Adding an Ancient Road in Vermont

In response to Act 178 of 2006 (Unidentified Corridors), the Vermont Agency of Transportation (VTrans) Mapping Unit was presented with the challenge of mapping the additions of class 4 town highways and legal trails using information provided from towns and any ancillary data that was available.

1. The Town does extensive research of their records to determine if there is documentation of the legal establishment of a public highway that has not been mapped on the official General Highway Map (also known as the Town Highway Map).

2. The general location of the highway is sketched on a modern map base to give an indication of the starting and ending points and general layout.

3. The historical survey is converted into 2019 ArcGIS COGO traverse format.

4. The highway is generated and entered into the master road centerline data layer.

5. The official General Highway Map is created showing the newly added ancient road.

A sophisticated suite of tools was employed to make the town highway map update possible, including ESRI's Arcinfo and Production Line Toolset (PLTS), plus running traverses using COGO tools.

In most cases, a rudimentary sketch map accompanied the volumes of deeds, surveys, old maps, and other documents from the towns, providing a general idea of where to add the highway or trail.

A sketch of the road on a U.S. Geological Survey quad sheet was included with the Town's documentation.

The survey was entered into a spreadsheet with the original measurement of rods converted into feet and meters. Also, note that two of the bearings are “West dominant” instead of North or South dominant. For example, the bearing W 12° E had to be converted into the current standard format of S 7° W. The left most column of the spreadsheet was used for the ESRI COGO traverse file.

Excerpt from the final Town Highway Map showing the newly added ancient road.

More information about ancient roads can be found at the Vermont Agency of Transportation Mapping Unit’s ArcGis maps web page (http://www.vt.gov/vermont/transportation/MAP_PUB/). Map produced by Vermont Agency of Transportation Mapping Unit, Montpelier, Vermont July 2012.