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**RESEARCH DESIGN
FOR CULTURAL RESOURCES INVESTIGATIONS
FOR THE CUSHING LATERAL OF THE
TRANSCANADA PIPELINE,
KAY, NOBLE, AND PAYNE COUNTIES, OKLAHOMA**

by

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INTRODUCTION

ENSR International has contracted with Geo-Marine, Inc., to produce a research design for a Phase I survey and archeological inventory of the proposed 128.2-km (79.66-mi) Oklahoma segment (Cushing Lateral) of the TransCanada Keystone Pipeline. This research design is the result of a thorough records review of all sites and surveys recorded within 76.2-m (250-ft) of the proposed pipeline centerline, a visual reconnaissance of the proposed project corridor by a qualified geoarcheologist, and the construction of a GIS data layer including topographic features, identified sites and surveys, and probability modeling.

The objective of the research design is to produce a preliminary methodology for a Phase I cultural resources survey and archeological inventory that has been constructed with the involvement of Oklahoma State Historic Preservation Office (SHPO) staff, who provided guidance on state standards for archeological research and assisted with Section 106 compliance. Constructing the research design involved identification of sites that are potentially eligible for inclusion in the National Register of Historic Places (NRHP), as well as sites that have not yet been evaluated for eligibility. The previously identified sites were used to provide recommendations for avoidance of certain areas, and previously conducted surveys indicated where sites were not likely to be found. The geoarcheological reconnaissance provided data concerning areas of disturbance and the likelihood of encountering intact cultural resources. The resulting research design was constructed as a synthesis of these data, in relation to the cultural questions and issues of focus within the prehistoric and historic management regions in which the pipeline falls.

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