



MEMO

TO	Crab Run Solar Project, LLC
FROM	Environmental Resources Management (ERM)
DATE	15 July 2025
REFERENCE	PN 0787671
SUBJECT	Crab Run Solar Project- Cultural Resources Memorandum

1. INTRODUCTION

Environmental Resources Management (ERM) conducted a cultural resources-focused desktop review for the Crab Run Solar Project, which includes approximately 412-acres located approximately 1.80 miles southeast of the town of Loretto in central Marion County, Kentucky (Project Area) (Figures 1 and 2), plus a 1.0-mile buffer search area surrounding the site. The Crab Run Solar Project Area is in the Raywick and Lebanon West, Kentucky, 7.5 Minute U.S. Geological Survey (USGS) quadrangles. The desktop study conducted a review of archaeological site databases and files maintained by the Kentucky Office of State Archaeology (OSA) and the Kentucky Heritage Council (KHC) State Historic Preservation Office (SHPO) Cultural Resources Web Portal, an online map viewer and database managed by the KHC, on June 23, 2025. Additionally, research was conducted to determine if any portion of the Project Area has been subject to past cultural resource surveys. The National Park Service’s (NPS) National Register of Historic Places (NRHP), National Historic Landmark (NHL), and American Battlefield Protection Program (ABPP) databases were also consulted. ERM conducted the records review to determine the number, nature, and location of known archaeological sites, cemeteries, and architectural resources.

2. ARCHAEOLOGY AND CULTURAL HERITAGE ASSESSMENT

The parcels are currently privately owned and are not on federally owned or managed land (Regrid 2025). A cultural resources-focused desktop review was conducted using the archaeological site database and files maintained by the Kentucky Office of State Archaeology (OSA) and the Kentucky Heritage Council (KHC) State Historic Preservation Office (SHPO) Cultural Resources Web Portal on June 23, 2025. The search area of the Crab Run Solar Project comprised approximately 412-acres (Project Area), plus a 1.0-mile buffer search area surrounding the Project Area.

2.1 ARCHAEOLOGY AND CULTURAL HERITAGE ASSESSMENT

According to the OSA data, there are no recorded archaeological sites within the Project Area, and two recorded sites within the one-mile buffer (Table 1) (OSA 2025). Sites 15MN155 and 15MN376 are prehistoric habitation sites that have not been evaluated for National Register of Historic Places (NRHP) listing. These sites are located at approximately 0.5 and 0.8 mile east of the Project Area and will not be directly impacted by the Project. Due to the sensitive nature of archaeological sites, the previously recorded archaeological site locations are not provided in the attached Figure 3.

TABLE 1. PREVIOUSLY RECORDED ARCHAEOLOGICAL SITES WITHIN 1.0 MILE BUFFER OF THE PROJECT AREA.

Project Area Number	Project Area Type	Project Area Description	NRHP Eligibility
15MN155	Unknown Prehistoric	Open Habitation	Not evaluated
15MN376	Unknown Prehistoric	Open Habitation	Not evaluated

Source: OSA (2025)

2.1.1 ASSESSMENT OF BURIED ARCHAEOLOGICAL SITE POTENTIAL WITHIN THE PROJECT AREA

ERM reviewed historic topographic maps dating back to 1968 and found two farmsteads (approximately 5 structures) within the Project Area, primarily along Arthur Mattingly and Ben Daugherty Roads. Historic aerial photographs dating back to 1958 support the information depicted on historic topographic maps, indicating the presence of the two farmsteads with associated outbuildings along the aforementioned roads. Current aerial imagery confirms that all structures visible in the historic aerials and topographic maps appear to remain extant (NETROnline 2025). Additionally, the Kentucky Heritage Council (KHC) identified an architectural resource (discussed below in Section 2.3) located along the eastern boundary of the Project Area. This structure, however, is not depicted in the historic aerials or maps, suggesting it was either demolished prior to 1958 or inaccurately mapped. Overall, the Project Area exhibits a high potential for buried archaeological resources associated with both existing and former historic architectural features.

None of the Project Area has been previously surveyed for buried archaeological sites (Phase I survey), therefore sites could be present within its boundaries. The Project Area is mapped on soils that formed on either alluvium, residuum (weathered bedrock), or loess (wind-blown sediment) over residuum (weathered bedrock). Based on this, deposits have either low, moderate, or high potential for the presence for containing buried pre-contact archaeological sites because their potential is dependent on the depositional history, environment, and relative age of a landform. Based on soil types, a majority of the Project Area has low potential (258 acres) and the remaining portion has either moderate potential (108 acres) or high potential (45 acres). The areas with moderate potential are loess deposits with the potential presence of buried surfaces at 35 to 102 inches below the surface. At the depth of a buried surface/paleosol, there is high

potential for the presence of buried archaeological sites. Floodplains and stream terraces (alluvium) commonly contain buried archaeological sites. Approximately 45 acres have soils that formed on floodplains or alluvial terraces. Therefore, 63% (258 acres) of the parcel has low potential, 26% (108 acres) has moderate potential, and 11% (45 acres) has high potential for containing potentially eligible buried pre-contact archaeological sites

2.2 CEMETERIES

There are no known cemeteries located within the Project Area and one known cemetery within the one-mile buffer (KHC 2025, Find a Grave 2025) (Table 2). Saint Charles cemetery is an active cemetery located approximately 0.8 mile southeast of the Project Area. Due to its distance from the Project Area and intervening vegetation, it is unlikely the cemetery would be visually impacted by the Project.

TABLE 2. PREVIOUSLY RECORDED CEMETERIES WITHIN 1.0 MILE BUFFER OF THE PROJECT AREA.

Cemetery Name	Time Period	Condition/Status	NRHP Eligibility	Within Project Area?
Saint Charles Cemetery (MN 29)	1797-Present	Active, Maintained	Not Evaluated	No

KHC Project Area Check, 2025; Find A Grave, 2025

Additionally, unmarked rural cemeteries and graves do occur in Kentucky. If human remains or unmarked graves are encountered, stop work immediately and contact law enforcement. Under the Kentucky Revised Statutes 525.115, it is unlawful to “mutilate the graves, monuments, fences, shrubbery, ornaments, grounds, or buildings in, or violate the grave of any person by destroying, removing, or damaging the headstone, or dig into or plow over or remove any ornament, shrubbery, or flower placed upon any grave or lot, footstone, or the tomb over the enclosure protecting any grave enclosing any cemetery or place of sepulchre,”.

2.3 ARCHITECTURE RESULTS

There is one recorded architectural resource located within the Project Area (MN 556), and seven architectural resources located within the one-mile buffer (Table 3, Figure 3). MN 556 was a late 19th-century log cabin situated along the eastern boundary of the Project Area. The structure was not evaluated for NRHP listing and, based on current aerial imagery, appears to have been demolished. Of the resources within the one-mile buffer, none have been evaluated for NRHP listing.

A map review indicates that there are two farmsteads within the Project Area. One is on Arthur Mattingly Road along the southern boundary of the Project Area and the other is off of Ben Daugherty Road along the western boundary. According to historic aerials, both farmsteads date to at least 1958, therefore making them unrecorded historic resources. Unrecorded and

unevaluated resources within the Crab Run Project Area and in close proximity of the Project Area could be visually impacted due to the nature of the Project and the lack of intervening vegetation, should existing vegetation be removed in support of the Project. Evaluation of these resources would be needed to determine Project impacts.

TABLE 3. PREVIOUSLY RECORDED ARCHITECTURE WITHIN 1.0 MILE BUFFER OF THE PROJECT AREA.

Resource Number	Resource Name	Year(s)	Description	NRHP Eligibility	Within Project Area?
MN 29 (1)	Church of St. Charles and Cemetery	1900-1924	Church and Cemetery	Undetermined	No
MN 29 (2)	St. Charles Rectory	1900-1924	Church Rectory	Undetermined	No
MN 556	Log House	1875-1899	Single Dwelling	Undetermined	Yes
MN 557	Cumberland House	1875-1899	Single Dwelling	Undetermined	No
MN 558	I-House	1875-1899	Single Dwelling	Undetermined	No
MN 559	George Spaulding House	1925-1949	Single Dwelling	Undetermined	No
MN 560	Massed Plan House	1925-1949	Single Dwelling	Undetermined	No
MN 561	Benjamin Spaulding House	1900-1924	Single Dwelling	Undetermined	No

KHC Site Check, 2025; KHC E-Library, 2025

3. CONCLUSIONS AND RECOMMENDATIONS

The records review identified 2 archaeological sites, 1 cemetery, and 8 architectural resources within the 1.0-mile search buffer. None of the archaeological sites, cemetery, or architectural resources identified are eligible or listed on the NRHP.

Based on the current scope of work, it is not known if the project has a federal nexus, therefore formal NHPA compliance may not be required. However, ERM recommends: preparation of an Unanticipated Discovery Plan (UDP), early coordination with KHC/SHPO to determine further studies and information needed to complete permitting of the Project if there is a nexus, and incorporating impact avoidance and minimization measures early into Project planning and design and incorporate these measures into stakeholder and agency communications/consultations if there is a known federal nexus.

As a best practice, an UDP should be prepared prior to construction and in place for all earth-moving activities, so that any human remains or cultural resources inadvertently encountered can be appropriately managed, as discussed above. The purpose of the UDP is to make field personnel aware that, although there is currently no federal nexus to require a formal survey, cultural resources could still be present, and that construction should cease if any cultural resources are encountered. Further, the UDP guides steps that should be taken following any unanticipated

discovery. A UDP is not intended to allow any short-cuts or reduction of effort in any part of the Section 106 consultation process, should NHPA pertain to the Project. The Unanticipated Discovery Plan should be followed during Project construction to minimize potential impacts to any unknown intact archaeological resources. If previously unrecorded cultural resources, human remains, or unmarked graves are encountered within the Crab Run Project Area work should stop immediately, and law enforcement contacted along with the OSA.

ERM also recommends a letter be sent to the KHC to outline ERM's findings and solicit recommendations on further work required. Agencies typically have 30 days to respond to requests; however, response time is dependent on current workloads and project complexity.

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ERM

5425 Woodfield Crossing Boulevard
Suite 560-W
Indianapolis, IN 46240

T +1 317 706 2000

erm.com

APPENDIX A FIGURES

FIGURE 1. CRAB RUN SOLAR PROJECT LOCATION ON AERIAL



Legend
 Project Site

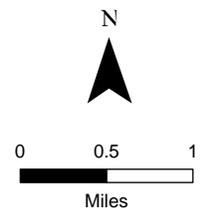
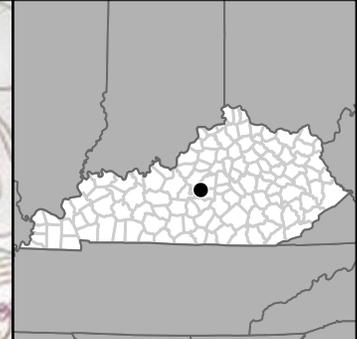
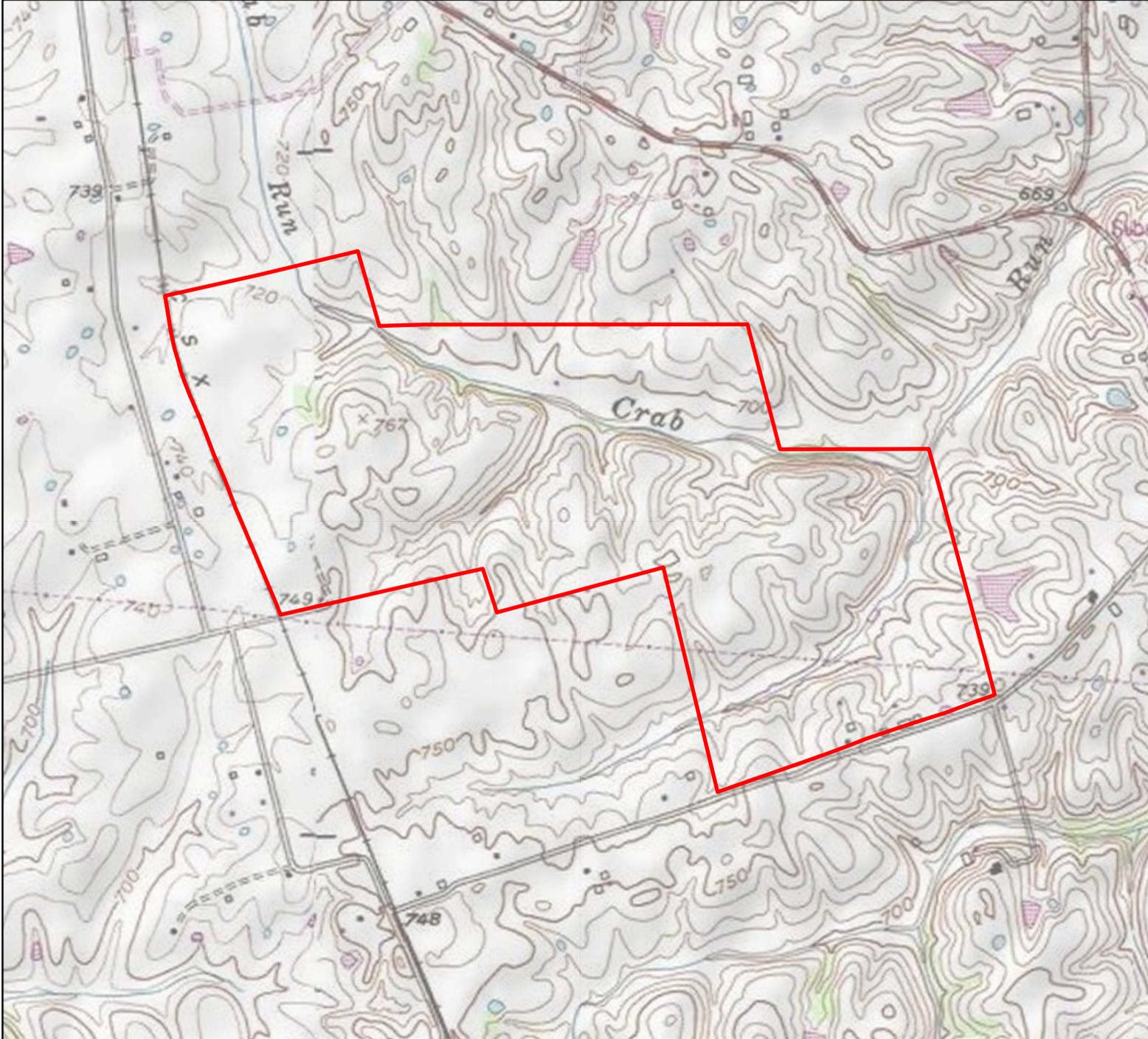


Figure 1
Site Map
Crab Run Solar Project
Crab Run Solar Project, LLC
Marion County, Kentucky



FIGURE 2. CRAB RUN SOLAR PROJECT LOCATION ON TOPOGRAPHIC MAP



Legend
 Project Site

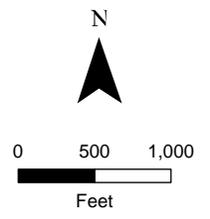
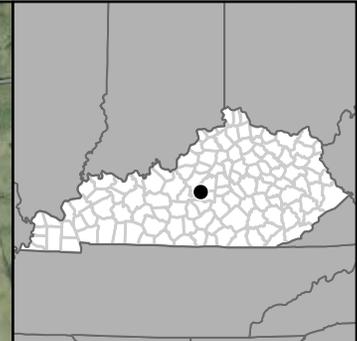


Figure 2
USGS Topographic Map
Crab Run Solar Project
Crab Run Solar Project, LLC
Marion County, Kentucky



FIGURE 3. CRAB RUN SOLAR PROJECT CULTURAL RESOURCES MAP WITH ONE MILE BUFFER



- Legend**
- Project Site
 - One Mile Buffer
 - Cemetery
 - Historic Resource

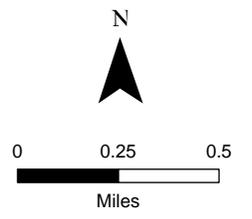


Figure 3
Cultural Resources Map
 Crab Run Solar Project
 Crab Run Solar Project, LLC
 Marion County, Kentucky

