

The population at the Blue Spur remains pretty much the same, and steady profitable work is going on there, with every prospect of continuing for some time. A few parties are still employed up the Arahura, and some prospecting has been going on in that direction, but with what success I have not heard.

On the whole I am justified in stating that this district is steadily improving; and should the efforts of the various parties out prospecting meet with success, there are reasonable grounds for believing that an increased prosperity will be attained during the current six months.

I have, &c.,
J. AYLMER, Warden.

The Chairman of the County Council, Hokitika.

Enclosure 7 in No. 2.
REPORT BY COUNTY ENGINEER.

Sir,—
Hokitika, 31st December, 1869.

I have the honor to report that during the last six months I have been engaged upon the different works, surveys, and explorations as below described:—

Completion of survey and drawings of the Mikonui Water Race.
Completion of survey and drawings of the Kanieri Water Race.
Superintendence of construction of Hohonu Water Race.
Exploration and survey of line of road Hokitika to Ross.
Detail survey of Race line from Sandstone Creek to Beach.
Reconnaissance survey and map of the Taipo and Lake Brunner Districts, with estimate of feasible track, &c.
Direction of works in progress from Hokitika to Arahura.
Various matters of routine in connection with the above, and other items more minutely described in statement of expenditure.

Detailed descriptions of some of the above are hereto attached, together with map of the districts explored, and surveys of the roads as laid out; also a statement of cost of each item.

Malcolm Fraser, Esq., Chief Surveyor, Hokitika. C. W. O'CONNOR, C.E.

MIKONUUI WATER RACE.

The following results of the detail survey of this Race are given as a guide to the formation of rough estimates of quantities, and in similar cases:—

—	Length of Contour Line following round Spurs.	Length of proposed Race as curtailed by Tunnels.	Distance as the crow flies.
Head of race to end of contour line near German Gully	25 miles 64 chains.	18 miles 40 chains.	9 miles 40 chains.

Of the 18 miles 40 chains as above:—

1 mile 8 chains = Fluming, average 18½ feet in height with boxes	...	For 40 Sluice Heads.
8 " 35 " = Boxing laid in side cutting	...	4' 8" x 2' 6"
2 " 68 " = Tunnelling	...	4' 8" x 2' 6"
2 " 9 " = Ditching	...	5' 0" x 3' 0"
		At low side.
		4' 8" x 3' 3"

The total cost of the detail survey, including preparation of plans, sections, estimates, &c., was £994 2s. 3d. = £38 10s. 8d. per mile of contour line, or £53 14s. 8d. per mile of line, as finally adopted.

KANIERI WATER RACE.

Result of the detail survey given for the same purpose as above:—

—	Length of Contour Line as run round Spurs.	Length of proposed Race as curtailed by Tunnels.	Distance as the crow flies.
Kanieri Lake to Big Paddock	17 miles 0 chains	13 miles 3 chains	7 miles 70 chains.
Big Paddock to Blue Spur	4 miles 0 chains	1 mile 71 chains	1 mile 20 chains.
Total	21 miles 0 chains	14 miles 74 chains	9 miles 10 chains.

Of the 14 miles 74 chains as above:—

1 mile 32 chains = Fluming, average height 17 feet with boxes	...	For 40 Sluice Heads.
2 " 67 " = Boxing laid inside cutting	...	4' 2" x 2' 6"
1 " 40 " = Tunnelling	...	4' 2" x 2' 6"
9 " 15 " = Ditching	...	5' 0" x 3' 0"
		At low side.
		4' 2" x 3' 3"

The cost of the detailed survey, including preparation of plans, sections, tables of quantities, &c., was £607 18s. 7d. The estimated value of the original trial line in facilitating survey was £250, in all £807 18s. 7d = £40 17s. 1d. per mile of contour line, or £57 9s. 7d. per mile of line as finally adopted.