

APPENDIX B

SUPPLEMENTAL CULTURAL RESOURCES INVESTIGATION FOR DRAFT SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT (2019)

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

June 17, 2019

Allyson Brooks, Ph.D.
State Historic Preservation Officer / Director
Washington State Department of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Subject: Northern Columbia Basin Railway Project, Docket No. FD 34936
Determination of No Adverse Effect
DAHP Log # 041007-02-STB

Dear Dr. Brooks:

As you know, the Surface Transportation Board (STB) previously made a determination of No Adverse Effect for the Northern Columbia Basin Railway Project (NCBRP) in 2009. Your office, the Washington State Department of Archeology and Historic Preservation (DAHP), concurred with that determination on April 7, 2009. In May and June 2009, STB, DAHP, the Washington State Department of Transportation (WSDOT) and the Port of Moses Lake (Port) finalized the NCBRP Programmatic Agreement (PA), which, in part, required archaeological inventory of parcels not yet surveyed in 2009 due to lack of access.

STB, as lead federal agency, is currently preparing a Draft Supplemental Environmental Assessment (DSEA) for the project due to modifications to the rail alignment and design changes at the two historic canals proposed by the Port. The STB's Office of Environmental Analysis (OEA) is managing the environmental and historic review, and the Federal Railroad Administration (FRA) has joined as a cooperating agency. As part of the historic review, the PA is currently in the process of being updated.

Jacobs Engineering, Inc. (Jacobs) has completed a new cultural resources survey report for the NCBRP. The report titled *Port of Moses Lake Northern Columbia Basin Railroad Project Supplemental Cultural Resources Investigations for Draft Supplemental Environmental Assessment*, dated January 2019, was electronically submitted to DAHP via WISSARD on April 25, 2019.

Jacobs' 2019 cultural resources survey report provides the results of an inventory for a previously un-accessed property and for adjustments to the route alignment/design that were not reflected in the 2009 determination. The 2019 inventory consists of a modified Area of Potential Effects for Segments 1 and 2 of the NCBRP, with which DAHP concurred in November of 2018. No new cultural resources were identified during the 2019 survey. Of note, an additional design change is proposed for crossings of two NRHP-eligible canals (EL20 and RCD 180+182); the Port is proposing to change from the previously approved bridge crossings to culvert/reverse siphon crossings. Overall, the report concludes that a finding of "No Adverse Effect" to historic properties continues to be appropriate for the project.

After reviewing all project-related surveys and available resources, OEA has determined that the project, with the proposed modifications, would continue to have No Adverse Effect to historic properties in accordance with 36 C.F.R. §800.5(b). OEA is seeking DAHP's comments and concurrence with this determination. If your office concurs with OEA's "No Adverse Effect" determination, FRA intends to make a *de minimis* impact finding to comply with Section 4(f) of the U.S. Department of Transportation Act of 1966. OEA intends to include DAHP's comments and concurrence in the DSEA prior to its release for public comment expected this July.

Thank you for your continued participation in the historic review process for the NCBRP project. If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with the first name "Victoria" written in a larger, more prominent script than the last name "Rutson".

Victoria Rutson
Director
Office of Environmental Analysis

cc: Laura Shick, FRA
Valarie Kniss, FRA
Katherine Zeringue, FRA
Lydia Kachadoorian, FRA
Dennis Wardlaw, DAHP
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

June 18, 2019

Ms. Victoria Rutson
Environmental Section Chief
Surface Transportation Board
395 E Street S.W. Room 1110
Washington, DC. 20423-0001

In future correspondence please refer to:
Project Tracking Code: 041007-02-STB
Property: STB Docket No. 34936, Northern Columbia Basin Railway Project
Re: NO Adverse Effect

Dear Ms. Rutson:

Thank you for contacting the State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) regarding the above referenced proposal. This action has been reviewed on behalf of the SHPO under provisions of Section 106 of the National Historic Preservation Act of 1966 (as amended) and 36 CFR Part 800. Our review is based upon documentation contained in your communication.

First, we agree with the Area of Potential Effect (APE) as mapped in the survey report. We also concur that the current project as proposed will have "NO ADVERSE EFFECT" on historic properties within the APE that are listed in, or determined eligible for listing in, the National Register of Historic Places. As a result of our concurrence, further contact with DAHP on this proposal is not necessary.

However, if new information about affected resources becomes available and/or the project scope of work changes significantly, please resume consultation as our assessment may be revised. Also, if any archaeological resources are uncovered during construction, please halt work immediately in the area of discovery and contact the appropriate Native American Tribes and DAHP for further consultation.

Thank you for the opportunity to review and comment. If you have any questions, please feel free to contact me.

Sincerely,

Dennis Wardlaw
Transportation Archaeologist
(360) 586-3085
dennis.wardlaw@dahp.wa.gov



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**Port of Moses Lake
Northern Columbia Basin Railroad Project
Supplemental Cultural Resources Investigations
for Draft Supplemental Environmental Assessment**

Prepared for:

Surface Transportation Board
Office of Environmental Analysis
395 E Street SW
Washington, DC 20423

Finance Docket No. 34936

Prepared by:

JACOBS®

1100 112th Avenue NE, Suite 500
Bellevue, Washington 98004

Authors:

Patrick Elliott, Michael Chidley, Connie Walker Gray, Michael Farrell, Jessica Jones,
and James Mayer

January 9, 2019

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Key Information

Project Name: Northern Columbia Basin Railroad (NCBR) Project

Location: Moses Lake, Grant County, Washington

USGS Topographic Quadrangle(s): Moses Lake North and Wheeler, Washington

Legal Description:

Segment	Township/Range	Sections
1	T19N R28E	13, 14, 24
1	T19N R29E	19, 20
2	T20N R38E	22, 27, 33, 34

Project Area: 9.6 linear miles (Segments 1B, 2B and 2C)

Acres Surveyed: 60.59 acres

Segment 1, Modification 1B: 19.25 acres surveyed

Intensive Acres: 3.01 acres

Reconnaissance Acres: 16.24 acres

Segment 2, Modifications 2B and 2C: 41.34 acres surveyed

Intensive Acres: 36.26 acres

Reconnaissance Acres: 5.08 acres

Project Data:

01 Previously Recorded Cultural Resources

00 New Cultural Resources Recorded

Report Authors: Patrick Elliott, Michael Chidley, Connie Walker Gray, Jessica Jones, and James Mayer

Associated Federal Project Number: Surface Transportation Board (STB) Finance Docket No. 34936

Associated Federal Agencies: STB and Federal Railroad Administration

Report Prepared For: STB

Project Owner: Port of Moses Lake

Repository: Jacobs Engineering Group, Inc.
1100 112th Avenue NE, Suite 500
Bellevue, Washington 98004

Principal Investigators: James Mayer, PhD, RPA

Report Date: January 2019

Summary of Findings: A supplemental cultural resources inventory was completed for the NCBR project (Project) for the construction of a new rail line including one bridge crossing. The inventory investigated both the surface and the subsurface within the modified Area of Potential Effects for the Project's Segment 1 and Segment 2 that includes previously unsurveyed parcels. No new cultural resources were identified during the survey. Project plans include adding culverts to segments of eligible canals EL20 and RCD 180+182; however, such a limited modification would not diminish any aspect of their physical integrity or ability to convey their historic significance. Jacobs recommends the project will have **No Adverse Effect** on historic properties.

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ACRONYMS AND ABBREVIATIONS

2008 Report Northern Columbia Basin Railroad Project Draft Cultural Resources Report

APE Area of Potential Effects

BOR U.S. Bureau of Reclamation

CFR Code of Federal Regulations

cm centimeter

cmbs centimeters below surface

DAHP Washington State Department of Archaeology and Historic Preservation

EA Environmental Assessment

FRA Federal Railroad Administration

GCIA Grant County International Airport

HDR HDR Engineering Inc.

Jacobs Jacobs Engineering Group Inc.

NCBR Northern Columbia Basin Railroad

NRCS Natural Resources Conservation Service

NRHP National Register of Historic Places

PA Programmatic Agreement

Project Northern Columbia Basin Railroad Project

RCD Rocky Coulee Diversion

SHPO State Historic Preservation Officer

STB Surface Transportation Board

STP shovel test pit

WISAARD Washington Information System for Architectural and Archaeological Research Data

WSDOT Washington State Department of Transportation

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INTRODUCTION

This report has been prepared to supplement the 2008 *Northern Columbia Basin Railroad Project Draft Cultural Resources Report* (2008 Report), prepared by HDR Engineering, Inc. (HDR) for the Surface Transportation Board (STB) and the Washington State Department of Transportation ([WSDOT]; Washington State Department of Archaeology and Historic Preservation [DAHP] Project No. 041007-02-STB). This report supplements the 2008 Report by addressing potential effects to historic properties from proposed modifications to the Original Alignment of the Northern Columbia Basin Railroad (NCBR) Segments 1 and 2, and proposed design changes in NCBR's Segment 1. Construction of the NCBR project (Project) was authorized by the STB in August 2009, and potential environmental impacts from the Modified Alignment are being analyzed in a Draft Supplemental Environmental Assessment (EA).

The Port of Moses Lake operates the Grant County International Airport (GCIA) and is chartered to foster economic development at the GCIA and the surrounding Port of Moses Lake district area that includes the City of Moses Lake. The Project would provide rail access to lands designated for industrial development south and east of the GCIA and along Wheeler Road in Moses Lake, Grant County, Washington. In 2008, the STB determined, and DAHP concurred, that the Project would have **No Adverse Effect** on historic properties.

The Port of Moses Lake is requesting that STB authorize certain limited route modifications (Modified Alignment) and design changes that require a supplemental assessment of the Project's potential effects on historic properties. The supplemental assessment is the focus of this report and includes both an archaeological survey and an evaluation of effects to historic canal segments.

Project Location and Description

The Project would provide rail service to industrial lands, the GCIA, and along Wheeler Road (Road 3 NE) by constructing approximately 4.5 miles of new rail line along and northwest of Wheeler Road (Segment 1), constructing approximately 3 miles of new rail line near the GCIA (Segment 2), and rehabilitating an existing 3.0-mile-long rail line that would connect Segments 1 and 2. The Project would provide freight rail service to more than 1,500 acres of industrial property in the area and a connection to the BNSF Railway Company (BNSF) mainline.

The Modified Alignments within Segments 1 and 2 fall within Sections 14, 13, and 24 of Township 19 North, Range 28 East; Sections 19 and 20 of Township 19 North, Range 29 East; and Sections 22, 27, 33, and 34 of Township 20 North, Range 38 (**Figure 1**).

Work on Segment 3 consists entirely of upgrading existing track and there are no alignment modifications proposed. Segment 3 was surveyed by HDR (2008), and no subsequent changes in design plans have occurred along this segment. Therefore, this report focuses on Segments 1 and 2.

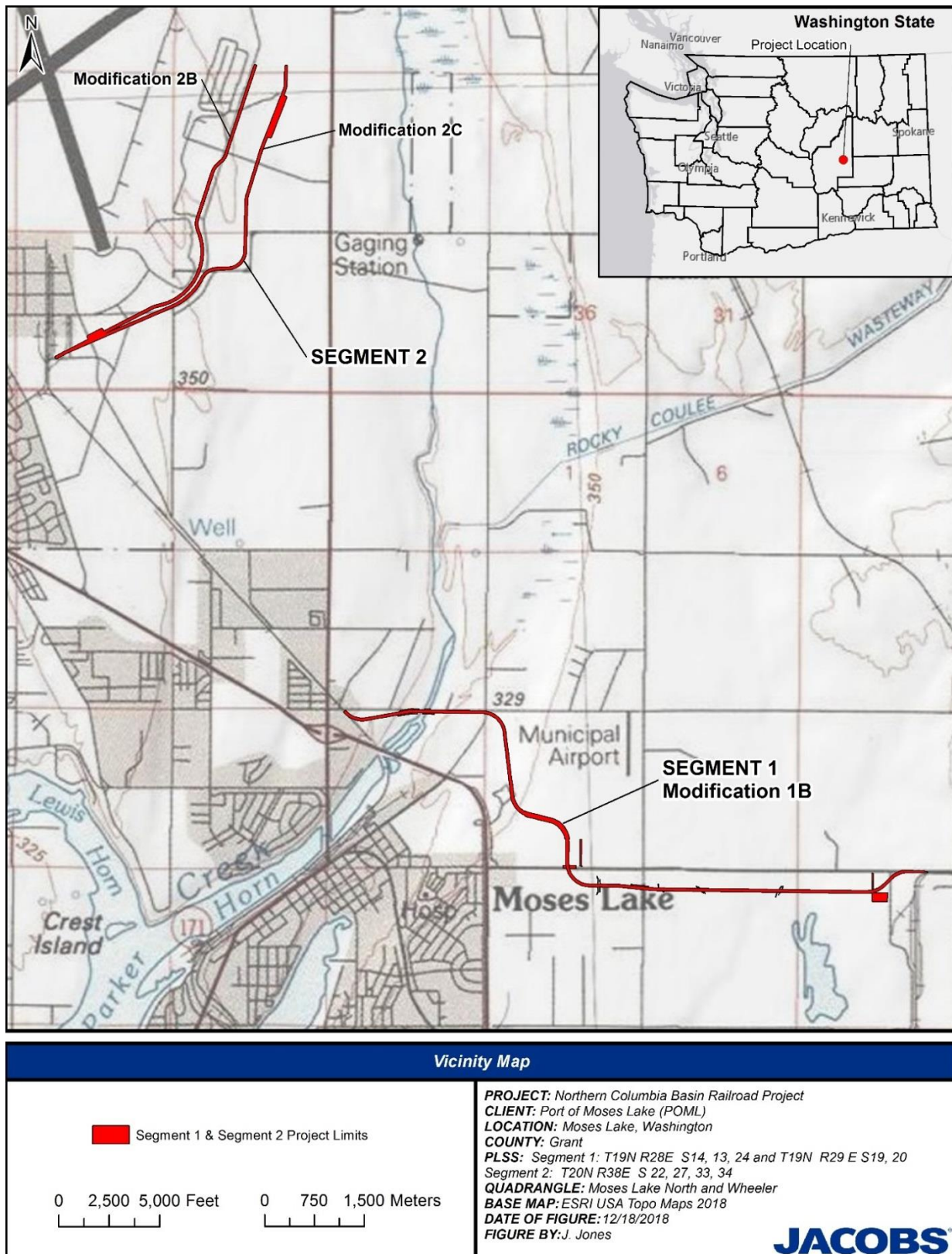


Figure 1. Modified APE for Segments 1 and 2.

Prior Cultural Resources Discipline Report

A cultural resources inventory was completed for this Project in November 2007 and revised in April 2008 by HDR and Jones & Stokes Associates on behalf of the STB and WSDOT. The 2008 Report forms the basis of understanding for the previous archaeological and built environment resource investigations undertaken and is included for reference in **Appendix A**.

The Area of Potential Effects (APE) for the prior fieldwork and evaluations associated with the Project's Original Alignment was defined under two parameters. Regarding archaeological and traditional cultural properties, the APE was defined as the "area that encompasses the horizontal and vertical extent of the proposed undertaking." Regarding historic buildings and structures, the APE was defined as, "50 feet from the centerline (both sides of the rail corridor) of the proposed undertaking." Therefore, the APE generally consisted of a 100-foot-wide corridor on either side of the track centerline along the length of the Original Alignment (HDR and Jones & Stokes Associates 2008:1-2).

The 2008 study presumed that the Project's direct construction effects would encompass the entire 100-foot width of the Original Alignment right-of-way (ROW):

"For all segments, the rail line right of way would generally be 100 feet wide, with one exception at the west end of Segment 1, where the right of way would be widened to 120 feet to keep all grading within the right of way. Right of way would need to be acquired for Segments 1 and 2, while existing right of way would remain in place for Segment 3. All clearing, grading, construction staging and stockpiling, and access roads would be restricted to within this right of way" (HDR and Jones & Stokes Associates 2008:2-6).

Fieldwork along the Original Alignment corridor consisted of pedestrian survey and inventory of archaeological, historical, and built environment resources. The survey included visual inspection of every parcel within the APE (where access was granted); inspection of all areas judged to have a high potential for archaeological resources; excavation of seven shovel probes within Segment 1 and Segment/Alternative 1A west of Crab Creek/Parker Horn; and identification/photography of all major buildings, structures, and objects within the APE.

A parcel containing a portion of the APE along the east of Crab Creek/Parker Horn was not surveyed due to access issues. This unsurveyed area was identified as containing "relatively moderate to high probability landforms" for undiscovered archaeological resources (HDR and Jones & Stokes Associates 2008:3-28-29).

The 2008 inventory and evaluation identified a total of 22 historic resources older than 50 years of age within the APE. These consisted of four elements of the Columbia Basin East Low (EL) Canal system (Canal No. EL20, EL20U1, Rocky Coulee Diversion [RCD] 180+182, and EL20 Extension) in Segment 1; the 8 Place Hanger Drainage Ditch and a stormwater ditch in Segment 2; and 16 historic buildings (HDR and Jones & Stokes Associates 2008:3-31-47). One historic building occurs in Segment 1, while the remainder are in Segment 3.

Project Final Environmental Assessment

A Project EA was prepared by the STB and WSDOT, which concluded that the Project would not result in any significant environmental impacts if certain mitigation measures were implemented (STB 2009a).

According to the May 2009 Final EA, the 2008 Report findings were provided to DAHP, the Confederated Tribes of the Colville Reservation, the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the Wanapum Tribe. Of the 22 identified potential historic resources within the APE, only the Columbia Basin East Low Canal system was determined eligible for listing on the National Register of Historic Places (NRHP), including canals EL20 (now known to be a lateral), EL20U1, and RCD 180+182. Following consultations in 2009, the STB determined the Project, which included construction of bridges over canals EL20 and RCD 180+182 and a culvert crossing of EL20U1, would have no adverse effect to historic properties. The Washington State Historic Preservation Officer (SHPO) concurred with that determination (STB 2009a:ES-17).

Existing Programmatic Agreement

Following issuance of the Final EA, a Programmatic Agreement (PA) was negotiated and executed in June 2009 by STB, DAHP, and the Port of Moses Lake, to identify and mitigate cultural and historic sites and structures in accordance with Section 106 of the National Historic Preservation Act and to ensure that archaeological resources and/or historic structures on unevaluated parcels would be assessed prior to initiation of Project construction (STB 2009b). WSDOT and the Columbia Basin Railroad Company—as the proposed operator of the NCBR—were consulting parties to the PA.

Regulatory Context

The Project is federally funded and permitted and is therefore a federal undertaking subject to Section 106 of the National Historic Preservation Act (NHPA). Section 106 of the NHPA requires that, before beginning any undertaking, a federal agency must consider the effects of the undertaking on historic properties and afford the Advisory Council on Historic Preservation an opportunity to comment on these actions. The Section 106 process is presented in Part 800 of Title 36 of the Code of Federal Regulations (36 CFR 800) and consists of five basic steps:

1. Initiate the process by coordinating with other environmental reviews, consulting with the SHPO, identifying and consulting with interested parties, and identifying points in the process to seek input from the public and to notify the public of proposed actions.
2. Identify cultural resources and evaluate them for NRHP eligibility, resulting in the identification of historic properties.
3. Assess effects of the project on historic properties.
4. Consult with the SHPO and interested parties regarding adverse effects on historic properties, resulting in a memorandum of agreement.
5. Proceed in accordance with the memorandum of agreement, if necessary.

National Register of Historic Places

The NRHP recognizes properties that are significant at the national, state, and local levels. According to 36 CFR 60, the quality of significance in American history, architecture, archaeology, engineering, and culture exists in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association.

Properties that are eligible for listing on the NRHP are properties that retain their integrity and meet one or more of the four criteria listed below. In addition, unless a property possesses exceptional significance, it must also be at least 50 years old.

The four criteria are (36 CFR 60):

- A. Associated with events that have made a significant contribution to the broad patterns of our history.
- B. Associated with the lives of persons significant in our past.
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represents a significant and distinguishable entity whose components might lack individual distinction.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

Individually eligible properties and historic districts must retain key character-defining features, or integrity, to convey the significance of a resource. Integrity specifically refers to the ability of a property to convey its significance. In other words, a historic property must have enough intact physical characteristics or features to communicate its significance under one or more of the NRHP criteria. NRHP guidelines recognize seven aspects, or qualities, that define integrity. The Secretary of the Interior defines these aspects as follows (36 CFR 60):

- **Location.** Is the location/site where the resource was originally constructed?
- **Design.** Is the design in its original form, plan, and style of the property intact?
- **Setting.** Have the physical surroundings of a property been compromised?
- **Materials.** Are the physical components used in construction of the property still present?
- **Workmanship.** Is there evidence of craftsmanship?
- **Feeling.** Is the property able to express a sense of time?
- **Association.** Is the “direct link” evident between the property and an important event or person?

For archaeological sites, integrity of location, materials, and association are crucial components. To address important research topics, archaeological deposits usually must be in their original location, retain depositional integrity, contain adequate quantities and types of materials in suitable condition to address important research topics, and have a clear association.

Associations may be defined at different social scales (e.g., an activity area, a household, or institution) and across various temporal spans (e.g., brief or long term).

Description of Modified APE

The STB reactivated consultation with SHPO for the Project's Draft Supplemental EA and submitted a modified APE, which is the basis for this supplemental cultural resources survey. The modified APE extends to the limits of all existing or modified/proposed ROWs and vertically to the depth of construction impacts, including Modifications 1B, 2B, and 2C and all staging and work areas (**Figure 1**). The APE includes the horizontal and vertical extent of all proposed Project activities and includes the geographic areas where the Project may directly or indirectly cause change of character or use of historic properties (e.g., archaeological sites, traditional cultural properties, or built environment resources). The total width for Modifications 1B, 2B, and 2C ROWs is presumed to be 100 feet. The actual depth of construction impacts is unknown at this time, so the vertical APE is defined as being to the depth of Pleistocene deposits or degraded bedrock.

The APE for Modifications 1B, 2B, and 2C (including work and staging areas) totals approximately 130 acres. Approximately 90 acres of the modified APE were not surveyed during the prior investigations, including that portion of the original APE that crosses a previously inaccessible parcel adjacent to the east side of Crab Creek.

DAHP concurred with STB's modified APE on August 22 and November 6, 2018. Copies of the correspondence are included in **Appendix B**. Correspondence regarding DAHP's concurrence with the original APE can be found in the 2008 Report (HDR and Jones & Stokes Associates) in **Appendix A**.

Key Personnel

Archaeologists and historians from Jacobs Engineering Group, Inc. (Jacobs) conducted background research and a preliminary field survey, recorded the subsurface survey, and authored this report. Archaeologist James Mayer served as principal investigator and meets the Secretary of Interior's Standards for a professional archaeologist.

The desktop records search was conducted by Archaeologist Jessica Jones, who reviewed records to determine if previously-recorded archaeological and historic resources are located within and near the modified APE. Senior Historic Archaeologist Stacy Bumback, and Senior Architectural Historian Connie Walker Gray, conducted a survey of NRHP-eligible canals. Archaeologists James Mayer, Jessica Jones, John Davis, Mike Farrell, and Patrick Elliott conducted the archaeological surveys. The aforementioned staff was aided by Senior Archaeologist Michael Chidley with report writing. Field records, inventory form copies, and report copies are maintained at Jacobs' office in Bellevue, Washington.

ENVIRONMENTAL AND CULTURAL SETTING

The environmental and cultural background information for this Project was presented in the 2008 Report (HDR and Jones & Stokes Associates) and is not reiterated herein.

RECORDS AND LITERATURE REVIEW

Overview

Background research was conducted in September 2018 via DAHP's Washington Information System for Architectural and Archaeological Research Data (WISAARD) database and through review of ethnographic reports, historic records, maps, and aerial photographs related to the APE and the vicinity. WISAARD contains all cultural resource documents submitted to DAHP since 1995. The records search included the original and modified APE and other relevant studies within one-half mile of the rail corridor.

The 2008 Report (HDR and Jones & Stokes Associates) identified no archaeological sites and 20 potential historic resources within the original APE. These resources were investigated and evaluated, and the Columbia Basin East Low Canal system was the only resource determined eligible for listing on the NRHP under Criterion A (the canals are discussed in more detail in the **Results** section below). There was also one historical archaeological site (45GR1467) identified within one-half mile of the original APE—an historical debris scatter—which was also determined as not eligible for listing on the NRHP.

According to files on record at DAHP, there are five cultural resources assessments that have occurred within one-half mile of the original and modified APEs since the 2008 Report, and no new cultural resources were identified. Additionally, only two of these assessments intersect the APEs. **Table 1** provides a summary of the investigations.

Table 1. Post-2008 Cultural Resources Investigations

Date	Author	Title	Proximity to APE (miles)
2018	Schirack	Cultural Resource Inventory for the Northwest Pipeline LLC Moses Lake Lateral Upgrade	0.2
2015	Sharley	Cultural Resources Assessment of the Stratford Road Sidewalk Project	0.09
2014	Ferguson	Archaeological Survey of the Moses Lake-Elk Telecommunications Facility (WN4678)	Intersects
2011	Adams	Cultural Resources Survey for the Moses Lake Lateral Facility Modifications Project	0.18
2010	Hartmann	Cultural Resources Assessment for the Feeder RA-9 Rebuild/SGL Project, Moses Lake	Intersects

Methods

Pedestrian, reconnaissance, and subsurface surveys were conducted during Jacobs' investigations to assess previous disturbance, reevaluate known historic properties, and identify any undocumented cultural resources within the APEs.

Pedestrian Surveys

Due to a proposed design change that would replace the previously proposed bridges spanning historic canals EL20 and RCD 180+182 with reverse siphons, Senior Historic Archaeologist Stacy Bumback and Senior Architectural Historian Connie Walker Gray conducted a field survey in May 2017 of the three NRHP-eligible canals within the Project APE to confirm that they still retained sufficient integrity to convey their historic significance. They noted and photographed existing conditions of the canals, as well as their settings. Field conditions were noted and photographs taken to document the variable conditions. The canals assessment memo by Gray and Chidley (2017) is summarized below, and the original document is included here as

Appendix C.

On September 4 through 6, 2018, and December 12 through 14, 2018, Jacobs' archaeologists James Mayer, PhD; John Davis, MA; Jessica Jones, BA; Mike Farrell, MS; and Patrick Elliott, MS, conducted archaeological field surveys within portions of the original and modified APE parcels that were not studied for the 2008 Report, using standard DAHP-accepted methods. This included varying levels of investigations that were in part determined by landowner right-of-entry permissions (**Figures 2 and 3**).

The 2018 archaeological pedestrian surveys were completed at 15-meter (49 feet) intervals along the Segment 1 previously unsurveyed parcel adjacent to the east side of Crab Creek, and along Modifications 1B, 2B, and 2C where access had been granted (**Figure 2 and Figure 3**). Of the 17 parcels along Modification 1B and Crab Creek, field investigators were granted right-of-entry permission on eight parcels. Of the 27 parcels along Modifications 2B and 2C, right-of-entry permission was granted on 22 parcels. For each accessed parcel, the exposed surface was examined closely for anthropogenic disturbances, topographic changes, and the presence of archaeological deposits.

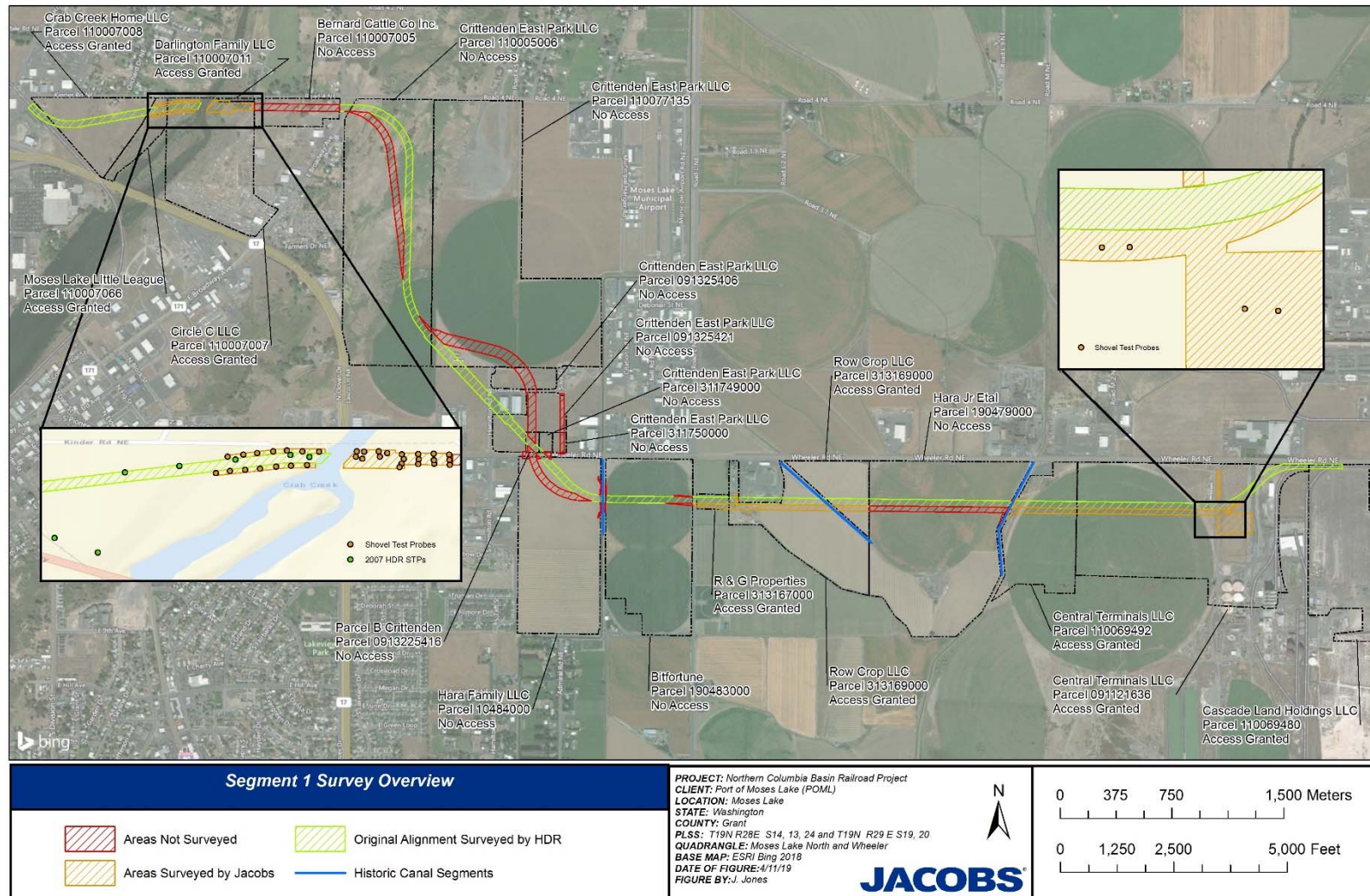


Figure 2. Segment 1 survey overview map with parcel permission and noted surveyed and inaccessible areas.

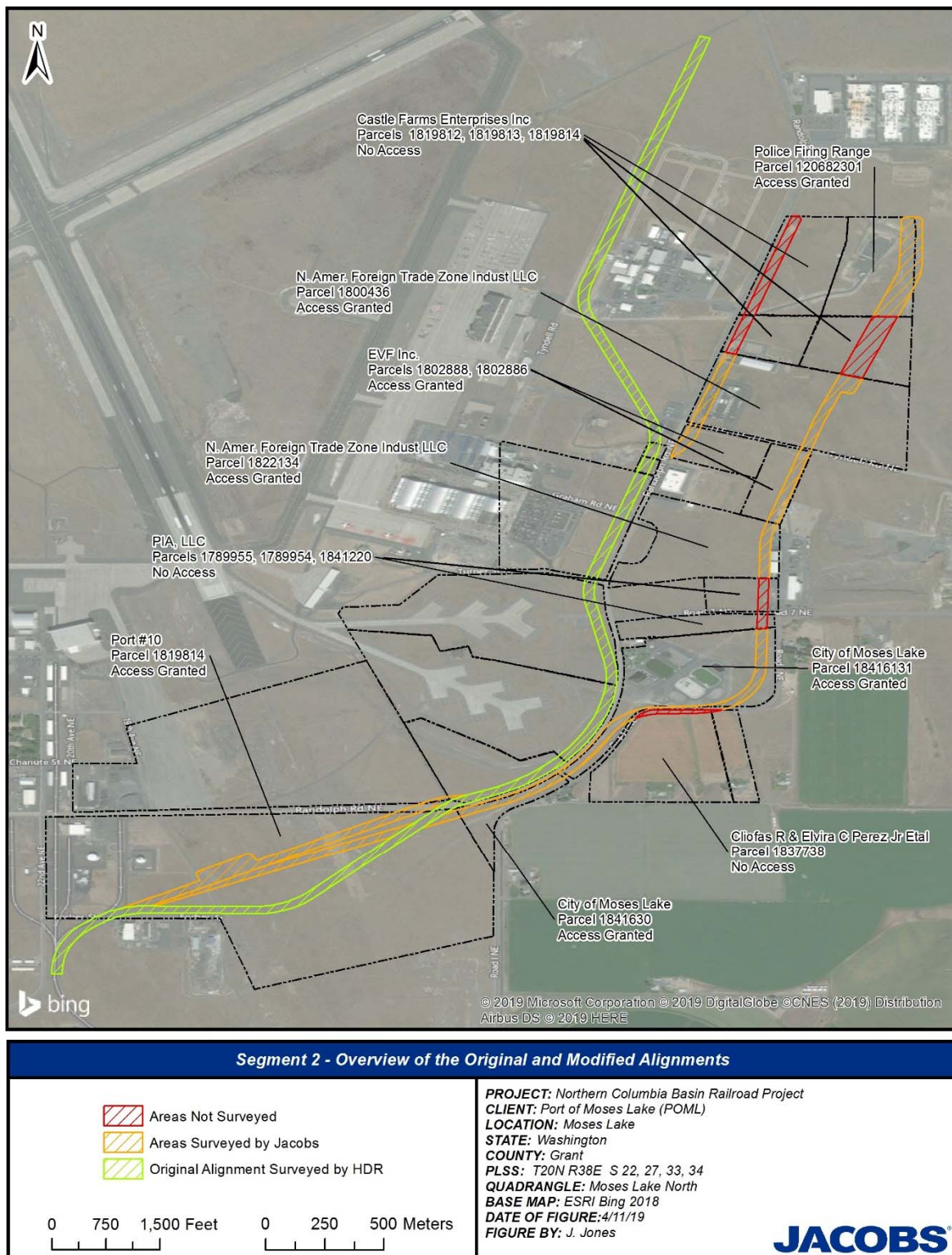


Figure 3. Segment 2 survey overview map with parcel permission and noted surveyed and inaccessible areas.

Reconnaissance Survey

A reconnaissance-level survey was conducted for parcels with no right-of-entry and for areas that are heavily developed or modified. Observations were made from adjacent roads and included photo documentation and notes on the current conditions of the APE vicinity.

Subsurface Investigations

Jacobs' staff used subsurface testing to characterize the nature of subsurface soils and deposits and to identify subsurface archaeological materials. Subsurface testing focused on where the APE crosses Crab Creek. Shovel test pits ([STPs]; hand dug, round holes measuring no more than 45 centimeters [cm] wide at the surface) were generally conducted at 30-meter (98 feet) intervals across the APE.

Although a depth of approximately 100 cm was targeted, STPs were excavated to the desired depth or until an impassable layer was encountered. Sediment from each STP was screened through 0.25-inch mesh. The soil and content of each STP was recorded, photographs were taken of any cultural deposits and representative soil profiles, and STP locations were recorded with a GPS device. All STPs were backfilled upon completion.

RESULTS AND ASSESSMENTS

Summary of Pedestrian Survey Results

Jacobs' staff conducted a field survey to assess the potential effects that design changes may have on three NRHP-eligible canals within the Project APE (Gray and Chidley 2017). Jacobs' staff also carried out supplemental archaeological investigations to examine parcels associated with the Modified Alignment that were not surveyed during the original HDR investigation (2008).

Regarding the canals, a proposed design change would replace the previously proposed bridges spanning historic canals EL20 and RCD 180+182 with reverse siphons (culverts). The canals were revisited to assess effects of the proposed design refinements.

No new historical or archaeological resources were observed during the pedestrian survey along Modifications 1B, 2B, or 2C. All three modifications are characterized primarily by: (1) Pleistocene deposits in upland settings with low potential for buried archaeological sites; or (2) areas modified by varying degrees of development. Previously unrecognized archaeological resources are unlikely to occur along most of Modification 1B and along all of Modifications 2B and 2C.

Subsurface investigations by Jacobs' staff focused on the Segment 1/Modification 1B crossing at Crab Creek and the upland areas along the easternmost end of Segment 1/Modification 1B. HDR (2008) completed STPs on the west side of Crab Creek along the centerline of the Original Alignment and identified no archaeological resources. Jacobs' staff excavated STPs in staging areas (added to Segment 1 in Modification 1B) in the same vicinity and no cultural resources were identified. Pedestrian survey and STPs carried out by Jacobs' staff on the parcel immediately east of Crab Creek (not accessible during the HDR 2008 investigation) determined that much of this area has been heavily modified. No cultural resources were identified in surface or subsurface contexts.

Historic Canals

Canal EL20

In 2007, canal EL20 was described as an earthen canal approximately 10 feet wide and 4 feet deep, running through a cast concrete culvert under Wheeler Road. Additional research by Jacobs in 2017 determined that canal EL20 is a lateral, estimated to be 10 to 11 miles long (Kelsey Doncaster, U.S. Bureau of Reclamation [BOR], personal communication on July 7, 2017). Canal EL20 was constructed in 1950 under BOR Specification 3085, started by J.A. Terteling and Sons, Inc. (National Archives and Records Administration 1950).

Jacobs' staff did not note any substantial changes to canal EL20 or its setting since it was originally documented in 2007. Further, Jacobs' staff assessed whether any of the seven aspects of integrity had been altered or diminished since the 2007 evaluation (see **Table 2**).

Review of specifications for the East Low Canal laterals show that canal EL20 has several specialized structures, crossings, and siphons and is a relatively long lateral. Known modifications to canal EL20 include the East Wheeler Road crossing and the piped/culverted "tail" between Interstate 90 and Baseline Road.

Canal RCD 180+182

In 2007, canal RCD 180+182 was documented as earthen, measuring approximately 8 feet wide and 5 feet deep (**Figure 4**). It is now understood to be a drain canal, one of many associated with the East Low Canal system, and its exact construction date and length are unknown, but it is known to have been constructed between 1946 and 1951 (Kelsey Doncaster, BOR, personal communication on July 7, 2017). Jacobs did not note any substantial changes to canal RCD 180+182 or its setting since it was originally documented in 2007. Further, they assessed whether any of the seven aspects of integrity (described above) had been altered or diminished since it was evaluated in 2007. The findings are summarized in **Table 2**.

Assessment Results

Based on the field visit and subsequent primary and secondary source research, including aerial maps, it was determined that the integrity of canals EL20 and RCD 180+182 has not been significantly altered or diminished from that recorded in 2007; therefore, the canals remain contributing elements to the NRHP-eligible East Low Canal system. No alterations were visible during this effort that would indicate that those portions of canals EL20 and RCD 180+182 within the APE, or other substantial sections of these canals, do not contribute to the broader system significance.

Table 2. Integrity Assessment of Canals EL20 and RCD 180+182

Aspect of Integrity	Findings
Location. Is the location/site where the resource was originally constructed?	The canals are in their original locations.
Design. Is the design in its original form, plan, and style of the property intact?	Generally, the canals' designs are in their original form, plan, and style. Some portions of the canals have been lined and/or placed in culverts since original construction.
Setting. Have the physical surroundings of a property been compromised?	Generally, the physical surroundings are similar to when they were recorded in 2007. Some areas have seen changes from nearby development, but the setting has not been significantly altered.
Materials. Are the physical components used in construction of the property still present?	With some exceptions where portions of the canals have been placed into culverts, the physical components are still present (i.e., unlined earthen canals).
Workmanship. Is there evidence of craftsmanship?	Not applicable – the canals are utilitarian features.
Feeling. Is the property able to express a sense of a past period of time?	The canals continue to convey their original “feeling” as utilitarian earthen canals from the 1940 to 1950s.
Association. Is the “direct link” evident between the property and an important event(s) or person?	There continues to be a direct link between the properties and the large irrigation system constructed and used in an arid agricultural landscape.



Figure 4. Overview of canal RCD 180+182, facing north.

Archaeological Pedestrian and Reconnaissance Survey

On September 5 and 6, 2018, Jacobs' archaeologists James Mayer, Patrick Elliott, and Jessica Jones conducted field investigations of the APE. Jessica Jones, John Davis, and Mike Farrell conducted a second round of field investigations on December 12 through 14, 2018.

Investigation of the APE consisted of pedestrian and reconnaissance surveys and subsurface investigations. Several parcels lacked landowner right-of-entry permission in Modifications 1B, 2B, and 2C; a list of the segments and associated investigations is presented in **Table 3**. A detailed list of parcels is presented in **Appendix C**.

Overall, the modified APE consists of Modifications 1B, 2B, and 2C that are within a moderately to heavily vegetated, relatively flat, rural and agricultural landscape. Surface visibility ranged from 0 to 75 percent, with an average of 50 percent. Developed areas exist primarily in Modifications 2B and 2C within parcels adjacent to and east and north of the GCIA. Parcels of the modified APE and survey results are summarized in **Appendix C**. A representative sample of photographs for the non-accessible parcels is presented in **Appendix D** with corresponding parcel numbers. No new cultural resources were documented during the pedestrian or reconnaissance surveys. Shovel test results are presented in **Appendix E**, and Historical Property Reports are presented in **Appendix F**.

Table 3. Summary of Parcels Examined in the Proposed APE

Segment Modification	Total Number of Parcels	Number of Accessible Parcels	Types of Survey Conducted	Identified Resources
1B	32	10	Pedestrian, Reconnaissance, and Subsurface	None
2B	14 ⁽¹⁾	11 ⁽¹⁾	Pedestrian and Reconnaissance	None
2C	14 ⁽¹⁾	6 ⁽¹⁾	Pedestrian and Reconnaissance	None

Note:

⁽¹⁾ Includes overlapping parcels.

Subsurface Survey

Subsurface testing focused on the Segment 1/Modification 1B crossing at Crab Creek. This included a parcel on the east side of Crab Creek not previously surveyed (HDR and Jones & Stokes Associates 2008), and for which the PA required survey when access was granted. The subsurface testing also included several STPs on the west side of Crab Creek in staging areas that are part of the modified APE that were not sampled during the previous study. These areas were targeted because they occur in an alluvial¹ setting and are considered to have the highest potential for buried cultural resources. Elsewhere along the APE, the uplands are characterized by soils and geologic mapping units that are Pleistocene in age and thus have much lower potential for buried resources.

Jacobs' staff completed 34 STPs within the APE, straddling both sides of Crab Creek (**Figure 5; Appendix E**). Four STPs were excavated to assess subsurface deposits in the uplands at the eastern end of Modification 1B (**Figure 2**) in parcels that are heavily modified by commercial and/or agricultural use.

Soils on the west side of Crab Creek were relatively consistent in makeup with brown to gray brown, fine sandy loam (probably loess) grading to gravelly loam, with many of the STPs terminating early due to large cobble obstructions or compacted coarser sediments (outwash/outburst flood; **Figure 6**). These soils fall into the Ephrata soil mapping unit, which is described as moderately developed soils in Pleistocene gravelly glacial outwash (probably outburst flood deposits) mixed with loess (Natural Resources Conservation Service [NRCS] 2018).

The only STPs that successfully extended to the desired depth were found along the west bank nearest to Crab Creek (A7 and B7); all other STPs terminated on dense, coarse cobbles. STP B7 included a buried A-horizon at approximately 80 to 90 centimeters below surface (cmbs). Soils adjacent to Crab Creek are mapped as the Kittitas soil mapping unit, described as weakly developed soils formed in alluvium (NRCS 2018). These soils are likely Holocene in age.

¹ Deposition of sediment and materials over a long period of time by a river, usually within a floodplain or delta.

Soils on the east side of Crab Creek were starkly contrasted based on their landscape, which included several piles of dumped refuse and demolition debris overlooking an unmodified wetland creek bank (**Figures 7 and 8**). STPs excavated on the bedrock bench/modified terrace (C1–C4, D1–D4, E1–E5, and G1) extended on average to 26 cmbs and encountered reddish-brown, fractured, weathered bedrock consistent with Wanapum Basalt, Priest Rapids Member formation (Gulick 1990;). Superimposing the weathered bedrock was organic material over poorly developed, light colored/ashy, gravelly to very gravelly silt loam. Towards the surface of the STPs were modern and undiagnostic trash and debris. These STPs occurred in the Prosser soil mapping unit, described as Pleistocene loess and outwash over bedrock (NRCS 2018).

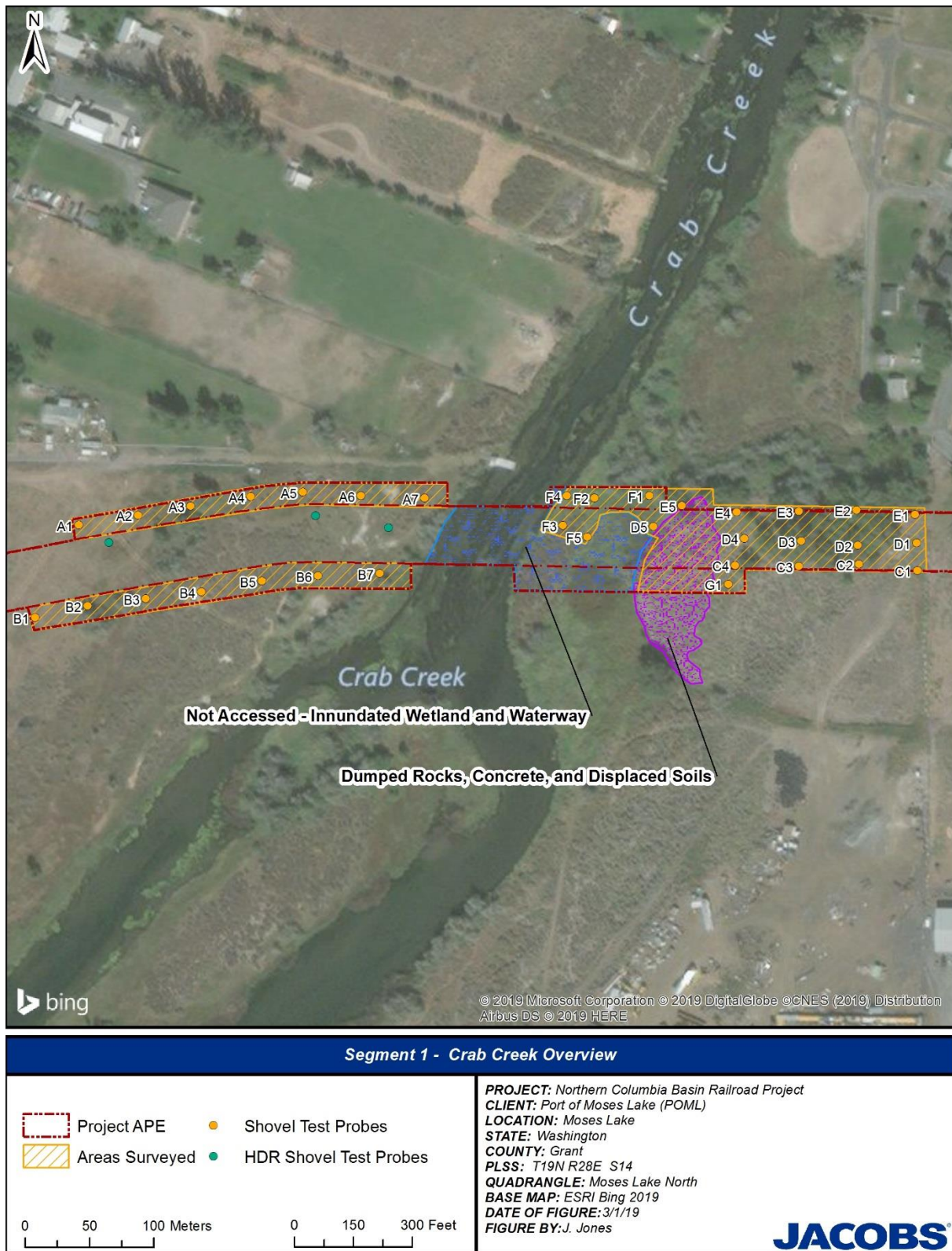


Figure 5. Location of subsurface survey along Crab Creek within Modification 1B of the APE.



Figure 6. STP A1 profile. Notice relatively fine-grained eolian² sediments (loess) over more gravelly outwash/outburst flood sediments with cobbles at base.



Figure 7. East side of Crab Creek with dumped boulders in foreground and lower wetland in background, facing west.

² Wind is the major agent of deposition



Figure 8. View of disturbed bedrock bench terrace from lower (approximately 4 meters) wetland. Notice concrete chunks on terrace slope, facing southeast.



Figure 9. STP E2 depicting shallow soils on a weathered bedrock bench.

STPs excavated west of the terrace in the wetland floodplain on the east side of Crab Creek (D5 and F1–F5) extended an average of 82.5 cmbs and consisted of a dense root mat overlaying gray to dark brown silt loam to brown to light brown sandy loam with occasional gravels (**Figure 6**). These STPs are largely associated with the Kittitas soil mapping unit, which is likely composed of Holocene alluvium. STPs terminated at indurated, or very hard, sediments (D5, F1, and F3); impassable cobbles (F4); water table (F2); and desired depth (F5). Hardened sediments are likely remnants of Pleistocene sediments, whereas the impassable cobbles are probably channel gravels related to a meander of Crab Creek. One potential buried surface was encountered at approximately 37 cmbs in STP F5.

Outside of modern trash debris consisting of flat glass, foil, and plastic fragments within the first 10 cm of STP A2 on the west bank of Crab Creek, and undiagnosed metal objects and fragments within the top layer of D5 and E1 on the east side of Crab Creek, there were no cultural materials encountered in the STPs.

In the upland sections of Modification 1B, Jacobs' archaeologists excavated four STPs within the alignment and adjacent work area on the side-slope of a small topographic rise (**Figure 2**). Both areas have been highly modified/disturbed by commercial and agricultural use. Subsurface soil deposits consist of a thin (0–10 cm), highly disturbed plow zone with a 2–5 cm light gray unidentified tephra deposit overlying a compact (15–50 cm) deposit of eolian silt loam (**Figure 11**).

All STPs were terminated when highly compact gravelly outwash/outburst flood sediments were encountered at 38–68 cmbs. No cultural materials were encountered within the STPs. The eolian silt is probably late Pleistocene in age, and thus any archaeological resources would likely be visible in surface contexts.



Figure 6. Profile of STP F5, water table at approximately 85 cmbs, and an increase in roots at 37 cmbs.



Figure 7. Profile of STP GT1 profile. Notice relatively fine-grained eolian sediments (loess) over more gravelly outwash/outburst flood sediments with cobbles at base. Unidentified light gray tephra between approximately 13 and 16 cmbs.

Assessment Results

Jacobs conducted an archaeological pedestrian survey consisting of intensive survey, reconnaissance survey, and limited subsurface testing. The survey covered approximately 47 percent of the 130 acres in the modified APE along Modifications 1B, 2B, or 2C. Subsurface investigations by Jacobs' staff focused on the Segment 1/Modification 1B crossing at Crab Creek and the upland areas along the easternmost end of Segment 1/Modification 1B. No cultural resources were identified in surface or subsurface contexts.

All three modifications are characterized primarily by Pleistocene deposits in upland settings with low potential for buried archaeological sites or areas modified by varying degrees of development. Therefore, previously unrecognized archaeological resources are unlikely to occur along most of Modification 1B and along all of Modifications 2B and 2C.

EFFECTS RECOMMENDATION

Under federal regulations (36 CFR 800.5), a project would have an adverse effect if it would diminish—directly or indirectly—any of the characteristics of a historic property that qualifies it for inclusion on the NRHP. These characteristics include the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. All qualifying characteristics of a historic property are considered, including those that may have been identified after the original evaluation of the property's NRHP eligibility. Adverse effects could include reasonably foreseeable effects that could occur later in time, be farther removed in distance, or be cumulative. Adverse effects on historic properties include, but are not limited to the following:

- Physical destruction of or damage to all or part of the property.
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines.
- Removal of the property from its historic location.
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance.
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features.
- Neglect of a property that causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization.
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR 800.5).

Because there was already a project-level determination of No Adverse Effect in 2009, and DAHP concurred, this 2019 effects recommendation is based solely on potential effects to canals EL20 and RCD 180+182 from the proposed design changes (replacing bridges with reverse siphons [culverts] at the rail crossing locations).

Assessment of Effect: Canals are utilitarian resources that require regular maintenance to sustain their operation, safety, and functionality. The canal system is very large, and only a small portion of canals EL20 and RCD 180+182 would experience a physical alteration by introducing a maximum of 100 linear feet of culvert to each canal. Such a limited modification would not diminish any aspect of the physical integrity of the East Low Canal system or canals EL20 or RCD 180+182 or the ability to convey their historic significance. The proposed design refinements would not diminish integrity of location, setting, workmanship, feeling, or association, and would only cause a minor alteration to integrity of materials and design. Jacobs recommends a finding of **“no adverse effect”** to historic properties for the proposed Project design changes.

An archaeological pedestrian survey consisting of intensive survey, reconnaissance survey, and limited subsurface testing covering approximately 47 percent of the 130 acres in the modified APE along Modifications 1B, 2B, or 2C identified no new cultural resources in surface or subsurface context. Because of factors along the APE, including geologic context and industrial development, previously unrecognized archaeological resources are unlikely to occur along most of Modification 1B and along all of Modifications 2B and 2C.

No archaeological resources are present in the modified APE, and it is unlikely that any will be encountered. Therefore, a finding of “**no effect**” to archaeological resources is recommended for the Project.

CONCLUSIONS AND RECOMMENDATIONS

Based upon results of the records search and field work, no further archaeological or built environment cultural resources assessment or work appears warranted for the proposed Project.

As described previously, proposed design changes would replace bridges with reverse siphons (culverts) at historic canals EL20 and RCD 180+182, which are contributing elements to the NRHP-eligible East Low Canal system. The culverts would affect, at maximum, 100 linear feet of each canal. The proposed design refinements would not diminish integrity of location, setting, workmanship, feeling, or association, and would cause only a minor alteration to integrity of materials and design. Moreover, no archaeological resources are known within the modified APE, and field work results indicate that there is little potential for previously unrecorded archaeological resources within the APE. Jacobs recommends a finding of **“no adverse effect”** for the proposed Project design changes.

Parcels not surveyed during the current study are recommended as not requiring survey because of one or more of the following: (1) they are in proximity to the originally surveyed APE with negative results (HDR and Jones & Stokes Associates 2008), (2) they are developed, or (3) they contain geologic deposits unlikely to harbor buried and intact cultural resources.

Any unanticipated discoveries will follow the protocol in the Project’s Unanticipated Discovery Plan. The Unanticipated Discovery Plan states that in the unlikely event that cultural resources are encountered during construction, ground-disturbing activities near the discovery would be immediately halted and a professional archaeologist would evaluate the find in consultation with the Washington SHPO, lead federal agency, and affected tribes. If human remains or anything that appears to possibly be human remains are encountered—either burials, teeth or bones, or mortuary items—ground-disturbing activities near the discovery would be immediately halted and the find protected from further disturbance, unauthorized access, or other impacts to maintain integrity and respect for the remains.

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2009b. Appendix B. Northern Columbia Basin Railroad Project Programmatic Agreement. Among the Surface Transportation Board, the Port of Moses Lake, and the Washington Department of Archaeology and Historic Preservation. Surface Transportation Board Finance Docket No. 34936.

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Appendix A
HDR Engineering Inc. 2008 Report

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Washington State

Northern Columbia Basin Railroad Project

Draft Cultural Resources Discipline Report

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Northern Columbia Basin Railroad Project

Draft Cultural Resources Discipline Report

Prepared for the

Washington State Department of Transportation
and the
Surface Transportation Board

By

HDR Engineering, Inc.
and
Jones & Stokes Associates

County: Grant
Township: 19N – 20N
Range: R 28E; 29E
Section(s): See Exhibit 1.1
USGS Quad: See Exhibit 1.1
APE acreage: approx. 200
Findings: "+" Positive

Findings: "+"
Positive

November 2007, revised April 2008



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For more information, contact:

- Call the WSDOT Rail Office at (360) 705-7902
- Write to the WSDOT Rail Office at WSDOT Rail Office, P.O. Box 47407
Olympia, WA 98504-7407;
- Fax your comments to (360) 705-6821; or
- E-mail your comments to rail@wsdot.wa.gov

- Call the Surface Transportation Board at (202) 245-0299;
- Write to the STB office at Surface Transportation Board, Attn: Christa Dean,
Section of Environmental Analysis, 395 E Street, SW, Room 1108,
Washington, DC 20423-0001, Attn: Finance Docket No. 34936;
- Fax your comments to (202) 245-0454; or
- E-mail your comments to christa.dean@stb.dot.gov
- Comments may also be filed electronically on the Surface Transportation Board's website at www.stb.dot.gov by clicking on the "E-FILING" link. A Login Account is not needed; simply click on "Environmental Comments," which will take you to the comment screen. Type in the docket number "FD 34936" then select "Christa Dean" in the drop down list under "attention of." Complete the form by adding your name, address, phone, and e-mail, and click "Submit."



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Appendices

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- Appendix D: Unanticipated Discovery Plan

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Acronyms

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
BMP	Best Management Practice
BNSF	BNSF Railway
B.P.	Before Present
CBRW	Columbia Basin Railroad
CFR	Code of Federal Regulations
CMSTP&P	Chicago, Milwaukee, St. Paul & Pacific Railroad (Milwaukee Road)
DAHP	Washington State Department of Archaeology and Historic Preservation
EL	East Low
GCIA	Grant County International Airport
GIS	Geographic Information System
GLO	General Land Office
MAC	Moses Lake Museum and Arts Center
MATS	Military Air Transport
MOA	Memorandum of Agreement
mph	miles per hour
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NRIS	National Register Information System
RCD	Rocky Coulee Diversion
RP	Reference Point
SAC	Strategic Air Command
SEPA	State Environmental Policy Act
SHPO	State Historic Preservation Office/Officer
SPCC	Spill Prevention Control and Countermeasures (Plan)
SR	State Route
STB	Surface Transportation Board

TAC	Tactical Air Defense
TESC	Temporary Erosion and Sedimentation Control (Plan)
THPO	Tribal Historic Preservation Officer
TLM	Track Laying Machine
USDA	U.S. Department of Agriculture
USDI	U.S. Department of the Interior
WAC	Washington Administrative Code
WISAARD	Washington Information System for Architectural and Archaeological Records Data
WSDOT	Washington State Department of Transportation
WSHR	Washington State Historic Register

Chapter One

Introduction

This report describes the proposed Northern Columbia Basin Railroad (NCBR) Project and potential effects on cultural resources in Grant County, Washington. This report describes the existing conditions, the proposed project and its potential effects on cultural resources, and measures taken to minimize effects.

Where is the project located?

The proposed Northern Columbia Basin Railroad Project is located in eastern Washington, east of Moses Lake between the Grant County International Airport and Interstate 90 (I-90). Information on the proposed project's location is provided in **Exhibits 1.1** and **2.1**.

Exhibit 1.1
Proposed Northern Columbia Basin Railroad Project Location Data

USGS 7.5' Quads	Township / Range	Sections
Moses Lake North	T19N R28E	3,4,10,11,13,14
Moses Lake North	T20 R28E	15, 21, 22, 27, 33, 34
Moses Lake South	T19 28E	24
Wheeler	T19N R28E	13, 19, 20, 24
Sieler	T19N R29E	19, 20

What and where is the Area of Potential Effects (APE)?

For the purpose of this cultural resources discipline report, the Area of Potential Effects (APE) is defined as the geographic area or areas within which an undertaking may directly or indirectly cause change of character or use of historic properties (i.e., National Register of Historic Places [NRHP] eligible archaeological sites, traditional cultural properties, and historic buildings/structures). The APE is influenced by the scale and nature of the undertaking (36 CFR 800.16d).

For archaeological resources and traditional cultural properties, the APE has been defined as the area that encompasses the horizontal and vertical extent of the proposed undertaking. For historic buildings and/or structures, the APE extends 50 feet from the centerline (both sides of the rail corridor) of the proposed undertaking. This 100-foot buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. Taking into account the buffer around the proposed project footprint, the APE is approximately 200 acres.

Appendix A contains the summary of correspondence between the interested agencies related to the establishment of the APE.

What are cultural resources?

Cultural resources include districts, sites, buildings, structures, objects, and landscapes significant in American history, prehistory, architecture, archaeology, engineering, and culture. As described in this report, cultural resources include existing and/or potential historic and prehistoric archaeological sites, historic buildings and structures, and Native American traditional cultural properties. Cultural resources are divided into three groups: archaeological resources, ethnographic resources, and the historic built environment (architectural resources). The three groups are further described below.

Archaeological Resources

Archaeological resources include pre-contact (prehistoric) and post-contact (historic) resources. Prehistoric resources are physical properties that result from human activities that pre-date European contact with native peoples in America. Prehistoric archaeological sites may include villages, campsites, lithic or artifact scatters, fishing sites, roasting pits/hearths, milling features, rock art (petroglyphs/pictographs), rock features, and burials. Historical archaeological sites consist of the physical remains (unoccupied ruins) of structures or built objects that result from the work of Euro-Americans. These physical remains must be more than 50 years old and post-date contact between Europeans and Native Americans. Historic archaeological sites may include town sites, homesteads, agricultural or ranching features, rail and other transportation-related features, and refuse concentrations.

Ethnographic Resources

Ethnographic resources include sites, areas, and materials important to American Indians for religious, spiritual, or traditional uses. These resources can encompass the sacred character of physical locations (mountain peaks, springs, and burial sites) or particular native plants, animals, or minerals that are gathered for use in traditional ritual activities.

Also included in this group are villages, burials, rock art, rock features, and traditional hunting, gathering, and fishing sites. Ethnographic resources are also eligible for listing in the NRHP if certain criteria are met (refer to the National Register Bulletin 38, *Guidelines for Evaluating and Documenting Traditional Cultural Properties*, USDI 1990).

Ethnographic resources that meet the definition set forth in Executive Order 13007 can be considered sacred sites. Activities that might affect accessibility to, or availability of, materials used in traditional practices are subject to Executive Order 13007. In some cases, ethnographic resources may overlap prehistoric or historic archaeological resources or they may be embedded within each other.

Historic Built Environment

Architectural resources of the historic built environment can include houses, barns, stores, post offices, bridges, and community structures that are more than 50 years old. These resources are generally standing structures that are currently occupied or are being preserved from deterioration and rehabilitated to accommodate occupation and use.

Why are cultural resources important?

Cultural resources can indicate or provide evidence of historical events and trends. They provide tangible evidence of people's lives and significant accomplishments, and reflect significant, distinctive and vernacular architectural, landscapes, and engineering designs. Cultural resources can continue to convey important history about people from the past to present and future generations of people.

What regulations apply to possible cultural resources within the project area?

The need for federal approval and permits requires compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (16 USC 470), as amended. The NHPA provides for establishment of the NRHP and the State Historic Preservation Office/Officer (SHPO), and directs federal agencies to consider the effect on historic properties in carrying out their activities. Cultural resources studied for the project are subject to the procedures of and review of the Surface Transportation Board (STB) and the Washington State Department of Transportation (WSDOT) in consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP), and any federally recognized Native American tribe that may have ancestral connections to

the proposed project area. The STB and WSDOT will submit this draft report to the appropriate Native American tribes, and comments gathered during tribal review will be incorporated into the final version of this report.

Federal Regulations

Section 106 of the NHPA requires that a federal agency take into account the effects of any undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions.

The term "historic property" is defined in the NHPA as: "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register"; such term includes artifacts, records, and remains which are related to such district, site, building, structure, or object (16 USC 470(5)).

The Section 106 process has six basic steps:

1. Initiate consultation and public involvement (ongoing).
2. Identify and evaluate historic properties that may be located within the APE; and based on input from the SHPO/Tribal Historic Preservation Officer (THPO) and any federally recognized tribes, determine if any of the historic properties are listed in or eligible for listing in the NRHP.
3. Assess whether the proposed project would have an adverse effect on historic properties.
4. Consult with the SHPO/THPO, interested parties, and federally recognized tribes to determine what, if any, mitigation should be imposed to avoid, minimize, or mitigate adverse effects on historic properties and incorporate any mitigation measures into a Memorandum of Agreement (MOA).
5. Submit the MOA to the ACHP.
6. Proceed in accordance with the MOA.

For federal projects, cultural resource significance is evaluated in terms of eligibility for listing in the NRHP. NRHP criteria for eligibility are defined below. The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects of state and local importance that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that:

- A. Are associated with events that have made a contribution to the broad pattern of our history;
- B. Are associated with the lives of people significant in our past;
- C. Embody the distinct characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or are likely to yield, information important in prehistory or history (36 CFR 60.4).

State Regulations

Washington's State Environmental Policy Act (SEPA) closely resembles the National Environmental Policy Act (NEPA) and requires environmental compliance at the state level. It requires that properties listed in or eligible for the Washington State Heritage Register (WSHR) be taken into account when state agency-enabled or funded undertakings affect properties of historic, archaeological, scientific, or cultural importance (WAC 197 11-960).

The WSHR is an official listing of historically significant sites and properties found throughout the state. The WSHR has a lower threshold for eligibility to incorporate properties not eligible for the NRHP. WSHR sites are not necessarily eligible for the NRHP and are not considered to be historic properties for the purpose of compliance with Section 106 in Washington State. While WSHR eligibility is an indicator that a site may have special significance, it does not necessarily indicate eligibility for the NRHP. However, for state-funded projects, properties must be given consideration when the undertaking affects cultural or historic values.

County Regulations

According to Grant County Code (21.04.080), "[f]ederal and state agencies shall avoid taking actions affecting ...cultural ...opportunities within Grant County that are incompatible with local custom, culture and economic stability or preservation and use of the environment, or that otherwise fail to protect private property rights and local determination." Similar to NEPA and SEPA regulations, Grant County Code requires the identification of alternatives and mitigation measures to protect or preserve cultural resources.

1 **What are the key points of this report?**

2 No prehistoric archaeological sites, historic era archaeological sites, or
3 traditional cultural properties were identified within the APE. A total of
4 19 historic resources older than 50 years of age were identified within the
5 APE: 16 buildings and three structures/systems.

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Chapter Two

Project Description

What is the Northern Columbia Basin Railroad Project?

The Port of Moses Lake (Port) is proposing to provide rail service to industrial land close to the Grant County International Airport (GCIA)¹ and along Wheeler Road (Road 3 NE) in the Moses Lake area by constructing new rail lines and upgrading existing rail lines. The proposed project, known as the Northern Columbia Basin Railroad (NCBR) Project, is intended to promote economic development in the region by attracting new rail-dependent businesses to industrial areas, and to encourage the long-term, continued use, growth, and preservation of rail operations in the region.

Where is the project located?

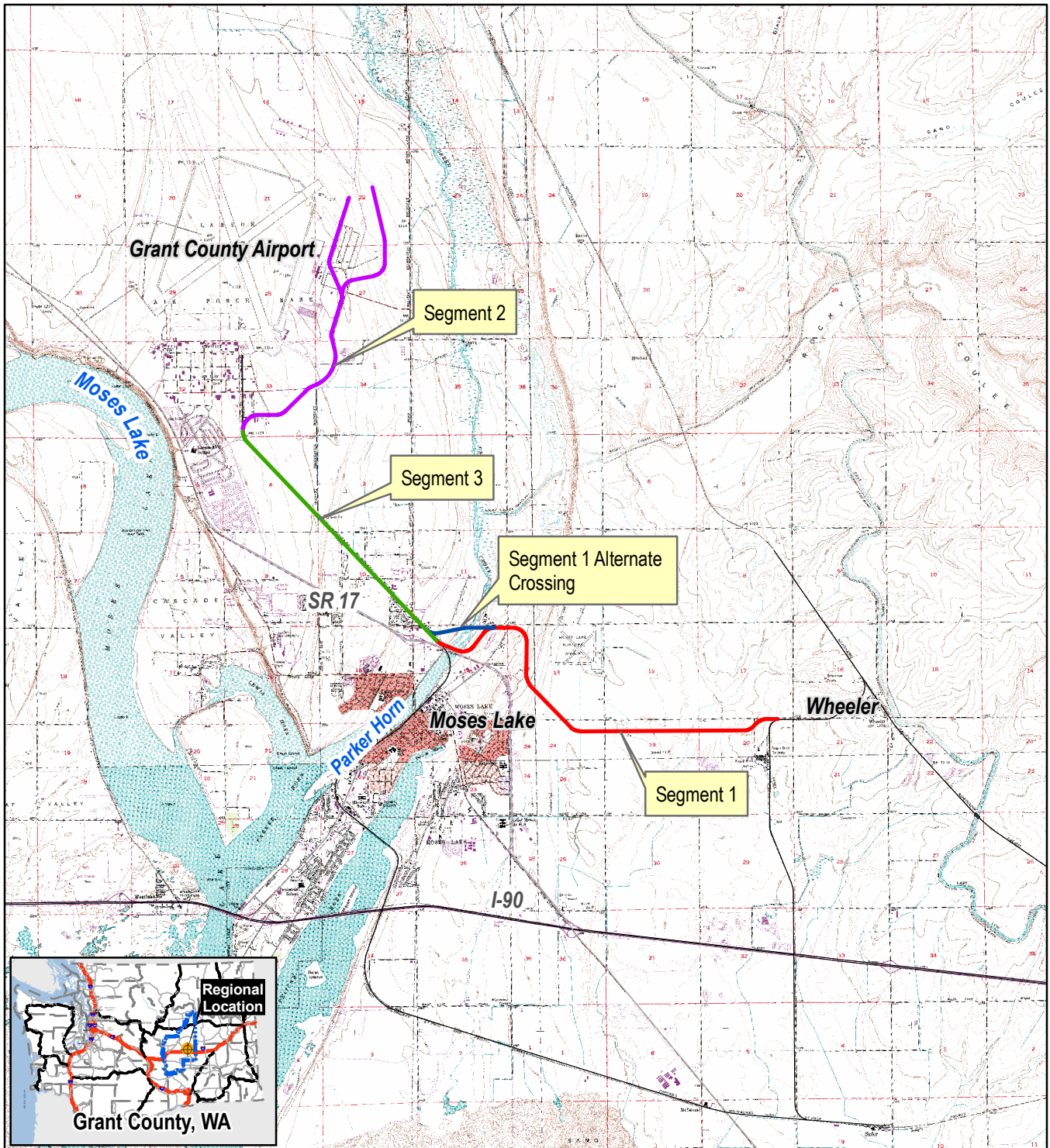
The proposed project is located in Grant County, Washington, primarily within the City of Moses Lake. The proposed alignment would run from east to west and would extend from the community of Wheeler² (Wheeler) to GCIA. Township and range information is provided in **Exhibit 2.1**. **Exhibit 2.2** shows the project vicinity.

Exhibit 2.1
Proposed Northern Columbia Basin Railroad Project Location Data

Segment	Township / Range	Section
Segment 1	T19N R28E	13,14, 24
	T19N R29E	19,20
Segment 1A	T19N R28E	13, 14
Segment 2	T20N R28E	22, 27, 33, 34
Segment 3	T19N R28E	3, 4, 10, 11, 14
	T20N R28E	33

¹ Two airports are located in the project vicinity. The larger airport, Grant County International Airport (GCIA), is located north and west of Randolph Road and Moses Lake Municipal Airport is located north of Wheeler Road (Road 3 NE) and east of Crab Creek/Parker Horn. GCIA is the airport that would be accessed by the proposed project.

² The community of Wheeler is referred to as “Wheeler” throughout this document. Wheeler Road is referred to as “Wheeler Road (Road 3 NE).”



Sources: USGS Moses Lake North, Wheeler, Moses Lake South and Sieler Quadrangles (1956)

- Segment 1
- Segment 1 Alternate Crossing
- Segment 2
- Segment 3 - Existing Columbia Basin Railroad



1 **What is the project's purpose and how would it be achieved?**

2 The proposed project's purpose is to promote economic development of
3 the Moses Lake area by attracting new rail-dependent businesses to those
4 areas designated for industrial development close to GCIA and along
5 Wheeler Road (Road 3 NE).

6 Moses Lake has maintained steady economic growth over time, increasing
7 employment by 22 percent from 2001 to 2006, or at an annual rate of 4.4
8 percent. This growth is partly a result of the balanced transportation
9 services available in the area, including air, rail, and highway access.
10 Investing in this project would encourage the continued use and
11 preservation of rail in the Moses Lake region.

12 The three components of the proposed project include:

- 13 • Building a new rail line through the designated industrial areas of
14 Moses Lake between Wheeler and the Parker Horn area;
- 15 • Extending the existing track (which currently terminates just south of
16 GCIA) to the industrial lands located east of GCIA; and
- 17 • Improving existing track between Parker Horn and GCIA.

18 **What are the existing rail systems in the project area?**

19 Two railroads currently operate in the project area: the Columbia Basin
20 Railroad (CBRW) and the BNSF Railway (**Exhibit 2.3**). The CBRW lines
21 provide local service in Grant County, while the BNSF Railway lines serve
22 Washington State and beyond. As a local or short line³ railroad, CBRW
23 serves local industries by transporting freight to and from the BNSF
24 Railway main line, which is connected into a national rail and shipping
25 network.

26 The CBRW main branch extends from the City of Connell (Connell) to
27 Wheeler, connecting into the BNSF Railway line at Connell. Branch lines
28 extend from Wheeler through the Town of McDonald (McDonald) and
29 Moses Lake to the south side of GCIA.

³ Class III rail carriers are rail carriers that have annual carrier operating revenues of \$27.7 million or less (threshold figures are adjusted annually for inflation using the base year of 1991), and all switching and terminal companies regardless of operating revenues (ASLRRRA 2008).



1 The condition of the track between Connell and McDonald allows 25-mph
2 operation, except in certain short segments. North of McDonald, the
3 condition of the track limits train speeds to 10 mph and restricts freight
4 (hazardous material shipments are limited). Improvements to the track are
5 required to allow long-term use of the new larger and heavier railcars that
6 are becoming more prevalent. The condition of the existing rail line
7 between the McDonald siding⁴ and GCIA prohibits its use by these larger
8 cars.

9 BNSF Railway has three east-west main lines that serve Washington State.
10 One of these lines, the Stevens Pass route, is located north of the project
11 area. Another line, the Columbia Gorge route, connects to the CBRW at
12 Connell. The third route, the Stampede Pass route, connects Pasco with
13 Auburn. Freight is shipped to, from, and through Washington State along
14 these routes.

15 **What are the existing CBRW operations in the project area?**

16 In 2007, the CBRW handled approximately 8,700 carloads (interchanged⁵
17 at Connell) (Mortensen 2008). Beyond the McDonald siding, the CBRW
18 handled 108 carloads, of which 22 carloads originated or terminated at two
19 GCIA-area rail shippers (Northern Energy and REC Solar Grade Silicon,
20 LLC).

21 Operations along the existing track beyond the McDonald siding have
22 declined since the Northern Columbia Basin Railroad Project Feasibility
23 Study (WSDOT 2006) was completed. Since traffic depends on customer
24 demand, trains have been traveling the route less than once per month.
25 Trains travel at approximately 10 mph and are typically up to three cars
26 long. Recently the line has seen service on an as-needed basis to serve
27 Northern Energy and REC Solar Grade Silicon, LLC located near GCIA.
28 Traffic is seasonal, with no demand during the summer months and very
29 limited demand during the winter months (one train last season). The line
30 now operates so infrequently that it is inspected only immediately before
31 use (WSDOT 2008b).

⁴ A siding is an auxiliary track located next to a main line that allows a train to move out of the way of an oncoming train. Sidings are also used to store trains or to add/subtract rail cars (WSDOT 2007).

⁵ “Interchanging” is the process by which one railroad exchanges a train or group of cars to another railroad for forwarding on to their final destination.

What are the project's physical characteristics?

The proposed project consists of three segments:

- **Segment 1** (new rail line from Wheeler across Parker Horn (Segment 1). Segment 1A provides an alternate route to cross Parker Horn farther to the north) (**Exhibit 2.5, Sheet 1**).
- **Segment 2** (new rail line to the industrial areas east of GCIA) (**Exhibit 2.5, Sheet 3**).
- **Segment 3** (improvements to existing track between Parker Horn and GCIA) (**Exhibit 2.5, Sheet 2**).

For all segments, the rail line right of way would generally be 100 feet wide, with one exception at the west end of Segment 1, where the right of way would be widened to 120 feet to keep all grading within the right of way. Right of way would need to be acquired for Segments 1 and 2, while existing right of way would remain in place for Segment 3. All clearing, grading, construction staging and stockpiling, and access roads would be restricted to within this right of way.

The *Northern Columbia Basin Railroad Project Conceptual Construction Plan* (WSDOT 2008a) contains detailed information regarding specific project elements, as well as conceptual engineering plan sheets.

Reference Points (RPs) have been placed along the alignment to aid in locating various areas along the proposed route, starting with RP 0 at the eastern end of Segment 1, and moving to the west consecutively to RP 11 close to the western end of Segment 2. RPs are located approximately one mile apart.

Segment 1

Exhibit 2.5, Sheet 1 illustrates the general location of Segment 1. Beginning on the east, Segment 1 would connect to an existing industrial track that currently serves Central Leasing at the old sugar processing plant. This track is connected to CBRW's main line at Wheeler.

Most of this segment is located on land that is designated for industrial development. In 2007, most of that land was being used for agricultural purposes. Land north of RP 2 is designated for commercial development.

The proposed rail line would tie into the existing track where it diverges to the south and from there generally heads west. The track would swing slightly south and run parallel to and about 620 feet south of Wheeler

Road (Road 3 NE). The line would proceed west through land currently used for agriculture and cross Road L NE at a signalized grade crossing. The proposed rail line would then cross an above-grade irrigation canal, swing to the northwest, and cross Wheeler Road (Road 3 NE).

The proposed rail line would continue northwest, crossing industrial zoned areas, currently used for agricultural purposes. The rail line would turn north and then west again and cross Road K at-grade at a signalized crossing just south of Road 4 NE (Cherokee Road). Segment 1 would sweep to the south and then again to the west and come parallel to and just north of State Route (SR) 17. Segment 1A (see below) would continue west, crossing Parker Horn farther north of SR 17, and join the existing alignment south of Kinder Road and north of SR 17.

How would the rail line cross Parker Horn?

Prior to crossing Parker Horn, the proposed line would need to drop down in elevation from the top of the bluff on the east side to an elevation suitable for crossing the waterway. Because this elevation drop would require a certain amount of cutting to create an acceptable gradient and a flat bench for the tracks, the project team is considering two alternatives (Segment 1 and Segment 1A) to descend from the bluff and cross Parker Horn. Both alternatives would require crossing a wetland area just east of Parker Horn.

Segment 1

Segment 1 would descend from the bluff southward across the wetland, cross Parker Horn next to the SR 17 bridge on a combination fill and bridge structure (similar in configuration to SR 17), and then swing slightly more to the north and connect to the southeast end of Segment 3. For this alternative, an excavation approximately 20 feet deep would be cut into the hillside between RPs 2 and 3 to allow the rail to keep its required vertical alignment. Because the top of this slope is near the edge of the 100-foot-wide right of way, the right of way would be widened to 120 feet at this location to keep all grading within the right of way.

Segment 1 would cross Parker Horn about 150 feet north of the SR 17 bridge. The proposed rail crossing would meet hydrologic flow requirements. The specific bridge structure type would be determined during final engineering, but would be designed for one rail line and would be no wider than 25 feet. For all bridge designs, work would need to be conducted in the water of Parker Horn, including placing fill and constructing bridge piers, foundations, and abutments. The specific amount and location of fill has not yet been determined. To be conservative during the impact analysis, the project team assumed that fill

would be no greater than that used by the SR 17 highway bridge to the south.

Segment 1A

Segment 1A would descend from the bluff and cross Parker Horn farther north at the mouth of Crab Creek, parallel to Road 4 NE (Cherokee Road). For this alternative, the line would descend more directly from the bluff, minimizing intrusion into wetland areas and crossing Parker Horn at RP 4A, about 1,000 feet north of SR 17.

The proposed rail crossing would meet hydrologic flow requirements. The specific bridge structure type would be determined during final engineering, but would be designed for one rail line and would be no wider than 25 feet. For all bridge designs, work would need to be conducted in the water of Parker Horn, including placing fill and constructing bridge piers, foundations, and abutments. The specific amount and location of fill has not yet been determined. To be conservative during the impact analysis, the project team assumed that fill would be no greater than that used by the SR 17 highway bridge to the south.

Segment 2

The proposed track extension in Segment 2 would run from the north end of Segment 3 (existing CBRW track) to the northeast to provide railroad access to the east side of GCIA. **Exhibit 2.5, Sheet 3** illustrates the general location of Segment 2.

The proposed rail line extension would begin at a turnout⁶ installed in the north end of Segment 3. The line would turn and cross Forbes Road, then initially proceed due east. The line would swing to the northeast and then cross Randolph Road about 3,700 feet east of the intersection of Randolph Road and 22nd Street. The line would generally follow Randolph Road as it swings to the north around the east side of GCIA.

Just south of Tyndall Road, Segment 2 would head northwest, diverge away from Randolph Road, and run west of Moses Lake Industries. At that point, the line would generally run north and slightly east, parallel to Randolph Road, before terminating about 6,000 feet from the Tyndall Road crossing.

Another alternative for the north end of Segment 2 is also being considered. This alternative would re-cross Randolph Road about 700 feet

⁶ A turnout is a set of tracks that connect the main line to a siding or rail yard. A turnout allows the train to move on or off the main line (WSDOT 2007).

north of the intersection of Randolph and Tyndall Roads, then curve to the north and extend about 7,000 feet before terminating.

Segment 2 would have five or six at-grade crossings⁷ depending on the alternative at the northern end, and would primarily traverse land zoned for heavy industrial use.

Segment 3

Exhibit 2.5, Sheet 2 illustrates the general location of Segment 3.

Segment 3 consists of approximately 4 miles of existing track (not including numerous industry spurs at GCIA) originally built by the military to access Larson Air Force Base (now GCIA).

This segment crosses five private and eleven public streets in at-grade crossings, two of which are currently signalized. There are no bridge structures besides one small irrigation canal structure.

Rehabilitation of this segment would primarily consist of replacing rails, ties, and other track materials. The rail line upgrade would permit use of the newer, larger railcars. Upgrades to the two signalized grade crossings (Stratford Road and Loring Drive) would also be included in the design, although these crossings are in good to excellent condition. With these upgrades, this portion of the railroad could be operated at 25 mph. The existing alignment and general profile would not be changed.

Street Crossings

The proposed rail line would add new at-grade crossings in Segments 1 and 2, and would upgrade existing crossings in Segment 3. At all crossings, streets in the immediate vicinity of the crossings would be reconstructed to provide a better crossing approach surface. The proposed single track would be constructed through the road, closely matching the existing roadway surface. A concrete crossing surface would be installed and the existing roadway approaches repaved to match the crossing surface. Curb and gutter as well as traffic control marking and signage might be included, depending on the number of vehicles and the existing road design.

Segment 1

Road L NE (RP 1.9), Wheeler Road (Road 3 NE) (RP 2.4), and Road K NE (RP 3.6) would be constructed with flashing lights and crossing gates.

⁷ An at-grade crossing is the surface where the rail and a roadway (or pathway) cross at the same level (WSDOT 2007).

1 Segment 2

2 Randolph Road (RP 8.5) would be constructed with flashing lights and
3 crossing gates. Turner Road NE (RP 9.2), Graham Road NE (RP 9.5), and
4 Tyndall Road NE (RP 9.7) would be constructed with crossbuck signs
5 rather than with gates and signals because the traffic on the streets is
6 limited. If alternative Segment 2A is selected, then crossbuck signs would
7 also be installed at Randolph Road (RP 9.9).

8 Segment 3

9 At Stratford Road (RP 4.8) and Loring Drive (RP 6.1), existing gates and
10 signals would be upgraded and modified with respect to approach circuit
11 lengths so that warning time would allow for the 25-mph train traffic.

12 **Water Crossings**

13 In addition to the new bridge at Parker Horn, three culverts would be
14 required to accommodate the proposed track over the irrigation canals and
15 wasteways⁸ along Segment 1. **Exhibit 2.4** lists each water body crossing
16 and irrigation canal located within the project area by segment. There are
17 no water crossings along Segments 2 and 3.

⁸ Wasteways are canals that irrigators use to carry unused irrigation water that may arise from runoff, pump failure, variation in pumping rates, or other sources of water beyond the irrigators' allowed water right for irrigation.

Exhibit 2.4
Water Crossings along Segment 1

Segment	Reference Point (RP)	Water Body	Water Body Type	Characteristics	Proposed Structure
1	0.98	Rocky Coulee Drain	Wasteway Canal	Earthen open channel about 6 feet wide	Bridge
1	1.19	Private Irrigation canal	Irrigation Canal	Earthen open channel about 2 feet wide	Culvert
1	1.23	Private Wasteway canal	Irrigation Canal	Earthen open channel about 2 feet wide	Culvert
1	1.38	Private canal	Irrigation Canal (concrete lined)	Concrete open channel	Culvert
1	1.50	Canal EL 20UI	Irrigation Canal	Earthen open channel about 1.5 feet wide	Siphon (culvert)
1	2.14	Canal EL 20	Irrigation Canal	Earthen open channel, about 10 to 12 feet wide	Bridge
1	4.00	Parker Horn	Lake	Channel – approximately 500 feet wide	Bridge
1A	4.30	Parker Horn	Lake	Channel – approximately 170 feet wide	Bridge

Construction methods for water body crossings have not been determined at this time; however, for water quality protection, uncured concrete would not be permitted to contact water.

How would freight rail service change if the project were implemented?

After construction, freight rail service would increase from on-demand to as much as one train per day, increasing as new industries are developed. Because the level of traffic would vary, particularly in the first years of operation, the project team assumed one round trip train per day (one train in and one train out, for a total of two train trips) for all of the analyses.

To be conservative in this report, the project team has assumed that each train would typically consist of up to ten cars (a total of about 1,000 feet long) traveling at a maximum of 25 mph. Actual train sizes and service patterns will depend on demand for rail services. Trains would most likely be shorter than ten cars until the industrial areas are fully developed. The proposed rail line would carry products similar to those currently carried along the CBRW. These products include grain and produce, gas and

1 petroleum (hazardous materials), and mineral resources. Manufactured
2 products of various kinds, depending on future industries, may also be
3 carried.

4 **How would the project be constructed?**

5 All construction disturbance would take place within the right of way,
6 including staging and parking of construction equipment, stockpiling dirt,
7 grading, and laying of track and crossing signals.

8 *The Conceptual Construction Plan for the Northern Columbia Basin*
9 *Railroad Project* (WSDOT 2008a) assumes the contractor would employ a
10 Track Laying Machine (TLM) for most or all of the railroad track
11 construction. In the event that the contractor chose to build the railroad
12 on-site, most of the sequences and activities in this description would
13 remain substantially the same. However, it is likely that short sections of
14 new track at each street crossing would be constructed prior to work on the
15 intermediate portions of the railroad. Although less likely, this could also
16 be the case if the contractor uses a TLM.

17 Mobilization would take place at the start of the proposed project.
18 Construction offices (trailers), storage areas, and employee facilities would
19 be established within the right of way, along each segment. Large quantity
20 items such as concrete ties and other track material would be delivered by
21 truck and stockpiled on the right of way for loading into gantry cars,⁹ then
22 directly installed from the TLM. Continuous welded rail would be
23 delivered by a specialized rail train and off-loaded near its installation
24 location.

25 Materials would either be distributed along the construction site at their
26 installation location, or stockpiled. Utility relocation, mainly near road
27 crossings, would also be a priority work item. Grading for the proposed
28 track would be performed concurrently with signal and utility work. Upon
29 completion of the crossing signal warning protection, grading, and
30 establishment of road closures, the track construction machine would
31 begin constructing the track on the graded embankment. Just prior to
32 TLM arrival at a crossing, the crossing would be closed (most likely on
33 weekends or nights) and the street paving would be saw-cut and removed
34 to create a trench in which to construct the track.

35 Drainage and signal/communication conduits would be installed in the
36 “track trench.” Following this, the TLM would proceed through the road

⁹ A gantry car is a railroad flatcar arranged in a specialized configuration that allows a small mobile gantry to traverse over and straddle the load over multiple flatcars.

1 crossing and continue constructing track. Ballast would be dumped on the
2 newly constructed track and the track would be raised and placed on
3 design alignment and grade. Concrete crossing surfaces would be installed
4 and temporary or permanent pavement tie-ins to existing street paving
5 completed.

6 Finally, the crossing signal warning system would be installed. Roadway
7 and utility crews would complete the utility work, curb and gutter, median,
8 and pavement tie-ins. This process would continue until the proposed
9 project was completed.

10 It is anticipated that the work would proceed during construction without
11 affecting railroad service, allowing free access to project work areas.
12 Roads would be closed briefly at crossings to allow construction of the
13 track through the intersection. Detours would be posted to ensure traffic
14 mobility during construction.

15 Construction is expected to last approximately 12 months for Segment 1
16 and eight months for Segment 2. The refurbishment of the existing line in
17 Segment 3 is expected to last approximately six months. The length and
18 complexity of the project would require staging and scheduling by the
19 contractor, working within the constraints related to access to both track
20 and road crossings. Material availability would also affect construction
21 time.

22 **What would happen if the project were not constructed?**

23 Without the proposed project, rail service would continue on the existing
24 CBRW system, serving customers on demand. However, constraints on
25 the existing line related to size and weight of railcars would not be
26 resolved without rehabilitation.

27 While it is possible to rehabilitate the existing line (Segment 3) to today's
28 standards in order to allow use of the heavier railcars, this rehabilitation
29 without the construction of the two additional rail segments (Segments 1
30 and 2) would not provide rail service to the industrial area, which is the
31 primary purpose of the proposed project.

32 Without the proposed project, the areas that are designated for industrial
33 development along Wheeler Road (Road 3 NE) and next to GCIA would
34 not be served by rail. Although opportunities for developing these areas
35 might still arise, such development would rely on trucks rather than rail to
36 haul products or supplies. The intention to develop these areas with rail-
37 serving industries would not be met. Industries that require rail access to
38 be profitable would not locate in these designated areas.

What permits would be required for construction and implementation of this project?

Federal and State Permits

Permits would be required from state and federal agencies for ground-disturbing activities related to track construction, surface water discharge, and work in environmentally critical areas, such as Parker Horn. Permits may include:

- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- Section 404 Permit
- Section 401 Water Quality Certification
- Hydraulic Project Approval
- Shoreline Permit
- Temporary Erosion and Sediment Control Plan

Local Agency and Utility Permits

Additional permits may also be required from the local jurisdiction and from public or private utilities for grading, utility relocation, street closures at road crossings, and work in environmentally sensitive areas.

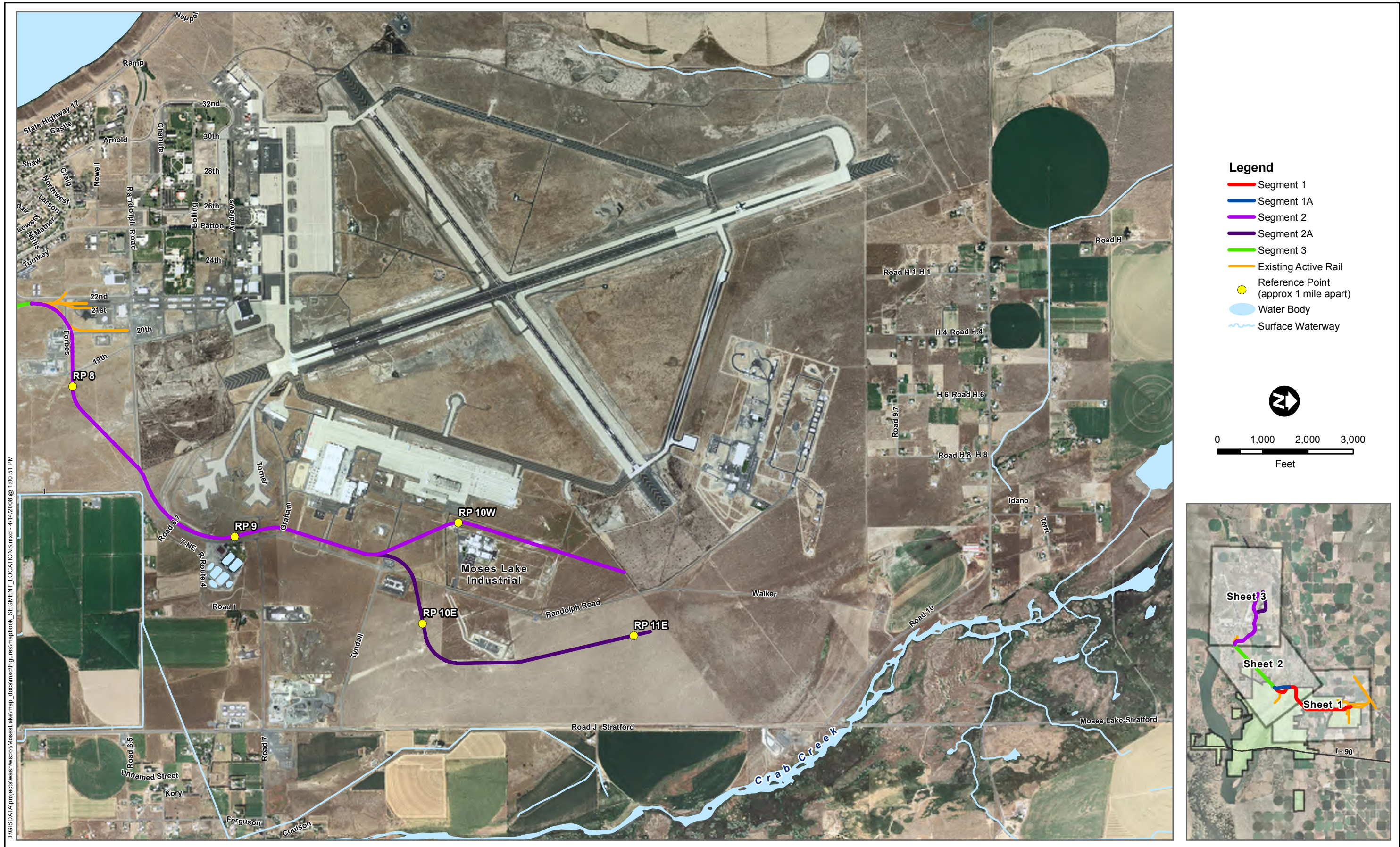


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Chapter Three

Affected Environment

This chapter provides information on the history and existing conditions of the cultural resources located within the APE.

What are the general features of the project area?

The Columbia Plateau has been primarily shaped by volcanic and hydrological cataclysms. Large basalt flows that underlie the majority of the Plateau region, some over a hundred feet deep and covering thousands of square miles, were laid down in the late Miocene and Pliocene (Alt and Hyndman 1994). Later, during the Pleistocene, a series of catastrophic floods caused by Glacial Lake Missoula breaching its ice dam created the channeled scablands and scoured the topsoil to expose the current basalt surface (Galm et al. 1981).

Moses Lake itself was formed several thousand years after the last of the Glacial Lake Missoula floods. Silt from the Ephrata Bar was blown eastward into the Palouse, leaving behind the heavier sand. This sand formed into dunes and blew across the lower channel of Crab Creek. The creek could not maintain a channel through the dunes, thus the water backed up and formed Moses Lake. The retention of water behind the dunes caused the water table to rise, forming ponds and marshes between the dunes. The vegetation that grew in the favorable marsh conditions stabilized the dunes (Alt 2001; Root and Ferguson 2004).

Prior to the introduction of agriculture and domesticated animals, the Columbia Plateau was an arid shrub-steppe landscape. Native plants included big sagebrush (*Artemisia tridentate*) and bluebunch wheatgrass (*Agropyron spicatum*). Other shrubs, rabbittbrush (*Crysothamnus viscidiflorus* and *C. nauseasus*), and grasses (principally *Stipa comata*, *Stipa thurberiana* and *Poa cusickii* on north slopes) were also present. Forbs included lupin (*Lupinus sericeus*), plantain (*plantago patagonica*), Indian paintbrush (*Castilleja spp.*), phlox (*Phlox longifolia*), and balsamroot (*Balsamorhiza spp.*). The margins of Moses Lake supported bitterbrush (*Purshua tridentate*), aspen (*Populus tremuloides*), willow (*Salix spp.*) and gooseberry (*Ribes spp.*) (Daubenmire 1970).

Large-bodied native wildlife, either prey for or competitors with humans, included elk (*Cervus elaphus*), deer (*Odocoileus spp.*), grizzly and black bears (*Ursus americanus* and *Ursus arctos*), lynx (*Lynx canadensis*), bobcat (*Lynx rufus*), mountain lion (*Puma concolor*), bighorn sheep (*Ovis*

1 *canadensis*), coyote (*Cania latrans*), gray wolf (*Urocyon*
2 *cinereoargenteus*), and fox (*Vulpes vulpes*). Smaller-bodied native
3 wildlife included short-tailed weasel (*Mustela ermine*), yellow-bellied
4 marmot (*Marmota flaviventris*), bushy tailed woodrat (*Neotoma cinerea*),
5 and pygmy rabbit (*Brachylagus idahoensis*). A variety of ducks, Canada
6 geese, grouse, herons, hawks, gulls, pigeons, and other birds were also
7 common in the area. Fish and shellfish were available in Moses Lake and
8 Crab Creek.

9 The Grant County Soil Survey report documents over ten soils mapped in
10 the project vicinity, with Ephrata sandy loam as the primary soil. Ephrata
11 sandy loam is a very deep, well drained soil on terraces. It is formed in
12 gravelly glacial outwash that is mixed loess in the upper part and located
13 in areas of 500 to 1,300 feet in elevation. The typical profile is a surface
14 layer of light, brownish gray, fine sandy loam extending from zero to nine
15 inches below ground surface. The subsoil is pale brown gravelly fine
16 sandy loam, which extends from nine to 14 inches below ground surface.
17 The substratum extends from one to 60 inches or more and is gray,
18 extremely gravelly coarse sand and calcareous (Gentry 1984).

19 Within the rain shadow of the Cascades, the Plateau region is rather arid,
20 receiving around nine inches of annual precipitation. Summers on the
21 plateau are hot with rain showers; winters bring heavy snows to
22 surrounding mountains.

23 **How was the Area of Potential Effects determined?**

24 The APE was determined based on a preliminary reconnaissance survey of
25 the project area and initial inspection of the database at the DAHP for any
26 historically-documented archaeological sites, traditional cultural
27 properties, or NRHP-eligible buildings and/or structures. The proposed
28 APE was mapped and submitted to DAHP for review and approval.

29 **Exhibits 3.1, 3.2, and 3.3** illustrate the proposed APE. **Appendix A**
30 contains the summary of correspondence between the interested agencies.

31 **How were historic and archaeological resources identified?**

32 After developing the APE, the first stage of determining if there were any
33 extant cultural resources was to understand the prehistory, ethnohistory,
34 and history of the area. By studying these topics, resources could be
35 evaluated for significance at the local, state, and federal levels. The
36 following historic and archaeological context statement established a
37 framework to evaluate any identified cultural resources within the APE for
38 listing in the NRHP.

Culturally, the area is referred to as the Southern Plateau, which stretches from the Okanogan Highlands in the north to the Bitterroots in the east, the southern edges of the Deschutes and John Day Rivers (in Oregon) in the south, and the crest of the Cascade Mountains in the west. Within the Southern Plateau, the Kittitas or Upper Yakama and others occupied the subregion called the South-central Plateau (Ames et al. 1998).

During ethnographic times, the predominant language of the Southern Plateau was Sahaptin, of which the Kittitas spoke the Northwest dialect along with the Yakama, the Klickitat, the Upper Cowlitz or Taitnapam, and the Upper Nisqually. However, nearly half the languages of the Plateau cultural area belong to the Salishan family group. Salishan is also spoken on the Northwest coast. There are seven languages of the Interior branch spoken on the Plateau. The southeastern group of these seven includes the Columbian spoken by the Sinkayuse, the Wenatchee, and the Chelan (Kincade et al. 1998).

Numerous chronological sequences or phases have been proposed for the archaeological record on the Columbia Plateau. These assigned phases generally reflect an effort to place documented cultural material remains within a certain framework. Chronologies usually rely heavily on projectile point characteristics or morphology—instead of technology—to place an archaeological site with a particular prescribed phase. No attempt has been made here to discuss Plateau cultural history within such a context. Rather, the many archaeological studies for the area have been synthesized to arrange Plateau cultural history into three general periods ranging from about 11,500 years ago to A.D. 1720 (adapted from Ames et al. 1998, unless otherwise noted). Following is a brief summary of these time frames. These time frames are strictly academic and do not reflect tribal viewpoints.

Period I. 15,500 to 7,000 years before present (B.P.)

Sub-Period IA c. 15,500- 11,000 B.P.

North America's first inhabitants presumably entered the continent by either crossing the Bering Strait or following the Late Pleistocene coastline along the Pacific Ocean. Navigating the ice-free corridor, the early inhabitants were engaged in a hunting–gathering subsistence economy and early coastal colonizers would also have been fishing. Evidence of their successful adaptation has been widely uncovered throughout North and Central America and is labeled the Clovis Tradition, based on a form of spear point used for big game hunting. Although recent archaeological data suggest a pre-Clovis occupation of North America (Fiedel 1999,

2000; Powell 2004; Rose 1999; Strauss 2000), no pre-Clovis sites have yet been identified in eastern Washington.

Two species of the mammoth, a primary resource of the Clovis hunters, have been identified in Washington: Imperial mammoth (*Mammuthus imperator*) and Columbian mammoth (*Mammuthus columbi*). Both of these species overlapped with human colonization of the New World before their ultimate extinction. There is a good likelihood, therefore, of discovering evidence of Clovis Period archaeological sites in Washington. The Richey-Roberts Clovis Cache is the only known site on the Southern Plateau containing intact deposits of the Clovis Period. The majority of evidence of these earliest occupations consists of surface finds of characteristic stone tools. However, the Lind Coulee site, east of Moses Lake, has yielded faunal remains of large mammals in addition to the ubiquitous stone tools. The presence of a 9,500-year-old skeleton, the famed Kennewick Man, also attests to the possibility of uncovering more evidence of early inhabitants in this region. There is little available evidence of cultural continuity from the Clovis Period to later-dating periods, although a strong connection with other regions to the south and east is implied. Period IA sites have not yet been identified in the South-central Plateau.

Sub-Period IB 11,000 to 7,000 B.P.

Post-Clovis cultures practiced a broad-spectrum hunter-gatherer subsistence strategy consisting of high seasonal and annual mobility, low population densities, and a technology suited for maximum flexibility. In that economy, wide ranges of foods were exploited. People moved frequently and left no evidence of dwellings or structures. Like other periods, Period IB is primarily defined by lithic tool morphology.

The great majority of Period IB sites, particularly those dating prior to 7,000 B.P., are concentrated in the central and eastern portions of the region. Most major sites are located along the Columbia and Snake Rivers and tributaries; sites are also documented in the surrounding plateaus and mountainous uplands, indicating that all regional environments were used. A documented Period IB archaeological site is located at Ryegrass Coulee near Vantage, west of the project area on the Columbia River.

Period II. 7,000 to 3,900 B.P.

During Period II, semi-subterranean pit houses appear in the archaeological record for the first time along with evidence of increased exploitation of certain nutritious roots and salmon. Less investment was made in the manufacture of stone tools as judged by a decline in their quality. Semi-subterranean pit houses from this period are 21 to 24 feet across, circular to rectangular in plan view, and three to six feet deep. The

houses generally lack evidence of superstructures, and their contents include clusters of large hopper mortar bases and anvils resting on floors. The presence of semi-subterranean pit houses likely represents a region-wide shift in settlement patterns to some form of semi-sedentism. However, there are few dated dwellings in the region from the period of 4,000 to 3,800 B.P.

Period III. 3,900 B.P. to A.D. 1700

The beginning of Period III is marked by the widespread reappearance of pit houses, increasing heavy reliance on fishing and storage of salmon, intensive exploitation of camas, and evidence of land use patterns that persisted into the 19th century. These land use patterns include seasonal (usually winter-early spring) villages in the canyons and exploitation of uplands and mountains from special use camps during the summer and fall.

By 2,500 B.P., pit houses were common and highly variable in size, with evidence of superstructures. Large pit houses (diameters greater than 36 feet) became more common after 1,000 B.P. (A.D. 1000). Large concentrations of houses, towns, and villages also appeared in the record by A.D. 500 (1,500 BP); longhouses entered the archaeological record after A.D. 500. Like pit houses, net weights became quite common, suggesting greater use of fishing nets. While there is very little evidence of food storage pits in Periods I and II, storage pits with salmon remains are seen at the beginning of Period III. Period III is the only period in Plateau prehistory that is also represented by fiber and wood artifacts and other perishables.

Pit house sites are found along the Columbia and its tributaries, and clusters of pit houses have been located on terraces of very small streams that flow into larger rivers and in totally unexpected places.

Sub-period IIIA 3,900 B.P. to 2,000 B.P. (A.D. 1)

Sub-period IIIA in the west-central Plateau reveals increased population and sedentism, changes in subsistence patterns, large riverine villages, and the appearance of communal villages, larger and more functional artifact assemblages, and an increase in trading of non-local items utilizing pre-existing trade networks. A greater diversity in the physical styles of housing and the larger numbers of dwellings documented during this period likely reflect an expanding regional population base.

Artifact assemblages are dominated by expedient tools, and salmon is a dominant component of faunal assemblages. Large mammals, such as elk and deer, were also a principal source of food. Seasonal root and

1 vegetable food gathering and raw material extraction were among the
2 prominent activities pursued from upland camps.

3 **Sub-period IIIB A.D. 1 to A.D. 1720**

4 Sub-period IIIB marks the appearance of the ethnographically defined
5 winter village pattern. By A.D. 1, pit houses were present among most
6 salmon-bearing rivers and streams, and upland camps and use areas appear
7 in expanded numbers. Hunting and hunting-related activities, plant
8 gathering and processing, and lithic quarries and collection areas are
9 among the most common of site occurrences in these areas. The first
10 documented examples of longhouses appear during Sub-period IIIB. The
11 number, size, and density of sites increase in this period, indicating a
12 population increase throughout this period. Trade with coastal areas is
13 indicated by marine shell artifacts made of *Dentalium*, *Olivella biplicata*,
14 and horse clams (*Schizothelus nutalli*) (Root and Ferguson 2004).

15 The longhouse at Avey's Orchard (East Wenatchee), dated to A.D. 889,
16 was a semi-subterranean structure, implying an evolution to a surface
17 structure found later. This change was most likely linked to the adoption
18 of an equestrian lifeway over most of the region after A.D. 1720. Even
19 though there were some changes in housing during Sub-period IIIB, the
20 circular, semi-subterranean pit house or mat lodge remained the dominant
21 form of housing. These were easily adapted to a surface structure with the
22 introduction of the horse and increase in settlement mobility. The number
23 and diversity of non-dwelling structures, such as sweat lodges, also
24 increased during this period.

25 Hunn (1990) states that the Plateau way of life remained "fundamentally
26 the same" throughout prehistory until the rapid changes brought about by
27 Euro-American influences during the 1700s and later. Any changes noted
28 represent subtle shifts of emphasis rather than profound redesign of
29 Plateau economic and social patterns. As stated by Kirk and Daugherty
30 (1978), culture change proceeded at a modest pace through the ages into
31 the historic period. Events that drastically altered the subsistence patterns
32 in Plateau life included the introduction of the horse, the spread of
33 diseases, the fur trade, and Euro-American emigration onto native land
34 (Hunn 1990).

35 The introduction of the horse fundamentally changed the Plateau culture,
36 as it changed other Native American cultures. In the Plateau region,

37 "...horses changed the style of hunting, enabled long trips
38 to buffalo country, and made it possible to travel over a
39 broader area of the annual seasonal round. Greater mobility
40 resulted in more frequent contacts...with more distant

groups. Increased interactions with Plains Indians led to participation in and adoption of a number of Plains traits such as style of warfare and social organization” (Campbell 1987, after Ray 1939).

The abundance of trails and close trading ties facilitated the spread of smallpox and other infectious European diseases to which the Plateau groups had little natural immunity. Smallpox epidemics occurred in the Plateau in 1770 and in 1801, prior to direct European contact. Boyd (1985) estimates that one-third of the population succumbed to the disease during both epidemics, resulting in an approximate 45-percent decline in the total population between 1775 and 1802. Subsequent smallpox epidemics, in addition to other introduced diseases, yielded a total decline of more than two-thirds of the population from 1775 to 1875 (Campbell 1987).

Native American History of Region

Ethnographically, this region has been the traditional territory of the Sinkayuse, or Moses-Columbia. The Sinkayuse are a Salishan speaking people who lived in the Big Bend Country of the Columbia River. The main Sinkayuse village was, historically, at the mouth of Rock Island Creek. The territory extended from Priest Rapids upriver to Cabinet Rapids, and included Grand Coulee, Moses Coulee, Moses Lake, and the Potholes region. The Sinkayuse had contacts with neighboring Middle Columbia Salish groups in addition to contacts with the Spokane and Palouse. The late 19th Century leader of the Sinkayuse, Chief Moses, is often eponymously associated with the Sinkayuse (Root and Ferguson 2004). The Sinkayuse occupied a number of summer villages around Moses Lake. At Parker Horn, there is record of a summer village called “Turtle Place”.

Salishan tribes along the Big Bend of the Columbia River, including the Cayuse, Walla Walla, Nez Perce, Umatilla, and Yakama, ceded their lands as part of the treaty signed on June 9, 1855, in Walla Walla. The original plan was for these tribes to live on the Yakama Reservation. The Upper River Colville Reservation was set aside by Executive Order in 1872.

The Sinkayuse elected Moses chief after the death of his father and defeat of his older brother in the Yakama War of 1858. Chief Moses did not want to live among the Yakama, and remained free while petitioning the U.S. Government for his own reservation.

The co-existence of Native American and Euro-American settlers was not peaceful. In 1878, the Perkins family was killed, probably by a group

1 associated with Chief Joseph. Many Euro-American settlers erroneously
2 believed Moses and his band were responsible for the murders or that the
3 Sinkayuse were protecting those responsible. Moses was arrested by the
4 military in 1878 and held at Fort Simcoe in an attempt to force him to live
5 on the Yakama Reservation. General Howard granted Moses permission
6 to travel to Washington, D.C. Before he could start the trip, he was again
7 arrested in an attempt to impede him. However, Indian Agent Wilbur
8 posted bond and he was allowed to continue. Moses departed for
9 Washington, D.C. in 1879 with his nephew Chillileetsah, Chief Homily of
10 the Walla Walla and Chief Hiachenie of the Cayuses. Moses effectively
11 pleaded his case and was granted the Columbia Reservation by a
12 Memorandum of Agreement signed by President Rutherford B. Hayes in
13 1879 (Ruby and Brown 1965).

14 The Columbia Reservation was expanded in 1880 to include Lake Chelan.
15 In 1881, however, the reservation was then reduced when the U.S.
16 Government reclaimed a 15-mile strip along the Canadian border for the
17 newly discovered silver mines. In 1884, due to pressure from mining
18 interests and Euro-American settlers, the Columbia Reservation was
19 returned to public domain. The Columbia Reservation was platted and
20 opened to Euro-American settlement in 1886. Chief Moses and his tribe
21 were allowed their own reservation for only four years. Individuals on the
22 Columbia Reservation were allowed the choice to retain one section (one
23 square mile) of the reservation or join the Colville Reservation. Chief
24 Moses died in 1899 at the Colville Reservation.

25 **Euro-American History of Region**

26 **Early Exploration**

27 Historically, the Columbia River was the primary means of travel through
28 the Plateau region. The Lewis and Clark Corps of Discovery entered the
29 region at the confluence of the Snake and Columbia rivers in 1805, and
30 David Thompson was the first individual Euro-American to enter the
31 region as he traveled down the Columbia to Astoria in 1811. Various
32 missionaries began to arrive in the 1830s. Gold strikes in British
33 Columbia, Idaho, and Montana in the 1850s and 1870s brought transient
34 visitors to the region, but few permanent settlers. In the 1870s, Columbia
35 River sand bars were also mined for gold by Chinese migrants.

36 **Settlement Period**

37 There was little Euro-American settlement of Grant County until the
38 1890s. Prior to this, there were a few ranchers raising livestock, but the
39 arid conditions were not conducive to profitable farming operations. The

1 completion of railroad lines from the East through to the Pacific Ocean in
2 the 1890s, in conjunction with the Homestead Act of 1862, brought hordes
3 of homesteaders to the area, many of German descent from the Midwest.

4 Bureau of Land Management General Land Office records show that the
5 earliest homestead in the study area was granted to Emanuel Klein in
6 August 1913, for 160 acres in the Southwest 1/4 of Section 12 in
7 Township 19 North, Range 28 East, although a house is shown in the 1881
8 General Land Office (also known as GLO) survey in Section 30. Much of
9 the land was owned by the Northern Pacific Railroad and not available to
10 homesteaders. **Exhibit 3.4** depicts the project alignment on portions of the
11 1882 and 1883 General Land Office Survey Maps.

12 Farming in the Moses Lake region was more lucrative than in other parts
13 of the Plateau due to the ability to use the lake and surrounding
14 marshlands for irrigation. In 1911, the Brumder family of Milwaukee,
15 Wisconsin, established a real estate development company to sell land
16 around Moses Lake to potential dairy farmers. They hoped to establish a
17 town with an economy based on cheese production. However, conflicts
18 over water rights developed, and their plans fell apart (Center for
19 Columbia River History ND).

20 The Neppel Town Company filed a plat for the Neppel town site on
21 October 12, 1912, the same year the Chicago, Milwaukee, St. Paul &
22 Pacific Railroad, also known as the Milwaukee Road, extended a line
23 terminus to the town. Neppel, incorporated in 1910, changed its name to
24 the City of Moses Lake in 1938. Apples and other fruit crops were grown
25 on the land around Moses Lake. Small, local irrigation projects arose in
26 some areas to enhance farming, but dry farming dominated the region until
27 the Columbia Basin Project was implemented.

28 **The Grand Coulee Dam and Columbia Basin Project**

29 Moses Lake is located in the high desert plateau of central Washington
30 State. Early farms in the area attempted to cultivate crops in the fertile soil
31 through dry farming. The arid plateau of central Washington State could
32 not support large crops without irrigation. As a result, small, regional
33 irrigation projects, which were limited in scope, attempted to irrigate
34 fertile farmland. While the massive Columbia River ran through the
35 plateau, the river was lower than the surrounding farmland, which made
36 irrigation difficult without a major feat of engineering. Plateau farmers
37 clamored for a dam for irrigation.

38 The desire for irrigation coincided with a growing awareness of
39 hydroelectric potential of the Columbia River and the need for Works
40 Progress Administration projects to decrease Depression-era

unemployment. These desires culminated in the U.S. Government embarking on what is known as the Columbia Basin Project. The Columbia Basin Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High, and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation History Program 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the Bureau.

Construction of the Grand Coulee Dam began in 1933, and was completed in 1941. However, World War II interrupted the construction of the irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

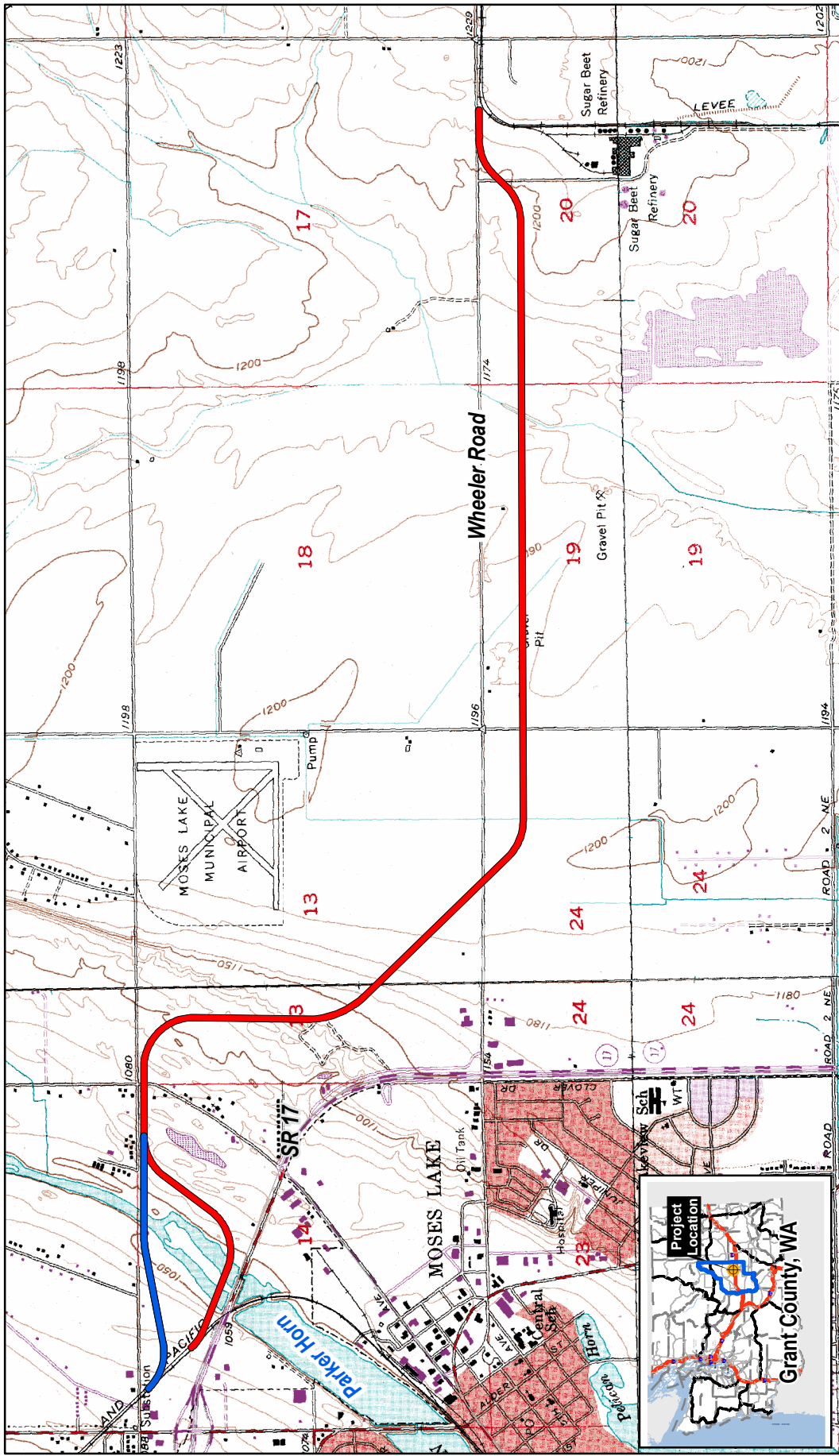
Following the end of World War II, construction of the irrigation canal system resumed. A total of 671, 000 acres of farmland were brought under irrigation through the construction of the Main, West, East High, and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946, and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses Lake in 1951 (Columbia Basin Project, East Columbia Irrigation District Resource Maps 1962). The irrigation canals and ditches further spurred a population boom in Moses Lake. Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold. **Exhibit 3.5** depicts the project alignment on a 1934 Bureau of Reclamation map of the early development of the Columbia Basin Irrigation Project.

To celebrate completion of the first irrigation canals, Moses Lake citizens and air base personnel created a "Farm-in-a-Day." An entire farm, complete with house, furnishings, outbuildings, and crops, was built in a 24-hour period. The Veterans of Foreign Wars searched for the "most worthy veteran" to receive the farm. Donald Dunn, a 30-year-old veteran of World War II whose Kansas farm had recently been destroyed by floods, received the ready-built farm. However, even with irrigation, Dunn was not able to make the small farm profitable and sold it within a few years.

The Utah and Idaho Sugar Company built its largest sugar beet processing facility in the United States on the Northern Pacific Railroad in 1952 (Bard et al. 1996). The water brought by the irrigation canals and ditches resulted in planting hundreds of acres of land with sugar beets. The Utah

1 and Idaho Sugar processing facility in Moses Lake was shuttered in 1978
2 due to rising costs of sugar beet processing and the increased use of corn
3 syrup sweeteners. At that time, fields were re-planted with beans,
4 potatoes, corn, onions, wheat, and other crops used for feeding livestock.

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Sources: USGS Moses Lake North, Wheeler Quadrangles (1956)

Segment 1

Segment 1 Alternate Crossing

— Columbia Basin Railroad

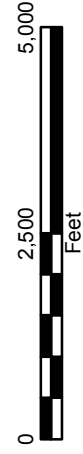
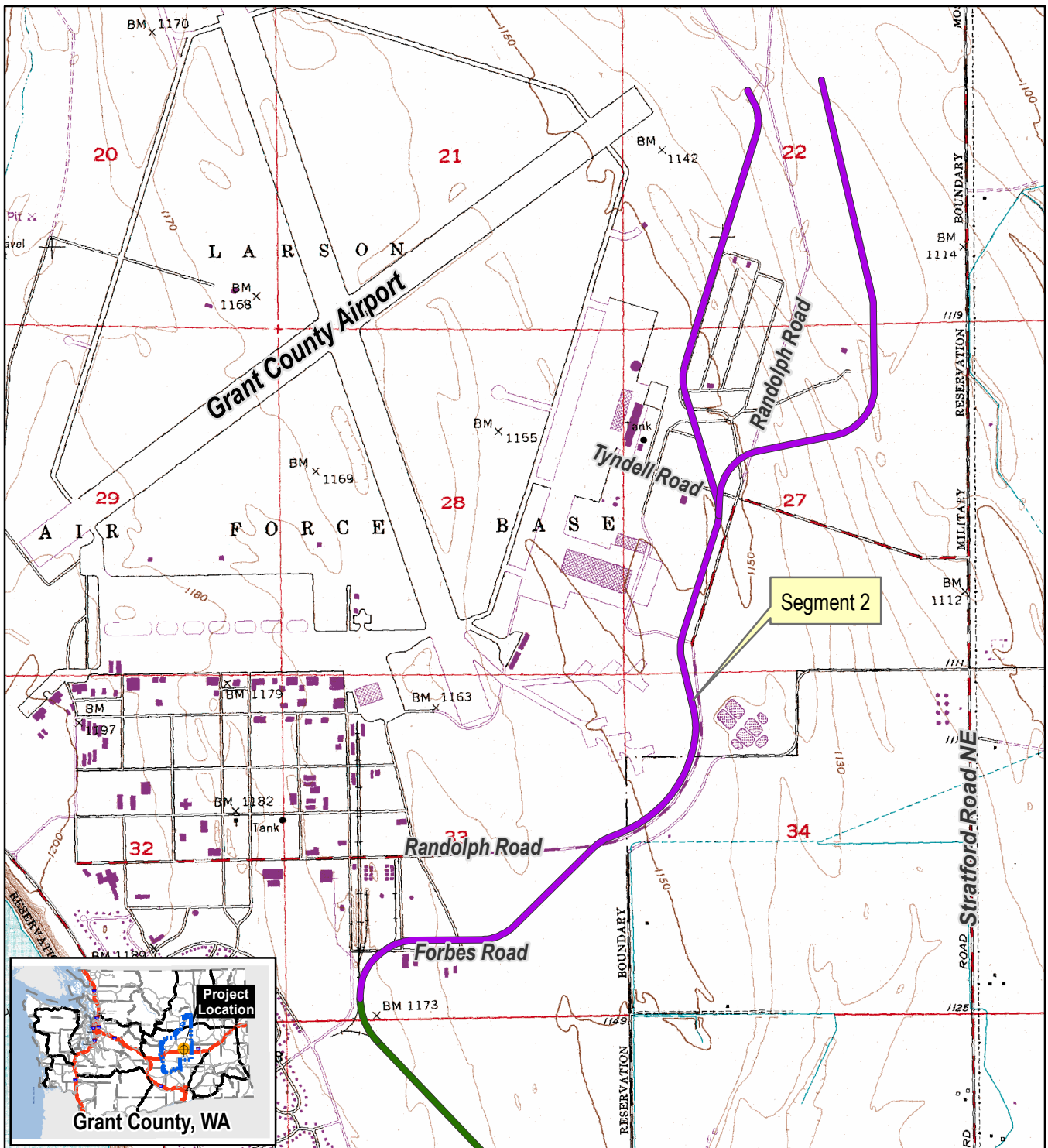


Exhibit 3.1
 Area of Potential Effects (APE) Map
 Northern Columbia Basin Railroad Project
 Segment 1 and Segment 1 Alternate Crossing
 April 2008





Sources: USGS Moses Lake North Quadrangle (1956)

- Segment 2
- Segment 3 - Existing Columbia Basin Railroad

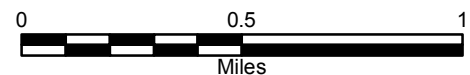
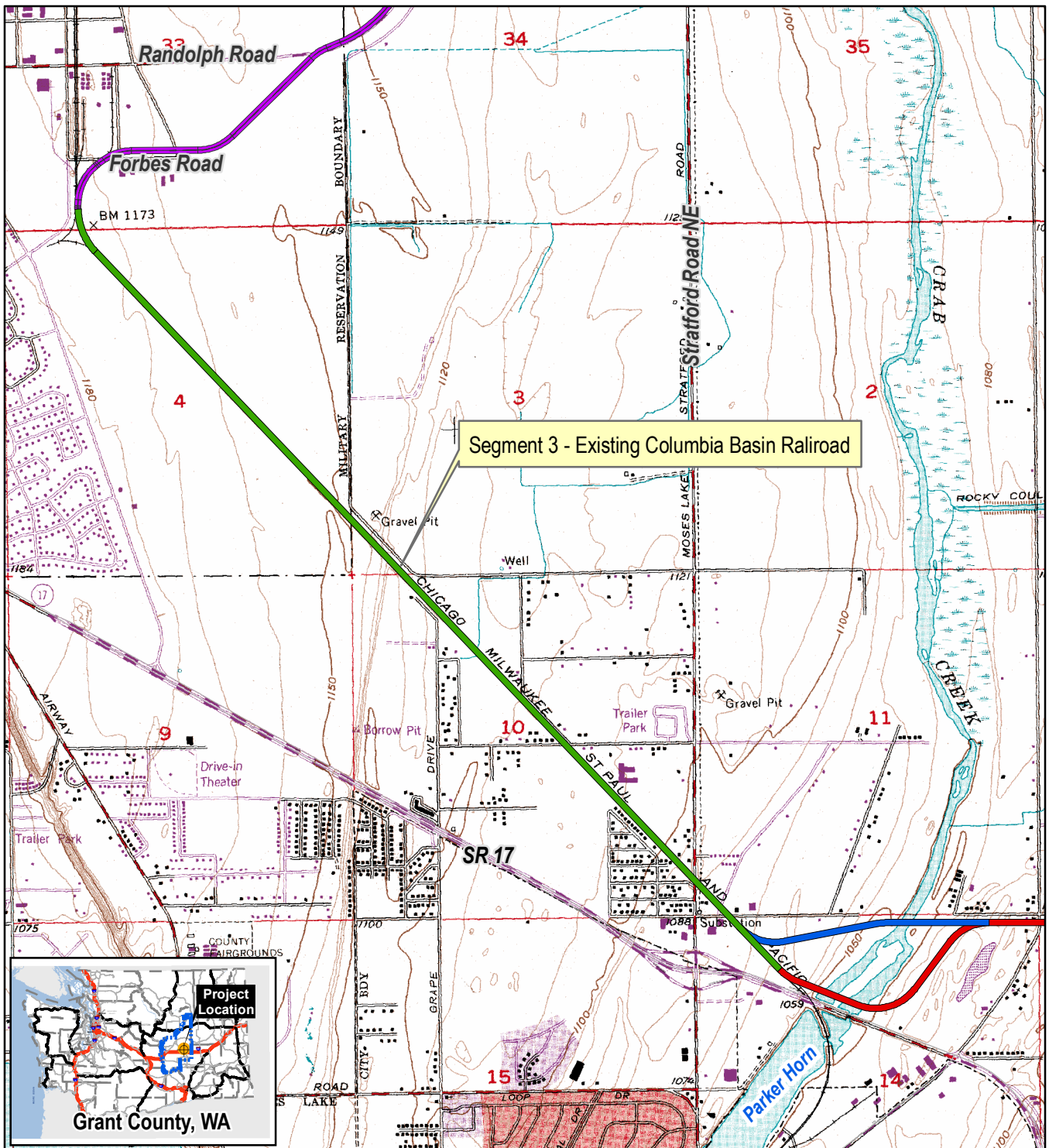


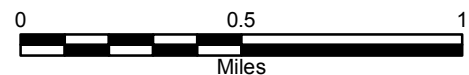
Exhibit 3.2
Area of Potential Effects (APE) Map
Northern Columbia Basin Railroad Project
Segment 2
April 2008

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Sources: USGS Moses Lake North Quadrangle (1956)

- Segment 1
- Segment 1 Alternate Crossing
- Segment 2
- Segment 3



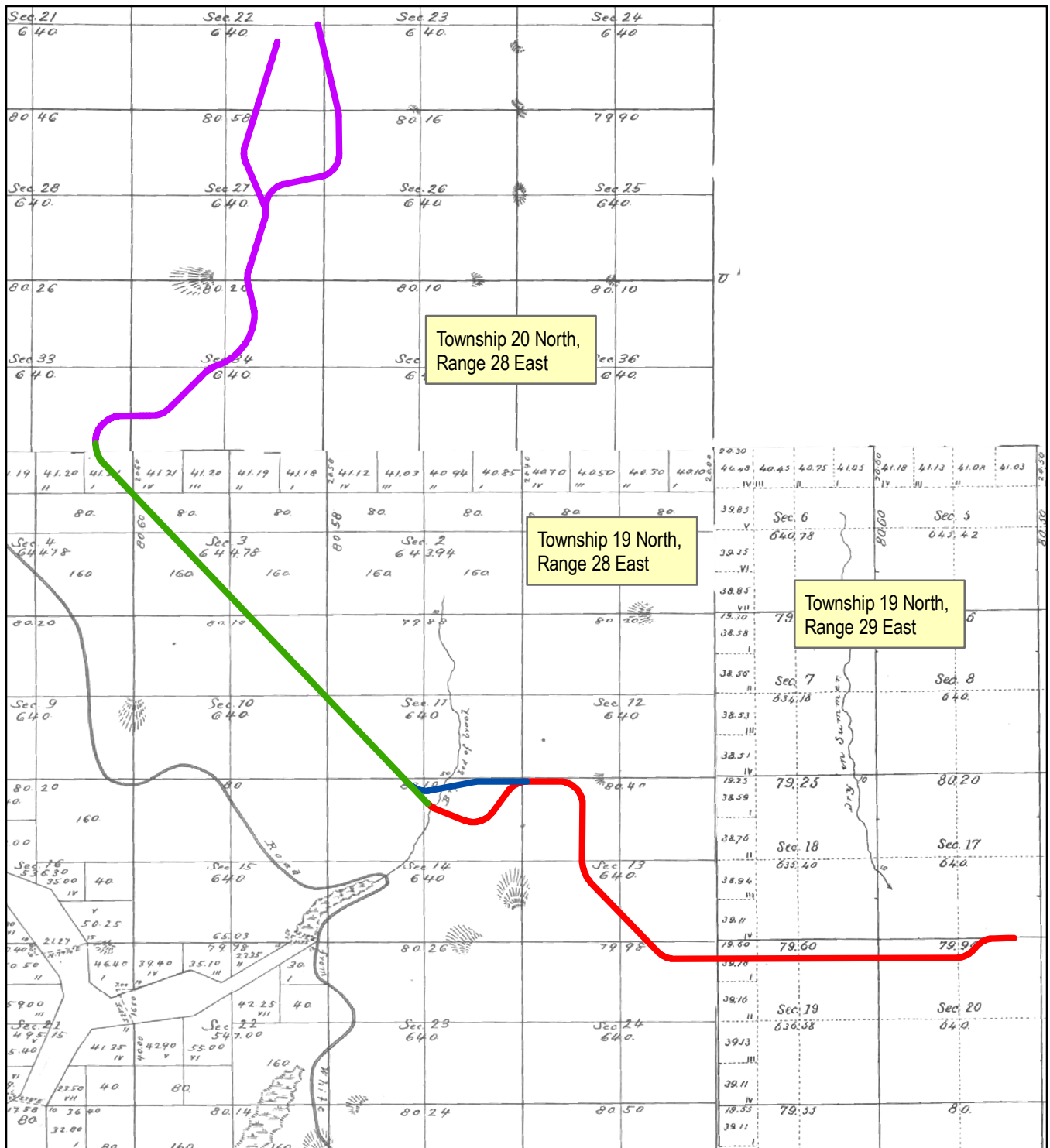
Washington State
Department of Transportation



HDR

Exhibit 3.3
Area of Potential Effects (APE) Map
Northern Columbia Basin Railroad Project
Segment 3 - Existing Columbia Basin Railroad
April 2008

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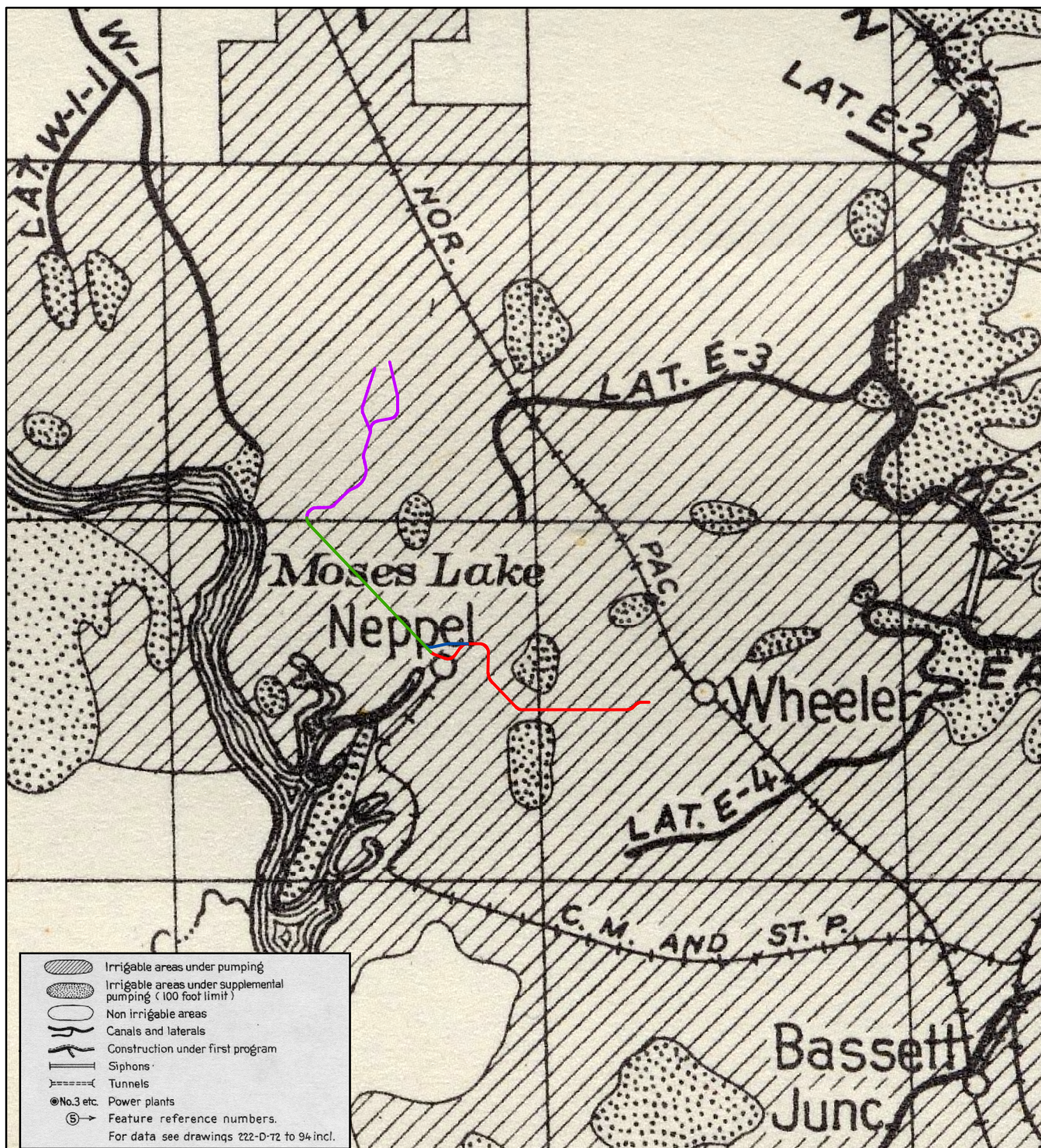
Sources: Department of the Interior - General Land Office Survey
Plats of Township 20 North, Range 28 East (1882), Township 19
North, 28 East (1882) and Township 19 North, 29 East (1883)

- Segment 1
- Segment 1 Alternate Crossing
- Segment 2
- Segment 3 - Existing Columbia Basin Railroad



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Source: Washington State University Library - Early Maps of Washington Digital Collection. Accessed 2007

- Segment 1
- Segment 1 Alternate Crossing
- Segment 2
- Segment 3 - Existing Columbia Basin Railroad



Not to Scale

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Larson (Moses Lake) Air Base

In 1942, the Moses Lake Air Base was established in 1942 to train pilots and combat crew for the B-17 Flying Fortress and P-38 Lightning Aircraft. The base name officially changed to Larson Air Base in 1950, in honor of Major Donald A. Larson, a World War II pilot from Yakima, Washington who was killed in 1944. The Army Air Corps left Moses Lake in 1945, after the cessation of hostilities, and the base was used by Boeing to test its B-50 and B-47 aircraft. Larson Air Force Base was transitioned to standby status in 1945, and reopened as a permanent installation in 1948, under the Air Defense Command. The Boeing Airplane Company continued to use the airstrips and buildings located in the eastern end of the Larson campus from 1948 until 1962. In 1952, the Boeing Airplane Company successfully completed the first flight of the B-52 Stratofortress at the facility.

During the early Cold War period, the base housed the Air Defense Command whose mission was to protect the Hanford Atomic Works and Grand Coulee Dam. Beginning in 1952, the Tactical Air Defense (also known as TAC) was housed at the base. Colonel Clyde W. Owen took command of the base in 1963. Colonel Owen established a base improvement program, which demolished 104 buildings on the base and replaced them with more modern buildings. In 1957, the Military Air Transport (also known as MATS) took over command of the base, followed by Strategic Air Command (also known as SAC) in 1960.

From 1961 to 1965, the 568th Strategic Missile Squadron was housed at Larson Air Force Base. Larson Air Force Base closed in 1966, but was quickly converted into the Port of Moses Lake. In 1968, Japan Airlines began using the airstrips at Port of Moses Lake to train Boeing 747 pilots.

Railroads

In 1909, the Chicago, Milwaukee, St. Paul & Pacific Railroad (CMSTP&P), or Milwaukee Road, completed its Chicago-to-Seattle route, passing through Moses Lake. The Milwaukee Road boasted the shortest transcontinental trip compared to other railroads, such as the Northern Pacific Railway and Great Northern Railway, which had previously completed Pacific routes. The Milwaukee Road was able to create a shorter route with better grades and shorter run times by avoiding many cities, which harmed its freight traffic. It was difficult to run under steam power due to the cold climate, so the Milwaukee Road switched much of the line through the mountains to run on electric power around 1915. The Milwaukee Road had a spur that ran from Tiflis (merely a depot) to Moses Lake in 1927. The Milwaukee Road suffered from the Great Depression, declining passengers due to automobiles, and later, poor decisions and bad

1 management by board members. The Milwaukee Road was sold to the
2 Minneapolis, St. Paul, & Sault Ste. Marie Railroad (Soo Line) in 1985,
3 after three bankruptcies and abandoning or selling much of its track
4 outside the Midwest. The Milwaukee Road was not a major player in the
5 settlement of the Pacific Northwest compared with the Great Northern and
6 Northern Pacific Railroads.

7 Railroads in general suffered from federal control during the World Wars,
8 the Great Depression, and the advent of the automobile and the jet age.
9 James J. Hill's Great Northern Railway, which influenced the opening of
10 the Pacific Northwest, was no different. Many regions of Washington
11 were well served by the Great Northern Railway, which transported
12 lumber or coal to needy ports. However, by the 1950s, it too was feeling
13 the crunch of bad times for the railroad. Many small, local railroads were
14 bought out due to years of little to no profits. A major merger of the Great
15 Northern Railway; the Northern Pacific Railway; the Chicago, Burlington
16 and Quincy Railroad; and the Spokane, Portland and Seattle Railroad
17 created the Burlington Northern line in 1970. In 1996, the Atchinson,
18 Topeka, and Santa Fe Railway was acquired, creating the Burlington
19 Northern Santa Fe Railway (BNSF Railway).

20 **How were other cultural resources identified?**

21 The cultural resources documented in this report were identified through a
22 record search, archival research, a pedestrian survey, and contact with
23 Native American representatives and other interested parties. For the
24 proposed project, surveys were undertaken and documentation prepared in
25 accordance with the Secretary of Interior's Standards and Guidelines for
26 Identification of Historic Properties (48 FR 44716), using personnel who
27 meet the Secretary of Interior's Professional Standards (48 FR 22716) in
28 the fields of prehistoric archaeology, historic archaeology, architectural
29 history, and history.

30 Mr. Jason Cooper, M.A., RPA, Jones & Stokes archaeologist, supervised
31 the archaeological field surveys and is the principal author of this report.
32 Mr. Cooper's qualifications meet and exceed the Secretary of the Interior's
33 Standards for Archaeologists.

34 Ms. Carrie Chasteen, M.S., Jones & Stokes architectural historian,
35 supervised the identification and evaluation of the historic buildings and
36 structures within the APE. Her qualifications meet and exceed the
37 Secretary of the Interior's Standards for Historians and Architectural
38 Historians.- Ms. Chasteen is the principal author of the architectural
39 history section of this report.

What tribal consultation did we include?

The STB, as co-lead with WSDOT, has initiated consultation by sending project letters describing the proposed project to the designated cultural representatives of the federally recognized Colville Confederated Tribes, Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Springs Reservation of Oregon, and the non-federally recognized Wanapum Tribe. This revised draft survey/discipline report will be sent to those tribes for review. Any information gathered during this review will be incorporated in the final version of this document.

Record Search

The Jones & Stokes archaeologist, Ms. Sarah Shufelt, visited the DAHP in Olympia, Washington, in January 2007, and conducted the preliminary record search of the pertinent documents for the study area. Subsequent visits to DAHP facilitated the completion of the record search. The record search was undertaken to identify previously documented archaeological, historic, and architectural resources within and near the APE and to help establish a context for resource significance. Specifically, national, state, and local inventories of architectural/historic resources were examined in order to identify significant local historical events and personages, development patterns, and unique interpretations of architectural styles. The following inventories and sources were consulted:

- DAHP Archaeological Site and Survey Electronic Geographic Information System (GIS) Database;
- The NRHP, National Register Information System (NRIS);
- Washington Information System for Architectural and Archaeological Records Data (WISAARD);
- East Columbia Basin Irrigation District archives;
- Port of Moses Lake archives; and
- Moses Lake Museum and Arts Center (MAC).

What potentially eligible cultural resources are in the APE?

No prehistoric archaeological sites or historic-period archaeological sites were identified within the proposed APE. Sixteen buildings and six structures were identified within the proposed APE that meet the 50-year age criterion for listing in the NRHP. The buildings and structures identified within the APE have not been previously evaluated for listing in the NRHP. No traditional cultural properties have been identified within the proposed APE.

Have other cultural resources studies been conducted in the area?

Four cultural resources studies have been previously conducted within a half-mile of the APE.

Bard et al. (1996) conducted a cultural resources survey of the Pacific Northwest Sugar Company's proposed expansion of the sugar beet factory in Moses Lake. The old Utah & Idaho sugar factory is located in Section 20 of Township 19 North, Range 29 East. This section is within the APE. No previously recorded sites were located within the proposed factory's footprint and no new sites or cultural resources were identified during Bard et al.'s (1996) survey.

Luttrell and Walker (1999) conducted a cultural resources survey for a wetland mitigation bank in Section 23 of Township 29 North, 28 East. This section is not within the current project's APE, but borders two sections of the APE. Pedestrian surveys and shovel test probes were conducted on all dry land within the section. All artifacts identified were from the historic or modern period. Luttrell and Walker recorded the concrete foundations and associated artifacts of the Neppel Pumping Plant as Site 45GR1323. Luttrell and Walker (1999) did not recommend the site for inclusion on the NRHP due to lack of association with significant events and lack of integrity.

Sharley (2003a) conducted a cultural resources survey of the widening of SR 17 in and adjacent to the City of Moses Lake. Sections 10 and 14 of Township 19 North, 28 East are within the APE; other portions of SR 17 are not within the APE. A pedestrian survey and six shovel test probes were conducted along SR 17 in Moses Lake. Historic structures and artifacts and a single possible prehistoric artifact were recorded by Sharley (2003a). None of the structures or artifacts were determined eligible for listing on the NRHP.

Root and Ferguson (2004) conducted a survey of Parker Horn for the Moses Lake Sediment Removal Project. A pedestrian survey and six shovel test probes were conducted on Parker Horn. No prehistoric or historic artifacts were identified by Root and Ferguson (2004), although historic Sinkayuse villages are known to have been located on Parker Horn.

What previously identified cultural resources are in the APE?

Three previously recorded sites are located within a half-mile of the APE.

Site 45GR1476, the Clover Drive debris scatter, is a historic refuse scatter located approximately 180 meters north of the intersection of Clover Drive and Wheeler Road (Road 3 NE). This site consists of over 100 fragmentary pieces of glass and metal debris dating to around the 1930s. The site cannot be tied to a significant person or event and is not considered eligible for listing on the NRHP (Sharley 2003b).

Site 45GR23 consists of the remains of two prehistoric house pits. The house pits have been bisected by plowing activity. The site was not evaluated for listing on the NRHP (R. 1947).

Site 45GR1323 consists of three concrete foundations or structures associated with the Neppel Pumping Plant or C.W. Hull farm. Hull owned the pumping plant and sold water to Neppel before its incorporation into the City of Moses Lake. The structures lack integrity and were not recommended for listing on the NRHP (Luttrell and Walker 1999).

Previously Identified Historic Properties in the APE

No previously recorded historic properties are located within the APE.

Cultural Resources Identified During the Survey

No prehistoric archaeological sites were identified during the background research or pedestrian survey of the study area. The APE maintains a low probability for unknown and significant prehistoric archaeological resources.

A total of 22 historic buildings and/or structures were identified and evaluated within the APE. **Exhibit 3.6** presents the name of each identified resource and relevant location information. **Exhibits 3.7, 3.8, and 3.9** depict the parcel locations for historic buildings and/or structures on an aerial image of the study area. See **Appendix B** for the Historic Property Inventory Report forms.

Pedestrian Survey

Field surveys of the APE were undertaken between August 20 and 24, 2007, according to standard Section 106 regulations and related procedures. During the architectural history fieldwork, conducted by Carrie Chasteen, an assessment was made of extant buildings/structures within the APE to determine whether they meet NRHP eligibility criteria. During the archaeological field investigation, conducted by Shane Sparks and Mike McKillop, Jones & Stokes Archaeologists, the boundary of the APE was confirmed through pedestrian survey transects spaced at 15-meter intervals along the APE. Photographs taken during the file survey of the APE are located in **Appendix C**. The field survey of archaeological, historic, and architectural resources included the following steps:

- Conducting a field survey consisting of a visual on-site examination of every parcel within the APE, including an assessment of integrity;
- Inspecting all areas within the APE that maintained a high probability for unknown archaeological resources;
- Excavating seven shovel test probes with an average depth of 85 centimeters below ground surface in locations that maintained a high probability for unknown archaeological resources and deposits;
- Identifying the age of all major buildings, structures, objects, and potentially coherent districts located within the APE;
- Photographing each potential district feature, major structure, building, or object within the APE; and
- Reviewing in the field of previous survey data, comments from interested parties, and lists of significant historic properties.

Seven shovel test probes were excavated within Segment 1 and Segment 1A, in the areas west of Parker Horn. These areas maintained the highest probability for intact cultural deposits due to their close proximity to water resources associated with Crab Creek and Parker Horn. All tests were excavated by hand and shovel. All sediment was screened through a 1/4 – inch mesh “rocker” screen onto a tarp. After excavation and recording, the screened backdirt was put back into the probes. The probes measured 35 to 40 centimeters at the surface and, on average, were excavated to a depth of 85 centimeters below ground surface. All seven tests yielded negative results for cultural materials. **Exhibit 3.10** depicts the location of the shovel test probes.

The soils encountered in the tests reflect the general profile of the mapped Ephrata sandy loam soil type (Gentry 1984). The soils formed in gravelly glacial outwash mixed with loess and are located on benches and slopes. The surface layer is light, brownish gray fine sandy loam extending to 20 centimeters below ground surface. Three of the shovel probes exhibited a thin ash deposit approximately two centimeters thick in the upper layer. The subsoil is pale brown gravelly fine sandy loam extending approximately 55 centimeters below ground surface. The substratum extends to approximately 60 inches below ground surface and is comprised of gray, extremely gravelly coarse sand (Gentry 1984).

A portion of the APE was not surveyed due to property access issues. These areas are located in relatively moderate to high probability landforms east of Parker Horn and would need to be surveyed for cultural resources prior to project finalization. **Exhibit 3.10** depicts the areas that were not surveyed as a part of this study.

Prior to and following the field survey, site-specific research was conducted using the following sources: Grant County Historical Society, University of Washington Libraries, DAHP, the Internet, Moses Lake Public Library, and the Washington State Archives, Central Region Branch.

Exhibit 3.6 Historic Buildings and Structures Identified and Evaluated within the Area of Potential Effects

Map ID No.	Historic Name	Address	Parcel No.	Year Built	Preliminary NRHP Determination	Exhibit	Section (S), Township (T) and Range (R)
1	10973 Road 4	10973 Road 4	170543000	c. 1957	Not eligible	3.7	S14:T19:R28
2	4199 Miller Street	4199 Miller Street	120498000	1943	Not eligible	3.8	S10:T19:R28
3	4255 Miller Street	4255 Miller Street	120503000	1943	Not eligible	3.8	S10:T19:R28
4	4267 Miller Street	4267 Miller Street	120504000	1943	Not eligible	3.8	S10:T19:R28
5	4279 Miller Street	4279 Miller Street	12505000	1943	Not eligible	3.8	S10:T19:R28
6	4289 Miller Street	4289 Miller Street	120506000	1943	Not eligible	3.8	S10:T19:R28
7	4301 Miller Street	4301 Miller Street	120508000	1943	Not eligible	3.8	S10:T19:R28
8	4321 Longview Street	4321 Longview Street	120513000	1943	Not eligible	3.8	S10:T19:R28

Map ID No.	Historic Name	Address	Parcel No.	Year Built	Preliminary NRHP Determination	Exhibit	Section (S), Township (T) and Range (R)
9	4321 Miller Street	4321 Miller Street	120508000	1943	Not eligible	3.8	S10:T19:R28
10	4325 Miller Street	4325 Miller Street	120509000	1943	Not eligible	3.8	S10:T19:R28
11	4335 Miller Street	4335 Miller Street	120510000	1943	Not eligible	3.8	S10:T19:R28
12	4359 Miller Street	4359 Miller Street	120512000	1943	Not eligible	3.8	S10:T19:R28
13	4890 Grape Drive NE	4890 Grape Drive NE	170325000	c. 1940	Not eligible	3.8	S10:T19:R28
14	8 Place Hangar drainage ditch	8 Place Hangar drainage ditch	171016013	c. 1952	Not eligible	3.9	S27:T20:R28
15	9930 Parkway Drive NE	9930 Parkway Drive NE	110279000	1943	Not eligible	3.8	S10:T19:R28
16	9972 Sunny Drive	9972 Sunny Drive	120405000	1954	Not eligible	3.8	S10:T19:R28
17	Chicago, Milwaukee, St. Paul & Pacific Railroad Building	Chicago, Milwaukee, St. Paul & Pacific Railroad Building	Chicago, Milwaukee, St. Paul & Pacific Railroad right of way	c. 1920	Not eligible	3.8	S10:T19:R28
18	Columbia Basin East Low Canal Feeder Canals: EL20, EL20 Extension, EL20U1, and RCD 180+182	Columbia Basin East Low Canal Feeder Canals: EL20, EL20 Extension, EL20U1, and RCD 180+182	East Columbia Basin Irrigation District Easement	1946-1951	Eligible	3.7	S19 and 24:T19:R28
19	Storm drainage ditch adjacent to Alert Center Building	Storm drainage ditch adjacent to Alert Center Building	17100600	c. 1952	Not eligible	3.9	S27:T20:R28

1 **Significant Cultural Resources Identified in the APE**

2 The following section presents and discusses significant cultural resources
3 identified in the APE.

4 **Archaeological Resources**

5 There are no significant archaeological resources within the APE.

6 **Historic Architectural Resources**

7 A total of 22 resources were identified in the APE and evaluated for
8 eligibility for listing in the NRHP. The Columbia Basin East Low Canal
9 Feeder Canals (Canal No. EL20, EL20U1, and RCD 180+182) appear to
10 be eligible for the NRHP as a result of this study. Canal No. EL20
11 Extension is included in the Columbia Basin East Low Canal Feeder
12 Canals but does not appear eligible for listing in the NRHP. Sixteen other
13 buildings and two structures also do not appear eligible for listing in the
14 NRHP. The following section contains a description and significance
15 statement for each evaluated resource.

16 **10973 Road 4**

17 According to the Grant County Tax Assessor records, the building was
18 constructed in 1968. However, the building appears to have been
19 constructed circa 1957 because of the flat roof with parapet and folded
20 plate roof. The one-story building is rectangular in plan. The flat roof
21 with parapet is clad in an unknown material. A folded plate porch roof is
22 supported by square wood posts and appears to be an alteration. The
23 centrally-located primary entrance is accessed via the covered porch. The
24 exterior walls and porch skirt are clad in stone veneer, which appears to be
25 an alteration. The windows and doors have been boarded up and it is not
26 known if original fabric remains. Portable ancillary buildings are located
27 on the parcel. A low, stone retaining wall separates the buildings from an
28 unpaved parking lot (**Exhibit 3.7**).

29 **Significance Statement**

30 Research was conducted at the Washington State Archives, Central Region
31 Branch, at the Moses Lake Historical Society, and on the Internet. Based
32 on the research, no historically important events are known to have
33 occurred at this site. Therefore, the building does not appear to be eligible
34 for listing in the NRHP under Criterion A.

According to research in the 1944 Moses Lake Irrigation District Assessment Rolls, the parcel was owned by Julius Surmann. Research in the 1961 Metsker's City of Moses Lake, Washington, map indicates the parcel was owned by Columbia Basin Livestock. Research does not indicate that Julius Surmann was a historically important person on the federal, state, or local level. Research also does not indicate that Columbia Basin Livestock was a historically important company on the federal, state, or local level. Therefore, the building does not appear eligible for listing in the NRHP under Criterion B.

The building has been significantly altered and no longer represents a style of architecture. Furthermore, the building is not known to be the work of a master architect nor is it known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

4199 Miller Street

The vernacular style one-story building located at 4199 Miller Street is irregular in plan and was constructed in 1943. The side gabled roof is clad in composition shingles. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with vinyl and aluminum sliding windows. The front porch appears to have been enclosed and the primary entrance appears to have been moved to the southern end of the primary façade. The building appears to have a side addition with shed roof (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are known to be associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been altered and no longer represents a style of architecture. The building has no known associations with a master architect and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

1 4255 Miller Street

2 The vernacular style one-story building located at 4255 Miller Street is
3 rectangular in plan and was constructed in 1943. The side gabled roof is
4 clad in rolled asbestos. The windows have been replaced with vinyl fixed
5 pane windows. The exterior walls are clad in vinyl siding. The entry
6 porch appears to have been enclosed and an attached carport addition was
7 constructed at an unknown date. The entrance is raised, and there are no
8 entry steps or porch (**Exhibit 3.8**).

9 Significance Statement

10 Based on the research, no historically important events are known to have
11 occurred at this site. Research in the Moses Lake Irrigation District
12 Assessment rolls, the East Columbia Basin Irrigation District Assessment
13 rolls, and the Metsker's maps did not identify the original owner of the
14 building. Research in the repositories listed above does not indicate that
15 any historically important persons are associated with the building.
16 Therefore, the building does not appear eligible for listing in the NRHP
17 under Criteria A and B.

18 The building has been altered, is not known to be the work of a master
19 architect, and is not known to have been built using an innovative
20 construction technique. Therefore, the building lacks sufficient
21 architectural quality to be considered eligible for listing in the NRHP
22 under Criterion C.

23 4267 Miller Street

24 The vernacular style one-story building located at 4267 Miller Street is
25 rectangular in plan and was constructed in 1943. The side gabled roof is
26 clad in composition shingles. The exterior walls are clad in asbestos and
27 particle board siding. The windows have been replaced with vinyl sliding
28 and fixed pane units. A rear porch addition was constructed at an
29 unknown date. The primary entrance is located on the southern façade and
30 is accessed via a small, sheltered porch. A shed roof, with square wood
31 post supports, shelters the entryway (**Exhibit 3.8**).

32 Significance Statement

33 Based on the research, no historically important events are known to have
34 occurred at this site. Research in the Moses Lake Irrigation District
35 Assessment rolls, the East Columbia Basin Irrigation District Assessment
36 rolls, and the Metsker's maps did not identify the original owner of the
37 building. Research in the repositories listed above does not indicate that
38 any historically important persons are associated with the building.

Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been substantially altered, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not appear to possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

4279 Miller Street

The vernacular style one-story building located at 4279 Miller Street is rectangular in plan and was constructed in 1943. The side gabled roof is clad in composition shingles. The exterior walls are clad in clapboard siding. The windows have been replaced with aluminum sliding units. A carport addition and entry porch was enclosed at an unknown date (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been altered, has no known associations with a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building lacks sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

4289 Miller Street

The Minimal Traditional style one-story building located at 4289 Miller Street is rectangular in plan and was constructed in 1943. According to *A Field Guide to American Houses* (McAlester 1992), the Minimal Traditional style was common from 1935 to 1950 and is characterized as follows: "...roof pitches are low or intermediate, rather than steep as in the preceding Tudor style. Eaves and rake are close, rather than overhanging as in the succeeding Ranch style. Usually, but not always, there is a large chimney and at least one front-facing gable, both echoing Tudor features. In fact, many examples suggest Tudor cottages with the roof line lowered and detailing removed..." (McAlester 1992). The side

gabled roof is clad in composition shingles. The porch roof is supported by square wood posts and shelters a cast concrete entry porch. The windows have been replaced with aluminum sliding units. The exterior walls are clad in vinyl siding. An attached garage is located on the southern end of the building and appears to be an addition (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building is a common example of a Minimal Traditional building in Grant County, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing on the NRHP under Criterion C.

4301 Miller Street

The Minimal Traditional one-story building located at 4301 Miller Street is rectangular and was constructed in 1943. The side gabled roof is clad in composition shingles. The pent porch roof is supported by square wood posts and shelters a raised wood porch. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with aluminum sliding units (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been altered, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient

1 architectural quality to be considered eligible for listing in the NRHP
2 under Criterion C.

3 4321 Longview Street

4 The Minimal Traditional style duplex located at 4321 Longview Street is
5 rectangular in plan and was constructed in 1943. The side gabled roof is
6 clad in composition shingles. The exterior walls are clad in vertical wood
7 siding. The windows have been replaced with vinyl sliding units. The
8 entrances are raised and accessed via cast concrete porches with wood
9 railings (**Exhibit 3.8**).

10 Significance Statement

11 Based on the research, no historically important events are known to have
12 occurred at this site. Research in the Moses Lake Irrigation District
13 Assessment rolls, the East Columbia Basin Irrigation District Assessment
14 rolls, and the Metsker's maps did not identify the original owner of the
15 building. Research in the repositories listed above does not indicate any
16 historically important persons are associated with the building. Therefore,
17 the building does not appear eligible for listing in the NRHP under Criteria
18 A and B.

19 The building is a common example of a Minimal Traditional style building
20 in Grant County, is not known to be the work of a master architect, and is
21 not known to have been built using an innovative construction technique.
22 Therefore, the building lacks sufficient architectural quality to be
23 considered eligible for the NRHP under Criterion C.

24 4321 Miller Street

25 The one-story Minimal Traditional style building located at 4321 Miller
26 Street is rectangular in plan and was constructed in 1943. The side gabled
27 roof is clad in composition shingles. The exterior walls are clad in T1-11
28 wood siding. The windows have been replaced with aluminum sliding
29 units. The entrance is accessed via a cast concrete porch and the
30 landscaping includes several mature trees (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been substantially altered, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

4325 Miller Street

The one-story Minimal Traditional style building located at 4325 Miller Street is rectangular in plan and was constructed in 1943. The side gabled roof is clad in composition shingles. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with aluminum sliding units. The entrance is accessed via a cast concrete porch and landscaping includes several mature trees (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building is a common example of a Minimal Traditional style residence in Grant County, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

1 4335 Miller Street

2 The one-story Minimal Traditional style building located at 4335 Miller
3 Street is rectangular in plan and was constructed in 1943. The front gabled
4 roof is clad in composition shingles. The exterior walls are clad in
5 clapboard wood siding with shiplap siding located in the gables. The
6 windows have been replaced with vinyl sliding units. The primary
7 entrance is located on the northern façade and is characterized by a
8 covered porch. A pent porch roof is supported by square wood posts and
9 shelters a wood porch deck. Landscape includes mature pine trees
10 **(Exhibit 3.8).**

11 Significance Statement

12 Based on the research, no historically important events are known to have
13 occurred at this site. Research in the Moses Lake Irrigation District
14 Assessment rolls, the East Columbia Basin Irrigation District Assessment
15 rolls, and the Metsker's maps did not identify the original owner of the
16 building. Research in the repositories listed above does not indicate that
17 any historically important persons are associated with the building.
18 Therefore, the building does not appear eligible for listing in the NRHP
19 under Criteria A and B.

20 The building is a common example of a Minimal Traditional style building
21 in Grant County, is not known to be the work of a master architect, and is
22 not known to have been built using an innovative construction technique.
23 Therefore, the building does not possess sufficient architectural quality to
24 be considered eligible for listing in the NRHP under Criterion C.

25 4359 Miller Street

26 The one-story Ranch style building located at 4359 Miller Street is
27 rectangular in plan and was constructed in 1943. The side gabled roof is
28 clad in composition shingles. The exterior walls are clad in T1-11 wood
29 siding. The windows have been replaced with vinyl sliding units. The
30 entrance is located off center and is accessed via a cast concrete porch.
31 The building appears to have been altered with a side addition
32 **(Exhibit 3.8).**

33 Significance Statement

34 Based on the research, no historically important events are known to have
35 occurred at this site. Research in the Moses Lake Irrigation District
36 Assessment rolls, the East Columbia Basin Irrigation District Assessment
37 rolls, and the Metsker's maps did not identify the original owner of the
38 building. Research in the repositories listed above does not indicate that
39 any historically important persons are associated with the building.

Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building is a common example of a Ranch style building in Grant County, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not appear to have sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

4890 Grape Drive NE

The one-story ancillary building located at 4890 Grape Drive NE is square in plan and was constructed circa 1940. The shed roof is clad in composition. The exterior walls are clad in wood clapboard. The windows are aluminum sash. The window openings appear to have been altered with the installation of smaller windows and plywood in-fill between the existing window surrounds and the aluminum windows (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls and the East Columbia Basin Irrigation District Assessment rolls did not identify the original owner of the building. According to research in the 1961 Metsker's City of Moses Lake, Washington map, the owners of the building were Edwin and Louise Leland. Research in the repositories identified above does not indicate that Edwin and Louise Leland were historically important persons. Therefore, the building does not appear eligible for listing on the NRHP under Criteria A and B.

Two buildings are located on the parcel: a single-family residence and an ancillary building. The single-family residence is not located within the APE and documentation of the building is beyond the scope of this cultural resources survey. According to research in the Grant County Assessor on-line records, the primary building was constructed in 1997. However, due to the construction materials and methods, the ancillary building appears to date to circa 1940. The ancillary building is not representative of a style of architecture, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the ancillary building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

8 Place Hangar Drainage Ditch

The 8 Place Hangar drainage ditch is horseshoe-shaped and located to the east of the 8 Place Hangar building. The ditch is approximately 10 feet wide and six feet deep. The ditch is un-channelized and runs through an empty field. The proposed project would cross the ditch in two places, and approximately 200 feet of the ditch alignment is contained within the APE (**Exhibit 3.9**).

Significance Statement

The property being evaluated within the APE is a drainage ditch; however, background information is being provided for the Moses Lake Army Air Base. As previously mentioned, the Moses Lake Army Air Base was established in 1942 to train pilots and combat crew for the B-17 Flying Fortress and P-38 Lightning aircraft. The base name officially changed to Larson Air Force Base in 1950 in honor of Major Donald A. Larson, a World War II pilot from Yakima, Washington, who was killed in 1944. The Army Air Corps left Moses Lake in 1945 after the cessation of hostilities, and the base was then used by Boeing to test its B-50 and B-47 aircraft. Larson Air Force Base was transitioned to standby status in 1945, and reopened as a permanent installation in 1948 under the Air Defense Command. The Boeing Airplane Company continued to use the airstrips and buildings located in the eastern end of the Larson campus from 1948 until 1962. In 1952, the Boeing Airplane Company successfully completed the first flight of the B-52 Stratofortress.

During the early Cold War period, the base housed the Air Defense Command, whose mission was to protect the Hanford Atomic Works and Grand Coulee Dam. Beginning in 1952, the Tactical Air Defense (also known as TAC) was housed at the base.

Colonel Clyde W. Owen took command of the base in 1963. Colonel Owen established a base improvement program, which demolished 104 buildings on the base and replaced them with more modern buildings. In 1957, the Military Air Transport (also known as MATS) took over command of the base, followed by the Strategic Air Command (also known as SAC) in 1960. From 1961 to 1965, the 568th Strategic Missile Squadron was housed at Larson Air Force Base. Larson Air Force Base closed in 1966, but the facility was quickly converted into the Port of Moses Lake. In 1968, Japan Airlines began using the airstrips at the Port of Moses Lake to train Boeing 747 pilots.

The 8 Place Hangar building was constructed circa 1952 by the Boeing Airplane Company and was a hangar for eight B-52s. Larson Air Force Base may be eligible for listing in the NRHP as a historic district under Criterion A for its role in World War II and the Cold War, and the 8 Place

1 Hangar Building could be considered a potential district contributor to the
2 potential NRHP-eligible historic district. The drainage ditches are non-
3 contributing features of the potential NRHP-eligible historic district
4 because they are utilitarian in design and construction, and have no known
5 associations with historical events or persons associated with Larson Air
6 Force Base. However, documentation of Larson Air Force Base as a
7 historic district is beyond the scope of this project because the APE
8 includes only portions of drainage ditches.

9 The 8 Place Hangar drainage ditch is located to the east of the building and
10 was constructed as a catch basin for the hangar; it is assumed that the ditch
11 was constructed at the same time, circa 1952. The 8 Place Hangar
12 drainage ditch does not appear to have played a significant role in the
13 history of Larson Air Force Base. The 8 Place Hangar drainage ditch has
14 no known associations with historically important persons. Therefore, the
15 8 Place Hangar drainage ditch does not appear eligible for listing in the
16 NRHP under Criteria A or B.

17 The 8 Place Hangar drainage ditch was constructed using utilitarian
18 building materials and techniques. The drainage ditch is also not known to
19 be the work of a master. Therefore, the 8 Place Hangar drainage ditch
20 does not embody the distinctive characteristics of a type of construction
21 and does not appear individually eligible for listing in the NRHP under
22 Criterion C.

23 Storm Drainage Ditch Adjacent to the Alert Center Building

24 The un-channelized storm drainage ditch adjacent to the Alert Center
25 Building is lined with gravel. The low-sloped ditch is approximately 150
26 to 200 feet wide and six to seven feet deep. The drainage ditch traverses an
27 undeveloped field located within the eastern perimeter of the former
28 Larson Air Force Base, which is located adjacent to the Alert Center
29 Building. The APE contains a portion of the ditch that is approximately
30 1,400 feet long by 100 feet wide (**Exhibit 3.9**).

31 Significance Statement

32 The storm drainage ditch is adjacent to the Alert Center Building and
33 conveyed water from the general area of the airstrips and the Alert Center
34 Building. It is assumed that the ditch was constructed at the same time,
35 circa 1952. The drainage storm ditch does not appear to have played a
36 significant role in the history of Larson Air Force Base. The drainage
37 storm ditch has no known associations with historically important persons.
38 Therefore, the drainage storm ditch does not appear eligible for listing in
39 the NRHP under Criteria A or B.

The drainage storm ditch was constructed using utilitarian building materials and techniques. The drainage storm ditch is also not known to be the work of a master. Therefore, the drainage storm ditch does not embody the distinctive characteristics of a type of construction and does not appear eligible for listing in the NRHP under Criterion C.

9930 Parkway Drive NE

The one-story Minimal Traditional style building located at 9930 Parkway Drive NE is L-shaped in plan and was constructed in 1943. The cross gabled roof is clad in corrugated metal. The exterior walls are clad T1-11 wood siding, which appears to be an alteration. Some of the windows are aluminum sliding windows and some of the windows have been replaced with vinyl sliding windows. The entrance is raised and the entry porch appears to have been enclosed. The landscape includes a mature cedar tree (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been substantially altered and is a common example of a Minimal Traditional style building in Grant County. Furthermore, the building is not known to be the work of a master architect nor is it known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for the NRHP under Criterion C.

9972 Sunny Drive

The one-story Minimal Traditional style building located at 9972 Sunny Drive is rectangular in plan and was constructed in 1954. The front gabled roof is clad in composition shingles. The exterior walls are clad in concrete block and vinyl siding. The windows have been replaced with vinyl sliding units. The primary entrance is at grade and is located on the southern facade. A metal canopy, with decorative metal supports, shelters the porch area and appears to be an alteration. An attached carport is located in the western facade. The carport roof is supported by wood posts and appears to be an addition (**Exhibit 3.8**).

Significance Statement

Based on the research, no historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls, and the Metsker's maps did not identify the original owner of the building. Research in the repositories listed above does not indicate that any historically important persons are associated with the building. Therefore, the building does not appear eligible for listing in the NRHP under Criteria A and B.

The building has been substantially altered and is a common example of a Minimal Traditional style building in Grant County. Furthermore, the building is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the NRHP under Criterion C.

Chicago, Milwaukee, St. Paul & Pacific Railroad Building

The Chicago, Milwaukee, St. Paul & Pacific Railroad Building is a one-story building and rectangular in plan. The barrel vault roof is clad in wood shingles. The exterior walls are clad in vertical and horizontal wood clapboard siding. A wood door is located on the eastern facade. The building appears to have been constructed with remnants of a wood boxcar and appears to date to circa 1920 (**Exhibit 3.8**).

Significance Statement

The building evaluated within the APE is a rail-related building; however, background information is provided for the Chicago, Milwaukee, St. Paul & Pacific Railroad. The earliest iteration of the Chicago, Milwaukee, St. Paul & Pacific Railroad, also known as the Milwaukee Road, was formed in 1886. The early railroad serviced the Midwest. The railroad expanded its service to Seattle and Tacoma in 1909, and portions of the line were electrified by 1920. The Milwaukee Road declared a final bankruptcy in 1980 and was purchased by the Soo Line at that time. The Milwaukee Road is generally regarded as having a minimal impact on settlement patterns and the development of industry and commerce in the Northwest due to its late construction date. However, a multiple property NRHP nomination form was prepared for the historic resources of the Milwaukee Road in Washington, 1909 to 1945, and the following resources were identified as significant features of the Milwaukee Road: construction camps, division points, depots, train order stations, and substations and substation housing. The Milwaukee Road, which operated from 1909 to 1980, was found to be significant for its pioneering efforts in railroad

electrification, and to a lesser extent, for advanced technological mechanisms used during construction of the railroad.

The building is located within the Milwaukee Road right of way and is assumed to be associated with the railroad. However, the purpose or function of the building is unknown and does not match the building types described in the multiple property submission form. The building type was not identified as a significant property type in the 1992 NRHP nomination form. Furthermore, the building is not known to be associated with historically important events on the federal, state, or local level. Therefore, the building does not appear to contribute to the Milwaukee Road NRHP historic district or as an individual resource under Criterion A.

Research on the Internet, at the Washington State Archives, and at the Moses Lake Historical Society indicates that the building has no known associations with historic persons. Therefore, the building does not appear eligible for listing in the NRHP under Criterion B.

The building is utilitarian in design and execution, is not representative of a style of architecture, and has no known associations with a master architect. Therefore, the building does not possess sufficient architectural quality to be considered eligible for the NRHP under Criterion C.

Columbia Basin East Low Canal Feeder Canals: EL20, EL20 Extension, EL20U1, and RCD 180+182

Exhibit 3.7 depicts the location of all Columbia Basin East Low Feeder Canals identified and evaluated below.

RCD (Rocky Coulee Diversion) 180+182:

The irrigation canal is approximately eight feet wide and five feet deep. Approximately 100 linear feet of the canal lie within the APE. The canal is earthen and overgrown with plants.

EL (East Low) 20U1:

The irrigation canal is approximately two feet wide and 16 to 18 inches deep. Approximately 100 linear feet of the canal lie within the APE. The canal is channelized with poured-in-place cast concrete. The canal has steps to help regulate water flow.

EL (East Low) 20:

The irrigation canal is approximately 10 feet wide and four feet deep. Approximately 100 linear feet of the canal lie within the APE. The canal

1 is earthen. Signage indicates that the canal is maintained with herbicides
2 to prevent plant growth and maintain water flow. The canal runs through a
3 cast concrete culvert under Wheeler Road (Road 3 NE).

4 ***EL (East Low) 20 Extension:***

5 The irrigation canal is approximately one foot wide and 16 to 18 inches
6 deep. Approximately 100 linear feet of the canal lie within the APE. The
7 canal is earthen construction and partially lined with rocks. A metal pipe
8 parallels the south side of the canal, and it is not known if the pipe is part
9 of the irrigation system.

10 **Significance Statement**

11 Four irrigation canals located within the APE were evaluated; however,
12 background information is provided for the Columbia Basin Project. As
13 previously mentioned, Moses Lake, originally known as Neppel, is located
14 in the high desert plateau of central Washington State. Early farmers in
15 the area attempted to cultivate crops in the fertile soil through dry farming.
16 The arid plateau of central Washington State could not support large crops
17 without irrigation. As a result, small, regional irrigation projects limited in
18 scope attempted to irrigate fertile farmland.

19 While the massive Columbia River ran through the plateau, the river was
20 lower than the surrounding farmland, which made irrigation difficult
21 without a major feat of engineering. Plateau farmers clamored for a dam
22 for irrigation. The desire for irrigation coincided with a growing
23 awareness of hydroelectric potential of the Columbia River and the need
24 for Works Progress Administration projects to decrease Depression-era
25 unemployment. These desires culminated in the U.S. Government
26 embarking on what is known as the Columbia Basin Project.

27 The Columbia Basin Project began with the construction of the Grand
28 Coulee Dam, the largest concrete structure ever built. Other structures
29 related to the initial phase of construction of the Columbia Basin Project
30 include: the Grand Coulee Power Complex and pump-generating plant;
31 Banks Lake and Feeder Canal; the Main, West, East High, and East Low
32 Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal
33 (Bureau of Reclamation History Program 1998). The project has been
34 called the largest Bureau of Reclamation project since the establishment of
35 the Bureau. Construction of the Grand Coulee Dam began in 1933 and
36 was completed in 1941. However, World War II interrupted construction
37 of the irrigation canals. Grand Coulee Dam was a significant source of
38 electricity for the Pacific Northwest during World War II, and continues to
39 function in this capacity.

1 Following the end of World War II, construction of the canal system
2 resumed. A total of 671,000 acres of farmland were brought under
3 irrigation through the construction of the Main, West, East High, and East
4 Low Canals, and associated irrigation ditches. Construction of the canal
5 system began in 1946 and continued over the course of the next 30 years.
6 Water began flowing through the canals and irrigation ditches to Moses
7 Lake in 1951 (Columbia Basin Project, East Columbia Irrigation District
8 Resource Maps 1962). Federal funding to support construction of the
9 system slowly dissipated over the course of the late 1960s and early 1970s,
10 and construction has largely been placed on hold.

11 The Columbia Basin Project elements consisting of the Grand Coulee
12 Dam; the Grand Coulee Power Complex and pump-generating plant;
13 Banks Lake and Feeder Canal; the Main, West, East High, and East Low
14 Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal
15 appear to be eligible for listing in the NRHP under Criteria A and C. This
16 is because the dams and canal system had a profound impact on farming,
17 electricity generation, and the economy in Washington State and the
18 Pacific Northwest region in general; were a major feat of engineering; and
19 used innovative construction techniques. However, documentation of the
20 Columbia Basin Project as an historic district is beyond the scope of this
21 project because the APE includes only four irrigation canals: EL20, EL20
22 Extension, EL20U1, and RCD 180+182.

23 Canals EL20, EL20U1, and RCD 180+182 were constructed between 1946
24 and 1951. Canal EL20 Extension was constructed after 1962, according to
25 research in the East Columbia Irrigation District maps (1962). Prior to
26 construction of the canals, Moses Lake was a small agrarian community.
27 The installation of the Moses Lake Army Air Base (later known as Larson
28 Air Force Base) in 1942 brought an influx of military personnel and their
29 families, which also led to an increase in the town's population. The
30 construction of the canals led to larger farming enterprises. The Utah and
31 Idaho Sugar Company built its largest sugar beet processing facility in the
32 country in Moses Lake in 1953, which resulted in thousands of acres of
33 sugar beets being planted and irrigated by water from the Columbia Basin
34 Project. The Utah and Idaho Sugar Company closed the processing
35 facility in 1978 due to increased costs of sugar production and the
36 increasing use of corn syrup sweeteners. The sugar beet fields were
37 converted to produce beans, corn, onions, wheat, and grains for livestock.
38 Moses Lake remains a largely agrarian-based community.

39 Canals EL20, EL20U1 and RCD 180+182 appear to contribute under
40 Criterion A to the potential Columbia Basin Project because they appear to
41 be part of the original design of the Columbia Basin Project and because
42 of the impact irrigation has had on the economic development of Moses
43 Lake. Canal EL20 Extension does not appear to contribute to the potential

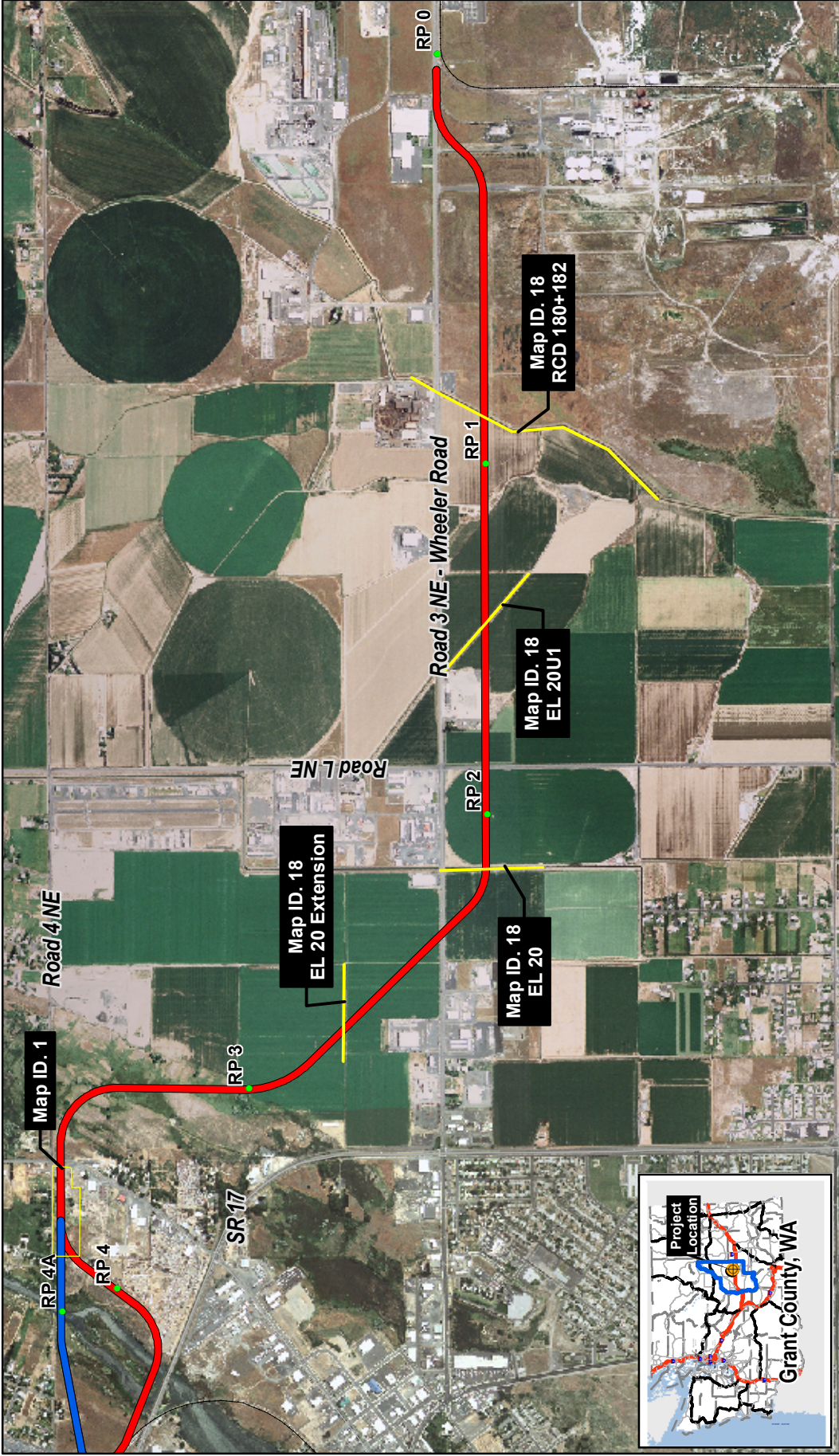
1 Columbia Basin Project NRHP-eligible historic district or as an individual
2 resource because research in the Columbia Basin Project irrigation maps
3 does not indicate that the canal was part of the original irrigation system
4 constructed in Moses Lake between 1946 and 1951. Furthermore, Canal
5 EL20 Extension has not achieved 50 years of age and does not appear to
6 possess sufficient exceptional importance to be considered eligible for
7 listing as a district contributor or as an individual resource under Criteria
8 Consideration G, and Canal EL20 Extension is not eligible for the NRHP.

9 Research does not indicate that any of the canals have known associations
10 with a historically important person(s). Therefore, the canals do not
11 appear eligible for listing in the NRHP as contributors to a potential
12 NRHP-eligible historic district or as individual structures under Criterion
13 B. The canals were constructed by dredging soil from fields. Canal
14 EL201U is channelized and the remaining canals are earthen. The canals
15 were constructed using utilitarian methods and designs. Therefore, the
16 canals do not appear to be eligible for listing in the NRHP as contributors
17 to a potential NRHP-eligible historic district or as individual historic
18 resources under Criterion C because they are of common design and
19 construction.

20 **What are the findings of this review?**

21 No prehistoric archaeological sites, historic-period archaeological sites, or
22 traditional cultural properties have been identified within the APE.

23 Based on the results of this study, it was determined that sixteen buildings
24 and three structures recorded are not potentially eligible for listing in the
25 NRHP; the Columbia Basin East Low Canal Feeder Canals (Canal No.
26 EL20, EL20U1, and RCD 180+182) were determined to be eligible for the
27 NRHP; and Canal No. EL20 Extension is included in the Columbia Basin
28 East Low Canal Feeder Canals but does not appear eligible for listing in
29 the NRHP.



Sources: HDR (2007), Grant County NAIP Imagery (2006)



Historic Buildings and Structures Identified and Evaluated

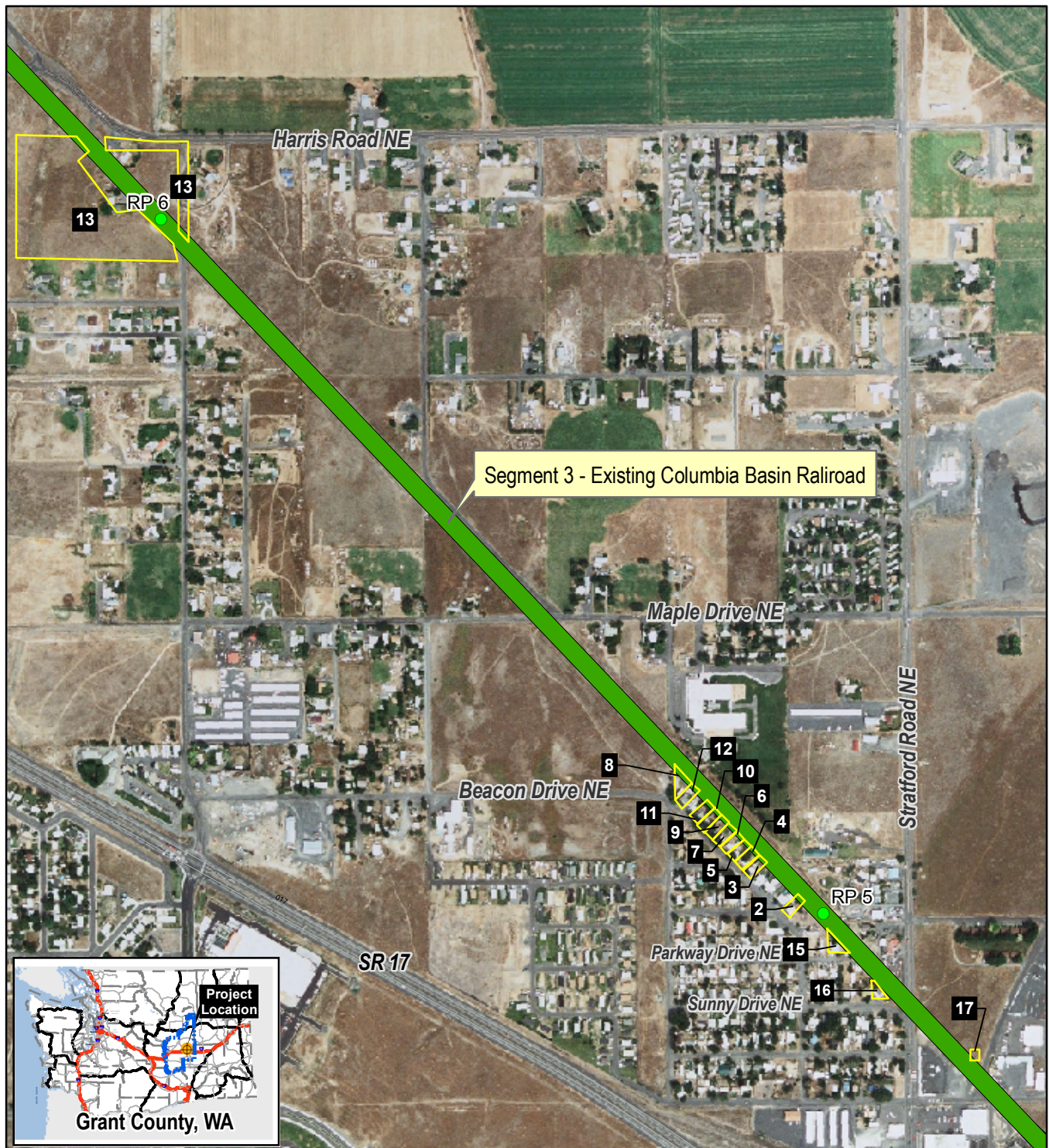
Segment 1 Alternate Crossing

Segment 1



Exhibit 3.7
Cultural Resources Location Map
Northern Columbia Basin Railroad Project
Segment 1 and Segment 1 Alternate Crossing
April 2008

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Sources: HDR (2006); Grant County, WA NAIP Imagery (2006)

- Historic Buildings and Structures Identified and Evaluated
- Segment 3
- Rail Mile-Posts

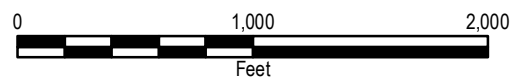
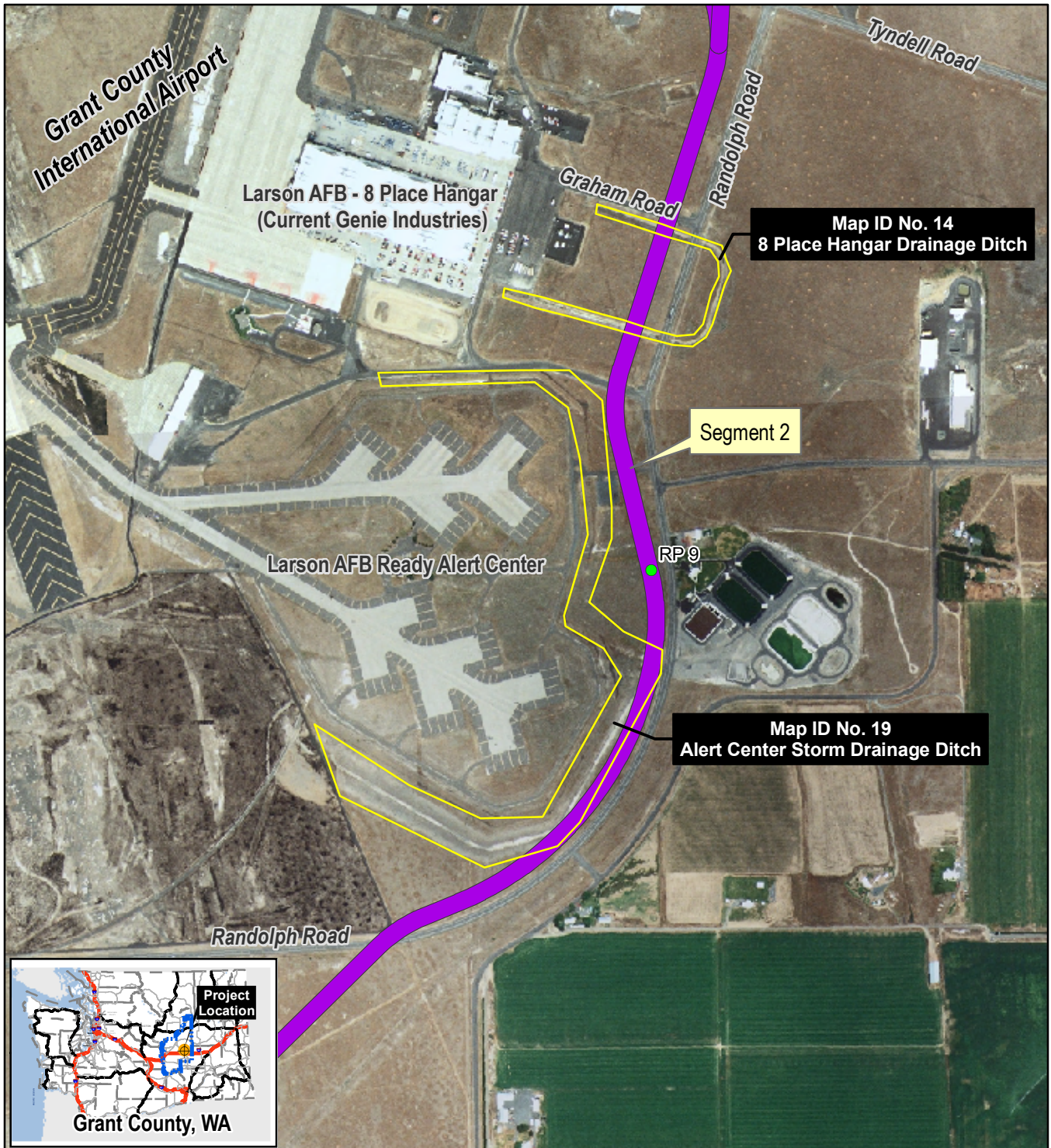


Exhibit 3.8
Cultural Resources Location Map
Northern Columbia Basin Railroad Project
Segment 3 - Existing Columbia Basin Railroad
April 2008

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Sources: HDR (2006); Grant County NAIP Imagery (2006)

- Historic Structures Identified and Evaluated
- Segment 2
- Rail Mile-Posts (RP)

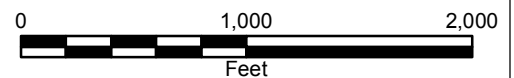


Exhibit 3.9
Cultural Resources Location Map
Northern Columbia Basin Railroad Project
Segment 2
April 2008

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Sources: HDR (2007), Grant County NAIP Imagery (2006)



- ✕ Negative Shovel Test Probe Location
- Areas Not Surveyed - No Property Access
- Segment 1 Alternate Crossing
- Segment 1
- Columbia Basin Railroad
- Rail Mile-posts (RP)

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Chapter Four

Potential Effects

This chapter discusses the potential effects of the proposed project on cultural resources.

What methods were used to evaluate potential effects of the proposed project on cultural resources?

In order to comply with Section 106 of the NHPA, any effects of the proposed undertaking on properties listed in or determined eligible for inclusion in the NRHP must be analyzed by applying the *Criteria of Adverse Effect* [36 CFR Part 800.5(a)]. The criteria were applied as follows:

(1) Criteria of adverse effect. An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that will diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

(2) Examples of adverse effects. Adverse effects on historic properties include, but are not limited to:

(i) Physical destruction of or damage to all or part of the property;

(ii) Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;

(iii) Removal of the property from its historic location;

(iv) Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;

1 (v) *Introduction of visual, atmospheric or audible elements that*
2 *diminish the integrity of the property's significant historic features;*

3 (vi) *Neglect of a property which causes its deterioration, except*
4 *where such neglect and deterioration are recognized qualities of a*
5 *property of religious and cultural significance to an Indian tribe or*
6 *Native Hawaiian organization; and*

7 (vii) *Transfer, lease, or sale of property out of Federal ownership*
8 *or control without adequate and legally enforceable restrictions or*
9 *conditions to ensure long-term preservation of the property's*
10 *historic significance.*

11 **Application of the Criteria of Adverse Effect**

12 (i) *Physical destruction of or damage to all or part of the*
13 *property;*

14 **RCD 180+182:**

15 The proposed project would construct a bridge to allow the newly
16 constructed tracks to span the canal. In order to construct the bridge, no
17 piers would be sunk into the canal and the abutments would be constructed
18 clear of the channel. Therefore, the proposed project would not physically
19 destroy or damage all or part of the property, and would not result in an
20 adverse effect under Criterion *i*.

21 **EL20U1:**

22 The proposed project would construct a siphon (culvert) to allow the
23 newly constructed tracks to span the canal. The canal is currently
24 channelized with poured-in-place cast concrete. It is not known when the
25 canal was channelized, but it is assumed that the canal was originally of
26 earthen construction similar to RDC and EL20. The proposed siphon
27 (culvert) would be constructed within the existing channelized streambed,
28 and in generally the same profile. Because the canal is already
29 channelized and the siphon would be constructed within the channelized
30 streambed, the proposed siphon would not result in physical destruction or
31 damage to all or part of the property and would not result in an adverse
32 effect under Criterion *i*.

33 **EL20:**

34 The proposed project would construct a bridge to allow the newly
35 constructed tracks to span the canal. In order to construct the bridge, no
36 piers would be sunk into the canal and the abutments would be constructed
37 clear of the channel. Therefore, the proposed project would not physically

1 destroy or damage all or part of the property, and would not result in an
2 adverse effect under Criterion *i*.

3 (ii) *Alteration of a property, including restoration,*
4 *rehabilitation, repair, maintenance, stabilization,*
5 *hazardous material remediation and provision of*
6 *handicapped access, that is not consistent with the*
7 *Secretary's Standards for the Treatment of Historic*
8 *Properties (36 CFR part 68) and applicable guidelines;*

9 The proposed project would be designed to have minimal impact on the
10 canals. The proposed bridges would not result in an alteration of a historic
11 property, including restoration, rehabilitation, repair, maintenance,
12 stabilization, hazardous material remediation, or provision of handicapped
13 access to canals RCD and EL20. The culvert would be constructed within
14 the existing channelized streambed of EL20U1. Because EL20U1 has
15 previously been altered by channelizing the streambed, the proposed
16 project would not result in a new alteration of a historic property,
17 including restoration, rehabilitation, repair, maintenance, stabilization,
18 hazardous material remediation, or provision of handicapped access.
19 Therefore, the proposed project would not result in an adverse effect under
20 Criterion *ii*.

21 (iii) *Removal of the property from its historic location;*

22 The proposed project would retain the current alignment of the canals and
23 would not remove the property from its historic location. Therefore, the
24 proposed project would not result in an adverse effect under Criterion *iii*.

25 (iv) *Change of the character of the property's use or of physical*
26 *features within the property's setting that contribute to its*
27 *historic significance;*

28 The canals would continue to convey water as part of a vital irrigation
29 system. The canals traverse Grant County, Washington. The canals are
30 funneled through culverts and bridges at various points along the
31 waterways, specifically where the canals pass under Wheeler Road (Road
32 3 NE), which is adjacent to and crosses the APE in Segment 1. Therefore,
33 the introduction of bridges and culverts would not result in a change of the
34 character of the property's use or of physical features within the property's
35 setting that contribute to its historic significance, and would not result in
36 an adverse effect under Criterion *iv*.

37 (v) *Introduction of visual, atmospheric or audible elements*
38 *that diminish the integrity of the property's significant*
39 *historic features;*

As described above, the canals are currently funneled through culverts and bridges where they intersect with Wheeler Road (Road 3 NE), and elsewhere in Grant County, Washington. Because the canals are currently spanned by existing bridges and culverts, the proposed project would not introduce visual, atmospheric, or audible elements that would diminish the integrity of the property's significant features, and would not result in an adverse effect under Criterion v.

(vi) Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and

The proposed project would not affect the flow or use of the canals. Therefore, the proposed project would not result in neglect of a property which caused its deterioration, and would not result in an adverse effect under Criterion vi.

(vii) Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.

The proposed project would not include the transfer, lease, or sale of property out of federal ownership or control. Therefore, the proposed project would not result in an adverse effect under Criterion vii.

Based on the results of the archival, field, archaeological and architectural studies conducted, the proposed project would not result in any potential impacts to historic, cultural, or archaeological resources, including the NRHP-eligible canals that would be intersected by the project alignment. Accordingly, it is Jones & Stokes' recommendation that a Finding of No Effect to Historic Properties pursuant to Section 106§800.5(3)(b) would be appropriate.

Are there any potential impacts to historic, cultural, and archeological resources?

The proposed project would not result in any potential impacts to historic, cultural, or archaeological resources.

Operational Impacts and Benefits

Procedures for addressing previously unknown cultural resources discovered during construction are identified in 36 CFR 800 (for

implementing the Section 106 process). Specific regulations regarding compliance with Section 106 state that, although the tasks necessary to comply with Section 106 may be delegated to others, the federal agency (STB) is ultimately responsible for ensuring that the Section 106 process is completed according to statute.

Construction Impacts

During construction the proposed project may temporarily affect the historic properties located adjacent to the rail line by increasing the amount of noise and dust. Temporary impacts, such as those anticipated during construction, are not considered to be an “effect” as defined in the federal guidance for evaluating a project’s effect on historic properties because they do not diminish characteristics of the property that make it eligible for the NRHP.

Buried cultural artifacts such as chipped or ground stone, historic refuse, building foundations, or human bone could be discovered during construction excavation, although this is highly unlikely. If significant cultural resources were discovered during construction excavation, all construction activity in the immediate area would stop so that a qualified archaeologist could accurately assess the context and integrity of the find.

If significant cultural resources were discovered (e.g., human skeletal remains), the contractor would contact the Moses Lake Police and/or Grant County Sheriff, and the affected Tribes. DAHP and the STB Section of Environmental Analysis would also be contacted immediately upon discovery of significant cultural resources. All Native American graves on private or public lands are protected under Washington State law (RCW 27.44). Disturbance of a known Native American grave is considered a Class C felony.

The Port of Moses Lake and the Washington State Department of Transportation were responsible for obtaining access to properties within the project study area. Although repeated attempts were made, access to two parcels was denied. The two parcels are located east of Parker Horn and are the following: Parcel No. 170543000 and Parcel No. 170545000

Both of these parcels are located in the project’s APE, but were not surveyed. Once these parcels are acquired (for implementation of this project), properties will be surveyed and a determination will be made. At that time, mitigation and commitments, as necessary, will be revised.

In summary, it is Jones & Stokes recommendation that the proposed project would result in a Finding of No Adverse Effect pursuant to Section 106§800.5(3)(b); therefore, the proposed project would not result in any unavoidable impacts to historic, cultural, or archaeological resources.

Reducing Potential Construction Impacts

The construction contractor would be required to observe the following:

- Construction storage and staging areas would be established to stage all heavy equipment used during construction, to store all construction materials, and to stockpile all construction debris not immediately transported from the project area.
- Construction storage and staging areas would be located in currently developed locations such as parking lots, where practicable.
- If it was necessary to construct staging areas, a professional archaeologist would carry out an archaeological survey of the proposed construction storage and/or staging areas.

Further steps to avoid or minimize project effects are discussed in detail in Chapter Five of this document.

Could the proposed project have other effects on cultural resources that are delayed or distant from it?

All buildings more than 50 years old (based on the proposed project's tentative construction date) were researched and evaluated for historical significance. Pending SHPO concurrence with the findings of this report, the proposed project would not result in a delayed or distant impact on the 16 buildings located within the APE. The proposed project may have delayed or distant effects on the canals that are within the APE. Further design development for this project would identify any potential effects to the canals.

Chapter Five

Measures Taken to Avoid or Minimize Project Effects

Would there be any unavoidable impacts to cultural resources?

Based on the results of the archival, field, archaeological and architectural studies conducted, Jones & Stokes recommends that the proposed project would result in a Finding of No Adverse Effect pursuant to Section 106§800.5(3)(b); therefore, the proposed project would not result in any unavoidable impacts to historic, cultural, or archaeological resources.

What mitigation measures are proposed to avoid and/or minimize impacts to cultural resources?

Since the proposed project would not result in any adverse effect or unavoidable impacts to historic, cultural, or archaeological resources, formal mitigation measures would not be required. Measures developed to address construction and operation-related issues are discussed in Chapter Four and project-related Best Management Practices (BMPs) are outlined below.

BMPs, a Temporary Erosion and Sedimentation Control (TESC) Plan, and a Spill Prevention Control and Countermeasures (SPCC) Plan would be developed and implemented to minimize negative construction impacts. The stormwater runoff and erosion control measures incorporated into the project proposal would be designed to meet or exceed specifications and guidelines for BMPs.

All erosion and sedimentation control devices shown on the civil construction plans would be installed prior to the first stage of site preparation or any site disturbance. In addition, the temporary erosion control measures would be inspected daily by the contractor and maintained as necessary to ensure they were functioning properly.

The proposed project would include the following erosion and sedimentation controls, as appropriate:

- Silt fencing with geotextile material would be installed along the proposed project area perimeter.

- Proprietary catch basin inserts would be placed in all new and existing catch basins receiving runoff from the disturbed areas of the project.
- Existing vegetation would be preserved to the maximum extent possible.
- Exposed soils would be seeded and composted, and emergency covering with plastic or straw would be employed if there was a major storm event.
- Street sweeping would be required daily.
- After the site was stabilized, all storm sewer facilities would be cleaned to prevent remaining sediment from leaving the site when erosion control BMPs were removed.

Should the TESC measures described above not prove adequate to control erosion and sedimentation, the contractor would install additional facilities as directed by WSDOT to protect adjacent properties. In addition, all work would cease and the contractor would immediately commence restoration or mitigation measures as approved by WSDOT. Restoration measures would continue until the problem was rectified.

An Unanticipated Discovery Plan has been developed, which would be implemented by the contractor for the proposed project. This would further help to avoid or minimize unanticipated effects to historic, cultural, and archaeological resources. The Unanticipated Discovery Plan is located in **Appendix D** of this report.

WSDOT and STB shall then consult with the DAHP, interested tribes, the applicant and other consulting parties to determine appropriate mitigation measures.

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5 [Basin%20Railroad%20Project%20Feasability%20Study.pdf](http://www.wsdot.wa.gov/freight/images/Northern%20Columbia%20Basin%20Railroad%20Project%20Feasability%20Study.pdf).
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14
15
16

List of Preparers

Carrie Chasteen, Architectural Historian – Historical Research and Site Evaluations. M.S. Historic Preservation. More than 6 years of experience at Jones & Stokes in Section 106 compliance and architectural/historic surveys.

Jason B. Cooper, Archaeologist – M.A. Anthropology; Register of Professional Archaeologists. More than 6 years of experience at Jones & Stokes and approximately 15 years in Section 106 compliance and archaeological surveys.

Shane Sparks, Archaeologist – B.A. Religion-Historical Studies and Archaeology. Less than 1 year of experience at Jones & Stokes, bolstered by Shane's 5 years in the field of cultural resource management.

Amy J. Jordan, Archaeologist – M.A., Anthropology. Less than 1 year of experience at Jones & Stokes, bolstered by Amy's 5 years in the field of cultural resource management.

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Appendix A: Correspondence

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

October 17, 2007

Allyson Brooks, Ph.D.
State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Re: STB Finance Docket No. 34936, Northern Columbia Basin
Railroad Project in Moses Lake, Washington; Determination of Area
of Potential Effect

Dear Dr. Brooks:

As you know, the Washington State Department of Transportation (WSDOT) and the Surface Transportation Board (STB or Board) are serving as co-lead agencies for the environmental review of a proposed rail construction project called the Northern Columbia Basin Railroad Project (Project). The project is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 16 U.S.C. 470f (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding the proposed project and 2) elicit comments from your office with regard to a determination of the Area of Potential Effect (APE) for the proposed project. (See Figure 1).

Location Information and Project Description

The proposed project includes the construction of two new rail line segments and the rehabilitation of an existing rail line segment. (See Figures 2a – 2c). Segment 1 consists of the construction of a new rail line from the area known as Wheeler to the area known as Parker Horn. Segment 1 also includes the crossing of Parker Horn, just northeast of the existing SR 17 crossing. (See Figure 2a). Segment 2 proposes to extend the existing Columbia Basin Railroad track to the industrial areas just east and northeast of the Grant County International Airport. (See Figure 2c). Segment 3 proposes to improve the existing Northern Columbia Basin Railroad track between the area known as Parker Horn and the Grant County International Airport. (See Figure 2b). A more detailed description of the proposed rail line construction and rehabilitation is attached for your review. The proposed project is expected to increase rail traffic by one train (with approximately 10-15 cars) per week, and this traffic could potentially increase over time.

Project grading and staging area activities will occur within the proposed project rights-of-way (ROW), with the exception of one proposed excavation area located at Rail Post (RP) 4 on Segment 1. This proposed excavation area will enlarge the ROW to 120 feet. All proposed grading and staging areas are included in the proposed APE boundary established for this study.

The proposed rail project is located in Sections 19 and 20 of Township 19 North, Range 29 East, Sections 3, 4, 10-14, and 24 of Township 19 North, Range 28 East, and Sections 15, 21, 22, 27, 33 and 34 of Township 20 North, Range 28 East, Willamette Meridian, Grant County, Washington. (See Figure 1). Project alignment maps of the proposal are attached to this document.

Area of Potential Effect

For archaeological resources and Traditional Cultural Properties, a proposed APE that encompasses the horizontal and vertical extent of the proposed undertaking is suggested. For historic buildings and/or structures, we suggest an APE that extends 50 feet from the centerline (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking. This 100-foot buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures.

Tribal Government-to-Government Consultation

With regard to Native American tribal consultation, the Board and WSDOT initiated consultation with the Confederated Tribes of the Warm Springs Reservation of Oregon, Wanapum Tribe, Colville Confederated Tribes, and the Confederated Tribes and Bands of the Yakama Nation in February 2007. At the time of this letter, we had not received any response from the tribes. However, we are continuing to send the tribes information about the proposed project.

We would appreciate your comments on the suggested APE for this project. The Board contact for this project is Christa Dean, Attorney and Project Manager, at (202) 245-0299 or christa.dean@stb.dot.gov. The WSDOT contact for this project is Elizabeth Phinney, Rail Environmental Manager, at (360)705-7902 or phinnee@wsdot.wa.gov. We look forward to working with your office to ensure our compliance with the Section 106 process. Please do not hesitate to us if you have any questions.

Sincerely,



Victoria Rutson
Chief
Section of Environmental Analysis

Attachments: Figure 1. Project Vicinity Map
Figure 2a, 2b and 2c. Project Location and Area of Potential Effects Map
Description of the Proposed Rail Line Construction and Rehabilitation

cc: Elizabeth Phinney, WSDOT Rail



STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

October 31, 2007

Ms. Christa Dean
Section of Environmental Analysis, Surface Transportation Board
1925 K Street NW
Washington, DC 20423-0001

RECEIVED

NOV 02 2007

WSDOT RAIL OFFICE

In future correspondence please refer to:

Log: 041007-02-STB

Property: STB Docket No. 34936, Northern Columbia Basin Railway Project

Re: Archaeology - APE Concur

Dear Ms. Dean:

We have reviewed the materials forwarded to our office for the Northern Columbia Basin Railway project (STB Docket No. 34936). Thank you for your description of the area of potential effect (APE) for the project. We concur with the definition of the APE. We look forward to the results of your cultural resources survey efforts, your consultation with the concerned tribes, and receiving the survey report. We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Should additional information become available, our assessment may be revised. Please note that DAHP has developed a set of cultural resource reporting guidelines. You can obtain a copy of these guidelines from our Web site. Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A., RPA
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov

Cc: Elizabeth Phinney, WSDOT Rail Office, MS 47387



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

RECEIVED
FEB 26 2007
WSDOT RAIL OFFICE

February 21, 2007

The Honorable Ron Suppah, Chairman
Confederated Tribes of the Warm Springs Reservation of Oregon
P.O. Box C
Warm Springs, OR 97761-3001

**RE: Section 106 Consultation for STB Finance Docket No. 34936,
Northern Columbia Basin Railroad Project – Construction and
Operation – In Grant County, Washington**

Dear Chairman Suppah:

The Surface Transportation Board (Board) and the Washington State Department of Transportation (WSDOT) are beginning an environmental review for a proposed rail construction project called the Northern Columbia Basin Railroad Project. The project is located in the Moses Lake area of Grant County, Washington. I have enclosed a map of the proposed project area for your reference.

The purpose of the Northern Columbia Basin Railroad Project is to attract new rail-dependent businesses to the Moses Lake area, and to encourage the continued use and preservation of rail in the region. The three components of the proposed project include:

- Building a new rail line from Wheeler to Parker Horn;
- Improving existing track between Parker Horn and the Grant County International Airport (GCIA); and
- Extending the existing Columbia Basin Railroad's track to the industrial areas just south and east of the GCIA.

In order to comply with the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act; the Board's environmental rules; WSDOT requirements; and other applicable Federal and state laws and regulations, the Board's Section of Environmental Analysis (SEA) and WSDOT will prepare an environmental document that evaluates the potential environmental effects of the proposed project, including any reasonable and feasible alternatives to the proposed route.

Because the proposed project may be located within an area historically affiliated with the Confederated Tribes of the Warm Springs Reservation of Oregon (Confederated Tribes of Warm Springs), the Board is formally initiating government-to-government consultation with the Confederated Tribes of Warm Springs as a Federally recognized tribe. Pursuant to Section 106, we would like consultation to address historic resource issues, including whether properties of religious and cultural significance to your tribe are potentially located within the proposed project area. See 36 CFR 800.2(c)(4).

For the proposed project, the Board and WSDOT are co-lead agencies. Federal, state, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement. See 40 CFR 1501.5(b). As the lead Federal agency, the Board is ultimately responsible for government-to-government consultations with Federally recognized tribes. Because WSDOT has specific expertise in the state of Washington regarding tribal issues, we recommend that the Confederated Tribes of Warm Springs work directly with WSDOT regarding the specific activities involved in identifying and addressing the concerns and interest of the Confederated Tribes of Warm Springs. **The WSDOT contact is Elizabeth Phinney, Environmental Coordinator for the WSDOT Rail Office. Ms. Phinney may be contacted at (360) 705-7902 or phinnee@wsdot.wa.gov.**

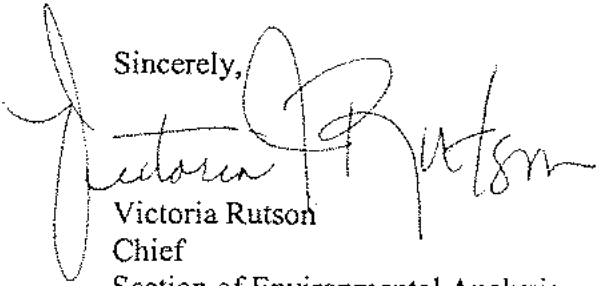
If you would prefer not to work directly with WSDOT or if you have any specific concerns regarding our government-to-government consultation responsibilities, please let us know in your response to this letter. **We will consult with you directly regarding specific issues as you feel appropriate and as required under Federal law.**

Please inform SEA if you would like Section 106 consulting party status for the proposed project. We would appreciate receiving your response within 30 days following your receipt of this letter. Due to the delay in receiving mail at the Board, e-mail responses are strongly recommended in addition to hard copies of your response via regular mail.

Please send your comments to:
Surface Transportation Board
Section of Environmental Analysis
Attn: Christa Dean
Washington D.C. 20423-0001

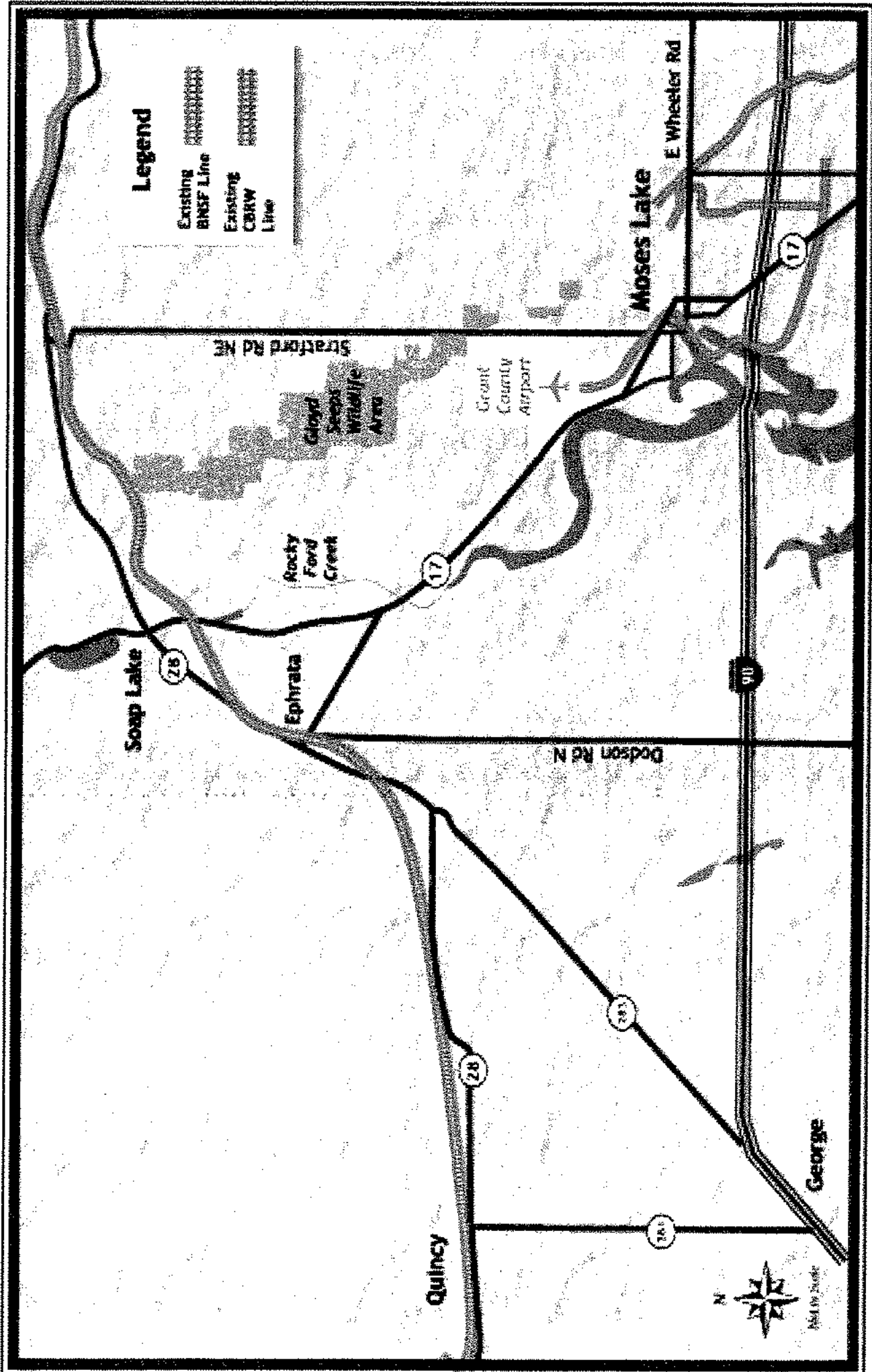
Please send your emails to:
christa.dean@stb.dot.gov

If you have any questions about this proposed project, please do not hesitate to contact Christa Dean with SEA at (202) 565-1606 or Elizabeth Phinney with WSDOT at (360) 705-7902. Thank you for your time and we look forward to working with you.

Sincerely,

Victoria Rutson
Chief
Section of Environmental Analysis

Enclosure

cc: Kate Valdez, Yakama THPO
Johnson Meninick, Yakama Cultural Resources
Phillip Rigdon, Yakama Natural Resources
Dr. Allyson Brooks, Washington SHPO
Colleen Jollie, WSDOT Tribal Liaison
Elizabeth Phinney, WSDOT Rail





SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

February 21, 2007

The Honorable Lavina Washines, Chairwoman
Confederated Tribes and Bands of the Yakama Nation, Washington
P.O. Box 151
Toppenish, WA 98948-0151

**RE: Section 106 Consultation for STB Finance Docket No. 34936,
Northern Columbia Basin Railroad Project – Construction and
Operation – In Grant County, Washington**

Dear Chairwoman Washines:

The Surface Transportation Board (Board) and the Washington State Department of Transportation (WSDOT) are beginning an environmental review for a proposed rail construction project called the Northern Columbia Basin Railroad Project. The project is located in the Moses Lake area of Grant County, Washington. I have enclosed a map of the proposed project area for your reference.

The purpose of the Northern Columbia Basin Railroad Project is to attract new rail-dependent businesses to the Moses Lake area, and to encourage the continued use and preservation of rail in the region. The three components of the proposed project include:

- Building a new rail line from Wheeler to Parker Horn;
- Improving existing track between Parker Horn and the Grant County International Airport (GCIA); and
- Extending the existing Columbia Basin Railroad's track to the industrial areas just south and east of the GCIA.

In order to comply with the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act; the Board's environmental rules; WSDOT requirements; and other applicable Federal and state laws and regulations, the Board's Section of Environmental Analysis (SEA) and WSDOT will prepare an environmental document that evaluates the potential environmental effects of the proposed project, including any reasonable and feasible alternatives to the proposed route.

Because the proposed project may be located within an area historically affiliated with the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation), the Board is formally initiating government-to-government consultation with the Yakama Nation as a Federally recognized tribe. Pursuant to Section 106, we would like consultation to address historic resource issues, including whether properties of religious and cultural significance to your tribe are potentially located within the proposed project area. See 36 CFR 800.2(c)(4).

For the proposed project, the Board and WSDOT are co-lead agencies. Federal, state, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement. See 40 CFR 1501.5(b). As the lead Federal agency, the Board is ultimately responsible for government-to-government consultations with Federally recognized tribes. Because WSDOT has specific expertise in the state of Washington regarding tribal issues, we recommend that the Yakama Nation work directly with WSDOT regarding the specific activities involved in identifying and addressing the concerns and interest of the Yakama Nation. **The WSDOT contact is Elizabeth Phinney, Environmental Coordinator for the WSDOT Rail Office. Ms. Phinney may be contacted at (360) 705-7902 or phinnee@wsdot.wa.gov.**

If you would prefer not to work directly with WSDOT or if you have any specific concerns regarding our government-to-government consultation responsibilities, please let us know in your response to this letter. **We will consult with you directly regarding specific issues as you feel appropriate and as required under Federal law.**

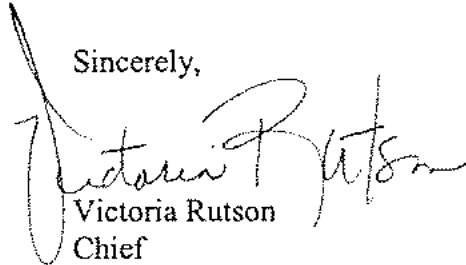
Please inform SEA if you would like Section 106 consulting party status for the proposed project. We would appreciate receiving your response within 30 days following your receipt of this letter. Due to the delay in receiving mail at the Board, e-mail responses are strongly recommended in addition to hard copies of your response via regular mail.

Please send your comments to:
Surface Transportation Board
Section of Environmental Analysis
Attn: Christa Dean
Washington D.C. 20423-0001

Please send your emails to:
christa.dean@stb.dot.gov

If you have any questions about this proposed project, please do not hesitate to contact Christa Dean with SEA at (202) 565-1606 or Elizabeth Phinney with WSDOT at (360) 705-7902. Thank you for your time and we look forward to working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with a large initial "V" and "R".

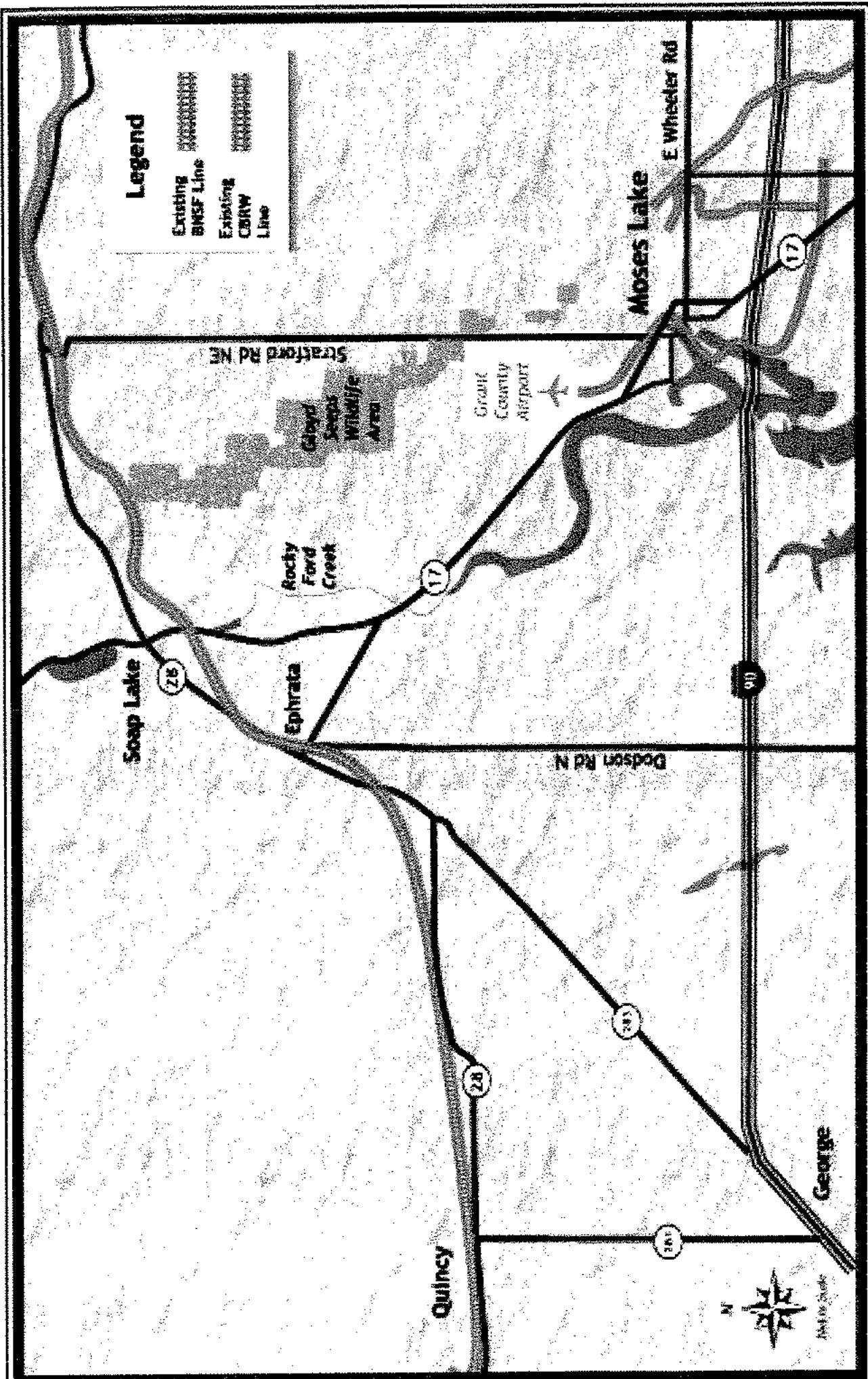
Victoria Rutson

Chief

Section of Environmental Analysis

Enclosure

cc: Kate Valdez, Yakama THPO
Johnson Meninick, Yakama Cultural Resources
Phillip Rigdon, Yakama Natural Resources
Dr. Allyson Brooks, Washington SHPO
Colleen Jollie, WSDOT Tribal Liaison
Elizabeth Phinney, WSDOT Rail





SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

February 21, 2007

The Honorable Rex Buck, Chairman
Wanapum Tribe
15655 Wanapum Loop SW
Beverly, WA 98321

**RE: Section 106 Consultation for STB Finance Docket No. 34936,
Northern Columbia Basin Railroad Project – Construction and
Operation – In Grant County, Washington**

Dear Chairman Buck:

The Surface Transportation Board (Board) and the Washington State Department of Transportation (WSDOT) are beginning an environmental review for a proposed rail construction project called the Northern Columbia Basin Railroad Project. The project is located in the Moses Lake area of Grant County, Washington. I have enclosed a map of the proposed project area for your reference.

The purpose of the Northern Columbia Basin Railroad Project is to attract new rail-dependent businesses to the Moses Lake area, and to encourage the continued use and preservation of rail in the region. The three components of the proposed project include:

- Building a new rail line from Wheeler to Parker Horn;
- Improving existing track between Parker Horn and the Grant County International Airport (GCIA); and
- Extending the existing Columbia Basin Railroad's track to the industrial areas just south and east of the GCIA.

In order to comply with the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act; the Board's environmental rules; WSDOT requirements; and other applicable Federal and state laws and regulations, the Board's Section of Environmental Analysis (SEA) and WSDOT will prepare an environmental document that evaluates the potential environmental effects of the proposed project, including any reasonable and feasible alternatives to the proposed route.

Because the proposed project may be located within an area historically affiliated with the Wanapum Tribe, the Board is inviting the Wanapum Tribe to participate as a consulting party in the Section 106 process. See 36 CFR 800.3(f). Pursuant to Section 106, we would like consultation to address historic resource issues, including whether properties of religious and cultural significance to your tribe are potentially located within the proposed project area. See 36 CFR 800.2(c)(5).

For the proposed project, the Board and WSDOT are co-lead agencies. Federal, state, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement. See 40 CFR 1501.5(b). Because WSDOT has specific expertise in the state of Washington regarding tribal issues, we recommend that the Wanapum Tribe work directly with WSDOT regarding the specific activities involved in identifying and addressing the concerns and interest of the Wanapum. **The WSDOT contact is Elizabeth Phinney, Environmental Coordinator for the WSDOT Rail Office. Ms. Phinney may be contacted at (360) 705-7902 or phinnee@wsdot.wa.gov.**

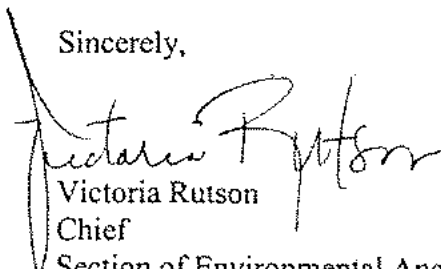
Please inform SEA if you would like Section 106 consulting party status for the proposed project. We would appreciate receiving your response within 30 days following your receipt of this letter. Due to the delay in receiving mail at the Board, e-mail responses are strongly recommended in addition to hard copies of your response via regular mail.

Please send your comments to:
Surface Transportation Board
Section of Environmental Analysis
Attn: Christa Dean
Washington D.C. 20423-0001

Please send your emails to:
christa.dean@stb.dot.gov

If you have any questions about this proposed project, please do not hesitate to contact Christa Dean with SEA at (202) 565-1606 or Elizabeth Phinney with WSDOT at (360) 705-7902. Thank you for your time and we look forward to working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with a long, sweeping underline that extends to the right.

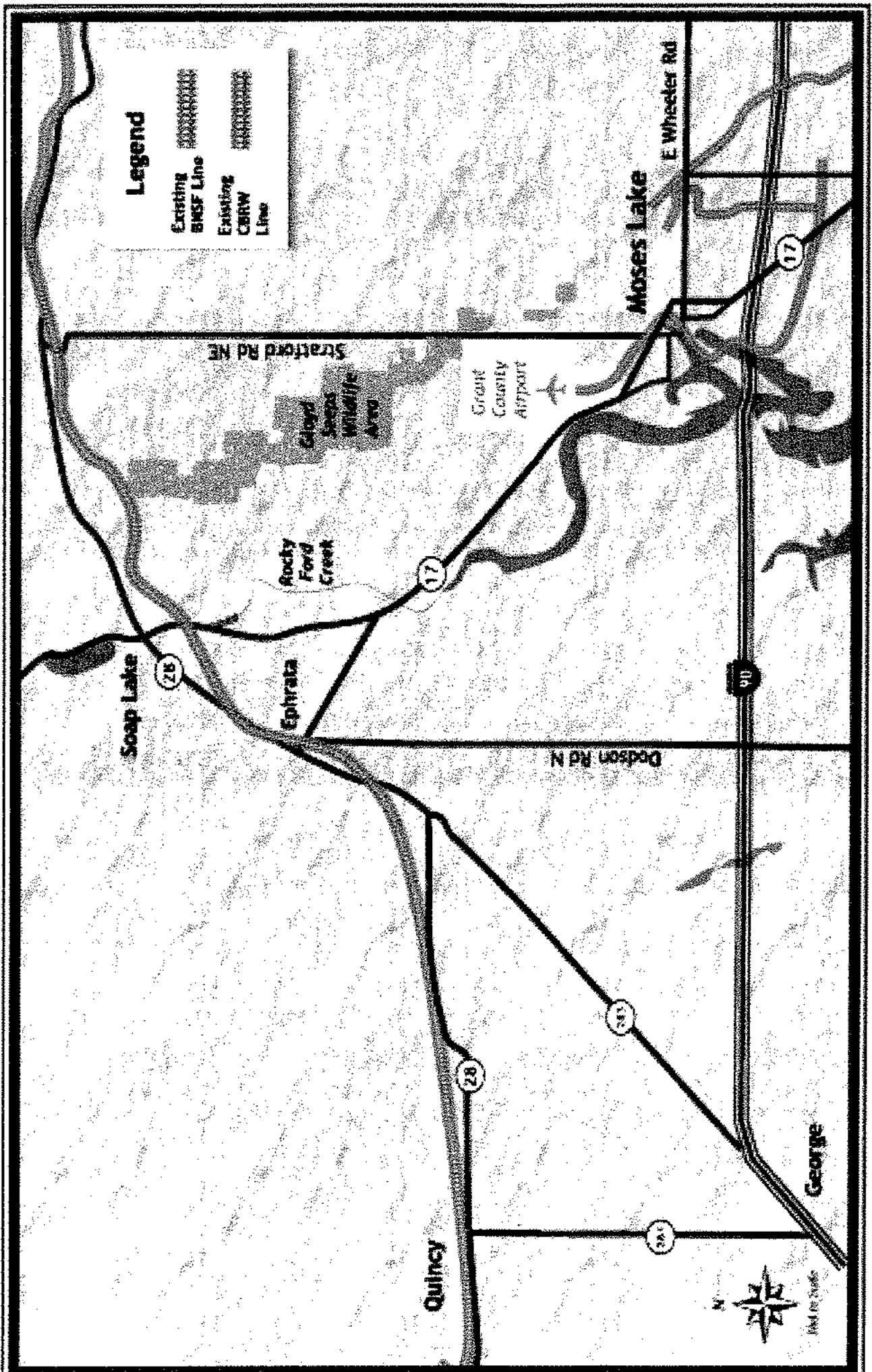
Victoria Rutson
Chief

Section of Environmental Analysis

Enclosure

cc: Kate Valdez, Yakama THPO
Johnson Meninick, Yakama Cultural Resources
Phillip Rigdon, Yakama Natural Resources
Dr. Allyson Brooks, Washington SHPO
Colleen Jollie, WSDOT Tribal Liaison
Elizabeth Phinney, WSDOT Rail

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Economics, Environmental Analysis and Administration

February 21, 2007

The Honorable Mike Marchand, Chairman
Colville Confederated Tribes
P.O. Box 150
Nespelem, WA 98155-0150

**RE: Section 106 Consultation for STB Finance Docket No. 34936,
Northern Columbia Basin Railroad Project – Construction and
Operation – In Grant County, Washington**

Dear Chairman Marchand:

The Surface Transportation Board (Board) and the Washington State Department of Transportation (WSDOT) are beginning an environmental review for a proposed rail construction project called the Northern Columbia Basin Railroad Project. The project is located in the Moses Lake area of Grant County, Washington. I have enclosed a map of the proposed project area for your reference.

The purpose of the Northern Columbia Basin Railroad Project is to attract new rail-dependent businesses to the Moses Lake area, and to encourage the continued use and preservation of rail in the region. The three components of the proposed project include:

- Building a new rail line from Wheeler to Parker Horn;
- Improving existing track between Parker Horn and the Grant County International Airport (GCIA); and
- Extending the existing Columbia Basin Railroad's track to the industrial areas just south and east of the GCIA.

In order to comply with the National Environmental Policy Act of 1969; Section 106 of the National Historic Preservation Act; the Board's environmental rules; WSDOT requirements; and other applicable Federal and state laws and regulations, the Board's Section of Environmental Analysis (SEA) and WSDOT will prepare an environmental document that evaluates the potential environmental effects of the proposed project, including any reasonable and feasible alternatives to the proposed route.

Because the proposed project may be located within an area historically affiliated with the Colville Confederated Tribes (Colville Tribe), the Board is formally initiating government-to-government consultation with the Colville Tribe as a Federally recognized tribe. Pursuant to Section 106, we would like consultation to address historic resource issues, including whether properties of religious and cultural significance to your tribe are potentially located within the proposed project area. See 36 CFR 800.2(c)(4).

For the proposed project, the Board and WSDOT are co-lead agencies. Federal, state, or local agencies, including at least one Federal agency, may act as joint lead agencies to prepare an environmental impact statement. See 40 CFR 1501.5(b). As the lead Federal agency, the Board is ultimately responsible for government-to-government consultations with Federally recognized tribes. Because WSDOT has specific expertise in the state of Washington regarding tribal issues, we recommend that the Colville Tribe work directly with WSDOT regarding the specific activities involved in identifying and addressing the concerns and interest of the Colville Tribe. **The WSDOT contact is Elizabeth Phinney, Environmental Coordinator for the WSDOT Rail Office. Ms. Phinney may be contacted at (360) 705-7902 or phinnee@wsdot.wa.gov.**

If you would prefer not to work directly with WSDOT or if you have any specific concerns regarding our government-to-government consultation responsibilities, please let us know in your response to this letter. **We will consult with you directly regarding specific issues as you feel appropriate and as required under Federal law.**

Please inform SEA if you would like Section 106 consulting party status for the proposed project. We would appreciate receiving your response within 30 days following your receipt of this letter. Due to the delay in receiving mail at the Board, e-mail responses are strongly recommended in addition to hard copies of your response via regular mail.

Please send your comments to:

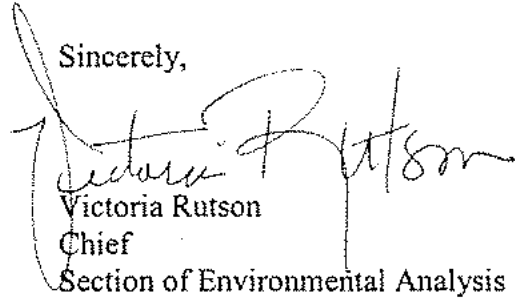
**Surface Transportation Board
Section of Environmental Analysis
Attn: Christa Dean
Washington D.C. 20423-0001**

Please send your emails to:

christa.dean@stb.dot.gov

If you have any questions about this proposed project, please do not hesitate to contact Christa Dean with SEA at (202) 565-1606 or Elizabeth Phinney with WSDOT at (360) 705-7902. Thank you for your time and we look forward to working with you.

Sincerely,

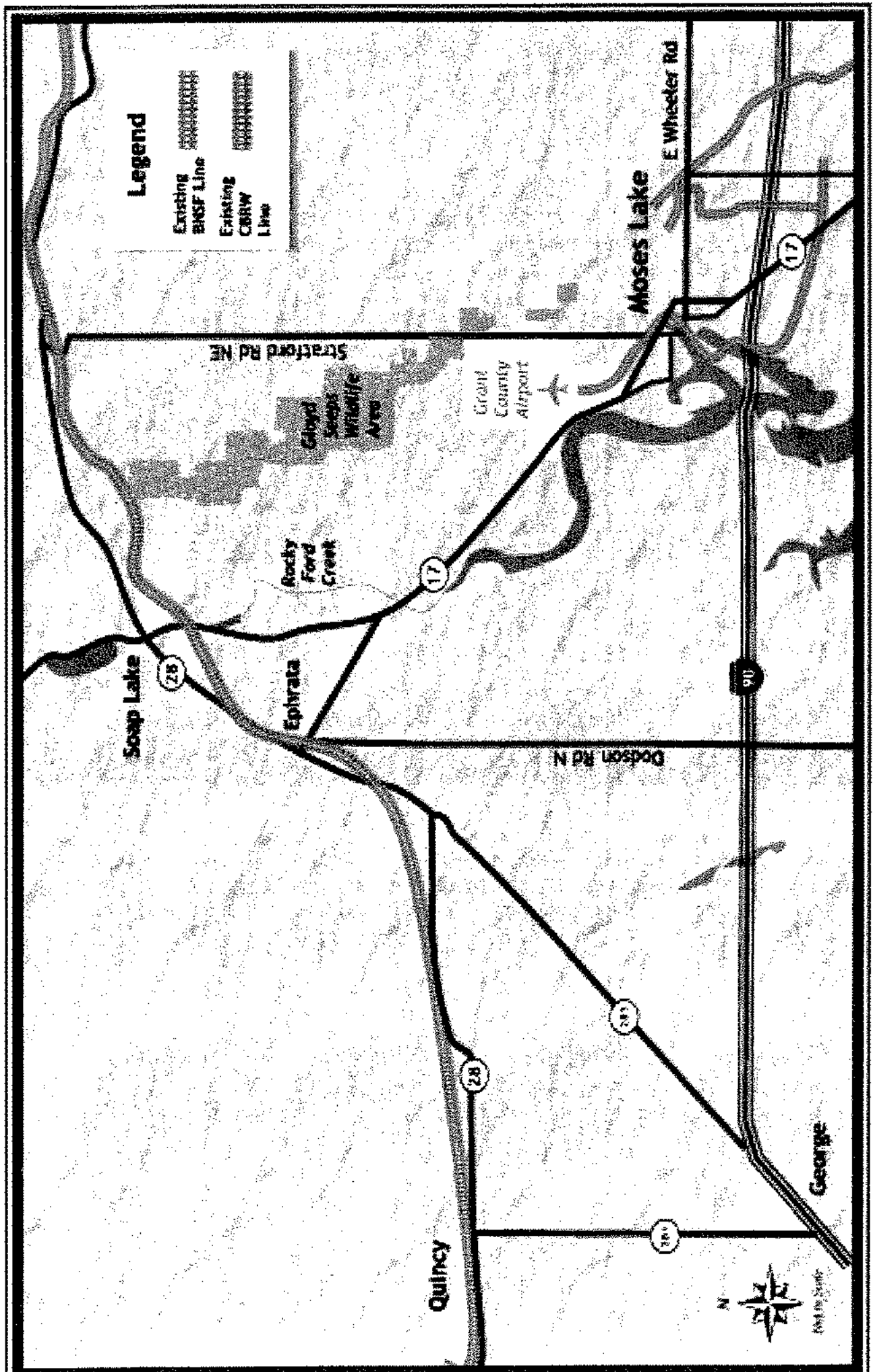


Victoria Rutson
Chief
Section of Environmental Analysis

Enclosure

cc: Kate Valdez, Yakama THPO
Johnson Meninick, Yakama Cultural Resources
Phillip Rigdon, Yakama Natural Resources
Dr. Allyson Brooks, Washington SHPO
Colleen Jollie, WSDOT Tribal Liaison
Elizabeth Phinney, WSDOT Rail

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RECEIVED
APR 11 2007
WSDOT RAIL OFFICE

STATE OF WASHINGTON
DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

April 10, 2007

Ms. Christa Dean
Section of Environmental Analysis
Surface Transportation Board
1925 K Street NW
Washington, DC 20423-0001

In future correspondence please refer to:

Log: 041007-02-STB

Property: STB Docket No. 34936, Northern Columbia Basin Railway Project

Re: More Information Needed

Dear Ms. Dean:

Thank you for contacting our office. We have reviewed the materials you provided for this project. In order to complete our review we require the following material to be provided to our office:

- Could you please provide more detailed information regarding the proposed alignment construction and/or modification? By defining your area of potential effect (APE), it allows our office to officially begin the consultation process and provide you with the guidance that you require.

We would appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4) and the survey report when it is available.

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations 36CFR800. Please feel free to contact me should you have any specific questions about our request and we look forward to receiving this material.

Please note that DAHP has developed a set of cultural resource reporting guidelines. You can obtain from our website. Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A., RPA
Transportation Archaeologist
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Cc: Elizabeth Phinney, WSDOT, Rail Office, MS 47407



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Appendix B:

Historic Property Inventory Forms

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**Historic Property
Inventory Report for**

10973 Road 4

at 10973 Road 4, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB1

OAHP No.:

Historic Name: 10973 Road 4

Common Name: 10973 Road 4

Property Address: 10973 Road 4, Moses Lake, WA 98837

Comments:

County Pierce Township/Range/EW T04R06E Section 07 1/4 Sec 1/4 1/4 Sec ABERDEEN SE Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 328864

Northing: 5223796

Tax No./Parcel No.

170543000

Plat/Block/Lot

N14 AC NENE; LS TX#S 3407,13847 & RD:14 19 28

Supplemental Map(s)

Acreage

13.1

IDENTIFICATION SECTION

Survey Name: Clover Creek Habitat/Floodplain
Restoration Cultural Resources Study

Field Recorder: Carrie E. Chasteen

Date Recorded: 2/26/2007

Owner's Name:

BERNARD CATTLE CO
INC

Owner Address:

9921 RD 1 NE

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Unknown

Current Use: Vacant/Not in Use

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Various

Form/Type

Other

View of primary elevation, facing west.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000458.jpg

**Historic Property
Inventory Report for**

10973 Road 4

at 10973 Road 4, Moses Lake, WA 98837

Changes to windows: Unknown

Other (specify):

Cladding

Veneer - Permastone

Foundation

Concrete - Block

Roof Material

Unknown

Roof Type

Flat with Parapet

Other

NARRATIVE SECTION

Date Of Construction: c. 1957

Study Unit

Other

Architecture/Landscape Architecture

Agriculture

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted at the Washington State Archives, Central Region Branch, the Moses Lake Historical Society, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Therefore, the building does not appear to be eligible for listing in the National Register of Historic Places under Criterion A.

According to research in the 1944 Moses Lake Irrigation District Assessment Rolls, the parcel was owned by Julius Surmann. Research in the 1961 Metsker's City of Moses Lake, WA map indicates the parcel was owned by Columbia Basin Livestock. Research does not indicate Julius Surmann was a historically important person on the federal, state or local level. Research also does not indicate Columbia Basin Livestock was a historically important company on the federal, state or local level. Therefore, the building does not appear eligible for listing on the National Register of Historic Places under Criterion B.

The building has been significantly altered and no longer represents a style of architecture. Furthermore, the building is not known to be the work of a master architect nor is it known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

According to the Assessor records, the building was constructed in 1968. However, the building appears to have been constructed circa 1957 because of flat roof with parapet and folded plate roof. The one-story building is rectangular in plan. The flat roof with parapet is clad in an unknown material. A folded plate porch roof is supported by square wood posts and appears to be an alteration. The centrally located primary entrance is accessed via the covered porch. The exterior walls and porch skirt are clad in stone veneer, which appears to be an alteration. The windows and doors have been boarded up and it is not known if original fabric remains. Portable ancillary buildings are located on the parcel. A low, stone retaining wall separates the buildings from an unpaved parking lot.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

Metsker's Map. City of Moses Lake, WA. 1961

Moses Lake Irrigation District Assessment Roll, Grant County Washington. 1944.



View of east and south facades, facing west. taken 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000459.jpg



View of north and east facades, facing southwest. taken 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000457.jpg

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

**Historic Property
Inventory Report for**

4199 Miller Street

at 4199 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB2

OAHP No.:

Historic Name: 4199 Miller Street

Common Name: 4199 Miller Street

Property Address: 4199 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327091

Northing: 5224218

Tax No./Parcel No.

120498000

Plat/Block/Lot

LOT 2 BLK 4; LONGVIEW TRACTS 2ND ADD; 60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:
WHITCHURCH TAITE L

Owner Address:
25215 234TH AVE SE

City/State/Zip:
Maple Valley, WA 98038

Classification: Building

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing east.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000518.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Irregular

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Extensive

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Vernacular

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4199 Miller Street

at 4199 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - T 1-11</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Shingle</u>	Roof Type <u>Gable - Side Gable</u> <u>Shed</u>
---	--	--	--

NARRATIVE SECTION

Study Unit

Other

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been altered and no longer represents a style of architecture. The building has no known associations with a master architect and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is irregular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with vinyl and aluminum sliding windows. The front porch appears to have been enclosed and the primary entrance appears to have been moved to the southern end of the primary façade. The building appears to have a side addition with shed roof.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4255 Miller Street

at 4255 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB3

OAHP No.:

Historic Name: 4255 Miller Street

Common Name: 4255 Miller Street

Property Address: 4255 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327045

Northing: 5224264

Tax No./Parcel No.

120503000

Plat/Block/Lot

LOT 7 BLK 4;LONGVIEW TRACTS 2ND ADD:60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 2/26/2007

Owner's Name:

GONZALES GUSTAVO S

Owner Address:

9939 SUNNY DR NE

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing northwest.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000517.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Moderate

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Vernacular

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4255 Miller Street

at 4255 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - Clapboard</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Rolled</u>	Roof Type <u>Gable - Side Gable</u>
--	--	---	---

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been altered, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building lacks sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is rectangular in plan. The side gabled roof is clad in rolled asbestos. The windows have been replaced with vinyl fixed pane windows. The exterior walls are clad in vinyl siding. The entry porch appears to have been enclosed and an attached carport addition was constructed at an unknown date. The entrance is raised, and there no entry steps or porch.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4267 Miller Street

at 4267 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB4

OAHP No.:

Historic Name: 4267 Miller Street

Common Name: 4267 Miller Street

Property Address: 4267 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327040

Northing: 5224278

Tax No./Parcel No.

120504000

Plat/Block/Lot

LOT 8 BLK 4;LONGVIEW TRACTS 2ND ADD:60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:
CORE INVESTMENTS,
LLC

Owner Address:
PO BOX 247

City/State/Zip:
SNOHOMISH, WA 98291

Classification: Building

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Moderate

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Vernacular

Form/Type

Single Family

View of primary façade, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000516.jpg

**Historic Property
Inventory Report for**

4267 Miller Street

at 4267 Miller St, Moses Lake, WA 98837

Changes to windows: Extensive

Other (specify):

Cladding

Plywood

Shingle - Concrete/Asbestos

Foundation

Concrete - Block

Roof Material

Asphalt / Composition - Shingle

Roof Type

Gable - Side Gable

NARRATIVE SECTION

Date Of Construction: 1943

Study Unit

Other

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been substantially altered, is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore, the building does not appear to possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is rectangular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in asbestos and particle board siding. The windows have been replaced with vinyl sliding and fixed pane units. A rear porch addition was constructed at an unknown date. The primary entrance is located on the southern façade and is accessed via a small, sheltered porch. A shed roof, with square wood post supports, shelters the entryway.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4279 Miller Street

at 4279 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB5

OAHP No.:

Historic Name: 4279 Miller Street

Common Name: 4279 Miller Street

Property Address: 4279 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327020

Northing: 5224288

Tax No./Parcel No.

120505000

Plat/Block/Lot

LOT 9 BLK 4; LONGVIEW TRACTS 2ND ADD: 60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

GONZALES GUSTAVO S

Owner Address:

9939 SUNNY DR NE

City/State/Zip:

MOSES LAKE, wa 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000515.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Moderate

Changes to interior: Unknown

Style

Changes to original cladding: Intact

Changes to other:

Vernacular

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4279 Miller Street

at 4279 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - Clapboard</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Shingle</u>	Roof Type <u>Gable - Side Gable</u>
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NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore, the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been altered, has no known associations with a master architect and is not known to have been built using an innovative construction technique. Therefore the building lacks sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is rectangular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in clapboard siding. The windows have been replaced with aluminum sliding units. A carport addition and entry porch was enclosed at an unknown date.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4289 Miller Street

at 4289 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB6

OAHP No.:

Historic Name: 4289 Miller Street

Common Name: 4289 Miller Street

Property Address: 4289 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH

UTM Reference
Zone: 11 Spatial Type: Point Acquisition Code: TopoZone.com
Sequence: 1 Easting: 327010 Northing: 5224308

Tax No./Parcel No.
120506000

Plat/Block/Lot
LOT 10 BLK 4;LONGVIEW TRACTS 2ND ADD;60X100

Supplemental Map(s)
N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name: MALDONADO, LORENZO
BANEGAS Owner Address: 935 S IRONWOOD DR

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Building Resource Status
Survey/Inventory

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Slight

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Ranch - Minimal Traditional

Form/Type

Single Family

View of primary façade, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000514.jpg

**Historic Property
Inventory Report for**

4289 Miller Street

at 4289 Miller St, Moses Lake, WA 98837

Changes to windows: Extensive

Other (specify):

Cladding

Veneer - Vinyl Siding

Foundation

Concrete - Block

Roof Material

Asphalt / Composition - Shingle

Roof Type

Gable - Side Gable

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building is a common example of a Minimal Traditional building in Grant County, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore the building does not possess sufficient architectural quality to be considered eligible for listing on the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is rectangular in plan. The side gabled roof is clad in composition shingles. The porch roof is supported by square wood posts and shelters a cast concrete entry porch. The windows have been replaced with aluminum sliding units. The exterior walls are clad in vinyl siding. An attached garage is located on the southern end of the building and appears to be an addition.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4301 Miller Street

at 4301 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB7

OAHP No.:

Historic Name: 4301 Miller Street

Common Name: 4301 Miller Street

Property Address: 4301 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326990

Northing: 5224323

Tax No./Parcel No.

120507000

Plat/Block/Lot

LOT 11 BLK 4;LONGVIEW TRACTS 2ND ADD;60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

ORONIA HERCULANO

Owner Address:

9768 KINDER RD NE

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of Primary façade, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000513.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Ranch - Minimal Traditional

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4301 Miller Street

at 4301 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - T 1-11</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Shingle</u>	Roof Type <u>Gable - Side Gable</u>
---	--	--	---

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been altered, is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story building is rectangular. The side gabled roof is clad in composition shingles. The pent porch roof is supported by square wood posts and shelters a raised wood porch. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with aluminum sliding units.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4321 Longview Street

at 4321 Longview St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB8

OAHP No.:

Historic Name: 4321 Longview Street

Common Name: 4321 Longview Street

Property Address: 4321 Longview St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326975

Northing: 5224343

Tax No./Parcel No.

120513000

Plat/Block/Lot

LOT 17 BLK 4; LONGVIEW TRACTS 2ND ADD

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

RANGEL CRUZ G/VIOLA

Owner Address:

704 VISTA DR N

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing south.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. IP1000508.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Multiple Family House

Current Use: Domestic - Multiple Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Intact

Changes to other:

Ranch - Minimal Traditional

Form/Type

Changes to windows: Extensive

Other (specify):

Multi-Family - Duplex

**Historic Property
Inventory Report for**

4321 Longview Street

at 4321 Longview St, Moses Lake, WA 98837

Cladding

Wood - Clapboard

Foundation

Concrete - Block

Roof Material

Asphalt / Composition - Shingle

Roof Type

Gable - Side Gable

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building is a common example of a Minimal Traditional style building in Grant county, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore the building lacks sufficient architectural quality to be considered eligible for the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The Minimal Traditional style duplex is rectangular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in vertical wood siding. The windows have been replaced with vinyl sliding units. The entrances are raised and accessed via cast concrete porches with wood railings.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4321 Miller Street

at 4321 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB9

OAHP No.:

Historic Name: 4321 Miller Street

Common Name: 4321 Miller Street

Property Address: 4321 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326950

Northing: 5224363

Tax No./Parcel No.

120508000

Plat/Block/Lot

LOT 12 BLK 4;LONGVIEW TRACTS 2ND ADD;60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

MACIEL ERIKA

Owner Address:

9780 RD H.6 NE

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary elevation, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000512.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Ranch - Minimal Traditional

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4321 Miller Street

at 4321 Miller St, Moses Lake, WA 98837

Cladding	Foundation	Roof Material	Roof Type
<u>Wood - T 1-11</u>	<u>Concrete - Block</u>	<u>Asphalt / Composition - Shingle</u>	<u>Gable - Side Gable</u>

NARRATIVE SECTION

Study Unit

Other

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been substantially altered, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criteiron C.

**Description of
Physical
Appearance**

The one-story Minimal Traditional style building is rectangular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with aluminum sliding units. The entrance is accessed via a cast concrete porch. Landscaping includes several mature trees.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4325 Miller Street

at 4325 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB10

OAHP No.:

Historic Name: 4325 Miller Street

Common Name: 4325 Miller Street

Property Address: 4325 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference
Zone: 11 Spatial Type: Point Acquisition Code: TopoZone.com
Sequence: 1 Easting: 326940 Northing: 5224383

Tax No./Parcel No.
120509000

Plat/Block/Lot
LOT 13 BLK 4;LONGVIEW TRACTS 2ND ADD;60X100

Supplemental Map(s)
N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:
LAGASSE LORNA

Owner Address:
4325 MILLER ST NE

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Building

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000511.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Irregular

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Moderate

Changes to interior: Unknown

Style

Form/Type

Changes to original cladding: Intact

Changes to other:

Ranch - Minimal Traditional

Single Family

Changes to windows: Extensive

Other (specify):

**Historic Property
Inventory Report for**

4325 Miller Street

at 4325 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - Clapboard</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Shingle</u>	Roof Type <u>Gable - Side Gable</u>
--	--	--	---

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building is a common example of a Minimal Traditional style residence in Grant county, is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story Minimal Traditional style building is irregular plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in wood clapboard siding. The windows have been replaced with aluminum sliding units. An attached garage addition, with new entry way, was constructed at an unknown date. The new primary entrance altered the orientation of the original primary entrance. Landscape includes a white picket fence and mature trees.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4335 Miller Street

at 4335 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB11

OAHP No.:

Historic Name: 4335 Miller Street

Common Name: 4335 Miller Street

Property Address: 4335 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326920

Northing: 5224393

Tax No./Parcel No.

120510000

Plat/Block/Lot

LOT 14 BLK 4;LONGVIEW TRACTS 2ND ADD;60X100

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:
ORONIA HERCULANO

Owner Address:
9768 KINDER RD NE

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Building

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing southeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000510.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Intact

Changes to other:

Ranch - Minimal Traditional

Form/Type

Changes to windows: Extensive

Other (specify):

Single Family

**Historic Property
Inventory Report for**

4335 Miller Street

at 4335 Miller St, Moses Lake, WA 98837

Cladding <u>Wood - Shiplap</u>	Foundation <u>Concrete - Block</u>	Roof Material <u>Asphalt / Composition - Shingle</u>	Roof Type <u>Gable - Front Gable</u>
--	--	--	--

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building is a common example of a Minimal Traditional style building in Grant county, is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story Minimal Traditional style building is rectangular in plan. The front gabled roof is clad in composition shingles. The exterior walls are clad in clapboard wood siding with shiplap siding located in the gables. The windows have been replaced with vinyl sliding units. The primary entrance is located on the northern façade and is characterized by a covered porch. A pent porch roof is supported by square wood posts and shelters a wood porch deck. Landscape includes mature pine trees.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4359 Miller Street

at 4359 Miller St, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB12

OAHP No.:

Historic Name: 4359 Miller Street

Common Name: 4359 Miller Street

Property Address: 4359 Miller St, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH

UTM Reference
Zone: 11 Spatial Type: Point Acquisition Code: TopoZone.com
Sequence: 1 Easting: 326915 Northing: 5224413

Tax No./Parcel No.
120512000

Plat/Block/Lot
LOT 16 BLK 4;LONGVIEW TRACTS 2ND ADD;SENIOR
CITIZEN EXEMPTION;60X100 MEMO

Supplemental Map(s)
N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name: GOMEZ JUAN M/MARY H
Owner Address: 4359 MILLER ST

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Building Resource Status
Survey/Inventory

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing east northeast.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000509.jpg

DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Unknown

Changes to interior: Unknown

Style

Changes to original cladding: Extensive

Changes to other:

Ranch

Form/Type

Single Family

**Historic Property
Inventory Report for**

4359 Miller Street

at 4359 Miller St, Moses Lake, WA 98837

Changes to windows: Extensive

Other (specify):

Cladding

Wood - T 1-11

Foundation

Concrete - Block

Roof Material

Asphalt / Composition - Shingle

Roof Type

Gable - Side Gable

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building is a common example of a Ranch style building in Grant county, is not known to be the work of a master architect, and is not known to have been built using an innovative construction technique. Therefore the building does not appear to have sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story Ranch style building is rectangular in plan. The side gabled roof is clad in composition shingles. The exterior walls are clad in T1-11 wood siding. The windows have been replaced with vinyl sliding units. The entrance is located off center and is accessed via a cast concrete porch. The building appears to have been altered with a side addition.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

4890 Grape Dr NE

at 4890 Grape Dr NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB13

OAHP No.:

Historic Name: 4890 Grape Dr NE

Common Name: 4890 Grape Dr NE

Property Address: 4890 Grape Dr NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326001

Northing: 5225444

Tax No./Parcel No.

170325000

Plat/Block/Lot

N1/2NWNW LS TX#S 4760 & 10009:10 19 28

Supplemental Map(s)

Acreage

17.3

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

MATHENIA, HAROLD
D/FRANCES L

Owner Address:

4890 GRAPE DR NE

City/State/Zip:

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of primary façade, facing north.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000525.jpg

DESCRIPTION SECTION

Historic Use: Unknown

Current Use: Unknown

Plan: Square

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Intact

Changes to other:

None

Form/Type

Unknown

**Historic Property
Inventory Report for**

4890 Grape Dr NE

at 4890 Grape Dr NE, Moses Lake, WA 98837

Changes to windows: Extensive

Other (specify):

Cladding

Wood - Clapboard

Foundation

Concrete - Poured

Roof Material

Asphalt / Composition

Roof Type

Shed

NARRATIVE SECTION

Date Of Construction: c. 1940

Study Unit

Other

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Agriculture

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls and the East Columbia Basin Irrigation District Assessment rolls did not identify the original owner of the building. According to research in the 1961 Metsker's City of Moses Lake, WA map, the owner of the building was Edwin and Louise Leland. Research in the above identified repositories does not indicate Edwin and Louise Leland were historically important persons. Therefore, the building does not appear eligible for listing on the National Register of Historic Places under Criteria A and B.

Two buildings are located on the parcel: a single-family residence and an ancillary building. The single-family residence is not located within the Area of Potential Effects and documentation of the building is beyond the scope of this Cultural Resources survey. According to research in the Grant County Assessor on-line records, the primary building was constructed in 1997. However, due to the construction materials and methods, the ancillary building appears to date to circa 1940. The ancillary building is not representative of a style of architecture, is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore, the ancillary building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story ancillary building is square in plan. The shed roof is clad in composition. The exterior walls are clad in wood clapboard. The windows are aluminum sash. The window openings appear to have been altered with the installation of smaller windows and plywood in-fill between the existing windows surrounds and the aluminum windows.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

9930 Parkway Dr NE

at 9930 Parkway Dr NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB15

OAHP No.:

Historic Name: 9930 Parkway Dr NE

Common Name: 9930 Parkway Dr NE

Property Address: 9930 Parkway Dr NE, Moses Lake, WA 98837

Comments: TX# 3356
COMMENCING AT THE SOUTHEAST
CORNER OF LOT 2, BLOCK 4, LONG-
VIEW TRACTS, FIRST ADDITION, AND
RUNNING THENCE EAST ON ALINE
FORMED BY THE EXTENSION OF THE
SOUTH LINE OF SAID LOT 2IN A
STRAIGHT LINE TO AN INTERSECTION
WITH THE SOUTHWESTERLYLINE OF
THE RIGHT OF WAY OF THE RAILWAY
EASEMENT CONVEYED TOTHE UNITED
STATES OF AMERICA BY EASEMENT
FILED IN THE OFFICEOF THE AUDITOR
OF GRANT COUNTY, WHICH POINT
SHALL BE KNOWNAS POINT "A".
COMMENCING AGAIN AT THE POINT OF
BEGINNING ANDRUNNING THENCE
NORTH ON THE EAST LINE OF SAID LOT
2,EXTENDED, TO THE SOUTHWESTERLY
LINE OF THE ABOVE
MENTIONEDRAILROAD RIGHT OF WAY;
THENCE IN A SOUTHEASTERLY
DIRECTIONALONG THE
SOUTHWESTERLY LINE OF SAID RIGHT
OF WAY TO POINT"A" HEREINABOVE
REFERRED TO.

County	Township/Range/EW	Section	1/4 Sec	1/4 1/4 Sec	Quadrangle	UTM Reference	Acquisition Code:
<u>Grant</u>	<u>T19R28E</u>	<u>10</u>			<u>MOSES LAKE NORTH</u>	Zone: <u>11</u> Spatial Type: <u>Point</u> Sequence: <u>1</u> Easting: <u>327244</u>	<u>TopoZone.com</u> Northing: <u>5224048</u>
Tax No./Parcel No.	Plat/Block/Lot	Supplemental Map(s)	Acreage				
<u>110279000</u>	<u>See Comments</u>		<u>.12</u>				

**Historic Property
Inventory Report for**

8 Place Hangar drainage ditch

at Randolph Road, near Tyndall Road, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB14

OAHP No.:

Historic Name: 8 Place Hangar drainage ditch

Common Name: 8 Place Hangar drainage ditch

Property Address: Randolph Road, near Tyndall Road, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T20R28E Section 27 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 10 Spatial Type: Point Acquisition Code: Unknown

Sequence: 1 Easting: 326102 Northing: 5228955

Sequence: 2 Easting: 326183 Northing: 5229199

Tax No./Parcel No.

171016013

Plat/Block/Lot

POR TX# 13751 IN SWSW;27 20 28

Supplemental Map(s)

Acreage

15

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name: AERO-SPACE PORT Owner Address: N/A

INTERNATIONAL GROUP

City/State/Zip:

SEATTLE, WA 98138

Classification: Structure

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:

DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan:

No. of Stories:

Structural System:



View of southern end of drainage ditch, facing west. taken 8/21/2007

Photography Neg. No (Roll No./Frame No.): P1000544.jpg

Comments: Photo No. P1000544.jpg

**Historic Property
Inventory Report for**

8 Place Hangar drainage ditch

at Randolph Road, near Tyndall Road, Moses Lake, WA 98837

Changes to plan:

Changes to interior:

Style

Form/Type

Changes to original cladding:

Changes to other:

Utilitarian

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Date Of Construction: c. 1952

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Study Unit

Other

Military

Agriculture

Property appears to meet criteria for the National Register of Historic Places: No

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 property evaluated is a drainage ditch that was constructed around the 8 Place Hangar building on Moses Lake Air Base. The Moses Lake Air Base was established in 1942 to train pilots and combat crews for the B-17 Flying Fortress and P-38 lightning aircraft. The base name officially changed to Larson Air Base in 1950 in honor of Major Donald A. Larson, a World War II pilot from Yakima, Washington who was killed in 1944. The Army Air Corps left Moses Lake in 1945 after the cessation of hostilities and the base was used by Boeing to test their B-50 and B-47 aircrafts. Larson AFB was transitioned to standby status in 1945 and reopened as a permanent installation in 1948 under the Air Defense Command. Boeing Airplane Company continued to use the airstrips and buildings located in the eastern end of the Larson campus from 1948 until 1962. In 1952, Boeing Airplane Company successfully completed the first flight of the B-52 Stratofortress at the facility. During the early Cold War period, the base housed the Air Defense Command whose mission was to protect the Hanford Atomic Works and Grand Coulee Dam. Beginning in 1952, the Tactical Air Defense (also known as TAC) was housed at the base. Colonel Clyde W. Owen took command of the base in 1963. Colonel Owen established a base improvement program that demolished 104 buildings on the base and replaced them with more modern buildings. In 1957, the Military Air Transport (also known as MATS) took over command of the base, followed by the Strategic Air Command (also known as SAC) in 1960. From 1961-1965, the 568th Strategic Missile Squadron was housed at Larson Air base. Larson Air Base closed in 1966, but was quickly converted into the Port of Moses Lake. In 1968, Japan Airlines began using the airstrips at Port of Moses Lake to train 747 pilots.

The 8 Place Hangar building was constructed circa 1952 by Boeing Airline Company and was as a hangar for eight B-52s. Larson Airforce Base may be eligible for listing in the National Register of Historic Places (NRHP) as a historic district under Criterion A for its role in World War II and the Cold War, and the 8 Place Hangar Building could be considered a potential district contributor to the potential NRHP historic district. Documentation of Larson Airforce Base as a historic district, however, is beyond the scope of this project.

The 8 Place Hangar drainage ditch is located to the east of the building and was constructed as a catch basin for water drainage and run off in the area surrounding the hangar. The drainage ditch is assumed to have been constructed at the same time as the hangar, circa 1952. The 8 Place Hangar drainage ditch does not appear to have played a significant role in the history of Larson Air Force base, and has no known associations with historically important persons. Therefore the 8 Place Hangar drainage ditch does not appear eligible for listing in the NRHP under Criteria A or B.

The 8 Place Hangar drainage ditch was constructed using utilitarian building materials and techniques. The drainage ditch is also not known to be the work of a master. Therefore, the 8 Place Hangar drainage ditch does not embody the distinctive characteristics of a type of construction and does not appear eligible for listing in the NRHP under Criterion C.

**Historic Property
Inventory Report for**

8 Place Hangar drainage ditch

at Randolph Road, near Tyndall Road, Moses Lake, WA 98837

**Description of
Physical
Appearance**

The 8 Place Hangar drainage ditch is a horse shoe-shaped and located to the east of the 8 Place Hangar building. The ditch is approximately 10-feet wide and 6-feet deep. The ditch is unchannelized and runs through an empty field.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1929, 1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

Anderson, Albert, Industrial Development Manager, Port of Moses Lake. Personal communication, 8/24/07.

"B-52 First Flight: Drama Equals Broadway Opening" accessed on 9/25/07 at: http://www.boeing.com/defense-space/military/b52-strat/b52_50th/ff.htm

"Building Community: Larson Air force Base. Interview with Colonel Clyde Owen," accessed on 9/25/07 at:
<http://www.ccrh.org/comm/moses/community4.html>

"Larson Air Force Base Guide & Directory. History of Larson AFB from P-38s to Titans (A Military Pamphlet for Incoming Soldiers), circa 1961 accessed on 9/25/07 at:
<http://www.ccrh.org/comm/moses/primary/larson.html>

URS. "Master Plan Update. Grant County Airport. October 2005." accessed on 8/7/07 at: <http://www.portofmoseslake.com/PDF%20Files/GCIA%20Master%20Plan%202005.pdf>

Additional Photos for: 8 Place Hangar drainage ditch

at Randolph Road, near Tyndall Road, Moses Lake, WA 98837



View of northern end of drainingage ditch, facing west. **taken** 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000545.jpg

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

**Historic Property
Inventory Report for**

9930 Parkway Dr NE

at 9930 Parkway Dr NE, Moses Lake, WA 98837

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:
GILLESPIE GAYLA J

Owner Address:
9930 PARKWAY DR NE

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Building

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: L-Shape

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Changes to original cladding: Extensive

Changes to other:

Changes to windows: Extensive

Other (specify):

Cladding
Wood - T 1-11

Foundation
Concrete - Block

Style
Ranch - Minimal Traditional

Form/Type
Single Family

Roof Material
Metal - Corrugated

Roof Type
Gable - Cross Gable

View of primary façade, facing north.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000507.jpg

NARRATIVE SECTION

Study Unit

Other

Architecture/Landscape Architecture

Date Of Construction: 1943

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Property appears to meet criteria for the National Register of Historic Places: No

**Historic Property
Inventory Report for**

9930 Parkway Dr NE

at 9930 Parkway Dr NE, Moses Lake, WA 98837

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been substantially altered and is a common example of a Minimal Traditional style building in Grant county. Furthermore, the building is not known to be the work of a master architect nor is it known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story Minimal Traditional style building is L-shaped in plan. The cross gabled roof is clad in corrugated metal roof. The exterior walls are clad T1-11 wood siding which appears to be an alteration. Some of the windows are aluminum sliding windows and some of the windows have been replaced with vinyl sliding windows. The entrance is raised and the entry porch appears to have been enclosed. Landscape includes a mature cedar tree.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

**Historic Property
Inventory Report for**

9972 Sunny Dr.

at 9972 Sunny Dr., Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB16

OAHP No.:

Historic Name: 9972 Sunny Dr.

Common Name: 9972 Sunny Dr.

Property Address: 9972 Sunny Dr., Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 10 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327330

Northing: 5223957

Tax No./Parcel No.
120405000

Plat/Block/Lot
LOT 1 BLK 3; LONGVIEW TRACTS; SENIOR CITIZEN
EXEMPTION; MEMO

Supplemental Map(s)

Acreage
N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

Owner Address:

City/State/Zip:

HUFF, ROLAND
C/ANASTACIA

9972 SUNNY DR NE

MOSES LAKE, WA 98837

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Domestic - Single Family House

Current Use: Domestic - Single Family House

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

View of primary elevation, facing north.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000506.jpg

Changes to plan: Intact

Changes to interior: Unknown

Style

Form/Type

Changes to original cladding: Extensive

Changes to other:

Ranch - Minimal Traditional

Single Family

**Historic Property
Inventory Report for**

9972 Sunny Dr.

at 9972 Sunny Dr., Moses Lake, WA 98837

Changes to windows: Extensive

Other (specify):

Cladding

Concrete - Block

Veneer - Vinyl Siding

Foundation

Concrete - Block

Roof Material

Asphalt / Composition - Shingle

Roof Type

Gable - Front Gable

NARRATIVE SECTION

Date Of Construction: 1954

Study Unit

Other

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Property appears to meet criteria for the National Register of Historic Places: No

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**

Research was conducted in the State Archives, Central Region Branch, the Moses Lake Historical Society, the Moses Lake public library, the Grant County Assessor on-line records, and the Internet. Research does not indicate any historically important events are known to have occurred at this site. Research in the Moses Lake Irrigation District Assessment rolls, the East Columbia Basin Irrigation District Assessment rolls and the Metsker's maps did not identify the original owner of the building. Research in the above listed repositories does not indicate any historically important persons are known to be associated with the building. Therefore the building does not appear eligible for listing in the National Register of Historic Places under Criteria A and B.

The building has been substantially altered and is a common example of a Minimal Traditional style building in Grant county. Furthermore, the building is not known to be the work of a master architect and is not known to have been built using an innovative construction technique. Therefore, the building does not possess sufficient architectural quality to be considered eligible for listing in the National Register of Historic Places under Criterion C.

**Description of
Physical
Appearance**

The one-story Minimal Traditional style building is rectangular in plan. The front gabled roof is clad in composition shingles. The exterior walls are clad in concrete block and vinyl siding. The windows have been replaced with vinyl sliding units. The primary entrance is at grade and is located on the southern facade. A metal canopy, with decorative metal supports, shelters the porch area and appears to be an alteration. An attached carport is located in the western facade. The carport roof is support by wood posts and appears to be an alteration.

**Major
Bibliographic
References**

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1929, 1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

Additional Photos for: 9972 Sunny Dr.

at 9972 Sunny Dr., Moses Lake, WA 98837



View of west façade, facing north northeast. taken 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000505.jpg

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

**Historic Property
Inventory Report for**

Chicago, Milwaukee, St. Paul & Pacific Railroad
building

at Wenatchee Dr NE, near Kinder Rd NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB17

OAHP No.:

Historic Name: Chicago, Milwaukee, St. Paul & Pacific Railroad building

Common Name: Chicago, Milwaukee, St. Paul & Pacific Railroad building

Property Address: Wenatchee Dr NE, near Kinder Rd NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 11 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 327416

Northing: 5223890

Tax No./Parcel No.

N/A- CBR ROW

Plat/Block/Lot

N/A

Supplemental Map(s)

Acreage

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 8/21/2007

Owner's Name:

Columbia Basin Railroad

Owner Address:

111 S. 33rd St.

City/State/Zip:

YAKIMA, WA 98901

Suite 200

Classification: Building

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Transportation - Rail-Related

Current Use: Unknown

Plan: Rectangle

No. of Stories: 1

Structural System: Braced Frame

Changes to plan: Intact

Changes to interior: Unknown

Style

Changes to original cladding: Intact

Changes to other:

Other - Utilitarian

Form/Type

Industrial

View of south and eastern facades, facing northwest.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000547.jpg

Historic Property Inventory Report for Chicago, Milwaukee, St. Paul & Pacific Railroad building at Wenatchee Dr NE, near Kinder Rd NE, Moses Lake, WA 98837

Changes to windows: Unknown

Other (specify):

Cladding

Wood - Clapboard

Foundation

Unknown

Roof Material

Wood - Shingle

Roof Type

Barrel Vault

NARRATIVE SECTION

Date Of Construction: c. 1920

Study Unit

Other

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Architecture/Landscape Architecture

Transportation

Property appears to meet criteria for the National Register of Historic Places: No

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 property contains utility building associated with the Chicago, Milwaukee, St. Paul & Pacific Railroad. The earliest iteration of the Chicago, Milwaukee, St. Paul & Pacific Railroad, also known as the Milwaukee Road, was formed in 1886. The early railroad serviced the Midwest. The railroad expanded its service to Seattle and Tacoma in 1909, and portions of the line were electrified by 1920. The Milwaukee Road declared a final bankruptcy in 1980 and was purchased by the Soo Line at that time. The Milwaukee Road is generally regarded as having a minimal impact on settlement patterns and the development of industry and commerce in the Northwest due to its late construction date. However, a multiple property National Register Nomination form was prepared for the historic resources of the Milwaukee Road in Washington, 1909-1945, and the following resources were identified as significant features of the Milwaukee Road: construction camps, division points, depots, train order stations, and substations and substation housing. The Milwaukee Road, which operated from 1909-1980, was found to be significant for its pioneering efforts in railroad electrification, and to a lesser extent, for advanced technological mechanisms used during construction of the railroad.

The utility building is located within the Milwaukee Road right-of-way and is assumed to be associated with the railroad. The purpose and function of the building is unknown, however, and does not match the building types described in the multiple property submission form. The building type was not identified as a significant property type in the 1992 National Register nomination form. Furthermore, the building is not known to be associated with historically important events on the federal, state or local level. Therefore, the building does not appear to contribute to the Milwaukee Road National Register of Historic Places historic district or as an individual resource under Criterion A.

Research on the Internet, the Washington State Archives, and the Moses Lake Historical Society indicates the building has no known associations with historic persons. Therefore, the building does not appear eligible for listing in the National Register of Historic Places under Criterion B.

The building is utilitarian in design and execution, is not representative of a style of architecture, and has no known associations with a master architect. Therefore, the building does not possess sufficient architectural quality to be considered eligible for the National Register of Historic Places under Criterion C.

Description of Physical Appearance

The one-story building is rectangular in plan. The barrel vault roof is clad in wood shingles. The exterior walls are clad in vertical and horizontal wood clapboard siding. A wood door is located on the eastern facade. The building appears to have been constructed with remnants of a wood boxcar and appears to date to circa 1920.

Historic Property Chicago, Milwaukee, St. Paul & Pacific Railroad at Wenatchee Dr NE, near Kinder Rd NE, Moses Lake, WA 98837
Inventory Report for building

Major Bibliographic References

Archaeological and Historical Services, EWU. "Historic Resources of the Milwaukee Road in Washington, 1909-1945" 1991

Encyclopedia of Chicago. "Chicago, Milwaukee, St. Paul & Pacific Railway Co." accessed on 9/19/07 at: <http://www.encyclopedia.chicagohistory.org/pages/2613.html>

HistoryLink.org "Grant County- Thumbnail History" accessed on 9/19/07 at: http://www.historylink.org/essays/output.cfm?file_id8010

Jordan, Keith. Transsystems. Personal communication on 9/24/07.

Milwaukee Road Historical Association. "A Brief History of the Milwaukee Road" accessed on 9/17/07 at: <http://www.mrha.com/history.cfm>

Additional Photos for: Chicago, Milwaukee, St. Paul & Pacific Railroad **at** Wenatchee Dr NE, near Kinder Rd NE, Moses Lake, WA 98837
Building



View of west and north facades, facing southeast. **taken** 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000546.jpg

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

View of **taken**
Photography Neg. No (Roll No./Frame No.):
Comments:

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal EL20 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB18

OAHP No.:

Historic Name: Columbia Basin East Low Canal Feeder Canal EL20

Common Name: Columbia Basin East Low Canal Feeder Canal EL20

Property Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 24 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 0 Easting: 330027

Northing: 5222079

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

East Columbia Basin Irrigation District Easement

N/A

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 2/26/2007

Owner's Name:

Owner Address:

City/State/Zip:

East Columbia Basin Irrigation District

55 N 8TH AVE

OTHELLO, WA 99344

Classification: Structure

Resource Status

Comments

Within a District?

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan:

No. of Stories:

Structural System:

Changes to plan:

Changes to interior:

Style

Changes to original cladding:

Changes to other:

Form/Type

Utilitarian

View of Ditch No. EL20, View South

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.): P1000443.jpg

Comments:

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal EL20 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Date Of Construction: 1946-1951

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Study Unit

Other

Agriculture

Community Planning/Development

Science & Engineering

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): Yes - National

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

Statement of Significance

The property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basic Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal EL20 was constructed between 1946 and 1951. Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personal and their families, which also led to an increase in the town's population. The construction of the canals associated with the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal EL20 appears to contribute under Criterion A to the potential Columbia Basin Project because it appears to be part of the original design of the Columbia Basin Project and because of the impact

Historic Property Columbia Basin East Low Canal Feeder Canal EL20 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
Inventory Report for

that irrigation has had on the economic development of Moses Lake. Canal EL20 is considered eligible for the National Register of Historic Places under Criterion A.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places as individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. Canal EL20 is channelized, while others like it are earthen. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion C because it is of common design and construction.

**Description of
Physical
Appearance**

The irrigation canal is approximately 10-feet wide and 4-feet deep. The canal is earthen. Signage indicates the canal is maintained with herbicides to prevent plant growth to maintain water flow. The canal runs through a cast concrete culvert under Wheeler Road.

**Major
Bibliographic
References**

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

Bureau of Reclamation. "Columbia Basin Project (Second Draft), Bureau of Reclamation History Program. Denver, Colorado. Research on Historic Reclamation Projects." 1998 accessed on 9/18/07 at: <http://www.usbr.gov/dataweb/projects/washington/columbiabasin/history.html>

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"The Columbia Basin Project and the Growth of Moses Lake" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/project4.html>

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"Moses Lake: 1938-1990" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/moseslake.html>

"Neppel and Water: Irrigation." accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/neppel2.html>

Pfaff, Christine. "Reclamation: Managing Water in the West" BLM. October 2007.

Sharley, A. 2003a A Cultural resources Survey of the Washington State Department of Transportation's Proposed SR 17: Pioneer way to Stratford Road Project, grant County, Washington. Report on file at DAHP, Olympia.

Additional Photos for: Columbia Basin East Low Canal Feeder Canal **at** Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
EL20



View of Ditch No. EL20 Culvert at Wheeler Road, View North **taken** 8/21/2007

Photography Neg. No (Roll No./Frame No.): P1000444.jpg

Comments:

View of **taken**

Photography Neg. No (Roll No./Frame No.):

Comments:

View of **taken**

Photography Neg. No (Roll No./Frame No.):

Comments:

View of **taken**

Photography Neg. No (Roll No./Frame No.):

Comments:

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal EL20 Extension at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB20

OAHP No.:

Historic Name: Columbia Basin East Low Canal Feeder Canal EL20 Extension

Common Name: Columbia Basin East Low Canal Feeder Canal EL20 Extension

Property Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW Section T19R28E 1/4 Sec 13 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle MOSES LAKE NORTH

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 328859

Northing: 5222932

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

East Columbia Basin Irrigation District Easement

N/A

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad Project, Grant County, WA

Field Recorder: Carrie Chasteen

Date Recorded: 2/26/2007

Owner's Name:

Owner Address:

City/State/Zip:

East Columbia Basin Irrigation District

55 N 8TH AVE

OTHELLO, WA 99344

Classification: Structure

Resource Status

Comments

Within a District? No

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan:

No. of Stories:

Structural System:

Changes to plan:

Changes to interior:

Style

Changes to original cladding:

Changes to other:

Form/Type

Utilitarian

View of Canal EL20 Extension, View West

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.): P1000499.jpg

Comments:

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal EL20 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
Extension

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Date Of Construction: 1946-1951

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Study Unit

Other

Agriculture

Community Planning/Development

Science & Engineering

Property appears to meet criteria for the National Register of Historic Places: No

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 property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basin Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal EL20 Extension was constructed after 1962 according to research in the East Columbia Irrigation District maps (1962). Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personnel and their families, which also led to an increase in the town's population. The construction of canals as part of the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal EL20 Extension does not appear to contribute to the potential Columbia Basin Project National Register of Historic Places-eligible historic district or as an

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal EL20 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
Extension

individual resource because research in the Columbia Basin Project irrigation maps does not indicate the canal is part of the original irrigation system constructed in Moses Lake between 1946 and 1951. Furthermore, Canal EL20 Extension has not achieved 50 years of age and does not appear to possess sufficient exceptional importance to be considered eligible for listing as a district contributor or as an individual resource under Criteria Consideration G. Canal EL20 Extension is considered not eligible for listing in the National Register of Historic Places.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register eligible historic district under Criterion C because they are of common design and construction.

Description of Physical Appearance

The irrigation canal is approximately 1-foot wide and .5-foot deep. The canal is earthen construction and partially lined with rocks. A metal pipe parallels the south side of the canal, and it is not known if the pipe is part of the irrigation system.

Major Bibliographic References

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

Bureau of Reclamation. "Columbia Basin Project (Second Draft), Bureau of Reclamation History Program. Denver, Colorado. Research on Historic Reclamation Projects." 1998 accessed on 9/18/07 at: <http://www.usbr.gov/dataweb/projects/washington/columbiabasin/history.html>

Columbia Basin Project. Irrigation Maps. Tenth Revision, Farm Unit Plat, Irrigation Block 41. Pages 15- 17. 1962

"The Columbia Basin Project and the Growth of Moses Lake" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/project4.html>

Emerson, Steve. "Context Statement on Administrative Facilities of the Columbia Basin Federal Reclamation Project: Grant, Adams, Franklin, Benton, and Walla Walla Counties." AHS-EWU. April 2006.

Galm, J.R, G.D. Hartmann, R.A. Masten, and G.O. Stephenson 1981. A cultural Resources Overview of the Bonneville Power Administration's Mid-Columbia Project, Central Washington. Report on file at DAHP, Olympia.

"Moses Lake: 1938-1990" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/moseslake.html>

"Neppel and Water: Irrigation." accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/neppel2.html>

Pfaff, Christine. "Reclamation: Managing Water in the West" BLM. October 2007.

Sharley, A. 2003a A Cultural resources Survey of the Washington State Department of Transportation's Proposed SR 17: Pioneer way to Stratford Road Project, grant County, Washington. Report on file at DAHP, Olympia.

Additional Photos for: Columbia Basin East Low Canal Feeder Canal **at** Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
EL20 Extension



View of Detail of Canal EL20 Extension and pipe taken 8/21/2007
Photography Neg. No (Roll No./Frame No.): P1000497.jpg
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

**Historic Property
Inventory Report for**

Columbia Basin East Low Canal Feeder Canal
EL20U1

at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB21

OAHP No.:

Historic Name: Columbia Basin East Low Canal Feeder Canal EL20U1

Common Name: Columbia Basin East Low Canal Feeder Canal EL20U1

Property Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 19 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 330911

Northing: 5222049

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

East Columbia Basin Irrigation District Easement

N/A

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad
Project, Grant County, WA

Field Recorder: Carrie Chasteen

Date Recorded: 2/26/2007

Owner's Name:

Owner Address:

City/State/Zip:

East Columbia Basin
Irrigation District

55 N 8th AVE

OTHELLO, WA 99344

Classification: Structure

Resource Status

Comments

Within a District?

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:

DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan:

No. of Stories:

Structural System:

Changes to plan:

Changes to interior:

Style

Changes to original cladding:

Changes to other:

Form/Type

Utilitarian



View of Ditch No. EL20U1, View Northwest

taken 8/20/2007

Photography Neg. No (Roll No./Frame No.): P1000414.jpg

Comments:

**Historic Property
Inventory Report for**

Columbia Basin East Low Canal Feeder Canal
EL20U1

at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Study Unit

Other

Agriculture

Community Planning/Development

Science & Engineering

Date Of Construction: 1946-1951

Architect: Unknown

Builder: Unknown

Engineer: Unknown

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): Yes - National

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

**Statement of
Significance**

The property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basin Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal EL20U1 was constructed between 1946 and 1951. Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personal and their families, which also led to an increase in the town's population. The construction of the canals associated with the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal EL20U1 appears to contribute under Criterion A to the potential Columbia Basin Project because it appears to be part of the original design of the Columbia Basin Project and because of the impact

**Historic Property
Inventory Report for**

Columbia Basin East Low Canal Feeder Canal
EL20U1

at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

that irrigation has had on the economic development of Moses Lake. Canal EL20U1 is considered eligible for the National Register of Historic Places under Criterion A.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places as individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. Canal EL20U1 is channelized, while others like it are earthen. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion C because it is of common design and construction.

**Description of
Physical
Appearance**

The irrigation canal is approximately 2-feet wide and .5-foot deep. The canal is channelized with poured in place cast concrete. The canal has steps to help regulate water flow.

**Major
Bibliographic
References**

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

Bureau of Reclamation. "Columbia Basin Project (Second Draft), Bureau of Reclamation History Program. Denver, Colorado. Research on Historic Reclamation Projects." 1998 accessed on 9/18/07 at: <http://www.usbr.gov/dataweb/projects/washington/columbiabasin/history.html>

Columbia Basin Project. Irrigation Maps. Tenth Revision, Farm Unit Plat, Irrigation Block 41. Pages 15- 17. 1962

"The Columbia Basin Project and the Growth of Moses Lake" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/project4.html>

Emerson, Steve. "Context Statement on Administrative Facilities of the Columbia Basin Federal Reclamation Project: Grant, Adams, Franklin, Benton, and Walla Walla Counties." AHS-EWU. April 2006.

Galm, J.R, G.D. Hartmann, R.A. Masten, and G.O. Stephenson 1981. A cultural Resources Overview of the Bonneville Power Administration's Mid-Columbia Project, Central Washington. Report on file at DAHP, Olympia.

"Moses Lake: 1938-1990" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/moseslake.html>

"Neppel and Water: Irrigation." accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/neppel2.html>

Pfaff, Christine. "Reclamation: Managing Water in the West" BLM. October 2007.

Sharley, A. 2003a A Cultural resources Survey of the Washington State Department of Transportation's Proposed SR 17: Pioneer way to Stratford Road Project, grant County, Washington. Report on file at DAHP, Olympia.

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal RCD 180+182 at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB22

OAHP No.:

Historic Name: Columbia Basin East Low Canal Feeder Canal RCD 180+182

Common Name: Columbia Basin East Low Canal Feeder Canal RCD 180+182

Property Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW T19R28E Section 19 1/4 Sec 1/4 1/4 Sec MOSES LAKE NORTH Quadrangle

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 331978

Northing: 5222013

Tax No./Parcel No.

Plat/Block/Lot

Supplemental Map(s)

Acreage

East Columbia Basin Irrigation District Easement

N/A

N/A

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad Project, Grant County, WA

Field Recorder: Carrie Chasteen

Date Recorded: 2/26/2007

Owner's Name:

Owner Address:

City/State/Zip:

East Columbia Basin Irrigation District

55 N 8TH AVE

OTHELLO, WA 99344

Classification: Structure

Resource Status

Comments

Within a District?

Survey/Inventory

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan:

No. of Stories:

Structural System:

Changes to plan:

Changes to interior:

Style

Changes to original cladding:

Changes to other:

Form/Type

Utilitarian

View of Ditch No. RCD 180+182, View North

taken 2/26/2007

Photography Neg. No (Roll No./Frame No.): P1000377.jpg

Comments:

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal RCD at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
180+182

Changes to windows:

Other (specify):

Cladding

Foundation

Roof Material

Roof Type

NARRATIVE SECTION

Date Of Construction: 1946-1951

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Study Unit

Other

Agriculture

Community Planning/Development

Science & Engineering

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): Yes - National

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

Statement of Significance

The property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basin Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal RCD 180+182 was constructed between 1946 and 1951. Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personal and their families, which also led to an increase in the town's population. The construction of the canals associated with the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal RCD 180+182 appears to contribute under Criterion A to the potential Columbia Basin Project because it appears to be part of the original design of the Columbia Basin Project and because of

Historic Property Inventory Report for Columbia Basin East Low Canal Feeder Canal RCD at Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
180+182

the impact that irrigation has had on the economic development of Moses Lake. Canal RCD 180+182 is considered eligible for the National Register of Historic Places under Criterion A.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places as individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. Canal RCD 180+182 is channelized, while others like it are earthen. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion C because it is of common design and construction.

Description of Physical Appearance

The irrigation canal is approximately 8-feet wide and 5-feet deep. The canal is earthen and overgrown with plants.

Major Bibliographic References

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

Bureau of Reclamation. "Columbia Basin Project (Second Draft), Bureau of Reclamation History Program. Denver, Colorado. Research on Historic Reclamation Projects." 1998 accessed on 9/18/07 at: <http://www.usbr.gov/dataweb/projects/washington/columbiabasin/history.html>

Columbia Basin Project. Irrigation Maps. Tenth Revision, Farm Unit Plat, Irrigation Block 41. Pages 15- 17. 1962

"The Columbia Basin Project and the Growth of Moses Lake" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/project4.html>

Emerson, Steve. "Context Statement on Administrative Facilities of the Columbia Basin Federal Reclamation Project: Grant, Adams, Franklin, Benton, and Walla Walla Counties." AHS-EWU. April 2006.

Galm, J.R, G.D. Hartmann, R.A. Masten, and G.O. Stephenson 1981. A cultural Resources Overview of the Bonneville Power Administration's Mid-Columbia Project, Central Washington. Report on file at DAHP, Olympia.

"Moses Lake: 1938-1990" accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/moseslake.html>

"Neppel and Water: Irrigation." accessed on 9/18/07 at: <http://www.ccrh.org/comm/moses/neppel2.html>

Pfaff, Christine. "Reclamation: Managing Water in the West" BLM. October 2007.

Sharley, A. 2003a A Cultural resources Survey of the Washington State Department of Transportation's Proposed SR 17: Pioneer way to Stratford Road Project, grant County, Washington. Report on file at DAHP, Olympia.

Additional Photos for: Columbia Basin East Low Canal Feeder Canals: at EL20, EL20 Extension, EL20U1, and RCD 180+182 Columbia Basin East Low Canal Feeder Canals: EL20, EL20 Extension, EL20U1, and RCD 180+182



View of detail of Canal EL20 Extension and pipe. taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000497.jpg

View of taken

Photography Neg. No (Roll No./Frame No.):

Comments:

View of taken

Photography Neg. No (Roll No./Frame No.):

Comments:

View of taken

Photography Neg. No (Roll No./Frame No.):

Comments:

Historic Property Inventory Report for Storm drainage ditch adjacent to the Alert Center Building at 8868 Turner Rd, Moses Lake, WA 98837

LOCATION SECTION

Field Site No.: NCB19

OAHP No.:

Historic Name: Storm drainage ditch adjacent to the Alert Center Building

Common Name: Storm drainage ditch adjacent to the Alert Center Building

Property Address: 8868 Turner Rd, Moses Lake, WA 98837

Comments:

County Grant Township/Range/EW Section 1/4 Sec 1/4 1/4 Sec 27 Quadrangle MOSES LAKE NORTH

UTM Reference

Zone: 11 Spatial Type: Point

Acquisition Code: TopoZone.com

Sequence: 1 Easting: 326086

Northing: 5228417

Tax No./Parcel No.
171006000

Plat/Block/Lot
ALL LS TX#S:27 20 28

Supplemental Map(s)

Acreage
29.99

IDENTIFICATION SECTION

Survey Name: Northern Columbia Basin Railroad Project, Grant County, WA

Field Recorder: Carrie E. Chasteen

Date Recorded: 2/26/2007

Owner's Name:
PORT DISTRICT #10

Owner Address:
7810 ANDREWS ST NE #200

City/State/Zip:
MOSES LAKE, WA 98837

Classification: Structure

Resource Status
Survey/Inventory

Comments

Within a District? No

Contributing?

National Register Nomination:

Local District:

National Register District/Thematic Nomination Name:



View of ditch, facing east.

taken 8/21/2007

Photography Neg. No (Roll No./Frame No.):

Comments: Photo No. P1000541.jpg

DESCRIPTION SECTION

Historic Use: Other

Current Use: Other

Plan: No. of Stories:

Structural System:

Changes to plan:

Changes to interior:

Style

Changes to original cladding:

Changes to other:

Changes to windows:

Other (specify):

Form/Type

Utilitarian

Historic Property Inventory Report for Storm drainage ditch adjacent to the Alert Center Building at 8868 Turner Rd, Moses Lake, WA 98837

Cladding	Foundation	Roof Material	Roof Type
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NARRATIVE SECTION

Study Unit

Other

Date Of Construction: c. 1952

Architect: Unknown

Builder: Unknown

Engineer: Unknown

Military

Agriculture

Property appears to meet criteria for the National Register of Historic Places: No

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 property contains a storm drainage ditch constructed around the Alert Center Building on the Moses Lake Air Base. The Moses Lake Air Base was established in 1942 to train pilots and combat crew for the B-17 Flying Fortresses and P-38s. The base name officially changed to Larson Air Base in 1950 in honor of Major Donald A. Larson, a World War II pilot from Yakima, Washington who was killed in 1944. The Army Air Corps left Moses Lake in 1945 after the cessation of hostilities and the base was used by Boeing to test their B-50 and B-47 aircrafts. Larson AFB was transitioned to standby status in 1945 and reopened as a permanent installation in 1948 under the Air Defense Command. Boeing Airplane Company continued to use the airstrips and buildings located in the eastern end of the Larson campus from 1948 until 1962. In 1952, Boeing Airplane Company successfully completed the first flight of the B-52 Stratofortress. During the early Cold War period, the base housed the Air Defense Command whose mission was to protect the Hanford Atomic Works and Grand Coulee Dam. Beginning in 1952, the Tactical Air Defense (also known as TAC) was housed at the base. Colonel Clyde W. Owen took command of the base in 1963. Colonel Owen established a base improvement program which demolished 104 buildings on the base and replaced them with more modern buildings. In 1957, the Military Air Transport (also known as MATS) took over command of the base, followed by Strategic Air Command (also known as SAC) in 1960. From 1961-1965, the 568th Strategic Missile Squadron was housed at Larson Air base. Larson Air Base closed in 1966, but was quickly converted into the Port of Moses Lake. In 1968, Japan Airlines began using the airstrips at Port of Moses Lake to train 747 pilots.

The Alert Center Building was constructed circa 1952 and was used by pilots awaiting flight orders. Larson Air force Base may be eligible for listing in the National Register of Historic Places (NRHP) as a historic district under Criterion A for its role in World War II and the Cold War, and the Alert Center Building could be considered a potential district contributor to the potential NRHP historic district. Documentation of Larson Air force Base as a historic district, however, is beyond the scope of this project.

The storm drainage ditch is adjacent to the Alert Center Building and conveyed water from the general area of the airstrips and the Alert Center building. The storm drainage ditch appears to have been constructed at the same time as the Alert Center Building, circa 1952. The drainage storm ditch does not appear to have played a significant role in the history of Larson Air Force base. The drainage storm ditch has no known associations with historically important persons. Therefore the drainage storm ditch does not appear eligible for listing in the NRHP under Criteria A or B.

The drainage storm ditch was constructed using utilitarian building materials and techniques. The drainage storm ditch is also not known to be the work of a master. Therefore, the drainage storm ditch does not embody the distinctive characteristics of a type of construction and does not appear eligible for listing in the NRHP under Criterion C.

Description of Physical Appearance

The unchannelized drainage ditch is lined with gravel. The low-sloped ditch is approximately four-feet wide and is approximately 43 feet long. The drainage ditch traverses an undeveloped field located within the eastern perimeter of the former Larson Army Air Base, which is located adjacent to the Alert Center Building.

Historic Property Storm drainage ditch adjacent to the Alert Center at 8868 Turner Rd, Moses Lake, WA 98837
Inventory Report for Building

Major Bibliographic References

State Archives, Central Region Branch; Grant County Assessor on-line records; Moses Lake Irrigation District Assessment Rolls (1944 and 1935); East Columbia Basin Irrigation District Assessment Rolls (1929, 1944 and 1952); HistoryLink.org; Moses Lake Historical Society; Moses Lake public library; and the Internet.

Anderson, Albert, Industrial Development Manager, Port of Moses Lake. Personal communication, 8/24/07.

"B-52 First Flight: Drama Equals Broadway Opening" accessed on 9/25/07 at: http://www.boeing.com/defense-space/military/b52-strat/b52_50th/ff.htm

"Building Community: Larson Air force Base. Interview with Colonel Clyde Owen," accessed on 9/25/07 at: <http://www.ccrh.org/comm/moses/community4.html>

"Larson Air Force Base Guide & Directory. History of Larson AFB from P-38s to Titans (A Military Pamphlet for Incoming Soldiers), circa 1961 accessed on 9/25/07 at: <http://www.ccrh.org/comm/moses/primary/larson.html>

URS. "Master Plan Update. Grant County Airport. October 2005." accessed on 8/7/07 at: <http://www.portofmoseslake.com/PDF%20Files/GCIA%20Master%20Plan%202005.pdf>

Additional Photos for: Storm drainage ditch adjacent to the Alert Center **at** 8868 Turner Rd, Moses Lake, WA 98837
Building



View of ditch, facing east. taken 8/21/2007
Photography Neg. No (Roll No./Frame No.):
Comments: Photo No. P1000542.jpg

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

View of taken
Photography Neg. No (Roll No./Frame No.):
Comments:

Appendix C: Photographs

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Photo 1: View of eastern end of Segment 1 alignment and existing rail spur proceeding south toward the old U&I Sugar refinery in background.



Photo 2: View of east end of Segment 1 alignment in abandoned agricultural field looking west.



Photo 3: View of RCD 180+2 (Map Id. No. 18) and proposed Segment 1 crossing location looking south with active agricultural field to right of photo.



Photo 4: View of EL 20U1 (Map Id. No 18) and proposed Segment 1 crossing looking east across active onion agricultural field.



Photo 5: View of Ditch EL 20 (Map Id. No 18) and proposed Segment 1 crossing looking south.



Photo 6: View of open agricultural field at Ditch EL 20 Extension Map ID No. 18) and proposed Segment 1 crossing north of Wheeler Road looking west.



Photo 7: View of Segment 1 alignment and upland sage vegetation looking southeast.



Photo 8: View of crew shovel testing on the proposed Segment 1 Alternate Crossing west of Parker Horn looking east.



Photo 9: View of existing Columbia Basin Railroad (Segment 3) at Stratford Road crossing looking northwest.



Photo 10: View of proposed Segment 2 alignment (south end) looking northeast with large transport plane making a landing approach in background.



Photo 11: View of Alert Center Drainage Ditch 9 (Map Id. No. 19) at proposed Segment 2 alignment west of Randolph Road looking northeast.



Photo 12: View of 8 Place Hangar Drainage ditch looking west, northwest from Randolph Road toward proposed Segment 2 crossing and industrial buildings (previous Larson AFB 8 Place Hangar) in background

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Appendix D: Unanticipated Discovery Plan

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Plan and Procedures for Dealing with the Unanticipated Discovery of Human Skeletal Remains or Cultural Resources During the Northern Columbia Basin Railroad Project in Grant County, Washington

Any human skeletal remains that are discovered during this project will at all times be treated with dignity and respect. The affected Indian Tribe(s) is the Confederated Tribes of the Colville Reservation (CTCR), the Confederated Tribes and Bands of the Yakama Nation, the Confederated Tribes of the Warm Spring Reservation of Oregon, and the Wanapum Tribe.

- A. If any Washington State Transportation Department (WSDOT) employee or any of the contractors or subcontractors believes that he or she has made an unanticipated discovery of human skeletal remains or cultural resources, all work adjacent to the discovery shall cease. The area of work stoppage will be adequate to provide for the security, protection, and integrity of the human skeletal remains, in accordance with Washington State Law. Representatives of WSDOT, The Port of Moses Lake and Grant County will be contacted.
- B. Representatives of WSDOT will be responsible for taking appropriate steps to protect the discovery. At a minimum, the immediate area will be secured to a distance of thirty (30) feet from the discovery. Vehicles, equipment, and unauthorized personnel will not be permitted to traverse the discovery site.
- C. If human skeletal remains are discovered, WSDOT will immediately call the Grant County Sheriff's office and a cultural resource specialist or consultant qualified to identify human skeletal remains. The Sheriff's office may arrange for a representative of the county coroner's office to examine the discovery. The remains should be protected in place until the cultural resource specialist has examined the find.
- D. If the human skeletal remains are determined to be Native American, WSDOT and Grant County will notify the State Department of Archaeology and Historic Preservation and the affected Tribes.
- E. If cultural resources are uncovered, such as stone tools or flakes, fire-cracked rocks from a hearth feature, butchered animal bones, or historic-era objects (patent medicine bottles, milk tins, clay pipes, etc.), WSDOT and Grant County will arrange for a qualified professional archaeologist to evaluate the find. Again, the cultural resources will be protected in place until the archaeologist has examined the find.
- F. If the cultural resources find is determined to be significant, the cultural resource specialist/archaeologist or consulting archaeologist will immediately contact the Department of Archaeology and Historic Preservation, and the affected Tribes to seek consultation regarding the National Register eligibility of any further discovery.

CONTACT INFORMATION

WSDOT

Colleen Jollie
WSDOT Tribal Liaison
WA State Dept. of Transportation
P.O. Box 47318
Olympia, WA 98504-7318

SHPO/DAHP

Dr. Allyson Brooks
Dpt. Of Archaeology & Historic Preservation
1063 South Capitol Way, Suite 106
Olympia, WA 98501

Stephenie Kramer
Assistant State Archaeologist
Department of Archaeology and Historic Preservation
PO Box 48343
1063 Capitol Way South
Olympia, WA 98504-8343
Phone: (360) 586-3083

Grant County Sheriff's Office
Moses Lake Substation
1274 Lowry
Moses Lake, WA 98837
509-762-5822
509-762-2862 fax

Federally Recognized Tribes:

Colville Confederated Tribes

The Honorable Mike Marchand, Chairperson
Colville Confederated Tribes
P.O. Box 150
Nespelem, WA 98155-0150
509-634-2110

Camille Pleasants
THPO Cultural Resources
Colville Confederated Tribes
P.O. Box 150

Nespelem, WA 98155-0150
509-634-2654, Camille.pleasants@colvilletribes.com
Yakama Nation

The Honorable Lavina Washines, Chairperson
Yakama Nation
P.O. Box 151
Toppenish, WA 98948
509-865-5121 ext 4340

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Kate Valdez
THPO Cultural Resources
Yakama Nation
P.O. Box 151
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Confederated Tribes of the Warm Springs Reservation of Oregon

The Honorable Ron Suppah, Chairman
Confederated Tribes of the Warm Springs Reservation of Oregon
P.O. Box C
Warm Springs, OR 97761-3001

Non-Federally Recognized Tribe:

Wanapum Tribe

The Honorable Rex Buck, Chairman
Wanapum Tribe
15655 Wanapum Loop, SW
Beverly, WA 98321

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Appendix B

Area of Potential Effects Correspondence

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SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

August 21, 2018

Allyson Brooks, Ph.D.
State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Modified Area of Potential Effect**

Dear Dr. Brooks:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP). The NCBRP is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, new developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) now proposes several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding modifications to the previously-approved alignment; and 2) elicit written concurrence from your office of the new Area of Potential Effect (APE) for the proposed project.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. Attached is a more detailed description of the proposed rail line construction and

rehabilitation, project area maps, and imagery showing the original and modified APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train, and this traffic could potentially increase over time.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 120 feet from the centerline as detailed in the attached memo from Thompson Hine to the Board and the Federal Railroad Administration; the proposed APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures.

We are working to submit this information into WISAARD per your request and would appreciate your written concurrence by September 7th. If we do not receive your concurrence by September 7th, we will assume your concurrence on the suggested APE for this project. If you have any questions, please contact Adam Assenza, of my staff, at (202) 245-0301 or adam.assenza@stb.gov. We look forward to working with your office to ensure the Board's compliance with Section 106 of NHPA.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Attachments: Memo from Thompson Hine to the Board and the Federal Railroad
Administration
Project Location and Area of Potential Effects Map
Rehabilitation Project Vicinity Map

CC: Lydia Kachadoorian, FRA
Valarie Kniss, FRA
Katherine Zeringue, FRA
Laura Shick, FRA
Matthew Sterner, DAHP

Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

August 22, 2018

Ms. Victoria Ruston
Surface Transportation Board
1925 K Street NW
Washington, DC 20423-0001

In future correspondence please refer to:
Project Tracking Code: 041007-02-STB
Property: STB Docket No. 34936, Northern Columbia Basin Railway Project
Re: Revised APE Concur, Review of Archaeological Work Plan

Dear Ms. Ruston:

Thank you for contacting the State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHP) regarding the Northern Columbia Basin Railway project. I have reviewed your description and maps of the revised area of potential effect (APE) and have no comments at this time. I have also had the opportunity to review the archaeological work plan submitted under separate cover and think that the procedures and protocols described are adequate for the undertaking. Along with the results of the inventory we will need to review your consultation with the concerned tribes, and other interested/affected parties. Please provide any correspondence or comments from concerned tribes and/or other parties that you receive as you consult under the requirements of 36 CFR 800.4(a)(4).

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR 800. Should additional information about the project become available, our assessment may be revised.

Finally, please note that in order to streamline responses, DAHP requires that all documents related to project reviews be submitted electronically. Correspondence, reports, notices, photos, etc. must now be submitted in PDF or JPG format. For more information about how to submit documents to DAHP please visit: <http://www.dahp.wa.gov/programs/shpo-compliance>. To assist you in conducting a cultural resource survey and inventory effort, DAHP has developed guidelines including requirements for survey reports. You can view or download a copy from our website.

Thank you for the opportunity to review and comment. Should you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A.
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov





SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 21, 2018

Velma Kate Valdez
Tribal Historic Preservation Officer
Confederated Tribes and Bands of the Yakama Nation
PO Box 151
Fort Road
Toppenish, WA

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Modified Area of Potential Effect**

Dear Ms. Valdez:

As you may know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP). The NCBRP is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, new developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) now proposes several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding modifications to the previously-approved alignment; and 2) elicit written comment from your Tribe of the new Area of Potential Effect (APE) for the proposed project. To our knowledge, the project area is entirely within the State of Washington, and does not occur on the reservation of any Tribe. The Confederated Tribes and Bands of the Yakama Nation was contacted on February 21, 2007, during the initial review of this project, and as of the writing of this letter, the Board has not received any reply from the Confederated Tribes and Bands of the Yakama Nation.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5

miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. Attached is a more detailed description of the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and modified APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train, and this traffic could potentially increase over time.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 120 feet from the centerline as detailed in the attached memo from Thompson Hine to the Board and the Federal Railroad Administration; the proposed APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Washington SHPO submitted correspondence stating that it had no comments regarding the expanded APE.

We appreciate your participation in the Section 106 process and request that you please provide comments by October 22, 2018. If you have any questions, please contact Adam Assenza, of my staff, at (202) 245-0301 or adam.assenza@stb.gov.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Attachments: Memo from Thompson Hine to the Board and the Federal Railroad Administration
Project Location and Area of Potential Effects Map
Rehabilitation Project Vicinity Map

CC: Dr. Allyson Brooks, DAHP
Matthew Sterner, DAHP
Lydia Kachadoorian, FRA
Valarie Kniss, FRA
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 21, 2018

Guy Moura
Tribal Historic Preservation Officer
The Confederated Tribes of the Colville Reservation
PO Box 150
Nespelem, WA 99155

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Modified Area of Potential Effect**

Dear Mr. Moura:

As you may know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP). The NCBRP is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, new developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) now proposes several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding modifications to the previously-approved alignment; and 2) elicit written comment from your Tribe of the new Area of Potential Effect (APE) for the proposed project. To our knowledge, the project area is entirely within the State of Washington, and does not occur on the reservation of any Tribe. The Confederated Tribes of the Colville Reservation was contacted on February 21, 2007, during the initial review of this project, and as of the writing of this letter, the Board has not received any reply from the Confederated Tribes of the Colville Reservation.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection

with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. Attached is a more detailed description of the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and modified APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train, and this traffic could potentially increase over time.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 120 feet from the centerline as detailed in the attached memo from Thompson Hine to the Board and the Federal Railroad Administration; the proposed APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Washington SHPO submitted correspondence stating that it had no comments regarding the expanded APE.

We appreciate your participation in the Section 106 process and request that you please provide comments by October 22, 2018. If you have any questions, please contact Adam Assenza, of my staff, at (202) 245-0301 or adam.assenza@stb.gov.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Attachments: Memo from Thompson Hine to the Board and the Federal Railroad Administration
Project Location and Area of Potential Effects Map
Rehabilitation Project Vicinity Map

CC: Dr. Allyson Brooks, DAHP
Matthew Sterner, DAHP

Lydia Kachadoorian, FRA
Valarie Kniss, FRA
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 21, 2018

The Honorable Rex Buck, Jr.
Chair
Wanapum Tribe
PO Box 275
Beverly, WA 99321-0164

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Modified Area of Potential Effect**

Dear Chairman Buck:

As you may know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP). The NCBRP is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, new developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) now proposes several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding modifications to the previously-approved alignment; and 2) elicit written comment from your Tribe of the new Area of Potential Effect (APE) for the proposed project. To our knowledge, the project area is entirely within the State of Washington, and does not occur on the reservation of any Tribe. The Wanapum Tribe was contacted on February 21, 2007, during the initial review of this project, and as of the writing of this letter, the Board has not received any reply from the Wanapum Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection

with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. Attached is a more detailed description of the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and modified APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train, and this traffic could potentially increase over time.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 120 feet from the centerline as detailed in the attached memo from Thompson Hine to the Board and the Federal Railroad Administration; the proposed APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Washington SHPO submitted correspondence stating that it had no comments regarding the expanded APE.

We appreciate your participation in the Section 106 process and request that you please provide comments by October 22, 2018. If you have any questions, please contact Adam Assenza, of my staff, at (202) 245-0301 or adam.assenza@stb.gov.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Attachments: Memo from Thompson Hine to the Board and the Federal Railroad Administration
Project Location and Area of Potential Effects Map
Rehabilitation Project Vicinity Map

CC: Dr. Allyson Brooks, DAHP
Matthew Sterner, DAHP

Lydia Kachadoorian, FRA
Valarie Kniss, FRA
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

September 21, 2018

Robert Brunoe
Tribal Preservation Officer
Confederated Tribes of the Warm Springs Reservation of Oregon
PO Box C
Warm Springs, OR 97761-3001

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Modified Area of Potential Effect**

Dear Mr Brunoe:

As you may know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP). The NCBRP is located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, new developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) now proposes several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is to: 1) provide additional information regarding modifications to the previously-approved alignment; and 2) elicit written comment from your Tribe of the new Area of Potential Effect (APE) for the proposed project. To our knowledge, the project area is entirely within the State of Washington, and does not occur on the reservation of any Tribe. The Confederated Tribes of the Warm Springs Reservation of Oregon was contacted on February 21, 2007, during the initial review of this project, and as of the writing of this letter, the Board has not received any reply from Confederated Tribes of the Warm Springs Reservation of Oregon.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company,

Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. Attached is a more detailed description of the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and modified APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train, and this traffic could potentially increase over time.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 120 feet from the centerline as detailed in the attached memo from Thompson Hine to the Board and the Federal Railroad Administration; the proposed APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Washington SHPO submitted correspondence stating that it had no comments regarding the expanded APE.

We appreciate your participation in the Section 106 process and request that you please provide comments by October 22, 2018. If you have any questions, please contact Adam Assenza, of my staff, at (202) 245-0301 or adam.assenza@stb.gov.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Attachments: Memo from Thompson Hine to the Board and the Federal Railroad Administration
Project Location and Area of Potential Effects Map
Rehabilitation Project Vicinity Map

CC: Dr. Allyson Brooks, DAHP

Matthew Sterner, DAHP
Lydia Kachadoorian, FRA
Valarie Kniss, FRA
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 1, 2018

Allyson Brooks, Ph.D.
State Historic Preservation Officer
Washington State Department of Archaeology and Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Dr. Brooks:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board submitted a letter detailing these modifications to the previously-approved alignment and requested written concurrence of the new Area of Potential Effect (APE) for the proposed project on August 21, 2018, which your office provided on August 22, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written concurrence of a revised APE, which reflects the Port's additional modifications.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing

CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 325 feet from the centerline as detailed in the attached revised memo from Thompson Hine to the Board; the revised APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Federal Railroad Administration (FRA) is aware of the revised APE and concurs with OEA's renewing consultation with the SHPO and Tribes.

Port contractors authorized to do so on the Board's behalf will submit this information into WISAARD per your request. We would appreciate your written concurrence by November 30th, 2018. If we do not receive your concurrence by that date, we will assume your concurrence on the revised APE for this project.

If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continue working with you.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board

Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Laura Shick, FRA
Valarie Kniss, FRA
Katherine Zeringue, FRA
Lydia Kachadoorian, FRA
Matthew Sterner, DAHP
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

November 6, 2018

Mr. Adam Assenza
Surface Transportation Board
Washington, DC 20423

In future correspondence please refer to:
Project Tracking Code: 041007-02-STB
Property: STB Docket No. 34936, Northern Columbia Basin Railway Project
Re: Revision to APE, APE Concur

Dear Mr. Assenza:

Thank you for contacting the State Historic Preservation Officer (SHPO) and Department of Archaeology and Historic Preservation (DAHHP) regarding the Northern Columbia Basin Railway project. I have reviewed your description and map of the revised area of potential effect (APE) and concur with your definition of the revised APE. Please provide us with your survey methodology before proceeding with any cultural resource inventories. Along with the results of the inventory we will need to review your consultation with the concerned tribes, and other interested/affected parties. Please provide any correspondence or comments from concerned tribes and/or other parties that you receive as you consult under the requirements of 36 CFR 800.4(a)(4).

These comments are based on the information available at the time of this review and on behalf of the SHPO in conformance with Section 106 of the National Historic Preservation Act and its implementing regulations 36 CFR 800. Should additional information about the project become available, our assessment may be revised.

Finally, please note that in order to streamline our responses, DAHHP requires that Resource documentation (HPI, Archaeology sites, TCP) and reports be submitted electronically. Correspondence must be emailed in PDF format to the appropriate compliance email address. For more information about how to submit documents to DAHHP please visit: <https://dahp.wa.gov/project-review>. To assist you in conducting a cultural resource survey and inventory effort, DAHHP has developed Guidelines for Cultural Resources Reporting. You can view or download a copy from our website.

Thank you for the opportunity to review and comment. Please ensure that the DAHHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,

Matthew Sterner, M.A.
Transportation Archaeologist
(360) 586-3082
matthew.sterner@dahp.wa.gov





SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 9, 2018

Velma Kate Valdez
Tribal Historic Preservation Officer
The Confederated Tribes and Bands of the Yakama Nation
PO Box 151
Fort Road
Toppenish, WA 98948-0151

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Ms. Valdez:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board sent you a letter detailing these modifications and requested comment on the new Area of Potential Effects (APE) for the proposed project on September 21, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written comment from your Tribe on the revised APE for the proposed project, which reflects the Port's additional modifications described below. To our knowledge, the project area is entirely within the State of Washington and does not occur on the reservation of any Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection

with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 325 feet from the centerline as detailed in the attached revised memo from Thompson Hine to the Board; the revised APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Federal Railroad Administration (FRA) is aware of the revised APE and concurs with OEA's renewing consultation with the SHPO and Tribes.

If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continuing working with you.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board
Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Dr. Allyson Brooks, Department of Archaeology and Historic Preservation
Matthew Sterner, Department of Archaeology and Historic Preservation
Lydia Kachadoorian, Federal Railroad Administration
Valarie Kniss, Federal Railroad Administration
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 9, 2018

Guy Moura
Tribal Historic Preservation Officer
The Confederated Tribes of the Colville Reservation
PO Box 150
Nespelem, WA 99155

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Mr. Moura:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board sent you a letter detailing these modifications and requested comment on the new Area of Potential Effects (APE) for the proposed project on September 21, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written comment from your Tribe on the revised APE for the proposed project, which reflects the Port's additional modifications described below. To our knowledge, the project area is entirely within the State of Washington and does not occur on the reservation of any Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing.

Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 325 feet from the centerline as detailed in the attached revised memo from Thompson Hine to the Board; the revised APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Federal Railroad Administration (FRA) is aware of the revised APE and concurs with OEA's renewing consultation with the SHPO and Tribes.

If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continuing working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with the first name "Victoria" and last name "Rutson" clearly distinguishable.

Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board
Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Dr. Allyson Brooks, Department of Archaeology and Historic Preservation
Matthew Sterner, Department of Archaeology and Historic Preservation
Lydia Kachadoorian, Federal Railroad Administration
Valarie Kniss, Federal Railroad Administration
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 9, 2018

The Honorable Rex Buck, Jr.
Chair
Wanapum Tribe
PO Box 275
Beverly, WA 99321-0164

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Chairman Buck:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board sent you a letter detailing these modifications and requested comment on the new Area of Potential Effects (APE) for the proposed project on September 21, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written comment from your Tribe on the revised APE for the proposed project, which reflects the Port's additional modifications described below. To our knowledge, the project area is entirely within the State of Washington and does not occur on the reservation of any Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing.

Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 325 feet from the centerline as detailed in the attached revised memo from Thompson Hine to the Board; the revised APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Federal Railroad Administration (FRA) is aware of the revised APE and concurs with OEA's renewing consultation with the SHPO and Tribes.

If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continuing working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with the first name "Victoria" and last name "Rutson" clearly distinguishable.

Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board
Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Dr. Allyson Brooks, Department of Archaeology and Historic Preservation
Matthew Sterner, Department of Archaeology and Historic Preservation
Lydia Kachadoorian, Federal Railroad Administration
Valarie Kniss, Federal Railroad Administration
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

November 9, 2018

Robert Brunoe
Tribal Historic Preservation Officer
Confederated Tribes of the Warm Springs Reservation of Oregon
PO Box C
Warm Springs, OR 97761-3001

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Mr. Brunoe:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board sent you a letter detailing these modifications and requested comment on the new Area of Potential Effects (APE) for the proposed project on September 21, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written comment from your Tribe on the revised APE for the proposed project, which reflects the Port's additional modifications described below. To our knowledge, the project area is entirely within the State of Washington and does not occur on the reservation of any Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing.

Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

For historic buildings and/or structures (above ground resources), and for archaeological resources and Traditional Cultural Properties (below ground resources), the Board's Office of Environmental Analysis (OEA) suggests an APE that generally extends 50 feet from the centerline of track (both sides of the rail corridor) or to the distance of proposed horizontal excavation of the proposed undertaking, except in certain sections of the route where the Port is proposing to expand the APE up to 325 feet from the centerline as detailed in the attached revised memo from Thompson Hine to the Board; the revised APE would encompass the vertical extent of the proposed undertaking. This buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures. The Federal Railroad Administration (FRA) is aware of the revised APE and concurs with OEA's renewing consultation with the SHPO and Tribes.

If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continuing working with you.

Sincerely,

A handwritten signature in black ink, appearing to read "Victoria Rutson". The signature is fluid and cursive, with the first name "Victoria" and last name "Rutson" clearly distinguishable.

Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board
Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Dr. Allyson Brooks, Department of Archaeology and Historic Preservation
Matthew Sterner, Department of Archaeology and Historic Preservation
Lydia Kachadoorian, Federal Railroad Administration
Valarie Kniss, Federal Railroad Administration
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group



SURFACE TRANSPORTATION BOARD
Washington, DC 20423

Office of Environmental Analysis

December 4, 2018

Johnson Meninick
Cultural Resource Program Manager
The Confederated Tribes and Bands of the Yakama Nation
PO Box 151
Fort Road
Toppenish, WA 98948-0151

Re: Docket No. FD 34936, Port of Moses Lake – Construction Exemption – in
Grant County, Wash.; **Determination of Revised Area of Potential Effect**

Dear Mr. Meninick:

As you know, the Surface Transportation Board (Board) is serving as the lead agency and preparing a Supplemental Environmental Assessment for a previously-approved rail construction called the Northern Columbia Basin Railroad Project (NCBRP), located in the Moses Lake area of Grant County, Washington. The purpose of the project is to promote economic development in the region through the attraction of new rail-dependent businesses, thereby encouraging the long-term, continued use, growth, and preservation of rail operations in the region. Since the Board's August 27, 2009 decision granting construction authority, developments in the project area have affected portions of the Board-approved route. The Port of Moses Lake (Port) recently proposed several modifications to the previously-approved alignment to minimize impacts to local land use, transportation patterns, and environmental resources. The Board sent you a letter detailing these modifications and requested comment on the new Area of Potential Effects (APE) for the proposed project on September 21, 2018.

The Board's approval of the proposed project is considered an undertaking under Section 106 of the National Historic Preservation Act, 54 U.S.C. § 306108 (NHPA), and is thus covered under its provisions. The purpose of this letter is: 1) to inform you that the Port has made additional modifications to its revised alignment after consultation with local government and other interested parties; and 2) to request written comment from your Tribe on the revised APE for the proposed project, which reflects the Port's additional modifications described below. To our knowledge, the project area is entirely within the State of Washington and does not occur on the reservation of any Tribe.

Location Information and Project Description

The NCBRP has three segments. Segment 1 involves construction of approximately 4.5 miles of new track from a connection with a rail line of the Columbia Basin Railroad Company, Inc. ("CBRW") in the Wheeler neighborhood on the east side of Moses Lake to a connection

with a different rail line of CBRW just west of the Parker Horn (Crab Creek) water crossing. Segment 2 involves construction of approximately 3.1 miles of new track from the existing CBRW line to the eastern side of the Grant County International Airport. Segment 3 involves acquisition and rehabilitation of approximately 3 miles of CBRW track that connects Segments 1 and 2. The Port has now added two modifications to Segment 2 (2B and 2C), in addition to the modifications to Segment 1 recently proposed. Attached is a more detailed description of these modifications, the proposed rail line construction and rehabilitation, project area maps, and imagery showing the original and revised APE for your review. The proposed project is expected to increase rail traffic by one round-trip train per day, with approximately ten cars per train.

Area of Potential Effect

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If you have any questions, please feel free to contact Adam Assenza of my staff at (202) 245-0301 or adam.assenza@stb.gov. We look forward to continuing working with you.

Sincerely,



Victoria Rutson
Director
Office of Environmental Analysis

Enclosures: Project Vicinity Map showing 2017 modifications and original APE
Revised APE Memo from Thompson Hine to the Board
Combined 2017 and 2018 Revised Alignment Map showing additional
modifications and expanded APE in Segment 2

cc: Dr. Allyson Brooks, Department of Archaeology and Historic Preservation

Matthew Sterner, Department of Archaeology and Historic Preservation
Lydia Kachadoorian, Federal Railroad Administration
Valarie Kniss, Federal Railroad Administration
Sandy Brown, Thompson Hine LLP
Jeannie Beckett, The Beckett Group

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Appendix C

Historic Canals Assessment for the Northern Columbia Basin Railroad Project

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600 108th Avenue NE, Suite 700
Bellevue, WA 98004
www.jacobs.com
T +1.425.452.8000
F +1.425.452.1212

Subject	Historic Canals Effects Assessment for the Northern Columbia Basin Railroad Project (Project 041007-02-STB)
Attention	Ted Potter, PE, Jacobs Program Manager
From	Connie Walker Gray, Senior Architectural Historian and Michael Chidley, Senior Archaeologist
Date	August 31, 2017

Introduction

This memorandum has been prepared to supplement the Northern Columbia Basin Railroad Project Draft Cultural Resources Report, prepared by HDR Engineering, Inc. and Jones & Stokes in 2008 for the Surface Transportation Board (STB) and the Washington State Department of Transportation (WSDOT), **Project 041007-02-STB**. This memorandum is intended to supplement the 2008 report by addressing potential effects to historic properties as a result of a proposed design refinement.

The Port of Moses Lake (Port) proposes to provide rail service to industrial land close to the Grant County International Airport (GCIA) and along Wheeler Road in the Moses Lake area in Grant County, Washington. This would include the construction of new rail lines and upgrading of existing rail lines. In 2008, STB determined, and the Department of Archaeology and Historic Preservation (DAHP) concurred, that the project would have **No Adverse Effect** on historic properties.

The Port is currently proposing a design refinement which would replace previously proposed bridges spanning East Low (EL) Canal Lateral 20 (**property 90228**) and Rocky Coulee Diversion (RCD) Drain Canal 180+182 (**property 90233**) with reverse siphons (a type of culvert) at the crossing locations. EL20 and RCD 180+182 have been determined eligible for listing in the National Register of Historic Places (NRHP) within the project Area of Potential Effects (APE). This supplemental assessment was conducted to:

- Document the current conditions of EL20 and RCD 180+182, and assess whether they continue to retain sufficient integrity to meet NRHP eligibility criteria;
- Evaluate whether the construction of culverts (instead of bridges) at the identified locations would adversely affect historic properties;
- Recommend potential measures in the event that the culverts would constitute an adverse effect to historic properties; and
- Coordinate with WSDOT and DAHP regarding the effects recommendation (forthcoming with submittal of this assessment).

As described in this memorandum, we recommend that EL20 and RCD 180+182 continue to meet NRHP eligibility criteria. We also recommend a continued finding of **No Adverse Effect** as a result of the proposed design refinement.

Project Background

In 2007 and 2008, Jones & Stokes prepared a Draft Cultural Resources Report for the Northern Columbia Basing Railroad Project. This report was prepared in accordance with Section 106 of the National Historic Preservation Act (NHPA), and identified historic properties within the project APE. As part of this evaluation, STB determined that three canals within the project APE were determined eligible for listing in the NRHP: EL20 (now known to be a lateral); EL20U1; and RCD 180+182, which was called a feeder canal in 2007, but is now known to be one of many drainage canals. DAHP concurred with this determination. These resources are considered contributing elements to the NRHP-eligible East Low Canal system.

The 2008 cultural resources report defined the APE as extending “50 feet from the centerline (both sides of the rail corridor) of the proposed undertaking. This 100-foot buffer takes into consideration the possibility of noise and vibration issues with regard to historic buildings and/or structures” (Pg. 1-2). Approximately 100 feet of the two canals lie within the project APE.

In April 2009, STB determined, and DAHP concurred, that the undertaking, which included construction of bridges over canals EL20 and RCD 180+182, would not adversely affect historic properties. The Final Environmental Assessment (EA) prepared for the project in 2009 reported that there would be no adverse effect to canals EL20 and RCD 180+182 because “the proposed project would constitute a bridge to span the canal; no piers would be sunk into the canal and the abutments would be constructed clear of the channel” (p. 5-5), thus avoiding direct alteration and damage to the NRHP-eligible canals. The original design included a culvert crossing of the NRHP-eligible EL20U1, but because the resource’s integrity had previously been altered, it did not constitute an adverse effect. Therefore, this memorandum focuses only on canals EL20 and RCD 180+182.

A Programmatic Agreement (PA) was prepared to identify protocol for survey of parcels contained within Segment 1, which were not accessible during the original cultural resources investigation. Signatories to the PA are the STB, DAHP, and the Port, WSDOT, and the Columbia Basin Railroad Company. The latter two are signatory consulting parties.

Proposed Design Refinement

The Port is considering a design refinement, which would replace the previously proposed bridges spanning EL20 and RCD 180+182 with reverse siphons at the crossing locations. The proposed rail crossings at these locations would meet hydrologic flow requirements. The specific dimensions would be determined during final engineering, but the length of each culvert is not anticipated to exceed 100 feet (the width of the rail line right of way). The depth/height of the culverts is anticipated to be approximately three feet from the top of the rail to the top of the culvert pipes; pipe diameter will not exceed 84” on each side. Attachment A of this memorandum depicts a typical section of the proposed culvert.

Regulatory Environment

The project is a federal undertaking, as it is regulated by the STB (lead federal agency), and is therefore subject to Section 106 of the NHPA (Section 106). Section 106 requires that, before beginning any undertaking, a federal agency must take into account the effects of the undertaking on historic properties and afford the Advisory Council on Historic Preservation (ACHP) an opportunity to comment on these actions. The Section 106 process is presented in Code of Federal Regulations Title 36 Part 800 (36 CFR 800) and consists of five basic steps:

1. Initiate process by coordinating with other environmental reviews, consulting with the SHPO, identifying and consulting with interested parties, and identifying points in the process to seek input from the public and to notify the public of proposed actions.
2. Identify cultural resources and evaluate them for NRHP eligibility, resulting in the identification of Historic Properties.
3. Assess effects of the project on Historic Properties.
4. In the event of adverse effect(s) on Historic Properties, consult with the SHPO and interested parties, resulting in a memorandum of agreement (MOA).
5. Proceed in accordance with the MOA.

National Register of Historic Places

The NRHP recognizes properties that are significant at the national, state, and local levels. According to the NRHP (36 CFR 60), the quality of significance in American history, architecture, archaeology, engineering, and culture exists in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. Properties that are eligible for listing on the NRHP are properties that retain their integrity and meet one or more of the four criteria listed below. In addition, unless a property possesses exceptional significance, it must also be at least 50 years old.

A resource can be considered for inclusion on the NRHP if it meets at least one of the following criteria (36 CFR 60):

- A. Is associated with events that have made a significant contribution to the broad patterns of our history;
- B. Is associated with the lives of persons significant in our past;
- C. Embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represents a significant and distinguishable entity whose components might lack individual distinction;
- D. Has yielded, or might be likely to yield, information important in prehistory or history.

Individually eligible properties and historic districts must retain key character-defining features, or integrity, to convey the significance of a resource. Integrity specifically refers to the ability of a property to convey its significance. In other words, a historic property must have enough intact physical characteristics or features to communicate its significance under one or more of the NRHP criteria. NRHP guidelines recognize seven aspects, or qualities, that define integrity. The Secretary of the Interior defines these aspects as follows (36 CFR 60):

- **Location.** Is the location/site where the resource was originally constructed?
- **Design.** Is the design in its original form, plan, and style of the property intact?
- **Setting.** Have the physical surroundings of a property been compromised?
- **Materials.** Are the physical components used in construction of the property still present?
- **Workmanship.** Is there evidence of craftsmanship?
- **Feeling.** Is the property able to express a sense of a past period of time?

- **Association.** Is the “direct link” evident between the property and an important event(s) or person?

Additional Research and Field Investigations

On May 23, 2017, Senior Historic Archaeologist Stacy Bumback and Senior Architectural Historian Connie Walker Gray conducted a field survey of the three NRHP-eligible canals to confirm that they still retained sufficient integrity to convey their historic significance. They also visited two (2) canal crossings in culverts recommended by WPE engineer Nathan Nofziger (email to Stacy Bumback et al., May 10, 2017). Photographs documenting this field visit are included in Attachment B of this memorandum.

Ms. Bumback and Ms. Gray conducted a pedestrian survey of the three canals within the project APE. They noted and photographed existing conditions of the canals, as well as their settings. Field conditions were noted and photographs taken to document the variable conditions.

EL20

In 2007, EL20 was described as an earthen canal approximately ten feet wide and four feet deep, running through a cast concrete culvert under Wheeler Road. Additional research has determined that EL20 is a lateral, estimated to be 10-11 miles in length (Kelsey Doncaster, Bureau of Reclamation [BOR], personal communication on July 7, 2017). It was constructed in 1950 under BOR Specification 3085, started by J.A. Terteling and Sons, Inc. (Annual Project History for the Columbia Basin Project: Part 2, Ephrata District, Volume XVIII - 1950).

Ms. Bumback and Ms. Gray did not note any substantial changes to EL20 or its setting since it was originally documented in 2007. Further, they assessed whether any of the seven aspects of integrity (described above) had been altered or diminished since it was evaluated in 2007. Their findings are summarized below in Table 1.

Review of the specifications for the East Low Canal laterals show that EL20 has several specialized structures, crossings, and siphons and is a relatively long lateral. Known modifications to EL20 include the East Wheeler Road crossing and the tail between Interstate 90 and Baseline Road, which has been piped/culverted.

RCD 180+182

In 2007, RCD 180+182 was documented as earthen, measuring approximately eight feet wide and five feet deep. It is now understood to be a drain canal, one of many associated with the East Low Canal system, and its exact construction date and length are unknown, but it is known to have been constructed between 1946 and 1951 (Kelsey Doncaster, BOR, personal communication on July 7, 2017).

Ms. Bumback and Ms. Gray did not note any substantial changes to RCD 180+182 or its setting since it was originally documented in 2007. Further, they assessed whether any of the seven aspects of integrity (described above) had been altered or diminished since it was evaluated in 2007. Their findings are summarized below in Table 1.

Table 1. Integrity Assessment of EL20 and RCD 180+182

Aspect of Integrity	Findings
Location. Is the location/site where the resource was originally constructed?	The canals are in their original locations.
Design. Is the design in its original form, plan, and style of the property intact?	Generally, the canals' designs are generally in their original form, plan, and style. Some portions of the canals have been lined and/or placed in culverts since original construction.
Setting. Have the physical surroundings of a property been compromised?	Generally, the physical surroundings are similar to when they were recorded in 2007. Some areas have seen changes from nearby development, but in general, the setting has not been significantly altered.
Materials. Are the physical components used in construction of the property still present?	With some exceptions where portions of the canals have been placed into culverts, the physical components are still present (i.e. unlined earthen canals).
Workmanship. Is there evidence of craftsmanship?	N/A – the canals are utilitarian features.
Feeling. Is the property able to express a sense of a past period of time?	The canals continue to convey their original “feeling” as utilitarian earthen canals from the 1940-50s.
Association. Is the “direct link” evident between the property and an important event(s) or person?	There continues to be a direct link between the properties and the large irrigation system constructed and used in an arid agricultural landscape.

Based on the field visit and subsequent primary and secondary source research, including aerial maps, Ms. Bumback and Ms. Gray determined that the integrity of EL20 and RCD 180+182 has not been significantly altered or diminished from that recorded in 2007, and therefore remain contributing elements to the NRHP-eligible East Low Canal system. No alterations were visible during this effort that would indicate that those portions of EL20 and RCD 180+182 within the APE, or other substantial sections of these canals, no longer contributed to their significance.

Effects Recommendation

Under federal regulations (36 CFR 800.5), a project would have an adverse effect if it would diminish, directly or indirectly, any of the characteristics of a historic property that qualifies it for inclusion in the NRHP. These characteristics include the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. All qualifying characteristics of a historic property shall be considered, including those that may have been identified after the original evaluation of the property's NRHP eligibility. Adverse effects could include reasonably foreseeable effects that could occur later in time, be farther removed in distance, or be cumulative. Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property;

- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR 68) and applicable guidelines;
- Removal of the property from its historic location;
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance ;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization;
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR 800.5).

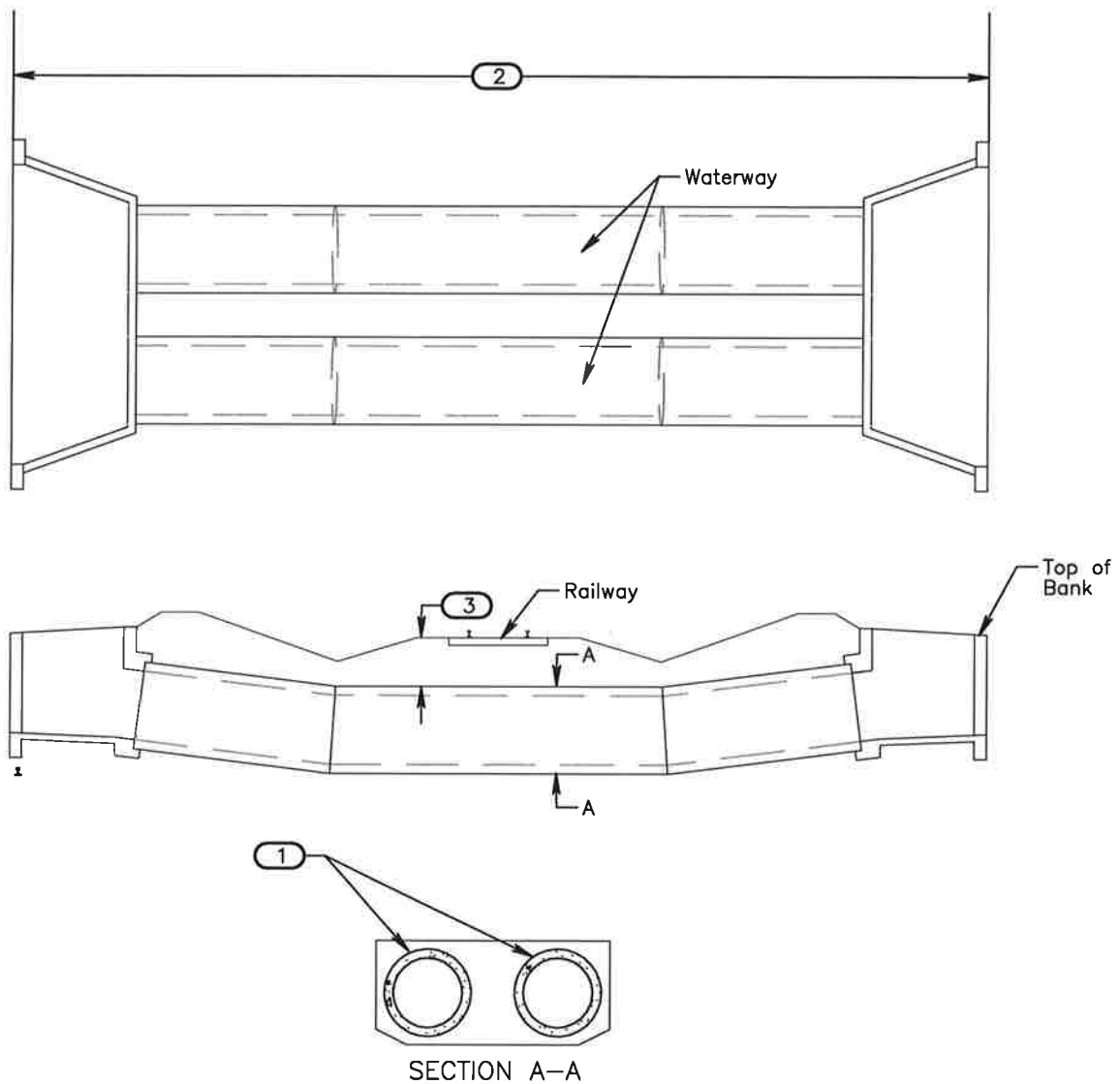
Because there has already been a project-level determination of No Adverse Effect, and DAHP concurred, this effects recommendation is based solely on potential effects to EL20 and RCD 180+182, which are contributing elements to the East Low Canal system, from the above-described design refinements.

Assessment of Effect: Canals are utilitarian resources that require regular maintenance to sustain their operation, safety, and functionality. The canal system as a whole is very large, and only a small portion of the EL20 and RCD 180+182 would experience a physical alteration by introducing a maximum of 100 linear feet of culvert on each canal. Such a limited modification would not diminish any aspect of the East Low Canal system, EL20, or RCD 180+182's physical integrity or ability to convey their historic significance.

The proposed design refinements would not diminish integrity of location, setting, workmanship, feeling, or association, and would only cause a minor alteration to integrity of materials and design. Therefore, a finding of **"no adverse effect"** is recommended for the proposed design refinement.

Conclusion

As described above, the proposed design refinement would replace bridges over EL20 and RCD 180+182, which are contributing elements to the NRHP eligible East Low Canal system, with reverse siphons. The reverse culverts would affect, at maximum, 100 linear feet of each canal. The proposed design refinements would not diminish integrity of location, setting, workmanship, feeling, or association, and would only cause a minor alteration to integrity of materials and design. Therefore, a finding of **"no adverse effect"** is recommended for the proposed design refinement.



NOTES:

1. Pipe diameter not to exceed 84" each side.
2. Overall length of each culvert not to exceed 100' each crossing.
3. 36" coverage from top of pipe to top of tracks.



1328 East
Hunter Place
Moses Lake, WA
T:(509)765-1023
F:(509)765-1298

**Northern Columbia Basin Railroad
Double Barrel Road Crossing
Concrete Culvert Pipe**



DRAWN BY: PSH

CHECKED BY: NDN

DATE

August 2017

WPE PROJECT #

17423

Scale: 1" = N/A

EXHIBIT #

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Appendix D

Parcel Summary

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Segment No.	Parcel Number	Address	Treatment and Observations
Segment 1			
1.1	091121632	Directly east of 2757 Rd N NE	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists entirely of commercially disturbed field.
1.2	091121635	Directly west of 2626 Rd N NE	Pedestrian and STP: modified eastern part of the parcel with existing livestock pasture on the western half.
1.3	110069492	Directly west of Parcel 091121635	Pedestrian and STP: Entire parcel is agricultural field. Surface visibility was good. Historic period canal (RCD 180+182) is present on its western border intersecting the entire extent of the APE. Evaluation for eligibility to the NRHP by Jones & Stokes Associates (HDR and Jones & Stokes Associates 2008) determined the canal as not eligible.
1.4	190479000	12675 NE Wheeler Rd	Reconnaissance: Jacobs was not given permission to enter the land. Parcel overlapping the APE appears to be agricultural field with canal (RCD 180+182) along its eastern border.
1.5	313169000	12115 NE Wheeler Rd	Pedestrian: Entire parcel is agricultural field with some grass vegetation to its eastern half. Surface visibility was average to good. Within middle of parcel is a historic canal (EL 20U1) intersecting the entire APE. Evaluation for eligibility to the NRHP by Jones & Stokes Associates (HDR and Jones & Stokes Associates 2008) determined the canal as not eligible.
1.6	180206000	Directly east of 2998-2000 Rd L NE	Pedestrian: Back lot of public works parcel surveyed.
1.7	313167000	Directly west of 12115 NE Wheeler Rd	Pedestrian: Entire parcel is agricultural field with some grass vegetation to its western half. Surface visibility was poor.
1.8	190483000	2504 NE Rd L	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists entirely of agricultural field. Bounding the west side of the parcel is a historic canal (EL20) that was evaluated by Jones & Stokes Associates (HDR and Jones & Stokes Associates 2008) for eligibility to the NRHP and determined as not eligible.
1.9	190484000	Directly west of 2504 NE Rd L	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists entirely of

			agricultural field.
Segment No.	Parcel Number	Address	Treatment and Observations
Segment 1			
1.10	091325416	915 Third Avenue	Reconnaissance: Current industrial lot
1.11	091325421	Directly north and west of parcel 091325416	Reconnaissance: Jacobs was not given permission to enter the land. Parcel appears to be commercial/industrial use property.
1.12	311750000	221 Bowen Street	Reconnaissance: Current industrial lot. Jacobs was not given permission to enter the land.
1.13	311751000	Directly west of parcel 190484000	Reconnaissance: Parcel developed and commercial therefore no pedestrian survey occurred.
1.14	091325420	Directly north of parcel 311751000	Reconnaissance: Current industrial lot. Jacobs was not given permission to enter the land.
1.15	091325419	Directly north of parcel 091325421	Reconnaissance: Current commercial/industry property in overgrown lot. Jacobs was not given permission to enter the land.
1.16	091325406	Directly north of parcel 091325421	Reconnaissance: Jacobs was not given permission to enter the land. Parcel appears to be commercial/industrial use property.
1.17	110077135	Directly north of parcel 091325406	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists entirely of agricultural field.
1.18	110005006	Directly west of parcel 091325406	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists primarily of agricultural field, however, in the northern end appears a utilized gravel pit or quarry.
1.19	110007005	Directly southwest of Rd K NE and Rd 4 NE intersection	Reconnaissance: Jacobs was not given permission to enter the land. Parcel consists entirely of livestock pasture.
1.20	110007011	Directly north of Rd 4 NE and Parcel 110007007	Yet to be surveyed.
1.21	110007007	Directly south of Rd 4 NE straddling Crab Creek	Pedestrian and STPs: Heavily modified landscape on an existing bedrock bench grading to unmodified wetland on the east side of Crab Creek. On the west side was largely unmodified developed floodplain.
1.22	110007066	Directly west of parcel 110007007	Pedestrian and STPs: Landscape consists of a largely unmodified developed floodplain.
1.23	110007008	Directly west of parcel 110007007	Reconnaissance: Parcel was surveyed during HDR and Jones & Stokes 2008 study.

Segment No.	Parcel Number	Address	Treatment and Observations
Segment 1			
1.24	110710000	4021 Orchard Drive NE	Not surveyed.
1.25	110708000	4079 Orchard Drive NE	Not surveyed.
1.26	110711000	Directly east of parcel 110708000	Not surveyed.
1.27	110711001	4101 Orchard Drive NE	Not surveyed.
1.28	110712000	4125 Orchard Drive NE	Not surveyed.
1.29	170488000	10748 NE Rd 4	Not surveyed.
1.30	170498000	10804 NE Rd 4	Not surveyed.
1.31	170491000	Directly north of 170498000	Not surveyed.
1.32	110709000	4049 Orchard Drive NE	Not surveyed.
Segment 2			
2.1	110069519	Directly south of parcel 171020000	Jacobs was not given permission to enter the land.
2.2	171020000	6957 NE Patton Blvd, parcel section south of Randolph Rd NE and east of 22 nd Ave NE	Pedestrian: Entire parcel is unused industrial landscape. Surface visibility was good to average.
2.3	110412009	Directly east of parcel 171020000 and south of Randolph Rd NE	Pedestrian: Entire parcel is unused industrial landscape. Heavily disturbed by construction of Randolph Rd. and Road I. Surface visibility was good to average.
2.4	190380000	6523 NE Rd I	Reconnaissance: Jacobs was not given permission to enter the land. APE extends E/W along Road I. Parcel consists of plowed agricultural field.
2.5	190380011	6745 NE Rd I	Reconnaissance: Jacobs was not given permission to enter the land. APE extends E/W along Road I. Parcel consists of plowed agricultural field.
2.6	110412008	Directly south of parcel 110069514	Pedestrian: Entire parcel is unused industrial landscape. Surface visibility was poor to average due to vegetation.

Segment No.	Parcel Number	Address	Treatment and Observations
Segment 2			
2.7	110069514	Directly north of parcel 110412008 and south of Road 7 NE	Reconnaissance: Jacobs was not given permission to enter the land. The APE extends N\S across Road 7 NE. The parcel is disturbed by modern industrial and commercial activity.
2.8	313389000	Directly east of parcel 313388000 and north of Road 7 NE	Reconnaissance: Jacobs was not given permission to enter the land. The APE extends N\S across Road 7 NE. The parcel is disturbed by modern industrial and commercial activity.
2.9	110866002	Directly east of parcel 110866001	Pedestrian: Entire parcel is unused industrial landscape. Surface visibility was poor due to vegetation.
2.10	312081000	Directly east of parcel 312080000 and 312079000, south of Tyndall Rd NE	Pedestrian: Entire parcel is unused industrial landscape. Surface visibility was poor due to vegetation.
2.11/2.11B	110069513	9422 NE Tyndall Rd	Pedestrian: Parcel is unused industrial landscape. The parcel is disturbed by modern industrial and commercial activity. Surface visibility was poor to average due to vegetation.
2.12/2.12B	090629207	8037 NE Randolph Rd	Pedestrian: Parcel is unused industrial landscape. The parcel is disturbed by modern industrial and commercial activity. Surface visibility was poor to average due to vegetation.
2.13/2.13B	120682301	8313 NE Randolph Rd	Pedestrian: Parcel 2.13 is unused industrial landscape. Former location of shooting range Surface visibility was good to average. Reconnaissance: Parcel 2.13b, Jacobs was not given permission to enter the land. The APE extends parallel on along the east side of Randolph Rd NE. The parcel is disturbed by modern industrial and commercial activity.
2.14	110069508	Directly north of parcel 120682301 and east of Randolph Rd NE	Pedestrian: Landscape has noticeable trace of past development, now overgrown.

Segment No.	Parcel Number	Address	Treatment and Observations
Segment 2			
2.15	110069517	North of Randolph Rd NE and directly east of parcel 171020000	Reconnaissance: APE extending approximately 100 feet into the parcel, parallel to Randolph Rd NE. The parcel is semi-developed by the existing airbase. All but an approximately 20-foot-wide section of the APE was previously surveyed (HDR and Jones & Stokes Associates 2008).
2.16	110069516	6802 NE Randolph Rd	Reconnaissance: APE extending approximately 100 feet into the parcel, parallel to Randolph Rd NE. The parcel is semi-developed by the existing airbase. All but a 35-foot-wide section of the APE was previously surveyed (HDR and Jones & Stokes Associates 2008). During the same study an historical ditch (Alert Center Storm Drainage Ditch) was evaluated and determined as not eligible to the NRHP.
2.17	110069515	Directly north of parcel 110069516	Reconnaissance: APE begins approximately 100 feet into the parcel, parallel to Randolph Rd NE. The parcel is semi-developed by the existing airbase. All but a 22-foot-wide section of the APE was previously surveyed (HDR and Jones & Stokes Associates 2008). During the same study an historical ditch (Alert Center Storm Drainage Ditch) was evaluated and determined as not eligible to the NRHP.
2.18	171006000	9053 NE Graham Rd	Reconnaissance: APE begins approximately 85 feet into the parcel, parallel to Randolph Rd NE. The parcel is semi-developed by the existing airbase and contains an historic drainage ditch (8 Place Hangar Drainage Ditch) that was evaluated and determined not eligible to the NRHP in a previous study (HDR and Jones & Stokes Associates 2008).
2.19	090969100	7760 NE Randolph Rd	Reconnaissance: APE extending approximately 30 feet into the parcel, parallel and crossing over Randolph Rd NE. The parcel is disturbed by modern industrial activity. All but an approximately 40-foot-wide section of the APE was previously surveyed (HDR and Jones & Stokes Associates 2008).

Segment No.	Parcel Number	Address	Treatment and Observations
Segment 2			
2.20	090969101	7770 NE Randolph Rd	Reconnaissance: APE extending along the northeast corner of the parcel. The parcel is disturbed by modern industrial activity.
2.21	312080000	7761 Randolph Rd NE	Reconnaissance: Observed from the side of the road. Largely commercial developed land. Did not survey behind buildings.
2.22	312079000	7082 NE Stratford Rd	Pedestrian: Parcel is unused industrial landscape. The parcel is disturbed by modern industrial and commercial activity. Surface visibility was poor to average due to vegetation.
2.23	090629206	8037 NE Randolph Rd	Reconnaissance: Jacobs was not given permission to enter the land. The APE extends parallel on along the east side of Randolph Rd NE. The parcel is disturbed by modern industrial and commercial activity.
2.24	090629205	8037 NE Randolph Rd	Reconnaissance: Jacobs was not given permission to enter the land. The APE extends parallel on along the east side of Randolph Rd NE. The parcel is disturbed by modern industrial and commercial activity.

Appendix E

Project Photographs

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Start of Segment 1 Parcel 091121632 at the east end, facing west.



Historic canal RCD 180+182 bordering the west side of parcel 110069492, facing south.



Start of Segment 1 overlooking staging area in parcel 091121635, facing east.



East side of parcel 313169000 showing thick corn stocks—making it unable to survey in September— facing east. Parcel was surveyed during December fieldwork.



East side of parcel 313169000 showing thick corn stocks—making it unable to survey—facing west.



Pedestrian surveying parcel 171020000 of Segment 1, facing northeast. Note thick sagebrush.



Non-permitted parcel 110007005, facing east.



Non-permitted parcel 110005006, facing east.



Non-permitted parcel 091325421, facing southwest. Parcel is part of industrial park.



Non-permitted parcel 091325406, facing northwest. Parcel is part of industrial park.



Non-permitted parcel 190484000, facing south. Note parcel is agricultural field.



Non-permitted parcel 190483000, facing southeast. Note historic canal (EL20) in foreground and agricultural field in mid-ground/background.



Non-permitted parcel 190479000, facing southeast. Note entire parcel is agricultural field.



Parcel 110069517 not surveyed because the APE overlaps previous APE footprint, facing northwest.



Parcel 110069516 not surveyed because the APE predominantly overlaps previous APE footprint, facing northwest.



Parcel 171006000 not surveyed because the APE predominantly overlaps previous APE footprint, facing northwest.



Historic canal (8 Place Hangar Drainage Ditch) on parcel 171006000, facing west.



Overview of parcel 312080000, facing east.



Overview of parcels 090969100 and 090969101, facing west. Note heavy development of land.



Overview of non-permitted parcel 312079000, facing east.



Overview of non-permitted parcel 110069513, facing southeast.



Overview of non-permitted parcel 090629207, facing east.



Overview of non-permitted parcel 120682301, facing northeast.



Overview of non-permitted parcels 110069514 and 313389000, facing north.



Overview of non-permitted parcels 190380000 and 190380011, facing south.



Overview of non-permitted parcel 09-0629-207, facing south.

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Appendix F

Shovel Test Pit Results

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Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
A1	40	0-27	Pale brown fine sandy loam, soft, 5-15% unsorted gravels, smooth gradual boundary, Bw-horizon	No	Alluvium – Glacial, Terminated at impassable cobbles.
		27-58	Brown fine sandy loam, soft, 15-35% rounded-subangular gravels, smooth diffuse boundary, C-horizon		
		58-65	Brown fine sandy loam, soft, 20% rounded-subrounded gravels, large cobbles, C-horizon		
A2	40	0-22	Pale brown fine sandy loam, loose, 15-20% unsorted gravels, smooth clear boundary, Bw-horizon	No – modern trash debris	Alluvium, trash debris includes flat glass, foil, plastic fragments at first 15 cmbs, terminated at impassable boulder, moved probe and encountered similar cobbles
		22-32	Brown fine sand, soft, 30% rounded-subrounded gravels, one small boulder at base of layer, C-horizon		
A3	40	0-6	Brown fine sandy loam, soft, 5-15% subangular-angular gravels, common roots/rootlets, wavy clear boundary, A-horizon	No	Alluvium - Glacial, Terminated at Pleistocene sediments
		6-10	Pale gray silt loam, soft, 10% small subangular-angular gravels, few roots/rootlets, smooth clear boundary, Bw-horizon		
		10-20	Light brown fine sandy loam, hard, 10% small sub-angular, common rootlets, C		
A4	40	0-10	Pale brown fine sandy loam, soft, 5-15% subangular-angular gravels, few rootlets, smooth clear boundary, A/E-horizon	No	Alluvium – Glacial, Terminated due to impassable cobbles
		10-60	Brown/Reddish-brown fine sandy loam, soft, 30% small-large rounded-sub angular gravels, few rootlets at the top, gravels increased with depth, C-horizon		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
A5	40	0-12	Pale gray fine sandy loam, 5-10% small-large rounded-subrounded gravels, common rootlets, wavy clear boundary, A/E-horizon	No	Alluvium - Glacial, Terminated due to impassable cobbles
		12-55	Reddish-brown loam, 40% small-large angular-subrounded gravels, trace rootlets, C-horizon		
A6	34	0-17	Mixed soils, disturbed area, Ap-Horizon	No	Terminated due to cobbles
		17-36	Tan/Brown very fine loamy sand, no gravels, moist, A-horizon		
		36-48	Tan/Brown very fine loamy sand, 50% rounded gravels, some cobbles, some fresh angular gravels from shovel impact, B-horizon		
A7	40	0-15	Brown fine sandy loam, medium gravels, weak to moderate structure, gradual boundary, A-horizon	No	Alluvium
		15-40	Brown fine sandy loam, weak subangular blocky structure, gradual boundary, A-horizon		
		40-100+	Light gray brown fine sandy loam to sandy loam, massive to weak subangular blocky, C-horizon		
B1	36	0-5	O-horizon	No	Terminated at Pleistocene sediments
		5-35	Light tan very fine silty sand, <5% rounded pebbles, dry, A-horizon		
		35-54	Reddish-tan very fine silty sand, 30-40% rounded gravels, occasional large cobble, Bw-horizon		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
B2	35	0-5	Dense grass/straw bed, Oi-horizon	No	Slightly gravelly aeolian/slope over cobbles
		5-40	Light gray brown slightly gravelly fine sandy loam, medium gravels, gradual boundary, A-horizon		
		40-70	Pale brown fine sandy loam, subangular blocky structure, abrupt boundary at coarse gravels		
		70-75+	Cobbles		
B3	35	0-7	Light tan very fine silty sand, large round cobbles and gravels, O-horizon	No	Terminated due to cobbles
		7-24	Light tan very fine silty sand, 70-80% large rounded cobbles and gravels, A-horizon		
B4	35	0-10	Light gray slightly gravelly loam, laminated and vesicular, Av(?) -horizon	No	Terminated due to dense gravelly sediments
		10-30	Light yellow brown loam, very gravelly, dense, Bw-horizon		
B5	33	0-2	Silty clay, O-horizon	No	Terminated due to cobbles
		2-36	Very fine silty loamy sand, no cobbles, slightly compact, moist, A-horizon		
		36-43	Silty sand, many large rounded cobbles, B-horizon		
B6	35	0-15	Gray brown slightly gravelly loam, medium gravels, moderate structure, gradual lower boundary, A-horizon	No	Terminated due to gravelly sediments
		15-55	Pale brown gravelly loam, subangular to rounded clasts, 1-5 cm moderate to medium subangular blocky structure, clear boundary, Bw-horizon		
		55-65	Pale brown gravelly loam, very gravelly subangular to rounded clasts 1-5 cm, moderate to medium subangular blocky structure, wet below 60 cm, Bw-horizon		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
B7	38	0-15	Brown fine sandy loam, medium gravels, moderate structure, gradual boundary, A-horizon	No	Alluvium, Buried A-horizon at 80-90 cmbs
		15-80	Pale brown fine sandy loam, massive to weak subangular blocky structure, abrupt boundary, C-horizon		
		80-90	Dark brown sandy loam, medium gravels, moderate to strong structure, Ab-horizon		
		90-100+	Pale brown sandy loam, saturated, water at 95 cmbs		
C1	Probe skipped due to weak/modern soil development over fill/modern trash				
C2	Probe skipped due to weak/modern soil development over fill/modern trash				
C3	41	0-8	Tan/White ashy fine silt, friable, loose, 30% angular cobbles/gravels, dry, Fill layer	No	Located in upland sagebrush scrub
		8-37	Reddish-brown fine silt, friable, 40-50% angular cobbles, A-horizon		
		37-38	Bedrock, R-horizon		
C4	42	0-9	Tan/White ashy very fine silt, loose, 30% angular decomposing cobbles, dry	No	On sagebrush rise, Terminated at 24 cmbs due to impassable fractured bedrock
		9-24	Mixed reddish-brown silt, 60% angular gravels/cobbles		
D1	40	0-5	Ashy white gravelly loam, angular gravels, approximately <1 to 5 cm	No	Angular quarry spalls or fractured bedrock?
		5-20	Strong brown to olive brown loamy gravel, angular gravels < to 5 cm, residual soil in weathered bedrock, Br-horizon		
D2	40	0-5	Leaves and woody debris, O-horizon	No	Weakly developed soil on weathered bedrock
		5-10	Ashy white gravelly loam, angular gravels, approximately <1 to 5 cm		
		10-30	Brown to olive brown, angular gravels, clasts <1cm to 25 cm, residual soil in bedrock, Br-horizon		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
D3	40	0-3	Organic detritus, Oi-horizon	No	Not sure about ashy layer, seems to sit on residual soil in bedrock
		3-10	Gravelly ash layer		
		10-25+	Strong brown gravelly loam to loamy gravel, angular gravels <1 cm to 20 cm, residual soil, B-horizon		
D4	Probe skipped due to its placement on anthropogenic built-up environment				
D5	34	0-12	Brown clay loam with organics, no gravels	No	Alluvium
		12-63	Gray/Brown very fine loamy sand, no gravels		
		63-86	Darker brown, coarse loamy sand, no gravels		
E1	40	0-10	Light brown sandy loam, loose, 80% angular-subangular gravels, modern A horizon	No	Two metal brackets, appeared modern, terminated due to impassable angular gravels
E2	40	0-5	Pale gray silt loam, loose, 80% angular small-large gravels smooth clear boundary, Modern A-horizon	No	Terminated due to impassable angular gravels
		5-25	Reddish-brown sandy loam, loose, 80% angular small-large gravels, B-horizon		
E3	40	0-5	Dark brown sandy loam, loose, 50% angular small-medium gravels, organics, Modern A-horizon	No	Terminated due to impassable angular gravels, weathered bedrock
		5-25	Pale gray (ash?) sandy loam, loose, 80% angular unsorted gravels, smooth gradual contact, B-horizon		
		25-28	Reddish-brown sandy loam, loose, 80% subrounded-angular unsorted size gravels, R-horizon?		
E4	Probe skipped due to modern soil development over disturbed bedrock bench				

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
E5	40	0-28	Pale gray silty loam, loose, 80% angular-subangular unsorted size gravels, smooth clear boundary	No	Terminated due to impassable angular gravels
		28-41	Reddish-brown sandy loam, loose to soft, 80% angular-subangular unsorted size gravels		
F1	40	0-10	Dark brown silt loam, no gravels, root mat with many roots/rootlets, smooth clear boundary	No	Water at 70 cmbs, lowest boundary unclear due to water table but appears to be abrupt on sidewall shovel scrape, Terminated at Pleistocene sediments
		10-32	Brown-gray loam, friable, no gravels, common rootlets, smooth gradual boundary		
		32-84	Brown-gray sandy loam, friable, <5% rounded small gravels, few rootlets, moist, seemingly abrupt boundary		
		84-85	Dark gray sandy loam, hard		
F2	40	0-4	Dense grass mat, Oi-horizon	No	Water table at 70 cmbs
		4-25	Dark gray-brown silty loam, medium gravels, moderate structure, many fine roots, gradual boundary, A-horizon		
		25-50	Pale brown silty loam, trace pebbles throughout, massive to weak sub angular blocky structure, clear boundary		
		50-65	Brown silty loam to fine sandy loam, medium gravels, moderate to strong structure, clear boundary, Ab-horizon		
		65-70+	Light brownish-gray silty loam, saturated		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
F3	40	0-5	Gray-brown silty loam, medium gravels, weak to moderate structure, many roots, clear boundary, A-horizon	No	Relatively thick soil in fine-grained loess? With indurated B-horizon
		5-25	Brown silty loam, medium gravels, weak to moderate structure, gradual boundary, A-horizon		
		25-55	Brown to pale brown silty loam, medium gravels, weak to moderate subangular blocky structure, gradual boundary, AB-horizon		
		55-90	Pale brown silty loam, medium gravels, weak to moderate subangular blocky structure, clear to abrupt boundary, Bw-horizon		
		90-98+	Pale brown, massive, indurated, Bgm-horizon		
F4	36	0-14	Clay loam, no gravels, heavy organics	No	Lowland/Wetland, adjacent to river, heavily fragment rusted portions of wire fencing found 0-20 cmbs
		14-46	Brown loamy silt, no gravels, rootlets		
		46-57	Darker brown loamy very coarse sand, 40% subrounded large cobbles		
F5	40	0-10	Dark brown silt loam, soft, root mat, smooth clear boundary	No	Water table at 80 cmbs, root development at approximately 37 cmbs
		10-47	Gray-brown loam, friable, no gravels, common rootlets, increase in rootlets at 37 cmbs, possible buried A-horizon, wavy gradual boundary		
		47-99	Gray and brown fine sandy loam, slightly stiff, <5% gravels, trace rootlets, moist, reduction throughout, some root cast staining		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
G1	40	0-8	Tan/White ashy silt, 50 % angular gravels/cobbles	No	Sagebrush upland, Terminated at weathered bedrock
		8-12	Light mixed reddish-brown silty sand, 70% angular gravels/cobbles		
		12+	Weathered bedrock		
GT1	40	0-13	Ap/A - brown silt loam 10YR 4/3, soft, 10% angular to sub-angular gravels, smooth clear boundary	No	Probable 1980 Mount St. Helens tephra. Highly disturbed by grazing and agriculture. Terminated at Pleistocene flood deposits of gravels and cobbles/highly compact carbonates.
		13-16	Tephra deposit, light gray 2.5Y 7/2, clear boundary		
		16-68	B- pale brown 10YR 7/3 loess/silt loam, reddening with depth, compact, gravels and carbonates increased with depth		
GT2	40	0-14	Ap/A - brown silt loam 10YR 4/3, soft, 10% angular to sub-angular gravels, smooth clear boundary	No	Probable 1980 Mount St. Helens tephra. Highly disturbed by grazing and agriculture. Terminated at Pleistocene flood deposits of gravels and cobbles/highly compact carbonates.
		14-17	Tephra deposit, light gray 2.5Y 7/2, clear boundary		
		17-54	B horizon - pale brown 10YR 7/3 loess/silt loam, reddening with depth, compact, gravels and carbonates increased with depth		
GT3	40	0-13	Ap/A - brown silt loam 10YR 4/3, soft, 10% angular to sub-angular gravels, smooth clear boundary	No	Probable 1980 Mount St. Helens tephra. Highly disturbed by grazing and agriculture. Terminated at Pleistocene flood deposits of gravels and cobbles/highly compact carbonates.
		13-15	Tephra deposit, light gray 2.5Y 7/2, clear boundary		
		16-38	B- pale brown 10YR 7/3 loess/silt loam, reddening with depth, compact, gravels and carbonates increased with depth		

Test No.	Width (cm)	Depth (cm)	Soil Description	Artifacts	Notes
GT4	40	0-9	Ap/A - brown silt loam 10YR 4/3, soft, 10% angular to sub-angular gravels, smooth clear boundary	No	Probable 1980 Mount St. Helens tephra. Highly disturbed by grazing and agriculture. Terminated at Pleistocene flood deposits of gravels and cobbles/highly compact carbonates.
		9-13	Tephra deposit, light gray 2.5Y 7/2, clear boundary		
		13-49	B- pale brown 10YR 7/3 loess/silt loam, reddening with depth, compact, gravels and carbonates increased with depth		

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Appendix G

Historical Property Reports

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Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder
Canal EL20

Property ID: 90228

Location



Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
Tax No/Parcel No: East Columbia Basin Irrigation District Easement
Plat/Block/Lot: N/A
Geographic Areas: Grant County, MOSES LAKE NORTH Quadrangle, T19R28E24

Information

Number of stories: N/A

Construction Dates:

Construction Type	Year	Circa
Built Date	1946	☒

Historic Use:

Category	Subcategory
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Historic Context:

Category

Science and Engineering

Agriculture

Community Planning and Development

Architect/Engineer:

Category	Name or Company
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Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder
Canal EL20

Property ID: 90228

Thematics:

Local Registers and Districts

Name	Date Listed	Notes
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Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
041007-02-STB, STB, STB Docket No. 34936, Northern Columbia Basin Railway Project	2/26/2007	Determined Not Eligible	, 6/3/2009



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder Canal EL20

Property ID: 90228

Inventory Details - 2/26/2007

Common name: Columbia Basin East Low Canal Feeder Canal EL20
Date recorded: 2/26/2007
Field Recorder: Carrie E. Chasteen
Field Site number: NCB18
SHPO Determination 041007-02-STB determined on 6/3/2009

Detail Information

Characteristics:

Category	Item
Form Type	Utilitarian

Surveyor Opinion

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): Yes

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

Significance narrative: The property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basic Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder Canal EL20 Property ID: 90228

Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal EL20 was constructed between 1946 and 1951. Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personnel and their families, which also led to an increase in the town's population. The construction of the canals associated with the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal EL20 appears to contribute under Criterion A to the potential Columbia Basin Project because it appears to be part of the original design of the Columbia Basin Project and because of the impact that irrigation has had on the economic development of Moses Lake. Canal EL20 is considered eligible for the National Register of Historic Places under Criterion A.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places as individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. Canal EL20 is channelized, while others like it are earthen. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion C because it is of common design and construction.

Physical description: The irrigation canal is approximately 10-feet wide and 4-feet deep. The canal is earthen. Signage indicates the canal is maintained with herbicides to prevent plant growth to maintain water flow. The canal runs through a cast concrete culvert under Wheeler Road.



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder Property ID: 90228
Canal EL20

Bibliography:

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

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Galm, J.R, G.D. Hartmann, R.A. Masten, and G.O. Stephenson 1981. A cultural Resources Overview of the Bonneville Power Administration's Mid-Columbia Project, Central Washington. Report on file at DAHP, Olympia.

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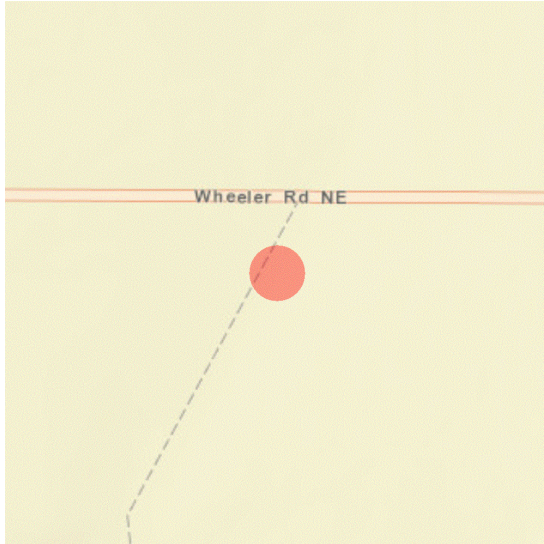


Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder
Canal RCD 180+182

Property ID: 90233

Location



Address: Wheeler Rd, between Highway 17 and Road N NE, Moses Lake, WA 98837
Tax No/Parcel No: East Columbia Basin Irrigation District Easement
Plat/Block/Lot: N/A
Geographic Areas: Grant County, MOSES LAKE NORTH Quadrangle, T19R28E19

Information

Number of stories: N/A

Construction Dates:

Construction Type	Year	Circa
Built Date	1946	☒

Historic Use:

Category	Subcategory
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Historic Context:

Category

Science and Engineering

Agriculture

Community Planning and Development

Architect/Engineer:

Category	Name or Company
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Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder
Canal RCD 180+182

Property ID: 90233

Thematics:

Local Registers and Districts

Name	Date Listed	Notes
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Project History

Project Number, Organization, Project Name	Resource Inventory	SHPO Determination	SHPO Determined By, Determined Date
041007-02-STB, STB, STB Docket No. 34936, Northern Columbia Basin Railway Project	2/26/2007	Determined Not Eligible	, 6/3/2009



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder
Canal RCD 180+182

Property ID: 90233

Inventory Details - 2/26/2007

Common name: Columbia Basin East Low Canal Feeder Canal RCD 180+182
Date recorded: 2/26/2007
Field Recorder: Carrie Chasteen
Field Site number: NCB22
SHPO Determination 041007-02-STB determined on 6/3/2009

Detail Information

Characteristics:

Category	Item
Form Type	Utilitarian

Surveyor Opinion

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): Yes

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

Significance narrative: The property consists of an irrigation canal that is associated with the Columbia Basin Project. Moses Lake, originally known as Neppel, is located in the high desert plateau of central Washington State. Early farmers in the area attempted to cultivate crops in the fertile soil through dry farming. The arid plateau of central Washington State could not support large crops without irrigation. As a result, small, regional irrigation projects limited in scope attempted to irrigate fertile farmland. While the massive Columbia River ran through the plateau, the river was lower than the surrounding farmland, which made irrigation difficult without a major feat of engineering. Plateau farmers clamored for a dam for irrigation. The desire for irrigation coincided with a growing awareness of hydroelectric potential of the Columbia River and the need for Works Progress Administration projects to decrease Depression-era unemployment. These desires culminated in the United States government embarking on what is known as the Columbia Basin Project. The Columbia Basic Project began with the construction of the Grand Coulee Dam, the largest concrete structure ever built. Other structures related to the initial phase of construction of the Columbia Basin Project include: the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal (Bureau of Reclamation 1998). The project has been called the largest Bureau of Reclamation project since the establishment of the bureau. Construction of the Grand Coulee dam began in 1933 and was completed in 1941. However, World War II interrupted the construction of the Project's irrigation canals. Grand Coulee Dam was a significant source of electricity for the Pacific Northwest during World War II, and continues to function in this capacity.

Following the end of World War II, construction of the canal system resumed. A total of 671,000 acres of farmland were brought under irrigation through the construction of the Main, West, East High and East Low Canals, and associated irrigation ditches. Construction of the canal system began in 1946 and continued over the course of the next 30 years. Water began flowing through the canals and irrigation ditches to Moses



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder Property ID: 90233
Canal RCD 180+182

Lake in 1951 (Columbia Basin Project, Irrigation Maps 1962). Federal funding to support construction of the system slowly dissipated over the course of the late 1960s and early 1970s, and construction has largely been placed on hold.

The Columbia Basin Project elements consisting of the Grand Coulee Dam; the Grand Coulee Power Complex and pump-generating plant; Banks Lake and Feeder Canal; the Main, West, East High and East Low Canals; O'Sullivan Dam and Potholes Reservoir; and Potholes East Canal appears to be eligible for listing in the National Register of Historic Places under Criteria A and C because the dams and canal system had a profound impact on farming, electricity generation, and the economy in Washington State and the Pacific Northwest region in general, and as a major feat of engineering and innovative construction techniques. Documentation of the Columbia Basin Project as a historic district, however, is beyond the scope of this evaluation.

Canal RCD 180+182 was constructed between 1946 and 1951. Prior to construction of the canal, Moses Lake was a small agrarian community. The installation of the Moses Army Air Base (also known as Larson Air Force Base) in 1942 brought an influx of military personnel and their families, which also led to an increase in the town's population. The construction of the canals associated with the Columbia Basin Project led to larger farming enterprises. The Utah and Idaho Sugar Company built their largest sugar beet processing facility in the country in Moses Lake in 1953, which resulted in thousands of acres of sugar beets being planted and irrigated by water from the Columbia Basin Project. The Utah and Idaho Sugar Company closed the processing facility in 1978 due to increased costs of sugar and the increasing use of corn syrup sweeteners. The sugar beet fields were converted to produce beans, corn, onions, wheat and grains for livestock. Moses Lake remains a largely agrarian-based community. Canal RCD 180+182 appears to contribute under Criterion A to the potential Columbia Basin Project because it appears to be part of the original design of the Columbia Basin Project and because of the impact that irrigation has had on the economic development of Moses Lake. Canal RCD 180+182 is considered eligible for the National Register of Historic Places under Criterion A.

Under other criteria, research does not indicate that the canal has known associations with a historically important person(s). Therefore, the canal does not appear eligible for listing in the National Register of Historic Places as individually or as a contributor to a potential National Register historic district under Criterion B. The canal was constructed by dredging soil from fields. Canal RCD 180+182 is channelized, while others like it are earthen. The canal was constructed using utilitarian methods and designs. Therefore, the canal does not appear to be eligible for listing in the National Register of Historic Places individually or as a contributor to a potential National Register historic district under Criterion C because it is of common design and construction.

Physical description: The irrigation canal is approximately 8-feet wide and 5-feet deep. The canal is earthen and overgrown with plants.



Historic Property Report

Resource Name: Columbia Basin East Low Canal Feeder Property ID: 90233
Canal RCD 180+182

Bibliography:

Bard, J.C., R.McClintock, J.B. Cox, V. Wright, S. Christensen and J. Woodruff 1996. A Cultural Resource Assessment of the Pacific Northwest Sugar Company's Moses Lake Sugar Beet Processing Plant Site, Grant County, Washington. Report on file at DAHP, Olympia.

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