

In order to give access from the main road and camps to the work, it has been necessary to erect a mechanically operated cableway for the transport of material and three boat ferries on cables for the purpose of conveying workmen, the country on the railway side of the river being so precipitous that it is impossible to establish camps there. The erection of a light suspension bridge situated centrally in regard to the work is in hand at present, so that communication will not be cut off at any time of floods.

#### LAWRENCE-ROXBURGH RAILWAY.

*Roxburgh Section* (49 m. 59 ch. to 58 m. 69 ch.; length, 9 m. 10 ch.).—When my last report was written all work on this section had progressed substantially towards completion. During this year the following work was done: The concrete piers on the Timaburn Bridge were finished, and the steel girders, fabricated at the Department's workshop at Tauranga, were placed in position on the three bridges on the section, which total 270 ft. in length. Platelaying, ballasting, and fencing were completed.

Station buildings: At Teviot station-yard the goods-shed, shelter-shed, and stockyards were completed by contract. At Roxburgh station-yard one cottage, the latrines, stockyards, and a 6,000-gallon vat were erected by contract. The platform, loading-bank, engine-pits, turntable, and buffer-stops were erected by the Department. The station-yard buildings were completed by the removal from Beaumont or Miller's Flat and their re-erection at Roxburgh of three cottages and station buildings, goods-shed, engine-shed, and coal-store, this work being carried out by the Railway Department's staff.

From the 26th December, 1927, a daily goods service was run on this section, and considerable freight, mostly fruit, was carried. The section was handed over to the Working Railways on the 19th April last.

All plant, stores, and buildings are being transferred or otherwise disposed of, as there is no longer any need for such in this locality.

### SURVEYS OF NEW LINES UNDER CONSTRUCTION, NEW RAILWAYS, ETC.

#### GISBORNE-WAIROA SURVEY.

Two parties have been engaged on the survey of the coastal route for the major part of the year, and on the north end the trial line was surveyed to 18 m. 40 ch., while the permanent line was pegged to 17 m. 53 ch. On the south end the permanent pegging was completed to 33 m.

During the latter part of the period work was commenced on the inland route, and on the north end the old line was investigated up to 32 m. On the south end approximately 15 m. of trial survey was completed.

#### STRATFORD MAIN TRUNK (EAST END).

The survey of the permanent line to 32 m. 40 ch. has been completed, and the plans are well in hand. The location survey for an approach road from Tatu, on the Stratford-Taumarunui Main Highway, has also been completed.

#### DARGAVILLE BRANCH RAILWAY.

The survey of the permanent line to Dargaville has been completed after several trial lines had been run to determine the most suitable position for the terminal point of the branch railway at Dargaville.

### CONSTRUCTION AND MAINTENANCE OF ROADS AND BRIDGES.

*Okaihau-Kerikeri Road (Bay of Islands County)*.—This road was formed 20 ft. wide over a length of 520 ch.

*Opua-Waimate Road (Bay of Islands County)*.—3 m. 20 ch. of formation 14 ft. wide was completed.

*Ruaapekapeka-Tapuhi Road (Bay of Islands County)*.—Formed to a width of 14 ft. for 4 m. 3 ch.

*Donnelly's Crossing-Tutamoe Road (Hobson County)*.—44 ch. of metalling was completed and 700 cub. yd. of slips were removed.

*Kirikopuni-Parakao Road (Hobson and Whangarei Counties)*.—Considerable progress was made on this important road during the year, a further length of approximately 7 m. having been metalled, and the base course was laid as far as the Mangatika Viaduct, a distance of 3 m. The concrete piers and abutments for this viaduct were built, and a great deal of the steel truss span was in position at the end of the year. In addition to the foregoing, several very heavy slips were removed from the formation.

*Waimamaku-Donnelly's Crossing Road (Hobson and Hokianga Counties)*.—The old roads between Waimamaku and Donnelly's Crossing were connected up by the completion of 6 m. of 18 ft. formation to the 16 m. 24 ch. peg. 5 m. were metalled with good blue-metal or hard conglomerate, and 4 m. were covered with rubble and inferior shingle. One hundred and twenty culverts were placed and seven temporary bridges erected, so that the road is now available for through traffic except in mid-winter. It is anticipated that a metalled connection will be made through the forest this summer.

*Broadwood-Takahue Road (Hokianga County)*.—This road was widened to 12 ft. for 146 ch., and 1,826 cub. yd. of slips were removed.