

# Vermont Geology and the Shaping of the Crown Point Road

Leah Nagel - Historical Geology of Vermont - Winter Term 2012

## Historical Context

In the year 1759, after several years of embarrassing losses to a significantly smaller French army, the British finally got their act together in New England. That July, General Amherst (the first competent general assigned to the region) captured two key French outposts, Fort Carillon, now known as Ticonderoga, and Fort St. Frederic, the key to trade on Lake Champlain (Hill, 1995; Starbuck, 1999).

The physical structure of Fort St. Frederic was lost in the battle, so General Amherst ordered the construction of a new, larger fort nearby that became known as the Crown Point Fort. To ensure adequate supplies for the building and future support of the fort, he ordered a road built through what is now Vermont to Fort Number Four in Charlestown, New Hampshire, which was at the time the northernmost fort in the Connecticut River Valley (Crown Point Road Association, 1999).

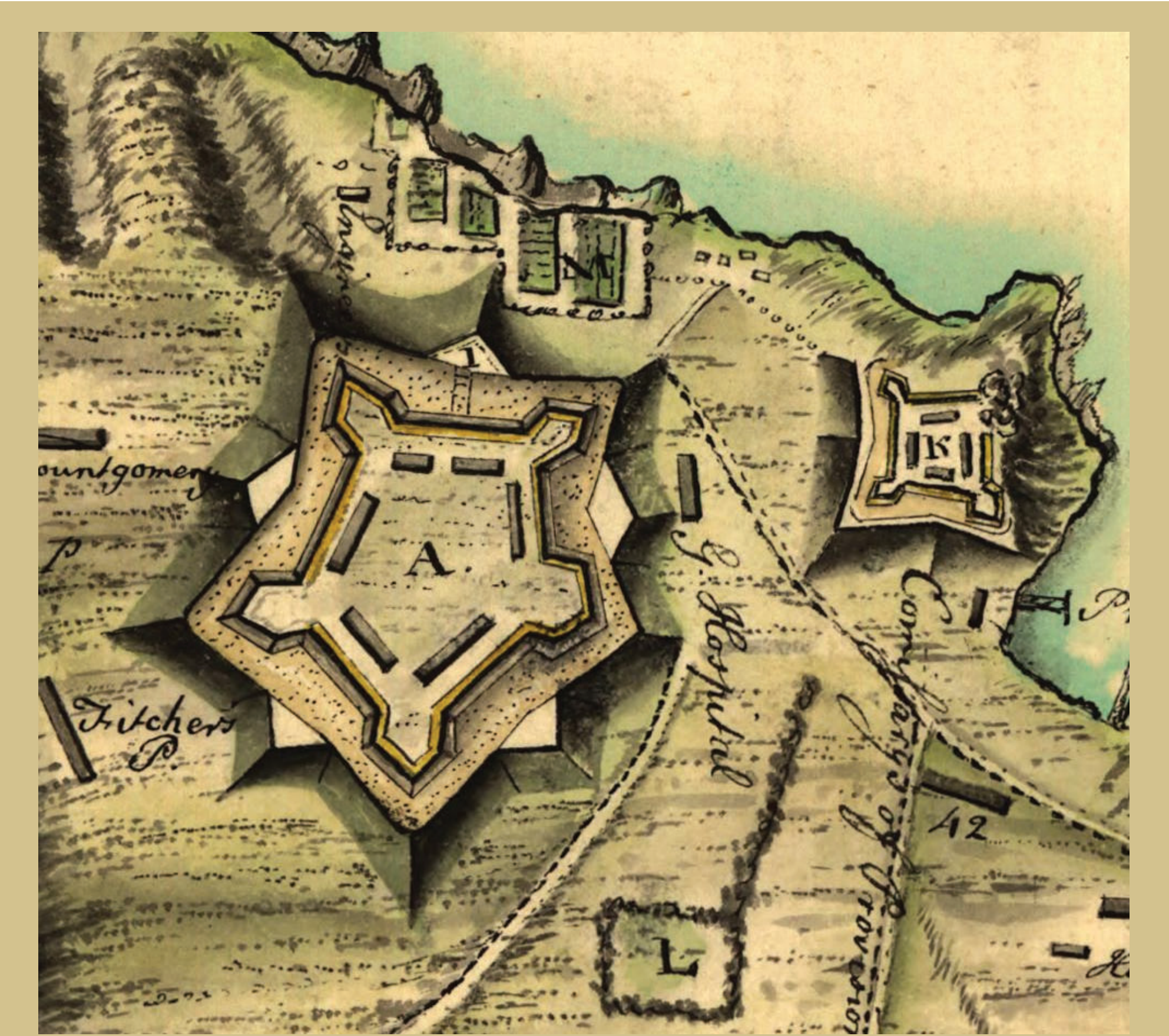


Figure 1. Crown Point, New York. The original French fortification (K) was built in 1731 and destroyed in 1759 when French soldiers, facing a British army far larger than their own, set fire to their munitions and blew it up (Coolidge, 1985). Crown Point Fort (A) was built by the British to replace the French fort and secure their hold on the region.

## Building the Crown Point Road

Building a road through Vermont in 1759 was no mean feat; much of the primeval forest remained intact, and there were large rivers to ford and swamps to pass through or avoid. Captain Stark of Roger’s Rangers was sent to survey the route, and in September of 1759 he and 250 men began construction on the road (Squires, 1959). They arrived at their destination in October very low on provisions and morale. Given that they had arrived at their destination in so short a time under such conditions, it is likely that much of the road was little more than a blazed trail.

In the spring of 1760, construction began anew on the Crown Point Road. General Amherst ordered Colonel Goffe of the New Hampshire militia and 800 of his men to complete the road from the East (Squires, 1959). They set out from Fort Number Four in June, and over the course of the next several weeks Goffe struggled to keep his men from deserting in the face of hard labor with little to no food (Jones, 2001). They succeeded in completing the road, however, and by late July, there were men, supply wagons, and cattle passing over the road. The first of these reached the Crown Point Fort on July 31st, and the first non-aquatic highway in the region was finally complete.



Figure 2. Once the Crown Point Road left the Valley of Vermont, it entered the broad, flat Champlain Valley. This extensive plain has very little elevation change, and as a result rivers tend to be in a winding, alluvial phase—perfect for the formation of swamps. Swamps are formed in areas that are either intermittently or permanently water-covered that support woody plant growth (USGS). In the Champlain Valley, swamps appear to be primarily associated with rivers, and form in areas where the floodplain is poorly drained (Chernicoff and Whitney, 2006). For the soldiers building the Crown Point Road, swamps meant extra work to build corduroy sections (built up with logs) and—at least for Colonel Goffe’s men building at the height of summer—plenty of mosquitoes and other biting insects to contend with.

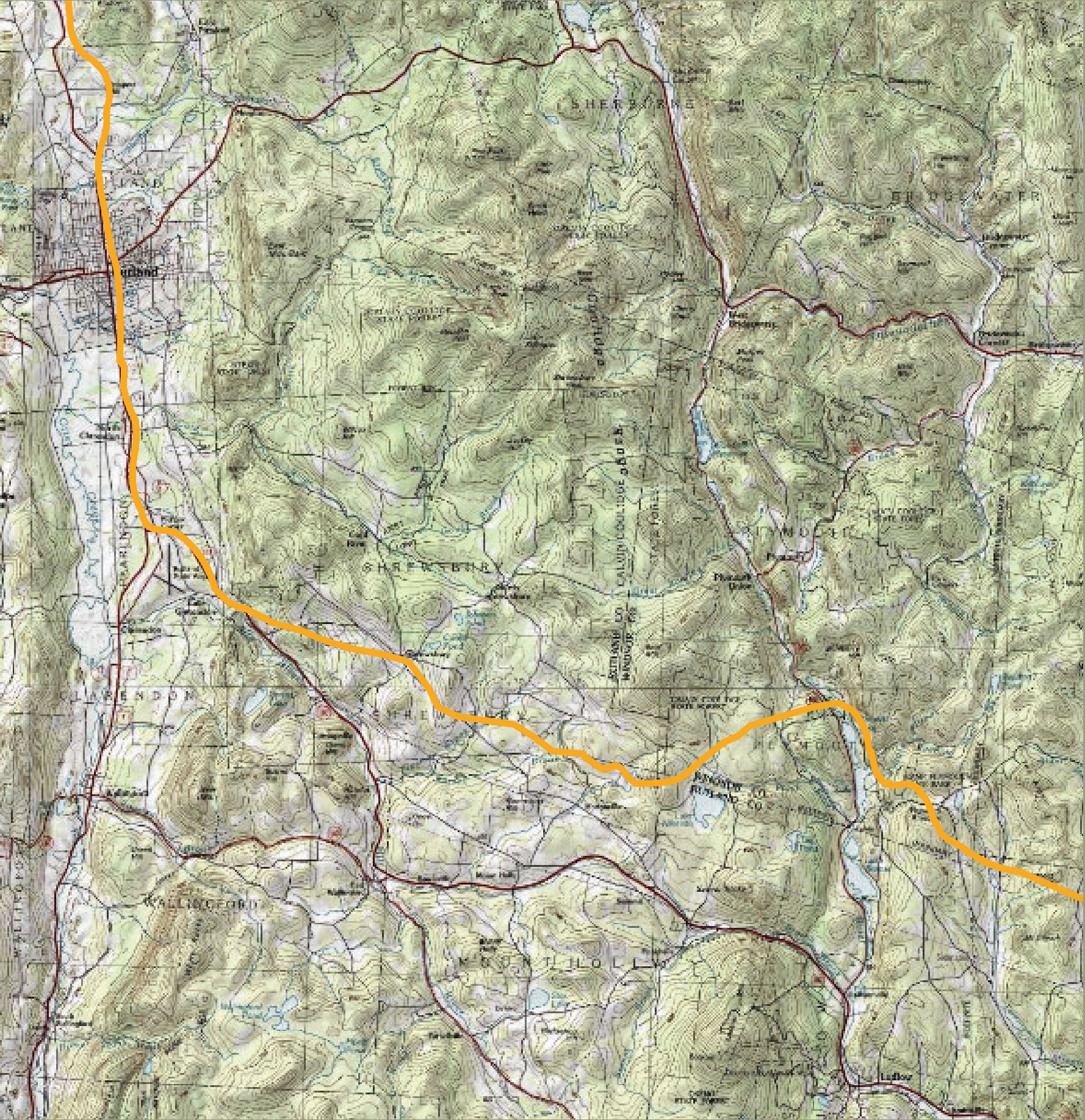


Figure 3. One of the major challenges to blazing the Crown Point Road was crossing the Green Mountains. The range itself was originally formed when an ancient island chain known as the Taconic Island Arc collided with the North American plate approximately 500 million years ago (Klyza and Trombulak, 1999). The basement rock of the range, however, dates back to a mountain range so ancient that had entirely eroded away by the Taconic Orogeny; these Precambrian deposits visible throughout much of the central and southern portions of the range are over one billion years old (Doolan, 1996). Continued tectonic activity in the region led to faulting and igneous intrusion, as well as the melting and re-crystallization of various historically mined minerals such as copper, talc, and asbestos (Doolan, 1996; Klyza and Trombulak, 1999).

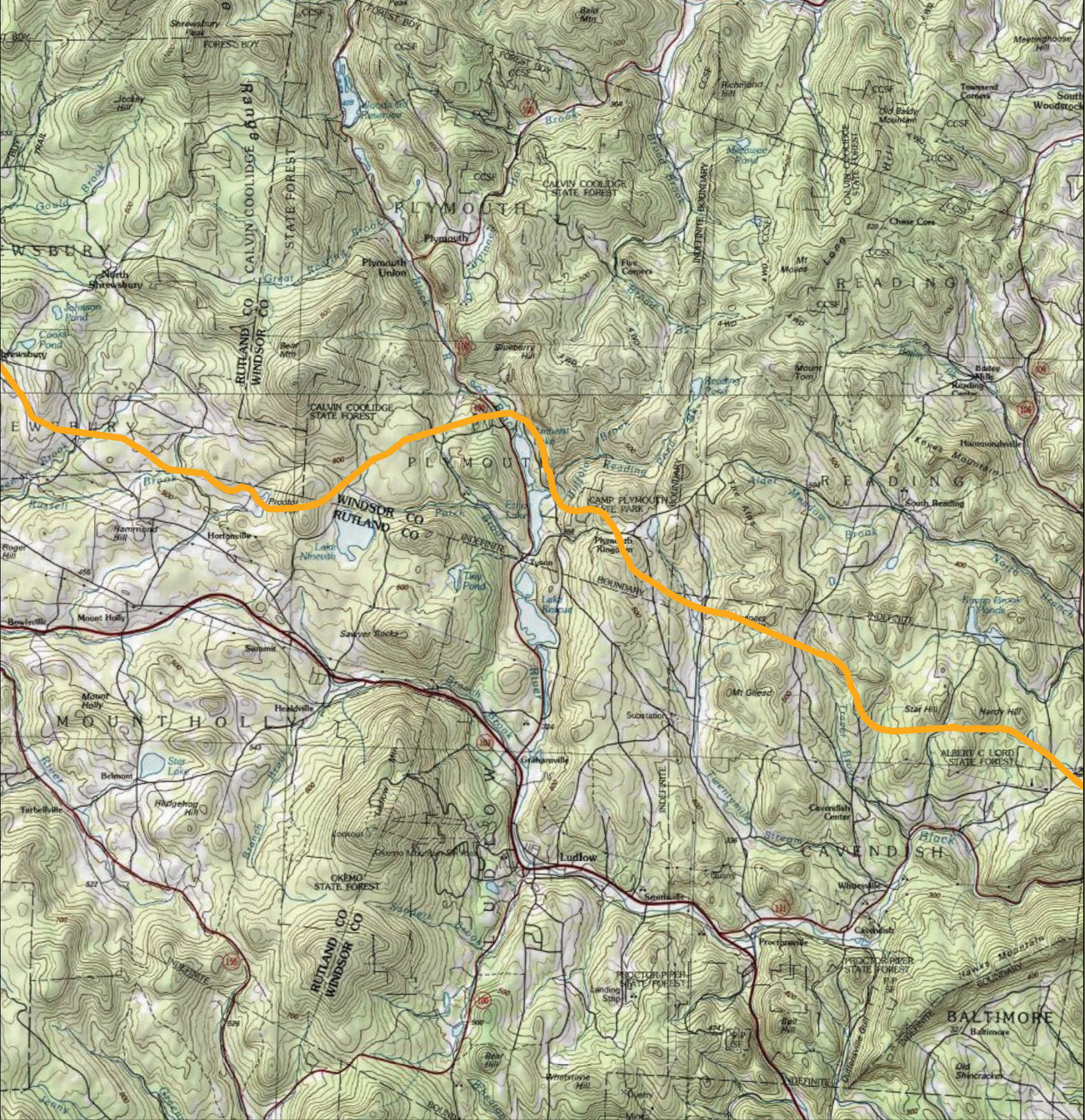
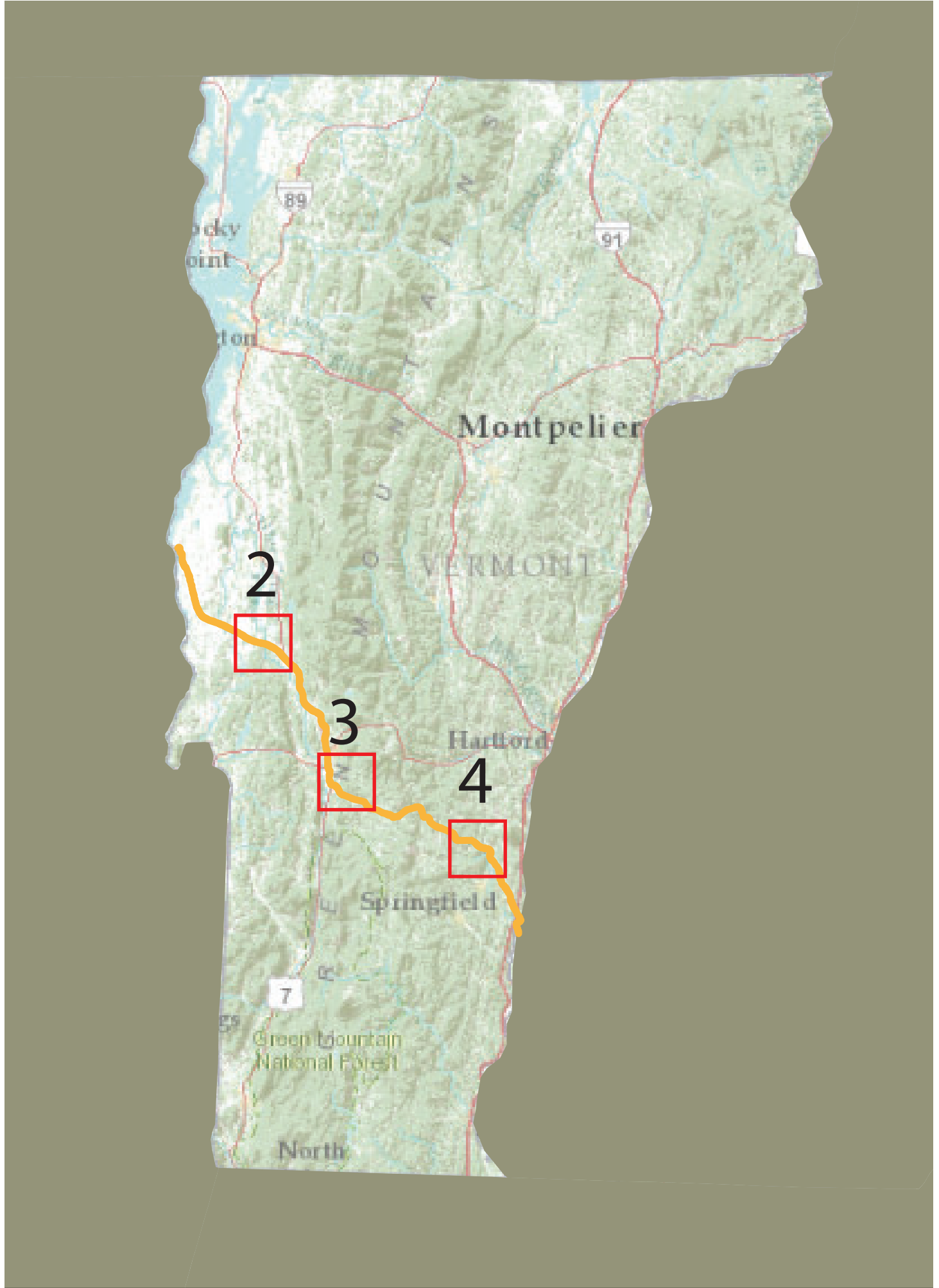


Figure 4. There were numerous other challenges that made construction on the Crown Point Road a grueling task. Building bridges in stable locations, or at least finding safe places to ford the river was likely a difficult task. There was also the question of felling the (by today’s standards) giant trees of the old-growth forest still present in the region; some of them could reach diameters of over 5 feet (CITE), and the felling such huge trees was dangerous (at least one man in Colonel Goffe’s regiment broke his leg when a tree fell on him) (Jones, 2001). All of this was done on very short rations; sometimes the men did not eat for two days at a time and could not work on the road. Many were so fed up with the conditions that on July 20th, 1760, 40 men deserted the regiment.



Figure 5. This 1860 map of Vermont traces the path of the Crown Point Road 100 years after it was completed by Colonel Goffe and his men. The detail with which the route is recorded suggests that even a century later, large portions of the road may have still been intact (or only recently lost to development or abandonment).



## Long-Term Impacts of the Road

The Crown Point Road played a significant role in shaping history and the landscape itself while it lasted. In the 1760 campaign by the British, the road allowed for the crucial passage of colonial troops carrying supplies, munitions, and livestock to support the Crown Point Fort (Crown Point Road Association, 1999). After the war, it served as a gateway for settlers looking for a fresh start; by providing direct access to areas far from the major waterways in the region, the road opened up entirely new areas of the state to settlement. Today, much of the Crown Point Road has been abandoned and reclaimed by the forest that recolonized the state after the sheep craze; however, a few stretches remaining as hiking trails. Some of it continued to be used as road (a significant chunk of the road became part of Route 7), while other parts have been bulldozed to make room for expanding development. But its legacy lives on, a road fundamentally shaped by the geology of the region that in turn dramatically altered the natural and human landscape for decades to come.

### Bibliography

- Chernicoff and Whitney 2006. Geology: An Introduction to Physical Geology. 4th ed. Upper Saddle River, NJ: Prentice Hall.  
Coolidge, G.O. 1985. The French Occupation of the Champlain Valley. Montpelier, VT: Vermont Historical Society.  
Crown Point Road Association. Historical Markers on the Crown Point Road. 1999. Rutland, VT: Sharp Offset Printing.  
Doolan, B. 1996. The Geology of Vermont. Rocks and Minerals Magazine 71: 218-225.  
Hill, R.N. 1995. Lake Champlain: Key to Liberty. Woodstock, VT: Countryman Press.  
Jones, B.B., ed. 2001. Rev. Samuel Macclintock's Journal, 1760, and Names of Men in Col. Goffe's Regiment. Rutland, VT: Academy Books.  
Squires, J.D. 1959. Old Number Four: Yesterday and Today. The New England Social Studies Bulletin. 16(2): 11-14.  
Starbuck, D.R. 1999. The Great Warpath: British Military Sites from Albany to Crown Point. Hanover, NH: University Press of New England.  
Stewart, D.P. and P. MacClintock. 1969. The surficial geology and Pleistocene history of Vermont. Vermont Geological Survey 31: 29-39.  
Tiner, R.W. 1997. Wetland definitions and classifications in the United States. National Water Summary on Wetland Resources, USGS Water Supply Paper 2425. <<http://water.usgs.gov/nwsum/WSP2425/definitions.html>>  
Walling, H.F. 1860. Map of the State of Vermont. Vermont Collection, Middlebury College Library.