



Stantec Consulting Services Inc.
12075 Corporate Parkway, Mequon, WI 53092

September 16, 2021
File:193708352

Reference: Confidential Cultural Resource Database Review and Survey Results for the Saratoga Solar Project, Wood County, Wisconsin

Attention: Ms. Emily Truebner
Vice President Permitting and Environmental
Saratoga Solar Project, LLC
422 Admiral Boulevard
Kansas City, MO 64106

Dear Ms. Truebner,

Stantec Consulting Services Inc. (Stantec) understands that Saratoga Solar Project, LLC (Saratoga Solar) is proposing the Saratoga Solar Project (Project), in Sections 19, 20, 21, 27, 28, 29, 30, and 34 of Township 21 North, Range 6 East in Wood County, Wisconsin (Figure 1). The total Project area is approximately 1,927 acres.

Stantec conducted a review of the Project in advance of Saratoga Solar's Application to the Public Service Commission (PSC) of Wisconsin for a Certificate of Public Convenience and Necessity (CPCN) in accordance with Wisconsin Statute § 196.491(3) and Wisconsin Administrative Code § PSC 111.53. The PSC and Wisconsin Department of Natural Resources (PSC and WDNR 2021) *Application Filing Requirements Solar Energy Projects* directs the applicant to:

- 1 Provide maps or GIS files and a description of all archaeological sites, historic buildings and districts, and human burial sites within or near the proposed project area
- 2 For archaeological sites and historic buildings or districts, determine the boundaries, historic significance, and integrity of each resource
- 3 Identify the potential project effects on each resource
- 4 Describe modifications to the project that would reduce, eliminate, avoid, or otherwise mitigate effects on the resources
- 5 For human burial sites, obtain a Burial Site Disturbance Authorization/Permit from WHS for all human burial sites that would be affected by the project
- 6 Provide an unanticipated archaeological discoveries plan
- 7 Notify Wisconsin Tribal Historic Preservation Officers of any Native American human burial sites and significant prehistoric archaeological sites that could be impacted by the project

This letter report is intended to provide Saratoga Solar with information necessary to address the first four of the PSC/WDNR requirements. To meet the PSC's requirements, Stantec first conducted a review of the

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Wisconsin Historic Preservation Database (WHPD) to determine the presence and nature of cataloged archaeological sites, burial sites or cemeteries, and historical structures. Second, Stantec reviewed a previously developed model for prehistoric site probability that covered the entire Project area and reviewed historical plat maps to identify areas of high potential for historic period Euro-American archaeological sites. The review was conducted to provide an initial cultural resources assessment of the Project and determine if additional cultural resources investigations would be required under Wis. Stats. §44.40 and §157.70. Stantec then conducted a shovel test archaeological survey of the high probability areas within the Project to determine the presence and nature of uncatalogued archaeological sites.

Because the Project will require a CPCN, it must comply with the regulations of Wisconsin Statutes §44.40 and §157.70. Per Wis. Stats. §44.40 archaeological sites and above-ground (architectural/historical) resources that are deemed to be significant can be protected during the course of state agency activities (grants, funding, permits, ground-disturbing projects). Under Wis. Stats. §157.70, all burials on non-federal public and private lands in the state are protected from disturbance. As currently proposed, the Project does not plan to utilize federal funding or lands and does not anticipate the need for federal permits, and as such the Project would not be subject to Section 106 of the National Historic Preservation Act, as amended (54 U.S.C. 306108).

Wisconsin Historic Preservation Database Review Results

On September 1, 2021, Stantec performed a cultural resource review of the Wisconsin Historic Preservation Database (WHPD) for registered historic structures, archaeological sites, burial sites, cemeteries, and other cultural resources within the Project area for direct effects and a 0.25-mile buffer surrounding the Project area for indirect effects. The results of the WHPD review are discussed below and presented in Figure 1.

Previous Archaeological Surveys. One previous archaeological survey was conducted within the Project area, while two previous archaeological surveys have been conducted within the 0.25-mile buffer of the Project area (Figure 1). Archaeological survey ARI# 09-1117 was conducted within the Project Area in 2009 in anticipation of reconstruction along STH 13. No archaeological resources were discovered, and no further investigations were recommended. Two previous archaeological surveys have been conducted within the 0.25-mile buffer of the Project area. ARI# 91-0590 was conducted in 1991 for a gas transmission line along Ten Mile Road and STH 13. No archaeological resources were discovered, and no further investigations were recommended. There was no data in the WHPD regarding the final survey ARI# AA-0530.

Archaeological Sites. No archaeological sites are located within the Project area or within the 0.25-mile Project buffer (Figure 1).

Cemeteries and Burial Sites. No cemetery/burial sites are located within the Project area. One cemetery/burial site is located within the 0.25-mile buffer of the Project area (Figure 1). Site BWO-0119 known as the Frank Durrell Grave is located 1,000 ft east of the Project area along Ten Mile Ave. This burial site consists of an isolated burial dating to the Historic Euro-American period. The burial site includes a grave marker that dates the site to 1856. This site is protected under Wis. Stats §157.70.

Historic Structures. No structures are present in the WHPD AHI database within the Project area or the 0.25-mile buffer of the Project area (Figure 1).

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Archaeological Site Predictive Modeling Results

Upon completion of the WHPD review, Stantec reviewed the 2019 Wood County Solar Project predictive modeling figures. Based on the results of the adjacent 2019 Wood County Solar Project probabilistic modeling conducted by Commonwealth Heritage Group (CHG), which included the entire Saratoga Solar Project area, a portion of the Project within a pine plantation on Blue Ridge Road is within an area identified as having a moderate probability for archaeological sites (CHG 2021). This is the portion of the Project with the highest probability for archaeological sites. Since this area has a moderate probability for archaeological sites and not a high probability, Shovel test pits (STP) were focused on the southern portions of the pine plantation that are closest to high probability areas associated with Tenmile Creek. A review of the 1928 historic plat map identified two locations of high historic site probability within the Project area (Geo. A. Ogle & Co. 1928). These two high historic site probability locations were also included in the STP survey.

When combined, a total of 20.5 acres (1.1 percent) of the approximately 1,927-acre Project area was defined as having a moderate probability for archaeological sites. The high potential area for prehistoric Native American sites totals approximately 20 acres and the high potential area for Historic period sites totals approximately 0.5 acres.

Survey Methods

Archaeological survey of archaeological site high probability areas within the Project was conducted on September 6-7, 2021, using field methods that followed the *Guide for Public Archeology in Wisconsin* (Dudzik et al. 2012). The archaeological site high probability areas were identified in the field through use of Geographic Information System (GIS) mapping applications with submeter accuracy. Three locations were identified within the Saratoga Solar Project area as having high potential for archaeological sites (Table 1). Two were defined as high probability for Historic period sites (Tracts A & B) and the third was defined as high probability for Native American sites (Tract C). At the time of survey, locations within the archaeological site high probability areas consisted of a pine plantation with visibility of 0%. Shovel Test Pits (STPs) were conducted at 15-m (49.2-ft) intervals throughout the high probability tracts.

Table 1. Project Survey Tract Characteristics

Survey Tract	Acreage	Field Conditions	Approximate Visibility (%)	Survey Method	Sites Identified
A	0.5	Pine Plantation	0	STP	None
B	0.5	Pine Plantation	0	STP	None
C	20	Pine Plantation	0	STP	None

Project Survey Results

All of the 20.5 acres (8.3 ha) identified as having a high potential for archaeological sites were investigated by shovel test pit (STP) survey at 15-m (49.2-ft) intervals. All of the high archaeological site probability survey tracts consisted of a pine plantation with 0-percent ground surface visibility (Figure 3, 4, and 5).

A total of eight STPs were excavated in Survey Tracts A and B, while 288 STPs were excavated in Survey Tract C. No artifacts were recovered. STPs had two strata consisting of very dark grayish brown (10YR3/2)

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to dark yellowish brown (10YR3/4) sand over dark yellowish brown (10YR4/4; 10YR4/6) sand. The transition between the two strata was distinct and occurred between 2 cm (0.78 inches) and 35 cm (13.78 inches) below ground surface (Figure 6). Soils in the area are mapped as Plainfield Sand, 0-2% slopes (U.S. Department of Agriculture, Natural Resources Conservation Service [NRCS] 2021). Plainfield series soils typically have a sand plow zone over a sandy subsoil. Soils observed during the survey were consistent with the soil series description.

The due diligence archaeological survey efforts resulted in complete survey of the archaeological site high probability areas (20.5 acres [8.3 ha]). No previously unrecorded archaeological sites were identified in the pedestrian or STP survey of the archaeological site high probability areas.

Conclusions and Recommendations

Wisconsin Stats. §44.40 directs that state funded or permitted projects that have direct or indirect impacts to previously recorded archaeological sites or above-ground resources (historical structures or cemeteries) require field verification and assessment as to the significance of the resource. Potentially significant cultural resources are to be evaluated for listing in the NRHP, and the effects of the Project on any cultural resources that are determined eligible for listing in the NHRP are to be considered by the funding or permitting agency. PSC requirements for solar project applications require the same assessments.

No known archaeological sites or historic structures are present within the Project area.

Wisconsin Stats. §157.70 also directs state funded and permitted projects to avoid disturbance to previously recorded cemeteries and burial sites, with a buffer of at least 5 feet between the project limits and the cemetery or burial site.

No cemetery/burial sites are located within the Project area and one cemetery/burial site (BWO-0119) is located within the 0.25-mile buffer of the Project area. Site BWO-0119 known as the Frank Durrell Grave is located 1,000 ft east of the Project area along Ten Mile Ave. As the Project area is 1,000 feet away from BWO-0119, the Project would not impact this burial site.

To comply with PSC requirements for solar energy project applications, Stantec reviewed the 2019 Wood County Solar Project predictive modeling. Based on the results of the adjacent 2019 Wood County Solar Project probabilistic modeling conducted by CHG, which included the entire Saratoga Solar Project area, Stantec completed archaeological survey within the areas of the Project with the highest probability for archaeological sites (CHG 2021). A review of historic plat maps also identified two areas within the Project area with high historic site probability which were also included in the Project archaeological survey. No previously unrecorded archaeological sites (prehistoric or historic) were identified during the archaeological survey.

If federal permitting is found to be required for the Project, the Wisconsin State Historic Preservation Office will review the Project under Section 106 of the National Historic Preservation Act of 1966, as amended. Additional field survey for archaeological resources, historic structures, and cemeteries and burial sites may be required to comply with Section 106.

Other historical properties and archaeological sites may be present in or near the Project area but have not been discovered or reported to the State Historical Preservation Office and the Office of Wisconsin State Archaeologist. This review is intended to assist the client with fulfilling local and state laws and regulations

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regarding historic properties, cultural resources, and the disposition of human remains associated with cemetery/burial sites. No further investigation is needed at this time but may be required for local, state, or federal permits or if the Project design changes.

Regards,

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Attachments: Figure 1: WHPD Review Results
Figure 2: 1928 Historical Plat Map
Figure 3: Field Survey Methods and Results
Figure 4: Shovel Test Points
Figure 5: Typical Survey Conditions
Figure 6: Typical Soil Profile

References Cited

Commonwealth Heritage Group (CHG)
2020 Due Diligence Archaeological Survey Wood County Solar Project.

Geo. A. Ogle & Co.
1928 Wood County 1928: Saratoga Township, Nepco Lake, Geo. A. Ogle & Co., Chicago, Illinois.
Scale: 2 Inches to the Mile.
<http://www.historicmapworks.com/Map/US/158673/Saratoga+Township++Nepco+Lake/Wood+County+1928/Wisconsin/>

Public Service Commission (PSC) of Wisconsin and Wisconsin Department of Natural Resources (WDNR)
2021 *Application Filing Requirements Solar Energy Projects: Section 5.14 Archaeological and Historic Resources*. Electronic document, <https://psc.wi.gov/SiteAssets/2021SolarPowerAFR.pdf>, accessed June 2021.

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Figure 1. WHPD Review Results

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Figure 2. 1928 Historical Plat Map

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Figure 3. Field Survey Methods and Results

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Figure 4: Shovel Test Points

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Figure 5: Typical Survey Conditions



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Figure 6: Typical Soil Profile

