

Archaeological Permit Applicants

(5-21-2012)

Re: Importance of a Research Design in permit applications

The Administrative Rules for Oregon's Archaeological permit statute (ORS 390.235) state that a research design is considered a vital part of all permit applications. As such, in order for a permit application to be considered complete and sent out for review it must include a research design. It is important that all applicants carefully consider the purpose and intent of all proposed permit applications and that their design reflects the important research questions that can be addressed through the proposed investigative work. Such a design is needed for permits focusing on site discovery as well as the recovery of site specific information (e.g., determining boundaries, integrity, significance, or mitigation). The Administrative Rules (OAR 736-051-0080(4)(c) and 736-051-0090(3)(a)) state that each permit needs "A research design that explicitly develops the rationale behind the proposed research, giving the theoretical orientation, justification for problem selection, logic and procedures for the research strategy. The design must define the universe of study, establish realistic minimal expectations and a realistic schedule of research and provide justified recovery procedures."

While the development of a research design may appear fairly straightforward for archaeological investigations focusing on a known site, archaeologists often have difficulty including sufficient information within their permit application for reviewers to be aware of the focus of their permit research and the research questions that are trying to be addressed (i.e., focus of their research). This is particularly lacking for permits applied for in areas where no known sites exist and a permit application is being requested solely to identify the presence or absence of sites within a project's Area of Potential Effect (APE).

In Oregon, archaeological permits are routinely applied for in five general scenarios. These include: 1) permits seeking to discover the presence or absence of any site within a project area; 2) permits to determine a site's boundaries so that a proposed project can avoid it; 3) permits directed toward discovering a site's significance and eligibility to the National Register; 4) data recovery of a known site that has been determined eligible and can not be avoided by a proposed project (i.e., mitigation) or is the focus of a particular research effort; and 5) a combination of any of the first three permit scenarios..

The following outline is provided to assist future permit applicants to address the range of basic questions that should be asked regarding each type of research design being sought. These questions are meant to serve as a guide and are not all-inclusive. All research designs should be project specific; that is, they should focus on the specific project area noted in the permit application (e.g., areas of high probability and low visibility, known site) and not include a "canned design format" applicable to any land in the state.

1) *Research designs for permits seeking only to discover the presence or absence of a site within a project area should address the following questions:*

- a) Considering the geomorphology of the proposed project's APE, where would archaeological sites (both prehistoric and historic) most likely be found?
- b) How will your proposed field strategy sample such an area (e.g., are subsurface probes sufficient, use of augers in bottom of probes to discover deeply buried sediments, trenching)? Provide a basis for your proposed testing strategy based on the potential project impacts and the likelihood of sites to be within the proposed APE.
- c) Based on the completed background research for the project's APE (e.g., one to two mile radius) what site types are likely to be found in your project area? How do such site types relate to the past land use history of the area?
- d) Does your project area lie within an area incorporated in or near an important past activity associated with local, state or regional history (e.g., reported ethnographic Indian village site or burial, reported archaeological site (tickler), native or homestead allotment, early townsite, ferry landing, historic mining area, 19th century dry land farming, historic railroad development)?
- e) If sites are found during the proposed investigation, how will these sites be addressed (e.g., work stoppage and avoidance, boundary determination, evaluation of significance)?

2) *Research designs for permits to determine site boundaries.*

Research designs for establishing the boundary of an archaeological site should combine sufficient background research with attempts to document both the horizontal and vertical extent of cultural materials. For example:

- a) Given what is known about the depositional history of the area, site type, general topography and the recorded surface or exposed assemblage, is the site expected to be large, discrete or diffuse? Given the same criteria, does the site likely extend beyond the surface assemblage?
- b) Based on background research (similar type sites in the region) and on-site observations, are areas with past disturbances expected (e.g., modern impacts, bioturbation, freeze/thaw cycles, krotovina)?
- c) Are deeply buried cultural deposits anticipated?

Research questions may additionally relate to whether the site connects to a known site nearby. Since boundary testing will involve subsurface investigations, research questions may further focus on temporal placement or analyses of anticipated buried cultural deposits. Be sure to keep in mind how test units/probes will be distributed and how many are anticipated given what is known and expected about the site boundary, topography and degree of past disturbances.

3) *Research designs for permits seeking to determine a site's significance (e.g., National Register eligibility or significance of the portion of site available for testing [evaluation of contributing component of site when investigation is limited to a project's APE]).*

As with boundary testing, research designs developed to assess significance should utilize background research for both inter and intra-site comparisons as appropriate. Research designs may address how intact subsurface cultural deposits relate to significance; or how anticipated analyses (e.g. testing a dense lithic scatter with buried deposits suggests a high probability exists for lithic analysis, sourcing, obsidian hydration dating etc.) or any available analyses of

recovered data (e.g., radiocarbon analysis, faunal analysis, raw material sourcing, hydration dating, lithic analysis) will contribute to significance. Questions may relate to:

- a) What is the age of the site? How does the site fit into what is known about local or regional prehistory or history? Relationship to other sites in the area?
- b) What season(s) was the site occupied?
- c) What activities were occurring at the site?

Background research may indicate continuity with current traditional cultural practitioners which may support significance. It should be noted that both prehistoric and historic archaeological sites may be significant under any of the four criteria of the National Register of Historic Places (NRHP). It is also important to note that the same level of research design for determining significance is necessary for determining that a site is not significant (Oregon SHPO treats all archaeological sites as eligible until proven otherwise). The design strategy should define the anticipated volume of excavation which should be appropriate to make statements on significance given the site's known boundary and depth. The location of excavation units should be distributed, as appropriate, where data yield will address research questions regarding site significance and not based on proposed project disturbance alone, unless constrained by landownership issues which dictate the study area. The location of a proposed project may not adversely effect elements of a site that make it significant, but when assessing significance, the research design should focus on the entirety of the site and where important data is likely to be recovered. If an archaeological site is treated as eligible, evaluation testing may focus on whether the portion located within the project area contributes to significance.

4) Research designs for permits seeking data recovery of a known site that has been determined eligible and can not be avoided by a proposed project (i.e., mitigation) or is the focus of a particular research effort.

By the time there is a need for data recovery excavations of an archaeological site, the site has been through two earlier phases of investigations (survey and testing) and has gone through the evaluation process. Therefore the previous investigations have already developed research designs with specific and general theoretical questions and methodologies to address those questions. Data recovery investigations should be based on earlier work and analyses; the focus of the data recovery research design should therefore focus on specific questions in a more refined and well-designed manner than earlier investigations. Identify site-specific topics that are important to understanding inter-site questions (e.g., questions about discovered patterns of cultural materials or features within the site). However, don't dismiss previous research questions that still may be appropriate to follow up on, such as identifying archaeological topics that are important to local/regional/national prehistory/history that the site can be expected to address (e.g., questions regarding how the site relates to other sites in the region).

5) Research designs for permits seeking to combine any of the first three permit scenarios.

It may be possible for a permit to combine any of the initial three permit cases (i.e., it is not possible to combine data recovery with other permit case types). If a permittee is attempting to combine more than one of these phases within a single permit (e.g., determine presence or

absence of site and if a site is found, determine site significance) the research design for the initial permit application should incorporate background research, environmental conditions and any other pertinent information to best predict what types of sites one might expect to find during probing and how the testing and/or evaluation of such site types would address local and regional questions of importance. If it is not possible to address such questions before submitting your permit you may need to submit a second permit for the additional proposed work.

Once a site is actually found and evaluation of significance is desired, research questions often need to be tweaked or changed in order to address the discovered resource. If a site type was identified that requires additional research questions or consultation, a summary of the discovered site and a list of additional research questions that will be sought during the significance portion of the permit should be shared with both Oregon SHPO and the Tribes. Such a consultation letter permits both the SHPO and appropriate tribes to become aware of the number, type and range of sites discovered through the initial permit investigations. The number of excavation units should not need to change but the questions that are trying to be answered with those units should be refined to specifically address the site in question.

When attempting to address significance, it is important to consider all four of the National Register criteria. The research questions should be tailored to reflect that attempt. This revised research design does not constitute a second review period; only a continuation of the consultation process between the permit applicant, tribes and SHPO.