The Edgecumbe Bridge, which is long overdue for replacement, was again damaged by floods, and new temporary piles had to be driven. A length of 20 chains through Te Teko Township was sealed with emulsion surface treatment.

No. 20 State Highway, Whakatane–Gisborne via Waioeka.—The Taneatua Deviation was completed, metalled, and opened for traffic, thus cutting out a portion of the highway subject to interruption by flooding. In the Waimana Gorge, widening has been continued. Ninety-eight chains adjacent to Whakatane have been primed, as part of 2 miles of sealing to be carried out this season. In Opotiki Borough, 20 chains of highway were given a maintenance-seal coat, and preparation of 4 miles from Opotiki towards Waioeka for sealing at an early date is in hand. In the Waioeka Gorge, widening has been carried out between 6 m. and 6 m. 65 ch., bridges repaired, slips cleared, and the large retaining wall at 20 m. is nearing completion. The survey of the gorge for realignment is in hand, and some 10 miles of field-work completed.

No. 21 State Highway, Rotorua—Taupo.—Shoulders on the sealing, damaged by heavy timber traffic, are being strengthened, and patching of the sealed length has been a constant job. During the year, four miles of maintenance sealing were carried out. On the Hickey's Flat—Reporoa section, 4½ miles of Taupo grit bituminous plant mix were placed. At the Control Gates, Taupo, 60 chains have been primed ready for Taupo grit bituminous mix surfacing.

No. 22 State Highway, Taupo-Napier.—The 20½ miles of this pumice highway to the Rangitaiki River is subject to heavy traffic, suffers from frost in winter and dust in summer, and is difficult to keep up to standard.

No. 23 State Highway, National Park-Taupo.—Taupo-Jellicoe Point Section: 2 miles in Taupo Township have been resealed, and the whole unsealed length to Waitahanui of  $5\frac{1}{4}$  miles has been primed and is ready for grit-mix surfacing coat.

No. 411 Main Highway, Papamoa-Mount Maunganui.—Heavy maintenance, including stabilizing sandy sections with clay, has been carried out, and 2 miles prepared for sealing.

No. 413 Main Highway, Wainui.—The Whakatane Borough has sealed 15 chains of this highway to the borough boundary.

No. 802 Main Highway, Matamata-Tauranga.—Between Barke's Corner and the Omanawa River, several lengths have been considerably improved, and 40 chains at Tauriko sealed.

No. 810 Main Highway, Opotiki – Te Araroa.—In widening and improving by Maori gangs, over 21,000 cubic yards of material have been excavated. Over 5,000 cubic yards of screened shingle have been applied as maintenance. Floods at Kereu damaged the bridge approaches, necessitating groyne work and willow protection. Retaining-walls have been built at several narrow places on the Motu Bluffs.

No. 844 Main Highway, Te Ngae-Paengaroa.—This section, nearly all pumice, has been improved and corners cut back, and crushed metal from Hamurana Quarry placed as available on deviations and hill sections.

## GISBORNE DISTRICT

## State Highways

No. 20 State Highway, Whakatane-Gisborne via Waioeka.—On the Trafford's Hill reconstruction (51 $\frac{1}{2}$  miles to 56 miles),  $3\frac{1}{2}$  miles are now completed, the earthwork quantities shifted being 89,720 cubic yards.

On the reconstruction and sealing,  $15\cdot1$  miles to 19 miles, work was commenced and 15,000 cubic yards of earthwork completed,  $7\frac{1}{2}$  chains of creek diversion constructed, 62 chains of fencing shifted, and a contract let for the supply of 10,000 cubic yards of Waipaoa shingle.

On general maintenance, 6,769 cubic yards of metal and shingle were used.