

long steel girders, a Duplex cableway plant is installed. This cableway was previously used most successfully for erecting some of the huge steel viaducts on the Napier-Wairoa Railway. Its use on the Buller River will minimize the risk of loss by floods, as far less staging will be required.

For cylinder-sinking the latest pattern electrically operated air-locks will be used.

For the other bridges it is proposed to embark on reinforced-concrete structures instead of the more commonly used concrete piers and steel girders.

This type of construction for high railway bridges is new to New Zealand and has required close investigation, but a saving in cost is anticipated, besides giving a structure on which maintenance is reduced to a minimum.

A feature of this construction will be the use of special vibrating equipment, which has been imported to enable high-strength concrete to be produced for these special structures.

The country through which this railway is being constructed is in the main stable, but there are one or two slip problems likely to present considerable difficulty.

The comfort of the workmen has not been overlooked. Neat camps for single and married men have been provided along the route.

The largest of these at Tiroroa has a large recreation-hall managed by the Y.M.C.A., while each camp and the hall at this point is supplied with electric light from the Department's own Diesel-driven generator. Hot and cold showers are installed at the camps. Other facilities for the men are being provided, particularly at Inangahua Junction, where the Buller Bridge works will be in progress for a considerable time.

RAILWAYS: IMPROVEMENTS AND ADDITIONS TO OPEN LINES.

The net expenditure out of the Public Works Fund under the above heading for the year ended 31st March, 1937, was £432,112. This amount was expended on the various works shown in the following statement—

	£
Wellington new station and yard	218,833
Wellington - Tawa Flat deviation	10,761
Wellington-Johnsonville electrification	27,264
Wellington-Paekakariki electrification	73,545
Christchurch new station	10,534
Papakura-Horotiu duplication	19,749
Plimmerton-Paekakariki duplication	6,677
Turakina-Okoia deviation	31,157
Grade easements	21,677
Rail-car sheds	10,312
Minor works	1,603
	£432,112

The Wellington new station building was nearing completion at the end of the financial year, and was officially opened on 19th June, 1937. Work on the Tawa Flat deviation was completed early in the financial year.

The work of electrifying the suburban sections at Wellington was proceeded with. On the Wellington-Paekakariki section good progress was made with bonding of rails and erection of overhead gear, the transmission-line was completed, and equipment was installed at the various sub-stations as it arrived. During the year work was commenced on the Wellington-Johnsonville section. The erection of poles was practically completed, and good progress made with bonding and overhead erection, while the work of equipping sub-stations was proceeding.

The amount shown against the Christchurch new station is the initial expenditure, and is for the purchase of land.