

No. 567 Main Highway, Farndon—Paki Paki.—Raise, Metal, and Seal: A low-lying section has been raised from 2 ft. to 4 ft. over a distance of approximately $1\frac{1}{2}$ miles preparatory to metalling and sealing. A total length of 3 miles is involved, and 35,000 cubic yards of spoil were placed during the year.

Bridges and Culverts

Progress on respective highways was as follows:—

No. 22 State Highway, Taupo—Napier.—Ninety feet of 8 ft. by 7 ft. R.C. culvert were constructed, and 20 chains of approaches involving 7,000 cubic yards formation, together with metalling were completed.

No. 31 State Highway, Woodville—Masterton.—On the Woodville County section, Sinclair's Bridge was replaced with a 10 ft. 6 in. by 7 ft. R.C. culvert 38 ft. 6 in. in length. A 9 ft. by 6 ft. by 35 ft. R.C. culvert replaced the Manga-atua Overflow Stream bridge, and a 6 ft. by 6 ft. culvert to replace Anson's Bridge is 50 per cent. complete.

No. 848 Main Highway, Dannevirke—Waipukurau via Porangahau.—In the Dannevirke County the Pene Pene Culvert of 74 ft. by 9 ft. by 9 ft. was constructed, together with $17\frac{1}{2}$ chains of approaches.

In the Weber County, Morgan's Bridge, a single 45 ft. two-way concrete bridge, was completed with 6 chains of approaches.

In the Patangata County a 6-ft.-diameter concrete culvert was constructed to replace Geenty's Bridge, and approximately 15 chains of formation and metalling of the approaches were completed.

No. 814 Main Highway, Waipawa—Tikokino.—The Manga-o-nuku River Bridge, a two-way concrete structure 447 ft. in length, was completed.

No. 845 Main Highway, Napier—Hastings via Fernhill: Ngaruroro River Bridge at Fernhill (fifteen 80 ft. spans, two 60 ft. spans; total length, 1,320 ft.; roadway, 24 ft.; footpath, 4 ft. 6 in.): Piles driven for year, 4,279 ft., a total of 8,063 ft. (driving completed).

Piers and Abutments: Nine constructed during year (684 cubic yards), making a total of 14 (988 cubic yards).

Girders, Beams, and Deck Slab: Three hundred and sixty lineal feet constructed during year (701 cubic yards).

Falsework, staging, &c., is well in hand over the remaining sections, and the whole work was 59 per cent. complete as at 31st March, 1948.

Afforestation for Highway Protection: Tangoio Conservation Reserve

Twenty-five thousand trees were planted out on reserves adjacent to the highway and a further 33,000 lined out in the nursery for this winter's planting. Planting of willows and poplars on eroding stream-banks was continued with promising results.

TAUMARUNUI DISTRICT

No. 23 State Highway, National Park—Taupo.—For repairs, 1,358 cubic yards of crushed metal were used.

The Manuia Stream Bridge was strengthened and handrails repaired. Both the Whakapapanui and Whakapapiti truss bridges were strengthened by placing Bailey panels on each side of the bottom chords and fastening the transoms to the bottom chord of the Bailey panels.

No. 27 State Highway, Te Kuiti—National Park.—For maintenance, 2,003 cubic yards of crushed $\frac{3}{4}$ in. running-course metal were carted out.

On the Ongarue-Okahukura section, for the reconstruction of $6\frac{1}{2}$ miles, contracts have been let for metal-supplies and are well in hand.

A twin 6 ft. concrete culvert 100 ft. in length has been completed to replace the Roto Stream Bridge.