

Surface Plant and Machinery.

The plant, machinery, and buildings in and about this colliery has been maintained in good condition. In my last annual report reference was made to the duplicating of the plant in the central power-house at this colliery, and the intention was to duplicate it by means of a water-driven plant, providing the power was available from either the Seven-mile or Davy Creeks. It has now been found that the power would be unreliable, owing to the small flow of water in these creeks during certain seasons of the year; therefore, instead of installing a water-power-driven plant, it is proposed to erect the plant recently used at the Point Elizabeth Colliery, which is practically similar in design to the one now in use.

COLLIERY WORKSHOPS.

Since the inception of the State coal-mines all mechanical work has been done at the Point Elizabeth Colliery Workshops; and, although the latter-named colliery is now closed down, it is proposed to continue using these workshops for some time, as they are central for the Liverpool and the James Colliery.

At the present time the Colliery Engineer has the following work under construction: (a) Haulage-engine for the new haulage-tunnel, Liverpool Colliery; (b) haulage-engine and carriages for the conveyance of workmen, Liverpool Colliery; (c) haulage-engine and fan engine for the James Colliery.

It is also proposed to construct most of the plant required for the MacDonald Mine at these workshops.

JAMES MINE.

In my last annual report reference was made to the amount of boring and prospecting work which had been carried out on the low coastal ranges near Point Elizabeth, and as a result of these operations a coal-seam 8 ft. thick had been proved to exist over an area of about 350 acres. Since then, however, further boring operations have been carried out, and the workable area is now estimated at 400 acres. The estimated quantity of coal in the proved area is about 4,800,000 tons, of which 75 per cent., or 3,600,000 tons, should be won. This quantity of coal having been proved, it has been decided to establish a colliery thereon, named the James Colliery.

To open up this colliery should not be a costly undertaking so far as plant and machinery is concerned, for it is proposed to dismantle and re-erect practically the whole of the Point Elizabeth Colliery equipment. The whole of this work cannot, of course, be done at present without incurring a heavy carting-cost. The scheme outlined is to transfer and re-erect a portion of the Point Elizabeth Colliery bins and other plant and machinery necessary to commence operations, and some time later, when the branch railway which is now in course of construction is completed, transfer the whole of the plant.

The preliminary work so far carried out in connection with this colliery is as follows: (a) The clearing of the sites for the storage-bins, power-house, and also the haulage-road from the bin-site to the tunnel-entrance; (b) the laying of a service tramway, 19 chains in length, from the Greymouth-Barrytown Road to the proposed bin-site, to enable supplies of plant and material to be transported to the principal seat of operations; (c) the erection of a power-house with concrete foundations, together with the installation of a 60 horse-power boiler and a self-contained air-compressing plant, the latter being installed for the driving of the rock-drilling machines and ventilating-fan for the tunnel; (d) the excavating and laying of a double-line tramway, 15 chains in length, from the bin-site to the tunnel-entrance; (e) the commencement made to drive the tunnel to connect with the seam, the estimated length of which is 16 chains. This tunnel is now in a distance of over 2 chains, and if the present rate of progress is maintained the seam should be reached in the course of seven months.

When the seam is reached it will be necessary to make a connection with the surface by means of a rise for ventilation purposes, and once this connection is made and a large fan installed steps will be taken to develop the mine. Under favourable working-conditions mining operations at this colliery should in the course of twelve months be so far advanced as to enable coal to be won from the winning headings.

MACDONALD MINE.

With a view of establishing a State coal-mine in the North Island, the freehold of the Awaroa Land Company's and also the Whangape Coal Company's properties at Waikokowai, comprising an area of 1,289 acres, has recently been purchased. This property has been thoroughly tested in a systematic manner by boring by means of the diamond, percussion, and hand drilling plants, and also by trenching in various places. As the result of these operations a seam of coal, which may be termed a superior brown coal, and averaging 15 ft. 6 in. in thickness, has been proved to exist over an area of about 520 acres. Although the average thickness is 15 ft. 6 in., it will be necessary to leave a coal roof of not less than 3 ft. 6 in., thus leaving a thickness of 12 ft. of coal to be worked. The estimated quantity of coal available is therefore about 9,360,000 tons, of which 60 per cent., or 5,616,000 tons, should be won. Assuming an annual output of about 120,000 tons, the life of this mine may be safely estimated at fifty years.

The development of this mine is to a large extent now dependent on the construction of a branch railway from near Huntly to the valley of Brown Creek, shown on the accompanying plan; also the construction of a service road from Rotowaro Railway-station to the vicinity of the Waikokowai School. Trial surveys have been made of the proposed railway route, and the service road referred to is now under construction.