DOE/EA-1260

Environmental Assessment

Transfer of 1100 Area, Southern Rail Connection and Rolling Stock, Hanford Site, Richland, Washington

U.S. Department of Energy
Richland, Washington

August 1998

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ENVIRONMENTAL ASSESSMENT

FOR THE

TRANSFER OF 1100 AREA, SOUTHERN RAIL CONNECTION

AND ROLLING STOCK,

HANFORD SITE, RICHLAND, WASHINGTON

U.S. DEPARTMENT OF ENERGY

RICHLAND, WASHINGTON

AUGUST 1998

PREFACE

This environmental assessment (EA) has been prepared to assess potential environmental impacts associated with the U.S. Department of Energy's proposed action: the transfer of the 1100 Area, southern rail connection and rolling stock to a non-federal entity. Impact information contained herein will be used by the U.S. Department of Energy, Richland Operations Office Manager, to determine if the proposed action is a major federal action significantly affecting the quality of the human environment. If the proposed action is determined to be major and significant, an environmental impact statement will be prepared. If the proposed action is determined not to be major and significant, a Finding of No Significant Impact (FONSI) will be issued and the action can proceed. Criteria used to evaluate significance can be found in Title 40, Code of Federal Regulations (CFR) 1508.27.

This EA was prepared in compliance with the *National Environmental Policy Act* (NEPA) of 1969, as amended, the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500-1508), and the U.S. Department of Energy Implementing Procedures for NEPA (10 CFR 1021). The following is a description of each section of the EA.

1.0 Purpose and Need for Action. This provides a brief statement concerning the problem or opportunity the U.S. Department of Energy is addressing with the proposed action. As necessary, background information is provided.

2.0 Description of the Proposed Action. A description with sufficient detail to identify potential environmental impacts is provided.

3.0 Alternatives to the Proposed Action. Reasonable alternative actions, which would address the Purpose and Need, are described. A no action alternative, as required by 10 CFR 1021, also is described.

4.0 Affected Environment. This provides a brief description of the locale in which the proposed action takes place, and which may be environmentally impacted.

5.0 Environmental Impacts. The range of environmental impacts, beneficial and adverse, are described for the proposed action. Impacts of alternatives briefly are discussed.

6.0 Permits and Regulatory Requirements. A brief description of permits and regulatory requirements for the proposed action is provided.

7.0 Organizations Consulted. Any outside agencies, groups, or individuals contacted as part of environmental assessment documentation preparation are listed.

8.0 References. Documents used to provide information or data are listed.

The appendices contain additional information necessary to support an understanding of the proposed action, alternatives, and potential impacts is provided. Comments resulting from review of the environmental assessment by states and tribes or other stakeholders and the response to those comments will be included in the appendices.

GLOSSARY

AOP	Air Operating Permit
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CLUP	Comprehensive Land Use Plan
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act of 1973
FONSI	Finding of No Significant Impact
GSA	General Services Administration
NAAQS	National Air Ambient Quality Standards
NEPA	National Environmental Protection Agency
NMFS	National Marine Fisheries Service
NPL	National Priorities List
POB	Port of Benton
PSD	Prevention of Significant Deterioration
RCT	Radiological Control Technician
RL	U.S. Department of Energy Richland Operations Office
SHPO	State Historic Preservation Officer
WDOE	Washington Department of Ecology

METRIC CONVERSION CHART

Into metric units			Out of metric units		
If you know	Multiply by	To get	If you know	Multiply by	To get
Length			**Length**		
inches	2.54	centimeters	centimeters	0.393	inches
feet	0.305	meters	meters	3.28	feet
yards	0.914	meters	meters	1.09	yards
miles	1.61	kilometers	kilometers	0.62	miles
Area			**Area**		
square feet	0.092	square meters	square meters	10.76	square feet
square yards	0.836	square meters	square meters	1.20	square yards
square miles	2.59	square kilometers	square kilometers	0.39	square miles
square feet	2.296×10^{-5}	acres	acres	4.36×10^{4}	square feet
acres	0.404	hectares	hectares	2.47	acres
Volume			**Volume**		
cubic feet	0.028	cubic meters	cubic meters	35.31	cubic feet
cubic yards	0.76	cubic meters	cubic meters	1.31	cubic yards
gallons	3.79	liters	liters	0.26	gallons
Temperature			**Temperature**		
Fahrenheit	subtract 32 then multiply by 5/9ths	Celsius	Celsius	multiply by 9/5ths, then add 32	Fahrenheit

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1.0 PURPOSE AND NEED FOR ACTION

The following sections describe the purpose and need and provide background information concerning this environmental assessment (EA).

1.1 PURPOSE AND NEED

The U.S. Department of Energy, Richland Operations Office (RL) needs to reduce indirect costs by optimizing site infrastructure. Due to downsizing at the Hanford site and consolidation of resources, the 1100 Area and southern rail connection will not be required for Hanford operations.

1.2 BACKGROUND

The 1100 Area is located in the southern-most portion of the Hanford Site, adjacent to the City of Richland in Benton County, Washington. It occupies approximately 311 hectares (768 acres), a large portion of which is undeveloped, on the west side of Stevens Drive, north of Snyder Road and south of Horn Rapids Road. The 1100 Area currently serves as a procurement, central warehousing, vehicle maintenance, transportation, and distribution center for the Hanford Site. Property adjacent to the 1100 Area is zoned by the City of Richland for heavy manufacturing, medium industrial, and limited manufacturing. The 1100 Area is shown as Industrial and Commercial property in the Draft Hanford Remedial Action Environmental Impact Statement (EIS) and the Comprehensive Land Use Plan (CLUP), (DOE, 1996). There are approximately 115 potential legal instruments (i.e., agreements, deeds, easements, permits) which are associated with the property. Existing interest in the legal instruments will be transferred with the subject property. The proposed action will not affect the railroad system north of Horn Rapids Road.

RL received an unsolicited proposal from the Port of Benton (POB) requesting transfer of the southern connection of the Hanford railroad and the 1100 Area. The POB is a political subdivision of the State of Washington chartered to engage in economic development activities. The POB developed a long-range plan to integrate the Hanford rail system and associated infrastructure into a regional Freight Mobility and Industrial Center.

2.0 DESCRIPTION OF THE PROPOSED ACTION

The proposed action involves the transfer of ownership of the 1100 Area consisting of 311 hectares (768 acres), the southern rail connection consisting of 25.76 kilometers (16 miles), and rolling stock to a non-federal entity. The proposed transfer would occur under the authority of the Atomic Energy Act. Any rolling stock that is not transferred would be excessed. The real and personal property is located in the southwest quarter of Section 15, Township 10 North, Range 28 East, Willamette Meridian, and the east half of Section 22 and 27, Township 10 North, Range 28 East, Willamette Meridian, except for that portion of Section 27 described as the southwest quarter of the southeast quarter (Figures 1 and 2). Also included as part of the subject property is the southern connection of the Hanford railroad. This connection begins at the Union Pacific Richland Junction near the Columbia Center at the northwest boundary of the City of Kennewick and extends northerly along Highway 240; over U.S. Highway 12; across the Yakima River; then west/northwest and over U.S. Interstate 182; then along the east side of the Richland Airport and through the Hanford 1100 Area to Horn Rapids Road (Figure 3). The section of rail is approximately 6.24 kilometers (16 miles) long. The Yakima River delta is owned by the Corps of Engineers. This proposed action concerns the usage of the railroad right-of-way. The current commercial users of the railroad are Lamb Weston and Heningsen Cold Storage. The receiving entity will operate and lease equipment for the railroad system. The proposed action is consistent with the site missions of economic transition, re-use of current assets, and optimization of land holdings. The railroad system north of Horn Rapid Road will not be affected by this proposed activity. The 1100 Area Facilities are listed in Table 2-1.

2.1 PROPOSED TIMING

The proposed transfer would be accomplished by the end of September, 1998. The appraised value of the 1100 Area was approximately $4.2 million and that of the southern rail connection was $1.0 million.

2.2 ENVIRONMENTAL INFORMATION

2.2.1 Soil or Subsurface Disturbance and the Consequences

All areas within the proposed action are previously disturbed areas. It is anticipated that any soil and subsurface activities associated with this transfer would be temporary, therefore the anticipated impacts to the environment are not expected to be consequential.

2.2.2 Liquid Discharges to the Groundwater or Surface Waters and the Consequences

Stormwater runoff is the only liquid discharge from the 1100 Area. It is routed to a combination of catch basins and dry wells as documented in the Draft Inventory of Miscellaneous Streams (DOE-RL, 1997). The proposed action would not generate any liquid discharges. The majority of the floor drains in the 1100 Area facilities have been plugged with grout. However, there are two open floor drains in the 1171 facility.

The 1100 Area sewer system ties into the City of Richland municipal sanitary sewer system. One trunk line collects sewage from the 1163, 1167, and 1170 Buildings. A second trunk line collects sewage from the 1171 and 1172-A Buildings. Both lines cross under Stevens Drive and Route 4S and connect to the Richland sewer collection system.

2.2.3 Hazardous Substances Present and Consequences

Hazardous materials were stored and used within the 1100 Area. The 1161, 1168, and 1171 storage facilities currently contain halogens and noble gases. All hazardous materials will be removed prior to transfer of ownership.

The 1100 Area has fifty-six Heating, Ventilation, and Air Conditioning units which contain a total of 428.5 pounds of Freon 22 (1,1,1-chlorodifluorethane) which is a Class II ozone depleting substance. The units are currently active and are serviced by Morrison Refrigeration. Drinking fountains, refrigerators, and ice machines also contain a small amount of refrigerant.

The 1100 Area had three 90-day accumulation areas which have been closed: one north of the 1171 facility which operated from 1985-1990; one at the 1164 facility which closed June, 1997; and one east of the 1176 facility which closed August, 1997. The current 90-day accumulation area northwest of the 1164 facility will be closed prior to the proposed transfer.

With the exception of the 1162 and 1163 Buildings, fluorescent light fixtures in the 1100 Area are likely to have ballast capacitors containing PCBs. Leaks from overheated ballasts could pose a threat to human health and the environment.

Asbestos-containing material is fixed and present in most of the 1100 Area buildings, with the exception of the 1162 and 1163 facilities which have no asbestos. The asbestos does not pose an immediate health threat and is not required to be removed prior to transfer.

Table 2-1. 1100 Area Facilities

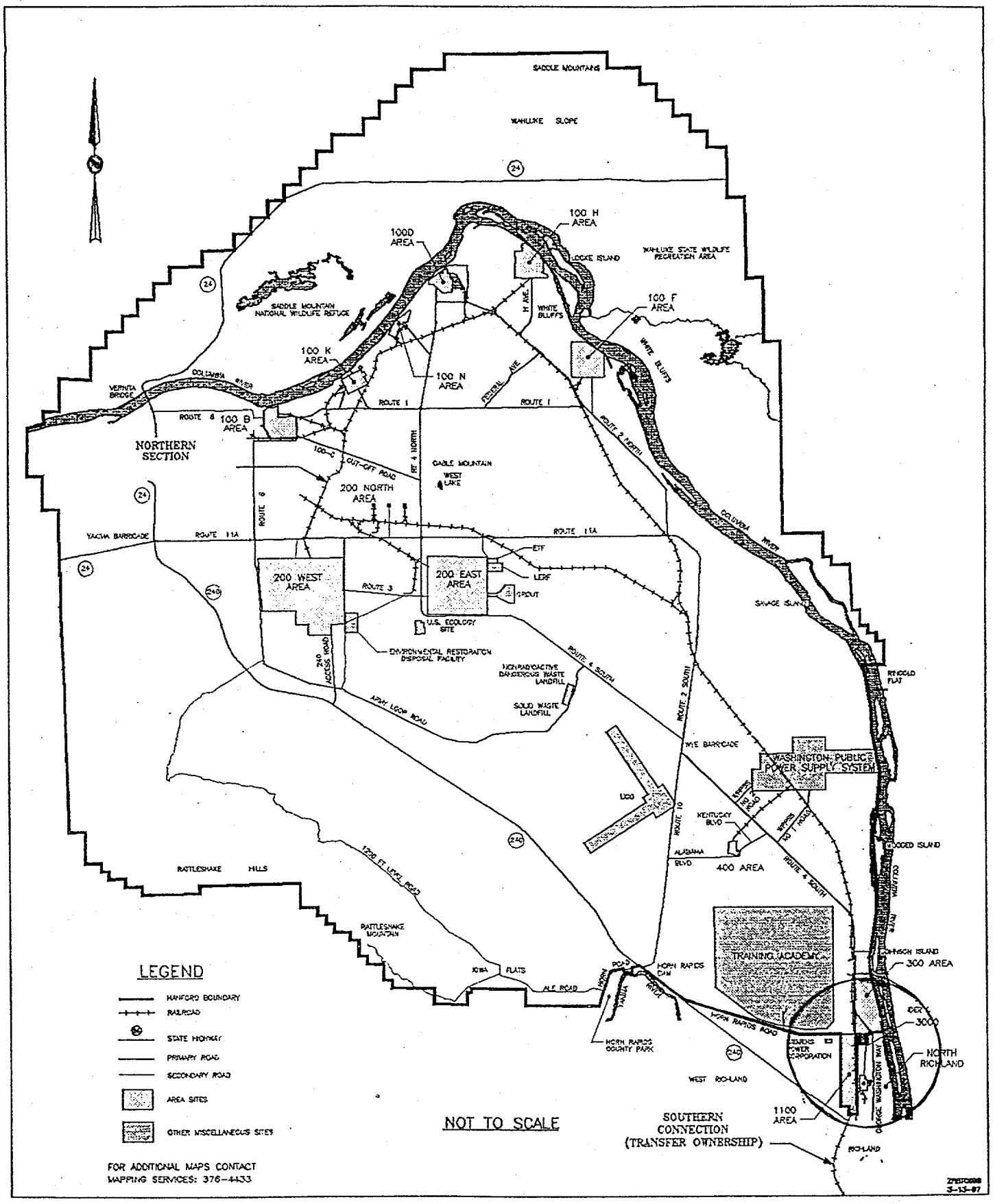
Number	Facility Name	Size (sq. ft.)	Contractor	Type
MO-404	Mobile Office @ 1163	7,392	LMSI	M
MO-916	Mobile Office @ 1163	1,584	LMSI	M
MO-938	Mobile Office @ 1163	1,584	LMSI	M
MO-940	Mobile Office @ 1163	1,344	LMSI	M
X4	Railroad Tool Shed	168	DYN	B
1112	Gas Storage Shed	64	DYN	B
1161	Nitrogen Bottle Facility & Propane Fill Station	480	DYN	B
1162	Flammable Material Storage	8,900	DYN	B
1163	Central Warehouse	181,780	DYN	B
1164	Hazardous Storage Facility	2,000	DYN	B
1167	General Stores Covered Storage Bldg.	36,000	DYN	B
1167A	Excess Salvage Office Building	2,185	DYN	B
1168	Cylinder Storage Facility	4,110	DYN	B
1169	Chemical Storage Facility	2,400	DYN	B
1170	Bus Terminal Dispatchers Building	6,657	DYN	B
1171	Main Transportation Shop Building	94,767	DYN	B
1171A	Bus Wash Facility Add-On to 1171	256	DYN	B
1171C	Spare Parts Storage Shed	1,000	DYN	B
1172A	Conoco Station	200	DYN	B
1173	Motor Stores Building	3,216	DYN	B
1175	Storage	2,400	DYN	B
1176	Tire Storage Building	800	DYN	B
1177	Storage Building	768	DYN	B
1179	Road Crew Storage	1,008	DYN	B
11201	N. 40 Tool Shed	1,250	DYN	B
X1	Railroad Scale House	70	DYN	S
1171B	Equipment Wash Facility	4,200	DYN	S
1174	Bulk Petroleum Storage Facility	48	DYN	S

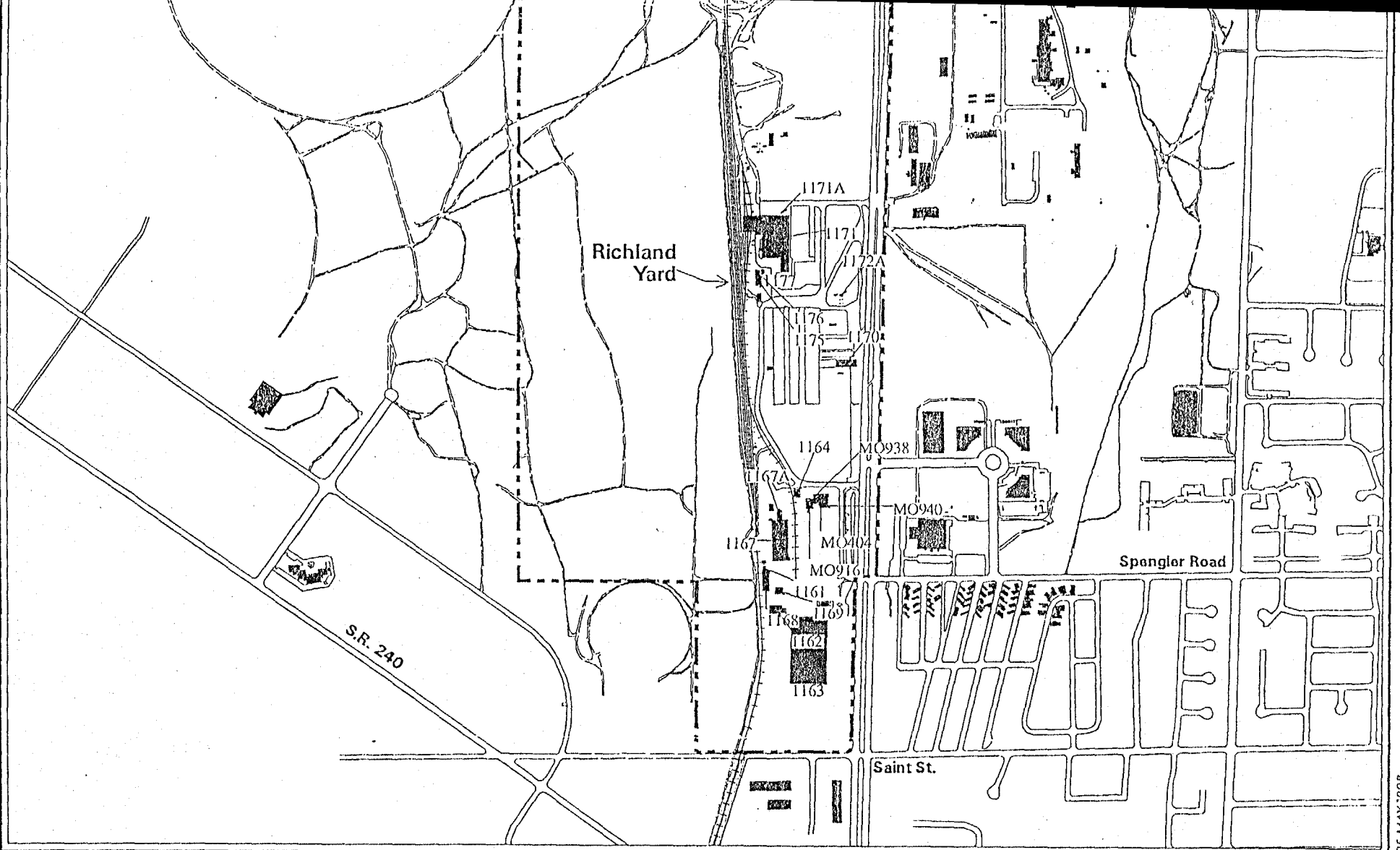
DYN = DynCorp Tri-Cities Services, Inc.
LMSI = Lockheed Martin Services, Inc.

M=Mobile
B=Building

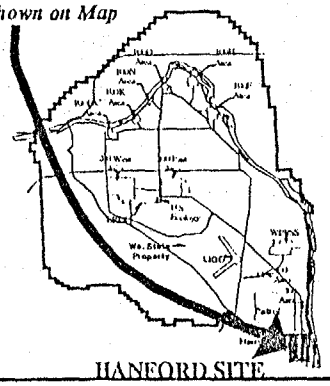
S=Structure

Figure 1. Location of the 1100 Area within the Site





Area Shown on Map



HANFORD SITE

DOE Rail System - 1100 Area

0m 100m 200m 300m 400m 500m 600m 700m 800m 900m

0ft 1000ft 2000ft 3000ft

Building

1100 Area Boundary

Paved Road

Unpaved Road

Railroad Right-of-Way

Rail Crossing

Railroad Line

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
HANFORD ENVIRONMENTAL RESTORATION PROGRAM

BECHTEL HANFORD, INC.
RICHLAND, WASHINGTON

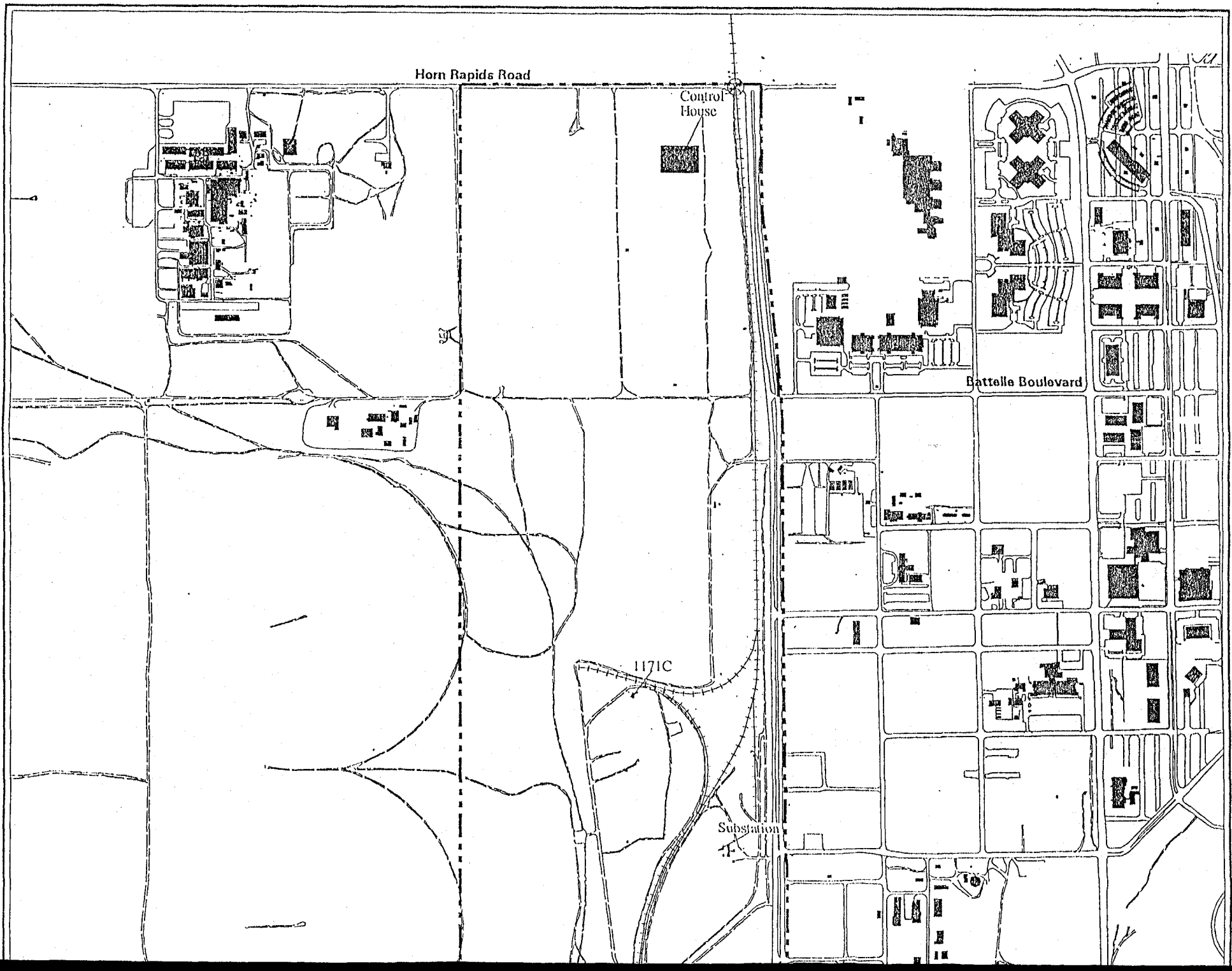
Bechtel Job No.: 22192	DOE Contract Number: DE-AC06-93RL12367
AML: map_b	Service Request No.: JRC0271_1
	Date: 05-MAY-1998

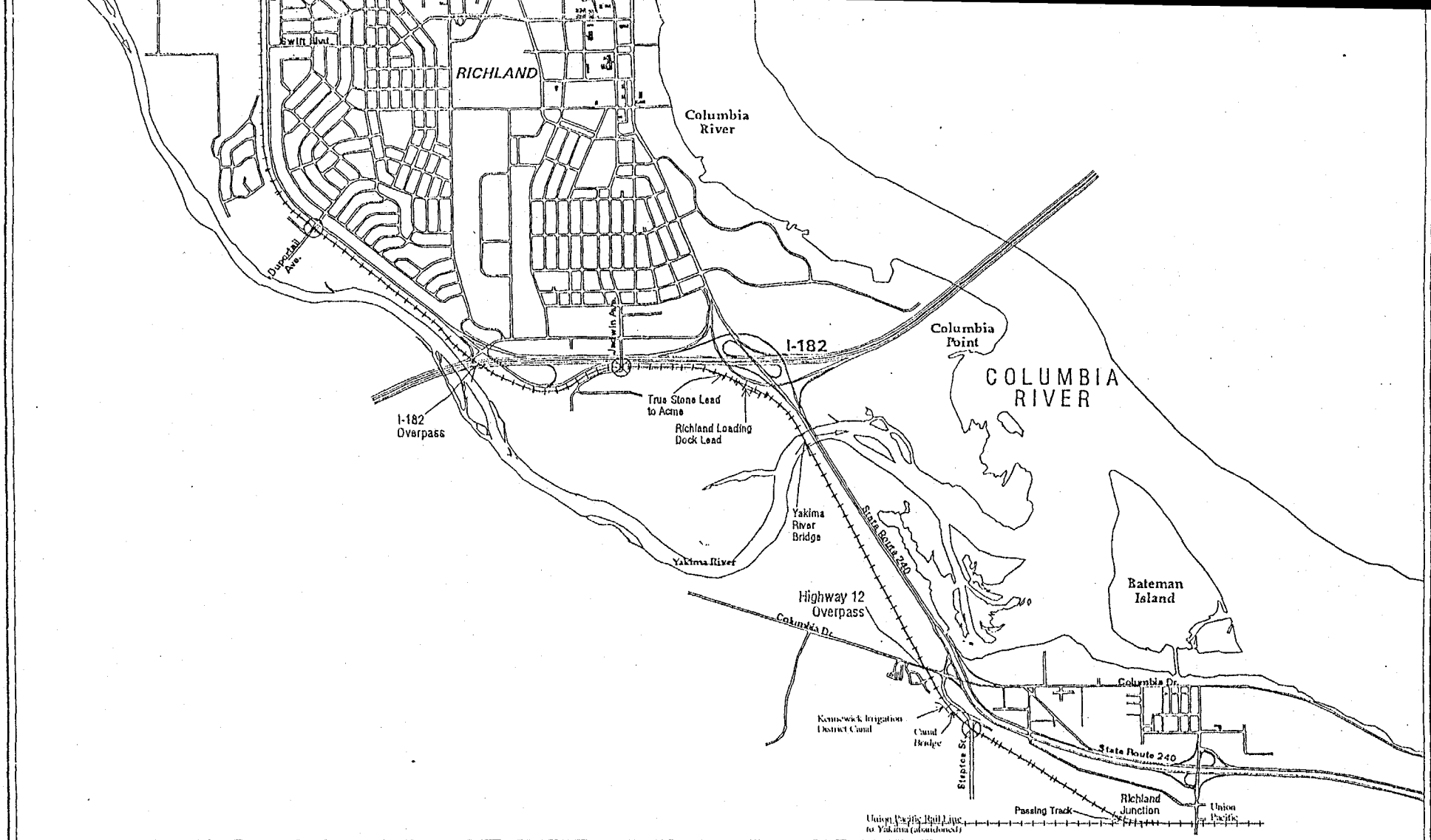
Projection ..... Lambert Conformal Conic
Coordinate System ..... Washington State Plane, South Zone
Horizontal Datum ..... North American Datum, 1983 (NAD83)
Vertical Datum .. North American Vertical Datum, 1988 (NAVD88)

Spatial and attribute data are maintained by the Environmental Data Management Group of the Environmental Restoration Contractor.

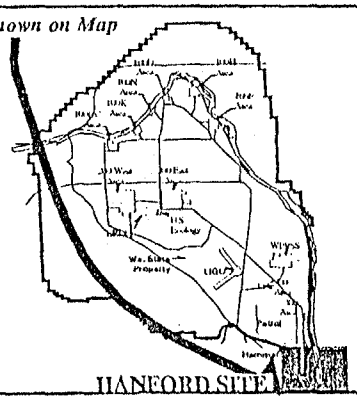
ERC;jrc map_b.aml rev. B JRC0271_1 Database: 05-MAY-1998

Figure 2


Horn Rapids Road
Control House
Battelle Boulevard
1171C
Substation



Area Shown on Map



DOE Rail System - Southern Connection

0km 1km 2km

0ml 1ml

Building

1100 Area Boundary

Paved Road

Unpaved Road

Railroad Right-of-Way

Rail Crossing

Railroad Line

U.S. DEPARTMENT OF ENERGY
RICHLAND OPERATIONS OFFICE
HANFORD ENVIRONMENTAL RESTORATION PROGRAM

BECHTEL HANFORD, INC.
RICHLAND, WASHINGTON

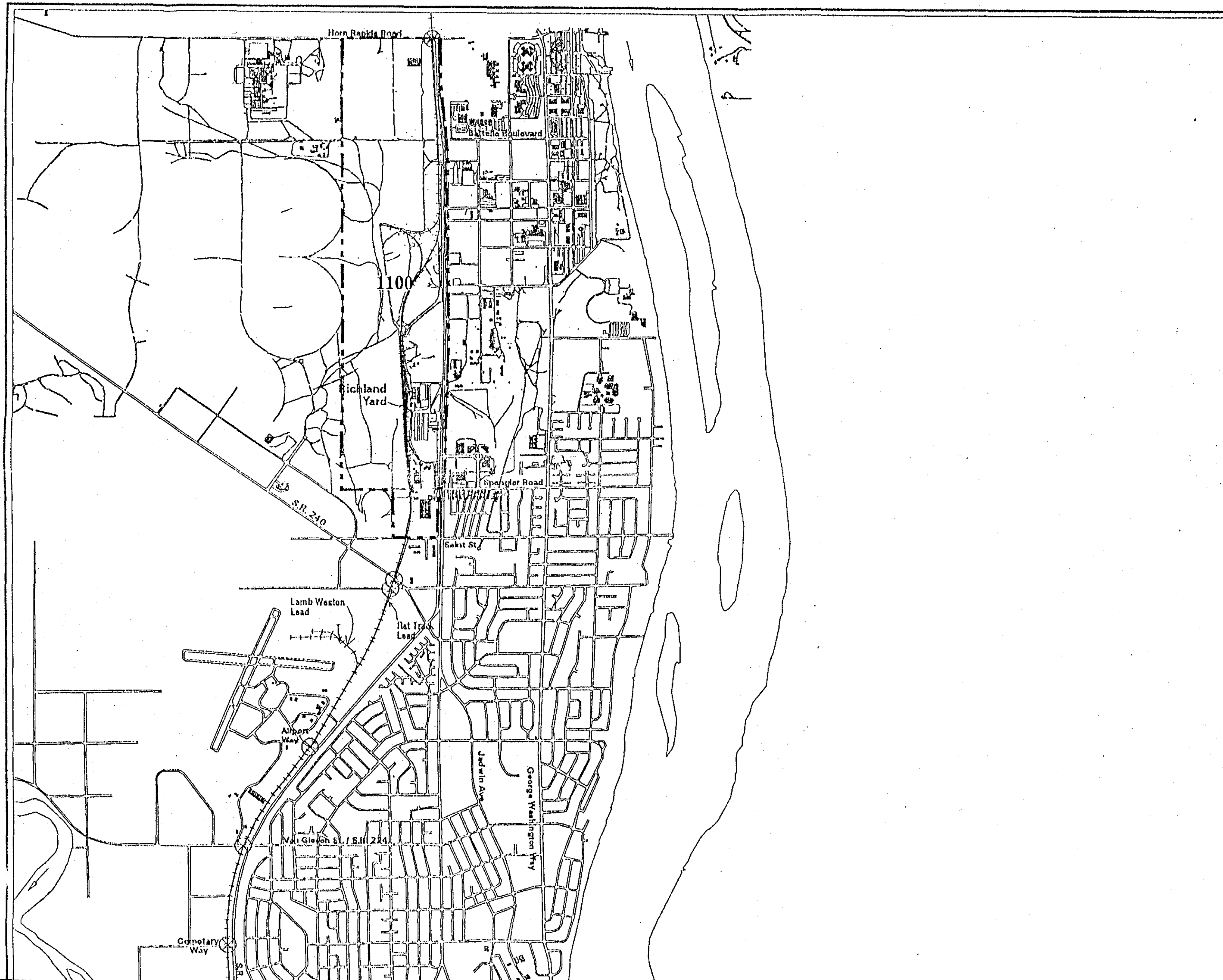
Bechtel Job No.: 22192	DOE Contract Number: DE-AC06-93RL12367	
AML: map_b	Service Request No.: JRC0271_3	Date: 05-MAY-1998

Projection ..... Lambert Conformal Conic
Coordinate System ..... Washington State Plane, South Zone
Horizontal Datum ..... North American Datum, 1983 (NAD83)
Vertical Datum .. North American Vertical Datum, 1988 (NAVD88)

Spatial and attribute data are maintained by the Environmental Data Management Group of the Environmental Restoration Contractor.

ERC:jrc map_b.aml rev. B JRC0271_3 Database: 05-MAY-1998

Figure 3


Horn Rapids Road
Battelle Boulevard
1100
Richland
Yard
Spengler Road
S.R. 240
Saint St
Lamb Weston
Lead
Rat Track
Lead
Airport
Way
Jadwin Ave
George Washington Way
Van Giesen St. / S.R. 224
Cemetary
Way

3.0 ALTERNATIVES TO THE PROPOSED ACTION

Alternatives to the proposed action are discussed in the following sections.

3.1 NO ACTION ALTERNATIVE

The No Action alternative would involve the continued DOE operation and ownership of the 1100 Area facilities and the Hanford southern rail connection. The reduction of indirect costs by optimizing site infrastructure would not be met. In the future when DOE would no longer have a need for the 1100 Area, the 1100 Area would be placed in surveillance and maintenance mode.

3.2 OTHER ALTERNATIVES

An alternative would be for DOE to retain ownership and lease facilities and the railroad system to non-federal entities.

Another alternative would be to transfer a portion of the 1171 facility (heavy and light equipment shop), the 1171 C (track Maintenance Storage), the Railroad Tool Shed, the Railroad Scale House, and the southern connection of the Hanford rail line. DOE would retain the right to use space in the 1171 facility and other facilities within the 1100 Area, as required to meet mission activities.

The 1100 Area and southern rail connection could also be transferred to General Services Administration (GSA) for excess of property and equipment.

4.0 AFFECTED ENVIRONMENT

The following sections provide a discussion of the existing environment to be affected by the proposed action and alternatives.

4.1 GENERAL HANFORD SITE ENVIRONMENT

The Hanford Site is 1,450 square kilometers (560 square miles) located in southeastern Washington State in a semiarid region with rolling topography. Two topographical features dominate the landscape: Rattlesnake Mountain is located on the southwest boundary with Gable Mountain located on the central portion of the Hanford Site. The Columbia River flows through the northern part of the Hanford Site and forms part of the eastern boundary of the Hanford Site. Areas adjacent to the Hanford Site are primarily agricultural lands. The 1100 Area has been heavily used as an industrial area since the 1950s.

The Hanford Site is located in a semiarid region of southeastern Washington State. The Cascade Mountains, beyond Yakima to the west, greatly influence the climate of the Hanford area by means of their "rain shadow" effect. This mountain range also serves as a source of cold air drainage, which has a considerable effect on the wind regime on the Hanford Site (Neitzel, 1997). Climatological data are available from the Hanford Meterological Station.

The 1995 emission rates of nonradiological constituents at the Hanford Site remained below all established limits set for regulated air pollutants (Neitzel, 1997). Atmospheric dispersion conditions of the area vary between summer and winter months. The summer months generally have good air mixing characteristics. If the prevailing winds from the northwest are light, less favorable dispersion conditions might occur. Occasional periods of poor dispersion conditions occur during the winter months.

Most mammal species known to inhabit the Hanford Site are small, nocturnal creatures; primarily pocket mice and jackrabbits. Large mammals found on the Hanford Site are deer and elk; although the elk exist almost entirely on the Arid Lands Ecology Reserve. Coyotes and raptors are primary predators. Several species of small birds nest in the shrub-steppe vegetation. Semiannual peaks in avian variety and abundance occur during migration seasons. Additional information about the Hanford Site can be found in the publication entitled the *Hanford Site National Environmental Policy Act (NEPA) Characterization* report (Neitzel, 1997).

RL and its contractors employ nearly 20% of the total nonagricultural workers in Benton and Franklin counties. Therefore, activity on the Hanford Site plays a major role in the

socioeconomic environment of the Tri-Cities and other parts of Benton and Franklin Counties (Neitzel, 1997)

4.2 SPECIFIC SITE ENVIRONMENT

The 1100 Area is located in the southern-most portion of the Hanford Site and occupies approximately 311 hectares (768 acres) (Figures 1 and 2). The Hanford Site was added to the National Priorities List (NPL) in July 1989 based on the Environmental Protection Agency's Hazard Ranking System. Four sites were designated on the NPL, the 1100 Area was one of these sites. The DOE, Environmental Protection Agency (EPA), and Washington Department of Ecology (WDOE) entered into a Hanford Federal Facility Agreement and Consent Order in May, 1989 that established a protocol for developing, implementing, and monitoring remedial response actions. These response actions were developed in accordance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). In September, 1993, the Record of Decision (ROD) for the 1100 Area NPL site was issued, signed by DOE, EPA, and WDOE. The ROD identified the remedial action for these operable units and stated that no further action was required. The 1100 Area was declared clean and the EPA issued a delisting from the NPL September, 1996.

4.2.1 Climate

The Hanford Site is characterized as having a mild climate with 15 to 17 centimeters (6 to 7 inches) of annual precipitation, and occasional high winds of up to 129 kilometers (80 miles) per hour occur throughout the year. Ranges of daily maximum temperatures vary from normal maxima of 2°C (36°F) in early January to 35°C (95°F) in late July. On the average, there are 52 days during the summer months with maximum temperatures $\geq$32°C (90°F) and 12 days with maxima greater than or equal to 38 °C (100 °F). During the winter there are 3 days with minimum temperatures $\leq$-18 °C (0 °F). Tornadoes are extremely rare; no destructive tornadoes have occurred in the region surrounding the Hanford Site.

4.2.2 Hydrology

The groundwater in the 1100 Area is not impacted by Hanford Site operations. In addition to natural recharge, artificial recharge is associated with the North Richland recharge basins south of the 1100 Area. The water table in the 1100 Area reflects irrigation cycles connected with agriculture and the growing season.

4.2.3 Floodplain

The 1100 Area and southern rail connection are not susceptible to a 100-year flood on the Yakima and Columbia Rivers.

4.2.4 Air Resources

The Hanford Site operates under the Prevention of Significant Deterioration (PSD) permit issued by the EPA in 1980 to protect existing ambient air quality. The Hanford Site Air Operating Permit (AOP) Application (DOE, 1995) states that there are only insignificant air emission units for the 1100 Area. No substantial increases in overall emissions are envisioned from the proposed action and no changes to the AOP would be required.

4.2.5 Ecological Resources

The Biological Review, (Appendix A), indicated that the majority of the railroad corridor consists of disturbed habitat, except for some remnant habitat along the margins of the corridor. None of the species observed are listed as species of concern by the State or Federal Governments. No migratory bird species were observed nesting in the vicinity of the rail corridor. No plant and animal species protected under the Endangered Species Act (ESA), candidates for such protection or species listed by the Washington state government as threatened or endangered were observed either within the railroad right-of-way between the 1100 Area and Columbia Center Boulevard. One plant species of concern, the stalked-pod milk-vetch (*Astragalus sclerocarpus*) observed in the 1100 Area, is on the Washington Natural Heritage Program Watch List, the lowest level of listing by the State of Washington.

Bald eagles are occasionally sighted during winter months in the Yakima River delta but are not known to use the area for nesting. Steelhead trout in the Yakima River basin have been recently proposed for listing as threatened by the National Marine Fisheries Service (NMFS). All of these steelhead would pass beneath the railroad bridge over the Yakima River during their migrations to and from the Pacific Ocean. The continued use of the railroad corridor for rail traffic would not alter the current conditions and will not likely adversely affect the continued existence of the bald eagle and the Yakima Basin steelhead.

4.2.6 Cultural Resources

A Cultural Review (Appendix B) was conducted for the proposed action. The review concluded that the project area has one isolated find and 18 archaeological sites. Of the 18 sites found, only two may be considered eligible for listing on the National Register of Historic

Places: an irrigation canal and the Deranleau farmstead. The other 16 sites and one isolate find are probably not eligible for listing, but will require formal evaluation for determination of eligibility for listing on the National Register of Historic Places. Although these may not be eligible sites for listing on the National Register, they are tied to the early development of Richland and are important to the local history of the area. Appropriate documentation will be completed and submitted to the SHPO for concurrence. A clause would be stipulated into the transfer document for preservation and protection.

The Hanford Site Historical Task Team performed a cultural review for historical significance of the 1100 Area Complex in 1997 and determined that the 1167, 1167A, 1170, 1171, the Railroad Tool Shed, and the Railroad Scale House facilities are eligible for inclusion in the National Register of Historic Places. These facilities are contributing property recommended for mitigation within the Hanford Site Manhattan Project and Cold War Era Historic District as stipulated in Appendix C, Table 1 of the Programmatic Agreement among RL, the Advisory Council on Historic Preservation, and the Washington State Historic Preservation Office (SHPO) for the Maintenance, Deactivation, Alteration, and Demolition of the Built Environment on the Hanford Site, Washington (DOE-RL, 1996).

On February 3, 1998 a walkthrough of the eligible facilities was undertaken by representatives of DOE-RL and its contractors for the purpose of identifying, assessing, and retaining historic artifacts associated with the Manhattan Project and Cold War era. The walkthrough was conducted in compliance with the Programmatic Agreement to assess the contents of historic buildings and structure to locate and identify any artifacts which may have interpretive or educational value as exhibits within local, state, or national museums. The assessment team identified and tagged thirty-two artifacts in Building 1171, four in Building 1170 and one in Railroad Scale House (see Appendix C). The specific issues surrounding the historical significance of the facilities have been discussed between DOE-RL and the SHPO.

4.2.7 Radiological Survey

A random direct radiological verification survey for beta-gamma contamination was performed by a Radiological Control Technician (RCT) on the railroad in between railroad ties including the track from Horn Rapids Road to the Union Pacific Richland Junction at the northwest boundary of the City of Kennewick. The verification survey was completed and no contamination was detected.

4.3 REMEDIAL ACTION

The requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) which are pertinent to the sale, transfer, and lease of property by federal agencies, clarify the extent of remedial action necessary to protect human health and the environment. In accordance with the requirements imposed by Section 120(h) of CERCLA, records pertaining to the 1100 Area were reviewed, and interviews with personnel associated with the complex were conducted. A visual inspection of the 1100 Area and adjacent properties was also conducted. The review concluded that there were no releases or storage on the property in amounts that would have exceeded CERCLA reportable quantities. Pursuant to the regulations, no notice regarding hazardous substances activity (storage, release, or disposal) would be required. The process of the assessment meets the requirements of CERCLA for the sale or transfer of federal property.

5.0 ENVIRONMENTAL IMPACTS

The following sections describe impacts from the proposed action.

5.1 TRANSFER AND POST OPERATION IMPACTS

Impacts connected with the 1100 Area and southern rail connection are expected to remain the same after the transfer as they were before the transfer. Impacts are limited to small quantities of gaseous, particulate, or thermal discharge activities from transportation trucks and rail line activities. No adverse impacts to species, habitats, or other biological resources are expected to result from the proposed transfer of the 1100 Area and the southern rail connection.

5.2 SOCIOECONOMIC IMPACTS

No workers would be directly affected by the proposed action. The transfer of the 1100 Area to a non-federal entity would reduce operating costs at Hanford and encourage economic diversification.

5.3 ENVIRONMENTAL JUSTICE IMPACTS

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, requires that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or socioeconomic effects of their programs and activities on minority and low-income populations. Minority (primarily Hispanic) populations and low income populations are present near the Hanford Site (Neitzel, 1997). The analyses of the impacts in this EA indicate there would be minimal impact to both the offsite population and potential workforce by implementing the proposed action.

5.4 CULTURAL RESOURCES

Eighteen archaeological sites and one isolated find will be evaluated to determine the eligibility criteria for listing on the National Register of Historic Places. The proposed action will not impact the historical significance of these identified sites. A clause would be stipulated into the transfer document for preservation and protection. A memorandum of agreement would be developed by SHPO, RL and the non-federal entity that provides a plan for the preservation and enhancement of cultural and historical resources within the Hanford District.

5.5 CUMULATIVE IMPACTS

The impacts from the proposed action are not expected to substantially change the cumulative impacts of operations on the Hanford Site and surrounding area. Potential impacts from future land uses are unknown and analysis at present would require speculation.

5.6 IMPACTS FROM ALTERNATIVES

5.6.1 Implementation of the No Action Alternative

The No Action alternative would not change the current impacts to the environment.

5.6.2 Implementation of Alternatives

There would be no change in environmental impacts with any of the alternatives described in section 3.0. Potential impacts from future land uses are unknown and analysis at present would require speculation.

6.0 PERMITS AND REGULATORY REQUIREMENTS

The trustee would be required to comply with all applicable federal and state environmental requirements.

7.0 ORGANIZATIONS CONSULTED

The DOE consulted the SHPO regarding the historical facilities within the 1100 Area. The facilities are eligible for listing on the *National Register of Historic Places*. DOE also consulted with the U.S. Fish and Wildlife Service concerning threatened and endangered species, and species of concern.

Tribal and public involvement are important components of a cultural resource management program. Tribes and public have roles and responsibilities in ensuring that Hanford cultural and historic resources are protected, managed, and interpreted appropriately. To help to encourage this involvement, Hanford cultural staff conduct regular meetings with the Tribes and public to discuss site issues. The meetings allow participants to openly discuss issues, exchange information, and voice their concerns. The 1100 Area property transfer was among the topics discussed at these meetings, which provided cultural staff the opportunity to review the project activities and update the participants on the status of the project. The Tribal Cultural Issues meetings are attended by Hanford cultural staff and cultural resource representatives from the Confederated Tribes of the Umatilla Indian Reservation, the Yakama Indian Nation, the Nez Perce Tribe and the Wanapum. The 1100 Area was a topic of discussion at Cultural Issues meetings held on January 20, February 18, and July 28, 1998. Public Issues Exchange meetings are attended by the cultural staff and interested parties from the public, including local historical societies and museums, counties, and private citizens. Similar information was discussed at Public Issues Exchange meetings held on March 4, May 11, and June 16, 1998.

Prior to approval of this EA, a draft version was sent to the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, the Wanapum, the Yakama Indian Nation, Washington State Department of Ecology, U.S. Army Corps of Engineers, Port of Benton, City of Richland, City of Kennewick, TRIDEC, Washington State Railroad Historical Society, B Reactor Historical Society, Benton County, Hanford Education Action League, Heart of America, and Physicians for Social Responsibility for a 30 day review period. The draft was also be made available in the DOE Reading Room and placed on the Internet at the DOE-RL homepage.

All comments were considered in the preparation of the final EA, and in the DOE decision whether to resolve the EA as a Finding of No Significant Impact (FONSI) or as a determination to prepare an Environmental Impact Statement. Comments were received from the U.S. Army Corps of Engineers, the Washington State Department of Fish and Wildlife, a Hanford employee, and one private citizen. Comments and responses are contained in Appendix E.

8.0 REFERENCES

10 CFR 1021, DOE "National Environmental Policy Act Implementing Procedures".

29 CFR 1910, "Occupational and Safety Health Administration".

40 CFR 61, "National Emission Standards for Hazardous Air Pollutants".

40 CFR 373, "Comprehensive Environmental Response, Compensation, and Liability Act".

40 CFR 761, "Polychlorinated Biphenyls".

40 CFR 763, "Asbestos".

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DOE-RL, 1997, *Programmatic Agreement among the U.S. Department of Energy Richland Operations Office, the Advisory Council on Historic Preservation, and the Washington State Historic Preservation Office for the Maintenance, Deactivation, Alteration, and Demolition of the Built Environment on the Hanford Site, Washington*, 96-EAP-154.

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WAC 173-303, "Dangerous Waste Regulations".

APPENDIX A

BIOLOGICAL REVIEW

Pacific Northwest National Laboratory
Operated by Battelle for the U.S. Department of Energy

April 16, 1998

Ms. Robyn Currier
DynCorp Tri-Cities Services
P. O. Box 1400, MSIN G3-26
Richland, WA 99352

Dear Ms. Currier:

BIOLOGICAL REVIEW OF THE 1100 AREA LAND TRANSFER, ECR #97-1100-003.

Project Description:

- The DOE proposes to transfer the 1100 Area and the portion of the Hanford Rail system between Horn Rapids Road and Columbia Center Boulevard to non-federal ownership. This ecological review is in support of the Environmental Assessment in preparation for such transfer, and this review does not address any specific disturbance activities other than the transfer of the property within the scope of the review.

Survey Objectives:

- To determine the occurrence in the project area of plant and animal species protected under the Endangered Species Act (ESA), candidates for such protection, and species listed as threatened, endangered, candidate, sensitive, or monitor by the state of Washington, and species protected under the Migratory Bird Treaty Act.

- To evaluate the potential impacts of disturbance on priority habitats and protected plant and animal species identified in the survey.

Survey Methods:

- Pedestrian and ocular reconnaissance were conducted by C. A. Duberstein, J. M. Becker, and M. R. Sackschewsky. The rail line from the 1100 area to Columbia Center Boulevard was surveyed on 26 March 1998. The area within the 1100 area boundaries was surveyed on 27 March, 30 March, 31 March, and 2 April, 1998.

- Priority habitats and species of concern are documented as such in the following: Washington Department of Fish and Wildlife (1994, 1996), Washington State Department of Natural Resources (1997), and for migratory birds, U.S. Fish and Wildlife Service (1985). Lists of animal and plant species considered Endangered, Threatened, Proposed, or Candidate by the USFWS are maintained at 50 CFR 17.11 and 50 CFR 17.12.

Survey Results:

Rail Line:

- The majority of the railroad corridor consists of disturbed habitat, except for some remnant habitat along the margins of the corridor. The west side of the corridor from Highway 240

to Interstate 182 has been disturbed by the installation of a gas line, and has since been re-planted. The east side of the corridor in that area has some sagebrush and other native species present, but the general quality of the habitat is low and of limited utility to wildlife because it is located between the disturbed rail line and the Highway. The habitat within the corridor between I-182 and the Yakima River is highly disturbed. From the Yakima River to Columbia Center Boulevard the corridor is narrower (70 feet compared to 100 feet). From the Yakima River to Columbia Drive (through the Yakima Delta) the railroad berm appears to occupy the entire right of way and is colonized by sparse grasses and rabbitbrush. From Columbia Drive to Columbia Center Boulevard the corridor is highly disturbed, with vegetation consisting primarily of cheatgrass and other weedy species.

- A total of 69 plant species were observed within the railroad corridor between the south end of the 1100 area and Columbia Center Boulevard (Table 1). None of the species observed are listed as species of concern by the State or Federal governments. Thirty of these species are non-native to our area, and seven are on the Washington State Noxious Weed list, most significant of these are 3 species of *Centaurea*::*Centaurea diffusa* (Diffuse knapweed), *C. solstitialis* (Yellow starthistle) and *C. (Acroptilon) repens* (Russian knapweed), and *Lepedium latifolium* (broadleaf pepperweed).

- No migratory bird species were observed nesting in the vicinity of the rail corridor. A list of all animal species observed along the railroad corridor is provided in Table 2.

1100 Area:

- The predominant plant communities within the 1100 Area include Snow buckwheat, cheatgrass-Sandberg's bluegrass, Sagebrush, and Rabbitbrush, communities (Figure 1). Minor community types include sand dunes and disturbed cheatgrass communities. The sagebrush communities are for the most part degraded with large proportions of cheatgrass in the herbaceous layer. However, there are scattered patches of relatively high quality sagebrush habitat with significant amounts of native bunchgrasses in the understory including Sandberg's bluegrass, Needle-and-thread, and bluebunch wheatgrass.

- A total of 96 plant species were observed within the 1100 Area (Table 3), 33 of which are not native to South Central Washington State. This represents a remarkable degree of species richness considering that approximately 600 plant species have been documented on the entire Hanford reservation (Sackschewsky et al. 1992). The majority of the overall Hanford plant species richness is due to the presence of diverse habitats such as the riparian zone of the Columbia River and the higher elevations on Rattlesnake Mountain. Approximately 1/6 of all of the species known from Hanford were observed within the boundaries of the 1100 area. The only plant species of concern observed in the area was the stalked-pod milk-vetch (*Astragalus sclerocarpus*) which is on the Washington Natural Heritage Program Watch List, the lowest level of listing by the State of Washington.
- Nine species observed in the 1100 area are on the Washington State noxious weed list, most significantly Yellow starthistle, Russian knapweed, diffuse knapweed, broadleaf pepperweed, and Rush skeletonweed (*Chondrilla juncea*). Most of these species occur in small isolated populations, but several areas of over one acre each are fully infested with Russian knapweed.

- No migratory birds were observed nesting within the 1100 Area at the time of the field survey. However, the survey was conducted prior to the spring arrival for many species and numerous species would be expected to nest in the area. A list of the animal species observed within the 1100 Area is provided in Table 4. Other species expected to utilize habitats in the 1100 Area include Loggerhead shrike, Sage sparrow, and Burrowing owl.

Considerations and Recommendations:

- No plant and animal species protected under the ESA, candidates for such protection, or species listed by the Washington state government as threatened or endangered were observed either within the 1100 area or the railroad right-of-way between the 1100 Area and Columbia Center Boulevard.

- Threatened or endangered species that were not observed during the field surveys that should be considered include the Bald eagle and Yakima River steelhead trout. Bald eagles are occasionally sighted during winter months in the Yakima River Delta but are not known to use the area for nesting. Steelhead trout in the Yakima River basin have been recently proposed for listing as threatened by the National Marine Fisheries Service (NMFS) (63 FR 11798 – 11809, 10 March 1998). All of these steelhead would pass beneath the railroad bridge over the Yakima River during their migrations to and from the Pacific Ocean. For both the Bald eagle and the Yakima Basin Steelhead the continued use of the railroad corridor for rail traffic will not alter the current conditions and is not likely to adversely affect the continued existence of either of these species.

- The USFWS and NMFS have been contacted for information about the bald eagles, Yakima Basin Steelhead, and any other species that these agencies may be concerned about along the rail line or within the 1100 area. Other federally listed endangered, threatened, proposed, or candidate species known, or potentially occurring, near the Hanford Site include Columbia River Steelhead, Peregrine falcon, Aleutian Canada goose, and Bull trout. These species are not likely to be affected by the transfer of the 1100 area or rail line.

- Therefore, no adverse impacts to species, habitats, or other biological resources are expected to result from the proposed transfer of the 1100 area and Hanford south rail line.

Sincerely,

CA Brandt, Ph.D.
Project Manager
Ecological Compliance Assessment

CAB:mrs

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Washington Department of Fish and Wildlife. 1996. Priority Habitats and Species List. (January 1996).

Washington Department of Natural Resources. 1997. Endangered, Threatened & Sensitive Vascular Plants of Washington (August 1997).

TABLE 1. Plant Species Observed Along Rail Line Between Columbia Center Boulevard And The 1100 Area

Code	Species	Common Name	Family	Alien / Native
ACMI	Achillea millifolium	Yarrow	Asteraceae	N
AMAC	Ambrosia acanthicarpa	Bur-sage	Asteraceae	N
ARTR	Artemisia tridentata	Big Sagebrush	Asteraceae	N
CEDI	Centaurea diffusa	Diffuse knapweed	Asteraceae	A*
CERE	Centaurea repens	Russian knapweed	Asteraceae	A*
CESO	Centaurea solstitialis	Yellow starthistle	Asteraceae	A*
CHDO	Chaenactis douglasii	Hoary false yarrow	Asteraceae	N
CHNA	Chrysothamnus nauseosus	Gray rabbitbrush	Asteraceae	N
CHVI	Chrysothamnus viscidiflorus	Green Rabbitbrush	Asteraceae	N
CIAR	Cirsium arvense	Canada thistle	Asteraceae	A
COCA	Conyza canadensis	Horseweed	Asteraceae	N
GRCO	Grindelia columbiana	Columbia river gumweed	Asteraceae	N
LASE	Lactuca serriola	Prickly lettuce	Asteraceae	A
MACA	Machaeranthera canescens	Hoary aster	Asteraceae	N
SEIN	Senecio integerrimus	Lambstongue groundsel	Asteraceae	A
Sol. sp.	Solidago sp.	Goldenrod	Asteraceae	N
TAOF	Taraxacum officinale	Dandelion	Asteraceae	A
TRDU	Tragopogon dubius	Salsify	Asteraceae	A
AMLY	Amsinckia lycopsoides	Fiddleneck tarweed	Boraginaceae	N
AMTE	Amsinckia tessellata	Tessellate tarweed	Boraginaceae	N
CRCI	Cryptantha circumscissa	Matted cryptantha	Boraginaceae	N
CRPT	Cryptantha pterocarya	Winged cryptantha	Boraginaceae	N
CHTE	Chorispora tenella	Blue mustard	Brassicaceae	A
DEPI	Descurainia pinnata	Tansy mustard	Brassicaceae	N
DRVE	Draba verna	Spring whitlow grass	Brassicaceae	N
LELA	Lepedium latifolium	Broadleaf pepperweed	Brassicaceae	A*
SIAL	Sisymbrium altissimum	Jim Hill Mustard	Brassicaceae	A
SACE	Sambucus cerulea	Blue elderberry	Caprifoliaceae	N
HOUM	Holosteum umbellatum	Jagged chickweed	Caryophyllaceae	A
KOSC	Kochia scoparia	Summer cypress	Chenopodiaceae	A*
SAKA	Salsola kali	Russian thistle	Chenopodiaceae	A
DISY	Dipsicus sylvestris	Teasel	Dipsicaceae	A
ELAN	Elaeagnus angustifolia	Russian Olive	Elaeagnaceae	A
ASTCA	Astragalus caricinus	Buckwheat milkvetch	Fabaceae	N
MEOF	Melilotus officinalis	Yellow sweetclover	Fabaceae	A

TABLE 1. Plant Species Observed Along Rail Line Between Columbia Center Boulevard And The 1100 Area

Code	Species	Common Name	Family	Alien / Native
MESA	Medicago sativa	Alfalfa	Fabaceae	A
ROPS	Robinia psuedoaccacia	Black locust	Fabaceae	A
TRRE	Trifolium repens	White clover	Fabaceae	A
ERCI	Erodium cicutarium	Crane's-bill	Geraniaceae	A
RIAU	Ribes aureum	Golden current	Grossulariaceae	N
PHHA	Phacelia hastata	Whiteleaf scorpionweed	Hydrophyllaceae	N
ASOF	Asparagus officinale	Asparagus	Liliaceae	A
BRDO	Brodiaea douglasii	Cluster lily	Liliaceae	N
SPMU	Sphaeralcea munroana	Globe mallow	Malvaceae	N
EPPA	Epilobium paniculatum	Tall willowherb	Onagraceae	N
OEPA	Oenothera pallida	Pale eveningprimrose	Onagraceae	N
ORCO	Orobanche corymbosa	Flat-topped broomrape	Orobanchaceae	N
PLPA	Plantago patagonica	Indian wheat	Plantaginaceae	N
AGCR	Agropyron cristatum	Crested wheatgrass	Poaceae	A
AGIN	Agropyron intermedium	Intermeadiate wheatgrass	Poaceae	A
BRTE	Bromus tectorum	Cheatgrass	Poaceae	A
ORHY	Oryzopsis hymenoides	Indian ricegrass	Poaceae	N
PHAR	Phalaris arundinacea	Reed canarygrass	Poaceae	A*
POBU	Poa bulbosa	Bulbous bluegrass	Poaceae	A
POPR	Poa pratensis	Kentucky bluegrass	Poaceae	N
POSA	Poa sandbergii	Sandberg's bluegrass	Poaceae	N
SECE	Secale cereale	Rye	Poaceae	A
SIHY	Sitanion hystrix	Bottlebrush squirreltail	Poaceae	N
SPCR	Sporobolus cryptandrus	Sand dropseed	Poaceae	N
STCO	Stipa comata	Needle-and-thread grass	Poaceae	N
MIGR	Microsteris gracilis	Pink gracilis	Polemoniaceae	N
POMI	Polemonium micranthum	Annual Jacob's ladder	Polemoniaceae	N
ERNI	Eriogonum niveum	Snowy buckwheat	Polygonaceae	N
RUVE	Rumex venosus	Sand dock	Polygonaceae	N
RATE	Ranunculus testiculatus	Burr-buttercup	Ranunculaceae	A
PUTR	Purshia tridentata	Antelope bitterbrush	Rosaceae	N
POAL	Populus alba	Silver Poplar	Salicaceae	N
VETH	Verbascum thapsus	Wooly mullein	Scrophulariaceae	A*
TYLA	Typha latifolia	Cattail	Typhaceae	N

A* indicates species on the Washington State Noxious Weed List

Table 2. Animal Species Observed Along Rail Line		
Code	**Species**	**Common Name**
	BIRDS	
KIDE	*Charadrius vociferus*	Killdeer
HOLA	*Eremophila alpestris*	Horned Lark
WEME	*Sturna neglecta*	Western Meadowlark
RWBB	*Agelaius phoeniceus* -	Red-winged Blackbird
WCSP	*Zonothrichia leucophrys*	White Crowned Sparrow
HOFI	*Carpodacus mexicanus*	House Finch
MODO	*Zenaida macroura*	Mourning Dove
WODU	*Aix sponsa*	Wood Duck
MADU	*Anas platyrhynchos*	Mallard Duck
CAGO	*Branta canadensis*	Canada Goose
RTHA	*Buteo jamaicensis*	Red-Tailed hawk
BBMA	*Pica pica*	Black-billed magpie
NOFL	*Colaptes auratus*	Northern Flicker
RNPH	*Phasianus colchicus*	Ring-necked pheasant
CAQU	*Callipepla californica*	California quail
	MAMMALS	
Coyote	*Canis latrans*	Coyote
MUDE	*Odocoileus hemionus*	Mule Deer

TABLE 3. Plant Species Observed within the 1100 Area

CODE	Species	Common Name	Family	Native/ Alien
CYTE	*Cymopteris terebinthinus*	Turpentine spring-parsley	Apiaceae	N
LOMA	*Lomatium macrocarpum*	Big -seed desertparsley	Apiaceae	N
ACMI	*Achillea millifolium*	Yarrow	Asteraceae	N
AMAC	*Ambrosia acanthicarpa*	Bur-sage	Asteraceae	N
ARDR	*Artemisia dracunculus*	Tarragon	Asteraceae	N
ARTR	*Artemisia tridentata*	Big Sagebrush	Asteraceae	N
BACA	*Balsamorhiza careyana*	Carey's balsamroot	Asteraceae	N
CEDI	*Centaurea diffusa*	Diffuse knapweed	Asteraceae	A*
CERE	*Centaurea repens*	Russian knapweed	Asteraceae	A*
CESO	*Centaurea solstitialis*	Yellow starthistle	Asteraceae	A*
CHDO	*Chaenactis douglasii*	Hoary false yarrow	Asteraceae	N
CHJU	*Chondrilla juncea*	Rush skeletonweed	Asteraceae	A*
CHNA	*Chrysothamnus nauseosus*	Gray rabbitbrush	Asteraceae	N
CHVI	*Chrysothamnus viscidiflorus*	Green Rabbitbrush	Asteraceae	N
COCA	*Conyza canadensis*	Horseweed	Asteraceae	N
CRAT	*Crepis atrabarba*	Slender hawksbeard	Asteraceae	N
HYFI	*Hymenopappus filifolius*	Columbia cutleaf	Asteraceae	N
IVXA	*Iva xanthifolia*	Tall marsh-elder	Asteraceae	N
LASE	*Lactuca serriola*	Prickly lettuce	Asteraceae	A
MACA	*Machaeranthera canescens*	Hoary aster	Asteraceae	N
TAOF	*Taraxacum officinale*	Dandelion	Asteraceae	A
TRDU	*Tragopogon dubius*	Salsify	Asteraceae	A
AMLY	*Amsinckia lycopsoides*	Fiddleneck tarweed	Boraginaceae	N
AMTE	*Amsinckia tessellata*	Tessellate tarweed	Boraginaceae	N
CR sp.	*Cryptantha sp.*	Cryptantha	Boraginaceae	N
CRCI	*Cryptantha circumscissa*	Matted cryptantha	Boraginaceae	N
CRPT	*Cryptantha pterocarya*	Winged cryptantha	Boraginaceae	N
HECU	*Heliotropium curassavicum*	Salt heliotrope	Boraginaceae	A
PLTE	*Plagiobothrys tenellus*	Popcornflower	Boraginaceae	N
CHTE	*Chorispora tenella*	Blue mustard	Brassicaceae	A
DEPI	*Descurainia pinnata*	Tansy mustard	Brassicaceae	N
DESO	*Descurainia sophia*	Flixweed	Brassicaceae	A
DRVE	*Draba verna*	Spring whitlow grass	Brassicaceae	N
ERAS	*Erysimum asperum*	Wallflower	Brassicaceae	N
LELA	*Lepedium latifolium*	Broadleaf pepperweed	Brassicaceae	A*

TABLE 3. Plant Species Observed within the 1100 Area

CODE	Species	Common Name	Family	Native/ Alien
SIAL	*Sisymbrium altissimum*	Jim Hill Mustard	Brassicaceae	A
OPPA	*Opuntia polycantha*	Prickly pear	Cactaceae	N
HOUM	*Holosteum umbellatum*	Jagged chickweed	Caryophyllaceae	A
GRSP	*Grayia spinosa*	Spiney Hopsage	Chenopodiaceae	N
KOSC	*Kochia scoparia*	Summer cypress	Chenopodiaceae	A*
SAKA	*Salsola kali*	Russian thistle	Chenopodiaceae	A
COAR	*Convolvulus arvensis*	field bindweed	Convolvulaceae	A*
Ca sp.	*Carex species*	Sedge	Cyperceae	N
ASTCA	*Astragalus caricinus*	Buckwheat milkvetch	Fabaceae	N
ASTSC	*Astragalus sclerocarpus*	Stalked-pod milkvetch	Fabaceae	N
MESA	*Medicago sativa*	Alfalfa	Fabaceae	A
PEOR	*Petalostemon ornatum*	Prairie clover	Fabaceae	N
PSLA	*Psoralea lancolata*	Dune scurf-pea	Fabaceae	N
ROPS	*Robinia psuedoaccacia*	Black locust	Fabaceae	A
TRRE	*Trifolium repens*	White clover	Fabaceae	A
ERCI	*Erodium cicutarium*	Crane's-bill	Geraniaceae	A
RIAU	*Ribes aureum*	Golden current	Grossulariaceae	N
PHHA	*Phacelia hastata*	Whiteleaf scorpionweed	Hydrophyllaceae	N
PHLI	*Phacelia linearis*	Threadleaf scorpionweed	Hydrophyllaceae	N
Ju. sp.	*Juncus sp.*	Rush	Juncaceae	N
ASOF	*Asparagus officinale*	Asparagus	Liliaceae	A
BRDO	*Brodiaea douglasii*	Cluster lily	Liliaceae	N
FRPU	*Fritillaria pudia*	Yellow bells	Liliaceae	N
ZIVE	*Zigadenus venenosus*	Death camas	Liliaceae	N
SPMU	*Sphaeralcea munroana*	Globe mallow	Malvaceae	N
MOAL	*Morus alba*	Mulberry	Moraceae	A
EPPA	*Epilobium paniculatum*	Tall willowherb	Onagraceae	N
OEPA	*Oenothera pallida*	Pale eveningprimrose	Onagraceae	N
ORCO	*Orobanche corymbosa*	Flat-topped broomrape	Orobanchaceae	N
PLPA	*Plantago patagonica*	Indian wheat	Plantaginaceae	N
AGCR	*Agropyron cristatum*	Crested wheatgrass	Poaceae	A
AGDA	*Agropyron dasystachyum*	Thickspike wheatgrass	Poaceae	N
AGRE	*Agropyron repens*	Quackgrass	Poaceae	A
AGSP	*Agropyron spicatum*	Bluebunch wheatgrass	Poaceae	N
BRTE	*Bromus tectorum*	Cheatgrass	Poaceae	A
DIST	*Distichlis stricta*	Saltgrass	Poaceae	N

TABLE 3. Plant Species Observed within the 1100 Area

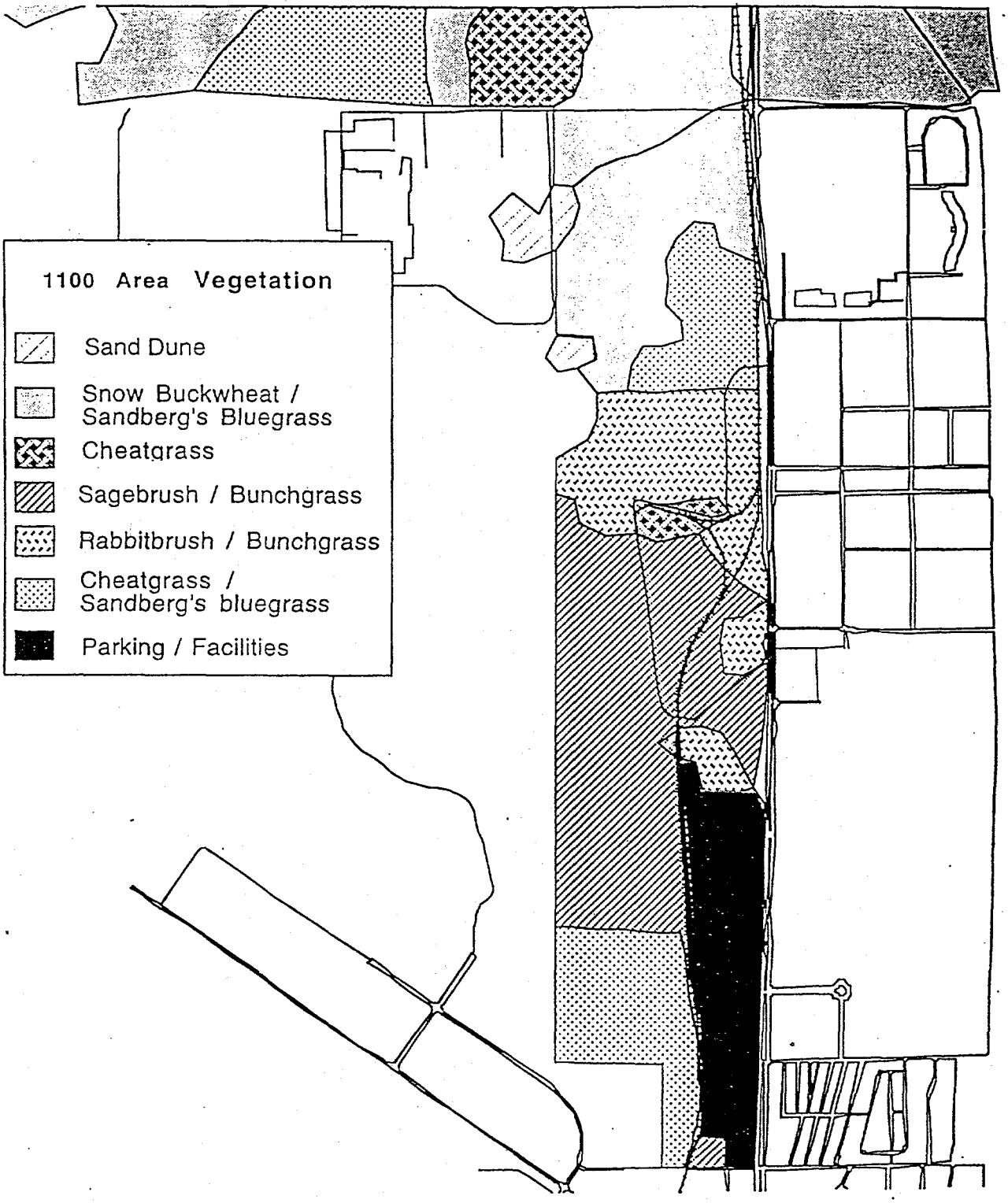
CODE	Species	Common Name	Family	Native/ Alien
ORHY	*Oryzopsis hymenoides*	Indian ricegrass	Poaceae	N
POBU	*Poa bulbosa*	Bulbous bluegrass	Poaceae	A
POMO	*Polypogon monspeliensis*	Rabbitsfoot grass	Poaceae	A
POPR	*Poa pratensis*	Kentucky bluegrass	Poaceae	N
POSA	*Poa sandbergii*	Sandberg's bluegrass	Poaceae	N
SIHY	*Sitanion hystrix*	Bottlebrush squirreltail	Poaceae	N
SPCR	*Sporobolus cryptandrus*	Sand dropseed	Poaceae	N
STCO	*Stipa comata*	Needle-and-thread grass	Poaceae	N
Gi. sp.	*Gilia sp.*	Gilia	Polemoniaceae	N
MIGR	*Microsteris gracilis*	Pink gracilis	Polemoniaceae	N
PHLO	*Phlox longifolia*	Long-leaf phlox	Polemoniaceae	N
POMI	*Polemonium micranthum*	Annual Jacob's ladder	Polemoniaceae	N
ERNI	*Eriogonum niveum*	Snowy buckwheat	Polygonaceae	N
RUVE	*Rumex venosus*	Sand dock	Polygonaceae	N
MOPE	*Montia perfoliata*	Miner's lettuce	Portulacaceae	N
DENU	*Delphinium nuttalianum*	Upland larkspur	Ranunculaceae	N
PRAR	*Prunus armeniaca*	Apricot	Rosaceae	A
PUTR	*Purshia tridentata*	Antelope bitterbrush	Rosaceae	N
VETH	*Verbascum thapsus*	Wooly mullein	Scrophulariaceae	A*
AIAL	*Ailanthus altissima*	Tree-of-heaven	Simaroubaceae	A
LYHA	*Lycium hamilifolium*	Matrimony vine	Solanaceae	A
TAPA	*Tamarix parviflora*	Salt cedar	Tamaricaceae	A*
PLMA	*Plectritis macrocera*	White cupseed	Valerianaceae	N
VEBR	*Verbena bracteata*	Bracted verbena	Verbenaceae	N
VIVI	*Vitis vinifera*	Grape	Vitaceae	A

A* indicates species on the Washington State Noxious Weed List

Table 4. Animal Species Observed Within The 1100 Area.

Code	Species	Common Name
	BIRDS	
WEME	*Sturna neglecta*	Western Meadowlark
AMRO	*Turdus migratorius*	American Robin
HOFI	*Carpodacus mexicanus*	House Finch
EUST	*Sturnus vulgaris*	European Starling
RODO	*Columba livea*	Rock Dove
BBMA	*Pica pica*	Black-billed magpie
AMCR	*Corvus brachyrhynchos*	American Crow
LBCU	*Numenius americanus*	Long-billed curlew
NOFL	*Colaptes auratus*	Northern Flicker
NOHA	*Cicus cyanus*	Northern Harrier
AMKE	*Falco sparverius*	American Kestrel
RNPH	*Phasianus colchicus*	Ring-necked pheasant
GRPA	*Perdix perdix*	Gray Partridge
CAQU	*Callipepla californica*	California quail
	MAMMALS	
DEMO	*Peromyscus maniculatus*	Deer Mouse
POGO	*Perognathus parvus*	Pocket Gopher
BTJR	*Lepus californicus*	Black-tailed Jackrabbit
CORA	*Sylvilagus nuttallii*	Cottontail Rabbit
Coyote	*Canis latrans*	Coyote
Badger	*Taxidea taxus*	Badger
MUDE	*Odocoileus hemionus*	Mule Deer

FIGURE 1. 1100 Area Plant Communities



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
517 South Buchanan
P.O. Box 1157
Moses Lake, Washington 98837
(509)765-6125 Fax: (509)765-9043

April 9, 1998

U.S. Department of Energy
Mr. James E. Rasmussen, Director
Environmental Assurance, Permits
and Policy Division
P.O. Box 550
Richland, WA 99206

RE: Species List, 1100 Area
FWS Reference: 1-9-98-SP-138

Dear Mr. Rasmussen:

Thank you for your request of April 6, 1997. Enclosed is a list of threatened and endangered species, candidate species and species of concern (Enclosure A), that may be present within the 1100 Area, in Benton County, Washington. The list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under Section 7(c) of the Endangered Species Act of 1973, as amended (Act). We are enclosing a copy of the requirements for federal agency compliance under the Act (Enclosure B).

For further information on species within the 1100 Area, the Washington Department of Fish and Wildlife (WDFW) maintains the Washington State Heritage Database, which has extensive location information on the Swainson's hawk *(Buteo swainsoni)*, loggerhead shrike *(Lanius ludovicianus)*, the Western burrowing owl, *(Athene cunicularia hypugea)* other migratory birds and wildlife species within the 1100 Area. To obtain current Heritage Database information, please contact Tom Owens of the WDFW at (360) 902-2489.

Should the biological assessment for the proposed project determine that a listed species is likely to be affected (adversely or beneficially) by the project, the federal agency should request Section 7 consultation through this office. If the biological assessment determines that the proposed action is "not likely to adversely affect" a listed species, the federal agency should request Service concurrence with that determination through the informal consultation process. If the biological assessment determines the project to have "no effect," we would appreciate receiving a copy for our information.

Candidate species and species of concern are included simply as advance notice to federal agencies of species which may be proposed and listed in the future. Protection provided to these species now may preclude possible listing in the future. If early evaluation of your project indicates that it is likely to adversely impact a candidate species, or species of concern, the federal agency may wish to request technical assistance from this office.

Anadromous fishes are listed under the Act by the National Marine Fisheries Service (NMFS). Some of these species occur in the vicinity of your project. Please contact NMFS in Seattle, WA at (206) 526-6150, or in Portland, OR at (503) 231-2319, to request a species list.

Thank you for your efforts to protect our nation's species and their habitats. If you have additional questions regarding your responsibilities under the Act, please contact Richard Smith of this office at (509) 765-6125.

Sincerely,

Kurt R Campbell

Kurt R. Campbell
Supervisor, Moses Lake Field Office

Enclosures

Enclosure A **April 9, 1998**

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES AND SPECIES OF CONCERN WHICH MAY OCCUR IN THE VICINITY OF THE 1100 AREA, BENTON COUNTY WASHINGTON

FWS Reference: 1-9 -98-SP-138

LISTED

Endangered

Peregrine falcon *(Falco peregrinus)*

Threatened

Bald eagle *(Haliaeetus leucocephalus)*

PROPOSED

Bull trout *(Salvelinus confluentus)*

CANDIDATE

None

SPECIES OF CONCERN

Animals

Black tern *(Chlidonias niger)*
California floater (mussel) *(Anodonta californiensis* (Lea, 1852*))*
Columbia pebblesnail *(Fluminicola (=Lithoglyphus) columbianus* (Hemphill in Pilsbry, 1899*))*
[great Columbia River spire snail]
Ferruginous hawk *(Buteo regalis)*
Fringed myotis (bat) *(Myotis thysanodes)*
Loggerhead shrike *(Lanius ludovicianus)*
Long-eared myotis (bat) *(Myotis evotis)*
Long-legged myotis (bat) *(Myotis volans)*
Lynn's clubtail (dragonfly) *(Gomphus lynnae)*
Margined sculpin *(Cottus marginatus)*
Northern sagebrush lizard *(Sceloporus graciosus graciosus)*
Olive-sided flycatcher *(Contopus borealis)*
Pacific lamprey *(Lampetra tridentata)*
Pale Townsend's (= western) big-eared bat *(Corynorhinus (=Plecotus) townsendii pallescens)*

River lamprey *(Lampetra ayresi)*
Small-footed myotis (bat) *(Myotis ciliolabrum)*
Western burrowing owl *(Athene cunicularia hypugea)*
Yuma myotis (bat) *(Myotis yumanensis)*

Plants
Astragalus columbianus (Columbia milk-vetch)
Eriogonum codium (Umtanum wild buckwheat)
Rorippa columbiae (Columbia yellow-cress)

Enclosure B

FEDERAL AGENCIES' RESPONSIBILITIES UNDER SECTIONS 7(a) AND 7(c) OF THE ENDANGERED SPECIES ACT OF 1973, AS AMENDED

SECTION 7(a) - Consultation/Conference

Requires:

1. Federal agencies to utilize their authorities to carry out programs to conserve endangered and threatened species;

2. Consultation with FWS when a federal action may affect a listed endangered or threatened species to ensure that any action authorized, funded, or carried out by a federal agency is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. The process is initiated by the federal agency after it has determined if its action may affect (adversely or beneficially) a listed species; and

3. Conference with FWS when a federal action is likely to jeopardize the continued existence of a proposed species or result in destruction or an adverse modification of proposed critical habitat.

SECTION 7(c) - Biological Assessment for Construction Projects *

Requires federal agencies or their designees to prepare a Biological Assessment (BA) for construction projects only. The purpose of the BA is to identify any proposed and/or listed species which is/are likely to be affected by a construction project. The process is initiated by a federal agency in requesting a list of proposed and listed threatened and endangered species (list attached). The BA should be completed within 180 days after its initiation (or within such a time period as is mutually agreeable). If the BA is not initiated within 90 days of receipt of the species list, please verify the accuracy of the list with our Service. No irreversible commitment of resources is to be made during the BA process which would result in violation of the requirements under Section 7(a) of the Act. Planning, design, and administrative actions may be taken; however, no construction may begin.

To complete the BA, your agency or its designee should: (1) conduct an onsite inspection of the area to be affected by the proposal, which may include a detailed survey of the area to determine if the species is present and whether suitable habitat exists for either expanding the existing population or potential reintroduction of the species; (2) review literature and scientific data to determine species distribution, habitat needs, and other biological requirements; (3) interview experts including those within the FWS, National Marine Fisheries Service, state conservation department, universities, and others who may have data not yet published in scientific literature; (4) review and analyze the effects of the proposal on the species in terms of individuals and populations, including consideration of cumulative effects of the proposal on the species and its habitat; (5) analyze alternative actions that may provide conservation measures; and (6) prepare a report documenting the results, including a discussion of study methods used, any problems encountered, and other relevant information. Upon completion, the report should be forwarded to our Moses Lake Office, P.O Box 1157, Moses Lake, WA 98837.

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* "Construction project" means any major federal action which significantly affects the quality of the human environment (requiring an EIS), designed primarily to result in the building or erection of human-made structures such as dams, buildings, roads, pipelines, channels, and the like. Biological evaluations are recommended for other federal actions such as permits, grants, licenses, federal authorizations or approval which may result in construction.

APPENDIX B

CULTURAL REVIEW

CULTURAL RESOURCES REPORT NARRATIVE
HANFORD CULTURAL RESOURCES LABORATORY

A. NAME AND FULL DESCRIPTION OF THE PROPOSED UNDERTAKING

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

The proposed project involves vacating the 1100 Area for possible turnover to the Port of Benton. The National Historic Preservation Act requires survey of undisturbed ground in the proposed project area before federally owned land can be leased or sold to a non-federal agency. A pedestrian survey of the 1100 Area was conducted intermittently from February 19, 1998, to April 2, 1998, to fulfill this requirement. The project area is shown in Figures 1 through 4.

B. LOCATION AND GENERAL ENVIRONMENTAL SETTING

The Hanford Site is located in South-central Washington State and is managed by the Department of Energy, Richland Operations (Figure 5). The Transfer of 1100 Area and Hanford Rail Connection project area is located in southeastern corner of the Hanford Site. It includes the 1100 Area from Horn Rapids Road to the southern boundary at Snyder Road. The project area also includes the railroad right-of-way on the Hanford Rail System Southern Connection from Horn Rapids Road south to Columbia Center. The topography over most of the 1100 Area is flat with small-scale vegetation hummocks and small pockets of stabilized sand dunes. Surface sediments are Holocene eolian sandy silt. The closest source of permanent water is the Columbia River, approximately 1.7 km to the east of the 1100 Area. Elevation in the project area is about 122 m (400 feet).

The vegetation is a steppe-shrub community (Daubenmire 1970) and is dominated by Big Sagebrush (Artemisia tridentata) and by annual and perennial grasses, especially cheatgrass (Bromus tectorum) and bluegrass (Poa sp.). Table 1 summarizes the plant species observed within the project area during the survey. Animals or their sign that were observed within the project area are listed in Table 2.

Table 1. Flora in the 1100 Area Vacate Plan project area.

	Species	Common name
Annual grass	Bromus tectorum	Cheat grass
Perennial grass	Oryzopsis hymenoides	Indian ricegrass
	Stipa comata	Needle-and-thread grass
	Poa sp.	Bluegrass
Annual/biennial forbs	Lactuca serriola	Prickly lettuce
	Salsola kali	Russian thistle
	Sisymbrium altissimum	Tumble mustard
	Tragopogon dubius	Yellow salsify
	Amsinkia lycopsoides	Tarweed fiddleneck
	Descurainia pinnata	Western tansymustard
	Draba verna	Spring whitlowgrass
	Fritillaria pudica	Yellow bell
	Erysimum asperum	Rough wallflower
	Holosteum umbellatum	Jagged chickweed
	?	Asparagus
Perennial forbs	Balsamorhiza careyana	Carey's balsamroot
	Achillea millefolium	Yarrow

Table 1 (continued).

Perennial forbs (cont.)	Brodiaea douglasii	Douglas's brodiaea
	Cymopterus terebinthinus	Turpentine cymopterus
	Centaurea repens	Russian knapweed
	Comandra umbellata	Bastard toadflax
	Centaurea solstitialis	Yellow starthistle
	Machaeranthera canescens	Hoary aster
	Phacelia hastata	Whiteleaf phacelia
	Phlox longifolia	Longleaf phlox
	Eriogonum niveum	Snow buckwheat
Shrubs	Artemisia tridentata	Big sage
	Purshia tridentata	Bitterbrush
	Grayia spinosa	Hopsage
	Chrysothamnus nauseosus	Gray rabbitbrush
	Chrysothamnus viscidiflorus	Green rabbitbrush
	?	Grapes
Trees	?	Black locust

Table 2. Animals or signs observed in the 1100 Area Vacate Plan project area.

	Scientific Name	Common Name
Mammals	Canis latrans	Coyote
	Odocoileus hemionus	Deer
	Taxidea taxus	Badger
	Lepus californicus	Blacktailed jackrabbit
Birds	Numenius americanus	Long-billed curlew
	Larus spp.	Gull
	Turdus migratorius	American robin
	Sturnella neglecta	Western meadowlark

Aerial photograph(s): EG&G 5675 # 133, 05-06-87 (Scale 1:19000); GS-XB, 1-145, 5-23-48 (1948); CIH-204-100, 6-25-39 (1939).

USGS topographic map(s): Richland, Washington 7.5 Minute Quadrangle, 1992 provisional edition and 1978 edition.

Legal descriptions: T 10 N, R 28 E, SE 1/4 of Section 15, east 1/2 of Section 22, and east 1/2 of Section 27.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

UTMs: (See Figure 1.)

Location	Zone	m Northing	m Easting
A	11	5135400	323600
B	11	5135370	324350
C	11	51313500	324200
D	11	5131380	323830
E	11	5131760	323860
F	11	5131790	323440

C. PRE-FIELD RESEARCH

1. Sources of information checked: [X] Survey and Site Location Maps [X] Previous Reports [X] Aerial Photographs [X] GLO Plats [X] Other

GLOS

The General Land Office survey for T 10N, R 28E was conducted in 1864. Adjacent GLO plats were surveyed between 1863 and 1880. No roads or trails were shown on the GLO plat for the survey area. The GLO plat map for the survey area is shown in Figure 6.

15' 1917 Pasco, Washington Quadrangle Map

Only two features observed during survey of the project area are shown on the 1917 map. The major irrigation canal (H3-21) and Lawrence Brewster's farmhouse foundation (HT-98-005) can be seen on the map (Figure 7). The canal (H3-21) is shown as a solid line on the north and south forks. However, a dashed line represents the upper part of the canal to the right of the page where the canal is a large wooden pipe. Water was probably taken from a previous portion of the canal system and pumped up the grade of the dashed line on the map to where the canal becomes an open cement-lined ditch to the east.

The 1917 map also shows where buildings formerly existed in the project area. A building at the NW corner of the project area as well as a building at the NE corner of the HT-98-003 property are no longer evident on the ground. A building located at or near the foundation in the southern portion of HT-98-029 may or may not be the one shown on the 1917 map.

1943 Land Plat Maps

The plat map for the project area in 1943 shows land ownership of agricultural fields found during the survey (Figure 8). HT-98-005 was owned by Lawrence Brewster in 1943. HT-98-003 was owned by Lucien Deranleau and HT-98-007 to the west was owned by Ray and Henry Deranleau. The fields of Ray Deranleau were irrigated jointly with Henry Deranleau's fields possibly indicating their family ties. HT-98-029 was owned by several owners each in a different section of the site. Owners of land within HT-98-029 include Benton County, Harry O. Sandberg, J.B. Worden - Carl W. Morgan, and E.A. Norling.

Survey and Site Location Maps/Previous Reports and Studies

Survey and site location maps were examined to determine previous surveys completed and sites and isolates known to be located within 1.0 km of the current project. This database contains the location of all known cultural resource sites recorded since 1947, project areas intensively surveyed since 1987, and sites, and isolated artifacts located during those surveys. Several survey projects have been conducted in the vicinity. Several isolated artifacts and sites have been recorded within the current project area and within 1 km of the project area. Tables 3 and 4 summarize these surveys and cultural items.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

Table 3. Project and cultural resources previously recorded within the 1100 Area Vacate Plan project area.

HCRC Project number	Cultural resources recorded within the 1100 Area
87-1100-001	HT-87-018 (H3-21 canal)
89-1100-003	HT-87-018 (H3-21 canal), HT-90-003 (H3-21 canal)
91-1100-002	H3-44 (historic debris concentration)
97-1100-002	HI-97-003 (lithic flake), HT-97-010 (historic debris concentration)
98-0600-015	HT-98-001 (the Hanson Farmstead)

Table 4. Projects and cultural resources outside of the 1100 Area Vacate Plan project area but previously recorded within 1.0 km of the area.

HCRC Project number	Cultural resources recorded within 1.0 km of project area
89-0300-023	HT-89-016 and HT-89-017 (historic debris concentrations)
89-0300-026	None.
89-0300-027	None.
89-1100-001	None.
90-0300-025	None.
90-0600-012	None.
92-0600-029	None.
92-1100-001	None.
93-0300-063	HT-94-001 (historic debris concentration)
94-0300-008	HI-94-015, HT-94-004 (historic debris concentration), and HT-94-017 (historic stone pile and concrete pipe)
94-0300-087	HI-95-005 (faunal remains)
94-3000-002	None.
95-0300-056	HT-95-332 and HT-95-333 (historic debris concentrations), HI-95-137 (bucket), HI-95-139 (can), HI-95-144 (bottle)
95-0600-015	None.

D. EXPECTED HISTORIC AND PREHISTORIC LAND USE AND SITE SENSITIVITY

1. Are there known sites in the general area? [X] Yes [] No

2. Are sites expected? [X] Yes [] No

Historic and prehistoric sites and isolated finds have been found near the project area. Others may be found there also.

E. FIELD METHODS

1. Areas examined and type of coverage:

The survey followed procedures outlined in Chatters (1989). Transects were spaced 20 m apart. Participants scanned an area 5 m to either side of the transect center line, thus having potential for 100% discovery of concentrations of surface artifacts larger than 10 m in diameter, as well as most smaller concentrations. The lowest estimated discovery rate, at 50%, was expected for single, isolated artifacts.

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

The surveyors walked transects oriented north/south in Unit 1. The first transect was located 40 m west of Stevens Drive with subsequent transects spaced 20 m apart to the west. The first transect in Unit 2 was located approximately 780 m west of Stevens Drive with subsequent transects spaced 20 m apart to the east. Transects in Section 2 were walked north/south parallel to the Stevens Drive. In Unit 3, transects oriented north/south were begun 20 m west of Stevens Drive and continued to the west spaced 20 m apart. Transects in Unit 4 were walked north/south. The first transect in Unit 4 was walked 40 m west of the Hanford Rail System tracks with subsequent transects spaced 20 m apart to the west. In the last unit, Unit 5, transects were walked north/south beginning 40 m west of the Hanford Rail System Southern Connection tracks. Transects were spaced 20 m apart to the west. Total coverage by the survey was 256.25 ha.

2. Areas not examined and reasons why: A large polygon around the paved 1100 Area Buildings measuring 37.5 ha was not surveyed (Figure 1). No bare ground was visible in this area. The following are the UTM coordinates for this area (Table 4):

Table 4. UTM Coordinates For Area Not Surveyed

Location	Zone	mNorthing	mEasting
1.	11	5132800	324000
2.	11	5132800	324300
3.	11	5131360	324200
4.	11	5131370	323930
5.	11	5131540	324000

3. Personnel conducting and assisting in this survey:
Laurie L. Hale, AWU, HCRL; James J. Sharpe, CH2M Hill; Natalie A. Cadoret, HCRL; Leah Sue Aleck, YIN; Greg Aleck, YIN; Steven Burnam, DOE; Earl Lloyd, DOE; Julie Smith, visiting University of Washington student; Tara Eschbach, PNNL; Amoret Bunn, PNNL.

4. Date(s) of survey:
February 19, 23, 1998; March 3-5, 9-12, 16-18, 23-26, 1998.

5. Visibility on surface: 15-90%
Visibility of subsurface: <5% from animal diggings.

6. Problems encountered: None.

F. RESULTS

All cultural materials recorded for this area during the current survey:

- Isolated artifacts: HI-98-005, an isolated prehistoric quartzite core measuring 5 cm x 6 cm x 3 cm. The core has been badly battered and was found in sediments disturbed by past construction activities.
- Sites: HT-98-004, a railroad grade without rails.
- HT-98-005, an historic farmstead owned by Lawrence Brewster in 1943. A farmhouse foundation, an outbuilding foundation and associated historic debris are surrounded by former agricultural fields with several irrigation lines.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
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- HT-98-007, historic agricultural fields owned by Ray, Henry, and Lucien Deranleau in 1943. A system of irrigation ditches and pipelines runs through the fields.
- HT-98-014, an historic debris concentration.
- HT-98-021, an historic debris concentration with cans dating from 1915-1930.
- HT-98-025, a fragmented historic debris concentration.
- HT-98-026, an historic debris concentration with cans dating from 1917-1929.
- HT-98-027, an historic debris concentration containing antique car parts.
- HT-98-028, an historic debris concentration with cans dating from 1908-1914 and 1915-1930.
- HT-98-029, historic agricultural fields and associated historic debris. Irrigation ditches and pipelines run throughout the fields.
- HT-98-030, a concrete well, metal pipe valve, small burned area, and a smashed wooden construct.
- HT-98-031, four vertically buried culvert pipes with clay tile pipelines running NE/SW through them and a 550 m long ditch with an "elbow" in the middle.
- HT-98-032, an historic debris concentration containing shop debris (probably Hanford-related).
- HT-98-033, an historic irrigation diversion box with inscriptions on the top of the walls dating to 1946, and a cluster of wooden irrigation pipes.
- HT-98-034, an oval depression and historic can concentration that may have been part of an historic farmstead.
- HT-98-037, an historic debris concentration with cans dating from 1935-1945.
- H3-21, an historic irrigation canal (H3-21) constructed by the Lower Yakima Irrigation Company in 1908-1909.
    - Feature A, a primary canal segment with both cement and earth-lined sections
    - Feature B, a shallow ditch running NE/SW through stabilized dunes
    - Feature C, , two small irrigation ditches and associated historic debris
    - Feature D, three segments of earth-lined irrigation canal
    - Feature G, a secondary canal segment located near HT-98-001 and HT-98-005
    - HT-87-018
    - HT-90-003
    - HT-94-018
- H3-44:
    - Feature A, an historic debris scatter in a dune blowout.
    - Feature B, an historic debris concentration.
    - Feature C, a concentration of concrete irrigation pipe fragments and miscellaneous historic debris.
    - Feature D, an historic debris concentration.
    - Feature E, an historic debris concentration.
    - Feature F, an historic debris concentration.
    - Feature G, a small depression and broken horse plow.
    - Feature H, two concentrations of historic debris.
    - Feature I, an historic debris concentration.
    - Feature J, a metal container, cans and wire fencing.
    - Feature K, two concentrations of historic debris.
    - Feature L, an historic debris concentration.
    - Feature M, an historic debris concentration with cans dating from 1885-1903.
    - Feature N, an historic debris concentration which includes nails and bottle glass in a dune blowout.
    - HT-91-008 (H3-44), a historic debris concentration and an associated agricultural field. This is a previously recorded site that has now been expanded to include the above mentioned features.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

All cultural resources previously recorded for this project area:

- HT-87-018, a segment of the H3-21 canal. This site has been included in the new H3-21 site form.
- HT-90-003, a segment of the H3-21 canal. This site has been included in the new H3-21 site form.
- HT-91-008, an historic debris concentration and associated agricultural field. This is a previously recorded site that has been expanded.
- HT-97-010, an historic debris concentration.
- HI-97-003, an isolated lithic flake.
- HT-98-001, the Hanson farmstead. The site form for this site has been modified. A canal segment feeding the farmstead was included with the site form for H3-21.

G. CONCLUSIONS AND RECOMMENDATIONS:

Eighteen archaeological sites and one isolated find were recorded during survey of the 1100 Area for this project and the southern connection of the Hanford Rail System. Five sites and one isolated find had been previously recorded in the project area. Most of the previously recorded and newly recorded sites can be placed into two categories: historic debris concentrations and farmsteads. Of the cultural resources in the project area, a portion of H3-21 (an irrigation canal), has already been determined eligible for listing on the National Register (Griffith 1994).

Before federally managed land can be transfered to other ownership, cultural resources on the land must be identified and evaluated for National Register of Historic Places eligibility (36CFR800). This report documents the identification of cultural resources for the project area. However, evaluation of the cultural resources eligibility for listing on the National Register of Historic Places remains to be conducted. To be eligible for listing in the National Register, an historic property must possess integrity of workmanship, location, design, setting, materials, feeling, and association *and* A) be associated with events that have made a significant contribution to the broad patterns of history, B) be associated with lives of persons significant in our past, C) embody the distinctive characteristics of a type or represent the work of a great master, or D) yield, or be likely to yield, information important in prehistory or history (U.S. Department of the Interior National Park Service 1991).

We will need to formally evaluate the 18 sites before the land transfer can be finalized. Those sites not considered eligible will require no further documentation, assuming the State Historic Preservation Office concurs. Determination of eligibility forms will need to be completed for sites that meet eligibility criteria for listing on the National Register of Historic Places. We recommend beginning evaluations of all the sites recorded during the project survey immediately to ensure that the process is fulfilled in a timely manner for completion of the land transfer.

Recommendations for completion of the evaluations include:

- Aerial photo documentation of the farmsteads and associated agricultural fields.
- Controlled surface and subsurface sampling of suspected historic debris areas, cellars, and wells.
- Collection of diagnostic artifacts for the refuse field (H3-44).
- Architectural and engineering recordation of the cellars, irrigation diversion boxes, and canal (H3-21).
- Vegetation identification for economic and indicator species.
- Subsurface probing of irrigation systems and root cellars.
- Oral informant interviews.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

H. REFERENCES

36CFR800 Code of Federal Regulations: Title 36, Parks Forests, and Public Property. Protection of Historic and Cultural Properties. Revised as of July 1, 1997. U.S. Government Printing Office.

Chatters, J. C. 1989 *Hanford Cultural Resources Management Plan*, PNL-6942, Pacific Northwest Laboratory, Richland, Washington.

Daubenmire, R. 1970 Steppe vegetation of Washington. Wash. Agric. Expt. Sta. Tech. Bull., 62, 131 pp.

Griffith, G.A. 1994 Letter from G.A. Griffith, Washington State SHPO, to Mr. Robert S. Holt, U.S. Department of Energy, dated December 8, 1994.

U. S. Department of the Interior. 1991. How to Apply the National Register Criteria for Evaluation. National Register Bulletin 15. Washington D. C.

I. ATTACHMENTS

1. Site forms for each site recorded ? [X]
2. Isolate forms for each isolate recorded? [X]
3. Overview location map [X]
4. Quad map of surveyed area? [X]
5. Other attachments? [X]

J. CERTIFICATION OF RESULTS

I certify that I conducted the investigation reported here, that my observations and methods are fully documented, and that this report is complete and accurate to the best of my knowledge.

Laurie L. Hale	Laurie L. Hale	7/1/98
Reporter	Signature	Date
Darby C. Stapp		7-1-98
Reviewer	Concurrence (Signature)	Date

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

RICHLAND QUADRANGLE, WASHINGTON - 7.5 MINUTE SERIES (TOPOGRAPHIC) 1992
T10 N R 28 E

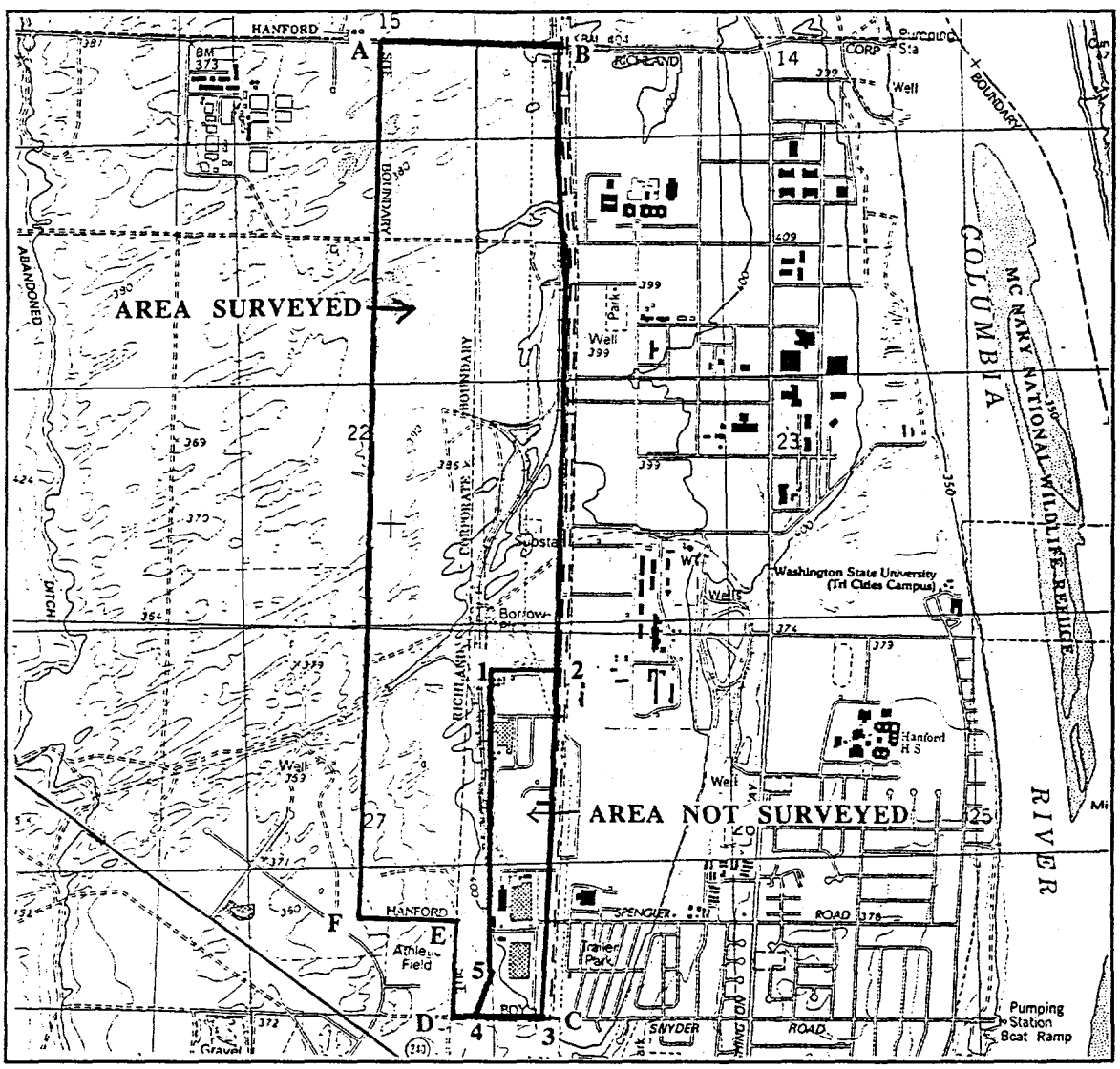

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Figure 1. Location of area surveyed for the Transfer of 1100 Area and Hanford Southern Rail Connection project, HCRC #97-1100-003.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

RICHLAND, COLUMBIA POINT, AND KENNEWICK QUADRANGLES, WASHINGTON - 7.5 MINUTE SERIES (TOPOGRAPHIC) 1992

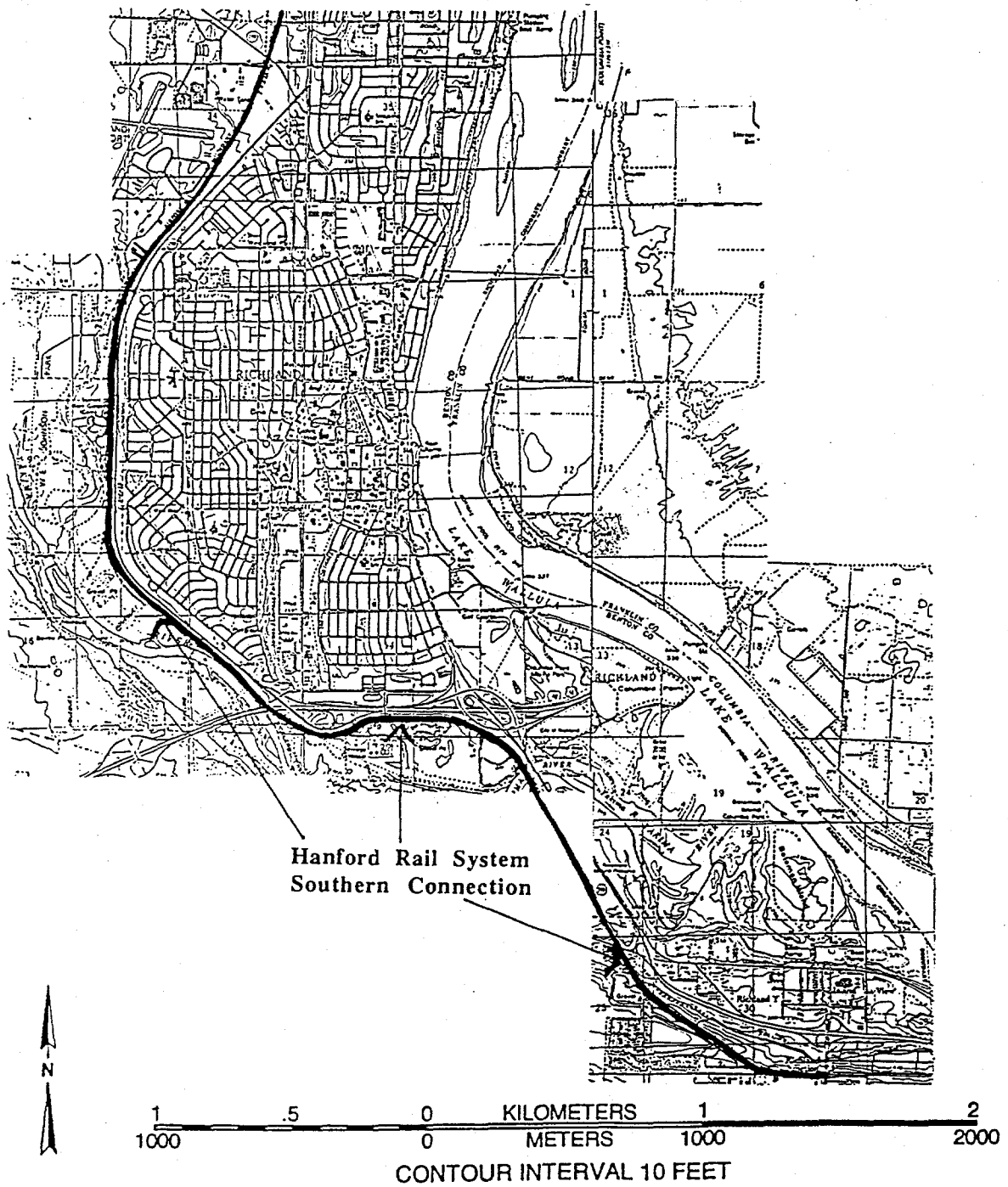


Figure 2. Location of Hanford Rail System Southern Connection surveyed for Transfer of 1100 Area and Hanford Southern Rail Connection project (HCRC #97-1100-003).

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

Figure 3. 1987 Aerial photo showing the project area for the Transfer of 1100 Area and Hanford Rail Connection project (HCRC #97-1100-003) at a 1:19900 scale. The project area extends a little further south than shown.

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

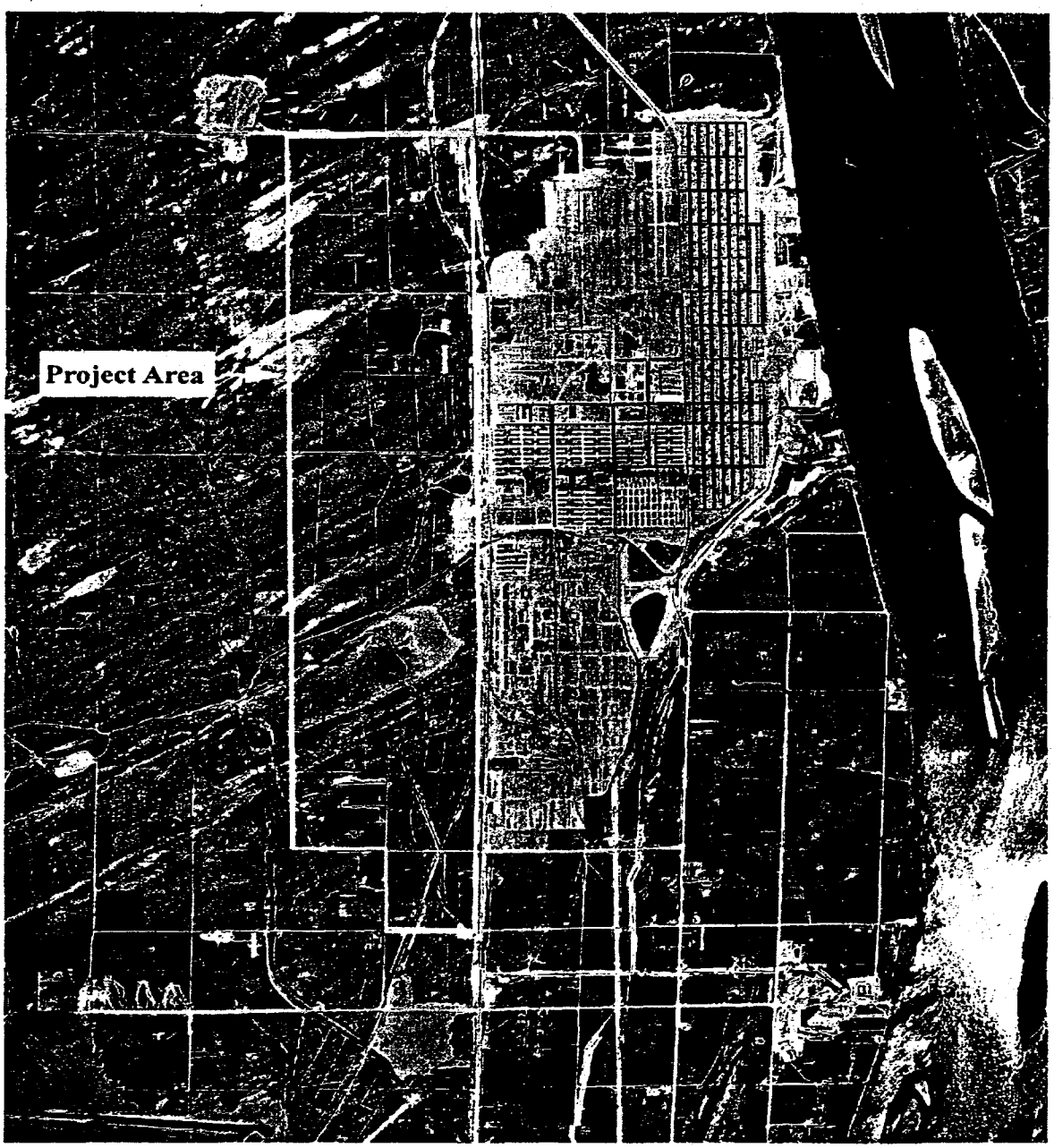


Figure 4. 1941 aerial photo showing the project area for the Transfer of 1100 Area and Hanford Rail Connection project (HCRC #97-1100-003) at a 1:23142 scale.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

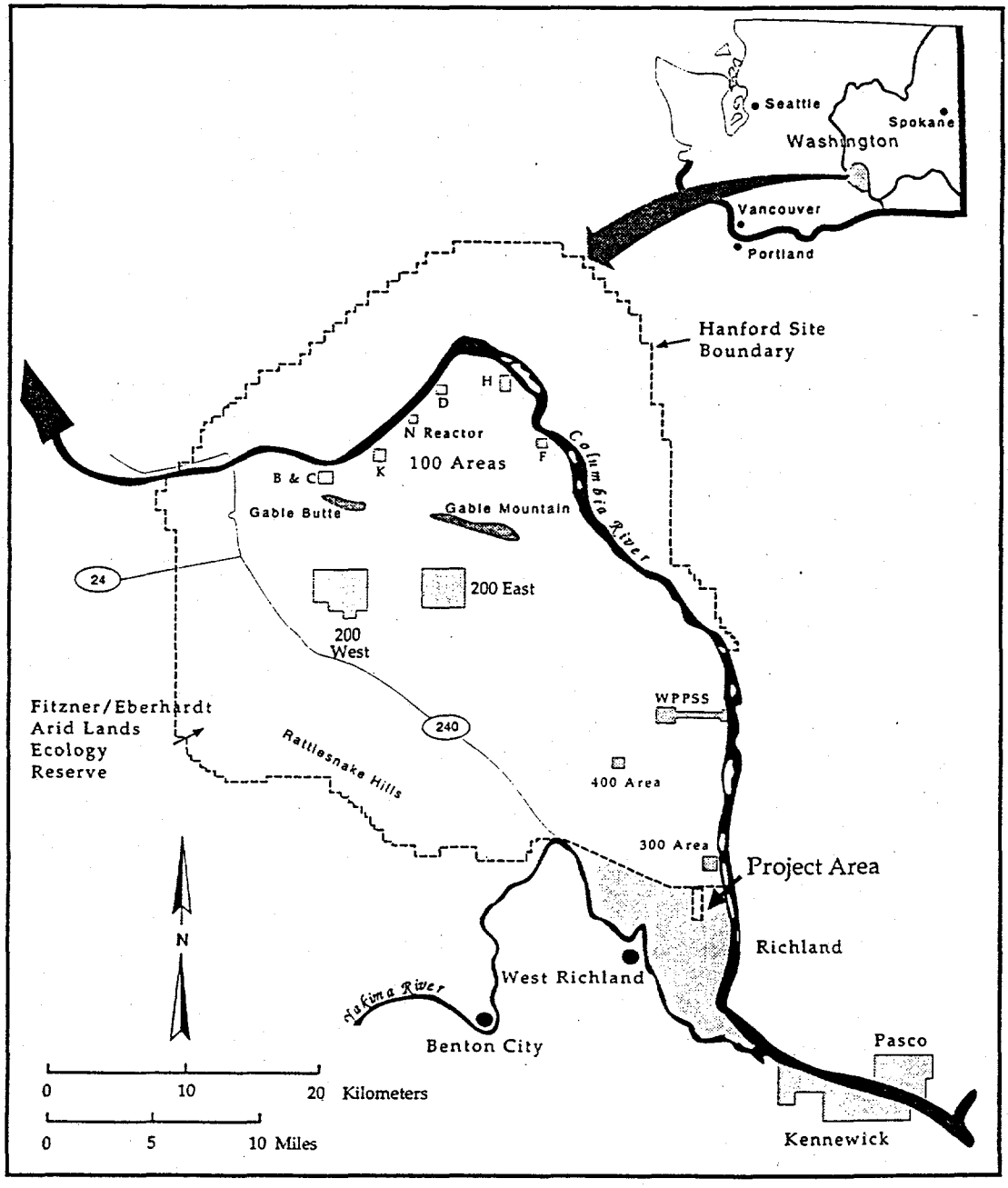


Figure 5. Overview map showing location of area surveyed for the Transfer of 1100 Area and Hanford Rail Connection project (HCRC #97-1100-003).

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

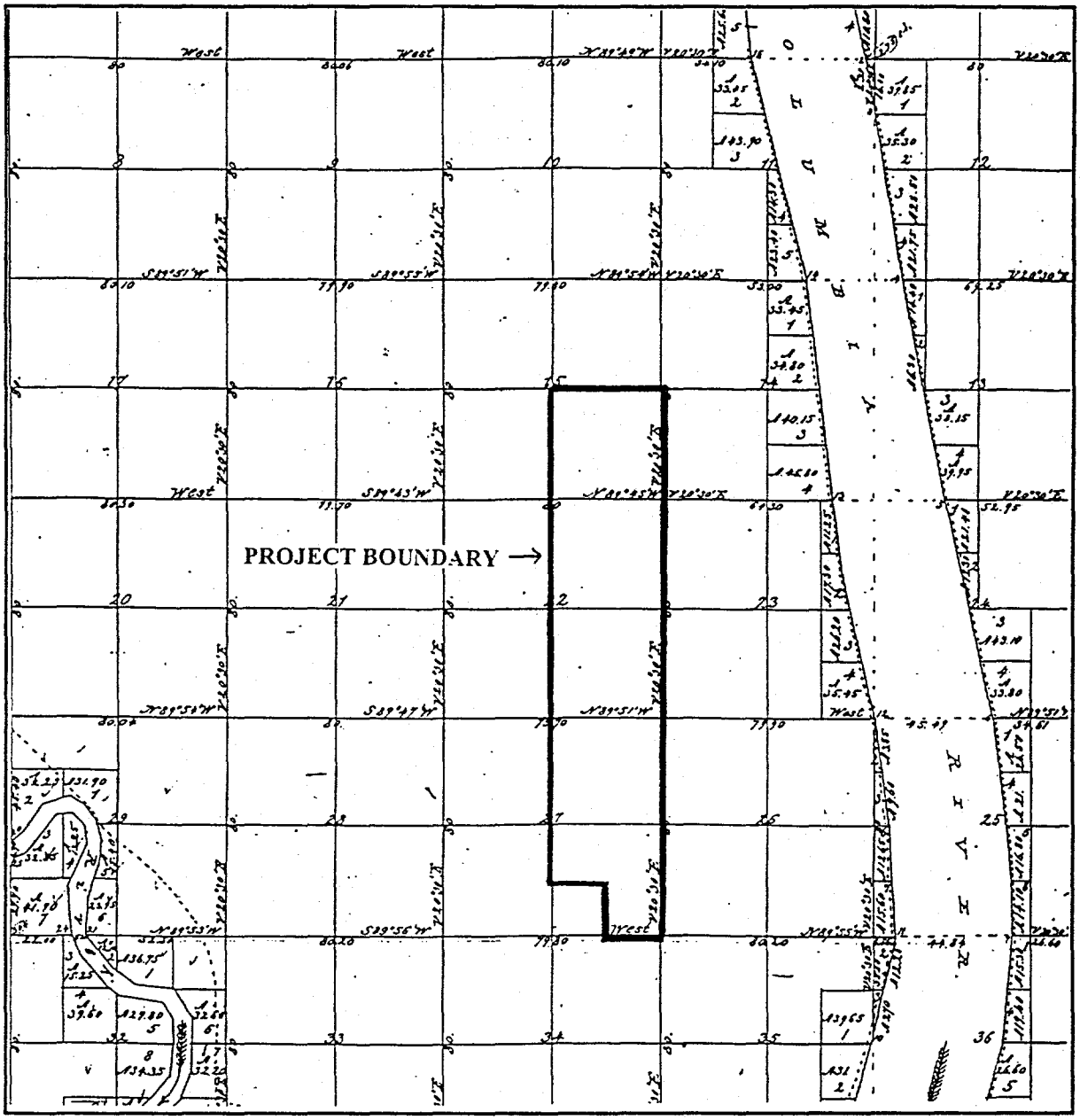


Figure 6. 1865 GLO map of T10N, R28E showing Sections 15, 22, and 27 which comprise the project area.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection

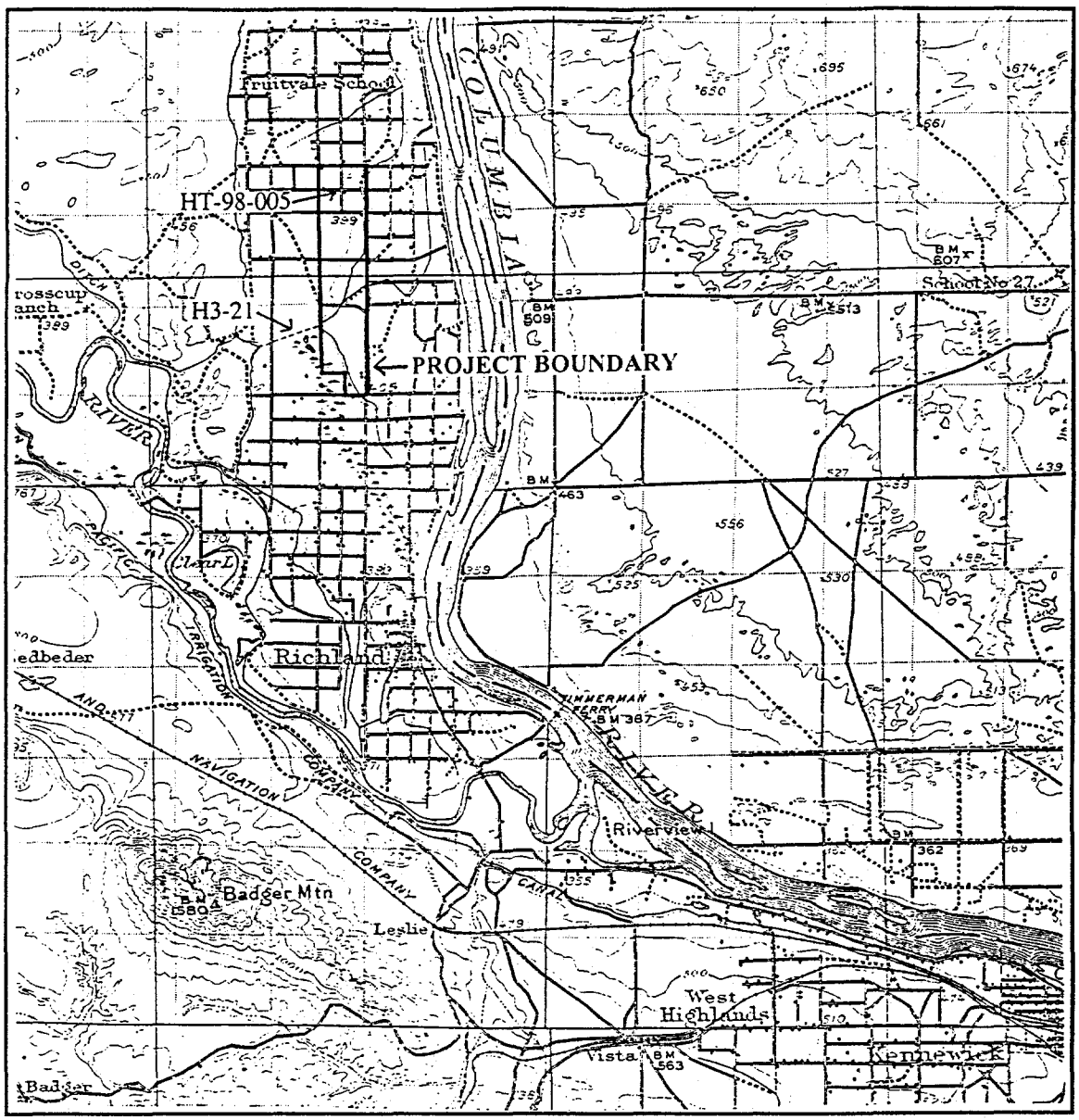
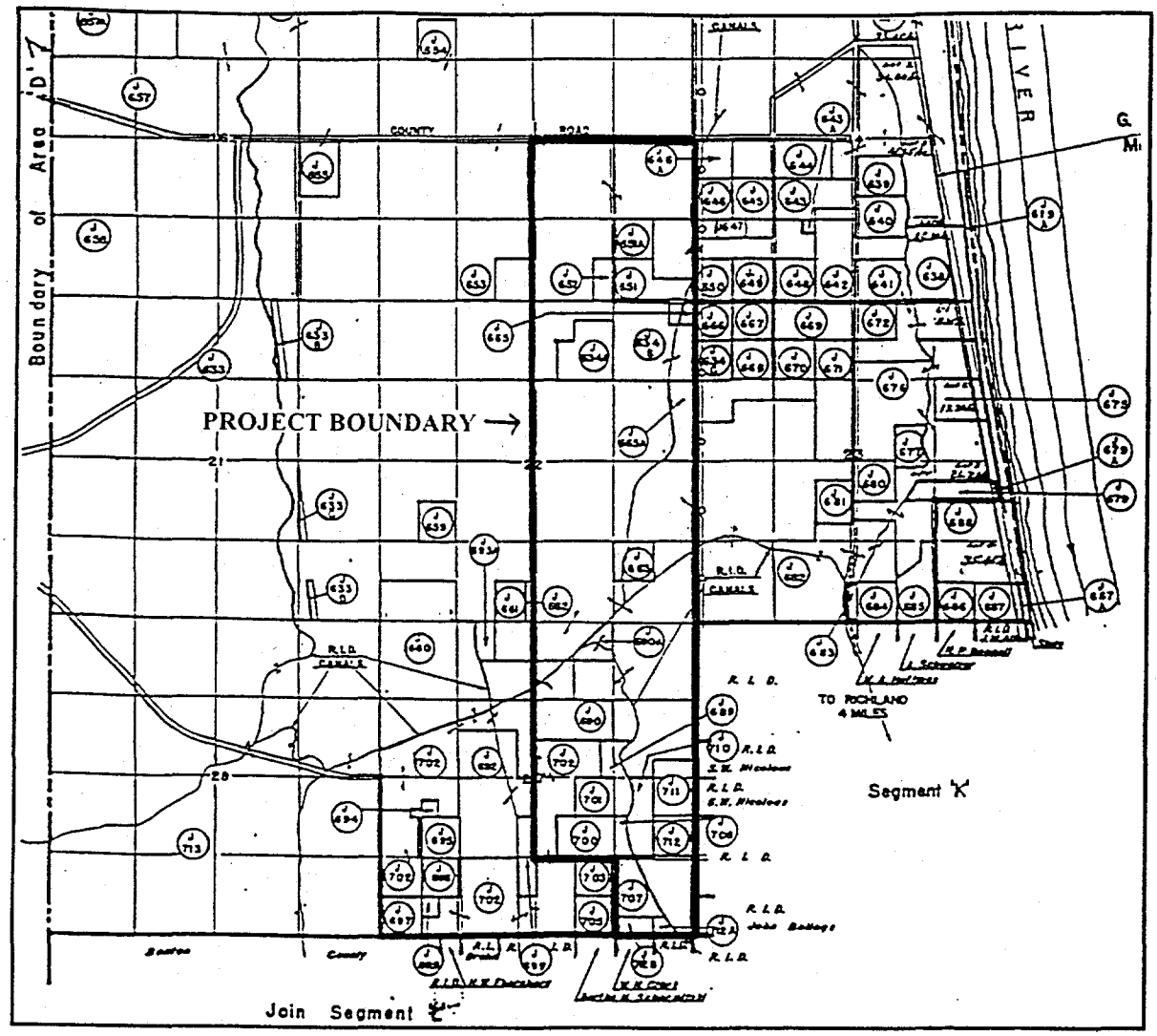


Figure 7. 1917 15' U.S.G.S. map showing the 1100 Area Vacate Plan project area. Note the building at HT-98-005 (the Brewster farmhouse) and the wooden pipeline segment of the H3-21 canal. Water was probably pumped uphill to the east where the line is dashed.

CULTURAL RESOURCES REPORT NARRATIVE

Project Number: 97-1100-003
Project Name: Transfer of 1100 Area and Hanford Southern Rail Connection



J - 651	PETER & GUDRUN HANSON	17.2
J - 651A	LAWRENCE BREWER	10.0
J - 652	R.I.D.- LAWRENCE BREWER	5.0
J - 653	BENTON COUNTY	30.0
J - 662	BENTON COUNTY	2.0
J - 663	BENTON COUNTY	10.0
J - 665	ARTHUR W. HULTGREN	1.8
J - 665A	LUCIEN DERAMLEAU	10.0
J - 667	R.I.D.- BLANCH MARTIN	10.0
J - 668	HAROLD BROOKS	25.0
J - 669	F. L. S. of SPOKANE - J.F. BELL	20.0
J - 670	CARL PFEIFFER A.V. NELSON	15.0
J - 671	F.L.S. of SPOKANE - ERNEST WATSON	30.0
J - 672	BENJAMIN J. HOSKINS	10.0
J - 675	R.I.D.- A.C. SPAIN	10.76
J - 676	RICHLAND IRRIGATION DISTRICT	95.6
J - 677	R.I.D.- D.H. WESTBERG	2.15
J - 679	E.H. & JULIA M. STINNETT	8.74
J - 680	LORA BICKHAUS (CAPLE)	10.0
J - 681	C.R. NEWBURN A.V. NELSON	11.29
J - 689	HARRY O. SANDBERG	11.22
J - 690	BENTON COUNTY	42.7
J - 690-A	BENTON COUNTY	6.85
J - 692	BERTHA MARIE SCHERRITZ	54.54
J - 699	J.C. & ALMA McGINNIS	5.25
J - 700	E.A. WORLIMS	15.0
J - 701	J.R. WORDEN - CARL W. MORGAN	10.0
J - 702	RICHLAND IRRIGATION DISTRICT	123.32
J - 705	R.I.D. - H.L. BURRIS	10.0
J - 705	HETTIE WONDER	10.0
J - 707	IDA PETERSON CLAUDE L. KENT	9.78
J - 708	EMIL BERCH	4.65
J - 710	J.C. & MATTIE E. TRAINER	8.78
J - 711	R.I.D. - [illegible]	15.0
J - 712	RICHLAND IRRIGATION DISTRICT	28.4
J - 712-A	C.A. PHIPPS	2.5
J - 712-B	RICHLAND IRRIGATION DISTRICT	3.0
J - 713	U. S. A.	648.8

Figure 8. 1943 Land plat map showing ownership of lands included in the project area.

APPENDIX C

HISTORICAL REVIEW

WALKTHROUGH AND ASSESSMENT OF HISTORIC BUILDINGS IN THE 1100 AREA

On February 3, 1998, a walkthrough of Buildings 1171, X-1, X-4, 1170, and 1167/1167A was undertaken by representatives of DOE/RL and its contractors for the purpose of identifying, assessing, and retaining historic artifacts associated with the Manhattan Project and Cold War era. The walkthrough was conducted to comply with Part V, Paragraph C, of the Programmatic Agreement for the Built Environment (DOE/RL, 1996), which states that the DOE/RL Cultural Resources Program will undertake an assessment of the contents of historic buildings and structures to locate and identify any artifacts which may have interpretive or educational value as exhibits within local, state, or national museums.

The assessment team identified and tagged thirty-two (32) artifacts in Building 1171 (Transportation Maintenance Shop), four (4) in Building 1170 (Dispatcher Office), and one (1) in Building X-1 (Railroad Scale House) for inclusion in the Hanford Collection. If any of the identified items are to be removed for other uses, the Hanford Cultural Resources Laboratory (HCRL) at PNNL and the DOE/RL Cultural Resources Program are to be notified.

List of buildings assessed and artifacts identified:

Building 1171

Railroad Maintenance Shop

1171-0
Three (3) Railroad Shop Operation and Service Manuals/Interchange Rules Book - 1950, 1963, 1967 (currently on loan to HCRL).

1171-1
Grinder with hand-painted, wooden/masonite safety sign. Hanford Engineer Works (HEW) metal registration tag.

1171-2
Drill press with hand-painted, wooden/masonite safety sign. HEW metal registration tag.

1171-3
Eight (8) miscellaneous Inspector's Gauges for railroad trains and cars (located in a drawer in Railroad Maintenance Shop).

1171-4
Drill Press, with "War Production Board" (World War II) sign.

1171-5 A & B

Railroad Floor Jacks. HEW metal registration tags.

Heavy Duty Maintenance Shop

1171-6
Hydraulic Shop Press.

1171-7
Small wooden ladder. HEW metal registration tag.

1171-8
Pipe Threader. HEW metal registration tag.

1171-9
Pipe Threader. Hanford Works (HW) metal registration tag.

1171-10
Fire blanket. (1944 inspection tag.)

1171-11
Drill Presses (Sibley brand). (DOE property identification number WB44859.)

1171-12
Heavy Duty Brake Reliner Equipment. HW metal registration tag.

Automachine Shop (Motor Room)

1171-13
Metal lathe (Milling machine). HEW metal registration tag. (DOE property identification number WB44857.)

1171-14
Wheel spindle lubrication machine. "War Production Board" sign and HEW metal registration tag.

1171-15
Crankshaft Grinder. HEW metal registration tag. (DOE property identification number FA23618.)

1171-16
Peterson (Kansas City, Mo) Surface Grinder with a wooden/masonite, hand-painted safety sign. HEW metal registration tag. (DOE property identification number WB34249.)

1171-17

Miscellaneous machine tool catalogues (1955).

1171-18
Brake drum lathe. HEW metal registration tag. (DOE property identification number WB44858.)

1171-19
Valve Grinder Machine with a hand-painted, masonite/wooden safety sign. HEW metal registration tag.

1171-20
Camshaft (Knuul)Machine. HEW metal registration tag.

****Consensus of the team was that the entire automachine shop/motor room has educational and interpretive value as a potential museum exhibit.**

Room 70 - Electric Component Rebuild Room (adjacent to Machine Shop/Motor Room)

1171-21
Maintenance manuals.

Light Body Shop

1171-22
Main Book Shelf - Maintenance manuals (There are plans to move many of these to the 2711-East Area Shop.)

Light Body Shop (Millwrights Shop)

1171-23
Band saw. HEW metal registration tag.

1171-24
Heavy duty drill press. HEW metal registration tag. (DOE property identification number WB05044.)

1171-25
Monarch metal lathe. HEW metal registration tag.

Tire Shop

1171-26
Tire inflation crank.

Paint Shop (Rm. 54, lunch room)

1171-27
Wooden book shelf. HEW metal registration tag.

Construction Equipment Foreman's Office (Rm. 46)

1171-28
Wells Metal Band Saw. HEW metal registration tag.

Light Body Shop

1171-29
Metal file cabinet. HEW metal registration tag.

Upholstery Shop

1171-30
Upholstery sewing machine (PFAFF brand). HW metal registration tag.

Building 1170

Front Office

1170-1
Hanford Site Railroad Map (wood framed on wall).

Lunch Room

1170-2
Urine Sample Storage Box.

Storage/Janitorial Room Closet

1170-3
Bus route/Shuttle bus designation signs (used in 1100 Area bus lot).

Room Number 2

1170-4
City of Richland Bus Route Map (wood framed on wall).

Building X-1 (Railroad Scale House)

X-1-1
Fairbanks-Morse Railroad Scale.

APPENDIX D

SHPO CORRESPONDENCE

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

AUG 14 1998

98-EAP-439

Mr. David Hansen
State Historic Preservation Officer
Office of Archaeology and Historic Preservation
Washington Department of Community,
Trade and Economic Development
P.O. Box 48343
Olympia, Washington 98504

Dear Mr. Hansen:

CULTURAL RESOURCES SURVEY REPORT NARRATIVE AND ENVIRONMENTAL ASSESSMENT FOR THE TRANSFER OF 1100 AREA AND HANFORD SOUTHERN RAIL CONNECTION PROJECT

The U.S. Department of Energy, Richland Operations Office (RL) is proposing to transfer a portion of the Hanford Site Historic District to the Port Of Benton (POB) to reduce the cost of maintaining infrastructure not needed for RL's current operations. A draft National Environmental Policy Act Environmental Assessment that explains this property transfer undertaking was previously sent to your office for your review and consideration. Please provide any written comments associated with this undertaking to our office.

According to 36 CFR 800.9(b) an undertaking is considered to have an adverse effect whenever federal property is transferred or sold. This undertaking will adversely effect two proposed cultural landscapes that are identified in the Hanford Cultural Resource Management Plan. These cultural landscapes include the Manhattan Project and Cold War Era Industrial Landscape and the Euro-American Resettlement Landscape.

The Hanford Site Manhattan Project and Cold War Era Treatment Plan (DOE/RL-97-56 Rev 1) provides mitigation for adverse effects on the industrial landscape due to property transfer or sale. Historic property inventory forms and expanded historic property inventory forms have been completed for all the industrial properties in the 1100 area. Walkthroughs of the 1100 area buildings were completed in February (HCRC # 98-1100-003) to identify any historic objects that could be used for interpretive purposes (ref. Letter to David Hansen, #98-EAP-159).

A survey of the 1100 area was completed and has identified 22 historic archaeological sites and one prehistoric isolated lithic. Some of the sites may be potentially eligible for listing on the National Register. The Historic properties include a remnant of a historic canal and three farmsteads. These sites are linked to the early development of the City of Richland, and may be contributing elements to the Euro-American Resettlement Landscape at Hanford. Evaluations are underway to determine eligibility status. Stipulations will be cited in the property transfer documents to provide protection and management for any of the historic properties found eligible

for listing on the National Register. A copy of the survey report, narrative is attached for your review. Once the data for this project has been compiled and the evaluation is complete, a determination of eligibility will be sent to your office for review.

If you have any further comments or questions, please call Dee W. Lloyd, Site Preservation Officer, at (509) 372-2299.

Sincerely,

James E. Rasmussen, Director
Environmental Assurance, Permits
and Policy Division

EAP:DWL

Enclosure

cc: w/encl.
See page 3

D. L. Klima, ACHP
I. Thompson, Benton County Historic Museum
D. K. Arrasmith, Benton County Offices
L. Bowman, Benton County Offices
T. Marceau, BHI
L. Wilhelmi, B-Reactor Museum Association
G. Woodcock, B-Reactor Museum Association
D. Stapp, CH2M Hill
J. DeFlice, Congressman Hastings Office
D. Goeke, Columbia Nation Wildlife Refuge
G. Leth, CRESHT
T. Bailor, CTUIR
J. R. Wilkinson, CTUIR
J. Tessman, CTUIR
R. L. Currier, DYN
V. Bergum, East Benton County Historical Society
M. Rooney, Eastern Washington State Historical Society
W. D. Adair, FDH
M. C. Brown, FDH
E. R. Lloyd, FDH
S. Miller, Franklin County
J. Sonderman, Franklin County Historical Society
P. Witham, Grant County Historical Society
P. Brown, Hanford Communities
P. Vinther, Hanford Retirees Association
A. Heriford, Hanford White Bluffs Pioneers
L. Mitchell, Kennewick Historic Preservation Commission
B. Kubik, Lewis & Clark Trail Heritage Foundation
D. Ward, Mid-Columbia Archaeological Society
D. Powaukee, Nez Perce
R. W. Bryce, PNNL
C. Mattingly, Senator Murrary's Office
S. Heaston, Senator Gorton's Office
P. Hale, State Senate
S. Hankins, State Senate
V. Loveland, State Senate
R. Greenberg, TRIDEC
L. Seelatsee, Wanapum
M. Huntington, Washington Railroad Historic Society
D. Sandberg, Washington Railroad Historic Society
D. Nicandir, Washington State Historical Society
K. Peterson, Washington State University
D. W. Harvey, Washington Trust for Historic Preservation
W. Grisham, White Bluffs-Hanford Heritage Foundation
R. Jim, YIN

STATE OF WASHINGTON

DEPARTMENT OF COMMUNITY, TRADE AND ECONOMIC DEVELOPMENT

Office of Archaeology and Historic Preservation

420 Golf Club Road SE, Suite 201, Lacey • PO Box 48343 • Olympia, Washington 98504-8343 • (360) 407-0752

Fax Number (360) 407-8217

August 17, 1998

Mr. James E. Rasmussen
Richland Operations Office
Department of Energy
PO Box 550
Richland, WA 99352

RE: 1100 Area Land Transfer
Log. No.: 082798-01-DOE

Dear Mr. Rasmussen;

Thank you for contacting our office regarding the proposed land transfer of the 1100 Area and the Hanford Southern Rail Connection. We have also reviewed the cultural resources survey by Laurie Hale and we understand you are currently conducting evaluations to determine the National Register eligibility status of the discovered historic archaeological resources.

We would recommend that you develop a Memorandum of Agreement (MOA) to address the cultural resource issues associated with the proposed transfer. In particular, sections of the MOA should address how the property will be integrated into the overall cultural resources management plan, how the recipient will assure professional cultural resource oversight, and how elements of the plan concerning vandalism and unanticipated discoveries will be implemented.

Please feel free to contact me should you have any questions and we look forward to receiving the draft MOA.

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist

APPENDIX E

COMMENTS AND RESPONSES

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
201 NORTH THIRD AVENUE
WALLA WALLA, WASHINGTON 99362-1876

June 17, 1998

Reply To
Attention Of:

Planning Division

Paul F.X. Dunigan, Jr.
U.S. Department of Energy,
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

Dear Mr. Dunigan:

The Walla Walla District Corps of Engineers (Corps) has reviewed the Draft Environmental Assessment (EA) for the Transfer of the 1100 Area, Southern Rail Connection and Rolling Stock, Hanford Site, Richland, Washington. Our only comment is regarding the railroad right-of-way across Corps property at the Yakima River delta. The Corps obtained the underlying lands from the Atomic Energy Commission (AEC) by way of a Memorandum of Agreement. The AEC reserved the railroad right-of-way in the Memorandum of Agreement. We need to maintain records of current ownership of this right-of-way. Should the Department of Energy transfer ownership of the railroad to another entity, we request that the Department notify Mr. Richard Carlton, Chief of our Real Estate Division at 509-527-7321 of the transfer.

Sincerely,

Carl J. Christianson
Chief, Environmental Planning Branch

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

98-SID-350

AUG 1 1 1998

Mr. Carl J. Christianson
Environmental Planning Branch
Walla Walla District
Corps of Engineers
201 North Third Avenue
Walla Walla, Washington 99362

Dear Mr. Christianson:

ENVIRONMENTAL ASSESSMENT (EA) FOR THE TRANSFER OF THE 1100 AREA SOUTHERN RAIL CONNECTION AND ROLLING STOCK, HANFORD SITE, RICHLAND, WASHINGTON

The U.S. Department of Energy, Richland Operations Office (RL) has received your comments on the subject EA and would like to thank you for taking the time to review our document.

RL recognizes the Corps of Engineers' (Corps) ownership of the Yakima River Delta. When the transfer is completed, we will notify Richard Carlton as requested. To clarify the Corps' ownership in the EA, the following statement was added:

> Under 2.0, Description of the Proposed Action, Paragraph 1, "The Yakima River Delta is owned by the Corps of Engineers. This proposed action concerns the usage of the railroad right-of-way."

If you have any questions, please contact me on (509) 376-6667, or Shannon Ortiz, Site Infrastructure Division, on (509) 373-0908.

Sincerely,

Paul F. X. Dunigan, Jr.

Paul F. X. Dunigan, Jr.
NEPA Compliance Officer

SID:SMO

STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE
1701 S 24th Avenue • Yakima, Washington 98902-5720 • (509) 575-2740 FAX (509) 575-2474
c/o Department of Ecology
1315 W 4th Ave, Kennewick, WA 99336

9 July, 1998

Mr. Paul Dunigan
U.S. Department of Energy
P.O. Box 550, MSIN: A5-15
Richland, WA 99352

Dear Mr. Dunigan:

RE: Comments on the *Environmental Assessment for the Transfer of 1100 Area, Southern Rail Connection and Rolling Stock, Hanford Site, Richland, Washington,* DOE/EA-1260.

The Washington Department of Fish and Wildlife (WDFW) appreciates the opportunity to provide comments on the aforementioned document.

The WDFW finds the proposed action fundamentally flawed due to a lack of: compliance with the Federal Property and Administrative Services Act (FPASA), a range of reasonable alternatives, and a cumulative affects analysis.

Procedural Framework for Transfer
The proposed action raises questions on whether adherence to the procedural framework for transferring federal property has occurred. It is apparent that the Port of Benton's unsolicited proposal has prompted this proposed action versus USDOE-RL identifying the property for excess. The environmental assessment states" RL received an unsolicited proposal from the Port of Benton requesting transfer of the southern connection of the Hanford railroad and the 1100 Area". The environmental assessment also states "The proposed transfer of the 1100 Area and southern section of the Hanford railroad system complies with several federal and Department of Energy alternatives, including the Atomic Energy Act...".

It is WDFW's understanding that under the Atomic Energy Act, U. S. Department of Energy-Richland Operations (USDOE-RL) authority to dispose of property is limited to situations in which the transfer directly serves the purpose of the Act, i.e. nuclear-related activities. Furthermore, land to be used for purposes unrelated to nuclear activities would have to be transferred in accordance with the FPASA, the Public Land Laws, or through long-term lease under the authority of the Atomic Energy Communities Act (AECA). In particular, USDOE-RL has failed to release the properties to the General Services Administration (GSA) for disposal as excess property. It should be noted that past disposals of Hanford lands have occurred through the provisions of FPASA and the GSA. Clearly this action is inconsistent with the FPASA. Therefore, WDFW has concluded

USDOE-RL's proposed action is both non-compliant with the FPASA and inconsistent with past Hanford property disposal actions.

Site Needs
WDFW believes USDOE-RL still has a need for the southern connection of the Hanford railroad for importing/exporting products to/from the 200 Areas, e.g. geologic materials for protective barriers.

Since 1987, the USDOE-RL has identified the need of geologic materials for protective barriers over waste sites. The identification of the McGee Ranch as the preferred site for soil and basalt has raised the issue to the forefront of WDFW's Hanford related concerns. WDFW has stated "adequate NEPA documentation has not occurred" for the source locations of geologic materials (letter dated 21 May, 1996 to Carolyn Haass, USDOE-RL, Subject: Comments on the *draft Environmental Impact Statement for the Tank Waste Remediation System*, DOE/EIS-0189D). Our concerns were reiterated in the *draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan*, DOE/EIS-0222D. In our comments (letter dated 9 December, 1996 to Thomas Ferns, USDOE), we stated "Cumulatively, [referring to the impacts of the borrow sites (2500 acres)] the adverse impacts would be significant, enough to be considered a "Major Action."...this warrants a thorough NEPA analysis, in a separate document tiered to the HRA-EIS."

NEPA analysis has yet to be performed to identify geologic source sites for earthen materials needed in constructing protective barriers over waste sites. The *final Environmental Impact Statement for the Tank Waste Remediation System* stated, "The final selection of borrow sites would be made through the Site Comprehensive Land Use Plan". Currently, the revised draft Comprehensive Land Use Plan fails to provide adequate NEPA analysis for borrow sites. WDFW believes an appropriate analysis should consider off-site locations. These locations would most likely utilize rail for transporting geologic materials to the Site.

The disposal of the southern rail connection to the Port of Benton could make any off-site geologic source sites an unreasonable alternative based on costs; it could be expected that the Port of Benton would charge USDOE-RL a user access fee for the southern rail connection. WDFW believes it is inappropriate for USDOE-RL to foreclose any option regarding geologic source sites until an appropriate NEPA analysis has been completed. WDFW requests a NEPA analysis be performed for geologic source sites, i.e. evaluate on- and off-site locations for earthen materials.

Other Alternatives
Other alternatives presented have not been adequately evaluated. In addition, a reasonable range of alternatives has not been presented.

An alternative that should be included for analysis is the retention of the southern rail connection and the transfer of the1100 Area. This alternative is appropriate given the issues related to geologic source sites/need for NEPA analysis.

Another alternative that should be considered is a long-term lease with the Port of Benton for the southern rail connection. The lease should include reserved ingress and egress rights to the Hanford Site with no user access fees. This would still fulfill the objective of reducing indirect cost by shifting the burden of rail line maintenance to the Port of Benton. A long-term lease would be consistent with past actions such as the lease with the state for the Washington Power Supply System. The terms of the lease should remain effective until all remedial activities are completed on the Hanford Site. This alternative would ensure the support of USDOE-RL's cleanup mission.

A delay in the proposed action would be appropriate until the issue of geologic source sites has had proper NEPA analysis.

Potential Adverse Impacts to Biological Resources
The proposed action could substantially change the cumulative impacts of operations on the Hanford Site. As a result of transferring the southern rail connection, off-site geologic source sites become less economically feasible and would most likely be excluded from a range of alternatives in a future NEPA analysis addressing that need. This would ultimately direct all adverse impacts from geologic source sites (2500 acres as identified in the *draft Hanford Remedial Action Environmental Impact Statement and Comprehensive Land Use Plan*, DOE/EIS-0222D) to the Hanford Site.

Conclusions
The proposed action will affect the future action of identifying geologic source sites which have potential significant adverse effects and cumulative affects to the Hanford Site's biological resources. We strongly encourage USDOE-RL to delay a decision on this action until a NEPA analysis has been performed on the geologic source sites as committed to in the *final Environmental Impact Statement for the Tank Waste Remediation System.* This course of action would not preclude any geologic source site from being considered. WDFW appreciates USDOE-RL's consideration of our proposed alternatives for analysis.

Again, thank you for the opportunity to comment. If you have any questions on the comments, please contact me at (509) 736-3095.

Sincerely,

Jay McConnaughey
Habitat Biologist, Hanford Site

cc: USDOE
Peter Knollmeyer
Thomas Ferns
Shannon Ortiz
WDFW
Ted Clausing
Neil Rickard

Department of Energy
Richland Operations Office
P.O. Box 550
Richland, Washington 99352

AUG 17 1998

98-SID-376

Mr. Jay McConnaughey
Department of Fish and Wildlife
c/o Department of Ecology
1315 W. 4th Avenue
Kennewick, Washington 99336

Dear Mr. McConnaughey:

DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR THE TRANSFER OF THE 1100 AREA, SOUTHERN RAIL CONNECTION AND ROLLING STOCK, HANFORD SITE, RICHLAND, WASHINGTON

The U.S. Department of Energy (DOE), Richland Operations Office (RL) has received your comments on the subject EA and would like to thank you for taking the time to review our document.

Procedural Framework for the Transfer

RL is using the authority provided under the Atomic Energy Act, section 161g, for the transfer. Property disposal in the context of transfers of property done to mitigate local community impacts from reduction or discontinuance of the DOE's defense production activities. This authority can be used independent of the authorities and procedures specified in other laws applied generally to executive agencies.

RL identified the 1100 Area property as underutilized with the shutdown of the railroad and that it would be excess in the short term, 5 years. The Port of Benton proposal for utilization of the railroad for the community initiated the transfer process to a non-federal entity. RL has previously disposed of excess property to the General Services Administration. RL believes that it is in the best interest to transfer the assets at this time for the community's use, but retain the use of the assets that are required for DOE's short term needs.

Site Needs

A review of the Site's current needs for the railroad was conducted. With the closing of the steam plants and the need for shipping coal to the site eliminated, the use of the railroad was greatly decreased. Keeping the railroad operating for possible use in the future was not economical and could not be supported by the programs. By transferring the southern rail connections to a non-federal entity for their operations would continue to provide railroad access to the site for future projects. The operator may charge a user fee but it is believed that this charge would be less than keeping the railroad operational for an unidentified length of time awaiting a possible use.

An analysis has been conducted, Site Evaluation Report for Candidate Basalt Quarry Sites BHI-00005, to determine the impacts or identify geologic source sites either on-site or off-site for constructing protective barriers over waste sites. This report can be located at www.hanford.gov/eis/twrseis.htm. Future environmental review and documentation will be conducted on this subject. It is uncertain at this time what earthen materials are required. The rail line will still remain an option for transportation. The main line north of the Horn Rapids road will not be removed and could be reactivated, if needed.

The EA has been modified under 1.0, Purpose and Need for Action, and 2.0, Description of the Proposed Action, to include the statement: "The proposed activity will not affect the railroad system north of the Horn Rapids Road." This is to clarify that the track north of Horn Rapids will not be torn up. The operations of the railroad will cease but the capability to reopen operations in the future will remain.

Other Alternatives

The alternative that was recommend to be included for analysis, retention of the southern rail connection and transfer of the 1100 area, is similar to those that were evaluated and the No Action alternative. The alternative for a long-term lease was analyzed in the EA. It is the first alternative on page 3-1.

Conclusion

RL disagrees that this action will affect the future action of identifying geologic source sites. The capability to use the railroad in the future is not being affected by this proposed action. Future environmental review and documentation will be conducted on the selection of geologic source sites.

If you have any questions concerning the proposed action, please contract Shannon Ortiz, Site Infrastructure Division, on (509) 373-0908. Questions on the NEPA process can be directed to myself on (509) 376-6667.

Sincerely,

Paul F. X. Dunigan, Jr.

Paul F. X. Dunigan, Jr.
NEPA Compliance Officer

SID:SMO

Ortiz, Shannon

From: Haakenson, John D
Sent: Wednesday, July 15, 1998 10:07 AM
To: Ortiz, Shannon
Cc: Haakenson, John D; Savage, Thomas C (Tom)
Subject: Environmental Assessment For Transfer of 1100 Area,Southern Connection

Shannon, I take exception to the comments in section 5.0 Environmental Impacts 5.2.Socioeconomic Impacts where it states No workers would be directly affected. In the past two years four bargaining unit and two exempts have been laid off. The transfer of the Southern Connection and the closure of the Hanford Railroad equates to a loss of more than sixteen jobs. This Environmental Assessment only covers part of the total plan to completely shut down the entire Hanford Railroad using various methods.

John Haakenson, Manager
DYN Railroad Operations
376-6753

Ortiz, Shannon
From: Ortiz, Shannon
Sent: Wednesday, July 15, 1998 10:11 AM
To: Haakenson, John D
Cc: Savage, Thomas C (Tom)
Subject: RE: Environmental Assessment For Transfer of 1100 Area,Southern Connection

Thanks for the comments. I will relook at the EA and see how we stated the impacts and what you are saying.

One thing I do remember when we were talking about what workers are effected we did look at the shutdown of the Railroad as being separate from the transfer of the 1100 area. The shutdown of the RR does effect the workers directly and indirectly effects the transfer of the 1100 area.

Thanks,
Shannon Ortiz, RL-SID

-----Original Message-----
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John Haakenson, Manager
DYN Railroad Operations
376-6753

Ortiz, Shannon
From: Phildirt@aol.com
Sent: Thursday, July 16, 1998 5:47 AM
To: shannon_ortiz@rl.gov
Subject: 1100 area transfer

Shannon,
I was hoping you could share more information on the socioeconomic impact. (5.2)As you know the current track crew (9 workers) are scheduled to be lay-ed off before September 30.My co-workers and I were wondering how the pro-posed action will affect us.

Please respond as soon as you can.We don't have a lot of time or hope left, and any information will be helpful.

Thank You,
Phill(1100 area railroad)

RL-F-1325.6 (02/98)

United States Government **Department of Energy**

memorandum

Richland Operations Office

DATE: AUG 1 1 1998

REPLY TO ATTN OF: SID:SMO/98-SID-351

SUBJECT: 1100 AREA TRANSFER

TO: Phill (Phildirt@aol.com)

This is in response to your message via the Internet. The socioeconomic impacts were written looking at those that were directly related to the transfer of the 1100 Area. It is recognized that the track crew has been directly impacted by the shutdown of the railroad. However, because the railroad will be shutting down whether the 1100 Area is transferred or not, it's impacts are considered to be indirect to the 1100 Area transfer.

The proposed action has no direct effect on the track crew.

If you have any questions, please contact Shannon Ortiz, Site Infrastructure Division, on (509) 373-0908.

Paul F. X. Dunigan, Jr.
NEPA Compliance Officer

FINDING OF NO SIGNIFICANT IMPACT

FOR THE

TRANSFER OF 1100 AREA,

SOUTHERN RAIL CONNECTION,

AND ROLLING STOCK

HANFORD SITE, RICHLAND, WASHINGTON

U.S. DEPARTMENT OF ENERGY

AUGUST 1998

DOE/EA-1260/FONSI

FINDING OF NO SIGNIFICANT IMPACT
TRANSFER OF 1100 AREA, SOUTHERN RAIL CONNECTION, AND ROLLING STOCK
HANFORD SITE, RICHLAND, WASHINGTON
U.S. DEPARTMENT OF ENERGY
AUGUST 1998

AGENCY: U.S. Department of Energy
ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) has prepared an Environmental Assessment (EA), DOE/EA-1260, to assess environmental impacts associated with the transfer of the 1100 Area, southern rail connection, and rolling stock to a non-federal entity. Based on the evaluations in the EA, and considering comments from the Corps of Engineers, Washington State Department of Fish and Wildlife, and members of the public, DOE has determined that the proposed action is not a major federal action significantly affecting the quality of the human environment, within the meaning of the *National Environmental Policy Act of 1969* (NEPA). Therefore, the preparation of an Environmental Impact Statement (EIS) is not required.

ADDRESSES AND FURTHER INFORMATION:

W. A. Rutherford, Director
Site Infrastructure Division
U.S. Department of Energy
Richland Operations Office
P. O. Box 550 A2-45
Richland, Washington 99352
(509) 376-7597

For further information regarding the DOE NEPA Process, contact:

Carol M. Borgstrom, Director
Office of NEPA Oversight
U.S. Department of Energy
1000 Independence Avenue, S.W.
Washington, D.C. 20585
(202) 586-4600 or (800) 472-2756

PURPOSE AND NEED: The U.S. Department of Energy (DOE) needs to reduce indirect costs by optimizing site infrastructure. Due to downsizing at the Hanford site and consolidation of resources, the 1100 Area and southern rail connection are not required for Hanford operations.

The proposed action is consistent with the site missions of economic transition, re-use of current assets, and optimization of land holdings.

BACKGROUND: The 1100 Area serves as a procurement, central warehousing, vehicle maintenance, transportation, and distribution center for the Hanford Site. Property in the 1100 Area is zoned by the City of Richland for heavy manufacturing, medium industrial, and limited manufacturing. The 1100 Area is shown as Industrial and Commercial property in the Draft Hanford Remedial Action Environmental Impact Statement (EIS) and the Comprehensive Land Use Plan (CLUP).

RL received an unsolicited proposal from the Port of Benton (POB) requesting transfer of the southern connection of the Hanford railroad and the 1100 Area. The POB developed a long-range plan to integrate the Hanford rail system and associated infrastructure into a regional Freight Mobility and Industrial Center. The proposed action will not affect the rail system north of Horn Rapids Road.

PROPOSED ACTION: The DOE proposes to transfer the ownership of the 1100 Area consisting of 311 hectares (768 acres), the southern rail connection consisting of 25.76 kilometers (16 miles), and rolling stock to a non-federal entity. Any rolling stock that is not transferred would be excessed. The Yakima River delta is owned by the Corps of Engineers. The proposed action concerns the usage of the railroad right-of-way.

ALTERNATIVES CONSIDERED

No-Action Alternative: This alternative would involve the continued DOE operation and ownership of the 1100 Area facilities and the Hanford southern rail connection. Reduction of indirect costs by optimizing site infrastructure would not occur.

Other Alternatives: Three alternatives considered were: (1) DOE retains ownership and leases facilities and the rail system to non-federal entities; (2) transfer a portion of the 1171 facility, the 1171C, the railroad tool shed, the railroad scale house, and the southern connection of the Hanford rail line; and (3) transfer the 1100 Area and southern rail connection to General Services Administration for excess of property and equipment.

ENVIRONMENTAL IMPACTS: Impacts connected with the transfer of the 1100 Area and southern rail connection are expected to remain the same after the transfer. Impacts are limited to small quantities of gaseous, particulate, or thermal discharge activities from transportation trucks and rail line activities. No adverse impacts to species, habitats, or other biological resources are expected to result from the proposed transfer of the 1100 Area and the southern rail connection.

Socioeconomic Impacts: Existing Hanford workers would not be directly affected by the proposed action. The transfer of the 1100 Area to a non-federal entity would reduce operating costs at Hanford and encourage economic diversification. It is anticipated that the non-federal entity may increase employment levels within Benton and Franklin counties.

Cultural Resource Impacts: Eighteen archaeological sites and one isolated find will be evaluated to determine the eligibility criteria for listing on the National Register of Historic Places. The proposed action will not impact the historical significance of these identified sites. The transfer document will provide for appropriate preservation and protection.

Environmental Justice: Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires that Federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of their programs and activities on minority and low-income populations. This proposed action would have minimal impact to both the offsite population and potential workforce.

Cumulative Impacts: The proposed action is not expected to substantially change the cumulative impacts of operations on the Hanford Site and surrounding area. Potential impacts from future uses are unknown and analysis at present would require speculation.

DETERMINATION: Based on the analysis in the EA and comments received on the draft EA, I conclude that the proposed transfer of the 1100 Area, southern rail connection, and rolling stock to a non-federal entity does not constitute a major federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, an EIS for the proposed action is not required.

Issued at Richland, Washington, this 27th day of August, 1998.

John D. Wagoner
Manager
Richland Operations Office