

APPENDIX D – RESOURCE SURVEY PROTOCOLS

D1 – Cultural Resources Survey Protocol

D2 – Draft Paleontological Resources Survey Plan

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Appendix D1
Cultural Resources Survey Protocol

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Acronyms and Abbreviations

APE	area of potential effect
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
kV	kilovolt
NEPA	National Environmental Policy Act
NRHP	National Register of Historic Places
ORS	Oregon Revised Statutes
P.L.	Public Law
Project	Boardman to Hemingway Transmission Line Project
SHPO	State Historic Preservation Offices
TCP	Traditional Cultural Properties
U.S.C.	United States Code

APPENDIX D1 – CULTURAL RESOURCES SURVEY PROTOCOL

Appendix D1 is an overview of the survey requirements that have been identified in the Boardman to Hemingway Transmission Line Project (Project) Programmatic Agreement regarding compliance with the National Historic Preservation Act and other applicable state and federal laws.

D1.1 Introduction

The purpose of this document is to define the procedures for identifying, recording, reporting, and evaluating cultural resources along the proposed Project. Idaho Power Company proposes to construct, operate, and maintain a high-voltage transmission line in Idaho and Oregon. This document summarizes requirements that have been identified in the Project Programmatic Agreement regarding compliance with the National Historic Preservation Act and other applicable state and federal laws.

Cultural resources or cultural properties, as defined in Bureau of Land Management (BLM) Manual 8100, are locations of human activity, occupation, or use identifiable through field inventory, historical documentation, or oral evidence. The term includes archaeological, historic, or architectural sites, structures, or places with important public and scientific uses and may include definite locations (sites or places) of traditional cultural or religious importance to specified social and/or cultural groups. They may be, but are not necessarily, eligible for the National Register of Historic Places (NRHP).

The methods proposed here are guided by and in compliance with the following federal legislation:

- Antiquities Act of 1906 (Public Law [P.L.] 59-209; 34 Statute [Stat.] 225; 16 United States Code [U.S.C.] 431-433)
- Historic Sites Act of 1935 (P.L. 74-292; 49 Stat. 666; 16 U.S.C. 461-467)
- National Historic Preservation Act of 1966 (as amended 2002)(P.L. 89-665; 80 Stat. 915; 16 U.S.C. 470 as amended by P.L. 90-243, P.L. 93-54, P.L. 94-422, and P.L. 94-458)
- Executive Order 11593 of 1971
- Archaeological and Historical Conservation Act of 1974 (P.L. 86-523, as amended by P.L. 93-291; 16 U.S.C. 469-469c)
- Archaeological Resources Protection Act
- American Indian Religious Freedom Act of 1978 (P.L. 95-341)
- Native American Graves Protection and Repatriation Act of 1990 (P.L. 101-601)
- National Register of Historic Places
- National Register Bulletins
- Other pertinent legislation and implementing regulations

Oregon state laws appropriate to the Project:

- Indian Graves and Protected Objects (Oregon Revised Statutes [ORS] 97.740-97.760)
- Archaeological Objects and Sites (ORS 358.905-358.961)
- Scenic Waterways (ORS 390.805-390.925)
- Conservation Easement (ORS 271.715-271.795)

D1.2 Overall Approach

The analysis of effects on cultural resources will involve identifying the properties located within the study corridors that are eligible for, or listed on, the NRHP and defining the characteristics of each

property that contribute to its eligibility. Cultural resources that are eligible for listing in the NRHP also are referenced throughout this document, and elsewhere, as historic properties.

For this Project, analysis of initial impacts was conducted through the National Environmental Policy Act (NEPA) process. Baseline data were used to make an informed decision about the range of potential effects each alternative may have on cultural resources. Intensive Class III level cultural resources inventory will be conducted for the selected route on the area of potential effect (APE) to identify specific historic properties that would be affected adversely by the Project. Specific management determinations will then be proposed, such as avoidance or mitigative treatment.

The baseline data used in the NEPA analysis were derived from Class I and Class II (if required) inventories (described below). These are summarized in separate cultural resources technical reports in support of the NEPA process. Pertinent Class I and Class II data will be incorporated into the Class III inventory report for the transmission line right-of-way.

The transmission line Class III cultural resources inventory will consist of an intensive pedestrian survey along an alternative route or routes selected for construction of the Project. The results of the survey will be presented in Class III cultural resources reports. The final Class III reports will allow the BLM, in consultation with the State Historic Preservation Offices (SHPO), other land-management agencies involved, tribes, and consulting parties, to identify NRHP-eligible properties and make determinations on eligibility of, and potential effects on, those properties.

The locations of ancillary facilities associated with the Project, such as roads, substations, and staging areas, have not been identified completely yet. As these areas are identified, additional Class III cultural resources inventories will be conducted, the results of which will be documented in Class III cultural resources reports. Construction variance inventories may be required to allow for minor shifts in the line, tower locations, or other features as necessitated by engineering during actual construction. Each variance location will be subject to a cultural resources evaluation and will be surveyed if required. All cultural resources inventory work necessitated by a construction variance request will be documented in an addendum report and submitted for formal review.

D1.3 Data Needs and Collection Methods

The BLM has identified three generally accepted levels or classes of cultural resources research and inventory. Class I inventories involve conducting a file search of existing literature and preparing an overview of an area. Class II inventories are statistically based sample surveys covering only a portion of a particular area. Using the database generated by the survey, predictions are then made for the entire area for types and densities of sites, as well as the topographic and environmental settings within which they could be found. Class III inventories consist of a complete pedestrian survey of a geographic area and are designed so that the vast majority of cultural resources in that area are identified and recorded. To assist in the identification of historic properties (36 Code of Federal Regulations [CFR] 800.4), the BLM will ensure that an intensive Class III inventory will be completed for the selected route(s) per the stipulations and requirements documented in the Programmatic Agreement for the Project. The Class III pedestrian inventory will be completed in two phases: Phase I will consist of an update of the Class I inventory data collected during the NEPA process and Phase II will consist of Class III inventory of the selected route(s).

D1.3.1 Class I Cultural Resources Inventory

The Class I data collected for the NEPA analysis are summarized in the Project's environmental impact statement and documented in the Class I Technical Reports prepared in support of the environmental impact statement. The pertinent Class I data will be updated and included in the Class III reports for the selected alternatives. The Class I cultural resources inventory for the Project involves the BLM, tribes, SHPOs, and other appropriate land-management agencies. In addition to this information, it was

necessary to consult the NRHP and the county historic files of the SHPOs. The transmission line study corridor for the Class I records review is 4 miles wide (2 miles on either side of the reference centerline).

D1.3.2 Class II Cultural Resources Inventory

A Class II cultural resources inventory typically is conducted for areas where an insufficient body of comparative data exists to complete general impact analysis for use in the NEPA process. Class II data collected for the environmental impact statement is later incorporated into the Class III inventory where applicable.

D1.3.3 Class III Cultural Resources Inventory

Once a route has been selected for construction, a Class III cultural resources inventory will be conducted of the entire route, its access corridors, and any associated ancillary facilities or additional work spaces, as required. The Class III inventory will consist of a pedestrian survey of the direct effects APEs. This survey will be executed by archaeologists walking parallel transects varying between 15 and 30 meters in width (as determined by the involved land-management agency and consulting parties) to cover the width of the direct effects APEs (Section D1.4.1 – Direct Effects). Any areas identified by the BLM, or other involved land-management agencies, where previous inventories have provided adequate survey coverage at levels consistent with current standards may be excluded from inventory at the discretion of the land-management agency. In addition, areas with excessively steep terrain, or extensive surface disturbance, and no potential for sites may be excluded from inventory at the discretion of the land-management agency.

D1.3.4 Cultural Resources Visual Effects Study

In addition to the Class I and Class III cultural resources inventories, a cultural resources visual effects study 5 miles on either side of the centerline will be required. The BLM, in consultation with the involved land-management agencies and consulting parties, has developed a cultural resources visual sensitivity assessment methodology to identify cultural resources properties that could be considered visually sensitive and potentially affected by the Project. For purposes of this methodology, as under the Advisory Council on Historic Preservation guidelines, a visual effect must alter, directly or indirectly, a characteristic of that property that qualifies it for inclusion to the NRHP and do so in a manner that would diminish that property's integrity of setting, feeling, and/or association (36 CFR 800.5). The cultural resources visual effects study will be reviewed by the participants in the Programmatic Agreement and approved by the BLM.

D1.4 Area of Potential Effects

The BLM, in consultation with the SHPO and other consulting parties, has defined and documented the APE based on direct, indirect, and cumulative effects. The APE will apply to federal, state, tribal, and private lands that may be affected by the transmission line corridor, staging areas, access roads, borrow areas, transmission substations, and other related transmission infrastructure for this Project.

D1.4.1 Direct Effects

Direct effects on the APE include the following:

- The direct effects APE for the above ground transmission line will be 250 feet on either side of centerline (500 feet total) for the right-of way and extend the length of the Undertaking, approximately 300 miles. The direct effects APE for new or improved access roads will be 100 feet on either side of centerline (200 feet total). Existing crowned and ditched or paved roads will be excluded from inventory.

- The direct effects APE for existing unimproved service roads will be 50 feet on either side of centerline (100 feet total).
- The direct effects APE for the staging areas, borrow areas, substations and other ancillary areas of effects will include the footprint of the facility and a buffer of 200 feet around the footprint of the proposed activity.
- The direct effects APE for pulling/tensioning sites that fall outside the right-of-way will be a 250 foot radius around these points.
- The direct effects APE for borehole locations needed for geotechnical studies conducted as part of detailed engineering will include a 250 foot radius area centered on the borehole location if outside the transmission line direct effects APE.
- The direct effects APE from operation and maintenance activities is the area of the right-of-way grant.

D1.4.2 Indirect Effects

Indirect effects on the APE include the following:

- The APE for indirect effects on historic properties will include, but not be limited to, the visual, audible and atmospheric elements that could adversely affect NRHP listed or eligible properties. Consideration will 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 NRHP.
- The indirect effects APE for the Undertaking will extend generally for five miles or to the visual horizon, whichever is closer, on either side of the centerline of the proposed alignment and alternative routes.
- Studies for previous 500 kilovolt (kV) lines have identified noise created by corona and electromagnetic fields as possible indirect effects for transmission lines. These same studies indicate that these effects are greatest immediately under the line and within the APE for direct effects. Although they may on occasion be measured as far as 300 feet from the centerline of a 500 kV line, data gathered for this Undertaking indicate that the noise created by corona and electromagnetic fields will be limited to within the inventoried indirect effects APE.
- Where the indirect APE includes Traditional Cultural Properties (TCPs), National Historic Trails, and other classes of visually-sensitive historic properties, additional analyses may be required and the indirect APE may need to be modified accordingly. These areas will require analysis on a case by case basis.

D1.4.3 Cumulative Effects

Cumulative effects on the environment results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes other actions. The identification of the APEs will consider cumulative effects to historic properties as referenced in 36 CFR 800.5. Cumulative effects may be direct and/or indirect, or reasonably foreseeable effects caused by the Undertaking that may occur over time, be farther removed in distance or be cumulative. For the purposes of this Project, the APE for cumulative effects is the same as that for direct and indirect effects.

The locations of ancillary facilities, such as roads, stations, and multi-use areas, have not yet been identified. Should they be identified by the time the Class III intensive pedestrian inventory is underway, they may be included in the same effort as the inventory of the selected route. Some ancillary facilities are likely to be designed after the inventory of the selected route is complete; in which case, additional Class III inventories and reports will be required. All areas inventoried at the Class III level, and all associated cultural resources, will be documented and included in these reports.

Upon completion of the Class III inventory, Class III cultural resources inventory reports (one per state) will be prepared for review. The final Class III reports will permit the BLM, in consultation with the tribes, SHPOs and other involved land-management agencies, to identify NRHP-eligible properties and make determinations on eligibility of, and potential effects on, those properties. All previously identified historic properties and unevaluated sites that are within the direct effects APEs, but are not directly affected by construction activities, will be assessed for indirect effects. As additional portions of the Project area may be added to include ancillary facilities (e.g., roads, staging areas, etc.), additional Class III inventory and reporting may be required.

A Historic Properties Management Plan and Historic Properties Treatment Plan for historic properties identified during the Class III inventory as potentially affected by the Project will be prepared. This will require consultation among the BLM, tribes, SHPO, and consulting parties. Avoidance of effects on cultural resources will be preferred; however, mitigation efforts to ameliorate adverse effects on historic properties may be considered when and where avoidance is determined impracticable.

The Class III inventory will focus on cultural resources that are available for visual inspection. Cultural resources sites, including both prehistoric and historic archaeological sites, will be recorded on the appropriate cultural resources site form. Different state-specific cultural resources site forms exist for Idaho and Oregon. Each site will be described, mapped, photographed, and evaluated for eligibility for the NRHP. Evaluative testing will be employed on an as-needed basis to aid in the determination of site eligibility. Previously recorded sites within the Class III inventory corridors will be revisited and the appropriate site form addendum will be prepared documenting the current state of the site, any additional materials located, or significant changes observed.

Should historic buildings be encountered during Class III inventories, documentation will be completed using the appropriate historic standing structure site form. Pursuant to agreement with the BLM as lead agency, all cultural resources within the APEs that will have achieved 50 years of age or more at the time of the completion of construction will be recorded, except sites younger than 50 years old that exhibit historic significance, to compensate for the anticipated life of the Project. Previously recorded architectural resources in the survey area will be revisited, and inventory forms will be updated if changes have occurred and resources re-evaluated for eligibility to the NRHP.

General Land Office maps will be reviewed to identify locations of potential historic features, such as canals, roads and railroads, and historic sites, such as homesteads, mining structures, etc., once located within the Class III inventory corridor. If General Land Office features are found, they will be documented during the Class III survey following standard procedures.

All reports detailing Class III level cultural resources inventories will include those items specified in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. An intensive survey report should document (a) the kinds of properties looked for; (b) the boundaries of the area surveyed; (c) the method of survey, including an estimate of the extent of survey coverage; (d) a record of the precise location of all properties at a degree of accuracy that meets or exceeds the National Map Accuracy Standard for 1:24,000-scale maps; and (e) information on the appearance, significance, integrity, and boundaries of each property sufficient to permit an evaluation of its significance. Reports should include discussion of the area's cultural history, previous research in the area, and treatment recommendations. Appendices to this report will include cultural resources site forms and/or historic standing structure site forms, maps, and photographs for all sites visited during the inventory.

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