

December 23, 1998

Lt. Col. William E. Bulen, Jr.
U.S. Army Corps of Engineers
Walla Walla District
201 N. 3rd Avenue
Walla Walla, WA 99362-1876

Re: ARPA Permit Request for Geoarchaeological Investigation at the
Kennewick Man Discovery Site, Columbia Park, Washington

Dear Colonel Bulen:

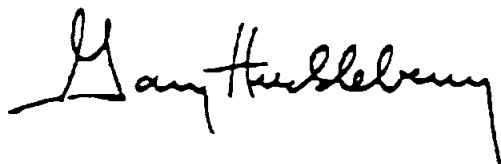
In August 1997 we were part of a research team that submitted an ARPA permit application to perform geoarchaeological testing at the location where skeletal remains known as "Kennewick Man" were recovered. In December 1997 we were allowed to participate in a geoarchaeological study led by scientists from the Army Corps Waterways Experiment Station (WES). This study was a limited reconnaissance of the terrace edge. Although the studies provided valuable background information, none of our ARPA permit objectives was accomplished. In March 1998 our team submitted to your District a report based on the December 1997 fieldwork. Last month we received the WES team's final report. An analysis of that report is being mailed to you separately.

We agree completely with the WES team's conclusion that more work needs to be done at the Site to fully define the geological context of the Kennewick Man skeleton. We firmly believe that the research design specified in our August 1997 ARPA permit request is best suited for answering contextual questions. In an effort to reduce the administrative delays that to date have attended our permit, we are modifying the timing, but not content of our proposed research. Accordingly, we request a permit to do a *phased study* at the Site. The first phase of our study would involve hand excavation of a stratigraphic trench approximately 1 m wide and approximately 10 m long. At the Site, this trench will be combined with approximately five discontinuous, 1 m² test units that are adjacent to the bank protection along the reservoir's edge. These excavations would be supplemented by widely spaced hand-held auger probes across the terrace surface. If, after completing this phase, we find geological information that warrants further testing of the Site, we will advise of the specific tests that will be needed during the second phase of our study.

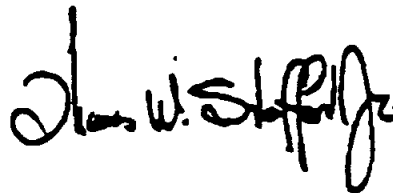
We believe that this phased approach to our original research design will allow us to collect chronological and three-dimensional stratigraphic

information with minimal impact to the Site. Based on both our team's and the WES team's conclusions, we have no empirical evidence that the Site contains human burials or other cultural remains that could be harmed by on-site geological test excavations. Therefore, we feel there is every reason to commence with controlled geologic test excavations. Ideally, we would like to perform this work as soon after February 1, 1999 as possible. Your prompt and positive response will be greatly appreciated.

Sincerely,



Gary Huckleberry, Ph.D.
Department of Anthropology
PO Box 644910
Washington State University
Pullman, WA 99164-4910
Phone: 509-335-3441
e-mail: ghuck@wsu.edu



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Xc: James Chatters

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August 26, 1997

District Commander
U.S. Army Corps of Engineers
Walla Walla District
201 N. 3rd Avenue
Walla Walla, WA 99362-1876

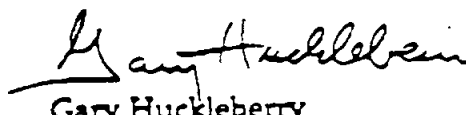
Subject: Geoarchaeological study of Kennewick Man site

Enclosed please find the following:

1. Two ARPA Permit Applications with Exhibits A through E;
2. Two letters of certification from the Museum of Anthropology, WSU.
3. Curriculum vitae for me and Dr. Thomas Stafford.

Maps of the proposed study area will be sent under separate cover. Given the impending approach of winter, your prompt and immediate attention to this matter would be greatly appreciated. If you have any questions, please call me at 509-335-4807.

Sincerely,


Gary Huckleberry

Enclosures

c: Alan Schneider, Timothy Kohler

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OMB APPROVAL NO. 1024-0037
Expires 30 June 1988

DEPARTMENT OF THE ARMY

APPLICATION FOR A FEDERAL PERMIT
UNDER THE ARCHAEOLOGICAL RESOURCES PROTECTION ACT
approved October 31, 1978
(Public Law 96-35; 95 Stat 721; 16 U.S.C. 470aa-11; 32 CFR 229)

NAME OF PROJECT OR INSTALLATION: Columbia Park, Benton County, Washington
Discovery location of Kennewick Man skeleton

All information requested must be completed before application will be considered. Use separate sheets of paper if more space is needed to complete a section.

1. Name of Institution or individual Gary A. Huckleberry, Ph.D.
2. Date of Application August 26, 1997

3. Address (include Zip Code) Department of Anthropology
Washington State University
Pullman, WA 99164-4910

4. Type of Permit Requested:

- a. Surveys, limited testing/limited collections of lands identified in No. 5.
- b. To excavate, collect, and make extensive collections on specific sites described below in No. 5.

5. Lands of the United States for which permit is requested:

a. Description: Specify military installation or civil works project, if on surveyed lands, description must be by subdivisions of the Public Land Surveys. If on unsurveyed lands, description must be by acres and bounds with ties to some topographic feature. See EXHIBIT A attached.

b. Appropriate map(s), sketch, or plan showing specific sites or areas for which permit is desired. (Use separate sheets, if necessary, and attach a copy of the application). See attachments.

6. Nature and extent of the work proposed, including how and why it is proposed to be conducted:

See Exhibit B attached.

7. Name, address, and institutional affiliation, if any, of persons in "a" and "b" below:

a. Individual(s) proposed to be responsible for carrying out the terms and conditions of the permit, (in general charge): See Exhibit C attached.

b. Individual(s) proposed to be responsible for conducting the work, (in direct charge of field work): Include as part of the application, evidence of qualifications, in accordance with 32 CFR 229.8 of the Final Uniform Regulations.

See Exhibit C attached.

8. Proposed date field work will begin:

9. Proposed time of performance:

See Exhibit C-1 attached.

See Exhibit C-1 attached.

10. University, museum, or other scientific or educational institution in which the applicant proposes to store all collections, and copies of records, data, photographs, and other documents derived from the proposed work. (The application must include a written certification, signed by an authorized official of the institution, of willingness to assume curatorial responsibility, and to safeguard and preserve these materials as property of the United States, or in the case of an application on Indian lands, in the event the Indian owners do not wish to take custody.)

Washington State University

11. Proposed outlet for public written dissemination of the results.

See Exhibit D attached.

12. Evidence of the applicants' ability to initiate, conduct, and complete the proposed work, including evidence of logistic support and laboratory facilities. See Exhibit E attached.

13. Certification:

I hereby certify that all materials will be curated within 90 days after completion of the final report in accordance with 32 CFR 229.8 of the final regulations.

SIGNATURE (Individual in General Charge) _____

14. Complete and return two (2) copies to the District Commander.

EXHIBIT A

Permit Application Dated 8/26/97

The description of the lands for which the permit is requested is:

Columbia River shorelands in T9N, R29E, Section 27 (or 34), right bank of the river between miles 331.5 and 332.

The site is more commonly known as the location where the Kennewick Man skeleton was recovered.

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EXHIBIT B

Permit Application Dated 8/26/97

1. The purpose of the proposed work is to conduct a limited testing program at the location where the Kennewick Man skeleton was discovered (the "Site"). A multidisciplinary team of research scientists, composed of geoarchaeologists, environmental archaeologists, and a radiocarbon dating specialist, will gather new data to be used to provide a contextual framework for evaluating the Kennewick Man discovery. Specific objectives of the testing program are to:

- (a) identify and record geomorphic features in the project area;
- (b) identify, sample and map stratigraphic and soil units at the Site;
- (c) collect samples of paleobotanical and faunal specimens that may be exposed in bank deposits;
- (d) determine if any intact archaeological deposits are present at the Site;
- (e) collect samples of organic materials (such as, charcoal, soils, nonhuman bone, etc.) for radiocarbon dating;
- (f) catalog all specimens and materials collected;
- (g) prepare a report on project activities and results.

2. Data gathered from the testing program will be used to address the following issues:

- (a) whether the age of the Site is consistent with the radiocarbon age of the skeleton;
- (b) whether the skeleton was deposited at the Site due to an intentional burial or to other causes;
- (c) whether the Site has been disturbed by geological, biological or cultural factors following initial deposition of the skeleton;
- (d) what factors may have contributed to preservation of the skeleton over time;
- (e) whether there was human occupation of the Site at the time of, prior to, or subsequent to deposition of the skeleton;
- (f) whether the Site is subject to any unusual conditions that might affect the reliability of radiocarbon dates taken from the skeleton or other organic materials (if any are found).

3. The proposed work will be conducted in the following manner:

A. The Site first will be examined or tested by pedestrian survey and by small auger holes (or shovel probes) to determine whether it contains any intact archaeological deposits that might be disturbed by the proposed work. If any such

deposits are found, investigation of the Site will be limited to areas not containing archaeological deposits. If that is not possible, activities at the Site will be terminated until plans can be developed for controlled archaeological excavation and a new permit is obtained. If any isolated archaeological objects (other than human remains or "cultural items") are encountered, the testing program will continue and such objects will be recorded and collected.

B. Subject to the above constraints, a trench will be excavated by backhoe at a right angle to the riverbank at or as close to the center of the Site as possible. The purpose of this backhoe trench is to expose a stratigraphic cross-section of the Site sediments and to permit the identification, measurement, recordation and sampling of the sedimentary strata within the Site. To the extent needed to comply with applicable OSHA requirements, shoring will be used to stabilize trench walls and/or the trench will be "stepped back." During excavation of the backhoe trench, team members will monitor the trench and tailing piles for any archaeological objects that might be encountered. If any such objects are encountered, they will be dealt with as described in Paragraph A above.

C. Excavation and examination of the backhoe trench will be supplemented by:

- (i) excavation of auger holes or shovel probes at selected locations in areas adjacent to the Site;
- (ii) visual examination of the riverbank at and adjacent to the Site (with possible limited testing as described below);
- (iii) a general survey (on foot and by map) of the exposed landforms in the area of the Site;
- (iv) a pedogenic analysis of the sedimentary strata using samples taken from the Site;
- (v) a sedimentary analysis of samples from the Site (if warranted by the circumstances encountered);
- (vi) radiocarbon dating of charcoal or other organics from different sedimentary strata (if found);
- (vii) radiocarbon dating (if feasible) of any soils that may have formed within the Site sediments.

D. The depth and length of the backhoe trench, and the number and depth of the auger holes (or shovel probes), will depend upon the circumstances encountered during the course of the project. In general, it should be anticipated that the trench will be approximately 50 to 100 feet in length and that it will be excavated to the depth of the current water table. Examination of the riverbank may require the excavation of shallow cut-backs by shovel or trowel to expose clean vertical cross-sections of the subsurface sediments. Depending upon the results of the auger holes (or shovel probes) and the riverbank examination, it may be necessary to excavate a

second backhoe trench at a location and in a direction to be determined at that time. The length and depth of this second trench would be roughly comparable to that of the first trench, and its excavation will be conducted as described in Paragraph B above.

E. In addition to the above activities, the following laboratory analyses will be conducted:

- (i) Laboratory analyses of the sediments will be conducted under my supervision at Washington State University and by Dr. C. Vance Haynes at the University of Arizona. These analyses will require approximately 6 weeks to complete.
- (ii) Radiocarbon dating of any organic materials obtained from the Site will be conducted by Dr. Thomas W. Stafford at the University of Colorado. Such dating will require approximately 8 weeks from the time that the test samples are delivered to Dr. Stafford.
- (iii) If any plant or animal specimens or archaeological objects are recovered from the Site, Drs. Chatters and Bonnicksen will either identify these specimens and objects themselves or contact specialists to assist with the analyses.

4. The following measures will be used to protect the site from vandalism or damage during the proposed work and to prevent injury to members of the public

A. The trench area will be flagged and posted with signs to warn against trespassing.

B. As a further deterrence against unauthorized entry, a flagged rope will be strung around the perimeter of the trench area. In addition, a fence (or plastic screen) will be placed around the trench each evening when work ceases for the day. This barrier will help to deter trespassers, and will also help to protect wildlife from injury.

C. It is applicant's understanding that the site is located in a public park managed by the City of Richland, Washington. Applicant has been informed that the park is closed at night to prevent vandalism and unauthorized use of the park facilities. City authorities will be requested to provide increased police monitoring of the park during the work period covered by this application. If possible, additional security will be provided by having one or more individuals present at the site in the evenings and over night.

- 5. It is expected that a report of the results of the proposed work can be completed with approximately 6 to 8 weeks after completion of the laboratory analyses referred to above. Two copies of the report will be provided to the Corps, together with such supplementary materials as may be specified in the Permit.
- 6. Geoarchaeological investigation of the Site will not result in any permanent damage to the Site as all trenches, auger holes and shovel probes will be refilled upon conclusion of on-site testing and examination.
- 7. The measures outlined above are projected plans for the proposed work based upon present knowledge of the Site. One should keep in mind, however, that the reality of field conditions may cause some aspects of the proposed excavation and sampling procedures to be redesigned as needs may dictate. For that reason, flexibility should be allowed for appropriate changes to be made as warranted by the conditions actually encountered. Among other things, actual Site conditions may necessitate modifications in sampling and testing strategies, and may indicate the need for a follow-up visit.

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EXHIBIT C-1

Permit Application Dated 8/26/97

Applicant proposes to begin activities at the Site on October 11, 1997, or as soon thereafter as weather and circumstances permit. Depending upon conditions encountered, it is expected that work at the Site will be completed in four (4) days. However, flexibility should be allowed for additional time at the Site (not to exceed 5 additional days) if warranted by conditions encountered.

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EXHIBIT D

Permit Application Dated 8/26/97

Copies of the investigation report will be provided to the Corps and may be filed with the Court as part of the record in Bornrichsen et al. v. U.S. In addition, results of the investigation may be used in various scientific articles by Drs. Bornrichsen, Chatters, Haynes and Huckleberry and other researchers.

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