buildings may be found immediately inland of the large Sugarloaf (Paretutu), and distant from it about 20 chains. This consists of an elevated piece of tableland, covered with grass, having an area of about 2 acres. It is at a considerable elevation above sea-level (about 250ft.), with a good view of the surrounding country, and its near proximity to the quarry renders it a desirable site. Another site, on a lower elevation (about 50ft. above sea-level), is situated about 45 chains eastward from the quarry, and immediately overlooking the sea-beach. The former we believe to be a Government reserve, the latter being private property, would have to be purchased.

Sites nearer to the quarry might, by an expenditure of a few hundred pounds, be procured by excavation and filling, but would be liable to the inconvenience of being invaded by drifting sand.