Phase IA/IB Historical Archaeological Investigation for the Proposed TH 169 CSAH 30 Interchange Hennepin County, Minnesota

Final Technical Memo

S.P. 2750-75
MnDOT Agreement No. 98504
OSA License No. 11-032

Authorized and Sponsored by:

Minnesota Department of Transportation

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HDR Project #162680

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Technical Memo

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From:	Michael J. Madson and Michael Justin	Project:	Phase IA/IB Historical Archaeological Investigation For the Proposed TH 169 CSAH 30 Interchange S.P. 2750-75 Hennepin County, Minnesota
			MnDOT Agreement No. 98504 OSA License No. 11-032 SHPO No. Pending
Date:	December 28, 2011	Job No:	162680

Management Summary

HDR Engineering, Inc. (HDR) was tasked by the Minnesota Department of Transportation (MnDOT) under Agreement No. 98504 to complete historical research and archaeological field investigations for proposed improvements along County State Aid Highway (CSAH) 30, (93rd Avenue North) Osseo and Brooklyn Park, Hennepin County. Planned improvements of its intersection with Trunk Highway (TH) 169 include:

- Bridging County Hwy 30/93rd Ave N over Hwy 169 to the north of the existing intersection
- Constructing loop ramps in the northeast and northwest quadrants of the interchange for access to and from Hwy 169 to the south
- Providing access to St. Vincent's Cemetery, retaining full access at Xylon Avenue and minimizing right of way impacts
- Signalizing the ramp intersections
- Providing eight-foot trails along both sides of 93rd Avenue N. through the project area.

The project is located in Sections 7 and 18, T119N, R21W.

MnDOT contracted with HDR to provide archaeological inventory of the areas within the project boundaries that have the highest potential for buried cultural materials. Consideration of potential sites of archaeological and historic interest is required under the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

The Area of Potential Effects (APE) for the project includes the farmstead areas of the Spanier location (approximately 0.8 acres) and the farmstead area of the Fischbach location (approximately 3.6 acres).

HDR found no significant archaeological materials or features, and recommends a No Historic Properties finding.

Introduction

The State of Minnesota is proposing improvements to County State Aid Highway (CSAH) 30, (93rd Avenue North) Osseo and Brooklyn Park, Hennepin County. The project is located in Osseo and Brooklyn Park, Hennepin County, Minnesota, Section 28 of T106N, and R33W (Figure 1). MnDOT contracted with HDR Engineering, Inc. (HDR) under Agreement No. 91849 to provide background research to determine the extent of St. Vincent's Cemetery; and Phase I/IB archaeological investigation of the areas within the project boundaries that have the highest potential for buried cultural materials, focusing on the Spanier and Fischbach farmsteads. Consideration of potential sites of archaeological and historic interest is required under the Minnesota Historic Sites Act and the Minnesota Field Archaeology Act.

Project Scope and Setting

Planned improvements of the intersection of CSAH 30 with Trunk Highway (TH) 169 include:

- Bridging County Hwy 30/93rd Ave N over Hwy 169 to the north of the existing intersection
- Constructing loop ramps in the northeast and northwest quadrants of the interchange for access to and from Hwy 169 to the south
- Providing access to St. Vincent's Cemetery, retaining full access at Xylon Avenue and minimizing right of way impacts
- Signalizing the ramp intersections
- Providing eight-foot trails along both sides of 93rd Avenue N. through the project area.

Information on the project was acquired from the MnDOT's Cultural Resource Unit (CRU). Figure 2 shows the proposed project design relative to the Spanier and Fischbach farmsteads.

Environmental Overview

The project is located in the Anoka Sand Plain Physiographic region (Wright 1972), and is SHPO's Archeological Region 4e: Central Lakes Deciduous East (Anfinson 1990).

The topography of Hennepin County consists of moraines, till plains, and outwash plains. The major topographic feature of the area is the Mississippi River trench, which bisects the region. The project is in the Mississippi River Watershed in the Upper Mississippi River Basin. The predominant soils within the project area are generally are classified as Verndale sandy loam, Soderville loamy fine sand, and Anoka and Zimmerman loamy fine sands. (Steffen 2004) (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx).

Before settlement the entirety of the area was predominantly grass prairie with small patches of wet prairie (Marschner 1930). In the late Holocene period the dominant fauna in the region was bison and the occasional large elk herd. White tail deer were located along the Mississippi River valley. The lakes of the region supported numerous aquatic mammals, waterfowl, and fish. The lakes also contained edible plants such as water lilies, cattails, and the occasional wild rice bed. In the upland areas of the region, flora such as prairie turnips, ground plums, and, in oak woodlands, acorns could be found.

Area of Potential Effects

Initial communication with the MnDOT CRU defined the APE proposed for the archaeological investigation as being coincident with the areas of the planned improvements. The area of the requested field survey included two farmsteads located along the north side of CSAH 30 equaling roughly 4.4 acres (1.8 hectares).

Methods

The objective of the survey was to inventory historic or precontact archaeological resources that may be affected by the project activities. If historic or precontact resources are found that may be affected, their relative integrity and significance are assessed to determine the likelihood that they would meet the eligibility criteria for inclusion on the National Register of Historic Places (NRHP) and require further consideration. To accomplish the goal of creating this inventory of historic properties, standard archaeological procedures were followed that adhered to the Secretary of the Interior's Standards and Guidelines and MnDOT Cultural Resources Unit Project Requirements, and Volume 4 of MnDOT's *Historic Context Study of Minnesota Farmsteads, 1820-1960*, Historical Archaeology of Minnesota Farmsteads.

HDR conducted a Phase 1a/1b investigation to determine the presence of any significant archaeological deposits at the Spanier and Fischbach properties. The properties have been used for residential (Spanier) and residential/commercial (Fischbach) activities since the 1940s and 1900s, respectively; subsurface historic-period and modern materials were indeed expected but any substantial evidence of an earlier occupation at both locations were the primary target of this investigation.

Field methods were derived from Terrell (2006:B.12 to B.14), including (a) fieldwork preparation and Gopher State One Call coordination; (b) visual inspection of the farmstead surface and standing structures; (c) mapping standing structures and other location features; (d) delineation of the boundary of each farmstead, and; (e) conducting subsurface testing to understand vertical integrity and sample artifact quality and quantity.

HDR archaeologists conducted fieldwork at the Spanier property on May 6, 2011, and the Fischbach property on May 6 and 10, 2011. Gopher State One Call was notified on May 2, 2011,

and by May 6, utilities were marked at both locations. HDR archaeologists Michael Madson and Erika Eigenberger mapped and conducted subsurface sampling at the Spanier location on May 6; HDR archaeologists Michael Madson and Dylan Eigenberger mapped and conducted subsurface sampling at the Fischbach location on May 10.

The archaeological investigation consisted of a field review of all areas within the proposed substation footprint that have high potential for archaeological deposits that had not been previously surveyed. The area was reviewed using pedestrian survey techniques with survey transects 10-15 meters apart. Shovel tests were needed for this inventory in areas that did not have 25 percent to 30 percent visibility. The area inventoried is estimated to be roughly 4.4 acres (1.8 hectares). Digital photographs (Photos 1 -2 below) document the existing conditions.

Photo 1. 8400 93rd Ave North, Fischbach location.

Photo 2. 8700 93rd Ave North, Spanier location.

Literature Review

Cultural resources investigations in the vicinity have been conducted since the 1990s (Anfinson 1997; Justin 1994; Zellie 2000). Recently, Summit Envirosolutions performed archaeological inventory and evaluations for the TH169/TH610 project (O'Brien et al. 2011), northwest of the project area. No archaeological investigations previously occurred on the Spanier or Fischbach properties, although the early residence on the Fischbach location was documented as BPC-HE-079 (Zellie 2000).

HDR reviewed historic maps and aerial photographs for each location (Table 1). In summary, the current Spanier location (8700 93rd Ave N) appears to have been in an agricultural field until sometime between 1945 and 1953, when the house appears on an aerial photograph with the garage added later sometime before 1956. The Fischbach location (8400 93rd Ave N.) has a more extensive history of occupation dating to sometime between 1898 and 1916. Zellie (2000) indicated the date of the structure was 1890 (apparently generally based on style), which is consistent with the map record. It is not clear who built the structure, but Zellie (2000) indicated that Leo Wolter was the first owner (Wolter does not appear on the maps or aerial photographs reviewed for this investigation). In addition, Zellie (2000) noted that a portion of the structure is reported to have been sourced from the 19th century Osseo jail. The Fischbach family subsequently occupied the location and throughout the 20th century added outbuildings and another residence, primarily in the 20 years after World War II. Like other farmers in the

vicinity, the Fischbach family grew potatoes for market and then began selling produce on-site, namely seasonal produce and Christmas trees.

St. Vincent's Cemetery first appears on the 1898 plat, and its size and location remain constant though the present day. There is no reason to believe that it ever extended north of 93rd Ave N.

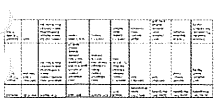

Photo 4. 8700 93rd Ave N front lot

Fischbach Location

Subsurface Testing

HDR archaeologists reviewed the Fischbach location on May 6 and 10, 2011. Seven structures were present; dates of construction appear to range between the late 19th century and the mid-1960s, which is consistent with the map and aerial record. Archaeologists mapped the property and photographed key features (Photos 5, 6, 7, and 8). Ten shovel tests were placed around the site to review subsurface conditions and identify cultural materials, particularly in the vicinity of BPC-HE-079, which is likely the oldest structure on-site, where seven tests were placed. Six of the seven shovel tests around the structure were positive for cultural materials, which in turn illustrated a primarily 20th century occupation. Soils varied across the site, depending on historic and modern modifications to the setting.

Artifacts observed were related to building construction and domestic and agricultural activities (Photo 9), such as cut and wire nails, bottle and window glass, and miscellaneous pieces of metal. These materials were not collected, but were photographed before being returned to the shovel test and reburied.

HDR archaeologists observed no significant archaeological deposits at the Fischbach location.

Photo 5. 8400 93rd Ave N shed (structure 2)

Photo 6. 8400 93rd Ave N house (structure 1)

Photo 7. 8400 93rd Ave N new house (structure 6)

Photo 8. 8400 93rd Ave N hog barn (structure 5)

Photo 9. Artifacts from ST9

Conclusions and Recommendations

Between May 6 and 10, 2011, HDR completed historic archaeological field reviews of two properties in Hennepin County as tasked by the Minnesota Department of Transportation (MnDOT) under Agreement No. 98504 for S.P. 2750-75, which proposes improvements along County State Aid Highway (CSAH) 30, (93rd Avenue North) Osseo and Brooklyn Park. MnDOT contracted with HDR to provide archaeological inventory of the areas within the project boundaries that have the highest potential for buried cultural materials. HDR reviewed the APE for the project, which includes the farmstead areas of the Spanier location (approximately 0.8 acres) and the farmstead area of the Fischbach location (approximately 3.6 acres).

The Spanier property contains two structures that appear to date to the mid-1950s, consistent with what is shown in the aerial photograph record. The Fischbach property contains seven structures that appear to date between the late 19th century and the mid-1960s, which is consistent with the map and aerial record. Subsurface testing on the two properties produced only architectural, domestic, and agricultural activities dating from the late 19th century to the present. There were no indications of significant archaeological materials or features, and HDR recommends a No Historic Properties finding.

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