

Wedderburn Section (77 m. 35 ch. to 85 m. 60 ch.; length, 8 miles 25 chains).—Work was begun on this section in July of last year, and, as the works are for the most part of an easy character, very good progress has been made, the earthworks being completed on nearly five miles and well advanced on the remainder of the section. The Eweburn Bridge (a small structure) and the Wedderburn Station are the principal works yet to be done. It is expected that the line can be opened for traffic to Wedderburn Station (85 m. 60 ch.) by next winter.

Ida Valley Section (85 m. 60 ch. to 93 m. 20 ch.; length, 7 miles 40 chains).—Work was begun on this section in March last. A number of culverts has been put in. Land-plan surveys for a mile and three-quarters have been done, and several of the cuttings have been started.

SEAWARD BUSH RAILWAY.

Waituna and Titiroa Sections (18 m. to 24 m. 52 ch.; length 6 miles 52 chains).—All the formation-works, bridges, and flood openings are finished, the rails laid, and the ballasting done up to 24 m. 52 ch. The Waimahaka Station buildings are not yet complete. Up to the date of opening, on the 9th of June last, traffic was worked by the ballast-engine on these sections. The works were very heavy, high banks and numerous flood-openings being required across the swamps on each side of the Maitura River, in addition to the bridge over the river itself.

FOREST HILL RAILWAY.

During the year the reduction of the 1 in 40 grades, widening of earthworks, relaying the first ten miles of the line with 40 lb. rails have been finished, and re-ballasting the line has been nearly completed. A considerable amount of station accommodation has been provided.

SURVEYS.

SURVEYS OF NEW LINES.

Hukerenui-Kawakawa.—An examination of the country has again been made, and a start with locating the line has been made at the Hukerenui end.

Paeroa-Waihi Branch Line.—The survey of this line was completed last year, and since then the plans, &c., have been finished. The estimated cost of the branch line is £82,000 for a length of 12 miles and 30 chains.

North Island Main Trunk Railway (north end).—The permanent survey has been extended to 83 m. to a point four miles south of the crossing of the Wanganui River. The plans have been finished for ten miles up to 68 m.

South End.—The trial line has been run to the junction with the north end survey at 83 m. on the chainage from Te Awamutu. This point is 129 m. 40 ch. on the chainage from Marton junction. The permanent line has been pegged up to 109 m. 60 ch. All the viaducts between Waimarino and the Wanganui River have been avoided.

GISBORNE-ROTORUA SURVEY.

A reconnaissance survey, to determine the best route for a line of railway between Gisborne and Rotorua, is nearly completed, and also a similar survey between Gisborne and Opotiki; the complete reports are, however, not yet to hand.

NAPIER-GISBORNE RAILWAY.

Three lines are explored and aneroid heights of the principal points determined between Napier and Wairoa, one being the route proposed by Mr. Knorpp along the sea coast, another an inland route *via* the Esk Valley and across country to Mohaka, thence it follows the Te Kiwi and Ohinepaka Valleys to the Wairoa River. A third line *via* the Tutaekuri and Mohaka Valleys was found to be exceedingly rough. Between Wairoa and Gisborne, two routes were explored. The line follows the Wairoa River to Opoiti, then two routes are available—one *via* the Mangapoika and Te Arai Valleys, and the other following the Hangarou River and the Mangaweka and Te Aroha Streams to the Gisborne Plains. After the exploration was finished, extending over three hundred miles, the trial line survey was begun, the route finally selected for this being that along the Esk Valley. About forty-two miles have been finished from Napier, and about six miles additional have been graded. The ruling gradient obtained is 1 in 40, with 6-chain curves.

WELLINGTON-WOODVILLE RAILWAY.

A trial line has been surveyed from near Kaitoke Station to Featherston *via* the road saddle, and a line has been chained and aneroid levels taken between Kaitoke Station and Woodside Station *via* the Tauherinikau River; also, trial lines have been run between the Upper Hutt and Kaitoke Stations. An exploration was again made of the suggested route *via* the Wainui-o-mata, Orongo-rongo, and Wairongomai Valleys, and also of two other suggested routes. The surveys show that much better grades are obtainable at reasonable cost between the Upper Hutt and Woodside Stations than exist on the opened line.

MIDLAND RAILWAY.

A deviation trial-survey *via* the Tadmor Valley was begun in June of last year, and had been completed from 36 m. 10 ch. up to 52 m. 40 ch. by the end of May of this year. It is expected that the field-work of this survey will be finished this month, and the plans in about six weeks time. Much easier grades are obtainable, and the works will be lighter by this route than by the route originally proposed. More country will be opened up.