

Lanark, Darling and Lavant, in the County of Lanark; Canonto and Miller, in the County of Frontenac; Matawatchan, Griffith, Lyndoch and Raglan, in the County of Renfrew; Carlow, Monteagle, Wicklow, McClure and Herschel, in the County of Hastings; Bunton, Harbun, Eyre, Havelock and Sherborne, in the County of Peterborough; Ridout, in the County of Victoria; McLean, Stephenson, Watt and Cardwell, in the Muskoka District and Monteith; Christie, McDougall and Foley, in the Parry Sound District. The total length measured on the map round all the sinuosities is 225 miles.

The first five miles from Carleton Place are on ground nearly level in all directions, but with a few low rocky knolls which can be easily avoided. The rise on these five miles is about fifty feet. On the next five miles there is more undulation, with somewhat heavier work, but the greatest inequality of surface is 80 feet in about $1\frac{1}{2}$ mile from the bed of the stream to the top of a ridge. The cost of construction up to sub-grade of these ten miles would be that of the modified rate for contract No. 1 of the Intercolonial Railway, that is, about \$9,100 per mile.

Between the tenth and sixteenth miles, the ground is for the most part rough and rocky, the curves would be frequent and the earthworks heavy. There would not be any heavy bridging. I estimate the cost of these six miles at something more than the modified average for Contract No. 18, say \$30,000 per mile. During the day on which I was on this section there was a thunder storm, and I believe my barometer did not register heights correctly, and I give this very high estimate to cover contingencies. There is no difficulty on the section, but the cuttings will be heavy.

Between the sixteenth and thirtieth miles the works will be comparatively easy, the valley of the Clyde, which extends as far as $27\frac{1}{2}$ miles, giving good ground. Between the seventeenth and eighteenth miles, the line for 300 or 400 yards runs along the face of a steep but not high rocky back of the river, but the work there will not be either heavy or difficult. At twenty-one miles the line crosses the river, as the ground is more favorable on the south side than on the north. Near the same point a short bold rocky headland strikes the river, but the line passes to the south of this, crossing a very low new neck of headland. In no place, except between seventeenth and eighteenth miles above mentioned, does the line of necessity run close alongside the river. At $27\frac{1}{2}$ miles the line again crosses the Clyde, and at an elevation of about 30 feet. Here it crosses also the line of the Kingston and Pembroke Railway, which is located close along the river. From this crossing the line ascends to the thirtieth mile by a grade of 50 feet per mile along good ground, sloping gently transversely, except for the last half mile, on which it has to cross a few narrow rocky spurs and gullies. I estimate the cost of this section of fourteen miles at the modified rate of Contract No. 9, namely, \$15,000 per mile. In addition, I estimate the two bridges over the Clyde, and the one over the Kingston and Pembroke Railway, with first-class masonry and iron superstructure, at \$62,200 or say \$4,500 per mile for the fourteen miles, making the total estimate for this section \$19,500 per mile.

The rise between the eighteenth and twenty-seventh miles is very gentle, as between these points the river Clyde has only two low short rapids, all the rest being nearly still water. I believe a great deal of gravel for ballast will be found on this section. The lumbering district begins on this section, at about the twenty-eighth mile, and continues almost without interruption all the way through to Parry Sound.

The line between the thirtieth and thirty-fifth miles, and again between the thirty-seventh and forty-third miles, is very much like that of contract No. 8, I. C. R., there being much flat ground on it, while that between the thirty-fifth and thirty-seventh miles is more of the general character of contract No. 18, as there would be some steep side-hill work upon it. At about thirty-six and a half miles there would be a bridge of about fifty feet in width across one of the branches of Mudlake Creek, which I estimate at \$9,500. I accordingly estimate the average cost of this section of thirteen miles at \$10,000 per mile. You will notice on this section that the line runs between the main body of the lake at thirty-four miles and an arm of the lake. The