

cutting for a mile in extent will be necessary. The maximum depth will be about 35 feet for 7 or 8 chains only.

§ 2. From hence following the shore of Kennebecasis Bay, the chief obstacles are Davidson's, Henderson's, Harris', and Forrester's Coves, until we reach the head of the last, at a distance of 15½ miles from Saint John. The intersection of these in a favourable manner will require due consideration. The cost of this portion of the Line must necessarily exceed the average expense of the remainder; but the result will be the attainment of gradients varying very slightly from a level. It was supposed that a shorter, less expensive, and sufficiently favourable route might be found through Lakefield, by the Valley of Salmon Creek. But the result of a careful exploration and section proved that the summit could not be overcome by a less favourable maximum gradient than 136 feet per mile, descending into the Valley of Hammond River. It is exceedingly doubtful that any other descent into the Valley of this River would prove more favourable.

§ 3. From the head of Forrester's Cove the Line will intersect Hammond River nearly a mile below the present Bridge, and continue by a straight line through the Marsh until it touches the south Shore of Darling's Lake. Following the latter by easy curves, and nearly on a level, until it intersects Groom's Cove; it proceeds thence with slight deviation from a direct course, to the head of Acicack Marsh, near Hampton Ferry, and at 23 miles 24 chains from Saint John. From thence it continues by a direct and level line along the Marsh, intersecting the Kennebecasis at a favourable point a little below Mr. Wright's Farm; and thence with a slight change of direction to the northern end of the old Toll Bridge, at 28 miles from Saint John.

§ 4. From hence it was supposed that the line might avoid the immediate bed of the Valley, by following a lateral valley running nearly parallel, and to the north westward of the Post Road. A comparative survey and section proved that there would be no saving in distance, and most probably a heavier expense of construction, whilst the gradients, though very favourable, would be greatly inferior, involving for a mile and a half in distance a maximum of 25 feet per mile, against a nearly uniform level by the River route.

§ 5. Following the latter from the Toll Bridge, to the left of Norton Upper Church, by a direct Line crossing Hayes' and Barbarie's Meadows, and the River to the foot of the high ground on the left or southern bank, nearly opposite to the Roman Catholic Chapel, and thence following this bank by a course nearly straight, the line recrosses the River near the Finger Board, at a distance of 34 miles from Saint John.