

PUBLIC WORKS DEPARTMENT CONSTRUCTION PLANT.

A statement showing labour-costs versus the cost of modern plant :—

Name of Work.	Nature of Work.	Type of Plant used.	Cost per Cubic Yard.		Savings.	Remarks (including Lead and Useful Data): Time comparison.
			Hand.	Machine.		
Waionu-Tokaanu Road	Stripping ballast - pit and excavating ballast	Diesel tractor, carry-all and angle-dozer combination	6d.	3½d.	Per Cent. 41.6	..
"	Road-formation	Diesel tractor, carry-all and angle-dozer combination	1s.	4d.	75.0	On 4 chains lead.
Ahuriri Lagoon development	Excavating drains and forming road	Drag-line (petrol), crawler type...	2s. 4½d.	8½d.	70.18	..
Kanaka - Spring Creek, crossing elimination	Excavating spoil for filling	¾ yard Diesel excavator, crawler type	1s. 8d. to 1s. 10d.	5.06d.	76.2	With slip material cost by hand would rise up to 2s. 6d. per cubic yard.
Mussel Point Aerodrome	Excavating and filling and levelling in loose sand and shingle	Diesel tractor and Hamilton crawler scoop	2s. to 2s. 6d.	9d. to 11d.	62.5 to 63.3	..
Karamea Harbour improvements...	Excavating and forming stop-banks in river-silt	Diesel tractor and Hamilton crawler scoop	2s. 3d. to 2s. 6d.	6d. to 9d.	77.7 to 7.0	..
Auckland-Whangarei Main Highway, Waipu-Kaiwaka Section	Excavation of spoil for road-formation	¾ yard crawler type Diesel excavator	2s. 8d.	2s. 0.718d.	21.9	Unfavourable conditions for machine, wet weather causing loss of over one-third total days. Shows actual cost by hand against tendered price for work with machine.
Ohiwewai overbridge approaches ..	Excavation in hard clay for filling	..	3s. 3d.	1s. 6d. (tendered price)	53.8	Lead up to 30 chains.
Great South Road Highway construction	Excavation and filling ..	Diesel crawler excavators and mechanical scrapers	3s. 0d.	1s. 11d.	36.1	Shows actual cost by hand against tendered price for work with machine.
Hamilton-Rotorua S.H.	Excavation and filling (material mostly rhyolite)	..	4s. 6d.	2s. 8d. (tendered price)	40.7	Both actual costs on same job.
Birkenhead - Maungaturoto S.H., Albany Hill	Excavation in heavy clay material	Diesel crawler excavator	2s. 8d.	1s. 3.4d.	50.0	Narrow drain, 2 ft. to 3 ft. water, hand excavating did not take out bottom, while machine did.
Taupari drainage scheme	Excavating Rototuna drain	Diesel ¾ yard crawler drag-line ..	1s. 10d. to 2s. (basic rate, 16s. per day)	9d.	60.8	Block cuttings in wide stream. Obsolete type of machines.
"	Excavating Komakorau Stream ..	Diesel ¾ yard crawler drag-line ..	1s. 6d.	7d.	61.1	Machine cost high owing to flood and breakdown.
"	Excavating Tauhei Stream ..	Petrol crawler drag-line excavator	1s. 2.25d. to 1s. 10d. (basic rate, 9s. per day)	6.6d. to 6.63d.	38.8	Machine is doing job in a quarter of the time required by hand labour.
"	Excavating Upper Mangawara ..	Steam drag-line crawler excavator	1s. (basic rate, 9s. per day)	10d.	16.7	Machine will complete job in one-third of the time required by hand labour.
Gisborne-Waikopu Railway, Kopuwhara Section	Excavation in hard sandstone underlying stiff rubble and clay	Diesel crawler-type shovel, ¾ yard bucket	3s. 1d.	1s. 6d.	50.4	Machine completed job in half the time (including double handling of one-fifth of total spoil) required by manual methods.
Gisborne - Waikopu, Bartlett's Section	Excavation in heavy clay and papa	¾ yard Diesel crawler shovel type	2s. 6d.	1s. 6.24d.	40.0	
Ditto	Excavation in heavy, wet clay and swamp soil	¾ yard Diesel crawler drag-line ..	1s. 2d.	6.3d.	57.1	