COMMISR. FOR RAILWAYS QUEENSLAND
04,780
C.E.S.
29. MAR. 85

Department of Public Works, Railway Branch.

Chief Engineer's Office,

Brisbane 29th March 1886

Memo

Cleveland Railway Surveys.

In reply to your memo of this date, I have the honor to forward you Plan and reports on all the routes surveyed. which please return when done with, and copies will be supplied if considered necessary.

W. Annett
for Chief Engineer

Seen by the Minister 30/3/86

Ans

The
Commissioner for Railways
Brisbane

Copy. 29/04 (2)

Dept. of Public Works, Railway Branch
Chief Engineer's Office
Brisbane 5th February 1886.

Memorandum
for H. C. Stanley Esq.
Chief Engineer
Brisbane.

631 ins
6.2.86.

Report on route of proposed railway to Cleveland

I have the honor to inform you that from the 25th to 29th ult: both days inclusive I was engaged upon a general examination of Country between Brisbane, Cleveland and Redland Bay.

In the course of my inspection I visited Belimba, Tennant, Hytton, Wynnum, Waterloo Bay, Manly, Wellington Point, Cleveland, Redland Bay, Alpalaba, Tingalpa, Belmont and Coorparoo.

Trial Surveys have been made

(a) From Woolloongabba to Hytton via Coorparoo Belimba and Tennant - length to construct 10 miles 16 chains.

(b) From 4 mile - 72 chs - 38 lks on (a) via Coorparoo Belimba Tingalpa, and Wellington Point to Cleveland - length to construct 17 miles 57 chains 40 links - dotted red line on tracing -

(c) From 1 mile 13 ch 23 lks on (a) via Coorparoo Belmont Raceedale and Wellington Point to Cleveland - length to construct 17 miles 17 chains 49 links - blue line on tracing -

In connection with the last two Surveys (b) and (c) the Surveyor Mr.

Wm H. W. Bethune in his Report has pointed out that it would be advisable to construct a Branch to Ryston via Remnant and Wyunum as shown by dotted Red and Blue lines on tracing. This Branch would be 5¼ miles in length Off (B) and 7 ¾ miles in length off (C).

After a careful Study of the Country including present and prospective Settlement and Sources of traffic I have decided to recommend that the Railway to Adelaide be taken by the Route shown in full Red on the tracing, with a Short Branch to the Ryston Railway. (also shown in full Red).

I do not recommend that this Branch be regularly worked in the same manner as the Race Course Branch but only occasionally as Public Requirements or Circumstances may demand - Whatever advantages may accrue to Residents along the line thereby having a double or larger Service of trains on account of the working of a Branch beyond them can just as readily be afforded by the Route recommended as by any other with this additional advantage that the extent of the train service will be more completely under the Control of the Traffic Department and can therefore be more exactly proportioned to Requirements -

The Route I recommend Commences

in

in the South Brisbane Branch at
Woolloongabba about one mile from
the Stanley Street Terminus, and
passes half a mile north west of
Dutton Park State School thence to
Rylimba where a platform can
be provided close to the Divisional
Board Office passes through Tennant
close to Gibson's Sugar Mill, and
upon reaching a point in the (a)
Survey 2/4 miles from the Lytton
Battery Curves to the right and
running parallel to the Shores of the
Bay at an average

distance therefrom of about three quarters of a mile. passes at the rear of Lytton, Wynnum, Waterloo Bay, Manly, Lota, and Wellington Point, reaching the proposed terminus at Cleveland in 20 miles 15 Chains from Woolloongabba - this distance although more circuitous than by the other routes, is less than half a mile longer than the coach road, which is 19 3/4 miles in length between the same points.-

The country traversed by the direct line (c) blue on tracing, is neither so favourable for Railway Construction nor so well adapted for settlement as that on either of the other routes. The best land I saw (apart from that in the immediate neighbourhood of Redland Bay) is situated on the bank of the Brisbane River between Bulimba Creek and Lytton and thence to Cleveland along the immediate shores of the Bay.—

The steepest gradient on the direct line (c) would be 105 chains of 1 in 62 as compared with 75 chains of 1 in 60 on either of the other routes - the summit levels being 140 feet and 103 feet respectively above high water mark,

The direct line (c) would pass sufficiently close to the Public Schools at Coorparoo, Belmont and Cleveland East and West to accomodate the settlement they represent the number of children in average daily attendance for the year ending

ending 31st December last at those schools, amounted to 163

The Central route (b, dotted red line on tracing) passes sufficiently close to the state schools at Coorparoo, Bulimba, Zinfalpa, and Cleveland east and west, with a total average of 295 children -

The route I recommend (full red line on tracing) passes near the state schools of Coorparoo, Bulimba, Hemmant, Lytton and Cleveland east and west with a total average of 361 children -

Comparison of lengths to construct without Branch to Lytton

Direct line	17 miles	17 chns	49 links
Central route	17 "	52 "	40 "
Route I recommend	20 "	15 "	00 "

Comparison of lengths to construct with branch to Lytton

Direct line and Branch	20 mls	77 chns	49 links
Central route with "	23 "	12 "	40 "
Route I recommend with Branch	22 "	35 "	00 "

The full red line has not been surveyed between 8 miles on (a) and 11½ miles on (b) but I do not anticipate any serious natural difficulties along the route recommended.

(Signed) Geo Phillip

Inspecting Surveyor.

Original Page 5.

2904 Mis
10.11.85.

Brisbane 4th Nov. 1885.

The Chief Engineer,

Sir,

In accordance with your Instructions, I have the honor to report on the route, viâ Coorparoo and Old Cleveland Road, for the Cleveland Branch Railway as under :-

I examined this route as well as that by which I am making the Trial Survey, before I recommended the adoption of the latter, but I have since examined it more in detail, & herewith forward "two mile" map showing a practicable route in yellow, Trial survey to Lytton in red, and Trial survey to Cleveland in blue.-

The alternative line would leave the Lytton Branch, just after crossing Normans Creek, and turning to the right, go towards Coorparoo Primary School; cross the old Cleveland Road a little beyond the school, & following up a water-course parallel to the Road for about a mile, cross the divide between Normans & Bulimba Creeks. Then keeping the same general direction, follow down another water-course for about two miles, to Bulimba Creek. The Main Road would require to be crossed, before crossing the Creek, but

Chainage at which it would be necessary for Mr. Aitchison Surveyor of the alternative route via Coorparoo if approved to meet Finlayson Creek Trial line with a view to adoption in lieu thereof.

Brisbane 10th Nov. 1885.

Mr. Aitchison Surveyor.- Herewith I forward a tracing from Mr. Aitchison's map showing the alternative line by Coorparoo & Old Cleveland Road as requested by you this morning.

(Sgd.) J. F. D. 10/11/85.

Mr. Aitchison Surveyor.- Herewith I forward a tracing from Mr. Aitchison's map showing the alternative line by Coorparoo & Old Cleveland Road as requested by you this morning.

(Sgd.) J. F. D. 10/11/85.

the general direction - Easterly - would still be the same, and the line after crossing the Creek, and passing Belmont State School, would enter what is known as the "Grassdale Estate", and passing through it for about three miles, would recross the Main Road, and passing the junction of the Coach Road, arrive at Tingalpa Creek, which would be crossed just above the Roadbridge. Thence passing Capalaba, and keeping close to the Cleveland Road, on the South side, would Cross Salt water Creek, (a branch of Tingalpa Creek) and leaving the Road where it turns sharp to the North, ascend on to the table land, that forms the watershed between Tingalpa and Hilliards Creeks and which gradually rises towards the East. Then following down a watercourse in a North Easterly direction, would Cross Hilliards Creek and join the Trial Survey to Cleveland. -

This route although practicable would pass through much more difficult Country, than the Trial Survey, and would require more Curves and earthwork. The line from Coorparoo to Belmba Creek, would be a succession of Curves, owing to the windings of the Watercourses it would be necessary

to follow, and a considerable amount of earthwork would be required, on account of the steep side slopes of the ground in many places. From Bulimba Creek to about a mile beyond Capalaba, a comparatively easy line could be obtained then there would be some heavy grades, and a good deal of earthwork, through very inferior country; in fact the whole character of the country passed through is inferior, and only fit for building sites. The crossing of Bulimba Creek, would be above tidal influence, but Tingalpa Creek, and the salt water Creek immediately beyond it, would require as much bridging as Tingalpa Creek itself at the crossing of the Trial Survey. although it is a much more direct route to Cleveland than that of the Trial Survey, I dont think more than one mile could be saved in distance. The scaled distance from Woolloongabba to Cleveland is 15¼ miles, and the Trial Survey of which I have completed the traverse is 18M 13.00 Owing to the number of curves that would be required on the alternative route, I think it would be necessary to allow two miles at least for curvature, making the distance 17¼ miles.

There is considerable settlement about Coorparoo, and by this route, a Station could be placed about half a mile nearer the State School, than by the other. At Belmont School there are some twenty children attending, and there is some settlement along the road as far as there, but from thence to Cleveland, or about two-thirds of the length of the Line, there is only Capalaba, with two or three

houses that would be benefited. Wellington Point and the good land in the neighbourhood could not be served by this route, unless the Line was made longer than the Trial Survey.

I have the honor to be,
Sir,
your obedient Servant,

Signed H. W. Lethem.
Asst by Surveyor in charge.

Original Copy

Inspecting Surveyor
Brisbane
(52) C.P.O. 45.
20/10/85
22/10/85

Original page 10 2763 Mis.
10. 10. 85

Brisbane
9th October 1885

The Chief Engineer

Sir,

I have the honor to report, that in accordance with instructions from the Inspecting Surveyor I have examined the country between Brisbane & Cleveland with the view of determining the best route for the proposed Cleveland Branch Railway, and herewith forward map showing trial survey of Lytton Branch in red, and proposed Cleveland Branch and alternative Branch to Lytton in blue. The routes I have followed in my examination of the country are marked. Brown, and the Chief centres of settlement are tinted red.

The general character of the country is inferior, and altho' all the land that the line will pass through has been alienated, a considerable portion of it has not been settled on. The best land is in the neighborhood of Stanmore and on the coast from Tingalpa Creek to Cleveland. As the settlement is somewhat

Survey may be proceeded with as suggested by Mr. Surveyor but the line should be asked to report on feasibility of taking the line direct to Tingalpa Creek with as little as possible to a deviation from the Cleveland Road along the Coast about

somewhat difficult to choose a route that shall be fairly direct, while meeting local requirements, but I think the route I recommend will fulfil those conditions as far as possible.

The proposed route follows the trial survey of the Lytton Branch from South Brisbane to 5¼ miles then leaving that survey turns to the right crosses Bulimba Creek, just below the Bridge on the new Cleveland Road and follows an Easterly direction for about a mile to the proposed Junction of the Lytton Branch. Then turning to the right crosses the road to Wynnum and a corner of the Cleveland Road, and following up a watercourse, crosses the divide between Bulimba and Tingalpa Creek; then turning to the left, and taking an Easterly course, crosses the latter creek at about 11½ miles, and 1½ miles from its mouth; then still keeping the same direction, crosses 1½ miles further, the Wellington Point road, and then the ridges that run down to that point. Then turning South Easterly crosses Tilliard's Creek, and passing behind West Cleveland turns to the left and going Easterly. Cleveland is reached at about 19 miles from Woolloongabba.

The

The country is comparatively easy for Railway construction. The Earthworks will be light, but heavy grades, cannot will be avoided in several places. Tugalpa Creek which is about three chains in width, and of course tidal will require the largest bridge.

Resp. The only point of any importance that this route does not accomodate is Capalaba on the East bank of Tingalpa Creek where the Cleveland Road crosses it. The place itself is not of much importance but there are a few settlers at Upper Tingalpa three miles up the Creek & roads branch off to Redland Bay and Mount Cotton. If the line was made to Cleveland all Redland Bay traffic would go to that Station & it would also be somewhat nearer from Mount Cotton to Cleveland than to Capalba. At present nearly all the Mt. Cotton traffic to Brisbane goes by Way of Upper Tingalpa & Mt. Gravatt on the Logan Road There is considerable settlement about Wellington Point and thence along the Coast to Cleveland and the soil is good. These settlers could not be equally benefitted by a Line via Capalaba unless a detour of more than two miles was made. There is no settlement at the Surveyed Township of Tingalpa on the West bank of the Creek of that name & opposite Capalaba.

Any line to Cleveland by what
is known as the "Old Road"
would be more costly owing
to the more difficult character
of the country & accomodate
much less settlement.

An alternative Branch
line to Lytton is also shown
on the Map. It commences
on the Cleveland Line at
about 7 miles & crossing a
small creek goes Northerly to
avoid some hilly country
then turning to the right
passes within a mile of Hemmans
& following a North Easterly
course for about two miles,
turns to the left near Wynnum
& goes north to Lytton. By adopting
this route instead of that by the
present Survey, one Bridge over
Bulimba Creek will serve
both Lines & Wynnum will be
benefitted. There is already
some settlement & the position
is as good as any on that part
of the coast for a Marine
Township. There is a considerable
settlement between Hemmans
& Lytton & the soil is good. This
Alternative Line would in
volve more earthwork, and
steeper grades, but the
saving of a bridge over Bulimba
creek

Creek, and the greater advantage
to settlement, would, I think,
more than compensate

I have the honor to be
Sir
Your obedient Servant.
(sgd) H. W. Letkem
Asst: Rly. Surveyor
in Charge