Geology and Geomorphology in Cultural Landscape Planning

Cultural landscapes are places that have acquired meaning through interactions between people and the land. They are representative of interconnected systems of land, water, vegetation, wildlife, and people, often conveying a sense of history unparalleled by other resources. As a historical landscape architect, I work as part of multi-disciplinary teams that plan for the documentation, protection, and management of these important landscapes, helping to reveal aspects of our shared human past and our evolving relationship with the natural world.

This talk will introduce the approach for documentation, evaluation, planning, design, and management of cultural landscapes through the lens of two vastly different cultural landscapes at Split Rock Lighthouse Historic Site in northern Minnesota and Manassas National Battlefield Park in northern Virginia. At each of these sites, key relationships between the geology, geomorphology, and human development of the landscape influenced our team’s understanding of the site’s history and subsequent recommendations for landscape rehabilitation and interpretation.

Split Rock Lighthouse was constructed on a particularly treacherous stretch of the Lake Superior coast, both due to the rugged terrain and magnetic deviations resulting from the area’s vast iron deposits, which made compass navigation difficult. Through detailed historical research, our team identified the critical role of the geology and topography in the light station’s design and construction, allowing us to plan for the protection of these features. Terrain also played a key role in the military movements during two Civil War battles that took place in the rolling hills and valleys of Manassas, Virginia in 1861 and 1862. For this project, our team used detailed GIS analysis of topography, viewsheds, soils, and vegetation data to develop treatment recommendations that enhance historic views, vegetation patterns, and circulation routes while protecting sensitive natural systems.

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Monday, April 1
4 to 5 p.m.
1118 Rood Hall