

Frene Creek Analysis and Improvement Planning

Hermann, Missouri

Frene Creek flows through the heart of downtown Hermann, Missouri, before emptying into the Missouri River. Located on the east bank of Frene Creek, near the confluence with the Missouri River, is the Hermannhof Winery, a Missouri landmark listed on the National Register of Historic Places. Intuition & Logic was hired to conduct a geomorphic analysis of Frene Creek and to develop recommendations, which would guide the location and design of a proposed trail, riverfront and streetscape improvements, near-stream structures, and streamside landscaping.



A working knowledge of geomorphic process, stable channel geometry and fundamental stability of a stream system is required in order to properly inform any river management decision. Therefore, our approach is based upon background data and field investigations conducted according to proven industry standards. The result of this analysis is an understanding of the physical stability of the stream, dominant fluvial process, channel hydraulics, sediment transport, and stable channel geometry.



Based on our analysis, we were able to predict the river's response to proposed changes and coordinate stream recommendations with proposed improvement plans located along the project reach. Our analysis allowed us to properly inform the placement of channel crossings, develop effective riparian buffers, calculate acceptable pool elevations, and provide preliminary near-stream pathway configurations.