

REPORT TO COLONEL J. J. ABERT,

DESCRIPTIVE OF SURVEYS MADE IN THE SUMMER OF 1838,

IN RELATION TO THE ROUTE OF

THE MARYLAND CANAL.

Washington, January 3, 1839.

To Col. J. J. ABERT, &c. &c.

Sir:—Your instructions, received on the 20th of June last, required the necessary examinations to be made, to determine the practicability of uniting the Chesapeake and Ohio Canal and the city of Baltimore, by a navigable canal, passing by the most Northern route exclusively within the State of Maryland.

The accompanying Maps and Profiles, marked 1 to 5 inclusive, shew the result of these examinations, which, with the following description of the routes surveyed, are respectfully submitted.

These routes are three in number viz:—

1st Route crossing Parr's Ridge, by the valleys of the Patapsco and Linganore, and intersecting the Chesapeake and Ohio canal at the mouth of Monocacy.

2d. A route entirely to the Eastward of Parr's Ridge, intersecting the Chesapeake and Ohio Canal at the mouth of the Seneca, and ascending the stream to its source; passing into the valley of the Patuxent; and,

3d. A route diverging from this by the valley of the Whetstone Branch of the Seneca, and passing by the head waters of Rock Creek to the valley of Hawkings River, and thence to the Patuxent. These routes will be described in the order named.

1st. The route crossing Parr's Ridge by the vallies of the Patapsco and Linganore, and known in the previous surveys for the Maryland Canal as the *Linganore Route*.

From the nature of your instructions our labors were confined solely to the examination of the summit section, or that extent of canal depending upon the summit water for its supply, which led us to examine,

1st. The best passage through the Ridge for a canal, by tunnel or open cut, with the elevation of the summit.

2d. The quantity of water which can be commanded for the summit section.

3d. The length of Canal, and number of Locks, to secondary supplies of water.

4th. The position, extent and number of reservoirs, to collect the drainage of the country above the summit.

5th. The extent of the drainage.

6th. The location of the feeders to transmit this supply to the canal.