Historic Property Inventory Report

Location

Field Site No. PCB-1

DAHP No.

Historic Name: Pilchuck Creek Bridge

Common Name: Pilchuck Creek Bridge (No. 9/134)

Property Address: SR 9 , Pilchuck, WA

Comments:

Tax No./Parcel No.

Plat/Block/Lot

Acreage < one

Supplemental Map(s)

Township/Range/EW	Section	1/4 Sec	1/4 1/4 Sec	County	Quadrangle
T32R05E	16	NE	NE	Snohomish	MC MURRAY

Coordinate Reference

Easting: 1234609

Northing: 1073666

Projection: Washington State Plane South

Datum: HARN (feet)

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Identification

Survey Name: Pilchuck Bridge Scour
Date Recorded: 09/28/2006
Field Recorder: Martin Engseth
Owner's Name: WSDOT
Owner Address:
City:
State: Washington
Zip:
Classification: Structure
Resource Status: Survey/Inventory
Comments:
Within a District? No
Contributing?
National Register:
Local District:
National Register District/Thematic Nomination Name:
Eligibility Status: Not Determined - SHPO
Determination Date: 1/1/0001
Determination Comments:

Description

Historic Use: Transportation - Road-Related (vehicular)
Current Use: Transportation - Road-Related (vehicular)
Plan: Other
Stories:
Structural System: Concrete - Poured
Changes to Plan:
Changes to Interior:
Changes to Original Cladding:
Changes to Windows:
Changes to Other:
Other (specify):
Style:
Cladding:
Roof Type:
Roof Material:
Foundation:
Form/Type:

Narrative

Study Unit
Other
Transportation
Date of Construction: 1916 Built Date
Builder:
Engineer: Luten, Daniel B.
Architect:

Property appears to meet criteria for the National Register of Historic Places: Yes
Property is located in a potential historic district (National and/or local): No

Property potentially contributes to a historic district (National and/or local):

Statement of Significance:	The Pilchuck Creek Bridge (No. 9/134) was built in 1916, during a period when this type of bridge was at its peak of popularity. This type of filled spandrel arch bridge is commonly referred to as a Luten bridge, after bridge engineer Daniel B. Luten. Often bridges of this type are called Luten bridges even when not designed by Mr. Luten himself, although he commonly sold his plans to various entities, including individual counties. In this case, plans on file at WSDOT indicate that the Pilchuck Creek Bridge is indeed derived from a Daniel Luten design. These drawings reveal that the original plans called for decorative closed balustrades. It seems apparent that these features were never constructed, and that a simple wood guardrail was applied instead. These rails deteriorated rapidly and were replaced several times, until recently being disposed of in favor of modern metal railings. Daniel Luten, an 1894 civil engineering graduate from the University of Michigan, retired from a teaching career in 1900 to design bridges full-time. He eventually held over thirty patents for bridge designs, both for closed and open spandrel types. He was a pioneer in the design of reinforced concrete structures. He was also a businessman and actively promoted his bridge designs throughout the United States. As a result, Luten designed bridges are probably present in every state. Although Luten bridges became common during the early years of the twentieth century, their number is rapidly declining as these older structures are demolished and replaced with modern bridges. Much rarer are double-span Luten bridges, such as the Pilchuck Creek Bridge. Furthermore, most remaining Luten bridges have suffered extensively from deterioration due to their age; many are in a crumbling condition with rebar exposed. The Pilchuck Creek Bridge maintains better than average integrity of structure and its historic appearance. The replacement of the wood rails with metal diminishes that integrity, but not to the point where the structure is not immediately recognizable as a vintage Luten bridge with characteristics typical of that type. The Pilchuck Creek Bridge has inexplicably escaped adequate evaluation in prior studies. It has never received any sort of determination of eligibility for listing on the NRHP. Due to considerations discussed above, it is recommended that the bridge is NRHP eligible under Criterion C.
Description of Physical Appearance:	The Pilchuck Creek Bridge is a concrete arch, filled spandrel, double span bridge. It is 112 ft long and 19 ft wide. The spandrel walls, the semi-circular barrel arches, and the deck are made of poured-in-place concrete, while the interior spaces of the bridge are filled with earth and rock. Short concrete parapet walls define the asphalt roadway. Historically, these walls served as the base of wood guardrails. These have been recently replaced with metal threi beam rails. The bridge is supported at each end by poured concrete abutments with wing walls, and at the center by a rectangular poured concrete pier. Décor is limited to incised lines that follow the sweep of the bridge arches and battered concrete pilasters rising with the central pier. Inside the north arch wall is some graffiti with a 1919 date.
Major Bibliographic References:	Martin Engseth, Sam Willis, Dana Komen, and Stephen Emerson. Cultural Resources Survey and NRHP Evaluation for Washington State Department of Transportation's Pilchuck Creek Bridge Scour Project, Snohomish County, Washington. Short Report DOT06-23. Archaeological and Historical Services, Eastern Washington University. November 2006.

Photos

View to the east
Southwest side of bridge

View to the south
Northeast side of bridge

View to the west
Northeast side of bridge

View to the northwest
Southeast approach