

*To R. M. Crysler, Andrew Heron, D. McDougal, John Barker, John Rogers, Esquires, the Committee appointed to superintend the survey for a Ship Canal from Lake Ontario to the summit of the Mountain in Thorold.*

GENTLEMEN,

In pursuance of your instructions "To survey a route for a Ship Canal from the Niagara River, to the Welland Canal at the summit of the mountain,"—I have examined the River,—the Welland Canal from St. Catharines southward to beyond Thorold—and the ground between these two places, and have fixed upon what I conceive to be the most eligible and the least expensive route between the two points, the outlines of which, and a section of the ground and of the levels of the proposed Canal I now lay before you on the plan which accompanies this Report, also an appendix containing estimates of the expense.

My first object was to fix upon the proper point of departure from the River.

The Niagara River, and the approach to it from the Lake has at all times a sufficient depth of water for any description of vessels which can ever navigate the proposed Canal.

Although the mouth of the River is easy of access, yet it is exposed to the swells of the Lake, especially when the storm is from the north-east. These swells are in part repelled by the current of the River, but are more effectually broken by the point of land on which Fort Niagara is built.

Southward of a line drawn across the River from the Episcopal Church in the Town of Niagara, to Fort Niagara—the water is smooth, and forms a safe and commodious roadstead—extending as far as the point on which Fort George is built. Above this point and onward to Queenston the current of the River is from three to four miles an hour. Below this point the River widens out and this circumstance, together with the repelling action of the Lake water causes the current to decrease, near the western shore opposite to the Church it is found to be under two miles an hour.

The elevation of the ground where our line passes along the common at Niagara, averages forty-three feet above the level of the Lake. The elevation of the ground near the River at the dotted line A shewn