

**SUSSEX COUNTY, DELAWARE  
LEWES AND REHOBOTH HUNDREDS  
WESTERN PARKWAY**

**ARCHAEOLOGICAL PREDICTIVE SURFACES**

**Prepared for:**

**DELAWARE DEPARTMENT OF TRANSPORTATION**

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## ABSTRACT

The Delaware Department of Transportation (DelDOT) is studying the feasibility of constructing the Western Parkway, as an alternate route to U.S. Route 1, between Red Mill Pond and Delaware Route (S.R.) 24 in Lewes and Rehoboth hundreds, Sussex County. As part of the project feasibility study, DelDOT will complete an Environmental Impact Statement (EIS). In accordance with Section 106 of the Historic Preservation Act of 1966 and the National Environmental Policy Act of 1969, the EIS must address the impact of proposed project construction on archaeological resources.

Skelly and Loy was asked to construct two archaeological predictive surfaces, including one that addresses the potential for pre-contact period resources and one that addresses the potential for historic period resources within the Western Parkway study area. The archaeological predictive surfaces are based on the concept that the spatial distributions of cultural remains, which are represented by archaeological sites, are the results of human decision-making activities within environmental conditions. In order to create the predictive surfaces, spatial data was created, processed, and displayed within a geographic information system (GIS). The GIS used the locational data, such as mapped features, and a relational database to allow for sophisticated spatial analyses and data manipulation, which resulted in the construction of the two relational archaeological predictive surfaces within the Western Parkway study area. The archaeological predictive surfaces can be used by DelDOT within their alternatives selection process to minimize the impacts of the project on significant archaeological resources, and to reduce the costs and work effort required for subsequent archaeological testing and/or mitigation within the selected preferred roadway alternative.

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