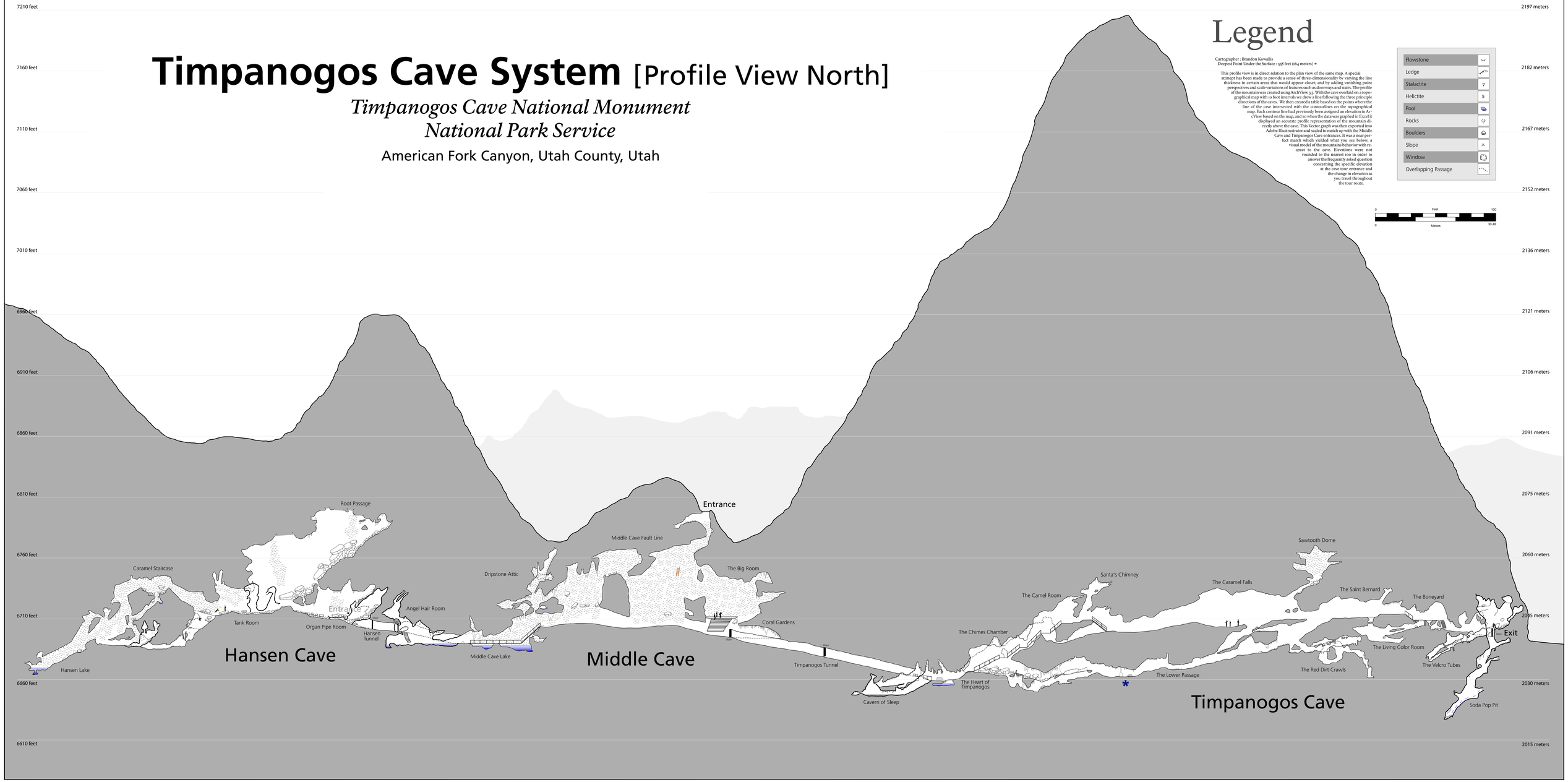
Timpanogos Cave System [Profile View North]

Timpanogos Cave National Monument
National Park Service

American Fork Canyon, Utah County, Utah



Cartographer : Brandon Kowallis
Deepest Point Under the Surface : 538 feet (164 meters) *

This profile view is in direct relation to the plan view of the same map. A special attmept has been made to provide a sense of three-dimensionality by varying the line thickness in certain areas that would appear closer, and by adding vanishing point perspectives and scale variations of features such as doorways and stairs. The profile of the mountain was created using ArcbView 3.3. With the cave overlaid on a topographical map with 10 foot intervals we drew a line following the three principle directions of the caves. We then created a table based on the points where the line of the cave intersected with the contourlines on the topographical map. Each contour line had previously been assigned an elevation in ArcView based on the map, and so when the data was graphed in Excel it displayed an accurate profile representation of the mountain directly above the cave. This Vector graph was then exported into Adobe Illustrustrator and scaled to match up with the Middle Cave and Timpanogos Cave entrances. It was a near perfect match which yielded what you see below; a visual model of the mountains behavior with respect to the cave. Elevations were not rounded to the nearest 100 in order to answer the frequently asked question concerning the specific elevation at the cave tour entrance and the change in elevation as you travel throughout the tour route.