



Finding of No Significant Impact Environmental Assessment

Prepared for ITD District Four - May 2008





U.S. Department
of Transportation
**Federal Highway
Administration**

Idaho Division

File: NH-2390 (134)
NH-2390 (135)

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May 2, 2008

Reply To: HFO-ID

Ms. Pamela K. Lowe, Director
Idaho Transportation Department
P.O. Box 7129
Boise, ID 83707

Attention: Roy Jost, Acting Environmental Section Manager

RE: US-93, I-84 to SH-25, Finding of No Significant Impact

Dear Ms. Lowe:

The FHWA has determined that the widening of US-93 in Jerome County, from I-84 to SH-25 will have no significant impact on the human or natural environment. A Finding of No Significant Impact (FONSI) for this project has been made and is enclosed.

Our FONSI determination has been made in accordance with 23 CFR 771.121 and is based upon the September 14th, 2007, Environmental Assessment (EA) and supporting documentation, the Environmental Evaluation Summary attached to the FONSI, and the public input received.

Please send a notice of availability of the FONSI to affected Federal, State and local agencies.

Sincerely,

Ed Miltner
Bridge/Operations Engineer

Enclosure(s)

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**MOVING THE
AMERICAN
ECONOMY**

FEDERAL HIGHWAY ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT

for

**US-93, I-84 to SH-25
JEROME COUNTY, IDAHO
Project No. NH-2390(134) & NH-2390(135)
Key No. 7800 & 7801**

The Federal Highway Administration (FHWA) has determined that the Proposed Action (Project) will not have any significant impact on the human or natural environment. This Finding of No Significant Impact is based on the attached Environmental Assessment (EA), which has been independently evaluated by the FHWA and determined to adequately and accurately discuss the environmental issues and impacts of the proposed Project. It provides sufficient evidence for determining that an Environmental Impact Statement is not required. The FHWA takes full responsibility for the accuracy, scope and content of the EA.

The purpose of the Proposed Action is to increase transportation safety for all users and to increase roadway capacity. To improve safety along the corridor, the Proposed Action consists of widening US-93 along the Project corridor to four twelve foot through lanes, two lanes in each direction with a divided median. Each side of the roadway will have eight foot outside shoulders. The median will be sixteen feet and left-turn lanes will be constructed at intersections. Between the I-84 ramps and the future 500 South Road, three twelve foot through lanes in each direction will be constructed to accommodate the additional traffic in this portion of the corridor. Elements of the Proposed Action are discussed below:

- Modified Type III access control is the current standard for multilane highways. Under this current standard, access is limited to county roadways at one-half mile intervals. Access will be provided to properties that already have access onto US-93. In some locations access will be limited to right-in and right-out access to be consistent with the divided median. Frontage roads may be constructed as needed to access future development and to consolidate existing accesses. It is envisioned that these roads will be built and maintained by property developers and included in the County Planning and Zoning approval process.
- The right-of-way for the Proposed Action will generally be a minimum of 300 feet wide. There are a few locations where the right-of-way will be less in order to avoid impacting existing buildings or adjacent historic properties.
- There are various existing public road intersections with US-93. The Proposed Action will include improvements to the existing roadway intersections. It will also include consideration of future options to install

traffic signals at each of the public road intersections with US-93. Traffic signals may be installed when the level of service at intersections and signal warrant analysis confirms they are needed and funding is available.

- Improvements to the Eastern Idaho Railroad (EIRR) crossing will be made independently by the EIRR at the same time as the Idaho Transportation Department (ITD) will be constructing highway improvements on US-93. ITD will coordinate with the EIRR during design to ensure that an improved railroad crossing is constructed that meets standards at time of design.
- The Proposed Action includes the construction of a paved shared use trail on the west side of the highway. No trail improvements are proposed north of the SH-25 intersection as part of this Project. The paved trail is proposed to be 20 feet in width and will meander along the west side of US-93.

After considering the environmental effects described in the EA, it has been determined that the Proposed Action will not have a significant effect on the quality of the human or natural environment considering the context and intensity of impacts (40 CFR 1508.27). This finding is based on the following:

1. The finding of no significant environmental effects is not biased by the beneficial effects of the Proposed Action. The finding is based on evaluating the effects of the action based on technical studies performed in support of the EA; these were used as supporting information for Chapter 3 and are documented in that chapter of the EA.
2. There will be no significant effects on public health or safety. Within the project area, between the 200 South Road and the SH-25 intersection, the average fatal accident rate is above the statewide average. The deaths have been attributed to failing to yield and passing through the intersections. There were also a high number of rear end crashes and turning crashes that resulted in injuries but not death. As discussed in the EA, the traffic analysis demonstrates widening US-93 from two to four lanes will accommodate future traffic to 2030. Widening the roadway will reduce congestion and therefore reduce the potential for rear end crashes. The Proposed Action also includes a 12-16 foot wide median, and left and right turn lanes at intersections. These improvements will be designed in accordance with AASHTO design guidance and will improve safety by reducing rear-end, head-on, right-angle, and other types of crashes. In addition, the Proposed Action will incorporate Type III access control and restrict intersections to one-half mile intervals which will also improve traffic flow by controlling turning movements and minimizing conflict points along the corridor, which will further improve the safety of the roadway. Eight foot shoulders will be constructed which will provide a location for disabled vehicles to safely pull-off the highway. A separate shared-use path will provide a means for alternative modes of travel in the corridor and will reduce the potential for pedestrian and

bicycle related crashes. In addition, the existing Eastern Idaho Railroad crossing will be improved; therefore reducing the potential for train-vehicle crashes.

3. There will be no significant effects on unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
 - Historic or Cultural Resources. The Proposed Action will have no significant impacts to historic or cultural resources along the corridor. They will be avoided, except for the linear sites that cross the corridor (canals and the railroad tracks). All impacts to cultural resources are considered a *No Adverse Effect* by the Idaho State Historic Preservation Office and will not detract from the qualities that make them eligible for listing on the National Register of Historic Places.
 - Park Lands. There are no park lands within the project corridor.
 - Agricultural and Farmlands (prime farmlands). The Proposed Action will require the conversion of 47.8 acres of agricultural land that has been designated as prime farmland. The U.S. Natural Resources Conservation Service has indicated that these impacts are not significant. Agricultural productivity will not change.
 - Wetlands and Waters of the U.S. There are no jurisdictional wetlands within the Project corridor. However, the canals, laterals, and ditches are considered Waters of the U.S. as they eventually flow into the Snake River. A total of 45 square feet of non-jurisdictional wetlands will be impacted by the Proposed Action. Mitigation for impacting these 45 square feet of non-jurisdictional wetlands is the preservation of 500 square feet of fringe wetland area along Almo Creek in Cassia County (part of the Snake River Basin). FHWA has found that there is no practicable alternative for avoiding construction in the wetlands within the project limits, and that the Proposed Action includes all practicable measures to minimize harm to wetlands which may result from such use.

In addition, the Proposed Action will have no significant effects on surface water, floodplains, groundwater, and sole source aquifers. There are no natural streams, rivers, or 100-year floodplains in the Project area. The Proposed Action will temporarily impact irrigation canals, laterals, ditches and irrigation ponds. ITD will minimize these impacts by:

- Coordinating with land owners prior to construction, and
- Ensuring that all irrigation facilities will remain in operation during construction of the Proposed Action or be relocated prior to any disruption of an existing facility

The Proposed Action will not impact groundwater. The Project is located within the Eastern Snake River Plains Aquifer (ESRPA). As documented in the EA (see section 3.14 Water Resources), the U.S. Environmental Protection

Agency (EPA) has reviewed information provided by ITD for this project and has approved the Proposed Action.

- Wild and Scenic Rivers. There are no rivers within the project corridor.
 - Ecologically Critical Areas. There are no ecologically critical areas that will be impacted by the Proposed Action.
4. The effects on the quality of the human environment are not likely to be highly controversial. The Proposed Action will displace one residence and possibly one business. They will be compensated in accordance with the Uniform Relocation Act. The Proposed Action does not result in any disproportionate effect to minority or low-income populations (Environmental Justice). Also, the Proposed Action is consistent with existing and planned land uses along the corridor and noise impacts are not significant. The Public Involvement process showed strong support for the project from local residents.
- Existing and Planned Land Uses. The Proposed Action is consistent with Jerome County plans and the Jerome County Commercial Overlay Zone. A total of 54 acres of land will be acquired for additional right-of-way. Land uses will continue to change from largely agricultural uses to commercial and industrial uses; this conversion is consistent with Jerome County's re-zoning of the corridor as a Commercial Overlay Zone.
 - Noise. Increased traffic volumes will result in eight noise receptors to be at or exceed ITD noise criteria of 66 dBA.
5. The effects are not uncertain, and do not involve unique or unknown risk. The ITD has an established experience with similar projects involving this type of roadway reconstruction and widening project.
6. The Proposed Action is not likely to establish a precedent for future actions with significant effects because the project is consistent with local and statewide transportation plans. The Proposed Action is not expected to have a substantial effect of the level or pattern of development outside of the project area and is consistent with the Jerome County Commercial Overlay Zone.
7. The Proposed Action will not result in cumulative adverse impacts when considered in combination with other past or reasonably foreseeable actions. The Project addresses the need for reducing future congestion along US-93 and for increased safety.
8. The Proposed Action will have no significant adverse effect on districts, sites, structures, or objects listed in or eligible for listing in, the National Register of Historic Places. Further, the Idaho State Historic Preservation Office has agreed with FHWA's finding of *No Adverse Effect* for all cultural resources along the corridor that are impacted by the Proposed Action.
9. Technical studies indicated that there are no threatened or endangered species or any critical habitat within the project corridor. FHWA has concurred that the

Proposed Action will have "no effect" on any of the currently listed Threatened & Endangered species as part of the Endangered Species Act of 1973 (June 1, 2007 – see Appendix C of the EA).

10. The Proposed Action will not violate Federal, state, and local laws or requirements imposed for the protection of the environment.



Federal Highway Administration

5-2-08

Date

US-93, JCT I-84 to SH-25 Study
Project No. NH-2390(134) & NH-2390(135)
Key No. 07800 & 07801

ENVIRONMENTAL ASSESSMENT

**SUBMITTED PURSUANT TO 42 U.S.C. 4332 (2) (C) AND
49 U.S.C. 303 BY THE U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION AND
IDAHO TRANSPORTATION DEPARTMENT
BOISE IDAHO**

9-14-07
Date of Approval


for Idaho Transportation Department

9/14/07
Date of Approval


for Federal Highway Administration

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Comments on this Environmental Assessment are due by November 8, 2007 and should be sent to the ITD
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US-93, I-84 TO SH-25 JEROME COUNTY, IDAHO

EXECUTIVE SUMMARY

PROJECT OVERVIEW

This Environmental Assessment (EA) is being prepared as part of the National Environmental Policy Act of 1969 (NEPA) and is sponsored by the Idaho Transportation Department (ITD) and the Federal Highway Administration (FHWA). It presents the analyses on how proposed roadway improvements on US-93 from I-84 north to SH-25 will affect the natural and built environments. The EA discloses information about existing resources and identifies potential effects resulting from the proposed Project. It serves as documentation of the environmental review process including public and agency input on the proposed Project, the recommended design for roadway improvements, potential effects, and recommended mitigation measures.

The proposed Project on US-93 is located in Jerome County in south-central Idaho. The 6.1 mile Project begins at milepost (MP) 53.3 at the westbound I-84 on- and off-ramps and extends north to MP 59.4 just north of SH-25 and the Jerome County Airport. It serves the residential and commercial traffic of the urbanized Twin Falls and Jerome areas, the surrounding agricultural cities and towns, and the traffic to and from the Sun Valley Resort located 75 miles to the north in Ketchum, Idaho. It is also within the Jerome County Commercial Overlay Zone where commercial and light industrial development is anticipated to occur. It also is a major regional highway that extends south to Arizona and north to Montana.

PURPOSE AND NEED

Purpose

The purpose of this Project is to:

- Increase US-93 roadway capacity to accommodate existing and future year 2030 vehicle traffic; and
- Increase transportation safety for all users.

Need

The need for this Project is based on the following factors:

- Predicted future year 2030 peak hour traffic demand exceeds available transportation capacity;
- The US-93 Project Corridor has been designated a Commercial Overlay Zone (COZ)¹ by Jerome County. The existing two lane facility will not accommodate the operations associated with future development;
- US-93 must provide a safe transportation facility for agricultural operations and residents until these properties develop as commercial facilities; and

¹ The Jerome County Comprehensive Plan states that the Commercial Overlay Zone is to "provide for and to encourage the grouping together of businesses, public and semi-public, and other related uses...and will be compatible to this highway corridor." Therefore, the major objective of the Commercial Overlay Zone is to spur economic development within the county and to help facilitate local transition from a largely rural, agricultural-based community to a more diversified economy.

- Currently no bicycle and pedestrian accommodations exist; the Project will provide a separated shared bicycle and pedestrian facility.

OBJECTIVES

Due to the anticipated problems caused by forecast traffic volumes and crashes, ITD proposes to make roadway improvements on US-93 between I-84 and SH-25. The objectives for these improvements include the following:

- Provide a transportation facility that meets current roadway standards and improves safety;
- Provide a transportation facility that accommodates projected traffic volumes;
- Provide a transportation facility that operates at acceptable level of service (LOS) and meets ITD standards;
- Provide a transportation facility that can accommodate access management concepts;
- Provide a safe railroad crossing that includes appropriate sight distance, signage, and signalization;
- Provide appropriate roadway design at intersections, access points, and hills;
- Provide acceleration and deceleration lanes and increase shoulder widths to accommodate slower and oversized vehicles for personal, commercial, and agricultural users; and
- Minimize potential impacts to the natural and built environment.

The need to increase the traffic capacity of US-93 is partially based on an analysis of existing traffic volumes and accidents. Generally, the existing engineering design of the highway, the lack of turn lanes and traffic signals, and the existing traffic volumes allow the existing roadway to meet ITD standards for acceptable LOS (C or better). Peak traffic volumes, however, warrant the installation of a traffic signal at the proposed 500 South intersection located just north of the Crossroads Parkway. Crash severity in the north portion of the highway corridor between 200 South and SH-25 exceeds statewide averages and requires improvements.

If no improvements are made to the highway and anticipated development occurs along the highway corridor, then the overall LOS will decline markedly as traffic volumes nearly triple and exceed the existing highway capacity. Congestion along the entire corridor will increase, traffic delays will increase, and crashes will increase due to higher traffic volumes. Analysis performed for this EA confirmed that the LOS of the highway corridor will be below the ITD standard for acceptable roadway performance. The roadway must be improved to manage access.

ALTERNATIVES

The initial range of conceptual alternatives for improving US-93 between I-84 and SH-25 was evaluated in the *US 93 Needs Assessment* (W & H Pacific 2002). This report evaluated a total of five corridor improvement options, including the following:

- Option #1 – No Build;
- Option #2 – 5-lane Improvement, Continuous Left Turn Lane, Standard Access;

- Option #3 – 5-lane Improvement, Continuous Left Turn Lane, Partial Control Type II Access;
- Option #4 – 5-lane Improvement, Continuous Median Channelization, Partial Control Type III Access; and
- Option #5 – 4-lane Improvement, Partial Type IV Access, No Direct Private Access.

After considerable discussion, members of the public and government agency representatives recommended dropping Option #2 because the continuation of the existing standard approach to access would not support the Project objectives. For the remaining three build options, an evaluation was conducted to compare and contrast these options to the No Build option. The analysis for each option included the preparation of 20-year travel forecasts. These forecasts were followed by evaluation of level of service (LOS) for roadway segments and intersections, traffic delay at intersections, signal warrant analysis, and railroad crossing assessments. The *US-93 Needs Assessment* provides the details of this analysis.

Based on the analysis and comparison of the Project options, Option #5 was considered the best; Option #4 was second and Option #3 was the least desirable of the three build options. To develop the final recommendation, additional public and agency input was again considered for the three build options and an initial review of potential environmental impacts was performed. Environmental impacts were minor for all options and therefore, not considered a differentiating factor between alternatives. Throughout the process, public reaction had been unfavorable toward Option #5 because of the very limited access to commercial development. Local government agencies also discussed the large amount of public road right-of-way needed for this option. Ultimately, the local government agencies concluded that Option #5 could be problematic. Due to these reservations, ITD decided that Option #4 should be adopted as the conceptual plan for making improvements to US-93 between I-84 and SH-25.

DESCRIPTION OF THE BUILD ALTERNATIVE

The Build Alternative (Preferred Alternative) consists of widening the highway to four through lanes, two lanes in each direction with a center turn lane median. Key aspects of the roadway improvements include the following:

- Existing 120- to 600-foot right-of-way will generally be used to build the Project, using a minimum of 300 feet, except in a few locations where the right-of-way used would be less. The narrower sections would avoid impacts to existing buildings or adjacent historic properties.
- Relocate the existing intersection at Crossroads Parkway and 500 South to align with the proposed Crossroads Boulevard entrance to the Crossroads Point Business Center now under construction.
- Improve existing intersections with US-93 at 400 South, 300 South, 200 South, 100 South, and SH-25.
- Coordinate with Eastern Idaho Railroad (EIRR) to improve crossing of the track by US-93.
- Construct a 20 foot wide paved shared use trail on the west side of the highway.
- Modify the existing canal crossings on US-93 between I-84 and SH-25 to accommodate the revised highway alignment. Modifications may include: widening

existing bridges, constructing new bridges, relocation of the canal bed and/or access roads, construction of an additional bridge structure for the proposed shared use trail, and installation of a barrier between the highway and the shared use trail.

- Install traffic signals at the public road intersections on US-93 when traffic volumes warrant signals. Installation of a signal at the future 500 South intersection (relocated Crossroads Parkway) will be part of the proposed roadway construction activities.

AFFECTED ENVIRONMENT, POTENTIAL EFFECTS, AND MITIGATION

Table ES-1 summarizes the existing conditions, potential effects, and recommended mitigation measures for the proposed US-93 Corridor Project.

Table ES-2 summarizes the potential temporary construction impacts and mitigation measures.

TABLE ES-1. SUMMARY OF NO BUILD AND BUILD ALTERNATIVE POTENTIAL EFFECTS AND MITIGATION

Affected Environment and Environmental Issues	Environmental Consequences		Mitigation
	No Build	Build Alternative	
Transportation US-93 is a Principal Arterial that is a major north-south route in south-central Idaho. It serves local, regional, and interstate travel needs for individuals, businesses, and freight. Locally, the Project corridor links the cities of Twin Falls, Jerome, and Shoshone.	Future traffic volumes will exceed roadway capacity. This will increase travel time and transportation costs for local residents, businesses, and freight transport. As volumes increase, the number of crashes is also anticipated to increase.	Proposed roadway improvements will meet 2030 traffic demand, provide LOS C or better, and maintain public safety. The Project will not affect the airport, but will require modification of the railroad crossing by the Eastern Idaho Railroad (through separate utility agreement). The proposed improvements include a shared use trail.	None.
Land Use and Relocations Existing land uses along the Project corridor include rural residential, agricultural, business/commercial, open space, and private recreation. US-93 between I-84 and SH-25 extending ¼ mile to the east and west has been designated a Commercial Overlay Zone. The main purpose of this zoning designation is to attract businesses and generally stimulate economic growth in the area.	None.	Proposed roadway improvements are consistent with local government plans and zoning ordinances. The Project will require the purchase of both land and structures. A total of 54 acres of land will be acquired, including one residence and several agricultural outbuildings. One commercial building may be acquired.	Property will be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act. Relocation resources will be made available to all without discrimination.

TABLE ES-1. SUMMARY OF NO BUILD AND BUILD ALTERNATIVE POTENTIAL EFFECTS AND MITIGATION

Affected Environment and Environmental Issues	Environmental Consequences		Mitigation
	No Build	Build Alternative	
Agriculture and Farmlands The main land use along the corridor is agriculture. The water needs are served by the K Coulee Canal, L Canal and its associated laterals L4A, L4, L3, and L2, and the D5 Ditch. All the existing farmland is considered either Prime, Unique, or of Statewide Importance by the NRCS.	None.	A total of 47.8 acres of agricultural land designated prime farmland will be converted from agricultural use. The effect of purchasing the slivers of land from individual property owners is not substantial considering the large size of properties. Agricultural productivity will not change.	Water delivery systems and irrigation ditches, canals, and ponds will be reconstructed and/or relocated as part of the proposed Project to maintain on-going and long-term use.
Economic Environment The major economic centers of south-central Idaho include Twin Falls and Jerome City. Jerome lies to the north approximately ten miles. Several highway-oriented and building industry businesses are adjacent to the US-93 Project corridor.	None.	Consistent with the county's plan to develop the US-93 corridor into a regional, commercial, industrial, and business center.	None.

Affected Environmental and Environmental Issues	Environmental Consequences		Mitigation
	No Build	Build Alternative	
Social The proposed highway improvements would occur in unincorporated Jerome County, which is transitioning from a rural agricultural county to a more urbanized area due to commercial rezoning. The county's population has experienced steady growth over the last 15 years. Growth is anticipated to continue. Based on 2000 census data, racial and ethnic minorities as well as low-income persons clearly reside in the Project study area. The percent of the population that is a racial or ethnic minority, however, is markedly lower than the demographic characteristics for Jerome County. The Project study area, however, has a higher proportion of the population that resides at or below the federal poverty level compared to county-wide statistics, despite the statistics that indicate that the median household income for residents in the Project study area is slightly greater than for all households in the county.	None.	Since the Project only requires the relocation of one residence and no minority or low-income populations have been identified there will be not disproportionate impact to minority or low income groups. Therefore, this Project is consistent with the provisions of Executive Order 12898 that disproportionately adverse effects on minority and low-income populations and community have been avoided.	None.

Environmental Issues and Description	Potential Effects		Mitigation
	No Build	Build Alternative	
Cultural Resources 17 historic properties are located in the Project area; a total of nine sites are considered eligible for listing on the National Register of Historic Places (NRHP). Of these, two are already listed on the NRHP. There are no archaeological sites along the Project corridor that qualify for listing on the NRHP.	None.	Cultural resources along the Project corridor will be avoided, except for the K Coulee Canal, Oregon Short Line Railroad (EIRR), L Canal, and the D5 Ditch. These will remain operational during the construction, but will require modification. All effects are considered a No Adverse Effect by SHPO. The effects are minor and will not detract from the qualities that make them eligible for listing on the NRHP. FHWA has determined impacts to 4(f) resources are <i>de minimus</i> .	None.
Visual and Aesthetic Characteristics The Project area is characterized as gently rolling topography. It is dominated by large agricultural fields with several residences and associated farm buildings. There are few trees or shrubs. Some business and commercial establishments are located adjacent to the highway corridor. Mountains are visible in the distance.	None.	The proposed highway improvements will increase the width of the roadway pavement. One residential structure will be displaced and removed from the landscape. Views from the highway will not change, but views of the highway will change due to widening and the new shared use trail.	None.
Air Quality The Project area is located in an attainment area as air quality meets current standards.	None.	None.	None.

TABLE ES-1. SUMMARY OF NO BUILD AND BUILD ALTERNATIVE POTENTIAL EFFECTS AND MITIGATION

Environmental Issues and Description	Potential Effects		Mitigation
	No Build	Build Alternative	
Noise A total of 16 sensitive noise receptors were modeled using Traffic Noise Model (TNM). These receptors include the KOA campground, a mobile home park, and other multi-receptor sites. The TNM model predicts noise impacts resulting from this Project.	Increased traffic volumes will result in 7 receptors to be at or exceed ITD noise criteria of 66 dBA.	Increased traffic volumes will result in 8 receptors to be at or exceed ITD noise criteria of 66 dBA.	Several measures were evaluated to minimize noise impacts, including noise barriers, traffic management, buffer zones, realignment of roadway, and building insulation. None, of the measures meet the minimum requirement for noise reduction.
Utilities and Emergency Services A number of utilities are located within the Project corridor. These include overhead and buried utilities such as power, cable, telephone, fiber optic, and natural gas. Water and sewer lines are proposed. Emergency services are provided by Jerome County Sheriffs Department and the Jerome Fire District #1.	None.	The proposed highway Project will not impact the demand for utilities or emergency services.	ITD will coordinate with utility companies to minimize utility disruptions and will relocate utilities as required by roadway improvements.
Hazardous Materials A review of federal, state, and local databases identified one RCRIS-SQG (small quantity generator) site, one UST site, six FINDS sites, one TRIS site, one TSCA site, and two FTTS sites located adjacent or near the Project corridor.	None.	The UST is located at the Flying J. The access will shift to the north away from the Flying J and will not impact the UST, therefore, no mitigation is required.	None.

TABLE ES-1. SUMMARY OF NO BUILD AND BUILD ALTERNATIVE POTENTIAL EFFECTS AND MITIGATION

Environmental Issues and Description	Potential Effects		Mitigation
	No Build	Build Alternative	
Geology and Soils The soils in the Project area are mostly very deep, silty loam, well-drained soils. The elevation ranges between approximately 3,700 feet on the south end of the Project corridor to 4,100 feet on the north.	None.	None.	None.
Water Resources There are eight irrigation ponds in the Project area. There are no 100-year floodplains. Groundwater is found about 150 to 400 feet below the surface. It is unknown how many septic systems, drain fields, or sewage lagoons are near the corridor. The Project area is over the Eastern Snake River Plain Aquifer, which is a sole source aquifer as defined by the EPA. A total of 33 wells are located within ¼ mile of the Project area. The water resources along the corridor are all irrigation related and include canals, laterals, ditches, and ponds.	None.	No impact to surface water, floodplains, groundwater, sole source aquifer. Wells and septic systems may be impacted. Some canals and laterals will need to be relocated.	Wells impacted by the Project will be abandoned and capped. Septic systems impacted will be disconnected in accordance with Idaho's requirements. Canals and laterals relocated in coordination with irrigation companies and will be reconstructed to maintain function.
Wetlands and Waters of the U.S. There are no jurisdictional wetlands within the Project corridor. However, the canals, laterals, (except the L4A Lateral), and ditches are considered Waters of the U.S. as they eventually flow into the Snake River. There are 45 square feet of non-jurisdictional wetlands adjacent to the L4A Lateral.	None.	All of the canals, laterals, and ditches that cross the corridor will be affected by the proposed Project. Most will require wider bridges or culverts. The L Canal and its access road will be realigned. 45 square feet of non-jurisdictional wetlands will be impacted.	All of the irrigation facilities will be restored to their prior function following construction. The mitigation for impacting 45 square feet non-jurisdictional wetlands include the preservation of 2.5 acres of fringe area along Almo Creek in Cassia County.

TABLE ES-1. SUMMARY OF NO BUILD AND BUILD ALTERNATIVE POTENTIAL EFFECTS AND MITIGATION

Environmental Issues and Description	Potential Effects		Mitigation
	No Build	Build Alternative	
Vegetation The vast majority of land within the Project corridor is agricultural. There is one undeveloped parcel owned by the BLM. This parcel is a wildlife tract that is managed cooperatively by the BLM and the Idaho Fish and Game. The native vegetation on this site includes grasses (cheat, wheat), rabbitbrush, sagebrush and others.	None.	Property will be acquired from some agricultural properties, but none will be acquired from the BLM tract. The Project will result in minimal effects to naturally occurring vegetation within the existing and proposed right-of-way.	ITD will develop a re-vegetation and planting plan during design. Exposed and impacted areas will be replanted as quickly as possible.
Wildlife and Threatened and Endangered Species The U.S. Fish and Wildlife Service is responsible for the Endangered Species Act. The Idaho Conservation Data Center maintains a list of threatened, endangered, and candidate species within Idaho, including Jerome County. A total of eight species listed as threatened, endangered, or species of concern could be found in the Project area.	None.	Of all of the threatened, endangered, or species of concern that could be found in the Project area, none are likely to inhabit the area due to a lack of appropriate habitat. The USFWS agreed with FHWA's No Effect Statement meaning that the proposed Project would have no effect on the species protected under the ESA.	None.
Permits	None.	Clean Water Act Section 404, NPDES	None.

TABLE ES-2. SUMMARY OF POTENTIAL CONSTRUCTION EFFECTS AND MITIGATION

Construction Impacts	There will be temporary impacts associated with construction. Potential Effects Below		Mitigation
	No Build	Build Alternative	
Construction Traffic and Access	None.	<p>Short term and temporary impacts to motorists from construction traffic delays.</p> <p>Temporary impact to access to and from adjacent properties.</p> <p>Access and/or parking may be modified during construction.</p>	<p>Construction activities will be planned to minimize traffic detours, congestion, and delays.</p> <p>Advance notice will be given for all road closures; traffic detours, congestion/delays, and reduced use of the existing roadway as practicable.</p> <p>Property and business owners will be able to report construction problems and should be able to expect resolution in a timely manner.</p> <p>Access to businesses and customer parking will be maintained throughout construction.</p>
Construction Noise	None.	During construction, noise levels in the Project area will temporarily increase, especially from internal combustion engines of equipment, impact equipment, and pile drivers. Noise from trucks will affect a larger area.	Temporary impact, no mitigation required.
Construction Air	None.	Construction activities, especially associated with excavation, will temporarily decrease air quality by increased amounts of larger dust particles. Odors may be present during paving.	Water or other dust abatement agents will be applied during construction.

TABLE ES-2. SUMMARY OF POTENTIAL CONSTRUCTION EFFECTS AND MITIGATION

Construction Impacts	<i>There will be temporary impacts associated with construction. Potential Effects Below</i>		<i>Mitigation</i>
	<i>No Build</i>	<i>Build Alternative</i>	
Construction Water Quality	None.	Potential for sedimentation and erosion during construction to impact water quality.	<p>Disturbed areas will be reseeded and planted with native vegetation as soon as feasible.</p> <p>BMPs will be used to minimize storm water runoff effects.</p> <p>Irrigation features will be maintained during construction so that farming dependent upon them will continue to be economically viable.</p>
Construction Utilities		Construction will require the relocation and/or re-construction of several utilities.	Advance notice will be given of all anticipated disruptions to utility service.
Construction Irrigation	None.	A total of five irrigation ponds will be affected. Canals and laterals will be realigned and reconstructed.	Water carried by the irrigation facilities will continue to reach farmers during construction. BMPs will be used to maintain the quality of the water within the irrigation facilities during construction.
Construction Hazardous Materials		Construction activities could result in accidental spill of hazardous materials, particularly petroleum products.	The contractor will be required to contain all areas used for refueling. Upon discovery of hazardous materials during construction, the contractor will be required to notify ITD immediately and cease all construction related activities in the area.

PUBLIC INVOLVEMENT

The National Environmental Policy Act (NEPA) requires effective and ongoing public participation during the development of an EA. Stakeholders were invited from local governments in Jerome City and Jerome County, Jerome Highway District, North Side Canal Company. In addition, members of the US-93 Citizen Committee and the Jerome Water and Sewer District were invited to provide input. Corridor property owners, business operators and the general public were also invited to participate and included at appropriate times in the process.

The following activities and supporting tools were implemented as part of the public involvement plan to appropriately engage area residents, businesses and affected local governments and resource agencies in the process. These included:

- *Stakeholder Meeting #1* – to introduce the current corridor access management concept plan alternatives and gather comments;
- *Future Land Use Discussion Session* – to understand the planned and potential future land uses along and around the corridor;
- *Public Open House* – to present and gather comments on the recommended alternative; and
- *Public Hearing* – planned to afford formal public review and comment regarding the draft EA document.

A public hearing will be held during the EA public comment period. Comments received during the comment period and comments submitted during the development of the EA as part of scoping and Project alternatives development phases of the Project have been incorporated into this EA.

CONCLUSION

This EA concludes that the project will not cause economic, social, or environmental impacts that cannot be mitigated.

CHAPTER 1.0 PURPOSE AND NEED

This Environmental Assessment (EA) is being prepared as part of the National Environmental Policy Act of 1969 (NEPA) and is sponsored by the Idaho Transportation Department (ITD) and the Federal Highway Administration (FHWA).

This chapter presents the need for transportation improvements along US-93 between I-84 and SH-25, Jerome County, Idaho and the purpose of the proposed Project. It also describes the existing highway corridor, its role in the regional highway system, the problems with current and future roadway conditions, and what transportation improvements are needed to resolve the identified problems.

1.1 PROJECT LOCATION

The Project corridor is located in rural south-central Idaho as shown in Figure 1-1. The entire segment of the highway corridor is located in Jerome County, which is part of an eight-county region referred to as Magic Valley. US-93 is the primary north-south highway leading north from Twin Falls, on the south side of the Snake River Canyon. The southern limit of the US-93 corridor intersects with I-84 which provides access to Jerome City to the west. At the northern end of the Project, US-93 intersects with SH-25 which provides access to the county airport and Jerome City. US-93 continues north to the City of Shoshone.

Local roads that intersect US-93 within the Project limits include Crossroads Parkway¹, 400 South, 300 South, 200 South, 100 South, SH-25, and Butte Drive. In addition, the highway crosses over six canals/laterals as well as the Eastern Idaho Railroad (EIRR).

1.2 PROJECT STUDY AREA

The Project corridor is 6.1 miles long. The Projects southern terminus is at milepost 53.3 at the I-84/US-93 interchange; the northern terminus is at milepost 59.4, 3,500 feet north of the SH-25/US-93 intersection. For purposes of this EA and supporting documentation, a study area 650 feet wide (325 feet east and west of the US-93 centerline) was used. The study area is shown in Figure 1-2.

1.3 PROJECT PURPOSE AND NEED

1.3.1 Project Purpose

The purpose of this Project is to:

- Increase US-93 roadway capacity to accommodate existing and future year 2030 vehicle traffic; and
- Increase transportation safety for all users.

¹ Crossroads Parkway provides access to a truck stop, motel, and the Idaho Farm and Ranch Museum. Crossroads Parkway (which connects to Centennial Spur) is under the jurisdiction of the Jerome Highway District.

1.3.2 Project Need

The need for this Project is based on the following factors:

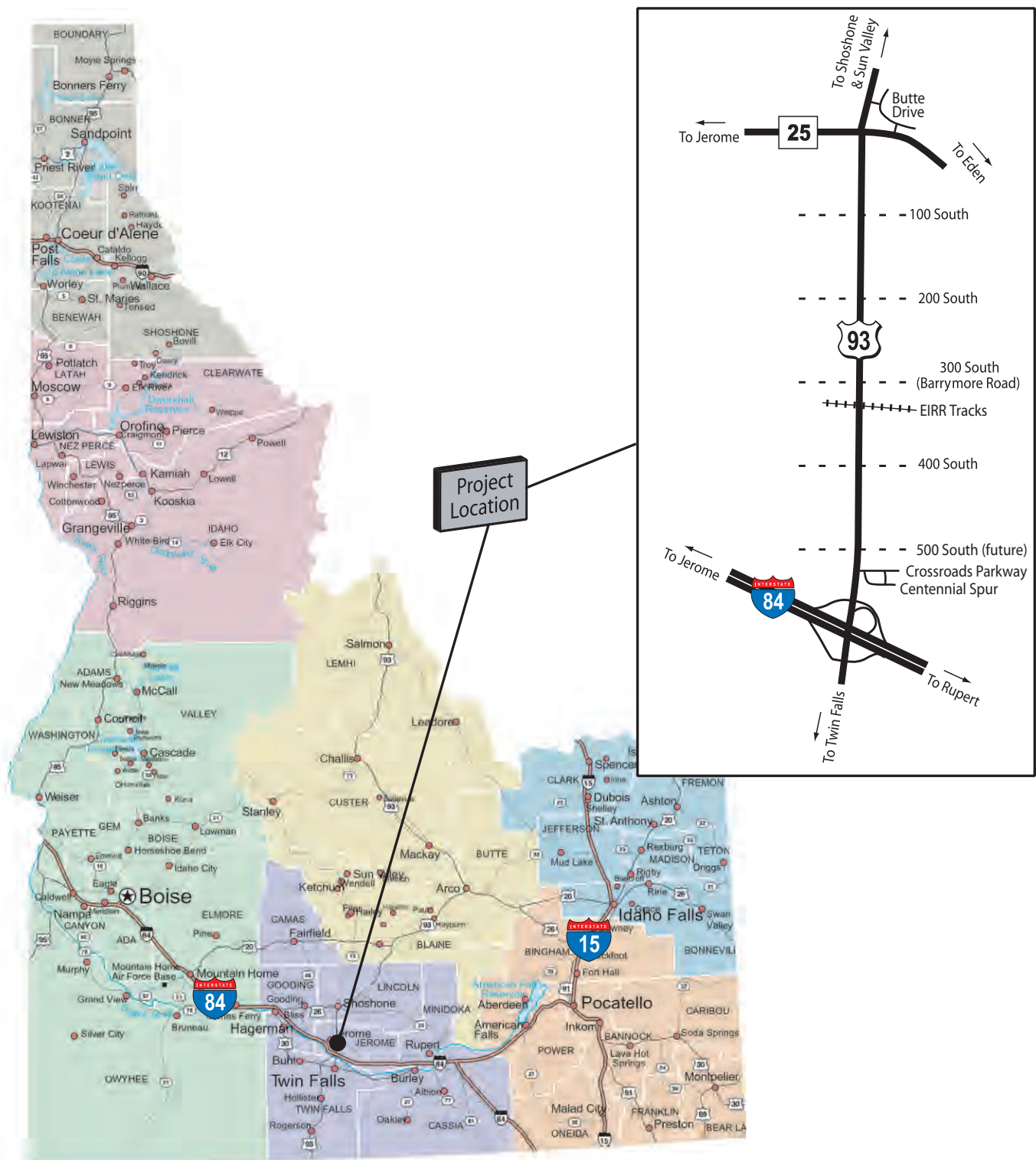
- Predicted 2030 peak hour traffic demand exceeds available transportation capacity;
- The US-93 Project corridor has been designated a Commercial Overlay Zone (COZ)² by Jerome County. The existing two lane facility will not accommodate the operations associated with future development;
- To provide a safe transportation facility for agricultural operations and residents until these properties develop as commercial facilities; and
- To accommodate a bicycle and pedestrian facility.

1.3.3 Project Objectives

Due to the anticipated problems caused by forecast traffic volumes and crashes, ITD proposes to make roadway improvements on US-93 between I-84 and SH-25. The objectives for these improvements include the following:

- Provide a transportation facility that meets current roadway standards and improves safety;
- Provide a transportation facility that accommodates projected traffic volumes;
- Provide a transportation facility that operates at acceptable level of service (LOS) and meets ITD standards;
- Provide a transportation facility that can accommodate access management concepts;
- Provide a safe railroad crossing that includes appropriate sight distance, signage, and signalization;
- Provide appropriate roadway design at intersections, access points, and hills;
- Provide acceleration and deceleration lanes and increase shoulder widths to accommodate slower and oversized vehicles for personal, commercial, and agricultural users; and
- Minimize potential impacts to the natural and built environment.

² The Jerome County Comprehensive Plan states that the Commercial Overlay Zone is to "provide for and to encourage the grouping together of businesses, public and semi-public, and other related uses...and will be compatible to this highway corridor." Therefore, the major objective of the Commercial Overlay Zone is to spur economic development within the county and to help facilitate local transition from a largely rural, agricultural-based community to a more diversified economy.



No Scale for Idaho Map

Scale for Project Location Map

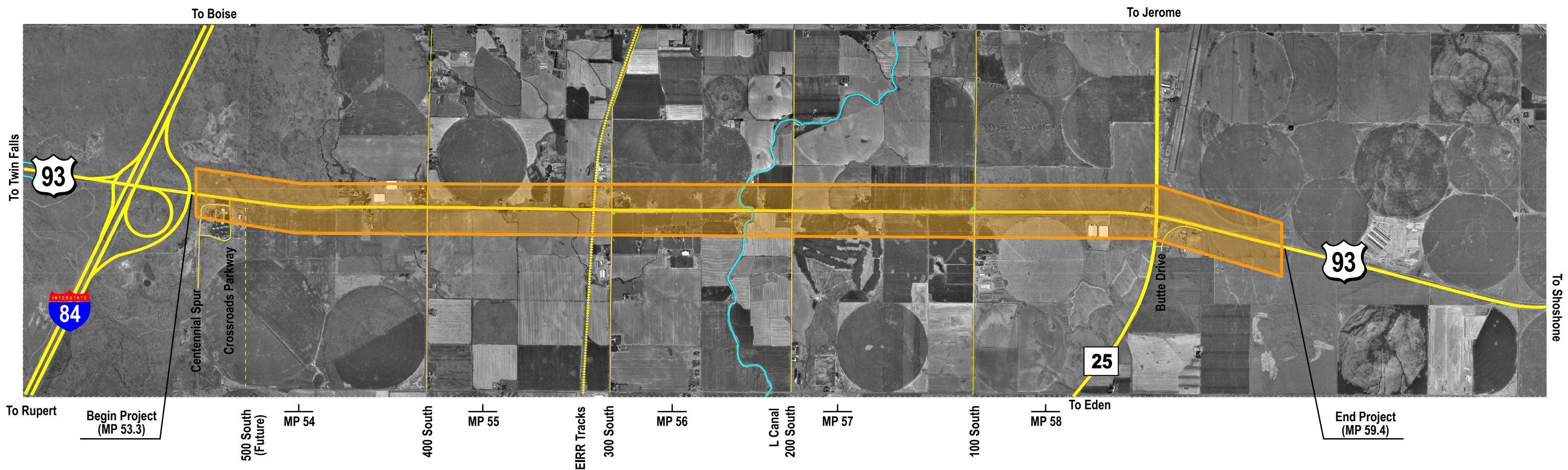


Figure 1-1
Vicinity Map



LEGEND





No Scale

Figure 1-2
Project Study Area

LEGEND

Project Study Area



1.4 LOCAL, REGIONAL, AND STATEWIDE TRANSPORTATION PLANS

1.4.1 Statewide Long-Range Plan

Idaho's Transportation Future: Getting There Together (Idaho's Transportation Partners 2004) is a visionary plan that was developed in compliance with Title 23 of the United States Code, as amended by the Transportation Equity Act of 1998. The purpose of the planning effort was to involve the public and private sectors to envision a preferred statewide transportation system for the next 30 years. It was developed in cooperation with Idaho's metropolitan planning organizations and through consultation with non-metropolitan areas. The planning effort addresses all highway, public transportation, bicycle, pedestrian, water, air, information technology, and rail systems within the state of Idaho.

This plan examines the changing demographics of the population of Idaho and how this affects the demand for transportation services. The plan concludes that highway corridors will continue to be the core component of the surface transportation system; mobility will need to be increased by providing a broader variety of transportation modes. In addition, the plan acknowledges that the transport of freight on State highways will continue to be essential to the economic vitality of both Idaho and the Nation. It outlines principles to guide the development of the State's future transportation system. The plan does not address specific proposals to improve any one mode of transportation or component element of that mode and does not specifically discuss improvement for US-93.

1.4.2 Near-Term Statewide Implementation Program

The *Idaho Statewide Transportation Improvement Program* (STIP) (ITD 2005) outlines a five-year transportation planning and implementation program for specific projects. The projects include all modes of the State's transportation system – highway, public transportation, rail, bicycle, pedestrian, and air. The current plan lists projects for the period fiscal years 2006-2010 and was approved by both FHWA and the Federal Transit Administration in 2005.

In order to receive federal funding, each project must appear in the STIP. Each project is assigned a key number that is used to track the planning, design and construction of the project. Moreover, each project is specifically defined by route number, milepost, project description by type, the fiscal year the project construction is anticipated to begin, the estimated cost for planning, engineering, and construction; funding source, and agency responsible for development, maintenance and match funding for the project. The STIP includes two projects on US-93 between I-84 and SH-25. These projects are listed in Table 1-1.

TABLE 1-1. STIP PROJECTS LISTED FOR US-93 IN PROJECT AREA

Key	Milepost	Project Name	Fiscal Year	Funding	Project Type
09352	54.8-59.5	300 S. to SH-25	2007	\$825,000	Pavement Rehabilitation
07801	56.7-59.5	200 S. to SH-25	Preliminary	\$1,000,000	Major Widening

Source: ITD 2005.

1.4.3 Jerome County Comprehensive Plan

The Jerome County *Joint Agency Comprehensive Plan* adopted in November 1996 also addresses needed improvements for US-93. This plan was prepared as an integrated comprehensive update to existing city and county plans. It also includes plans for the region's public agencies, including Jerome County and the City of Jerome. The Transportation Plan in particular lists the following goal and objectives applicable to US-93:

1.4.3.1 Goal

Maintain and develop state and federal highways to provide sufficient access and ensure safety for all areas of the county.

1.4.3.2 Objectives

- Widen and/or construct US-93 to state/federal standards;
- Capitalize on the I-84/US-93 intersection's potential for development of commercial, distribution, technological, and tourism related services;
- Develop a cloverleaf at I-84 and US-93 that will maximize traffic movement, safety and to facilitate traffic movement between I-84 and US-93. The cloverleaf will be constructed in two stages. Stage I, completed in 2003, included the construction of a partial cloverleaf in the northeast quadrant.
- Stage I included:
 - 1) The construction of a loop ramp for the northbound vehicles on US-93 to westbound I-84 (see Figure 1-2);
 - 2) The relocation north of the I-84 westbound on- and off-ramps to provide enough room for the loop ramps;
 - 3) The replacement and widening of the north I-84 bridge over US-93 to provide additional room for traffic lanes and pedestrian pathway; and
 - 4) The addition of a free right turn ramp for US-93 northbound to I-84 eastbound traffic.
- Stage II will consist of:
 - 1) Widening US-93 to three through lanes beneath the I-84 bridges with a design speed of 50 mph;
 - 2) Reconstructing the eastbound I-84 bridge over US-93 to accommodate an additional lane, an auxiliary lane to maintain horizontal clearance requirements, and a pedestrian pathway;
 - 3) Reconstructing the I-84 eastbound on- and off-ramps to meet the higher grade established by the new I-84 bridges and to provide enough room for future loop ramps to be built between the ramps and I-84 (similar to the northeast quadrant built during Stage I);
 - 4) Reconstructing a portion of eastbound I-84 to accommodate the additional lane with a design speed of 75 mph; and
 - 5) Reconstructing traffic signals at the eastbound ramp intersection.
- Accommodate development along the US-93 corridor from I-84 to Sun Valley, including the US-93/SH-25 intersection (i.e. commercial/tourism related services and agricultural related industries);

- Construction of a truck/slow vehicle climbing lane on US-93 from 300 South northward to approximately ½ mile north of the SH-25 intersection; and
- Consider design standards and beautification Projects for main corridors, particularly US-93.

1.4.4 US-93 Needs Assessment

The *US-93 Needs Assessment* addresses the future transportation needs for US-93 from the I-84 interchange to Shoshone, a distance of 21 miles. This report evaluated safety concerns along the roadway, at intersections, and at the EIRR tracks. The plan also identified operational and capacity issues, access management, and shared use. The needs assessment included the development of five different alternatives with varying degrees of access control and median types, frontage road network system, and increasing traffic lanes from two to four. A planning level evaluation of the alternatives was completed.

The following are the recommendations:

- Increase safety at the EIRR crossing;
- Increase traveler safety by applying current ITD standards to the roadway;
- Improve existing and future traffic flow by adding adequate number of travel lanes and turn lanes;
- Provide adequate and safe accessibility for adjacent properties; and
- Provide the availability for a shared use highway (multi-use trail).

1.5 HIGHWAY SYSTEM ROLE AND LINKAGE

US-93 is a major north-south corridor in western United States traversing through four western states: Arizona, Nevada, Idaho, and Montana. Its southern terminus is in Arizona, 50 miles north of Phoenix at the junction of US-89/US-60; its northern terminus is at the U.S./Canadian border. As it passes through the western part of the Country, it connects with other major transportation corridors including US-89, US-95, US-60, US-6, US-20, US-50, US-30, US-26, I-40, I-15, I-80, I-84, and I-90. US-93 links major urbanized and commercial/industrial cities including Phoenix, Arizona (via US-60), Las Vegas/Henderson, Nevada, Twin Falls, Idaho, Missoula, and Kalispell, Montana.

1.5.1 Regional

US-93 serves the regions population centers of Twin Falls and Jerome cities. Twin Falls has a population of over 35,000 and is the largest urban area in south-central Idaho. People from the Magic Valley area both work and shop in the city. Jerome City is approximately ten miles north of Twin Falls and is the county seat for Jerome County. It has a total population of approximately 8,000. US-93 is a major link in both the local and highway network and serves local travelers. It connects to I-84 at the southern terminus of this Project. I-84 connects to Boise in western Idaho and Pocatello, via I-86, in eastern part of the state (see Figure 1-1). North of the Project study area in Shoshone, US-93 connects with SH-75, which travels north to the City of Ketchum, home of the famous Sun Valley Ski Resort. North of Shoshone, US-93 continues northeast through the Salmon River Mountains, Lost River Range, and Bitterroot Mountains to Missoula, Montana. South of Twin Falls, US-93 travels to Wells, Nevada and connects with I-80; one of the nation's major east-west highway corridors connecting major western population centers such as Salt Lake City, Reno, Sacramento, and San Francisco.

1.6 EXISTING ROADWAY CONFIGURATION AND CONDITIONS

To determine the existing problems on the US-93 Project corridor the existing roadway and traffic conditions were studied including traffic count data, evaluation of existing traffic and access controls, and examination of highway safety. The following paragraphs described the factors affecting existing highway conditions.

US-93 between milepost 53.3 and 59.4 is a rural highway with four lanes from the I-84 interchange to just north of Crossroads Parkway (i.e. access to the Flying J Truck Stop at approximately 500 South). The remainder of the highway is a two-lane road with turn lanes at intersections. At the southern end of the Project corridor, the speed limit is 45 mph to Crossroads Parkway, but increases to 55 mph.

The US-93 Project corridor is classified as a Principal Arterial by ITD. Principal Arterials are a class of roadways that emphasizes a high level of mobility for the through movement of traffic. Access is secondary to the primary function of the overall roadway and through traffic. Generally, travel speeds and distances between accesses and intersections are greater on these facilities compared to the other classes (minor arterial, collector, and local). The highest classes of arterials are interstates and freeways that have limited access to allow the free flow of traffic.

Existing local cross roads intersect the highway at-grade and include 400 South, 300 South, 200 South, and 100 South. Other roads that bisect US-93 include Crossroads Parkway on the south and Butte Drive on the north end of the Project (see Figure 1-1). SH-25 also intersects US-93 at-grade and provides access to the Jerome County Airport and Jerome City. A total of six canals, laterals or ditches (K Coulee Canal, L4A Lateral, L4 Lateral, L3 Lateral, L Canal, and D5 Ditch) cross under the highway within the Project corridor. Sections of the L4A, L4, and L3 Laterals are adjacent and parallel the highway. The EIRR tracks intersect the highway at-grade just south of 300 South. In addition, there are a number of driveways or accesses along the corridor that provide access to adjacent agricultural land, residences, and businesses (see Figures in Appendix A).

Right-of-way (ROW) widths vary from approximately 120 to 400 feet through the study area. The highway ROW is approximately 350 feet wide at the I-84 interchange and 400 feet at the SH-25 junction. The pavement width, including shoulders, ranges between 72 feet wide near the I-84 interchange to 34 feet wide through the majority of the corridor. However, the pavement widens from 34 feet to 46 feet at the 300 South intersection to allow for a left turn lane from US-93. Also, at the SH-25 intersection the pavement widens from 34 feet to 76 feet; this is to allow for a short segment of four travel lanes and a left turn lane from US-93. The pavement width transitions back to a 34 foot width near the northern terminus of this Project. The travel lanes are 12 feet wide with no median except at the southern end of the Project between I-84 and Crossroads Parkway and at the 300 South and SH-25 intersections. The roadway shoulders ranges between 5 and 10 feet wide. There are seven unsignalized intersections (Crossroads Parkway, 400 South, 300 South, 200 South, 100 South, SH-25 and Butte Drive). There is one traffic signal along the US-93 Project corridor located at the I-84 northbound on- and off-ramps.

The shoulders serve a dual purpose of accommodating bicycle and pedestrian traffic and enhancing the roadway for vehicular safety. According to Appendix B of the *Idaho Bicycle and Pedestrian Transportation Plan* (January 1995), roadway shoulders should be at least six feet wide to safely accommodate non-motorized traffic. Based on current conditions, the

corridor section between Crossroads Parkway and SH-25, generally does not meet ITD shoulder standards.

1.7 EXISTING ACCESS CONTROL, FUNCTIONAL CLASSIFICATION, AND EXISTING ROADWAY CONDITIONS

Access control refers to the techniques that can be used to control access to adjacent properties. ITD catalogs access management/control into five classifications. ITD has classified the existing US-93 in the Project corridor as a Type III access facility. Type III access control is for highways with a functional classification of Principal Arterial in rural areas with medium to high traffic volumes and high speeds.

The historic development of land uses (farms, rural residential, and businesses) along the highway corridor and the construction of local/County roads intersecting US-93 all pre-date current ITD highway standards for access control. These standards, as found in the State Highway Access Control policy (Administrative Policy A-12-01) recommend a minimum spacing distances between roadway intersections, approaches (i.e. driveways), traffic signals, and frontage roads. There are a number of accesses for agricultural properties, rural residences, as well as businesses. And a number of these approaches or accesses are less than the recommended 1,000 feet minimum spacing³. As such, the highway corridor does not meet ITD standards for approach spacing.

1.7.1 Intersection Analysis

As described above, only the I-84 interchange with US-93 is signalized and all of the existing local roads intersecting US-93 in the Project corridor are unsignalized (except at the I-84 northbound on- off ramps/US-93 intersection). The *Manual on Uniform Traffic Control Devices* (MUTCD), published by FHWA describes eight criteria, called “warrants”. These warrants or standards are used to determine whether a traffic signal (or other increased type of traffic control) is needed to improve roadway operation and safety. Warrant numbers 2 and 3 evaluate the existing conditions of the highway corridor. Specifically, Warrant 2 examines the average hourly traffic volume during a four-hour peak period, also known as approach volume. If the approach volume exceeds the threshold for vehicles per hour a signal is “warranted” or recommended to improve safety and operation.

Warrant 3 examines the peak hour traffic volume. This standard simply evaluates the number of vehicles at the intersection for a one hour period. The analysis is based on highway peak hour volumes and is presented in Table 1-2 (found on the following page). Based on this analysis, only one location currently meets traffic signal warrant criteria. This location is at the Crossroads Parkway intersection.

³ Administrative Policy A-12-01, State Highway Access Control. 1,000 feet recommendation is found in table titled Approach/Intersection/Signal Spacing per Access Type on page 2.













TABLE 1-2. EXISTING SIGNAL WARRANT ANALYSIS

<i>Intersection</i>	<i>Peak Hour Approach Volume (major/minor)</i>	<i>Peak Hour Volume (minor)</i>	<i>Meets Warrant 2?</i>	<i>Meets Warrant 3?</i>
Crossroads Parkway	982/207	150	Yes	Yes
400 South	849/29	100	No	No
300 South	721/22	190	No	No
200 South	697/22	150	No	No
100 South	692/23	150	No data	No
SH-25	642/157	280	No	No

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

Note: Major and minor are referring to the roadway configuration. For this analysis, the major roadway is US-93 and the minor roadways are the local intersecting roads.

Traffic counts were used to estimate existing volumes and turning movements at six unsignalized intersections along the US-93 corridor. This information is used to determine existing LOS at the unsignalized intersections based on the turning movement delay experienced by vehicles. Level of service (LOS) is a concept used by traffic engineers to measure how well a transportation facility operates. LOS ranges from A to F; ITD's guidance is LOS C for this type of roadway. A description of the different levels of service is included in the exhibit below.

<i>Definitions of Level Of Service (LOS)</i>		
<i>LOS</i>	<i>Roadway Segment Operating Characteristics</i>	<i>Visual Example</i>
	Represents free traffic flow, very few cars on roadway.	
	In the range of free traffic flow, with some other motorists in the traffic stream begins to be noticeable. Some time spent following slower vehicles but appropriate gaps in traffic allows for passing with little delay.	
	In the beginning range of traffic flow in which the operation of individual motorists becomes significantly affected by other motorists in the traffic stream. Time spent following slower vehicles is longer and occurs more frequently, but appropriate gaps in traffic allows for passing with moderate delay.	
	Represents high-density traffic flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Time spent following slower vehicles is noticeably longer and occurs more frequently, and there are fewer gaps in traffic to allow for passing, increasing overall delay.	
	Represents operating conditions at or above the capacity level. All speeds are reduced to a low and relatively uniform speed. Time spent following slower vehicles exceeds time not behind slower vehicles, and there are few if any gaps in traffic to allow for passing.	
	Used to define intermittent stopping and moving at a very reduced speed. This condition exists wherever the amount of traffic exceeds the capacity of that point. Time spent following slower vehicles approaches 100 percent of the time traveling on a roadway segment, and there are likely no gaps in traffic to allow for passing.	

Source: Transportation Research Board, Highway Capacity Manual / (HCM) 2000, Pg. 10-5.

Typically, the longest delays are experienced by those from minor roads desiring to turn left onto the major roadway. The Highway Capacity Manual (2000) methodology was used to determine the LOS at each intersection. LOS at intersections is measured by seconds of delay. LOS criteria used is shown below in Table 1-3.

TABLE 1-3. LOS CRITERIA FOR INTERSECTION

<i>Level of Service</i>	<i>Average Control Delay (seconds/vehicle)</i>
A	0-10
B	> 10-15
C	> 15-25
D	> 25-35
E	> 35-50
F	> 50

Source: Highway Capacity Manual (2000), Exhibit 17-2

For this analysis, the LOS at an intersection is based on the delay for the approach roadway with the highest delay, and based on the average delay for each of the traffic movements on a single "leg" of the intersection. Table 1-4 shows the results of this analysis.

TABLE 1-4. EXISTING INTERSECTION LOS

<i>Intersection</i>	<i>LOS A.M. Peak Hour</i>	<i>LOS P.M. Peak Hour</i>
Crossroads Parkway	C	D
400 South	C	C
300 South	B	C
200 South	B	C
100 South	B	C
SH-25	B	C

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

The ITD standard for unsignalized intersections is LOS C. Based on this information shown in Table 1-4, all intersections operate at an acceptable LOS (LOS C or better) during both peak hours with the exception of the Crossroads Parkway intersection.

1.7.2 Traffic Volumes

Traffic counts were taken to understand existing traffic conditions along the highway corridor, including the amount of traffic during peak hours as well as the number of trucks, cars, and other types of vehicles. Typically, morning and evening peak hour traffic counts are analyzed because the congestion associated with commute times represent the worst case traffic conditions. The existing two-way traffic volume on US-93 between I-84 and SH-25 is between 430 and 800 vehicles during the morning peak hour (9 to 10 a.m.), but increases between 670 and 1,100 vehicles during the evening peak hour (5 to 6 p.m.).

The measure of roadway conditions during peak hours is based on LOS. The LOS is graded on a scale of A through F. LOS A for rural, two-lane highways is uncongested, unrestricted, and very light traffic flows, while LOS F reflects queued lines of slow-moving traffic with no ability to pass slower moving vehicles due to heavy traffic in the opposite direction. Table 1-5, found on the following page, shows the existing LOS conditions for seven segments of the highway corridor.

TABLE 1-5. EXISTING CONDITIONS LOS

Roadway Segment	LOS A.M. Peak Hour	LOS P.M. Peak Hour
I-84 to Crossroads Parkway	A	A
Crossroads Parkway to 400 South	D	D
400 South to 300 South	C	D
300 South to 200 South	C	D
200 South to 100 South	C	D
100 South to SH-25	C	D
SH-25 to end of Project	C	C

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

For rural state highways, ITD's LOS standard is C – a moderate level of traffic congestion. Based on the information in Table 1-5, the highway segment between Crossroads Parkway and 400 South has a LOS of D in the morning, below the ITD standard of LOS C. The other segments between Crossroads Parkway and SH-25 have LOS D during the evening peak hour.

1.7.3 Crash Analysis

Traffic studies also investigated existing safety on US-93 between I-84 and SH-25. The safety analysis examined the rate of vehicle crashes by type (angle, sideswipe, etc.), as well as severity (property damage, injury, fatality). This is typically measured in terms of crashes per 100 million vehicle miles traveled on a section of roadway. Crash rates that exceed the statewide average rate may indicate a recurring problem that needs to be corrected.

Between January 1, 2001 and December 31, 2003, there were 55 crashes within the study corridor from a high of 22 in 2001 and a low of 12 in 2003. Table 1-6 shows the crash rates for the highway corridor segments.

TABLE 1-6. HIGHWAY SEGMENT CRASH RATES

Segment	Length (miles)	Total Crashes	Fatal Crashes	Crash Rate	Fatal Crash Rate
Crossroads Parkway to 400 South	1.71	16	0	128.0	0
400 South to 300 South	1.11	11	0	141.2	0
300 South to 200 South	0.98	8	0	127.1	0
200 South to 100 South	0.98	8	1	143.8	18.0
100 South to SH-25	1.62	12	2	134.0	22.3
Total	6.40	55	3	133.8	7.3

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

The statewide average crash rate for the non-interstate state highway system for 2001-2003 was 182.1 crashes per 100 million vehicles miles of travel. All study segments have crash rates below the statewide average. The statewide average fatal crash rate for the same time period is 2.3. Two study segments have fatal crash rates that are above the statewide average:

- 200 South to 100 South; and
- 100 South to SH-25.

1.7.4 Pavement Conditions

Except for the very poor condition of pavement north and south of the railroad tracks near 300 South, the pavement condition in the study area is fair to good.

1.7.5 Eastern Idaho Railroad Crossing

ITD has developed a priority index used for improving railroad crossings. This index is based on roadway traffic, rail traffic, and the number of crashes at the crossing and accident potential over the next ten years. Based on this index (described in the *US-93 Needs Assessment*) the EIRR crossing needs to be improved.

1.7.6 Summary of Existing Roadway Conditions

- The Crossroads Parkway/US-93 intersection is the only location that currently warrants improvement for a traffic signal.
- All intersections operate at an acceptable LOS (LOS C or better) during both peak hours with the exception of the Crossroads Parkway intersection.
- The highway segment from Crossroads Parkway to 400 South does not meet the ITD standard for morning peak hour LOS. The segments between Crossroads Parkway and SH-25 do not meet the ITD standards for evening peak hour for LOS.
- There are two Project corridor segments with average fatal accident rate that are above the statewide average – 1) between 200 South and 100 South and 2) between 100 South and SH-25.
- The EIRR crossing needs upgrading based on ITD's crossing index.

1.8 FORECAST TRAFFIC PROBLEMS

To assess how the existing Project corridor will function in the future, a traffic analysis was prepared.

Future traffic volumes were projected for US-93 for the coming 30 years. As no travel demand forecasting model current exists for this segment of US-93, an alternative method was developed. This method considered existing and future land development, population and employment growth, and types of trip generation within the study area as well as the region. A trend analysis was used to forecast traffic volume increases based on past traffic volume increases. This forecast was then modified based on traffic increases specifically due to the proposed urban development in the US-93 COZ adopted by the Jerome County Commissionaires in 2000.

Traffic counts were taken and compiled for two segments of the Project corridor in 1998 and 2004; I-84 to Crossroads Parkway and 100 South to SH-25. Between I-84 and Crossroads Parkway, traffic volumes did not increase during this period. Traffic volumes, however, increased at a compound annual rate of 2.1 percent per year between 100 South and SH-25. The average growth rate for these two segments was 1.0 percent per year and is considered the background growth rate for traffic in the Project corridor.

Though historic increases in population and employment in Jerome County were associated with an economy based in agriculture, the historic trend analysis needed to be increased to accommodate planned urban development along the Project corridor and in the region. But because little land is zoned for urban development, the analysis assumed that an estimated 75 percent of future county employment growth will occur within the COZ along US-93. This employment growth was then used to forecast trip generation by land use type and density.

To analyze future traffic implications of not improving US-93, the forecast traffic volumes were modeled for the existing two-lane highway. Table 1-7 shows the existing and forecast

2030 peak traffic volumes for the Project corridor. Using this analysis, 2030 traffic volumes are expected to almost triple.

TABLE 1-7. COMPARISON BETWEEN CURRENT AND FORECAST TRAFFIC VOLUMES

US-93 Segment	2004 AM Peak	2030 AM Peak	2004 PM Peak	2030 PM Peak
I-84 to Crossroads Parkway	799	3,176	1,126	3,557
300 South – 200 South	481	2,029	691	2,283
100 South – SH-25	434	1,622	668	1,857
North of SH-25	375	997	554	1,213

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

As with the study of existing travel conditions on the Project corridor, LOS was calculated for highway segments and intersections using the forecast traffic volumes. Table 1-8 shows these calculated LOS measures for both highway segments and intersections along the Project corridor.

TABLE 1-8. FORECAST LOS FOR HIGHWAY SEGMENTS & KEY INTERSECTIONS¹

Segment	2030 AM Peak	2030 PM Peak
I-84 to 500 South (future)	C	C
500 South to 400 South	F	E
400 South to 300 South	E	E
300 South to 200 South	E	E
200 South to 100 South	E	E
100 South – SH-25	E	E
North of SH-25	D	D
Intersection:		
500 South ²	F	F
400 South	F ³	F
300 South	F	F
200 South	F	F
100 South	F	F
SH-25	F	F

Source: Traffic Analysis, Parsons Brinckerhoff, June 2006

Notes:

1. The ITD standard for LOS is C.
2. Assumes new 500 South Road built by developers.
3. Left turns from US-93 onto 400 South also cause US-93 to be LOS F for AM and PM Peak.

From the table, it is clear that without roadway improvements, none of the existing two-lane highway segments (north of Crossroads Parkway) will operate at acceptable levels. And forecast LOS of the existing intersections, all of which are currently unsignalized, will fail by 2030.

Moreover, with increased traffic volumes and decreased LOS, the incidence of vehicle crashes will increase. This is primarily because as traffic volumes increase, congestion and vehicle delay increases and drivers tend to become more anxious and are willing to accept small, sometimes unsafe gaps in traffic, when attempting to pass another vehicle or when turning onto the highway from a side road or driveway. Traffic crashes will also be expected to increase at the EIRR at-grade crossing due to increased exposure of blockages due to

train crossings. Fatal vehicle crashes, however, will likely stay the same or potentially decrease as they are typically attributable to excessive speeds, which will be less likely due to increased congestion.

Also, planned urban development of adjacent properties along the highway corridor will need access to either US-93 or local roads that intersect the highway. ITD, however, has standards that identify intersection, signal, and frontage road spacing and determine how at-grade access will be provided to future development located along the highway corridor. ITD classifies state highways by one of five types of access control. US-93 between I-84 and SH-25 is classified as a Principal Arterial because it is mostly a two-lane rural highway; therefore, it is a Type Class III access facility. In conclusion, forecast traffic volumes for US-93 without any changes to the existing roadway between I-84 and SH-25 will result in the following conditions:

- Traffic volumes will nearly triple between 2004 and 2030;
- LOS for all segments of the roadway that are currently only two lanes (north of the future 500 South) will be below ITD standards;
- LOS for existing and anticipated future intersections along the Project corridor will all be LOS F, substantially below ITD standards; and
- Traffic volumes and congestion will be expected to increase the incidence of vehicle crashes, including those with trains at the EIRR crossing.

1.9 ORGANIZATION OF THIS DOCUMENT

The remainder of this environmental document is comprised of four chapters. Chapter 2 presents the Project alternatives considered, why some of these alternatives were dropped from detailed evaluation, and describes in detail the proposed Project alternative. Chapter 3 evaluates potential direct, indirect, and cumulative environmental impacts (negative and beneficial) that could occur as a result of constructing the Project and mitigation measures, if applicable. Chapter 4 is the Section 4(f) Evaluation of potential impacts specifically to public recreational areas and historic resources. Chapter 5 summarizes the public outreach and involvement activities conducted as part of the Project planning and environmental review process. The last sections are a list of preparers, list of terms, and a list of references used to prepare this document.

CHAPTER 2.0 PROJECT ALTERNATIVES

2.1 INTRODUCTION

This chapter describes the proposed Project Alternatives that were considered during the National Environmental Policy Act (NEPA) process. Development and assessment of the alternatives considered and a description of the preferred Build Alternative is included in this chapter.

2.2 DEVELOPMENT OF ALTERNATIVES

The development of alternatives to improve US-93 between I-84 and SH-25 has entailed two phases. The first phase was a technical analysis associated with the preparation of the *US-93 Needs Assessment*. The second phase is the presentation of the findings of this technical analysis completed for this Environmental Assessment (EA) including input from local, state, and federal government agencies as well as members of the public and adjacent property owners. The following sections describe these activities.

2.2.1 Agency Considerations

Traffic volumes are anticipated to more than triple along US-93 by the year 2030¹. This increase is primarily the result of urban development in the Twin Falls and the Jerome area as well as the region's recent economic growth, particularly the development of several food processing manufacturing plants. The Jerome County designation of a Commercial Overlay Zone (COZ) along US-93 between I-84 and SH-25 in 2000 has increased public agency concerns about future highway operation.

Transportation experts recognized the need for the highway to be widened to accommodate increases in traffic volumes as well as the increased demands anticipated from future commercial development along the Project corridor. In addition, agency transportation experts recognized the need to change the character of the highway from a rural designation that permitted nearly unlimited access to adjacent properties to a highway in an urbanizing area where access control is necessary to ensure that the mobility function of the highway is maintained.

With this in mind, the primary purpose of the *US-93 Needs Assessment* (W & H Pacific 2002) was to investigate appropriate methods of access control while addressing the long-term capacity and safety needs of the highway. The Idaho Transportation Department (ITD) Administrative Policy A-12-01 addresses state highway access control based on highway functional class and access type (see Chapter 1). The two functional classes are rural or urban and each has five access control types. Because the character of the roadway is in transition, the objective of the *US-93 Needs Assessment* was to evaluate which access control type will best meet the future needs of the highway.

2.2.2 Stakeholder Coordination

Stakeholder coordination was conducted as part of the process to develop and select the preferred Build Alternative. The primary goals for the public outreach included the following:

- Build upon the earlier public outreach efforts that have been conducted for this Project, i.e. the outreach associated with the needs assessment study;

¹ Traffic Analysis (Table 9), 2006 – Parson Brinckerhoff

- Reestablish the purpose and need statement and goals for the highway corridor;
- Educate the public and agencies regarding the existing conditions, projected needs, and related technical issues affecting the potential alternatives and final configuration for the roadway; and
- Present the new schedule and activities for the preparation and completion of the EA and Project construction.

2.3 INITIAL RANGE OF CONCEPTUAL ALTERNATIVES

The initial range of conceptual alternatives for improving US-93 between I-84 and SH-25 were evaluated in the *US 93 Needs Assessment*. This report evaluated needed improvements on US-93 between I-84 and SH-26 in Shoshone. This corridor study encompassed an area that extended approximately 15 miles beyond the highway corridor evaluated in this EA. In this report, a total of five corridor improvement options were considered and evaluated.

2.3.1 Option #1 – No Build Alternative

This option does not include any roadway improvements. It was the baseline for comparison of all of the other alternatives.

2.3.2 Option #2 – 5-lane Improvement, Continuous Left Turn Lane, Standard Access

This option considered widening the existing roadway to four travel lanes with a center turn lane to allow vehicles to turn on and off of the highway with no change in access management.

2.3.3 Option #3 – 5-lane Improvement, Continuous Left Turn Lane, Partial Control Type II Access

This option examined widening the existing roadway to four travel lanes and a fifth center lane to allow vehicles to turn on and off of the highway. At major intersections, the turning movements would be controlled via median channelization. Public road access would be permitted based on a pre-approved plan, but there was no minimum spacing between accesses. New approaches were prohibited, except to serve isolated parcels.

2.3.4 Option #4 – 5-lane Improvement, Continuous Median Channelization, Partial Control Type III Access

This option studied widening the existing roadway to four travel lanes with a continuous middle fifth lane for limited access to adjacent properties restricted to no more than four per mile. The roadway would have a median channelization with left-turn lanes at major intersections. Access roads were provided when economically justified and as part of property redevelopment. Adjacent properties would have a highway access primarily through the development of a frontage road network.

2.3.5 Option #5 – 4-lane Improvement, Partial Type IV Access, No Direct Private Access

This option considered widening the existing roadway to four travel lanes with continuous median control and development on a frontage road network. Adjacent property access would have been from these frontage roads or public access roads. New approaches would have been prohibited. Access roads or right-of-way (ROW) for frontage roads were to be provided when appropriate or economically justified.

Compared to the existing two-lane highway, the proposed improvements all involved widening the highway to accommodate four traffic lanes and various methods of controlling roadway and property access.

2.4 EVALUATION OF CONCEPTUAL PROJECT OPTIONS

The evaluation of the four build options for the proposed Project involved both public input as well as detailed analysis of the several project options.

Meetings with the public and governmental agencies were held to review and discuss the Project options. Members of the general public as well as property owners along the highway corridor were consulted and input was solicited from local, state, and federal government agencies. After considerable discussion, both groups recommended dropping Option #2 because the continuation of the existing standard approach access policy that would not support the Project objectives. Further, Option #2 would not meet the Projects purpose and need as defined in Chapter 1. Specifically, the standard approach access policy would reduce the operational characteristics of the facility and decrease safety as compared to the other alternatives.

For the remaining three build options, a rigorous evaluation was conducted to compare and contrast these options to the No Build option. The analysis for each option included the preparation of 20-year travel forecasts followed by detailed evaluation of level of service (LOS) for roadway segments and intersections, traffic delay at intersections, signal warrant analysis, and railroad crossing assessments. The *US-93 Needs Assessment* provides the details of this analysis.

The results of the analysis indicated that in the future, left-turn movements from the minor street approaches to US-93 are expected to operate at LOS F. As a result, despite the access restrictions and roadway improvements, these intersections will still be out of compliance with ITD's intersection standard of LOS C. In addition, Option #3 would provide full access to commercial centers that would result in all left-turns out of the driveways operating at LOS F. The signal warrant analysis revealed that based on future projected traffic volumes, signal warrants will be met at all intersections and signals will improve intersection operation to LOS B or better for all Project options (except the No Build). Furthermore, signal warrant analyses for the commercial driveways allowed under Option #3 showed that if signalized, these intersections will also operate at LOS B.

ITD has developed a statewide index to prioritize improvements at railroad crossings based on roadway traffic, rail traffic, and crashes. Based on current trends, crash potential for the next ten years was projected and indicated that the existing Eastern Idaho Railroad (EIRR) crossing will rank high enough to warrant improvements. When improved, the existing flashing lights will be augmented with motion sensors and cantilevered lights to improve

sight distance, but automatic gates will not be warranted. This was identified as another Project need.

2.4.1 Selection of the Build Alternative (Preferred Alternative)

Based on the analysis and comparison of the Project options, Option #5 was considered the best; Option #4 was second and Option #3 was the least desirable of the three build options. To develop the final recommendation, additional public and agency input was again considered for the three build options and an initial review of potential environmental impacts was performed. Environmental impacts were minor for all options and therefore, not considered a differentiating factor between alternatives. Impacts resulting from the alternatives considered would be the same since the cross sections are similar. However, upon designing the Preferred Alternative, measures were taken to avoid important resources such as historic properties and to minimize the number of relocations.

All along, public reaction had been unfavorable towards Option #5 because of the very limited access to commercial development. Local government agencies also discussed the large amount of public road right-of-way needed for this option. Ultimately, the local government agencies concluded that Option #5 could be problematic. Due to these reservations, ITD decided that Option #4 should be adopted as the conceptual plan for making improvements to US-93 between I-84 and SH-25.

2.4.1.1 Access Management

From the *State Highway Access Control policy*² all principal arterials that are multi-lane facilities are recommended to be an access Type IV roadway (see first table on page 1 of 4 of this policy). Option #5 meets the goals established by ITD for access control for US-93. However, due to the number of accesses currently along the corridor and public and agency input Option #4 was chosen as the Build Alternative. Option #4 meets the Projects purpose and need as discussed in Chapter 1. However, a modified Type III access control will be adopted for this highway corridor as the area transitions from agricultural uses to commercial uses. This includes public road intersections at every ½ mile (500 South, 450 South, 400 South, 350 South etc...). As land uses change from agricultural uses to commercial uses as planned by Jerome County, accesses will be provided at ½ mile intervals. Access will be restricted, where possible, to the public roads located at ½ mile intervals. Existing accesses may be consolidated during the construction phase of the Build Alternative. Figure 2-2 illustrates the access management concepts with examples of how accesses and turning movements might be modified with a divided median. ITD will continue to coordinate with Jerome County to develop an access control policy along the corridor that meets the needs of the adjacent land owners while meeting the corridor needs.

2.5 ALTERNATIVES ADVANCED FOR FURTHER STUDY

Based on the screening analysis and input from government agencies and the public during the planning process, the analysis in this EA is based on two alternatives - the No Build Alternative and the Build Alternative. These alternatives are described in the following subsections. A detailed description of the Build Alternative is found in Section 2.5.2.

2.5.1 No Build Alternative

Under NEPA, the No Build Alternative is used as the basis against which the proposed build alternatives are evaluated (typical section is shown in Figure 2-1). The figures in Appendix

² Administrative Policy A-21-01

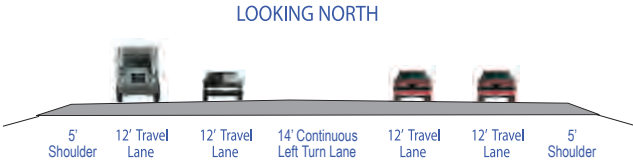
A show the existing conditions and access along the Project corridor. This alternative includes programmed transportation improvements in a project area except the proposed action. The following is a list of key features of the No Build Alternative.

- The highway will not be widened and most of the highway corridor will continue to be a two-lane rural highway;
- Existing access roads and approaches currently intersecting US-93 will continue in their current locations and 500 South will not be constructed to the north of Crossroads Parkway;
- Standard access management control will continue to allow every property adjacent to the highway to have a private approach as long as it meets ITD's basic safety and operation requirements;
- No traffic signals will be installed at existing or future road intersections;
- The EIRR track crossing near 300 South will be improved consistent with statewide agreements;
- A shared use trail will not be constructed. Pedestrians and bicyclists will continue to use the existing substandard roadway shoulders; and
- Existing maintenance and repair work will continue and will eventually over time lead to highway repaving.

2.5.2 Build Alternative

The Build Alternative consists of widening the highway to four through lanes, two lanes in each direction with a divided median (typical section is shown in Figure 2-1). In the median left-turn lanes will be constructed where vehicles from either direction could use to slow down and wait for a gap in the on-coming traffic before turning. As discussed above, access control will be a modified Type III as the area transitions to commercial development. It is envisioned that with this alternative, access onto US-93 will be limited to existing roads and possible roads at ½ mile intervals. ITD will provide access to properties that already have access onto US-93; no property will be inaccessible from US-93 if there is an existing access point. In some locations access will be limited to right-in and right-out access to be consistent with the divided median (see Figure 2-2). Frontage roads may be constructed as needed to access future development and to consolidate existing accesses. It is envisioned that these roads will be built and maintained by property developers and included in the approval process. In instances where an existing access onto US-93 cannot be maintained and there is not access via the potential ½ mile roadways or existing roads ITD will construct frontage roads. Appendix A, Figures A-1 through A-9 illustrates the existing transportation system and identifies the existing access points along the US-93 corridor. During the design, ITD will coordinate with landowners regarding movement and/or consolidation of accesses onto US-93.

Typical Existing Roadway Cross-Section
(from south end of project to Crossroads Parkway)

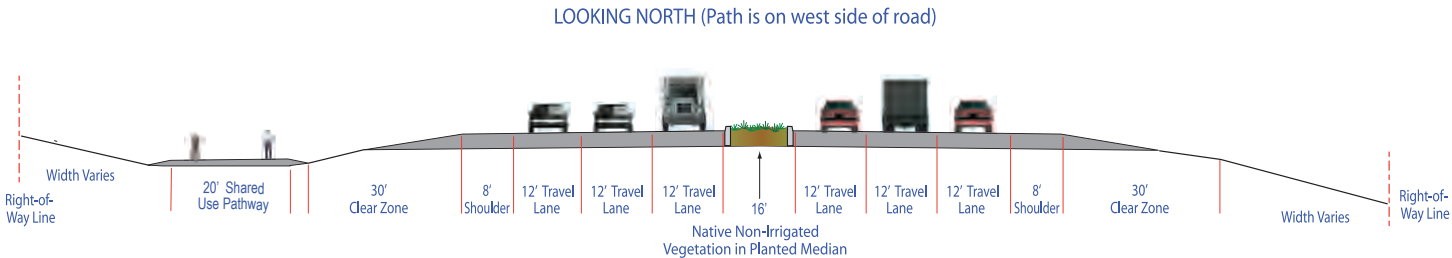


NOTE: Pavement widens for left-turn lanes at 300 South and SH-25 intersections.

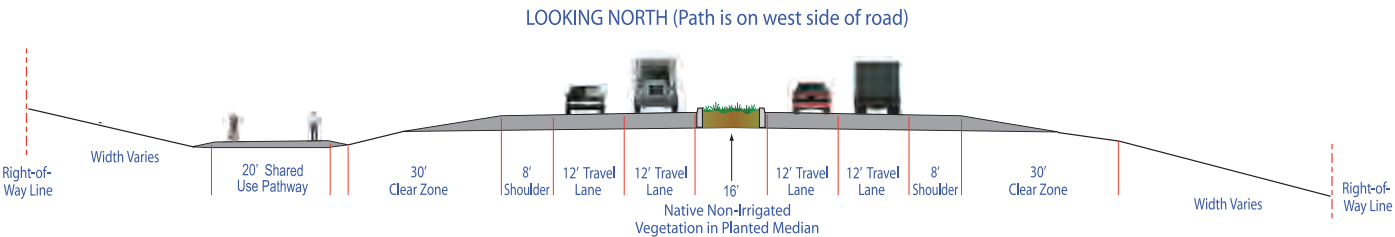
Typical Existing Roadway Cross-Section
(from Crossroads Parkway to north end of project)



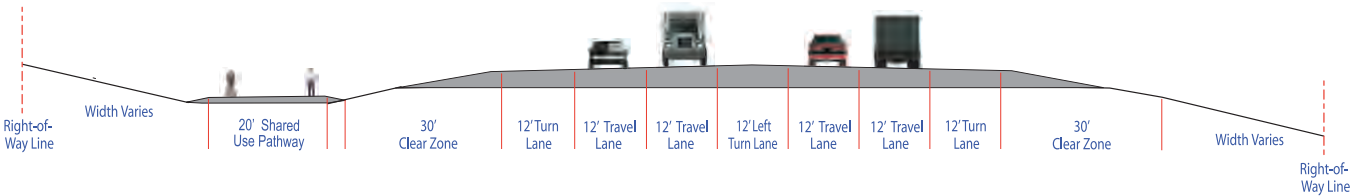
Typical Proposed Roadway Cross-Section (Build Alternative)
(from south end of project to Crossroads Parkway)



Typical Proposed Roadway Cross-Section (Build Alternative)
(from Crossroads Parkway to north end of project)



Typical Proposed Intersection Cross-Section (Build Alternative)
LOOKING NORTH (Path is on west side of road)



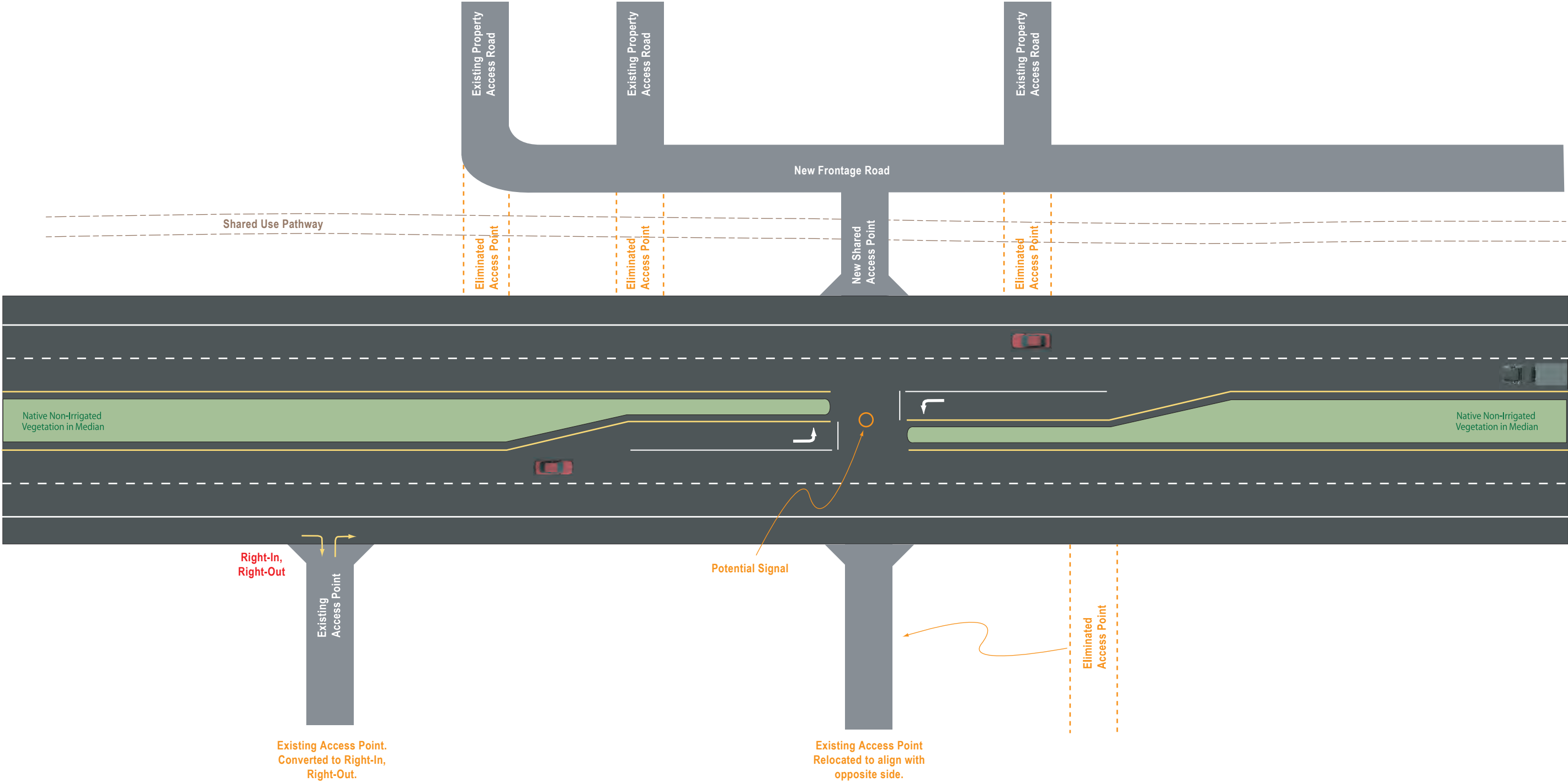
No Scale

Figure 2-1
Existing and Proposed Roadway Typical Sections



LEGEND





No Scale

Figure 2-2
Access Management Concept Examples



2.6 DETAILED DESCRIPTION OF THE BUILD ALTERNATIVE

This section provides a detailed description of the design, construction methods and schedule, and cost estimate for the Built Alternative. Appendix B, Figures B-1 through B-9, contains preliminary engineering drawings of the Build Alternative.

2.6.1 Project Design Elements

The paragraphs below describe the Build Alternative. Each section starts with a brief description of the existing conditions and is followed by a description of the proposed changes in highway design.

2.6.1.1 Project Termini

The proposed Project starts at milepost (MP) 53.3 and ends at MP 59.4 on US-93; a distance of 6.1 miles. The Project starts at the existing I-84 westbound off- and on-ramp intersection with US-93; it extends 6.1 miles north with its northern terminus approximately ½ mile beyond the existing intersection of SH-25 and US-93. Traffic along US-93 decreases by 35 percent at the SH-25 intersection (heading north on US-93). For this reason, the logical northern terminus is just north of the SH-25 intersection.

2.6.1.2 Roadway Cross-Section

The existing roadway is a two-lane rural highway except between the I-84 northbound on- and off- ramps and Crossroads Parkway (first ¼ mile of the highway corridor) where there are two through lanes in each direction. The proposed highway improvements will widen the entire highway corridor to five lanes. The existing and proposed typical section is shown in Figure 2-1.

2.6.1.3 Right-of-Way, Alignment, and Acquisition

The existing roadway ROW is variable. The US-93 right-of-way within the Project limits varies from 120 feet to over 600 feet as shown in Table 2-1.

TABLE 2-1. EXISTING US-93 RIGHT-OF-WAY WITHIN THE PROJECT CORRIDOR

<i>Mileposts (MP)</i>	<i>Right-of-Way Width (feet)</i>	<i>Comments</i>
MP 53.3 (beginning of Project) to MP 53.5	> 600 to 350	The ROW is wide at the westbound off/on ramp of I-84
MP 53.5 to MP 54.1	350	Approximately from the Crossroads Parkway to 450 South
MP 54.1 to MP 56.9	120	450 South to D5 Ditch at the 93 Golf Ranch
MP 56.9 to MP 58.5	400	D5 Ditch to north of the Simplot storage facilities located just south of the SH-25 intersection
MP 58.5 to MP 58.7	200	Simplot storage facilities to 200 feet south of the SH-25 intersection
MP 58.7 to MP 59.4 (end of Project)	> 600 to 400	SH-25 Intersection to MP 59.4 (end of Project)

Source: ITD

The right-of-way for the Build Alternative will generally be a minimum of 300 feet wide. There are a few locations where the right-of-way will be less in order to avoid impacting existing buildings or adjacent historic properties. No additional right-of-way will be needed

between the I-84 westbound off- and on-ramps to just south of the KOA Campground. New right-of-way will be acquired between the KOA Campground north to the D5 Ditch. This new right-of-way will be nearly equal on both sides of the existing roadway alignment. In a few locations to minimize impacts to existing buildings, waterworks improvements, and historic properties, the new right-of-way will be mostly on the east side of the roadway. And the purchase of new right-of-way will be required on the south side of the US-93 and SH-25 intersection. Appendix B, Figures B-1 through B-9 shows the existing and the proposed rights-of-way.

2.6.1.4 Roadway Intersections

There are seven existing public road intersections with US-93; Crossroads Parkway, 400 South, 300 South, 200 South, 100 South, SH-25, and Butte Drive. The Build Alternative will include improvements to the existing roadway intersections with one modification. To meet intersection minimum spacing requirements, the existing Crossroads Parkway intersection will be relocated to the north approximately 450 feet (future 500 South). A public road intersection will also be maintained to provide access to Crossroads Point Business Center development on the west side of US-93 (see Figure B-1 in Appendix B).

2.6.1.5 Railroad Intersection

There is one railroad track crossing along the Project corridor located just south of 300 South at MP 55.6. It is currently controlled by mast-mounted crossbuck signage and flashing lights located adjacent to the highway pavement on either side of the track crossing.

Because of a statewide agreement ITD has with railroads operating within Idaho, roadway improvements at track crossings are not part of the proposed Project. Needed improvements will be made independently by the railroad company at the same time as ITD will be constructing highway improvements to US-93. These improvements may include minor shifting of the railroad crossing and installing warning lights, motion sensors, and cantilevered lights to improve sight distance. ITD will coordinate with the EIRR during design to ensure that an improved railroad crossing is constructed.

2.6.1.6 Canal Improvements

Currently, there are six canals, laterals, or ditches that cross US-93 between I-84 and SH-25 plus an additional segment of a canal that is located adjacent and parallel to the west side of the highway. The proposed widening and realignment of the highway corridor will require modifications to several of the canal crossings. These improvements include the following:

- *K Coulee Canal* – The roadway will be widened to the east approximately 75 feet at this location. Also, the shared use trail will be located on the west side of US-93. These improvements and additions will require that the culvert be extended to accommodate the wider road cross-section and shared use trail;
- *L4A Lateral Canal* – This canal is immediately adjacent and parallel on the on both sides of the existing highway (the canal crosses to the west side of US-93 at 400 South). The proposed realignment of the highway will required that this canal be realigned;
- *L4 Lateral Canal* – The canal is immediately adjacent and west of the existing highway for a short distance and then it crosses the highway. The proposed realignment and widening of the highway will not require realignment of the canal, but the canal culvert will need to be reconstructed in its current location to accommodate the wider highway pavement;

- *L3 Lateral Canal* – The configuration of this canal crossing is similar to the L4 Lateral Canal crossing in that a short portion of the canal is immediately adjacent and parallel to the highway before it crosses. The proposed alignment of the highway is slightly east of the existing highway so the culvert will need to be reconstructed;
- *L Canal* – This canal is the largest that crosses US-93. The proposed alignment of the highway is west of the existing roadway and a new bridge/culvert will need to be constructed; and
- *D5 Ditch* – This ditch currently crosses the highway at approximately a right angle. The proposed realignment of the highway will be to the west of the existing roadway and will require the removal of the existing culvert. A new pipe or culvert will be used for the D5 Ditch; it will be approximately 300 feet long. The detailed design of the new pipe or culvert will be finalized during the design phase.

2.6.1.7 Shared Use Trail

The existing rural highway does not include a trail for pedestrians or bicyclists. Rather, there is informal use of the existing roadway shoulder, which does not meet design standards for this use. The Jerome County bicycle plan includes a proposed separated shared use paved trail along the Project corridor. This concept is supported by the community and is therefore, included in the Project.

The proposed roadway improvements will include the construction of a paved shared use trail on the west side of the highway between MP 53.3 (the I-84 on- and off-ramps) and the intersection of SH-25. No trail improvements are proposed north of the SH-25 intersection as part of this Project. Appendix B, Figures B-1 through B-9 shows the general proposed cross-section of the highway, including the location and dimensions of the proposed shared use trail. The paved trail will be 20 feet in width and will meander along the west side of US-93. At certain points, the distance between the shared use trail and the edge of pavement will be reduced. For example, the proposed realignment of the L Canal crossing of the highway will require the construction of a new bridge/canal culvert.

2.6.1.8 Traffic Signals

The only traffic signal in the Project corridor on US-93 is located at the on- and off- ramps from westbound I-84.

The Build Alternative will include consideration of future options to install traffic signals at each of the public road intersections with US-93. The timing for the installation of these traffic signals, however, may not coincide with the planned construction of the roadway improvements. Rather, the traffic signals will be installed when the level of service of intersections and signal warrant analysis confirms they are needed. The initial phased installation of traffic signals, however, will include a traffic signal at future 500 South with the proposed roadway construction activities.

CHAPTER 3.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES AND MITIGATION

3.1 INTRODUCTION

The purpose of this chapter is to describe the existing or affected environment, the impacts or consequences to the natural and manmade environment resulting from the No Build Alternative and the selected alternative (Build Alternative), and the necessary mitigation to offset the impacts from the Build Alternative. In addition, a discussion on the Secondary and Cumulative Impacts is discussed for each section.

- Secondary impacts (also know as indirect impacts) are those that are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable; and
- Cumulative impacts on the environment are the incremental impact of an action when added to the past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions.

The existing conditions are based on literature, coordination with local, state, federal agencies and on-site field investigations and surveys. Separate detailed technical studies were conducted and incorporated into this section. These include:

- Traffic Analysis;
- Noise Report;
- Cultural Resources Inventory;
- Natural Resources Memo;
- Wetland and Waters of the U.S. Report; and
- Hazardous Materials Survey and Inventory.

The descriptions focus on the human and natural environments within the US-93, I-84 to SH-25 Project corridor. The affected environment provides a basis for evaluating the environmental impacts associated alternatives. Mitigation to compensate for the impacts to the environmental features are detailed in this chapter as well.

The study area for this Project is 650 feet wide (325 feet each side of the existing centerline as shown in Figure 1-2). As discussed, the Project begins at the I-84/US-93 interchange at milepost (MP) 53.3 and extends 6.1 miles along US-93 to MP 59.4, north of the SH-25 intersection.

3.2 TRANSPORTATION

This section discusses the transportation and circulation system in the region and along the Project corridor. Specifically, it discusses the regional and statewide importance of US-93.

This section also discusses rail service, aviation, transit, pedestrian, and bicycle travel in the surrounding area.

3.2.1 Affected Environment

3.2.1.1 US-93 Corridor

US-93 is a major north-south corridor in the western part of the United States. It traverses through four states that include Arizona, Nevada, Idaho, and Montana. Its southern terminus is in Arizona 50 miles northwest of Phoenix at the junction of US-89/US-60; its northern terminus is at the U.S./Canadian border. As it crosses through the western United States, it connects with other major transportation corridors including US-89, I-40, I-15, US-50, I-80, US-30, I-84, US-26, and I-90. US-93 links major urbanized and commercial cities including Phoenix, Arizona (via US-60); Las Vegas/Henderson, and Reno Nevada (via I-80); Salt Lake City, Utah (via I-80); Twin Falls, Idaho; Missoula, and Kalispell, Montana.

US-93 Highway has been selected as part of the CANAMEX corridor, a federally-designated north-south route established to accommodate commercial traffic under the North American Free Trade Agreement (NAFTA)¹. One aspect of the CANAMEX corridor is to stimulate investment and economic growth as well as enhancing safety along the corridor. Part of the CANAMEX corridor calls for the development of a continuous four-lane roadway from the Mexican border through the United States and into Canada.

Regionally, US-93 is the main north-south corridor in south-central Idaho and serves local commuters in the region. Twin Falls currently has a population of over 35,000 and is the central city and largest urban area in south-central Idaho. People from the Magic Valley² area both work and shop in the city. The City of Jerome is approximately ten miles northwest of Twin Falls and is the Jerome County seat. It has a total population of approximately 8,000. North of the Project area is the City of Shoshone. Here, US-93 interconnects with SH-75, which travels northerly to the cities of Ketchum, home of the famous Sun Valley Ski Resort.

US-93 intersects with I-84 at the Project southern terminus. I-84 is an interstate freeway through Oregon, Idaho and Utah. Within the State of Idaho I-84 connects to Boise on the west and Pocatello and Idaho Falls (via I-86 and I-15) on the east side (see Figure 1-1 in Chapter 1). Outside of the state, I-84 links to Ogden and Salt Lake City, Utah and Portland, Oregon.

3.2.1.2 Local Roads

Local roads that intersect US-93 within the Project corridor include Crossroads Parkway (access to Flying J and other commercial businesses), 400 South, 300 South, 200 South, 100 South, SH-25, and Butte Drive. Paralleling US-93 one mile to the west is 300 East and a mile east is 500 East.

3.2.1.3 Railroad Service

The Eastern Idaho Railroad (EIRR) Northside Branch crosses US-93 at MP 55.6, about 500 feet south of the 300 South intersection. This short line rail is 57.5 mile long with its eastern terminus in Rupert (Minidoka County). The line extends through Jerome County before its western terminus in Wendell (Gooding County). This rail line carries up to a one million gross ton-miles per year with an average crossing of two trains a day at US-93. Currently, there are signals that warn vehicles on the highway of approaching trains.

¹ www.Canamex.org

² Magic Valley is made-up of eight counties in south-central Idaho including Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls

3.2.1.4 Airport Facilities

The Jerome County Airport is a publicly owned general aviation community access airport located in the northwest quadrant of US-93 and SH-25. The airport does not have scheduled or charter passenger service and has one asphalt runway in good condition. The airport serves several functions including general transient aviation, military uses, and as a base for aerial agricultural spraying operations.

3.2.1.5 Transit

Jerome County has limited public transportation available to its citizens. TRANS IV operates in the County and provides service to the cities of Gooding, Wendell, Jerome, and the College of Southern Idaho (CSI) in Twin Falls. TRANS IV is located in Twin Falls and operates the public bus transit system for northern Twin Falls County. The routes are generally the same but do vary depending on the need and roadway conditions.

Homebase Transport is a public charter that provides transit service to the disabled and elderly in the Jerome County area. Homebase does not have scheduled bus routes. There are other private taxi and bus companies that operate in Twin Falls and Jerome Counties. A park-n-ride lot is located on the southeast quadrant of US-93 and SH-25. This lot is 1/3 of an acre and can accommodate about 25 vehicles. Access to the lot is off of SH-25.

3.2.1.6 School Bus Service

The Jerome School District services the public educational needs within the proposed Project area. This school district has five schools - three elementary schools, one middle school, and one high school. The district has contracted with North Side Bus Company to provide bus service to the various schools. There are three bus stops along the Project corridor; in front of the KOA Campground, just south of the EIRR tracks, and in front of the El Costa Plenta Ranch (about 1,800 feet north of 300 South).

3.2.1.7 Bicycle and Pedestrian Facilities

There are no sidewalks, designated trails or paths in or adjacent to the Project study area or along US-93 between I-84 and SH-25. There is little bicycle or pedestrian travel along the corridor due to the rural nature of the highway and lack of a designated trail or path. Roadway shoulders serve the dual purpose of accommodating bicycle and pedestrian traffic and enhancing the roadway for vehicular traffic and safety. The paved shoulders are generally five feet wide within the Project corridor. According to Appendix B of the *Idaho Bicycle and Pedestrian Transportation Plan* (January 1995), roadway shoulders generally should be at least six feet wide to safely accommodate bicycle travel. Minimum shoulder width under severe physical width constraints should be four to five feet wide.

The *Jerome County Comprehensive Plan* states that “it is the policy of the plan to recognize the importance of cycling and walking as a form of transportation and to establish a bicycle/pedestrian network.” In addition, the Jerome County Recreation District has formed a committee which has developed a seven phase path system for pedestrian, bicycles, equestrian, and other recreational uses within the County. This committee includes representatives from the City of Jerome, the Jerome School District, the Jerome Highway District, and the Jerome Recreation District. As part of Phase VII of this plan, a multi-use trail is planned along the west side of US-93 from the Snake River to SH-25 (see discussion in Chapter 2). This planned multi-use trail will be incorporated into the proposed US-93 right-of-way (see Build Alternative in Appendix B).

3.2.2 Environmental Consequences

3.2.2.1 No Build Alternative

The No Build Alternative will not impact rail, bicycle, or pedestrian facilities or plans. However, the No Build Alternative would not improve safety for bicyclists using the highway shoulders and does not meet the Projects purpose and need as documented in Chapter 1.

3.2.2.2 Build Alternative

- US-93 Corridor - The Build Alternative will enhance safety and mobility along the Project corridor as discussed in Chapter 1. Furthermore, the Build Alternative agrees with the CANAMEX corridor plan which is to enhance and stimulate economic growth along the US-93 corridor.
- Railroad Services - The Build Alternative includes improving the EIRR crossing with US-93. The improvements will be done as a separate project; however the work will be completed at the same time as the roadway improvements. The improvements include a sign bridge structure with warning signals and lights. The improvements will be done in under a Utility Agreement between ITD and the EIRR, whereby ITD will pay for the work and EIRR will manage and construct the railroad crossing improvements.
- Airport Facilities - The proposed Project will have no impact on the Jerome County Airport.
- Transit Facilities - The proposed Project will have no impact on the transit facilities in Jerome County.
- School Bus Service - The Build Alternative will have no impact on school busses. The widened shoulders will be safer and better to accommodate school busses along the Project corridor.
- Bicycle and Pedestrian Facilities - Implementation of the Build Alternative will enhance and increase safety for bicycle and pedestrian travel along the corridor. As shown in Figure 2-1 the Build Alternative includes a 20 foot multi-use trail along the western edge of US-93. This will be a Class I trail that is separated from the traffic on US-93. Users of the Park and Ride lot on the southeast corner of the intersection of U-93 and SH-25 can cross US-93 and access the trail.

3.2.3 Secondary and Cumulative Impacts

There are no secondary or cumulative impacts.

3.2.4 Mitigation

None required for this resource.

3.3 LAND USE AND RELOCATIONS

This section describes existing land uses and the potential long-term effects that will occur following construction of the proposed Project. Topics addressed include a description of the regional context of the Project, land uses in the Project area, local government regulation of future development, and proposed and planned development in the Project area. For purposes of this analysis, the Project study area is defined as the US-93 highway corridor between I-84 and SH-25.

3.3.1 Affected Environment

3.3.1.1 Regional Context

The Project is located in rural south-central Idaho, approximately halfway between the state capitol in Boise in the western side of Idaho and Pocatello in the southeastern corner of the state. The surrounding terrain is characterized as rolling rural agricultural lands on the north side of the Snake River Valley. The major city in the region is Twin Falls, which has a four-county urbanized area population of slightly greater than 105,000 (Idaho Department of Commerce and Labor 2005). The highway corridor is located in unincorporated Jerome County approximately four miles east of the City of Jerome and four miles north of Twin Falls. The local agricultural activities focus on beef cattle, potatoes, sugar beets, hay, and grains. In the last 20 years, a substantial aquaculture industry (trout hatcheries and trout farms) has developed in and around the Twin Falls area. In addition, there has been a dramatic increase in dairy farms and associated food processing plants, especially in Jerome County. More recently, several high-tech call centers have located in the region's larger cities.

US-93 is the major highway north of Twin Falls through Jerome County, Shoshone in Lincoln County, and continues northeasterly through the Salmon River Mountains and Lost River Range in central Idaho and Missoula and Kalispell, Montana. Land use in the study area is generally described as rural agriculture. Adjacent to the highway, there are a number of residences and commercial businesses. Behind these structures, there are large tracks of cultivated fields.

3.3.1.2 Existing Land Uses

The various land uses found along the US-93 corridor are shown on Figure 3-1 and described below.

- Rural Agriculture - Along the Project corridor, the majority of the adjoining property is farmed and used for agricultural production, primarily field crops. Farmland is irrigated from the many canals that crisscross the County. For additional information, see Section 3.3 - Agriculture and Farmland.
- Rural Residential - There are a total of 20 residences that have direct access or frontage along US-93 within the Project corridor. Most of these are associated with the agricultural properties and farms along the corridor. Also, there is one trailer park with five lots located in the northeast quadrant of US-93 and SH-25 that have access onto the highway.
- Business/Commercial - There are 14 business/commercial properties that exist along the Project corridor. These include one motel, a truck stop, sand and gravel supplier, two manufactured home retailers, recreational properties, and six business parks. The Jerome County Airport is located on the northwest corner of the intersection of US-93 and SH-25. The EIRR crosses the highway corridor just south of 300 South.
- Recreation - There are two privately owned recreational properties within the US-93 Project corridor; the KOA Campground and the 93 Golf Ranch. The KOA Campground is located on the west side of US-93 approximately 2,000 feet south of 400 South. The campground provides RV and tent sites, one and two bedroom cabins, showers, playground, swimming pool, and other camping amenities. The 93 Golf Ranch is a privately owned nine hole golf course open to the general public. This course is situated on the northeast quadrant of US-93 and 200 South. The D-5 Ditch runs through the middle of the 93 Golf Ranch. The Idaho Farm and Ranch Museum (IFARM) is located just east of the Flying J Truck Stop near the south end

of the Project, but outside of the Project study area. This museum is located on a 100-acre site³. IFARM is a museum owned and operated by the Jerome County Historical Society and includes exhibits of antique agricultural machinery and buildings. There are no publicly owned parks or recreational facilities along the Project corridor. Informal recreational activities listed in the Jerome County Recreation District Specific Plan (1996) that also may occur in the Project study area include hunting (on private farmland), hiking, and nature viewing.

- **Open Space** - There is one large property managed as open space. The U.S. Department of Interior, Bureau of Land Management (BLM) owns a designated wildlife tract located southwest of the US-93 and SH-25 intersection (see discussion in Section 3.17 - Wildlife and Threatened and Endangered Species). The BLM Wildlife Tract is managed cooperatively by the BLM and Idaho Department of Fish and Game (IDFG). This area known as Wildlife Tract J10 is shown in Figure 3-1. The property contains native species in the shrub-steppe and is managed for upland game birds, including gray partridges, pheasants, and California quail.

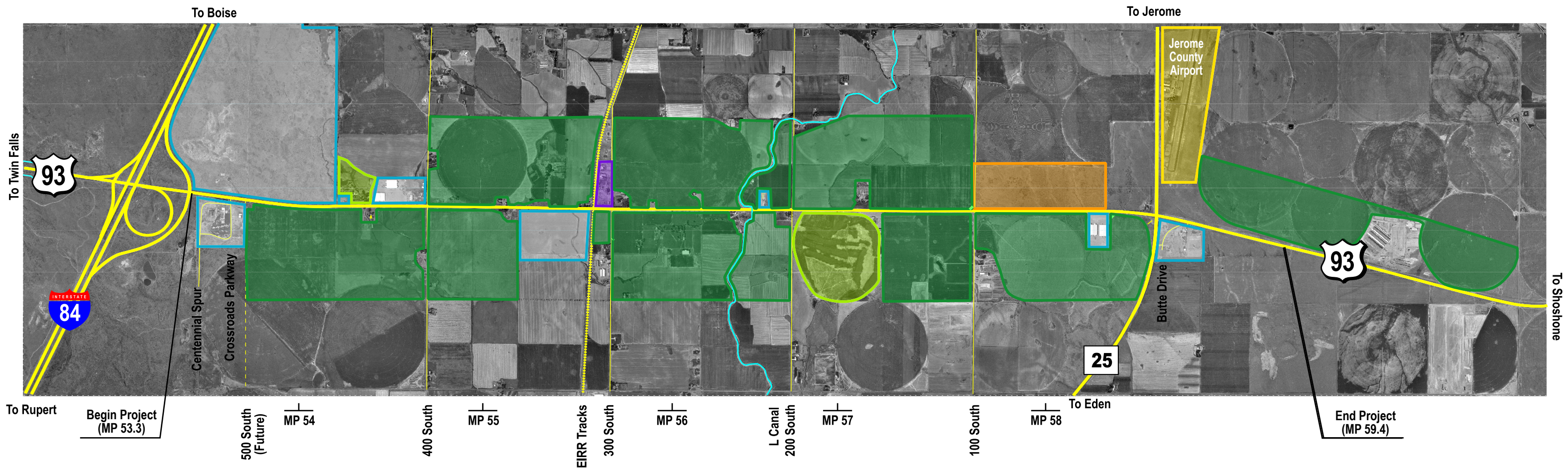
3.3.1.3 Existing Zoning

Jerome County has adopted zoning regulations for new development. The existing zoning along the Project study area is primarily agricultural (A-1). There also exists properties zoned light industrial (I-L), heavy industrial (I-H), general commercial (C-G), and city impact area (IMP) (see Figure 3-2).

Jerome County has also established a Commercial Overlay Zone (COZ) between I-84 and SH-25 along the entire length of US-93 in the Project study area. The COZ extends ¼ mile from US-93 on both the east and west sides of the highway. The COZ complies with local and state laws, including the Jerome County Zoning Ordinance Chapter 21 and Title 67 Chapter 65 of the Idaho Code. The major objective of the Commercial Overlay Zone is to spur economic development in the county and to help facilitate local transition from a largely rural, agricultural-based community to a more diversified economy. The ordinance states the purpose of the Commercial Overlay Zone is to “provide for and to encourage the grouping together of businesses, public and semi-public, and other related uses...and will be compatible to this highway corridor.”⁴ All businesses within the Commercial Overlay Zone are required to meet specific standards for landscaping, parking, and building setbacks.

³ Jerome County Comprehensive Plan – page 108

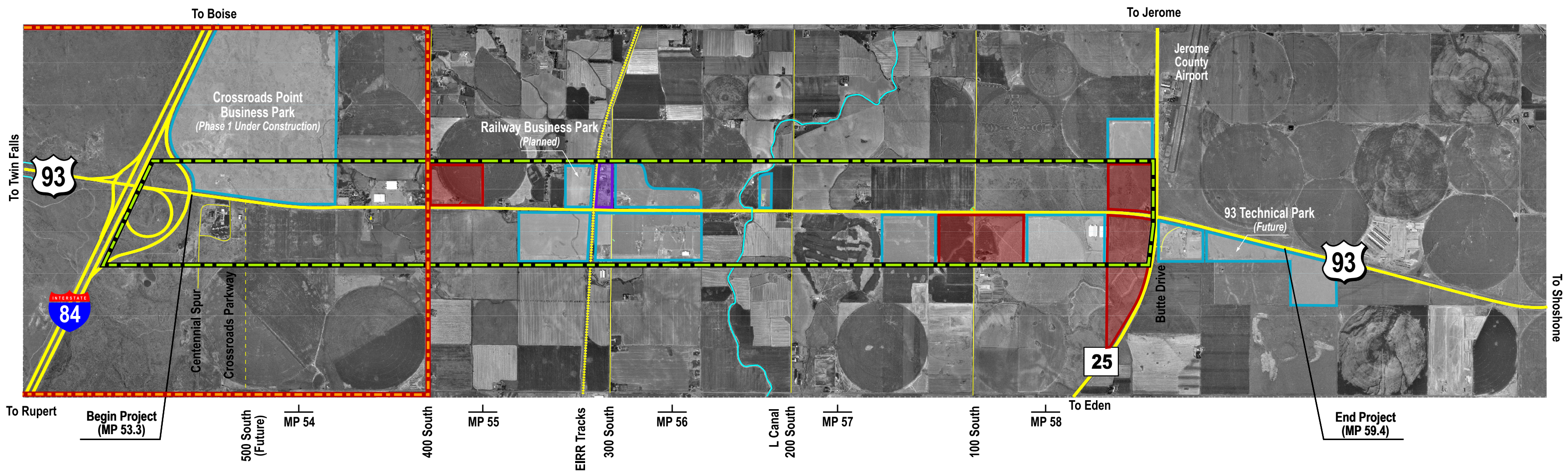
⁴ Regulations within Zones



No Scale

Figure 3-1
Existing Land Use





No Scale

Figure 3-2
Existing Zoning

LEGEND

	Zoned General Commercial		Zoned Light Industrial		Zoned Heavy Industrial		City Impact Zone		Commercial Overlay Zone
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3.3.1.4 Long-Range Planning

A number of state and local government planning documents have been prepared that are relevant to the Project study area and the proposed Project. These documents are briefly described below.

- **Jerome County Comprehensive Plan** - The Jerome County Comprehensive Plan was adopted on January 27, 1997 by the County Commissioners. This plan discusses the county transportation system and issues related to the needs of both existing and future land uses within the county. The plan identifies US-93 as the major north-south travel route⁵ and designates it for commercial land uses.
- **US-93 Needs Assessment** - The comprehensive US-93 Needs Assessment for this corridor was completed in July 2002 (W & H Pacific 2002) and was sponsored by the Idaho Transportation Department (ITD). This study examined three segments along the highway corridor: 500 South to 300 South, 300 South to SH-25, and SH-25 to US-26 in Shoshone. It was conducted to assist ITD in defining future corridor needs and to understand what environmental conditions, issues, and constraints need to be considered during the highway planning. The Needs Assessment identified the following issues:
 - 1) Railroad Crossing Safety;
 - 2) Traveler Safety;
 - 3) Traffic Flow;
 - 4) Accessibility; and
 - 5) Shared Highway Use (multi-use trail).

The Needs Assessment concluded that US-93, in its current 2-lane configuration, was insufficient to accommodate future traffic conditions (between I-84 and SH-25). With regard to the highway corridor under study in this Environmental Assessment (EA), it recommended the following:

 - a) Four travel lanes;
 - b) Public access road intersections should be considered at 500 South, 400 South, 300 South, 200 South, 100 South and SH-25. Traffic signalization should be studied and installed at warranted locations due to the expected traffic growth;
 - c) Continued development of the corridor in the vicinity of the SH-25 intersection should not preclude the eventual construction of a grade-separated interchange;
 - d) The EIRR crossing near 300 South warrants improvements including early warning signs and new and cantilevered warning lights;
 - e) No private driveway access should be permitted between the public road intersections, but rather a frontage road system should serve adjacent lands (modified Type III access control – see section 2.4.1 of Chapter 2); and
 - f) Up to three access points at ½ mile spacing could be considered between the major intersections with local public roads.

⁵ Jerome County Comprehensive Plan, page 49

- Idaho Statewide Transportation Improvement Program - The Idaho Statewide Transportation Improvement Program (STIP) outlines a five-year transportation planning and implementation program for specific projects. In order to receive federal funding, each project must be approved and shown on the STIP. The proposed Project is listed in the current STIP (ITD 2005). For additional discussion, please see Chapter 1, Section 1.4.

3.3.1.5 Proposed and Planned Development

Currently, there are three planned developments within the Project corridor. These are the Crossroads Point Business Center (Phase I currently under construction), Railway Business Park, and the 93 Technical Park.

- Crossroads Point Business Center** - The proposed Crossroads Point Business Center is a campus-style complex designed to function as a location where companies can engineer, manufacture, produce and market their products. This business center is located on the northwest quadrant of US-93 and I-84 (see Figure 3-2). The ultimate development site is proposed to be 492 acres⁶. Recently, construction activities have begun at the Crossroads Point Business Center. The first phase of this Project is proposed adjacent to US-93 and includes a new 25-bed hospital, hotels, service stations, restaurants, office space, and other commercial buildings. The master plan for this development has been approved by the Jerome County Planning and Zoning Department and construction work on infrastructure and utilities has also begun.
- Railway Business Park** - This business park has received preliminary approval from Jerome County. It is located on the west side of US-93 with its northern border at the EIRR tracks (see Figure 3-2). The Railway Business Park will have an 800 foot long frontage with US-93 and extends ¼ mile west of the highway (limits of Commercial Overlay Zone). The proposed businesses in this park include a lumber yard, storage rental area, feed store, and two six space office buildings.
- 93 Technical Park** - The proposed 93 Technical Park is located on the east side of US-93 and immediately north of SH-25 (see Figure 3-2). The entire 93 Technical Park site is 108 acres. The first phase of this development is 68 acres and has been subdivided for 26 industrial lots.

Also, in cooperation with the Southern Idaho Economic Development Corporation, Jerome County has been pursuing funding opportunities to install the necessary infrastructure to stimulate development in the Commercial Overlay Zone. The area is part of the proposed Southern Idaho Telecom Corridor Project, which is a 16 mile business corridor from the north end of the proposed highway Project (near the 93 Technical Park) to the College of Southern Idaho in Twin Falls. The telecom corridor will connect planned development in the Commercial Overlay Zone and other businesses in Twin Falls. In June 2005, Jerome City received a \$2.7 million federal grant from the U.S. Economic Development Administration (EDA) for needed infrastructure to accommodate the planned development. Specifically, this grant will be used to install or construct fiber optic services, new water and sewer lines, roads, curb and gutter within the 93 Technical Park, and needed upgrades at the Jerome Wastewater Treatment Plant.

⁶ Communication with Crossroads Point Business Center

3.3.1.6 Relocation Issues

Depending on the final design of the proposed Project, there will be a need for ITD to acquire additional land for right-of-way (ROW) from adjacent property owners.

Relocation activities are regulated by federal and state laws. These laws include Titles I and II of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Public Law 91-646) and amendments thereto, together with Idaho Code, Title 40, Chapters 1 and 20, and title 58, chapter 11 and ITD No. 39.C.44. This statute authorizes agencies to provide relocation assistance, to make relocation payments to displaced persons and to take other actions to comply with the provision of the Act. The statute also states that any payment made under the authority granted by the law shall be for the compensation or reimbursement to displaced persons or owners of real property. The Act states such payments shall not be deemed or considered compensation for real property acquired or compensation for damages to remaining property. The Project proponent must assure that displaced persons are given the proper assistance and provided all the payments that they are entitled without discrimination. This includes access to the relocation assistance advisory program, payment of certain moving and related expenses, and replacement housing payments, including housing of last resort.

In Idaho, the State Relocation Agency of ITD administers the Act. The Agency's Relocation Unit has the responsibility of providing relocation assistance and benefits to persons, businesses, farm operations, and non-profit organizations displaced by the acquisition of right-of-way for highway projects. The objective is to ensure right-of-way acquisition occurs in a manner that does not cause a disproportionate hardship to those affected by projects designed for the benefit of the general public.

3.3.2 Environmental Consequences

3.3.2.1 No Build Alternative

The No Build Alternative will have no immediate or direct adverse effects on existing land use, planning, or zoning along the US-93 highway corridor. However, maintaining the highway as a two-lane facility with numerous roadway and private access to the highway will constrain future local and regional mobility.

The No Build Alternative will not support planned growth and development and may impact the ability to develop the facility as planned. In the years to come, traffic congestion will increase. This reduced level of service on the highway could deter businesses from locating in Jerome County's designated Commercial Overlay Zone along US-93 between I-84 and SH-25.

3.3.2.2 Build Alternative

The Build Alternative will not adversely affect planned development or zoning along the US-93 corridor. The alternative is consistent with the *Jerome County Comprehensive Plan* as well as the Commercial Overlay Zone. Moreover, the Build Alternative is consistent with local and statewide transportation plans. The Build Alternative to widen the highway and make other improvements will be a benefit to the existing and planned land uses along the highway corridor. The Build Alternative is consistent with the County's Commercial Overlay zone and the vision for development along the corridor.

The conceptual engineering design of the Build Alternative, however, will require the acquisition of an estimated 54 acres of land from adjacent private property owners. This acquisition is less than earlier conceptual plans for the alternatives documented in the US-

93 Needs Assessment. The Build Alternative utilizes the existing US-93 roadway section and right-of-way and is widened to both the east and west to avoid acquisition of several other properties, including historic resources.

Anticipated property acquisition, however, will be acquired along both the east and west sides of the existing right-of-way of US-93. Table 3-1 below is a summary of these anticipated right-of-way acquisitions.

TABLE 3-1. PROPERTY ACQUISITION OR OTHER EFFECTS FOR THE BUILD ALTERNATIVE

Milepost	Property Description	Land Use	Acres Required	Comments
<i>Right-of-Way on the East Side of US-93</i>				
53.5	Crossroads of Idaho: Flying J Truck Stop, Days Inn Hotel, Southern Idaho Freightliner (north of Flying J)	Business	No right-of-way needs to be acquired.	Access shifted 450 feet north of existing access. Free right turn lane from west bound I-84 interchange.
54.1 to 54.7 (400 South)	Agricultural property	Agricultural	8.9 Acres	Lickley farm located between 450 South and 400 South. Abandoned tenant house will be impacted.
54.7 (400 South) to 55.1	Agricultural property	Agricultural	3.9 acres	Wild Rose Ranch - no ROW impacts to the historic Wild Rose Ranch historic boundaries.
55.2 to 55.6 (EIRR tracks)	93 Business Park	Business	4.5 acres	Currently under construction; no buildings will be impacted.
55.6 to 55.7	Agricultural property	Agricultural	1.7 acres	Agricultural property located between the EIRR tracks and 300 South.
55.7 to 56.2	El Costa Plenta Ranch	Agricultural	8.9 acres	
56.2 to 56.5	Agricultural property	Agricultural	2.7 acres	From El Costa Plenta Ranch to the L Canal.
56.6 to 56.6	Agricultural property	Agricultural	0.6 acres	
56.7 to 57.0	93 Golf Ranch	Recreation	0.4	200 South to D-5 Ditch.
58.5 to 58.7	Agricultural property	Agricultural	1.1 acres	North of the Simplot storage and SH-25.
<i>Right-of-Way on the West Side of US-93</i>				
54.4 to 54.6	R & V Trust (potato storage)	Business	0.3 acres	Strip take; no buildings impacted.
54.6	Magaw Warehouse and Storage	Business	0.1 acres	Strip take; no buildings impacted.
54.6 to 54.7	Magic Homes Inc.	Business	0.3 acres	Strip take; no buildings impacted.
54.7 (400 South) to 55.6 (EIRR tracks)	Agricultural property	Agricultural	8.4 acres	Resident located at MP 55.1 (west side) will be acquired along with two outbuildings.
56.0 to 56.2	Agricultural property	Agricultural	1.0 acre	
56.2 to 56.5	Agricultural property	Agricultural	2.0 acres	
56.5	Agricultural property	Agricultural/residential	1.2 acres	

TABLE 3-1. PROPERTY ACQUISITION OR OTHER EFFECTS FOR THE BUILD ALTERNATIVE

<i>Milepost</i>	<i>Property Description</i>	<i>Land Use</i>	<i>Acres Required</i>	<i>Comments</i>
<i>Right-of-Way on the West Side of US-93 (continued)</i>				
56.5	Y-R Homes	Business	0.7 acres	Possible acquisition; continuation business operation uncertain.
56.5 to 56.7	Agricultural property	Agricultural	2.1	
56.7 to 57.0	Agricultural property	Agricultural	4.3 acres	200 South to D-5 Ditch.
58.5 to 58.7	Agricultural property	Agricultural	0.9 acres	Between the BLM Wildlife Tract J10 and SH-25. No right-of-way required for the BLM Wildlife Tract J10.

In general, the acquisition of property will not affect existing land use. Narrow sections of land would be acquired from a total of 14 agricultural properties. One residence (MP 55.1) will be acquired as part of the Build Alternative (see Appendix B Sheet B-3 for location of residential relocation for the Build Alternative). Narrow sections of land in the front of six existing commercial businesses will similarly be affected, though driveway access and/or parking may need to be modified on the site to accommodate continued operation of the existing land use. Several acres of land will be acquired from the 93 Business Park, which is currently being developed.

3.3.3 Secondary and Cumulative Impacts

The Build Alternative is consistent with the County's Commercial Overlay Zone designation along the US-93 corridor. It is anticipated that commercial businesses will continue to grow along US-93 within the Commercial Overlay Zone. The Build Alternative will facilitate this growth and land use will be converted from agricultural uses to more business and commercial development type uses.

As previously discussed, the area along US-93 within the project limits has been designated as a Commercial Overlay Zone. One of the purposes of the commercial overlay zone is to attract new businesses to the area to help diversify the economy and to provide new jobs. The area will continue to convert from its historically agricultural uses to businesses. The cumulative impacts (incremental) for Land Use and Relocations is anticipated to follow the trend of converting agricultural lands for business parks and other uses.

3.3.4 Mitigation

The acquisition of additional right-of-way will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, as well as laws of the State of Idaho. Additional mitigation will include the following:

- A plan will be prepared that identifies the process, procedures, and the time frame for right-of-way acquisition and relocation of affected residents and businesses; and
- Relocation resources will be made available to all relocated residential and commercial property owners without discrimination; and if comparable dwellings are not available at the time the Project is advanced to construction, housing of last resort will be provided as stipulated by federal and state laws. This provision includes construction of a new replacement dwelling, rehabilitation of an existing replacement dwelling, and special financing arrangements at a reasonable cost.

3.4 AGRICULTURE AND FARMLANDS

This section discusses the agricultural and farmland areas and production along the US-93 Project corridor and evaluates the impacts resulting from the No Build and Build Alternatives. Figure 3-1 shows the areas along the Project corridor that are currently being used for farming and agricultural uses. As discussed in Section 3.3 – Land Use and Relocations, agricultural and farmlands are the predominant land uses in Jerome County and along the US-93 Project corridor.

Prime and unique farmland is provided protection under the Farmland Protection Policy Act (FPPA) found in 7 Code of Federal Regulations (CFR) Part 658. The FPPA is intended to minimize the impacts to farmlands (as defined by in 7 CFR 658) from federal programs and actions. The act also assures that to the extent possible federal actions are administered to be compatible with state, local units of government, and private programs and policies to protect farmland. The FPPA requires federal agencies:

- To use specific criteria to identify and take into account the adverse effects of their programs on the preservation of farmland;
- To consider alternative actions, as appropriate, that lessen adverse effects; and
- To ensure that their programs, to the extent practicable, are compatible with state, local government and private programs and policies to protect farmland.

3.4.1 Affected Environment

The farming and agricultural operations along the US-93 corridor include major row crops and one dairy farm is located adjacent to the Project corridor. The area is irrigated by the North Side Canal via the K Coulee Canal, L Canal and its associated laterals, and the D-5 Ditch. In Jerome County, the average farm size is 284 acres.

3.4.1.1 Prime, Unique, or Farmland of Statewide or Local Importance

Information regarding farmlands within Jerome County was obtained from the U.S Department of Agriculture, Natural Resources Conservation Service (NRCS) located in Jerome and from site visits to the Project corridor. In 2003, the NRCS issued the *Soil Survey of Jerome County and Part of Twin Falls County, Idaho*. Maps from this report were reviewed to identify prime and unique farmlands along the Project corridor.

The NRCS defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Prime farmlands have a soil quality, growing season and moisture supply needed to produce economically sustained high yields of crops. These farmlands must have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable soil acidity or alkalinity, acceptable salt and sodium content, and minimal or no rocks or other obstructions⁷. Also, prime farmland does not include land already in, or committed to, urban development or water storage.

Generally, the soils along the US-93 corridor are silt loam with less than 4 percent slope. Listed soil types are those that meet the requirements for prime farmland and are found along the Project corridor⁸.

⁷ U.S. Department of Agriculture Handbook No. 18, October 1993

⁸ Soil Survey of Jerome County and Part of Twin Falls County, Idaho 2003

- Bahem silt loam, 1 to 4 percent slopes;
- Barrymore silt loam, 1 to 4 percent slopes;
- Rad silt loam, 2 to 4 percent slopes;
- Shano silt loam, 1 to 4 percent slopes; and
- Sluka silt loam, 1 to 4 percent slopes.

As shown in Figure 3-3, all the farmland along the corridor is considered prime and unique as defined by the FPPA and NRCS.

3.4.1.2 Irrigation

Irrigation in Jerome County is supplied by the North Side Canal through its associated canals, ditches, and laterals. Water is diverted out of the Snake River at Milner Dam (12 miles west of Burley) into the North Side Canal which serves 165,000 acres of farmland in Jerome County and surrounding area. Within the Project corridor, irrigation water is received from the L Canal, K Coulee, and the D-5 Ditch that originate from the North Side Canal. Within the US-93 Project area, four laterals divert from the L Canal: L2 Lateral, L3 Lateral, L4 Lateral, and the L4A Lateral.

3.4.2 Environmental Consequences

3.4.2.1 No Build Alternative

The No Build Alternative will not impact any prime farmland.

3.4.2.2 Build Alternative

In discussions with Hal Swensen, Assistant State Soil Scientist, Natural Resources Conservation Service (NRCS), stated that the project area is not exempt from farmland protection under the FPPA even though it has been designated as a Commercial Overlay Zone. The project area is not within an incorporated city. Therefore, form AD 1006 was completed and is included in Appendix C.

The Build Alternative will require the direct conversion of 47.8 acres of prime farmland along the Project corridor. The required right-of-way will be strip takes along the adjoining sides of the farmland areas. No farms will be bisected by the Build Alternative and none will be impacted beyond the ability to remain an agriculturally productive property.

To assist federal agencies and the NRCS evaluate the extent a project will affect prime farmlands, a Farmland Conversion Impact Rating (form AD 1006) is used. This form is found in Appendix C along with correspondence from the NRCS. Portions of form AD 1006 were completed by the Federal Highway Administration (FHWA) through ITD with the remaining sections completed by the NRCS. The Farmland Conversion Impact Rating includes the total acres of prime farmland to be converted directly and indirectly, a land evaluation and criteria, and 12 site assessment criteria. When the land evaluation criteria and the site assessment criteria total 160 or more points, the federal agency must consider alternatives that avoid impacts and measures to minimize harm to prime farmlands. The conversion impact rating for this Project totaled 154 points; no further analysis is required.

3.4.3 Secondary and Cumulative Impacts

As discussed in Section 3.3 – Land Use and Relocations, the US-93 corridor between I-84 and SH-25 has been designated as a Commercial Overlay Zone by Jerome County. The designated overlay zone extends ¼ mile each side of US-93. The purpose of the overlay

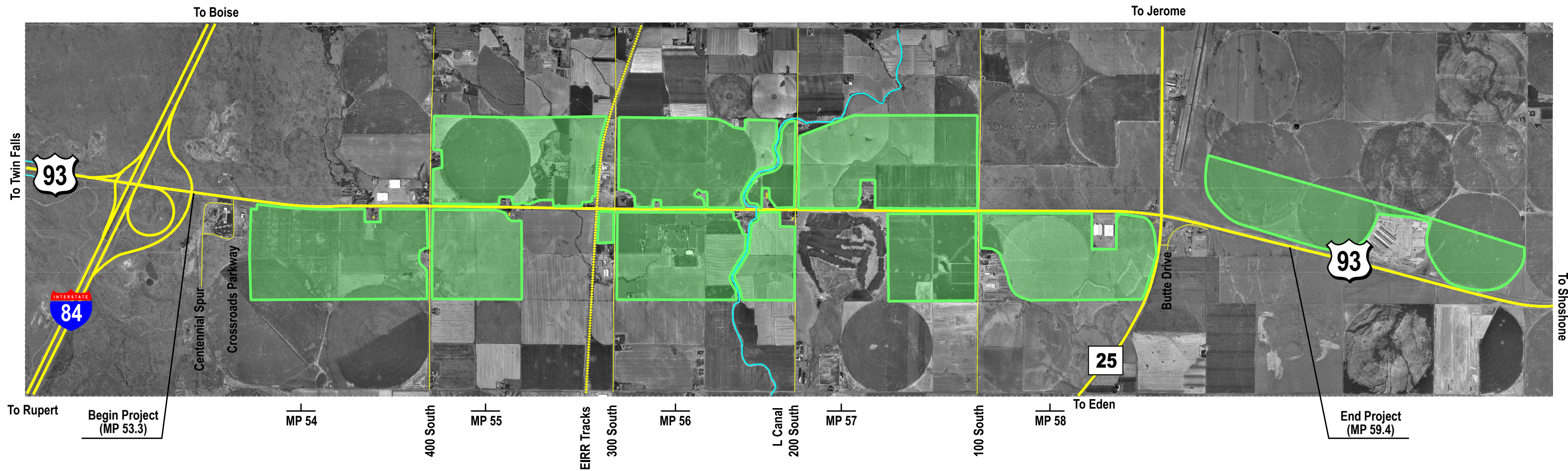
zone is to attract businesses and industrial establishments to the area. The Build Alternative will further facilitate the development of the Commercial Overlay zone, ultimately resulting in the indirect conversion of agricultural resources and lands to commercial or other land uses.

The Build Alternative is consistent with the County's Commercial Overlay Zone designation along the US-93 corridor. It is anticipated that commercial businesses will continue to grow along US-93 within the Commercial Overlay Zone. The Build Alternative will facilitate this growth and land use will be converted from agricultural uses to more business and commercial development type uses.

3.4.4 Mitigation

ITD will maintain access to existing farmland and agricultural areas. Needed right-of-way will be acquired in accordance with the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended. ITD and the Contractor will coordinate with impacted farmers along the corridor during the design and construction phases of this Project.

Any potential effects of the Build Alternative to water delivery systems and irrigation ditches, canals, and ponds will be reconstructed and relocated to maintain continuity and use of the systems. Impacted irrigation features including canals, laterals, ditches, ponds, and pivots will be restored and relocated outside of the new roadway width.



No Scale

Figure 3-3
Prime and Unique Farmlands



LEGEND

 Prime and Unique Farmland



3.5 ECONOMIC ENVIRONMENT

3.5.1 Affected Environment

3.5.1.1 Regional Economy

Based on the worker travel patterns described earlier in this document, a sizable share of the population growth of Jerome County is linked to the economic activities of Twin Falls County. The City of Twin Falls is the business center serving the region's rural-agricultural economy.

Twin Falls is the state's fifth largest city and home to many of the region's largest employers. The foundation of the county's economy is food products and other manufacturing. Approximately 1,400 workers are employed at three large food-processing plants; the Lamb Weston, the Amalgamated Sugar Company, and Glanbia Foods, Inc. Twin Falls is the regional financial and services center for south-central Idaho. The Magic Valley Medical Center and the Twin Falls Physicians Clinic employs more than 1,100 workers.

The economic development of Magic Valley is a common story in the West. The region is naturally arid and the landscape barren. The construction of Magic Valley Reservoir just north of the Lincoln County line secured the availability of water and stimulated agricultural development. Row crop farming is predominant, though commercial trout hatcheries and trout farms and dairies have grown in number during the 1990s. The region is distant from major population centers; therefore, food production plants associated with these agricultural sectors have located in the region. In particular, milk processing and cheese manufacturing have diversified the region's economy and dependence upon row crop farming. This growth in dairy farming and associated food processing is counter to national trends and has provided many good paying jobs to local residents. Currently, the area is experiencing continued growth in the dairy farm and commercial sectors.

3.5.1.2 Employment

Due to the close economic ties with Twin Falls, the strength of the Jerome County economy is best examined on a regional basis. The Idaho State Department of Commerce and Labor analyzes the south-central area of Idaho (Region 4) as a single regional economy and includes Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls counties (known as Magic Valley). Over the past 15 years, employment in this region has increased substantially. Between 1990 and 1999, total employment increased from 61,659 to 69,027, an average annual increase of 1.3 percent per year. This modest growth, however, was followed by strong economic expansion. Total regional employment by 2005 had increased to over 90,000, thus producing an average annual increase of 3.1 percent per year. In the region, employment in Twin Falls County comprises 42 percent of the regional employment, whereas employment in Jerome County comprises only 11 percent.

In 2005, Jerome County had a total labor force of 10,449, with 10,090 persons employed and 359 unemployed. Because of the overall growth occurring in the county, the unemployment rate has decreased from a high of 6.6 percent in 1993 to a low of 3.4 percent in 2005. This general decline has been attributed to diversification in the county's economy. In Jerome County, agriculture has been the historic foundation of the local economy. The trade, utilities and transportation sector is the largest sector of the economy followed by the agriculture sector. Together, these two sectors comprise over 50 percent of total employment. In recent years, the dairy industry in particular has increased dramatically and a number of related food processing and transportation businesses have located in the

county. Major employers in the county include: Jerome Cheese, Aardema Dairy, City of Jerome, County of Jerome, Rite Stuff Foods, St. Benedicts Medical Center, Progressive Logistics, Wal-Mart, Jerome School District, Spears Manufacturing, and Lott Trucking, Inc⁹. Growth in dairies, cheese processing and light manufacturing has helped stimulate the local retail market as well. Wal-Mart opened a large supercenter store in 2000, employing over 400 people.

This overall economic growth has gradually reduced unemployment over the past 15 years. The demand for labor has helped reduce the number of migrant or seasonal workers because many have been able to obtain regular full-time jobs, further stabilizing the local work force. Thus, the low unemployment rate reported of 3.4 percent for 2005 is expected to remain well below state averages (Idaho Commerce and Labor Department, 2006).

One element that is expected to continue to contribute to future economic growth in Jerome County is the spillover of development extending from Twin Falls. Twin Falls is the regional center for retail and service industries in south-central Idaho and has experienced steady growth in recent years. This growth has led to new employment opportunities as reflected by the city's unemployment rate which has declined from 7.1% in 1992 to 4.3% as of June 2004 (Southern Idaho Economic Development Organization (SIEDO), 2005). As Twin Falls expands, growth in outlying communities will continue and the Commercial Overlay Zone in Jerome County is intended to direct some of this highway-oriented development to the US-93 corridor.

3.5.1.3 Existing Businesses

Property located within the US-93 highway corridor includes a number of existing businesses. They are not clustered along the highway, but rather are scattered along the entire length of the corridor. The businesses in the south portion of the study area cater to the needs of travelers on I-84, particularly for freight trucking. Others serve the local automotive and building construction industry. There are businesses associated with the local agricultural activities and two retail establishments for manufactured homes. The existing businesses and commercial properties located along US-93 from south to north include the following:

- Days Inn Hotel;
- Flying J Truck Stop;
- Southern Idaho Freightliner
- Snake River Enterprise (six-business office complex south of the KOA Campground);
- KOA Campground;
- R & V Trust (potato storage complex north of the KOA Campground);
- Magaw Warehouse and Storage;
- Magic Homes Inc. (manufactured housing);
- 93 Business Park;
- Idaho Sand and Gravel (previously known as Bannock Paving Company);
- Y-R Homes (manufactured housing);
- 93 Golf Ranch;

⁹ Idaho Department Commerce and Labor, 2005b

- Simplot Storage;
- A & G Irrigation; and
- Dino's Burgers and Brew.

3.5.1.4 Future Commercial Development

There are three planned business parks proposed along the corridor (see Figure 3-1) and these proposed developments include the following:

- Crossroads Point Business Center is located on the northwest corner of the intersection of the I-84 off-ramps and US-93. The development site is 492 acres and the 253-acre Phase I infrastructure construction is currently under development. Proposed businesses include a 25-bed hospital, a ground transportation company, service station(s), restaurant(s), hotel(s), and professional office space.
- Railway Business Park is located on the west side of US-93 and south of the railroad tracks. This business park has received preliminary approval from Jerome County and plans include a lumber yard, storage unit area, feed store, and two office buildings.
- 93 Technical Park is located north of the existing cluster of businesses on the northeast corner of the intersection of US-93 and SH-25. Construction of this 68 acre high tech business park has been initiated with a \$2.70 million grant from the Economic Development Administration. The proposed 2005-2006 Jerome City budget identifies infrastructure improvements for this business park.

The Project corridor has a Commercial Overlay Zone designation in the *Jerome County Comprehensive Plan*. As such, future development of business, commercial, and industrial establishments are expected in the years ahead.

3.5.1.5 Government Revenue

Two key sources of locally generated government revenue are sales and property taxes. In Idaho, the state levies a five percent sales tax. A few local governments participate in the local option program, but Jerome County does not levy a local sales tax. As a result, a primary source of revenue for the local government entities, such as the county government and the school district, is property taxes. The 2005 average property tax levy for all taxing districts in Jerome County was 1.585 percent. This tax rate is levied on the county's more than 10,400 real properties.

3.5.2 Environmental Consequences

3.5.2.1 No Build Alternative

The No Build Alternative will not impact the economic conditions of the area. There will be no effect on the regional economy, area employment, existing businesses, or government revenues. Future commercial development is planned, but the lack of highway improvements may dissuade businesses from locating along the US-93 highway corridor.

3.5.2.2 Build Alternative

The Build Alternative will help facility the county's plan to develop the US-93 corridor into a regional commercial, industrial, and business center benefiting the regional economy.

Long-term, the Build Alternative will not directly affect employment in the area. The on-going maintenance work for the improved highway corridor will be added to the workload of existing staff. No new jobs will be created. Indirectly, though, the proposed improvements

to US-93 will facilitate the development of commercial and light industrial uses in the corridor consistent with the Commercial Overlay Zone. The construction of these buildings will provide space for new and re-located businesses. The operation of these new businesses will ultimately increase employment and government revenues to Jerome County. The proposed widening of US-93, however, will require the purchase of both land and buildings along the corridor. The following list identifies specific long-term effects resulting from property acquisition and/or construction of the proposed Project:

- Days Inn Hotel, Flying J Truck Stop, and Southern Idaho Freightliners - Access will be shifted to the north of the existing Crossroads Parkway to the future 500 South intersection (see Figure B-1 in Appendix B). Also, a right turn lane will be constructed to the new 500 South road from the I-84 northbound off ramp to help with congestion and traffic movements in southern portion of the Project corridor;
- R & V Trust (Potato Storage) - A small strip land (less than 0.3 acres) will be purchased from the property owner. No buildings or parking will be affected;
- Magaw Warehouse and Storage - The Build Alternative will require 0.1 acre of property from this business. No buildings will be impacted;
- Magic Homes Inc. - The Build Alternative will require the purchase of 0.2 acres along the property frontage along US-93. No buildings, parking, or existing access will be affected;
- 93 Business Park - The Build Alternative will require 4.5 acres from this business park. None of the existing structures will be affected and the accesses will remain at their current location;
- Y-R Homes - The Build Alternative will require 0.7 acres, which is 42 percent of the parcel property; and
- 93 Golf Ranch - The Build Alternative will require 0.4 acres from this golf course. However, none of the holes or amenities will be affected and the existing access will not change.

In total, 6.3 acres of commercial land will be purchased for the Build Alternative. This will affect a total of six businesses currently located along the highway corridor. The access to several other commercial properties also will be modified.

Along the entire corridor, a total of 54 acres of privately owned property will be purchased, which will reduce the property tax base of Jerome County. This reduction, however, is very small compared to the over 276,000 acres of real property in the county. As such, the loss of property taxes from the conversion of the private property to public right-of-way will not substantially reduce local government revenues. Furthermore, the redistribution of needed local government tax revenue to the remaining property tax payers will not be substantial. Indirectly, the planned commercial development will increase property tax revenues to local governments. These future economic gains would be expected to more than offset potential tax losses associated with right-of-way conversions. The highway improvement also will support planned commercial development, which over time will increase sales tax revenues to the government. The amount of this increase, however, cannot be estimated at this time without any certainty as to the number, size, and type of businesses that may locate in the commercial business center planned along US-93 between I-84 and SH-25.

3.5.3 Secondary and Cumulative Impacts

The Build Alternative will help to facilitate the planned growth along the corridor, ultimately in providing additional jobs and increased economic diversity to the region.

3.5.4 Mitigation

None required for this resource.

3.6 SOCIAL

3.6.1 Affected Environment

3.6.1.1 Regional and Community Growth

The US-93 proposed Project would provide improvements to a portion of the highway that serves as a regional commuting route between the cities of Twin Falls, Jerome, and Shoshone. Population growth in these cities as well as unincorporated Jerome County has contributed to the need for these highway improvements. Twin Falls is located four miles south of the southern terminus of the proposed Project. Shoshone is located in Lincoln County, approximately 15 miles north of the US-93/SH-25 intersection. Since 1990, population in these cities and counties has increased 19 to 32 percent as the region has grown. Between 2000 and 2004, local growth rates have been slower, but these jurisdictions continue to show increasing population. Table 3-2 shows population trends in the Jerome County and the key cities and counties served by the proposed Project.

TABLE 3-2. POPULATION TRENDS

<i>Location</i>	<i>1990</i>	<i>2000</i>	<i>2004</i>	<i>% Change 1990-2000</i>	<i>% Change 2000-2004</i>
Jerome County	15,220	18,440	19,279	21.2%	4.5%
City of Jerome	6,529	8,039	8,377	23.1%	4.0%
Lincoln County	3,350	4,060	4,326	21.2%	6.6%
City of Shoshone	1,249	1,488	1,496	19.1%	0.5%
Twin Falls County	53,790	64,350	67,935	19.6%	5.6%
City of Twin Falls	27,634	36,742	37,619	32.9%	2.4%

Source: U.S. Census Bureau, 2000; Idaho Department of Commerce and Labor, 2005a.

The proposed highway improvements would occur in unincorporated Jerome County, which is transitioning from a rural agricultural county to a more urbanized area due to commercial rezoning. The county's population has experienced steady growth over the last 15 years. It grew from 15,138 in 1990 to 18,342 by 2000. This growth trend continued as the county's population in 2004 was 19,279. The City of Jerome is the county seat and is located approximately four miles west of the US-93/SH-25 intersection. The population in the City of Jerome has also been increasing, from 7,780 in 2000 to an estimated population of 8,377 in 2004¹⁰.

Population forecasts for the three-county area indicate that growth rates in the region are expected to continue to increase over the coming decades. In 2030, the population in Jerome County is expected to be 26,470, in Lincoln County the population is expected to be 6,060, and in Twin Falls County the population is expected to be 83,550 (Church, 2004a). According to these forecasts, the regional population increase would be approximately 26.8 percent over the next 25 years. Population forecast information is shown in Table 3-3.

¹⁰ U.S. Census Bureau, 2000; and Idaho Department of Commerce and Labor, 2005a

TABLE 3-3. POPULATION FORECAST, 2004-2030

County	2004	2030	Pop. Increase	% Change
Jerome	19,279	26,470	7,191	37.3%
Lincoln	4,326	6,060	1,734	40.1%
Twin Falls	67,935	83,550	15,615	23.0%
TOTAL	91,540	116,080	24,540	26.8%

Source: Idaho Department of Commerce and Labor, 2005a; Church, 2004a.

3.6.1.2 Population Characteristics

Demographic characteristics for Jerome County and the census tract block group encompassing the Project corridor were reviewed to characterize the local residents. Information reviewed included race, ethnicity, household characteristics, income, mobility disabilities, and access to personal vehicles. Table 3-4 shows the racial and ethnic composition of the local population. The Project area is 92.4 percent White, which is a "race" by definition, with the remainder being other races (see Table 3-4). Of the total population, an estimated 13.7 percent of the population is Latino or Hispanic, which is an ethnicity (could be of one or more races). Compared to the county statistics, the population in the Project area has a small proportion of the population that is Non-White, but a larger proportion that is Latino or Hispanic.

TABLE 3-4. RACIAL AND ETHNIC CHARACTERISTICS

Racial and Ethnic Groups	Jerome County	Percent of County	Project Area ¹	Percent of Project Area
TOTAL ²	18,342	100.0%	1,111	100.0%
White	15,955	86.9%	1,027	92.4%
Black or African American	42	0.2%	3	0.2%
American Indian and Alaskan Native	126	0.6%	0	0.0%
Asian	50	0.2%	5	0.4%
Native Hawaiian and Other Pacific	9	< 0.1%	0	0.0%
Some other race	1,805	9.8%	62	5.5%
Two or more races	355	1.9%	14	1.2%
Total Non-White	2,387	13.1%	84	7.6%
Hispanic or Latino ³	3,150	17.1%	152	13.7%

Source: U.S. Census Bureau, 2000.

Notes:

1. The Project area is census tract 9705 block group 3. This is a very large area that extends approximately two miles west of the corridor, two miles north of the north terminus, northeast to the North Side Main Canal beyond SH-25, east to the intersection of SH-25 and SH-50 (approximately eight miles), and southwest to the Snake River. But, this is the smallest geographic area for which sample data, such as household income, is published by the U.S. Bureau of the Census.
2. Sums may not total 100 percent due to rounding.
3. By the U.S. Census Bureau definition, the Latino or Hispanic population can be any race.

A review of other characteristics for the county and the Project area indicates that Project area residents are slightly older than those of the county. There are fewer children and elderly. But, a higher proportion of the study area households rent as opposed to own their homes compared to the county as a whole. Table 3-5 summarizes these population characteristics.

TABLE 3-5. POPULATION CHARACTERISTICS

<i>Characteristics</i>	<i>Jerome County</i>	<i>Project Area (CT 9705 BG 3)</i>
Median Age	32.9	34.0
Children (<18 yrs.)	31.5%	30.0%
Elderly (>64 yrs.)	12.3%	11%
Sex (Male/Female)	51.1% male 48.9% female	54.2% male 45.8% female
Average Household Size	2.89	2.90
Average Family Size	3.33	3.23
Households	6,298	379
Owner occupied units	70.0%	63.3%
Renter occupied units	30.0%	36.7%

Source: U.S. Census Bureau, 2000.

Census data also report financial well-being of residents in Jerome County and the Project area. In 1999, Project area households had a median income of \$38,214, which was slightly greater than the \$34,696 median household income for the county as a whole (U.S. Census Bureau, 2000). A total of 1.5 percent of the households in the Project area receives public assistance income. However, approximately 16.2 percent of population in the Project area has an income that is at or below the federal poverty level. This compares to less than approximately 14 percent of the population in Jerome County that has an income at or below the federal poverty level (U.S. Census Bureau, 2000).

All but seven project study area households (less than 2 percent) have access to a vehicle for personal use. However, an estimated 14.6 percent of the population over the age of 15 years has mobility disabilities and require assistance to go outside of their home.

3.6.1.3 Environmental Justice

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by the President on February 11, 1994, directs federal agencies to take appropriate and necessary steps to identify and address disproportionately high and adverse effects of their projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law.

As a first step, it is important to determine the presence of minority and/or low-income populations or communities that may be located in the project study area. Based on the discussion above about population demographics, minorities and low-income persons reside in the project study area. Approximately 7.6 percent of the project study area population is Non-White, i.e. Persons of Color. This compares to approximately 13.1 percent for all of Jerome County. Approximately 13.7 percent of the project area population is Hispanic (of any race) and this compares to 17.1 percent for the entire County. Moreover, approximately 16.2 percent of the population residing in the project area has an income that is at or below the federal poverty level, which compares to 13.8 percent for the county.

Based on 2000 census data, racial and ethnic minorities as well as low-income persons clearly reside in the project study area. The percent of the population that is a racial or ethnic minority, however, is markedly lower than the demographic characteristics for Jerome County. This is somewhat expected as the largest proportion of the county's population resides in the city of Jerome. The project study area, however, has a higher proportion of the population that resides at or below the federal poverty level compared to county-wide statistics, despite the statistics that indicate that the median household income for residents

in the project study area is slightly greater than for all households in the county.

To help assess the specific demographic characteristics of the Project corridor and how it might be different from the very large area encompassed by the project study area defined by census tract 9705 block group 3 and to assess current demographic characteristics, windshield surveys were conducted during the project study. As previously described in the discussion of project corridor land uses, there are only a total of 16 residences fronting on US-93 in the project area and they are primarily associated with adjacent agricultural and farm lands. In the course of the project study, a number of these property owners were contacted and/or attended project public meetings. Based on this interaction with corridor residents, there was no indication that minority or low-income persons were residing immediately adjacent to the roadway. In addition, there are only a total of 14 businesses along the highway corridor and these small businesses are primarily highway- or construction-oriented enterprises. None of the businesses advertised names that appeared to be Hispanic, e.g. a Mexican restaurant or grocery store selling specialty ethnic foods. The windshield surveys did not identify any obviously appearing businesses that were owned or operated by minority (racial or ethnic) or low-income persons. Moreover, there were no concentrations or clusters of residences or businesses that obviously appeared to comprise a minority or low-income community or business district that focused on serving minority or low-income persons residing in the larger area.

In conclusion, though there are minority and low-income persons residing in the project study area, research did not appear to indicate that minority or low-income populations or communities are located in the project corridor.

3.6.1.4 Community Cohesion

The evidence of community cohesion is rather illusive in this rural Project study area. There are no churches, community centers, schools, parks, or other type of community facilities within the highway corridor. Existing roads crossing the highway corridor are one mile or more apart and properties are very large. It is generally not feasible for people to walk or bike to neighbors' houses, schools or libraries. People must travel potentially miles by vehicle to purchase goods and services or to visit friends. Considering the existing businesses along the corridor do not cater to the everyday needs of residents (e.g. grocery store, drug store, or barber shop), one must assume these rural residents do the vast majority of their shopping in Jerome or Twin Falls, particularly for larger retail purchases such as furniture or appliances. People do interact through area clubs and social organizations such as churches, school activities, 4-H clubs, and activities at the county fairgrounds and Grange Hall. So, rather than associating geographically with neighbors in the general area, residents may associate more frequently with others with whom they share common interests and those who live in close proximity.

3.6.2 Environmental Consequences

3.6.2.1 No Build Alternative

Under the No Build Alternative proposed improvements would not be constructed and local mobility would not be improved. This will not affect regional or community growth trends, nor will it affect the population or its demographic characteristics. This alternative will not affect existing community cohesion.

3.6.2.2 Build Alternative

- Regional and Community Growth - US-93 is an important transportation route for Jerome County and for the nearby communities. The proposed Project will improve this route and increase the capacity of the roadway to serve local residents.

Commercial growth along the roadway is planned as part of the commercial overlay zone and development of this corridor has already started. Therefore, the Build Alternative will support anticipated commercial development.

- Population - The anticipated acquisition of one residence will result in a slight reduction in the population of the immediate Project area. Considering the average household size for the Project study area is 2.90 persons per household, this property acquisition will displace approximately 3 persons.
- Environmental Justice - To construct the proposed project it is anticipated that one residential property and potentially one commercial business will be acquired by ITD. Based on census information, windshield surveys, contact with some of the project corridor residents and business owners, and observation and discussion with residents at public meetings, it does not appear that the owners or occupants of the displaced structures are a racial or ethnic minority or low-income person. Based on the knowledge about the project area, the project corridor, as well as the displaced land uses, it does not appear that minority or low-income persons would be affected at all, let alone disproportionately affected with adverse effects.

Since the Build Alternative only requires the relocation of one residence there will be no disproportionate impacts to minority or low-income groups. Face to face conversations with the relocated individual indicated that this person is neither a minority or of low-income.

In conclusion, no minority or low-income populations have been identified that would be adversely affected by the proposed Project. Therefore, this Project is consistent with the provisions of Executive Order 12898 that disproportionately adverse effects on minority and low-income populations and community have been avoided.

- Community Cohesion - The existing US-93 roadway was constructed sometime after 1941. Since that time, very little development has occurred adjacent to the roadway. In total, there are only 16 residences and 14 commercial businesses with frontage along the six-mile stretch of the highway project corridor. The proposed construction of the project is anticipated to displace one residence and potentially one commercial business. By far, the majority of the land required for construction is undeveloped or agricultural and consists of narrow slivers of land that comprise only a relatively small proportion of the adjacent agricultural properties, many of which are 10, 20, or more acres in size. Moreover, the property acquisition required would not affect community facilities or services in the community. As a result, the proposed Project will likely have very little effect, if any, on community cohesion. It is anticipated that the residents will continue to shop at the same locations in nearby Jerome or Twin Falls, attend the same churches, school boundaries will not change, and interaction between residents will not change as a result of the proposed project.

3.6.3 Secondary and Cumulative Impacts

The proposed project is needed to improve transportation services along the US-93 corridor, which will benefit regional and local residents as well as business. The proposed improvements are designed to provide access to commercial properties on either side of the highway. As a result, the proposed project will result in a beneficial secondary impact on commercial development in the regional growth.

The proposed project is a transportation project and would not indirectly affect population in the area and will facilitate growth and development already provided for in the local land use plans.

The proposed project will not cause secondary impacts on community cohesion. Local government land use plans already allow land development along the highway freeway that is markedly different from existing land uses. These plans will result in a dramatic conversion of agricultural land, rural farmsteads, and existing small businesses. The proposed land uses will definitely change the character of the highway corridor from primarily rural agricultural to urbanized land uses. The planned and proposed commercial development, some of which has already begun, is focused on large-scale commercial development projects that are highway-oriented. It is these many changes planned and proposed in the project study area, however, that will cumulatively affect local and regional growth, population and employment increases, and community cohesion in the project study area and beyond in the years to come. It is uncertain whether or not this indirect increase in population would change the demographic characteristics of the local population.

3.6.4 Mitigation

The proposed Project will support planned growth and improve mobility along the highway resulting in positive impacts to the local community and economy. No mitigation is recommended as there are no other long-term social effects.

3.7 CULTURAL RESOURCES

This section describes the historic and archaeological resources within the US-93 Project corridor. In accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, the US-93 Area of Potential Effect (APE) has been inventoried for all cultural resources. The APE covers 427 acres and extends 325 feet east and west of US-93 from I-84 to the end of the Project.

A cultural resources report was prepared in 2001 by Shaprio and Associates¹¹. A subsequent addendum report was prepared to supplement the original report and provides additional information regarding eligibility for historic resources in the area. Specifically, the addendum report responded to the Idaho State Historic Preservation Office's (SHPO) request for additional information regarding three historic properties (Lickley Farmstead, Wild Rose Ranch, and the North Side Water Master's House), report new information about the cultural resources in the APE since the 2001 report, and address the cultural resource impacts from the revised Project alignment. The addendum report has been approved by the Idaho SHPO (see letter in Appendix C).

36 CFR 800 defines the term historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. It also includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria. The term eligible for inclusion in the National Register includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria". The term historic property is used throughout this section.

3.7.1 Affected Environment

3.7.1.1 Historic and Prehistoric Land Use

Occupations dating throughout the Prehistoric Period are documented in Jerome County

¹¹ US-93: Petro II to SH-25 Jerome County, Idaho, Archaeological and Historical Survey Report, Archaeological Survey of Idaho

and in the region. The most notable is the Wilson Butte Cave located outside of the Project study area. This cave is one of the oldest known occupation sites in Idaho and in North America. Other well-known sites in the region include the Pence-Duerig Cave, the Mecham Burial site, and the Lower Rock Creek Cave which are all located south of the Project area and associated with the Snake River Canyon.

Early explorers and trappers were present in Idaho in the 18th century. However, the Historic Period in the region begins with the immigration of homesteaders in the later part of the 19th century. Before the development of large scale irrigation projects north of the Snake River Canyon, cattle and sheep ranching were the primary economic resources. The construction of Milner Dam in 1905 and consequently the North Side Canal Company marked the beginning of agricultural development in the Magic Valley. Construction on the canal began in 1907. Newly available and irrigated land was developed under the Carey Act Land Claims. Many of the historic structures along the corridor were originally part of the Carey Act.

The City of Jerome, located west of the Project, was founded in 1907 and served as the focus of business and commerce for the early settlers. Major transportation routes were developed in the area including the Shoshone Falls Road and Blue Lakes Boulevard; both are located outside of the Project study area. Cultural resources include archaeological, historical, and Native American traditional cultural properties (TCP). There are no archaeological or traditional cultural properties within the Project corridor. All resources are historical in nature.

3.7.1.2 National Register of Historic Places Criteria for Evaluation

The quality of history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association. A historic or archaeological resource that is eligible for the National Register of Historic Places (NRHP) has at least one of these qualities and sometimes more. These are described below:

- Resources that are associated with events that have made a major contribution to the broad patterns of our history;
- Resources that are associated with the lives of persons important in our past;
- Resources that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a distinguishable entity whose components may lack individual distinction; and
- Resources that have yielded or may be likely to yield, information important in prehistory or history.

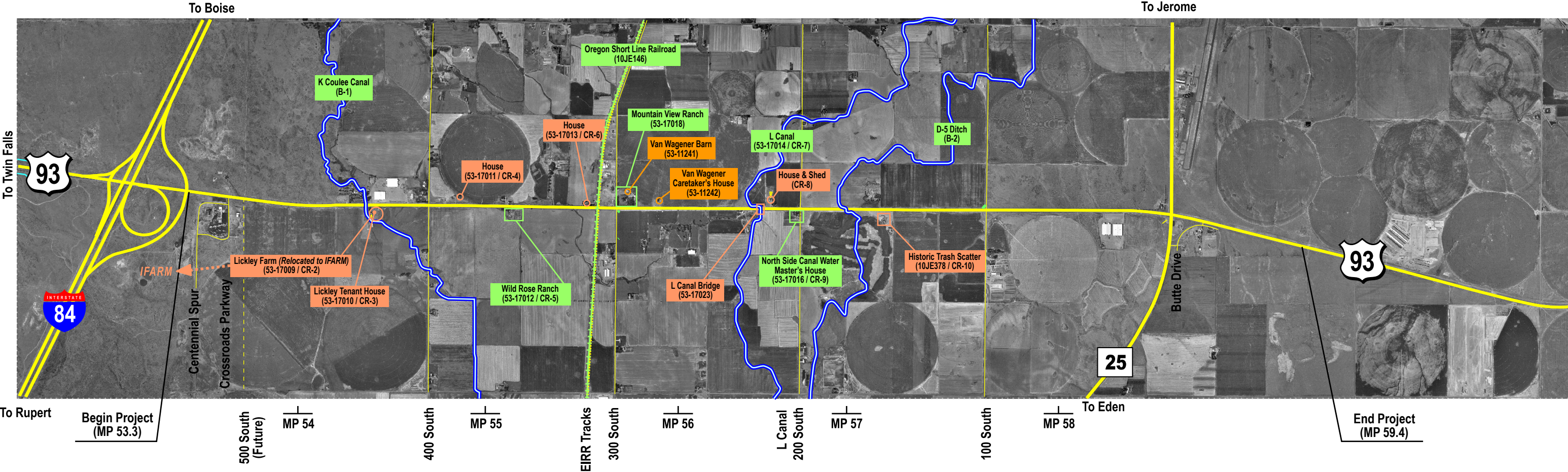
3.7.1.3 Results of Cultural Resources Surveys

A total of 17 historic resources were identified along the Project corridor. Of these, eight are not eligible for inclusion onto the NRHP; the other nine are eligible or are already on the NRHP. Figure 3-4 shows the location of the cultural resources along the corridor. Each of the historic properties is shown in the Table 3-6, found on the following page, with their eligibility rating and criteria.

TABLE 3-6. SUMMARY OF CULTURAL RESOURCES IN THE PROJECT AREA

<i>Name of Site</i>	<i>NRHP Eligibility</i>	<i>NRHP Criteria</i>	<i>Location</i>
K Coulee Canal	Eligible	Criterion A	Crosses US-93 at MP 54.7.
Lickley Farm	Not Eligible		Moved to the IFARM near I-84, off the of the US-93 corridor.
Lickley Tenant House	Not Eligible		MP 54.4, east side of US-93.
House (53-17011/CR-4)	Not Eligible		MP 54.9, west side of US-93.
Wild Rose Ranch	Eligible	Criteria A and C	Adjacent to US-93 east side at MP 55.5.
House	Not Eligible		MP 55.9, west side of US-93, adjacent to the railroad tracks.
Oregon Short Line Railroad (known as the Eastern Idaho Railroad)	Eligible	Criterion A	Crosses Project at MP 55.9.
Mountain View Ranch	Eligible	Criteria A, B, & C	Adjacent to US-93 on west side at MP 56.0
Jacob B. Van Wagener Barn	Listed on NRHP	Criteria A and C	Adjacent to US-93 on west side at MP 56.1
Jacob B. Van Wagener Caretaker's House	Listed on NRHP	Criterion C	Adjacent to US-93 on west side at MP 56.1
L Canal	Eligible	Criterion A	Crosses under US-93 at MP 56.5
L Canal Bridge #1	Not Eligible		Located at MP 56.5.
House and shed	Not Eligible		MP 56.6, west side of US-93.
North Side Canal Water Master's House	Eligible	Criteria A, B, & C	Adjacent to US-93 east side at MP 56.7.
D-5 Ditch	Eligible	Criterion A	Crosses US-93 at MP 57.0.
Trash scatter	Not Eligible		Not available
Isolate find	Not Eligible		Not available

Table is from the Addendum Cultural Resources Report



No Scale



LEGEND

- Eligible for NHRP
- Properties listed on NHRP
- Not eligible for NHRP



Figure 3-4
Cultural Resources

The following is a brief description of each site eligible or listed on the NRHP and their applicability to the historic register.

- **K Coulee Canal**
This canal is one of the larger channels that traverse the Project area. It crosses US-93 about 1,800 feet south of 400 South (see Figure 3-4). It diverts from the North Side Canal nearly six miles east of the Project area, and terminates at the L Canal, west of the Project area. The K Coulee Canal at one point was a natural stream; however it is now a part of the North Side Canal irrigation system. The K Coulee Canal at US-93 is eight feet wide where it meets a box culvert that carries it underneath the roadway. The K Coulee Canal flows through the previously historic Lickley Property (not eligible). The canal is associated with the box culvert and is eligible for the NRHP under criterion A. It is important to local history in the area of irrigation, agriculture, and settlement.
- **Wild Rose Ranch**
This historic property includes the following contributing structures: south house, south shed/garage, well house, two barns, corral, loafing barn, horse shed, fencing, and corral. Non-contributing structures include the south and central parking lots, central south house, some landscaping, and the north modern barn and shed. The house was originally a prove-up structure for a Carey Act Claim, built in 1909. The house has had structural modifications but the original building remains in the southwest portion of the current house. The major structural changes took place prior to 50 years ago. The well house and at least one barn were built at the same time as the original house. The remaining buildings were added in the following two decades. As a whole, the buildings and their layout provide a good example of an early 20th century farmstead and exhibit fine architectural craftsmanship. The property is eligible for the NRHP under criterion A for the farmstead's importance to the broad patterns of local agricultural history.
- **Oregon Short Line Railroad**
This railroad is owned, operated and maintained by the Eastern Idaho Railroad. The railroad was not recorded during the previous 2001 Cultural Resources Survey (Sayer 2001), and therefore, it was evaluated as part of the Addendum Report prepared by Bionomics. Construction on the Oregon Short Line (OSL) began in 1881. It extends nearly 612¹² miles from Granger, Wyoming, across southern Idaho, to Huntington, Oregon (Hudson and Bowyer 1996). The portion of this railroad OSL documented for this Project is restricted to the rail line crossing at US-93, southeast of Jerome, Idaho (see Figure 3-4). This railroad is an active rail line with approximately two crossings a day at US-93. The site as a whole retains integrity of setting, location, and association with the early development of transportation corridors and commerce in southern Idaho. It is eligible for the NRHP under criterion A in the areas of transportation and commerce.
- **Mountain View Ranch**
The Mountain View Ranch property contains the Jacob B. Van Wagener Barn and is located next to the Jacob B. Van Wagener Caretaker's House (both described below). The two-story house on this property was built in 1909 and reflects the rural tradition of the French Colonial style. The farmstead originated as an apple orchard with trees being planted on 40 acres in 1910 and 1911. After 1912, the property also

¹² The EIRR operates on these tracks a short line service between Rupert and Gooding, a distance of nearly 58 miles.

functioned as a dairy for several decades. The main house is eligible for the NRHP under criteria A, B, and C for its architecture and agriculture, as well as its association with Mr. Van Wagener and the structures on the property already listed on the NRHP.

- **Jacob B. Van Wagener Barn**
 The property is known to the local community as the Spanbauer Farm, but is historically documented as the Mountain View Ranch and/or the Van Wagener house and barn. The lava rock barn was built in 1912. The Gambrel-roofed, three-story barn has two rectangular cupolas. The barn is important for its size, style, workmanship, and its association with the agricultural development of the North Side Canal Project (Anderson 1978). The barn was placed on the NRHP under the criteria A and C.
- **Jacob B. Van Wagener Caretaker's House**
 The Caretaker's house is a one-and-one-half story lava rock structure with a gabled roof. The Caretaker's House is north of the Mountain View Ranch. It has two frame additions, one on the front and one on the back. This is the earliest known house to be built by master mason H.T. Pugh. The house is already listed on the NRHP under criterion C for its association with master mason H.T. Pugh (Anderson 1978).
- **L Canal**
 The L Canal is located about 1,200 feet south of 200 South at MP 56.9 (see Figure 3-4). It is part of the North Side Canal system built between 1907 and 1910 by the Twin Falls North Side Land and Water Company. The North Side Canal system originates at Milner Reservoir on the Snake River, and is used to convey irrigation water to approximately 165,000 acres of farm and pasture land in Jerome, Gooding, and Elmore counties (Sayer 2001). All irrigation waterways present at the Project area originate from the North Side Canal. The L Canal is a lateral that diverts off the North Side Canal east of the Project area and terminates near Jerome City back into the North Side main canal. As a whole, this linear site is eligible for the NRHP under criteria A. It is important to Jerome's history of irrigation and agriculture. Within the Project corridor, components of the L Canal include the L2, L3, L4, and L4A laterals.
- **North Side Canal Water Master's House**
 This historic property is part of a 1909 Idaho Farms Claim made by the developers of the North Side Canal Project. The North Side Canal Company built the house for the Water Master who was employed by the company to maintain the irrigation system in the area. The house has been occupied by Water Masters for the past 90 years. It represents skilled craftsmanship and is in good condition (Sayer 2001). The structures and historic property are eligible under criteria A. The historic property and features are important to the history of Jerome County and the history of agriculture and irrigation in southern Idaho. The property includes 1.75 acres of land surrounding the site's contributing elements which include the mature landscaping, the irrigation ditch near the house, the house itself, the root cellar, and the barn. The original house has been modified, but according to the current resident, the additions all date to over 50 years old and are within the historic period. The house represents skilled craftsmanship and remains in good condition. These structures have retained their historic integrity and are contributing elements of the property. Non-contributing elements include the concrete parking area, the driveway, the shed, and the dilapidated fencing, shed, and metal bin east of the main portion of the property (Sayer 2001).

- D-5 Ditch

This ditch is located 1,300 feet north of 200 South (see Figure 3-4). At the US-93 crossing it is approximately four feet wide. The D-5 Ditch diverts from the North Side Canal east of the Project area and terminates at the L Canal, west of the Project area. The D-5 Ditch was built a few years later than the L Canal and associated laterals, which gives it a relative construction date of 1915 (personal communication with Ted Diehl). The banks of this ditch have been stabilized with rip-rap and the bottom of the channel has been dredged. The D-5 Ditch is eligible for the NRHP under criterion A. It is important to the broad patterns of local history in irrigation, agriculture, and settlement. The linear site maintains its historical alignment, it is in good condition and it is currently being used as it has for nearly a decade.

3.7.2 Environmental Consequences

3.7.2.1 No Build Alternative

The No Build Alternative will not impact any of the cultural resources along the Project corridor.

3.7.2.2 Build Alternative

Properties that are not eligible for inclusion onto the National Register of Historic Places are not protected by Section 106. Therefore, the environmental evaluation does not consider alternatives to avoid or minimize the impacts to these resources. However, consideration is given to these resources for avoiding if possible.

The historic resources recommended eligible or are eligible for inclusion onto the NRHP are given certain protection. The impacts to historic properties resulting from the proposed Project are categorized by criteria established by Section 106 and its implementing regulations, 36 CFR 800. These include *No Historic Properties Affected*, *No Adverse Effect*, or *Adverse Effect*. The types of effects or impacts are determined by FHWA and ITD followed by concurrence from Idaho SHPO (see approval letter in Appendix C and ITD form 1502 found in Appendix D which has been signed by SHPO). The definitions are as follows:

- No Historic Properties Affected is defined as “either there are no historic properties present or there are historic properties present but the undertaking would have no effect upon them as defined in 36 CFR 800.16(i)”;
- No Adverse Effect is defined in 36 CFR 800 as “when the undertaking’s effects do not meet the criteria of 36 CFR 800.5(a)(1) ‘Adverse Effect’ or the undertaking is modified or conditions are imposed to avoid adverse effects.” The Proposed Action results in a No Adverse Effect when the impacts to a historic property are minimal but do not completely alter the historic characteristics that qualify it for eligibility onto the NRHP; and
- Adverse Effect includes “when the undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register.” (36 CFR 800.5(a))

Historic properties that are impacted by the proposed Project are those that have either a finding of *No Adverse Effect* or *Adverse Effect* (complete parcel acquisition or proximity damages). A property with a finding of *No Historic Properties Affected* is not impacted by

the Build Alternative. Table 3-7 summarizes the impacts to each eligible or listed historic property.

TABLE 3-7. SUMMARY OF IMPACTS TO ELIGIBLE HISTORIC RESOURCES

<i>Historic Resource</i>	<i>Type of Effect</i>	<i>Property Affected</i>	<i>Comments</i>
K Coulee Canal	No Adverse Effect	~150 linear feet	Culvert extended or replaced and additional canal placed in culvert
Wild Rose Ranch	No Historic Properties Affected		No impact
Oregon Short Line Railroad (EIRR)	No Adverse Effect	~100' linear feet	Additional width for added lanes
Mountain View Ranch	No Historic Properties Affected		No impact
Jacob B. Van Wagenor Barn	No Historic Properties Affected		No impact
Jacob B. Van Wagenor Caretaker's House	No Historic Properties Affected		No impact
L Canal	No Adverse Effect	~500 linear feet	Realigned, piped, or bridge over canal
North Side Canal Water Master's House and property	No Historic Properties Affected		No impact
D-5 Ditch	No Adverse Effect	~300 linear feet	Ditch realigned and additional culvert added for widened US-93

The proposed Project widening of US-93 will be designed to avoid the historic resources at the Wild Rose Ranch, Mountain View Ranch, Van Wagneor Barn and Caretaker's house, and the North Side Canal Water Master's House and property (see preliminary design Figures in Appendix B). The eligible historic properties impacted include the K Coulee Canal, Oregon Short Line Railroad, the L Canal, and the D-5 ditch. These historic resources are linear features that traverse across Jerome County following the natural contours of the area.

3.7.2.3 Section 4(f) Evaluation

A Section 4(f) evaluation is included in Chapter 4 of this document that discusses the impacts to the cultural resources impacted by the Build Alternative (see Table 3-7). A de minimus determination on 4(f) resources was made by FHWA (See Appendix C).

3.7.3 Secondary and Cumulative Impacts

As the corridor changes to a more business and commercial development, cultural resources may be impacted. The Commercial Overlay Zone may increase pressure on the known historic resources to convert to a commercial or business use. The impacted resources along the corridor are the canals and the EIRR tracks. These features will continue to operate as the corridor becomes more commercialized.

3.7.4 Mitigation

The cultural resources impacted by the Build Alternative are linear irrigation canals or ditches and the Oregon Short Line Railroad. The canals and ditches are owned, operated and maintained by the North Side Canal Company; the Oregon Shortline Railroad is owned,

operated, and maintained by the Eastern Idaho Railroad. ITD will continue to coordinate with these companies. There are no adverse impacts to historic resources, and therefore, no mitigation is required.

3.8 VISUAL AND AESTHETIC CHARACTERISTICS

3.8.1 Affected Environment

The Project area traverses land used primarily for agricultural purposes intermingled with several business complexes. The topography generally slopes to the south. The existing view sheds are dominated by open vistas of range and agricultural areas in a largely rural setting. There are several commercial and industrial businesses located along the corridor on both sides of the road.

Residences and associated farmsteads and outbuildings are visible in places along the corridor. These farmsteads typically are surrounded by large trees and other vegetation. In addition, US-93 within the Project limits is bisected by the EIRR tracks. Also, five roads cross the Project corridor in an east/west direction (400 South, 300 South, 200 South, 100 South, and SH-25); SH-25 is a major east-west arterial roadway. I-84 is located at the southern terminus of the Project. Seven irrigation canals are located along the Project corridor with six crossing the roadway. These canals and their associated irrigation ponds provide the only open water in the area.

Most foreground views are of cultivated agricultural land which transitions to rural homes with trees and shrubs nearby. Vegetation visible from the roadway includes sagebrush, rabbitbrush, bunchgrass, cottonwood trees, and Russian olive trees. Frequently human-created features such as fencing, lawns, antennas, vehicles and storage buildings are visible near rural homes. Power/telephone poles and lines are present along the highway. The Project area is in transition from a largely rural setting to a more urban one, with new commercial land uses being constructed along the roadway. Where commercial development has occurred, industrial buildings are frequently located close to the road. Commercial structures, parking lots, signage, and fencing are visible within foreground views in these areas. Some farmsteads are set back from the roadway and therefore occur within middle ground view distances. Background or more distant views are primarily of large areas of agricultural fields broken up by occasional views of homes, trees, and other buildings. Distant views of hills are also present on the horizon in places.

The combination of human intrusions in the form of new development, signs, existing roadways, railroad tracks and power/telephone poles is altering the existing setting from a purely rural area to one with views of more mixed agricultural and developed uses. New uses also are increasing the number of viewers traveling to and from the Project area. The primary existing view groups includes viewers from vehicles using the roadway and viewers from adjacent residences, agricultural fields, and businesses.

3.8.2 Environmental Consequences

3.8.2.1 No Build Alternative

The No Build Alternative will have no impact to the visual or aesthetic characteristics along the Project corridor.

3.8.2.2 Build Alternative

Under the Build Alternative, existing views will be altered. These changes will be associated

mainly with the proposed widening of the existing roadway in some locations along the Project corridor. New right-of-way for the proposed widening will be greatest from MP 54.1 north to the D-5 Ditch (MP 57). In this area the highway widening may be more noticeable than in other locations where much of the improvements will occur within the existing right-of-way. Several commercial buildings are interspersed along both sides of the roadway along this section of the proposed Project route. Where the proposed improvements replace undeveloped land with new asphalt, the physical footprint of the roadway will be increased to viewers in the area. This change will add to encroachments on rural uses currently taking place in the Project area.

Additional right-of-way will also be acquired adjacent to the existing roadway south of SH-25 in the northern Project area. Proposed improvements in this area would have a similar effect on the visual setting as described above. Commercial development is occurring near the intersection of US-93 and SH-25 in this area and the proposed widening would contribute to a more developed setting at this location.

For views from the road itself, additional paved lanes may be noticeable in foreground views, however, most travelers are expected to be looking beyond the roadway to middle ground and background views which would be largely unaffected by the proposed Project. For viewers looking toward the roadway from nearby fields or buildings, the area of pavement would be increased bringing the roadway slightly closer in proximity to some view locations. This impact would not substantially alter the overall view of the highway in its current setting. The widened roadway would potentially allow for more use of the roadway at times which has the potential to add additional sources of light and glare to the area from increased vehicle usage. This would result in an incremental increase to existing light and glare sources and will not substantially affect local views.

The proposed addition of a new multi-use trail along the western portion of the roadway will also add a new human-created feature to existing views. The new trail will be visible parallel to the roadway and will reinforce developed conditions. This change will not substantially diminish the existing viewscape. For views from the road, the trail, and users of the trail, may be visible in the foreground at times. Viewers looking toward the road will likely observe the trail and its users at middle or background distances where this change is expected to be less obvious.

The proposed trail will also introduce new viewers to the Project area, which are primarily expected to include pedestrians and bicyclists. These viewers may have more time to notice the visual setting than users of the roadway who may be traveling at greater speeds. As development continues along the roadway in the future, the visual setting will continue to change as well. Over time, the effect of the widened roadway on views in the Project area will diminish as more developed uses occur.

3.8.3 Secondary and Cumulative Impacts

The proposed Project will add to on-going changes in the setting along the roadway corridor. As indicated above, new commercial development consistent with county zoning is taking place in several locations along the roadway. It is likely that such development will continue in the future. Also associated with the new roadway, future intersection improvements are expected to include new traffic signals. The EIRR crossing will be improved with new warning lights and signage. These secondary impacts will contribute further to more developed conditions along the roadway. The widened roadway, in combination with other development, will contribute toward more urbanized views along the corridor and add to an

incremental increase in light and glare associated with more developed conditions in the Project area.

3.8.4 Mitigation

None required for this resource.

3.9 AIR QUALITY

3.9.1 Affected Environment

Air quality is regulated by the U.S. Environmental Protection Agency (EPA) and Idaho Department of Environmental Quality (IDEQ). The EPA has established the National Ambient Air Quality Standards (NAAQS) under the Clean Air Act (CAA). These standards specify maximum concentrations for criteria pollutants that include carbon monoxide (CO), particulate matter less than 10 micrometers in size (PM10), particulate matter less than 2.5 micrometers in size (PM2.5), ozone, sulfur dioxide, lead, and nitrogen dioxide (NO2).

ITD together with IDEQ has provided guidance for Project level air quality analysis for roadway projects (Project Level Air Quality Screening Analysis, September 2001). The ITD Project Level Air Quality Screening Analysis guidance states that of the seven federal criteria pollutants, CO and PM10 are the two pollutants of concern for Idaho transportation projects. The Project area is in attainment for criteria pollutants according to standards set by the EPA and IDEQ.

At the local level, topography and vegetation can affect air movement patterns. Prevailing winds in Jerome County are from the southwest throughout the year. The existing air quality in the county is generally good to excellent, but can be affected by localized conditions such as occasional wild fires in summer and fall, and prescribed fire and agricultural burning in the spring and fall.

Much of the Project area is surrounded by rural agricultural land and would be subject to dust and particulates during windy weather conditions. Additionally, periodic agricultural activities, such as crop cultivation or field spraying, may contribute localized pollutants to the air. Where unpaved roads are present on farmlands, equipment and vehicles using these roads may also contribute to dust and dirt in the air.

3.9.2 Environmental Consequences

A qualitative analysis was completed to identify potential impacts.

3.9.2.1 No Build Alternative

The No Build Alternative will have no impact on air quality in the Project area.

3.9.2.2 Build Alternative

The Build Alternative is not expected to affect air quality during future operation of the highway. Traffic is predicted to increase through 2030. According to the IDEQ document *Project Level Air Quality Screening, Analysis, and Documentation for Roadway Projects in Idaho*, this Project is not within a federally designated air quality nonattainment/maintenance area for CO and/or PM10. The Project is not within an IDEQ identified air quality area of concern for CO and/or PM10. The US-93 Project is forecast to experience traffic congestion of Level of Service (LOS) C or better at all intersections within or directly affected by this

Project¹³. The proposed Project does not include or directly affect any roadways for which the twenty year forecast daily volume will exceed 15,000 vehicles per day. It can therefore be concluded that the Project will have no adverse impact on air quality as a result of CO emissions.

There are currently no EPA approved models or methodology available to analyze individual projects for their potential to cause or contribute to PM10 concentrations. Emissions due to the construction operations for this Project will be mitigated by implementation of Best Management Practices (BMPs) such as utilizing water for dust abatement.

3.9.3 Secondary and Cumulative Impacts

The proposed widening will allow a greater number of vehicles to use the roadway in the Project area; however, as indicated above, new volumes are not expected to substantially affect air quality. Traffic increases will add incrementally to other local changes as the roadway corridor becomes more developed. These changes are not expected to result in substantial adverse conditions in air quality.

3.9.4 Mitigation

Emissions due to the construction operations for this Project will be mitigated by implementation of Best Management Practices (BMPs) such as utilizing water for dust abatement.

3.10 NOISE

In order to identify and evaluate potential noise impacts along the Project corridor, a noise study was conducted and documented in a *Noise Technical Memorandum*. This report was prepared in accordance with the Noise Abatement procedures outlined in ITD's Noise Policy, September 2005 and in ITD's Environmental Manual (part A.2.1 of Environmental Documentation). This section summarizes the findings of the *Noise Technical Memorandum*. The technical memo identifies the basic fundamentals of noise and noise sensitive areas within the Project corridor. The analysis uses impact criteria and methodologies prescribed by ITD and federal regulations under 23 CFR 772.

Federal noise criteria and abatement guidelines address noise generated by vehicles operating on public highways. FHWA's Noise Abatement Criteria (NAC) specify $L_{eq}(h)$ noise levels for various land uses and activity categories. The $L_{eq}(h)$ is a measure of the average noise level during a specific period of time.

Table 3-8, found on the following page, shows the Activity Categories, $L_{eq}(h)$, and description of land uses for each category.

¹³ Traffic Analysis, Parsons Brinckerhoff, June 2006

TABLE 3-8. FHWA NOISE ABATEMENT CRITERIA

Activity Category	$L_{eq}(h)$ (dBA)	Description of Activity Category
A	57 (exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	-	Undeveloped lands.
E	52 (interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: U.S. Department of Transportation, 1982.

3.10.1 Affected Environment

3.10.1.1 Traffic Noise Impact

In the Project area, identified receptors are primarily residences (Activity Category B) and the 67 dBA criterion is the basis for determining an impact. ITD's Noise Policy, September 2005, define a noise impact as either "relative" or "absolute".

- *Relative* impact is defined by the difference between the predicted noise levels for the design year (2030) to the existing noise levels (2005). A noise impact occurs if the relative noise is predicted to increase by 15 dBA or more between the existing year and the future design year using predicted traffic volumes for the future year. For example, if a receptor has an existing noise level of 49 dBA in 2005 and the proposed Project increases noise levels to 64 dBA in 2030, a noise impact occurs; and/or
- *Absolute* impact is when the future design noise levels are within one dBA of the NAC. For example, if a future, predicted noise level reaches 66 dBA or higher (within one dBA of the NAC), it exceeds the FHWA NAC of 67 dBA for Activity Category B in Table 3-8 and a noise impact occurs.

ITD's Noise Abatement procedures require that mitigation be evaluated when it has been determined that a noise impact occurs within the Project corridor. The mitigation measures must be constructed where it is determined to be feasible and reasonable under the department's policy. Feasibility and reasonableness are described in the mitigation section.

3.10.1.2 Analysis Methods and Results

FHWA has developed a computer model to predict traffic noise levels at receptors along a highway corridor. The Traffic Noise Model (TNM) uses the preliminary design geometry, design speed, total number of vehicles, percentage of trucks, type of pavement, and the location of sensitive receptors. TNM Version 2.5 computer model (FHWA, 2004) was used

to predict the $L_{eq}(h)$ for existing and future traffic noise levels at all the sensitive receivers along the US-93 corridor.

A sensitivity analysis is used to ensure TNM's accuracy. To accomplish this, ambient or existing noise levels were measured at two receptors to calibrate the noise model (see Table 3-9 and Table 3-10). A receptor is noise sensitive area or building such as a park, residence, hotels, church, or other. These measurements are then used to verify the accuracy of the TNM output. Traffic noise levels are modeled at all the sensitive receptors along the corridor.

TABLE 3-9. FIFTEEN-MINUTE NOISE MEASUREMENTS

Receptor Number	Address	Date	Start Time	$L_{eq}(h)$ (dBA)
A	KOA Campground	8/19/05	1:10 p.m.	65
K	200 South & US-93	8/19/05	1:40 p.m.	63

The Project corridor was screened for noise-sensitive receptors using aerial photographs and field visits. The existing land use along US-93 between I-84 and SH-25 is primarily agricultural with single family residences and commercial uses scattered along this segment of the highway. A total of 22 sensitive receptors were identified along the Project corridor including all residential units and the KOA Campground (see Figure 3-5). The receptors modeled by TNM are presented in Table 3-10 below.

TABLE 3-10. $L_{eq}(h)$ NOISE MODELING RESULTS AT MEASURED AND MODELED-ONLY SITES

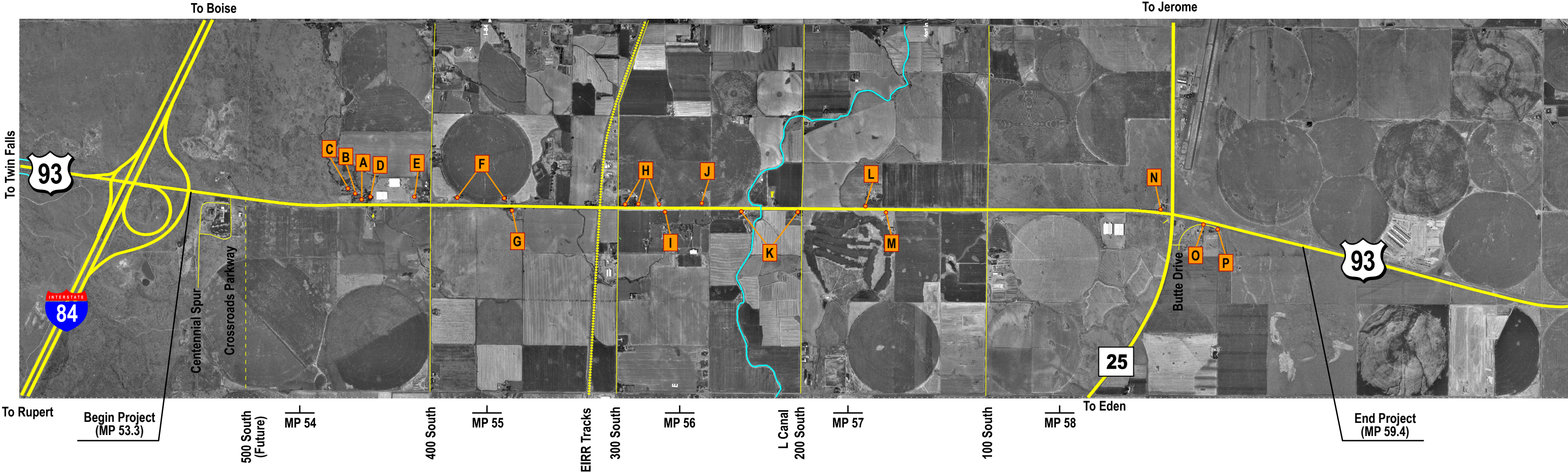
Receptor Number	Approximate Milepost	West or East Side of US-93	Number of Residences Represented	Comments
A*	54.2	West	13 camp sites	13 camp sites at the KOA Campground nearest to US-93. Measured existing noise levels at this site to calibrate TNM.
B	54.2	West	18 camp sites	18 sites centrally located at the KOA Campground including RV pads, tent sites, and cabins.
C	54.2	West	56 camp sites	56 sites remaining at the KOA Campground located furthest for US-93. These sites are obstructed by a commercial building. Sites include RV pads, tent sites, cabins, and a private residence.
D	54.3	West	1	
E	54.7	West	1	Located on 400 South.
F	54.8 and 55.1	West	2	Represents two residences. Residence at 55.1 will be relocated as part of the Build Alternative.
G	55.1	East	1	

TABLE 3-10. $L_{EQ}(H)$ NOISE MODELING RESULTS AT MEASURED AND MODELED-ONLY SITES

Receptor Number	Approximate Milepost	West or East Side of US-93	Number of Residences Represented	Comments
H	55.7 (2 residences) and 55.9	West	3	Mountain View Ranch and Van Wagner Caretakers house.
I	56.0	East	2	Represents two residences at El Costa Plenta Ranch.
J	56.2	West	1	
K*	56.4	East	2	Measured existing noise levels at this site to validate TNM.
L	57.0	West	1	
M	57.1	East	1	
N	58.6	West	1	Located on SH-25.
O	58.9	East	5	Mobile home park located on the northeast quadrant of US-93 and SH-25.
P	59.0	East	1	

* Measured Site

Each receptor was modeled for both alternatives (No Build and Build Alternatives) and existing conditions. The No Build Alternative and the Build Alternative were modeled using future year 2030 peak period traffic data; existing conditions were modeled using 2005 traffic data.



No Scale

Figure 3-5
Noise Measurements and Modeling Locations

LEGEND

Noise Measurement Stations

3.10.2 Environmental Consequences

3.10.2.1 No Build Alternative

Under the No Build Alternative, noise levels are projected to increase between five and six dBA at most receptors as a result of increased traffic on US-93 due to growth. Under the No Build Alternative seven receptors (A, B, F, G, H, K, and N found in Table 3-11) are predicted to be at or exceed the ITD noise criteria in 2030. The noise increase at each of these receptors will result from increased traffic on US-93.

TABLE 3-11. MODELED NOISE LEVELS

Receptor Number	Distance from Centerline of Existing US-93 (feet)	Noise Levels ($L_{eq}(h)$)			Number of Residential Units per Receptor
		Existing (2005)	2030 No Build Alternative	2030 Build Alternative	
A	80	65	72	73	13 camp sites
B	160	61	66	68	18 camp sites
C	300	57	62	63	56 camp sites
D	250	58	63	64	1
E	280	58	63	65	1
F	160	60	66	68	2 (1 will be acquired as part of the Build Alternative)
G	80	67	73	74	1
H	150	62	67	70	3
I	490	52	58	60	2
J*	410	54	60	62	1
K	80	63	73	74	2
L	260	58	63	64	1
M	320	56	61	63	1
N	170	61	66	68	1
O	380	54	59	61	5
P	200	59	64	66	1

Numbers in **bold** and highlighted represent a noise level that is an impact under the ITD Noise Abatement procedures (approaches within one dBA or exceed the FHWA NAC of 67 dBA).

* The noise measurement at this site was taken approximately 100 feet from the existing US-93 centerline. The actual receiver is more than 400 feet from the existing and proposed roadway (see second column in this table). Therefore, there is a discrepancy between the measured and modeled noise levels as shown in Table 3-9.

3.10.2.2 Build Alternative

The Build Alternative includes constructing a 4-lane highway cross-section. Traffic volumes are similar to the No Build Alternative. Eight receptors (A, B, F, G, H, K, N, and P) are predicted to be at or exceed the ITD noise criteria in 2030 under the Build Alternative (see Table 3-11). The increase at each of these receptors is a result from increased traffic on US-93 and the roadway realignment closer to the receptors. Future peak period traffic noise levels were predicted to approach or exceed the FHWA NAC at receptors located between 80 and 200 feet from the center of the Build Alternative alignment. The 66 dBA noise contour extends approximately 150 feet outside of the ROW. As shown on Table 3-11, one of the affected residential units at receptor F is planned for acquisition as part of the US-93 Project; therefore 31 campsites and 9 residences would experience traffic noise levels that approach or exceed the ITD noise criteria.

3.10.3 Secondary and Cumulative Impacts

The proposed widening would allow a greater number of vehicles to use the roadway in the Project area. Traffic increases will add incrementally to the noise levels in the Project area

as the roadway becomes more developed. Most likely, noise levels will increase as the area develops. However, due to the Commercial Overlay Zone and impending development, the number of receivers is likely to decrease.

3.10.4 Mitigation

This section discusses the anticipated construction impacts from the proposed Project and the mitigation measures to minimize and offset impacts. ITD's Noise Abatement procedures define noise abatement measures as those that must be considered when a project will result in a noise impact. Abatement measures include:

- Noise barriers;
- Traffic management;
- Alteration of horizontal and vertical alignments;
- Acquisition of property to serve as a buffer zone;
- Acquisition of property rights for barrier construction purposes; and
- Insulation of public use, non-profit institutional structures.

Each mitigation measure was evaluated for their potential to reduce noise impacts from the proposed action. The results of the evaluation are summarized below.

3.10.4.1 Noise barriers

Noise barriers include noise walls, berms, and buildings that are not sensitive to noise. The effectiveness of a noise barrier is determined by its height and length and by the topography of the Project site. To be effective, the barrier must block the "line of sight" between the highest point of a noise source, such as a truck's exhaust stack, and the highest part of a receiver. It must be long enough to prevent sounds from passing around the ends, have no openings such as driveway accesses, and be dense enough so that noise will not be transmitted through it. Intervening rows of buildings that are not noise sensitive also could be used as barriers.

Final determination of size and placement of noise barriers or berms and implementation of other mitigation methods takes place during detailed Project design, after an opportunity for public involvement and approval at the local, state, and federal levels. ITD's Noise Abatement procedures outline the process once a decision under NEPA has been made and the Project enters the design phase.

3.10.4.2 Traffic Management Measures

Management measures could include restricting travel times, restrictions on truck traffic, modified speed limits, and exclusive land designations. Restriction of truck traffic is not feasible as US-93 is a major commercial transportation corridor as described in section 3.2 of this chapter.

3.10.4.3 Alteration of Roadway Horizontal and/or Vertical Alignment

Development of the Build Alternative was an iterative process that resulted in minor changes to the roadway alignment to avoid and/or minimize impacts to resources. The horizontal alignment of US-93 is constrained by topography, existing development, and/or cultural resources. Additional changes to the US-93 horizontal alignment are not a reasonable noise mitigation measure.

3.10.4.4 Acquisition of Property to Serve as a Buffer Zone

Undeveloped parcels adjacent to US-93 study area could be acquired to provide noise buffers. While this could limit the effects of traffic noise on future development, it would not mitigate impacts to any of the currently existing receptors that would experience elevated noise levels under this Project. The cost of land acquisition for this purpose is also prohibitively expensive.

3.10.4.5 Acquisition of Property Rights for Barrier Construction Purposes

This option includes purchasing property for the construction of noise barriers. However, there is sufficient space between the roadway and the edge of right-of-way for placement of a noise barrier (if determined feasible and reasonable).

3.10.4.6 Insulation of Public Use, Nonprofit Institutional Buildings

The receptors that would be impacted are not public use, nonprofit institutions and therefore are not eligible for acoustic insulation.

3.10.5 Noise Mitigation Measure Feasibility and Reasonableness

The evaluation consists of determining the engineering feasibility of constructing the mitigation in a certain location and determining the effectiveness of the potential mitigation measure. The ITD Noise Policy, September 2005, procedures define effective mitigation as providing a noise reduction of at least ten dBA at a distance of ten feet from the mitigation and five dBA at a distance of 100 feet. A reduction of five dBA must also be achievable at the receptors of concern. Determination of reasonableness includes the number of sensitive receptors benefited by at least five dBA, cost-effectiveness of the mitigation, and concerns such as the desires of nearby land owners and residents, aesthetics, and safety. The ITD Noise Abatement procedures provide definitions of cost-effectiveness, as well as the post-NEPA process for considering the desires of the community and property owners directly affected by proposed noise mitigation.

Cost effectiveness is determined by multiplying the total number of benefited receptors by \$21,000 and subtracting the estimated cost of constructing effective mitigation. If this calculation results in a positive figure, the mitigation measure is cost effective (ITD, 2005). The dollar figure per benefited house and the construction cost information is adjusted every few years. For noise barriers, ITD currently uses a planning-level cost estimate of \$25 per square foot of barrier for barriers less than ¼ mile in length and \$20 per square foot of barrier for longer barriers. The planning-level estimated construction cost for each barrier is determined by multiplying the length times the height of a proposed noise wall by \$20 or \$25 per square foot, depending on wall length.

Mitigation in the form of noise barriers was evaluated to determine if it will be feasible and reasonable to substantially reduce traffic noise levels of the sensitive receivers where traffic noise impacts are predicted. A noise barrier was evaluated west of US-93 in an attempt to shield traffic noise from the KOA Campground camp sites. The length of the barrier was restricted by driveway access to the site and nearby businesses. Due to the restriction in barrier length, a noise barrier would not be feasible near the KOA Campground camp sites.

Noise barriers are not reasonable to mitigate noise for individual residences along the US-93 corridor because of the need to maintain access to these residences and because barriers would not be cost effective to protect widely-spaced individual residences. Construction of a continuous barrier would require that these access points be blocked. Walls with openings for driveways and local roadways are not effective at noise reduction. For noise barriers to meet reasonability requirements, the sensitive receptors benefited by

the barrier need to be either numerous or closely grouped together. In the US-93 Project area, no more than two affected receptors are located next to one another. Also considered was the spacing between residences along the US-93 corridor. Since the area is largely an agricultural, rural setting, there are no subdivisions with a high concentration of receivers (houses) where a noise wall could reduce noise and benefit more than just one residential unit. The housing units or receivers are spread-out along the Project corridor.

Both the No Build Alternative and the Build Alternative for US-93 will increase noise levels that approach or exceed the FHWA Noise Abatement Criteria; however it is not feasible or reasonable to mitigate noise levels at these receptors, as it requires the elimination of access to properties and/or require relocation of additional residences.

3.11 UTILITIES AND EMERGENCY SERVICES

This section discusses the existing and planned utilities and emergency services in the Project area.

3.11.1 Affected Environment

3.11.1.1 Existing Utilities

In order to serve the local community, several utilities are located along the Project corridor. These are discussed below. Utilities along the corridor include:

- Idaho Power services the electrical needs of residential, commercial and agricultural properties along US-93 and surrounding areas. Electrical lines cross US-93 in several locations including at each major cross roads. Several power lines are located within ITD right-of-way. Most of the power lines are overhead; however, there are several locations where the power lines are buried. The main transmission line runs along the east side of US-93 with accesses to the various businesses and residences;
- Cable One (fiber optic) has overhead and buried fiber optic cable that runs mainly along the east side of US-93 throughout the majority of the Project;
- MCI Fiber Optic Cable has a buried fiber optic line along the EIRR tracks;
- Qwest provides telephone service throughout the corridor and surrounding areas. Qwest has a fiber optic line that runs the length of the Project corridor to SH-25 which line is located on the west side of US-93. As indicated by Qwest, the fiber optic line is buried. Also, Qwest has copper lines that service the local telephone needs of the surrounding area;
- Intermountain Gas Company provides the gas needs throughout the Project corridor. Sewer lines are located along the Project corridor; and
- North Side Canal Company is one of the largest irrigation companies in the state of Idaho. The company diverts water from the north side of the Snake River at Milner Dam. The company serves approximately 165,000 acres of farmland in Jerome and Gooding Counties. Within the Project corridor the North Side Canal Company serves the areas agricultural irrigation needs through the K Coulee Canal, L Canal, and the D-5 Ditch (see Figure 3-6). The L Canal has four laterals (within the Project corridor): the L2 Lateral, L3 Lateral, L4 Lateral, and the L4A Lateral. Each crosses US-93 except the L2 Lateral. The L4 Lateral is an extension of the L2 Lateral; it changes in name only at the EIRR tracks.

3.11.1.2 Planned Utilities

The City of Jerome secured a federal grant of \$2.7 million from the U.S. Economic Development Administration (EDA). This grant will be used to upgrade Jerome's wastewater treatment plant and expand water and sewer needs for the planned Crossroads Point Business Center on the south end of the Project and the 93 Technical Park on the northern end. Also, an expanded fiber optic line is planned to run the length of the Project corridor to the College of Southern Idaho located in Twin Falls.

The utility components of the EDA grant include:

- Construction of more than 74,500 feet of a pressurized sanitary sewer and gravity mains from the City of Jerome to the Crossroads Point Business Center. This includes adding lift stations and pumps to get to the Jerome wastewater treatment plant located west of the city;
- Increasing the capacity and improving effluent quality at the wastewater treatment center;
- Construction of water mains, sewer mains and roadways within the area of the 93 Technical Park to help entice businesses; and
- Construction of a new water main between Jerome City and the 93 Technical Park.

These utility additions will help expedite business interests in these commercial parks and are necessary for the developments to proceed. They are planned to be finished within the year 2006. Also, an upgraded fiber optic cable is planned to connect these developments with the City of Jerome and the College of Southern Idaho¹⁴.

Also, the planned sewer lines will be the first in the area. This will help protect aquifer by converting the septic tanks and drain fields to the more environmental reliable sewer lines to the treatment plant. Sewer lines will help with the continued effort to protect the Eastern Snake River Plain Aquifer, a sole source aquifer from which more than 70 percent of the area gets its drinking water.

3.11.1.3 Emergency Services

Fire protection in Jerome County is provided by three independent fire districts: Jerome Rural Fire District, First Segregation Rural Fire District, and West End Fire District¹⁵. Within the US-93 Project corridor, fire protection is provided by the Jerome Rural Fire District, an all volunteer department. The BLM provides fire service assistance only for brush fires that originate on BLM lands. The Jerome City fire department does not service unincorporated areas of the county but are available for emergency support.

Emergency medical and ambulance services for the entire county are provided by the Emergency Medical Services department. Three ambulances are available to provide stabilization, transport, and transfer services. Medical treatment is coordinated locally with St. Benedict's or Magic Valley Medical Centers. Arrangements for life flight services to Boise and other locations are also coordinated by the department.

Public safety is provided by the Jerome County Sheriff's Office. The county Sheriff's Office, located in Jerome City, provides services for the entire unincorporated Jerome County

¹⁴ City of Jerome, EDA/RCDA Preliminary Engineering Report

¹⁵ Jerome County Comprehensive Plan

including the Project corridor. The Sheriff's office also administrates the county's jail.

Jerome County Disaster Services is a local government agency responsible for disaster preparedness. The disaster services provides assistance to Jerome County and works closely with other local, state, and federal agencies to help the community prepare for natural and man made disasters and emergencies.

3.11.2 Environmental Consequences

3.11.2.1 No Build Alternative

The No Build Alternative will not impact or require the relocation of utilities along the corridor. However, it should be noted that the planned utilities associated with the Crossroads Point Business Center and the 93 Technical Park will proceed with or without the Build Alternative.

3.11.2.2 Build Alternative

- Idaho Power - The electrical lines and their associated poles in the Project area may need to be relocated due to their proximity to the new roadway. ITD and the Contractor will coordinate with Idaho Power during the design and construction phases of this Project.
- Cable One - The overhead fiber optic cable is on existing telephone poles. Some of these poles will be relocated during the construction phase of this Project. At this point, it is unknown which poles will be disturbed.
- MCI Fiber Optic Cable - The exact location of the fiber optic cable that runs parallel to the EIRR tracks will be identified.
- Qwest - Qwest provides telephone service throughout the corridor and surrounding areas and also has a buried fiber optic line on the west side of US-93. It is anticipated that some of the poles (typically attached to the Idaho Power poles) will need to be relocated during the construction phase of this Project.
- Intermountain Gas Company - At the time of this document it is unclear if the gas lines are within US-93s ROW (or proposed ROW). Coordination with Intermountain Gas Company will continue during the design and construction phases.
- North Side Canal Company - A portion of the L Canal will be realigned (see Figure B-5 in Appendix B); the L Canal Bridge will either be widened or replaced to accommodate the new roadway width. The culverts for the K Coulee Canal, D-Ditch, L4A Lateral, L4 Lateral, and L3 Lateral will either be replaced or extended. Sections of the L4A Lateral, L4 Lateral, and L3 Lateral that are adjacent to the new roadway will be realigned.
- Planned Utilities - The utilities planned for the Crossroads Point Business Center and the 93 Technical Park may be impacted. ITD and the Contractor will coordinate with the officials extending these utilities to ensure that the Build Alternative will not conflict with the planned water, sewer, and fiber optic line.
- Emergency Services - The Build Alternative will have no impact on emergency services and response within the Project corridor.

3.11.3 Secondary and Cumulative Impacts

No impacts to this resource.

3.11.4 Mitigation

Where possible, utilities, planned and existing will be avoided. If relocation is required by the Build Alternative, ITD will coordinate with the affected utility company(s) during the design and construction phases of the Project. The Contractor will be required to minimize the impacts to residential, commercial, and agricultural properties along the corridor.

3.12 HAZARDOUS MATERIALS

3.12.1 Affected Environment

A review of available environmental records was conducted by Environmental Data Resources, Inc., in July 2005 for the proposed Project. The records search was defined as a one mile radius around the Project corridor, the southern-most point approximately one mile south of the I-84/US-93 interchange and the northern-most point approximately one mile north of the intersection of US-93 and SH-25. Search distances for the width of the corridor were conducted according to American Society of Testing and Materials (ASTM) Standards for Phase I Environmental Site Assessments.

3.12.1.1 Identified Hazardous Waste Sites

This review identified the following near the Project corridor:

- One Resource Conservation and Recovery Information System (RCRIS) small quality generator (SQG) site;
- One underground storage tank (UST) site;
- Six Facility Index System/Facility Identification Initiative Program Summary Report (FINDS) sites;
- One Toxic Chemical Release Inventory System (TRIS) site
- One Toxic Substances Control Act (TSCA) site; and
- Two FIFRA/TSCA Tracking System (FTTS) sites located adjacent or near the Project corridor.

In addition to the documents search, a preliminary drive through survey of the Project corridor was conducted on July 26, 2005. No hazardous material concerns were observed at that time.

3.12.2 Environmental Consequences

Based on a review of the environmental databases and a field visit, no known hazardous material sites were identified in the Project corridor that pose any environmental concerns to the proposed Project. The one UST located along the corridor is located at the Flying J Truck Stop. However, the proposed Project will not take property from the Flying J Truck Stop.

3.12.2.1 No Build Alternative

No impacts are associated with hazardous materials with the No Build Alternative.

3.12.2.2 Build Alternative

The UST is located at Flying J Truck Stop. No known hazardous material related impacts are anticipated to be encountered with the Build Alternative. The shifted access is north or away from the Flying J Truck Stop and therefore, the UST will not be impacted by the Build Alternative.

Unknown and unidentified hazardous materials may exist in the Project area. If encountered during construction, ITD will follow all federal and state regulations regarding the identification, removal, and disposal of potential hazardous materials encountered.

3.12.3 Secondary and Cumulative Impacts

No impacts to this resource.

3.12.4 Mitigation

None required for this resource.

3.13 GEOLOGY AND SOILS

Jerome County is located in south-central Idaho and is part of the Snake River Plain Sub-Region which is part of the Columbia Plateau Physiographic Province¹⁶. The county is generally flat, marked by shield volcanoes and volcanic vents with slightly undulating basalt plateaus used primarily for agriculture¹⁷. Basalt outcrops are common and are found within the study area for this Project. The area drains to the Snake River which is the southern border of Jerome County.

As mentioned, US-93 passes through predominantly irrigated agricultural lands including corn, alfalfa, potatoes, and sugar beets or livestock pasturelands. All of the natural streams in the Project area have been converted to irrigation canals or laterals. All surface water is associated with irrigation canals and laterals.

3.13.1 Affected Environment

According to the soil survey of Jerome County prepared by the U.S Department of Agriculture, Natural Resources Conservation Service (NRCS), the majority of the soils in the vicinity of the Project area are silty loam, very deep and well drained, and best suited for irrigated cropland and rangeland (see Farmland section of this chapter). Some areas contain rockier, volcanic soils, and have consequently not been converted to agriculture properties. Generally, the topography surrounding the US-93 corridor gradually slopes south and east towards the Snake River. The elevation ranges between approximately 3,700 feet on the south end of the Project to 4,100 feet on the north.

3.13.1.1 Soils

The NRCS soil survey maps were reviewed to provide a general soil description along the Project corridor. Soils along the US-93 corridor consist mainly of sedimentary silt or sandy loam soils¹⁸. The soils throughout the corridor have moderate permeability and are well drained, suitable for agricultural uses. The hazard for erosion ranges from slight to moderate depending on the slope, vegetation, and amount of precipitation and wind. The main soil types found along the corridor include:

- Banbury-Rock outcrop complex;
- Shano silt loam;
- Rad silt loam; and
- Bahem silt loam.

¹⁶ Jerome County Comprehensive Plan, 1997

¹⁷ Soil Survey of Jerome County and Part of Twin Falls County, Idaho – USDA, NRCS

¹⁸ Soil Survey of Jerome County and Part of Twin Falls County, Idaho – USDA, NRCS

3.13.2 Environmental Consequences

3.13.2.1 No Build Alternative

The No Build Alternative will have no impact on the geology and soils.

3.13.2.2 Build Alternative

The Build Alternative will not adversely impact geology and soil formations within the Project study area. 54 acres of additional right-of-way will be required for the Build Alternative that will include both cut and fill sections. There will not be increased geologic hazardous resulting from the proposed improvements. If the soils are determined to erode easily, BMPs are to be used during construction to minimize the erosion in accordance with ITD specifications.

3.13.3 Secondary and Cumulative Impacts

No impacts to this resource.

3.13.4 Mitigation

None required for this resource.

3.14 WATER RESOURCES

This section documents and discusses surface and ground water characteristics along the US-93 corridor. A reconnaissance level site visit was conducted to characterize the water resources in the area.

3.14.1 Affected Environment

3.14.1.1 Surface Water

This section discusses the surface water in the Project area that is not associated with irrigation related features. The Project area is in the Upper Snake River basin hydrologic unit as defined by the United States Geologic Survey (USGS). The area drains to the Snake River which is located approximately three miles south of this Project area. All the natural streams or rivers in the study area have been converted to irrigation canals (see section 3.15 – Wetlands and Waters of the U.S.).

3.14.1.2 Floodplains

The U.S Department of Homeland Security, Federal Emergency Management Agency (FEMA) performs hydrologic and hydraulic studies that identify flood-prone areas and provide flood risk data. FEMA prepares a Flood Insurance Rate Map (FIRM) that depicts the extent of Special Flood Hazard Areas (SFHAs) and other features related to flood risk assessment. The FIRM for Jerome County shows that there are no 100-year floodplains within the Project corridor.

3.14.1.3 Groundwater

Generally within Jerome County, average groundwater depth ranges between 150 to 400 feet below the natural ground surface¹⁹. According to the Idaho Department of Water Resources, there are 33 wells within ¼ mile of US-93 located on both sides of the road. Groundwater flows southeast towards the Snake River²⁰ and is associated with the Eastern Snake River Plain Aquifer (discussed below).

¹⁹ USDA, NRCS, Soil Survey of Jerome County and Part of Twin Falls County, Idaho

²⁰ Feasibility of Large-Scale Managed Recharge of the Eastern Snake Plain Aquifer System

3.14.1.4 Sole Source Aquifer

A Sole Source Aquifer is an underground water supply that is the sole or principal source of drinking water for a given area, as defined by the EPA. They are protected under the Safe Drinking Water Act of 1974. The Eastern Snake River Plain Aquifer (ESRPA) is a Sole Source Aquifer and extends from eastern Idaho near the Wyoming and Montana border to the western boundary of Gooding County. The ESRPA underlies Jerome County and the Project study area.

The Eastern Snake River Plain Aquifer is the second largest groundwater system in the United States and is about 170 miles long by 60 miles wide (approximately 10,800 square miles). The ESRPA is composed of thick sequences of Quaternary age basalt flows and its average depth is approximately 5,000 feet. Most horizontal groundwater movement is in the upper 300 to 500 feet²¹.

ITD has coordinated with the EPA regarding the ESRPA. The EPA responded to ITD regarding this project and their letter is found in Appendix C. Their concerns were regarding wells that will be abandoned (if any) and the runoff BMP's. They stated in the letter "consider the US-93 project approved by EPA".

3.14.1.5 Wells

According to the Idaho Department of Water Resources well data information, there are 33 wells within the Project corridor (¼ mile east and west of US-93). These wells are mainly for domestic uses; however, some are used for irrigation, stock watering, commercial/industrial, and fire protection.

3.14.1.6 Septic System, Drain Fields, and Sewage Lagoons

Based on information received from the South Central District Health, IDEQ no sewage lagoons exist within the Project study area (325 feet each side of the highway). A package house and sewage lagoon are located more than 2,500 feet east of the US-93 corridor that service commercial establishments in the area; these features will not be impacted by the propose Project.

3.14.1.7 Irrigation Canals, Laterals, Ditches and Irrigation Ponds

All surface water in the Project area originates from the North Side Canal located about six miles to the northeast. There are eight canals, laterals and ditches that either cross US-93 or are within the near proximity. All of the canals and ditches are owned and maintained by the North Side Canal Company. Also, there are eight irrigation ponds that are associated with the canals and ditches (see Figure 3-6). The canals, laterals, and ditches are discussed below (from south to north).

- Canals
 - K Coulee Canal* - This irrigation feature traverses the south end of the study area and is eight feet wide with earthen banks. This canal flows through the KOA Campground on the west side of US-93. It crosses under US-93 via a concrete box culvert. Historically, the K Coulee Canal was a natural flowing stream; however, it has been converted to a canal and is now part of the North Side Canal irrigation system.
 - L Canal* – The L Canal carries the largest amount of surface water in the survey area. It is 20 – 25 feet wide with earthen banks. US-93 crosses over the L Canal via

²¹ Feasibility of Large-Scale Managed Recharge of the Eastern Snake Plain Aquifer System

a bridge. This canal is regularly maintained and supplies water to the many agricultural areas in southern Jerome County and within the Project study area.

- **Laterals and Ditches**

L4A Lateral – This lateral diverts from the L4 Lateral on the west side of US-93. It parallels the highway until 400 South where it crosses under to the east side. This lateral is approximately three feet wide with earthen banks.

L4 Lateral – This lateral is an extension of the L2 Lateral. At the EIRR tracks the L2 Lateral changes to the L4 Lateral (only in name). This lateral is approximately four feet wide and crosses underneath US-93.

Unnamed Ditch – This ditch flows east on the south side of the EIRR tracks and turns south to at US-93 (on west side of the highway). This ditch drains into Pond 5 before discharging into the L4 Lateral.

L3 Lateral – The L3 Lateral is located just south of the L Canal and diverts off of the L2 Lateral, east of US-93. This lateral crosses under to the west side of the highway via a box culvert. The lateral is five feet wide in the survey area.

L2 Lateral – This lateral is located along the east side of US-93 and never crosses the highway. It is approximately 20 feet wide. This lateral diverts from the L Canal and flows to the south through the El Costa Plenta Ranch. At the EIRR tracks, this lateral becomes the L4 Lateral.

D-5 Ditch – This ditch is located north of the L Canal and is approximately four feet wide. Unlike the laterals discussed above, this ditch diverts directly off of the North Side Canal, not the L Canal. The D-5 ditch bisects the 93 Golf Ranch located on the east side of the roadway.

- **Irrigation Ponds**

There are eight irrigation ponds located within the US-93 study area. These are all associated with agriculture uses in the area and contain irrigation water throughout the growing season (see Figure 3-6 for location). Water stored in the ponds is pumped into the irrigation system.

Pond 1 – This pond is located on the east side of US-93 at MP 54.5 and is associated with the Lickely farmstead. It is fed by the L4A Lateral where it terminates. The pond is approximately 2,000 square feet in size.

Pond 2 – This pond is located on the east side of US-93 at MP 55.1 and is associated with the Wild Rose Ranch. It is fed by the L4A Lateral located on the west side of US-93. A culvert carries water underneath the highway to this irrigation pond. The pond is approximately 8,000 square feet in size.

Pond 3 – This pond is located on the west side of US-93 at MP 55.3. This pond is located between the diversion of the L4A Lateral and the L4 Lateral. The pond is about 9,500 square feet in size.

Pond 4 – This pond is located on the east side of US-93 and receives its irrigation water from the L4 Lateral. It is approximately 1,500 square feet in size and is located in the 93 Business Park. It is unknown if this pond is still in use.

Pond 5 – This pond is located on the west side of US-93 and receives its water from the L4 Lateral. It is directly across from Irrigation Pond 4. This pond serves the fields to its west and is approximately 600 square feet.

Pond 6 – This pond is on the east side of the highway between the diversion of the L3 Lateral and the L2 Lateral. It is located at MP 56.2 and is more than 200 feet east of the existing roadway. The surface area of this pond is about 900 square feet.

Pond 7 – This pond is located on the southwest corner of the US-93 and 200 South intersection. This pond is fed by the D-5 ditch located 1,300 feet north of the pond. The pond is approximately 2,800 square feet.

Pond 8 – This pond is on the west side of US-93 and is fed by the D-5 ditch which it parallels. The pond is located at MP 57.0 and is approximately 2,700 square feet in size.

3.14.2 Environmental Consequences

3.14.2.1 No Build Alternative

The No Build Alternative will have no effect on the water quality along the Project corridor.

3.14.2.2 Build Alternative

The following discusses the impacts to water resources in the Project corridor.

- **Surface Water**
There are no natural streams or rivers within the Project study area.
- **Floodplains**
The Build Alternative will not impact any designated 100-year floodplains; none exist within the Project corridor.
- **Groundwater**
The Build Alternative will not impact groundwater in the Project area. However, approximately 35 acres of impervious pavement area will be added as a result of this Project; reducing the overall area available for groundwater and aquifer recharge area. This area is small in comparison to the groundwater recharge for the entire area and the Easter Snake River Plains Aquifer.
- **Sole Source Aquifer**
The Build Alternative will not impact the ESRPA as agreed by the EPA (see letter in Appendix C). Appropriate BMPs will be incorporated into the final design to help minimize the impacts from construction storm water runoff into receiving waters. In addition, all wells impacted by the Build Alternative will be located prior to construction and abandoned following the appropriate Idaho well abandonment rules and procedures. Approximately 35 acres of impervious area will be added reducing the area available for aquifer recharge. This area is small in comparison to the groundwater recharge for the entire area and the Easter Snake River Plains Aquifer.
- **Wells**
Currently, it is unknown if any wells will be impacted by the Build Alternative. During the design phase all wells within the proposed right-of-way will be identified and their owner will be notified. All wells impacted by the Build Alternative will be abandoned and capped according to appropriate procedures in the State of Idaho.

- **Septic System, Drain Fields, and Sewage Lagoons**
It is likely that septic systems and drain fields will be encountered during design and construction due to the nature of this roadway widening Project. All septic systems and drain fields will be removed in accordance with IDEQ standards. These include disconnection of the inlet and outlet piping, pumping of the scum and septage with approved disposal, filling the septic tank with earthen materials, or physically destroying the septic tank or removing the septic tank from the ground (IDEQ Technical Guidance Manual, January 31, 2000, page 118).
- **Irrigation Canals, Laterals, Ditches, and Irrigation Ponds**
The Build Alternative will have a direct impact on several irrigation canals, laterals, ditches and irrigation ponds. These are each discussed below;

- **Canals**
K Coulee Canal – The Build Alternative crosses this canal and will require a new culvert or that the existing culvert is modified to accommodate the new roadway width. The new crossing will require an additional 150 feet be placed into a culvert. This canal will not be realigned and will remain in use during construction.

L Canal – The Build Alternative will cross this canal and require a new bridge or that the existing bridge is modified to accommodate the new roadway width. The Build Alternative will require that a segment of this canal be realignment (see Figure B-5 in Appendix B). Also, access roads paralleling the canal will be realigned to allow for the improvements.

- **Laterals and Ditches**
L4A Lateral – This lateral parallels both sides of US-93 and will be impacted by the Build Alternative (see Figure 3-6). Due to its close proximity of the US-93, approximately 4,500 feet will be relocated. The canal will remain functional during the construction and there will be no adverse impact to the surrounding agricultural uses.

L4 Lateral – The Build Alternative will impact this lateral and will require that the existing culvert be extended an additional 230 feet. This lateral parallels along the western edge of US-93 for about 500 feet. Based on preliminary designs the L4 Lateral will be relocated outside of the fill slopes for the new roadway. The canal will remain functional during the construction and there will be no adverse impact to the surrounding agricultural uses.

Unnamed Ditch – The Build Alternative will impact this ditch. 600 feet of this ditch runs along the west side of US-93 and will be relocated outside of the cut and fill section.

L3 Lateral – The Build Alternative will cross this lateral and will require that the culvert be extended an additional 200 feet. Also, this lateral parallels along the western edge US-93 for 400 feet and may need to be relocated.

L2 Lateral – This lateral will not be impacted by the Build Alternative.

D-5 Ditch – The Build Alternative will require that an additional 300 feet of the culvert be extended.

- Irrigation Ponds

Four irrigation ponds will be impacted by the Build Alternative. Each pond and the impacts associated with the Build Alternative are discussed below:

Pond 1 – This pond is located on the east side of US-93 and will require relocation. This pond receives its irrigation water from the L4A Lateral which also will be relocated.

Pond 2 – This pond will not be impacted by the Build Alternative.

Pond 3 – This pond will not be impacted by the Build Alternative.

Pond 4 – This pond will be impacted by the Build Alternative (if still in operation) and will need to be relocated.

Pond 5 – This pond will be impacted by the Build Alternative and will be relocated.

Pond 6 – This pond will not be impacted by the Build Alternative.

Pond 7 – This pond will be impacted by the Build Alternative and will require relocation during design.

Pond 8 – This pond will be impacted by the Build Alternative and will require relocation during design.

3.14.3 Secondary and Cumulative Impacts

All the surface water resources in the Project area are associated with the North Side Canal and its associated ditches, canals and laterals. As developments continue within the Commercial Overlay Zone, the land uses will change from an agricultural use to business and commercial. However, the irrigation canals and laterals will still be needed for agricultural uses outside of the Project area. The cumulative impact resulting from an increase in impermeable surface due to the roadway widening is minimal.

3.14.4 Mitigation

Water quality certification and a National Pollutant Discharge Elimination System (NPDES) Storm water Permit from the IDEQ will be required for the storm water management plan. Jerome County, ITD, EPA, IDEQ, and other federal and state agencies may be involved in the permitting processes.

With adherence to the environmental protection measures, no substantial unavoidable adverse impacts on short- or long-term surface water quality are anticipated under the Build Alternative. Any degradation in surface water or groundwater quality from Project construction or operation is not expected to impair existing beneficial uses or result in any additional water quality standard violations.

3.14.4.1 Sole Source Aquifer

The EPA has reviewed information provided by ITD for this Project and has approved the Project (see Appendix C – Correspondence). The BMP's to protect the ESRP include following the appropriate state rules properly capping abandoned wells, if any.

3.14.4.2 Wells

All wells impacted by the design will be capped and plugged according to Idaho Department

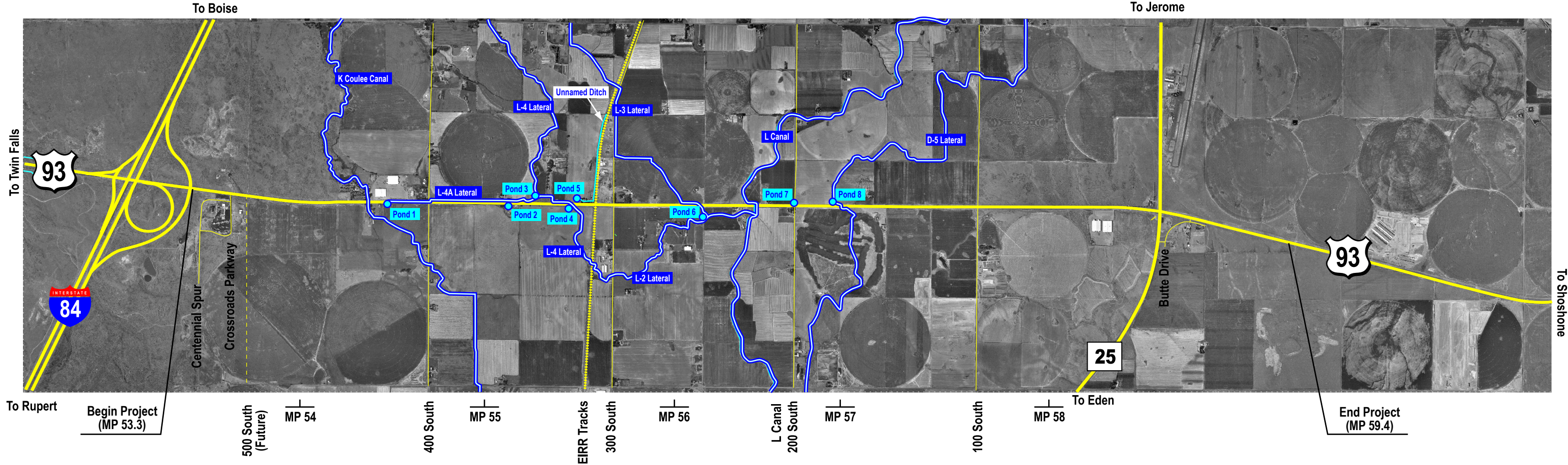
of Water Resources and ITD standards. This will ensure that direct connection to the ESRPA will be protected from pollution.

3.14.4.3 Septic System, Drain Fields, and Sewage Lagoons

Any impacted septic system and drain fields will be removed in accordance with IDEQ standards. These include disconnection of the inlet and outlet piping, pumping of the scum and septage with approved disposal, filling the septic tank with earthen materials, or physically destroying the septic tank or removing the septic tank from the ground (IDEQ Technical Guidance Manual, January 31, 2000, page 118).

3.14.4.4 Irrigation Canals, Laterals, Ditches, and Irrigation Ponds

All impacted irrigation canals, laterals, ditches, and irrigation ponds will be reconstructed and/or relocated during the construction phase of this Project. In addition, the Contractor will be required to maintain operable all irrigation features during the irrigation season to ensure viability of agricultural and farming industries that require the use of these features. The Contractor will be required to coordinate with the owners and operators of these facilities prior to construction.



No Scale

Figure 3-6
Canals, Laterals, Ditches, and Ponds



LEGEND



3.15 WETLANDS AND WATERS OF THE U.S.

Pursuant to the Federal Clean Water Act and through the Section 404 permitting process, the U.S. Army Corps of Engineers (COE) has been given responsibility and authority to regulate the discharge of dredge or fill materials into waters of the United States, including wetlands. In addition, Executive Order 11990, Protection of Wetlands, and DOT order 56601.1a emphasize the preservation of the Nations wetland resources, including their functions and values. FHWA is required to consider all wetlands at the same time the U.S. Army Corps of Engineers are required to look at regulated wetlands (jurisdictional). The COE uses the following definition of wetlands for administering the Section 404 permit program (Federal Register, 1982):

“Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.”

3.15.1 Affected Environment

This section discusses wetlands and Waters of the U.S. found within the Project corridor. A wetland survey and report was conducted to identify, map, and characterize wetlands and Waters of the U.S. in accordance with the Army Corps' Wetlands Delineation Manual. The survey included literature searches and on-sight investigations. Early in the inventory process, the National Wetland Inventory (NWI) maps were reviewed to determine the approximate location of area wetlands. A field survey was conducted on April 26, 2006 to identify waters of the U.S. and potential wetland areas. This Wetlands and Waters of the US Report has been reviewed by the COE and the U.S. Environmental Protection Agency (EPA); both agencies agree with the findings of this report (see Appendix C, April 4, 2007 letter from COE and March 29, 2007 email from the EPA).

3.15.1.1 Wetlands

- **Jurisdictional Wetlands (regulated by the Army Corps of Engineers)**
No jurisdictional wetlands were identified within the Project area. Several of the canals and laterals support very narrow patches of reed canary grass along their banks; but the wetland vegetation occurs within the ditch banks and is all rooted below the normal high water mark of these channels. Therefore, these areas are considered part of the Waters of the U.S. channel and not as separate jurisdictional wetlands.
- **Non Jurisdictional Wetlands**
There are two small patches of cattail wetland areas adjacent to the highway at milepost 54.6 on the eastside. The first is approximately 36 square feet in size while the other is approximately nine square feet (total 45 sq ft). Both are in a roadside ditch adjacent to the L4A Lateral. These small patches occur in two low spots of the roadside ditch and the hydrology is likely provided by leaks in the L4A Lateral, ponding in these low spots. The rest of the roadside ditch supports upland vegetation. The L4A Lateral is not a Waters of the U.S. since it terminates at Pond 1 (no return connection to the Snake River). These wetland patches are isolated within the US-93 roadside ditch. For these reasons, they were not considered jurisdictional wetlands.

Both of these non jurisdictional wetlands are located in close proximity to each other and are within the US-93 right-of-way near the old Likely Farmstead. They are in a roadside ditch and are very low quality. Their function is unknown because of their small size and inconsistent water source. Both are subject to roadway maintenance activities such as mowing and weed control.

3.15.1.2 Waters of the U.S.

Waters of the U.S were identified within the Project corridor including seven of the eight linear irrigation canals, lateral, and ditches (see Water Quality and Water Resources section of this chapter). Each exhibited a defined bed and bank and all of them, except the L4A Lateral, have a direct connection to the Snake River downstream. Therefore, the K Coulee Canal, L4 Lateral, Unnamed Ditch, L3 Lateral, L2 Lateral, L Canal, and the D-5 Ditch are considered Waters of the U.S. and protected by the Clean Water Act.

The L4A Lateral is not considered a Waters of the U.S. because it terminates in Irrigation Pond 1. The only outlet of this pond is via a pump, so there is no downstream connection to the Snake River (or other Waters of the U.S.).

All of the channels are regularly maintained by the North Side Canal Company. Maintenance includes dredging, bank stabilization, and burning the vegetation adjacent to the channels. All the Waters of the U.S. are associated with the North Side Canal system, which originates at the Milner Reservoir on the Snake River.

3.15.1.3 Irrigation Ponds

The irrigation ponds located within the Project corridor are not considered wetlands or Waters of the U.S. (see Water Quality and Water Resources section for complete description of each pond). Water is transferred from the canals and laterals to the ponds. The only outlets from these ponds are via irrigation pumps. Some of the irrigation ponds support wetland vegetation; however these are man-made ponds with no downstream connection to Waters of the U.S. and are therefore not jurisdictional.

3.15.2 Environmental Consequences

3.15.2.1 No Build Alternative

The No Build Alternative does not propose improvements or widen the existing US-93 and would result in no impacts to the wetlands and Waters of the U.S.

3.15.2.2 Build Alternative

The Proposed Project will impact two Non Jurisdictional Wetland areas. The Build Alternative will impact both wetland areas resulting in a loss of 45 square feet on non jurisdictional wetlands. The roadway is shifted eastward in this location to avoid adversely impacting the KOA Campground and other businesses on the west side of US-93. An alignment shift to avoid these low quality wetlands would require the relocation of at least 13 camp sites at KOA and several businesses north and south of the KOA.

The Build Alternative will directly impact Waters of the U.S. including the K Coulee Canal, L4 Lateral, Unnamed Ditch, L3 Lateral, L Canal, and the D-5 Ditch (L4A Lateral is not considered a Waters of the U.S.). The L2 Lateral will not be impacted.

- **K Coulee Canal**
The Build Alternative crosses this canal and will require a new culvert or that the existing culvert is modified to accommodate the new roadway width. The new crossing will require an additional 150 feet be placed into a culvert.
- **L4 Lateral**
The Build Alternative will cross this lateral and will require that an additional 230 feet be placed into a culvert. Also, this lateral parallels along the western edge of US-93 for 500 feet. Based on preliminary designs 500 feet of the L4 Lateral will be relocated outside of the fill slopes for the new roadway.
- **Unnamed Ditch**
The Build Alternative will impact this ditch. 600 feet of this ditch runs along the west side of US-93 and will be relocated outside of the cut and fill section.
- **L3 Lateral**
The Build Alternative will cross this lateral and will require that an additional 200 feet be placed into a culvert. Also, this lateral parallels along the western edge US-93 for 400 feet. This section of the lateral may need to be relocated. This will be determined during final design.
- **L Canal**
The Build Alternative will cross this canal and require a new bridge or that the existing bridge is modified to accommodate the new roadway width.
- **D-5 Ditch**
The Build Alternative will require that an additional 300 feet be placed into a culvert.

3.15.3 Secondary and Cumulative Impacts

There will be no secondary and cumulative impacts.

3.15.4 Mitigation

The Waters of the U.S. are associated with the North Side Canal and are all irrigation features. The irrigation features including canals, laterals, ditches, and ponds will be reconstructed during the construction phase of this Project. In addition, the Contractor will be required to maintain operable all irrigation features during the irrigation season to ensure viability of agricultural and farming industries along the corridor. The Contractor will be required to coordinate with the owners and operators of these facilities prior to construction.

The two non jurisdictional wetlands that will be impacted by the Build Alternative will be mitigated in accordance FHWA's no net loss for wetlands. Mitigation for this project will be located near another mitigation site within the Castle Rock State Park in Cassia County. A map showing the location of the mitigation sites is included in Appendix E – Wetland Mitigation. The mitigation area is administered by the Idaho Department of Parks and Recreation (IDPR) and includes protecting in perpetuity approximately 10 acres of existing wetlands within Castle Rock State Park.

The mitigation for the US-93 Project will include approximately 2.5 acre parcel which is described as a Fringe Area (see map in Appendix E). The fringe area contains at least 500 square feet of wetland along Almo Creek which will be protected as mitigation for the non jurisdictional wetlands impacted by the US-93 Project. A total of 45 square feet of non jurisdictional wetland will be impacted by the Build Alternative. Therefore, a mitigation ratio of 10:1 will be achieved with this fringe area. Major components of the US-93 mitigation site include:

- Implementation of grazing restrictions;
- Use of herbicide to control noxious weeds to selective areas. 'Blanket' spraying will not be allowed; and
- Documentation of the site.

3.16 VEGETATION

Jerome County is within the Intermountain Shrub Region as defined by the BLM. Within the county, typical undisturbed plant communities are generally composed of a sagebrush overstory with an understory of bunchgrasses and forbs²². To further assess the existing vegetation conditions along the corridor, a site visit at the Project area was conducted on July 18, 2005 by a biologist. A document called *The Natural Resources Report* was prepared. It is an evaluation of existing plant and vegetation communities along the Project corridor.

3.16.1 Affected Environment

US-93 passes through predominantly irrigated agricultural lands and several commercial, recreational (KOA Campground and 93 Golf Ranch) and industrial businesses located adjacent to the Project corridor.

The BLM wildlife habitat management area, also known as Wildlife Tract J10, is the only area within the Project corridor that is undeveloped. It is located on the west side of the highway just north of 100 South (see Figure 3-1). The Wildlife Tract J10 is a 101 acre tract of land managed cooperatively by the BLM and IDFG. This tract of land is mainly for upland game birds including gray partridges, pheasants, and California quail. The existing US-93 right-of-way adjacent to the BLM Wildlife Tract J10 is 400 feet wide. Approximately 190 feet separate the western edge of roadway pavement from the eastern property boundary of this tract. The tract contains native species in the shrub-steppe field including big sagebrush, rabbitbrush (*Chrysanthemum*), bluebunch wheatgrass (*Agropyron spicatum*), and several native forb species. Several non-native species are also present in this area, such as cheatgrass. This area contains scattered sagebrush, bunchgrasses, and a high density of tumble mustard and cheatgrass. The portion of the tract in the highway right-of-way contains minimal shrub cover. Some of the tract also contains prostrate kochia (*Kochia prostrata*) that was experimentally planted for cover.

Other than the BLM Wildlife Tract J10, vegetated areas adjacent to US-93 (outside of ITD right-of-way) are disturbed due to the dominance of agricultural and other uses. Cottonwood trees (*Populus* spp.) occur primarily adjacent to home sites where they have been planted. Vegetation directly adjacent along the highway, within ITD right-of-way, consists of introduced species such as crested wheatgrass (*Agropyron desertorum*) and invasive species such as cheatgrass (*Bromus tectorum*), tumble mustard (*Sysymbrium altimissum*), prickly lettuce (*Lactuca serriola*), and Canada thistle (*Cirsium arvense*). Some scattered native big sagebrush (*Artemesia tridentate*) is also present. The vegetated area within US-93 right-of-way is regularly disturbed due to highway maintenance activities.

3.16.1.1 Invasive Species and Noxious Weeds

Under Executive Order 13112 dated February 3, 1999, federally aided project must:

- Prevent the introduction of invasive species;

²² Jerome County Comprehensive Plan, 1997

- Detect and respond rapidly to and control populations of such species in a cost-effective and environmentally sound manner;
- Monitor invasive species populations accurately and reliably; and
- Provide for restoration of native species and habitat conditions in ecosystems that have been invaded.

Noxious weeds are considered invasive plant species that have been designated as such by Idaho State law. They are highly competitive with native vegetation growing in the area and often cause problems when left unmanaged. Below is a list of the noxious weeds reported in Jerome County²³:

- Buffalobur;
- Canada thistle (found along Project corridor);
- Diffuse knapweed;
- Field bindweed;
- Hoary cress;
- Leafy spurge;
- Perennial pepperweed;
- Perennial sowthistle;
- Poison hemlock;
- Puncturevine;
- Russian knapweed;
- Scotch thistle;
- Skeletonleaf bursage; and
- Spotted knapweed (found along Project corridor).

3.16.2 Environmental Consequences

3.16.2.1 No Build Alternative

There will be no impacts to vegetation in the Project area with the No Build Alternative.

3.16.2.2 Build Alternative

Under the Build Alternative there would be direct impacts to the vegetation within the existing and proposed right-of-way. These impacts are expected to be minimal because the vegetation impacted is well represented within the Project vicinity. The loss of undisturbed land from the Build Alternative is minimal considering that the majority of the property adjacent to the corridor is already disturbed due to agricultural use, commercial and business establishments, and residential properties. The Build Alternative will not require any right-of-way from the Wildlife Tract J10. Through the section of the project adjacent to the wildlife tract, the widening will occur mainly on the eastern side of the existing right-of-way. Even though the Build Alternative will use some of the area that may be used by wildlife in this tract, all of the improvements will be within current ITD right-of-way.

²³ Idaho's Noxious Weeds, 2003; Natural Resources Report, 2005

3.16.3 Secondary and Cumulative Impacts

As developments continue within the Commercial Overlay Zone, the land uses will change from an agricultural use to business and commercial.

3.16.4 Mitigation

ITD will develop a revegetation and planting plan during the design phase for this Project. The plan will be composed of native species appropriate to site conditions in order to revegetate areas disturbed during construction. Exposed and impacted areas will be replanted as quickly as possible.

Also, ITD will implement BMP's to help reduce and control spreading noxious weeds during and after construction. These may include using an approved herbicide prior to ground disturbing activities, identification and location of noxious weeds, regular cleaning of construction vehicles, and revegetation of disturbed areas as soon as feasible by the contractor.

3.17 WILDLIFE AND THREATENED AND ENDANGERED SPECIES

This section describes wildlife, wildlife habitat, threatened and endangered species, and special status wildlife species (i.e., species of concern and/or sensitive species) within the Project area. It was prepared in consultation with the U.S. Fish and Wildlife Service (USFWS) and the IDFG, and Idaho Conservation Data Center (CDC). The BLM Shoshone Field Office indicated that they had no Project concerns, as no BLM special status species inhabit the Project area. (See July 6, 2005 notes of telephone conversation in Appendix C).

3.17.1 Affected Environment

The US-93 Project passes through predominantly irrigated agricultural lands, several rural homes, a KOA Campground, a golf course, several commercial and industrial establishments, and one undeveloped tract of land (Wildlife Tract J10).

3.17.1.1 Wildlife Habitat

Wildlife habitat is limited within the Project corridor due to the high disturbance activities including farming and industrial and commercial areas.

3.17.1.2 Wildlife Tract J10

A wildlife tract is present in the Project area that is managed cooperatively by the BLM and IDFG for upland game birds including gray partridges, pheasants, and California quail. This wildlife tract was developed in accordance to the Sikes Act approved September 15, 1960 (16 USC 670a-670o, 74 Stat. 1052). The Sikes Act provides for the cooperation of the BLM (and other agencies) with state agencies in planning, development, conservation, and maintenance of wildlife areas.

The Wildlife Tract J10 is approximately 101 acres in size and is located on the west side of US-93 towards the north end of the Project (see Figure 3-1 for location). This area is currently used by wintering partridges and pheasants and is valuable since surrounding habitat has been converted to agriculture uses and does not provide suitable winter cover. This area contains scattered sagebrush, bunchgrasses, and a high density of tumble mustard and cheatgrass. Some of the tract also contains prostrate kochia (*Kochia prostrata*) that was experimentally planted for cover. The Build Alternative does not impact or require right-of-way from the Wildlife Tract J10. This parcel will not be impacted by the Proposed project.

3.17.1.3 Aquatic Habitat

Surface water is associated with irrigation canals and laterals, all of which exhibit seasonal and intermittent hydrologic characteristics; there are no natural streams or rivers present in the Project study area. The Snake River is the closest perennial stream and is approximately three miles south the Project area. Aquatic habitat is primarily limited to the canals/ditches, a few irrigation ponds, and localized flooding where irrigation water has accumulated at the ground surface. The irrigation network transports water delivered by the North Side Canal Company from April through October but are dry the remainder of the year. Irrigation deliveries are generally lowest in April and October and highest in July and August, resulting in a strong seasonal effect of the availability and distribution of water for fish, wildlife, and vegetation.

The IDFG StreamNet was searched to determine the known occurrences of sensitive fish species in the Project area. No federally listed threatened or endangered species or other special status fish species were identified as being present or of concern in the Project area (see the August 3, 2004 letter from the Idaho CDC in Appendix C).

3.17.1.4 Threatened and Endangered Species

Section 7(a)(2) of the Endangered Species Act (ESA) of 1973, as amended, requires that each federal agency review any action authorized, funded, or carried out by such agency to ensure that their action is not likely to jeopardize the continued existence of any threatened or endangered species or result in the destruction or adverse modification of habitat for such species. Federal funding, permitting, or land use management decisions are considered to be federal actions subject to Section 7. Threatened and Endangered Species are protected by the Endangered Species Act, administered by the USFWS.

The 90-day Species List Update prepared by the USFWS identifies threatened, endangered, proposed and candidate species that might occur in Jerome County (see Appendix C). Also, the Project area was assessed for species of concern and their habitat listed by the Idaho CDC and IDFG. Table 3-12 lists these species.

TABLE 3-12. LISTED THREATENED, ENDANGERED, AND CANDIDATE SPECIES

Common Name	Scientific Name	Status
Bald eagle	<i>Haliaeetus leucocephalus</i>	Threatened species
Utah valvata snail	<i>Valvata utahensis</i>	Endangered species
Snake River physa snail	<i>Physa natricina</i>	Endangered species
Bliss Rapids snail	<i>Taylorconcha serpenticola</i>	Threatened species
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Candidate species
Gray Wolf	<i>Canis lupus</i>	Experimental/Non-essential population

Candidate species have no protection under the ESA, but are included for planning considerations. The Threatened and Endangered Species and the Idaho CDC database contained no plant species of special concern within or adjacent to the Project area. Each of the species listed in Table 3-12 are discussed in the following paragraphs.

- **Bald Eagle**
High quality Bald Eagle habitat contains large diameter nest trees located in proximity to suitable food sources, usually aquatic in nature. The presence of large diameter trees with stout horizontal branches for perching and roosting in proximity to foraging or nesting habitat is an important feature of Bald Eagle habitat.

There is no suitable habitat for Bald Eagles within the Project area, due primarily to the lack of large areas and open water for foraging. Although there are a few large diameter trees along the corridor, they are not in proximity to foraging habitat and therefore are not suitable for nesting or daytime perch sites. The nearest suitable habitat is along the Snake River which is about three miles south of the Project area. A Bald Eagle nest was historically used along the Snake River, on the Blue Lakes Country Club golf course. However, this nest has not been occupied since 1994 and has not been monitored since 2000. No other records of Bald Eagles have been identified in the vicinity of the Project area.

- **Utah Valvata Snail**

The Utah Valvata Snail lives in deep pools adjacent to rapids or in perennial flowing waters associated with spring complexes. The species avoids habitats with heavy currents or rapids. The snail prefers well-oxygenated habitats of non-reducing calcareous mud or mud-sand substrate among beds of submergent aquatic vegetation. The species is absent from pure gravel-boulder bottoms. Distribution of this species is limited to a few springs and mainstream reaches in the Middle Snake River from American Falls Reservoir to the Hagerman Valley. Due to the lack of perennial streams, no suitable habitat exists in the Project area to support the Utah Valvata Snail. The only aquatic habitat in the Project area consists of canals, lateral, ditches, and irrigation ponds which only flow or contain water during the irrigation season. The Utah Valvata Snail is known only to occur in the Snake River Basin and therefore does not occur in the Project area.

- **Snake River Physa Snail**

The Snake River Physa Snail occurs on the underside of gravel to boulder size substrate in swift currents in the main stem of the Snake River. The species requires free flowing, turbulent, cold, well oxygenated waters. The Snake River Physa Snail has been found on boulders in the deepest accessible part of the river at the margins of rapids. Due to the lack of perennial streams, no suitable habitat exists in the Project area to support the Snake River Physa Snail. The only aquatic habitat in the Project area consists of canals, laterals, ditches and irrigation ponds which only flow or contain water during the irrigation season. This species is confined to the Snake River and therefore does not occur in the Project area.

- **Bliss Rapids Snail**

The Bliss Rapids Snail lives only in well oxygenated coldwater in the gravel and boulders of swift currents, usually just below canyon segments of the Snake River, in rapids or on boulder bars just below rapids. Due to the lack of perennial streams, no suitable habitat exists in the Project area to support the Bliss Rapids Snail. The only aquatic habitat in the Project area consists of canals, laterals, ditches and irrigation ponds which only flow during the irrigation season. This species is confined to the Snake River and therefore does not occur in the Project area.

- **Yellow-Billed Cuckoo**

The Yellow-billed Cuckoo preferentially selects moderately dense thickets and deciduous trees near water in lower elevations. They use low, dense, shrubby vegetation to a high degree. Western populations are restricted to narrow zones of riparian woodlands comprised of dense, closed-canopy stands of cottonwood and willow²⁴. They generally require relatively large riparian tracts below 7,000 feet for breeding and typically nest four to eight feet off of the ground. Suitable habitat for

²⁴ Heidel and Beauvais 2003

Yellow-billed Cuckoos is not present in the Project area, as riparian woodlands are essentially absent. The KOA Campground and a few irrigation canals have isolated patches of cottonwoods. However, these patches are not dense, do not have closed-canopies, and willows are not present in the under story. Therefore, this habitat is considered unsuitable for the cuckoo and this species is considered absent from the Project area.

- **Gray Wolf**

Suitable habitat for the Gray Wolf has been defined as any place with an adequate supply of ungulate prey and freedom from excessive human persecution. Gray Wolves use habitats with a variety of topographic features. Forests, open meadows, rocky ridges, and lakes or rivers may all comprise portions of a pack's territory. Gray wolves have been known to follow the seasonal elevation movements of ungulates, their principle food source. The Project area is within the USFWS Idaho Experimental Nonessential Population Zone and the Central Idaho Wolf Recovery Area. However, the known wolf packs in this recovery area have not been reported in the Project area or as far south as Jerome. The presence of this species in the Project area is unlikely as the habitats are highly modified by agriculture, rural development, and general urbanization.

3.17.1.5 Species of Concern

There are two species of concern that may occur within the Project study area according to the Idaho Conservation Data Center. These include the Western Toad (*Bufo boreas*) which is a BLM Type 2²⁵ Species of Concern and the Pygmy Rabbit (*Brachylagus idahoensis*) which is a sensitive species as defined by the U.S. Forest Service. These species are of concern to the BLM and the U.S. Forest Service and both of are discussed below.

- **Western Toad**

Western Toads are found at a wide range of elevations in a variety of habitats including desert springs and streams, meadows and woodlands, and in and around ponds, lakes, reservoirs, and slow-moving rivers and streams. They dig burrows in loose soil or use burrows of small mammals in or near wet areas. The toad requires open water lacking a strong current for breeding. Breeding usually occurs from late January through July, depending on latitude, elevation, and local conditions, generally commencing during snowmelt. Strings of eggs are attached to vegetation in shallow and typically still water.

One historical (1926) occurrence of this species was recorded in the Idaho CDC database about three miles south of the Project area along the Snake River between Blue Lakes and Shoshone Falls. No records of occurrence of this species exist within the Project area. It is possible that Western Toads use the drainage ditches and other irrigation water sources with shallow, slow-moving water for breeding. However, these water sources are likely to be dry at the beginning and/or end of the breeding season, which could render them unsuitable as breeding habitat for toads.

- **Pygmy Rabbit**

Pygmy Rabbits are a small rabbit species endemic to the Great Basin. They are a sagebrush obligate species and require dense stands of big sagebrush for both food and cover. The rabbits excavate and use extensive burrow systems requiring soil

²⁵ Type 2 species include those that re experiencing declines throughout their range with a high likelihood of being listed under the ESA in the foreseeable future due to their rarity and/or endangerment factors.

properties that allow for ease of excavation. Canopy cover, density, and height of sagebrush are also important features of burrowing habitat. Sagebrush is the primary food source for Pygmy Rabbits and is used exclusively during the winter. Grasses and forbs are also eaten in the spring and summer, thus high density of forbs is important. Near Mormon and Magic Reservoirs in southwestern Idaho, habitat has been described as occurring in pockets where soils can accumulate near the base of hills, such as intermittent areas of taller sagebrush and deeper soils. In Cassia County, habitat has been described as occurring in the banks along dry washes where vegetation is denser and deep soils are exposed²⁶.

Sagebrush habitat is limited in the Project area; it is confined to the southwestern portion of the corridor and in the BLM Wildlife Tract J10 (see Figure 3-1). Habitat in the BLM Wildlife Tract J10 contains limited sagebrush and is dominated by tumble mustard and grasses. Based on the above description of habitat for this species, and a field reconnaissance of the sagebrush, it was determined that the Project area is unsuitable for Pygmy Rabbits and that they are likely absent. Further, this species has not been documented in the Project area and no signs of rabbits were seen during field investigations.

3.17.2 Environmental Consequences

3.17.2.1 No Build Alternative

The No Build Alternative will have no impact on wildlife or wildlife habitat.

3.17.2.2 Build Alternative

The Build Alternative includes widening US-93 to four through lanes in each direction, a 20 foot paved path, and a 16 foot planted medium. The increased roadway width may increase mortality rates from wildlife/vehicle collisions. However, the medium provides a refuge for animals crossing the roadway.

3.17.2.3 Wildlife Tract J10

The existing US-93 right-of-way adjacent to the Wildlife Tract J10 is 400 feet wide. Approximately 190 feet separate the western edge of roadway pavement from the eastern property boundary of this wildlife tract. This area within US-93 right-of-way may be unintentionally utilized by the IDFG as part of the overall wildlife tract land. The Build Alternative will not require any right-of-way from the Wildlife Tract J10. Through the section of the project adjacent to the wildlife tract, the widening will occur mainly on the eastern side of the existing right-of-way. Even though the Build Alternative will use some of the area that may be used by wildlife in this tract, all of the improvements will be within current ITD right-of-way. No new property will be required from the Wildlife Tract J10.

3.17.2.4 Threatened and Endangered Species

- Bald Eagle - The proposed US-93 Project will have No Affect on Bald Eagles, as this species is not known to nest, roost, or forage in the Project area and suitable habitat for this species is absent.
- Utah Valvata Snail - The Utah Valvata Snail is known only to occur in the Snake River Basin and therefore does not occur in the Project area. The Project will have a No Affect on this species.
- Snake River Physa Snail - This species is confined to the Snake River and therefore does not occur in the Project area. The Project will have a No Affect on this species.

²⁶ Personal communication with Scott Bailey, (IDFG)

- Bliss Rapids Snail - This species is confined to the Snake River and therefore does not occur in the Project area. The Project will have a No Affect on this species.
- Yellow-Billed Cuckoo - No suitable habitat for this species is found within the Project area is absent from the Project area. The Project will have a No Affect on this species.
- Gray Wolf - The proposed Project would have No Affect on the Gray Wolf because this species is not known to occur in the Project area and habitat is considered unsuitable.

From the USFWS Threatened and Endangered species listing provided dated June 2007 (see Appendix C), there are no identified issues that would indicate that consultation under Section 7 of the Endangered Species Act of 1973, as amended, is needed for this Project. Threatened and Endangered Species exist in the Project region; however this Project will not pose an increase risk to any of the listed threatened and endangered species in Jerome County. No habitat for endangered and threatened species of any kind will be impacted. No individuals of the species will be at risk from this Project.

FHWA reviewed the documentation that ITD submitted and agreed with the conclusion that the proposed action will have "no-effect" on Threatened and Endangered listed species on March 14, 2007. The conclusion of the analysis is that the Project named US-93 from I-84 to SH-25 in Jerome County, Idaho will have no affect on any of the listed, proposed or candidate species by the USFWS under Jerome County list File #912.0000, 2007-SL-0497 dated June 1, 2007. Analysis information is attached. No consultation is required with the USFWS (No Affects for Threatened and Endangered Species - see email in Appendix C).

3.17.2.5 Species of Concern

- Western Toad
The proposed highway-widening Project will have no effect on the Western Toad. Although this species may inhabit the canals and ditches, the integrity of these water sources would not be compromised. Where the new road crosses such irrigation features, culverts and/or bridges will be replaced or upgraded with a suitable sized structure. If a delivery ditch parallel to the existing road were impacted, it would be replaced in kind. Therefore, there would be no net reduction in potential breeding habitat for the Western Toad. Further, standard BMP's would be used during construction to protect aquatic environments.
- Pygmy Rabbit
The proposed Project would have no effect on the Pygmy Rabbit because this species is not known to occur in the Project area and habitat is considered unsuitable.

3.17.3 Secondary and Cumulative Impacts

As developments continue within the Commercial Overlay Zone, the land uses will change from an agricultural use to business and commercial.

3.17.4 Mitigation

None required for this resource.

3.18 PERMITS AND CLEARANCES

3.18.1 No Build Alternative

No permits or clearances would be required under the No Build Alternative.

3.18.2 Build Alternative

The construction of the Build Alternative will require regulatory permits. These permits and clearances include the following.

3.18.2.1 Clean Water Act, Section 404

The Clean Water Act (CWA) Section 404 permit is required for discharging, dredging, or placing fill material within Waters of the U.S., including wetlands. This permit is obtained and regulated by the Army Corps of Engineers.

Certain types of activities can be authorized by the CWA Section 404 under the Nationwide permits (NWP) program. These types of permits are usually granted for projects that have minimal impacts on the wetlands and Waters of the U.S. For this Project, a Nationwide Permit 14, Linear Transportation Crossing, will be needed for the impacts to the irrigation canals and laterals that are considered Waters of the U.S. This permit will be obtained prior to construction.

3.18.2.2 NPDES Construction Permit

This General Permit is associated with construction activities that disturb more than one acre. This permit is administered by the EPA and regulates storm water discharge on construction sites for each project. A Notice of Intent NOI will be completed and submitted prior to construction activities. This permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) that identifies specific BMPs to prevent surface water and groundwater pollution.

3.19 CONSTRUCTION IMPACTS

3.19.1 Environmental Consequences and Mitigation

This section discusses the anticipated construction impacts from the proposed Project and the mitigation measures to minimize and offset impacts.

3.19.1.1 Transportation

The construction of the Build Alternative will have temporary and short term impacts to the motorists driving the corridor. During construction, inconvenience for the traveling public will be minimized.

3.19.1.2 Land Use and Relocations

The on-going use of adjacent property during construction could be affected during the construction period. Mobility and the use of US-93 will be affected. Traffic congestion will occur and traffic detours may be required. Access to and from adjacent properties and businesses will be temporarily affected.

The Project will require the purchase of land and buildings for needed right-of-way for the highway improvements. This will occur prior to the start of any construction activities. Adjacent property owners will be provided with notice of these property acquisitions.

To avoid, reduce, and minimize potential effects on all types of land use during construction, the following mitigation measures are recommended:

- ITD will work with property and business owners adjacent to the highway corridor prior to the start of construction to identify potential effects and discuss ways to avoid

or minimize these effects;

- During the construction period, a mechanism will be developed by which property and business owners may report problems during construction. This mechanism will be developed with input from adjacent property owners prior to the start of construction activities. The implementation of this construction problem reporting mechanism will ensure problems are resolved in a timely manner;
- Property owners will be provided with access to their property and buildings during the construction period;
- Property owners will be provided with compensation for any required temporary use of adjacent property for construction activities, i.e. construction staging area or construction easement for utility work;
- Property owners will be given advance notice of planned construction and demolition activities and the anticipated schedule for these activities;
- Property owners will be given advance notice of anticipated disruptions to utility service; and
- Property owners will be given advance notice of planned street closures, traffic detours, congestion/delays, and reduced use of the existing roadway as practicable.

3.19.1.3 Agriculture and Farmlands

The construction of the Build Alternative will create temporary impacts to agricultural businesses along the corridor. Access to all businesses, including agricultural businesses, will be maintained during construction.

3.19.1.4 Economics

Disruptions associated with construction could also result in short-term impacts on local economic conditions. Businesses that depend upon the highway for regular shipments and deliveries may be affected by travel delays associated with proposed construction activities. Detours, if needed, could also affect local travel patterns and could result in a potential decrease in customers if local residents avoid longer distance travel while construction is occurring. Local businesses nearest the Project area may also experience short-term increases in business associated with construction workers purchasing gas, food, and sundries. Construction impacts would be temporary and are not expected to result in substantial economic impacts.

To avoid, reduce and minimize potential construction economic effects, mitigation measures are recommended. Please see the general list of mitigation measures above for Land Use and Relocation. Additional recommended mitigation measures include the following:

- Access to all businesses will be maintained throughout the construction period, including access for customers and delivery trucks;
- An assessment will be conducted prior to the start of construction activities to make sure that construction activities do not eliminate areas that are used for customer parking when visiting adjacent businesses. If necessary, other parking will be provided for such customer parking; and
- Effort will be taken to minimize potential disruption to utilities during business hours.

3.19.1.5 Social

Residents along the highway corridor will be affected by the construction activities. As described above, the use of US-93 and access to and from residences will be affected.

Work on utilities may result in temporary disruptions. The construction activities will temporarily result in increased noise due to the demolition activities and operation of the machinery. The construction activities also will temporarily result in increased dust and particulate matter in the air. As a result, it will be important for residents in the immediate highway corridor as well as those residing in the region to be alerted to planned construction activities. To address these issues, please see the recommended mitigation measures listed above in the discussion of construction land use and relocation effects. In addition, please see the recommended construction mitigation measures for air and noise effects.

3.19.1.6 Cultural Resources

During construction, cultural resources along the Project corridor will be avoided, except for the K Coulee Canal, EIRR tracks, L Canal, and the D-5 Ditch. These will remain operational during the construction of the US-93 corridor.

3.19.1.7 Visual and Aesthetic Characteristics

During construction vehicles, equipment and workers will be noticeable along the Project corridor. Areas used for construction staging or storage of construction materials may also be visible, and could increase human features in the area. These elements will contribute new, temporary sources of light and glare in the Project area, and may also temporarily obstruct views from, or toward the roadway. Dust from construction activities may also decrease views at times. BMPs would be followed during construction and could include spraying exposed soils and/or wheel washing to reduce potential fugitive dust from construction vehicles. Areas disturbed by construction activities will be re-vegetated.

3.19.1.8 Air Quality

PM10 emissions would be associated with land clearing, ground excavation, cut-and-fill operations, and construction of the roadway. Construction emissions would be greatest during the earthwork phase because most emissions would be associated with the movement of dirt on the site. PM10 emissions during construction activities are regulated by IDEQ.

PM10 emissions would vary from day to day, depending on level of activity, specific operations, and weather conditions. PM10 emissions depend on soil moisture, silt content of soil, wind speed, and amount and type of equipment operating. Larger dust particles would settle near the source, while fine particles are dispersed over greater distances from the construction site.

The construction of the proposed Project will temporally affect air quality near the Project corridor. Several measures will be used to help reduce the amount of dust created by the construction of the new roadway. These include applying water or other dust abatement agents to reduce fugitive dust. In addition, disturbed areas will be re-seeded and planted with approved roadside grasses as soon as feasible to minimize fugitive dust from exposed areas. Odors may bother visitors and/or residents near the Project during paving. The impacts will be temporary and cannot be feasibly mitigated.

3.19.1.9 Noise

Nearby receptors would experience temporary noise impacts during the construction of the Build Alternative. Roadway construction involves clearing, cut-and-fill activities, removing old roadway pavement sections, demolition, importing fill, structures, and paving. The most prevalent noise source at construction sites will be the internal combustion engine including earth-moving equipment, material-handling equipment, and stationary equipment. Because trucks will be present during most phases and will not be confined to the Project site, noise

from trucks could affect more receptors. Other noise sources may include impact equipment and tools such as pile drivers. Impact tools could be pneumatically powered, hydraulic, or electric.

3.19.1.10 Utilities and Emergency Services

Users along the corridor will experience temporary inconveniences due to the construction of the Build Alternative. The Build Alternative will require the relocation of several utilities along the corridor. ITD will coordinate with the effected utility companies and the users impacted will be given sufficient notice.

3.19.1.11 Hazardous Materials

The use of heavy construction equipment will require the use of petroleum products. The Contractor will be required to contain all areas used for refueling. Upon discovery of hazardous materials during construction, the Contractor will be required to notify ITD Hazardous Materials Coordinator immediately and cease all construction related activities in the area.

3.19.1.12 Geology and Soils

The Build Alternative will disturb the soils along the Project corridor. Disturbed areas will be reseeded as soon as is reasonable to minimize impacts from storm water runoff.

3.19.1.13 Water Resources

The water resources along the corridor are all irrigation related and include canals, laterals, ditches, and ponds. BMPs will be followed and applied to minimize the impacts from storm water runoff. Also, all irrigation features will be maintained during construction so that the farming and agricultural businesses that depend on them will not be harmed.

3.19.1.14 Wetlands and Waters of the U.S.

As discussed earlier, there are no wetland areas as defined by the Army Corps of Engineers within the Project corridor. However, the canals, laterals, and ditches are Waters of the U.S. and are provided protection under the CWA, Section 404. BMPs will be adhered to so that impacts to waters of the U.S. will be minimized. All canals, laterals, and ditches will be maintained operational during the construction of the roadway.

3.19.1.15 Vegetation

Vegetation will be disturbed during construction of the Build Alternative. BMPs will be followed to minimize the disturbance of vegetation along the corridor. Disturbed areas that are not part of the roadway or trail cross section will be reseeded as soon as reasonable with an approved seed mix.

3.19.1.16 Wildlife and Threatened and Endangered Species

Wildlife along the Project corridor is limited. The BLM Wildlife Tract J10 will not be disturbed; the existing right-of-way in that area is wide enough for the Build Alternative. No threatened and endangered species are found along the Project corridor. There will be no construction related impacts to wildlife and threatened and endangered species.

CHAPTER 4.0 SECTION 4(F) EVALUATION

Section 4(f) of the Department of Transportation Act provides protection to publicly owned parks and recreational areas, wildlife and waterfowl refuges, and historic sites on or eligible for inclusion onto the National Register of Historic Places (NRHP). Specifically, Section 4(f) states:

“The Secretary [of Transportation] may approve a transportation program or project...requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use [49 USC 303(c)].”

This section discusses the resources within the US-93 Project corridor that may qualify for protection under Section 4(f) as defined in 23 CFR 771.135.

4.1 BUILD ALTERNATIVE¹/PROJECT PURPOSE AND NEED

The purpose of this Project as described in Chapter 1 of the Environmental Assessment (EA) is to:

- Increase US-93 roadway capacity to accommodate existing and future year 2030 vehicle traffic; and
- Increase transportation safety for all users.

Improvements to US-93 Project corridor are needed based on the following factors:

- Predicted 2030 peak hour traffic demand exceeds available transportation capacity;
- The US-93 Project corridor is a designated Commercial Overlay Zone (COZ) and the existing two lane facility will not accommodate the operations associated with future development;
- US-93 needs to be designed to provide a safe transportation facility for farm operations and residents until these properties develop as commercial facilities; and
- The Project corridor does not meet community needs to accommodate a bicycle and pedestrian facility.

4.2 IDENTIFICATION OF SECTION 4(F) RESOURCES

Section 4(f) protection applies to publicly owned parks and recreational areas, public waterfowl and wildlife refuges, and historic properties on or eligible for inclusion onto the NRHP. There are no publicly owned recreational areas (KOA Campground and the 93 Golf

¹ The term Build Alternative is used throughout this section instead of Proposed Action.

Ranch are privately owned) nor are there any waterfowl or wildlife refuges within the US-93 Project corridor.

Section 4(f) applies to historic properties that are on or eligible for inclusion onto the NRHP. To identify historic resources along the corridor, two cultural resource inventories were conducted. The first cultural resources report was prepared in 2001 by Shaprio and Associates². The second report is an addendum to the original report. The addendum cultural resources report provides additional information regarding eligibility for historic resources in the area. Specifically, it responded to the Idaho State Historic Preservation Office's (SHPO) request for clarification, report new information about the cultural resources in the Area of Potential Effect (APE), and to address the impacts to cultural resource from the revised Project alignment. The addendum report has been reviewed and approved by the Idaho SHPO (see letter in Appendix C).

36 CFR 800 defines the term historic property as "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria. The term eligible for inclusion in the National Register includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria". The term historic property is used throughout this Section 4(f) Evaluation.

4.2.1 Determination of Eligibility

A historic or archaeological resource that is eligible for the NRHP has at least one of the qualities described below:

- Resource associated with events that have made a significant contribution to the broad patterns of our history;
- Resource associated with the lives of persons significant in our past;
- Resource that embodies the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and
- Resource that has yielded or may be likely to yield, information important in prehistory or history.

A total of 17 historic resources were identified along the Project corridor and are listed in Table 4-1 (found on the following page). Of these, eight are not eligible for inclusion onto the NRHP; the other nine are eligible or have already been included onto the NRHP. Figure 3-4 of the previous chapter shows the location of the eligible cultural resources along the corridor. Each of the historic properties is shown in Table 4-1, found on the following page, with their eligibility rating and criteria.

² US-93: Petro II to SH-25 Jerome County, Idaho, Archaeological and Historical Survey Report, Archaeological Survey of Idaho

TABLE 4-1. SUMMARY OF CULTURAL RESOURCES IN THE PROJECT AREA

Name of Site	NRHP Eligibility	NRHP Criteria	Location
K Coulee Canal	Eligible	Criterion A	Crosses US-93 at MP 54.7.
Lickley Farm	Not Eligible		Moved to the IFARM near I-84, off the of the US-93 corridor.
Lickley Tenant House	Not Eligible		MP 54.4, east side of US-93.
House (53-17011/CR-4)	Not Eligible		MP 54.9, west side of US-93.
Wild Rose Ranch	Eligible	Criteria A and C	Adjacent to US-93 east side at MP 55.5.
House	Not Eligible		MP 55.9, west side of US-93, adjacent to the railroad tracks.
Oregon Short Line Railroad (known as the Eastern Idaho Railroad)	Eligible	Criterion A	Crosses Project at MP 55.9.
Mountain View Ranch	Eligible	Criteria A, B, & C	Adjacent to US-93 on west side at MP 56.0.
Jacob B. Van Wagener Barn	Listed on NRHP	Criteria A and C	Adjacent to US-93 on west side at MP 56.1.
Jacob B. Van Wagener Caretaker's House	Listed on NRHP	Criterion C	Adjacent to US-93 on west side at MP 56.1.
L Canal	Eligible	Criterion A	Crosses under US-93 at MP 56.5.
L Canal Bridge #1	Not Eligible		Located at MP 56.5.
House and shed	Not Eligible		MP 56.6, west side of US-93
North Side Canal Water Master's House	Eligible	Criteria A, B, & C	Adjacent to US-93 east side at MP 56.7.
D5 Ditch	Eligible	Criterion A	Crosses US-93 at MP 57.0.
Trash scatter	Not Eligible		Not available
Isolate find	Not Eligible		Not available

Table is from the Addendum Cultural Resources Report

For a complete description of each eligible site see Section 3.7 of Chapter 3.0.

4.3 ANALYSIS OF IMPACTS TO SECTION 4(F) RESOURCES

This section evaluates the impacts, if any, associated with the Build Alternative to each of the Section 4(f) resources discussed above. This analysis concludes whether or Section 4(f) use or impact would occur at each site. As shown in Table 4-1, nine eligible historic resources are located within the US-93 Project study area. There are no publicly owned recreational areas or wildlife refuges within the Project corridor.

4.3.1 Definition and Determination of Section 4(f) 'Use'

The term 'use' of a Section 4(f) resource means that an alternative will result in an impact to, or occupancy of, a Section 4(f) resource. Impacts or use can be interpreted as either direct or indirect (called constructive use for Section 4(f)). 23 CFR 771.135(f) defines use as:

- When land is permanently incorporated into a transportation facility; or
- When there is a temporary occupancy of land this is adverse in terms of the statute's preservationist purposes as determined by the criteria in paragraph (p)(7) of this section.

The impacts to historic resources resulting from the Build Alternative are categorized by criteria established by Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR 800). These include No Effect, No Adverse Effect, or Adverse Effect. The types of impacts from the Build Alternative were determined by the Federal Highway Administration (FHWA) and the Idaho Transportation Department (ITD) and approved by the Idaho SHPO. The definitions are as follows:

- No Effect is defined as no historic properties present or there are historic properties present but the undertaking would have no effect upon them as defined in 36 CFR 800.16(i);
- No Adverse Effect is defined in 36 CFR 800 as "when the undertaking's effects do not meet the criteria of 36 CFR 800.5(a)(1) 'Adverse Effect' or the undertaking is modified or conditions are imposed to avoid adverse effects." The Build Alternative results in a No Adverse Effect when the impacts to a historic property are minimal but do not completely alter the historic characteristics that qualify it for eligibility onto the NRHP; and
- Adverse Effect includes when the undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property's eligibility for the National Register (36 CFR 800.5(a)).

The Build Alternative has been designed to avoid five historical resources as shown in the preliminary design figures found in Appendix B. These properties are not impacted (No Effect) by the Build Alternative and include:

- Wild Rose Ranch;
- Mountain View Ranch;
- Jacob B. Van Wagenor Barn (part of the Mountain View Ranch);
- Jacob B. Van Wagenor Caretaker's House; and
- North Side Canal Water Masters House.

The Section 4(f) resources impacted by the Build Alternative are listed below and each will be a No Adverse Effect as determined by the Section 106 process. All of the historic resources impacted by the Build Alternative are linear features that extend beyond and outside the Project study area. The impacts to these historic properties are minimal in

comparison to the overall length of each. In addition, the Build Alternative will not substantially alter the historic characteristics that qualify them as eligible to the NRHP.

4.3.1.1 K Coulee Canal

The Build Alternative includes widening US-93 to the east at this location to avoid impacting the commercial businesses on the west side of the highway. Approximately 150 additional feet of the canal will be placed in a culvert. In whole, the Build Alternative will not alter the historical qualities of the K Coulee Canal that make it eligible for inclusion onto the NRHP. The Build Alternative results in a No Adverse Effect determination.

4.3.1.2 Oregon Short Line Railroad

The Build Alternative shifts US-93 to the east at the railroad crossing to avoid the businesses, Mountain View Ranch (Van Wagenor Barn), and residences on the west side of the highway. The proposed Project will result in a No Adverse Effect determination. The US-93 roadway will be 86 feet wide at the new crossing; it is currently 30 feet wide. The Build Alternative will not alter the historical qualities that make the Oregon Short Line Railroad eligible for the NRHP.

4.3.1.3 L Canal

Within the Project area, irrigation laterals that divert from the L Canal include the L4 Lateral, L3 Lateral, and L2 Lateral. The Build Alternative does not diminish the qualities that make the L Canal eligible for the NRHP. The impacts to the canal and each of its laterals are discussed.

- L Canal – Build alternative will shift US-93 to the west to avoid impacts to the North Side Canal Water Masters House. Approximately 550 feet of the canal will be realigned on the west side of US-93 and about 80 feet on the east side. The access roads (located on both sides of the canal) will also have to be realigned as part of the build alternative.
- L4 Lateral – A 500 foot section of this lateral parallels on the west side of US-93 which will have to be relocated due to the widening of the highway.
- L3 Lateral – A 400 foot long section of this lateral parallels US-93 on the west side of the highway. This segment will be relocated further west.
- L2 Lateral – No impacts to this canal; the build alternative does not cross it.

4.3.1.4 D5 Ditch

The Build Alternative will shift US-93 to the west at this location and will require that 300 feet of this ditch be relocated and placed in a culvert. The Build Alternative does not alter the qualities of the D5 Ditch that make it eligible for the NRHP.

4.4 DE MINIMIS DETERMINATION

Congress recently amended Section 4(f) when they enacted the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (Public Law 109-59, enacted August 10, 2005) ("SAFETEA-LU"). Section 6009(a) of SAFETEA-LU added a new subsection to Section 4(f), which authorizes the FHWA to approve projects that use a Section 4(f) resource that are part of a historic property without analysis of feasible and prudent avoidance alternatives. However, FHWA must make a finding that such uses would have *de minimis* impacts upon the Section 4(f) resource, with the concurrence of the relevant SHPO (see signed ITD form 1502 in Appendix D). A finding of *de minimis* impact

can be made if FHWA, in consultation with the SHPO, has made a “*No Adverse Effect*” determination for the resource under Section 106 of the NHPA. With regard to historic Section 4(f) resources, Section 6009 of SAFETEA-LU adds the following language to Section 4(f):³

4.4.1 De Minimis Impacts

4.4.1.1 Requirements

The requirements of this section will be considered satisfied with respect to an area described in paragraph (2) if the Secretary determines, in accordance with this subsection, that a transportation program or project will have a *de minimis* impact on the area. In making any determination under this subsection, the Secretary will consider to be part of a transportation program or project any avoidance, minimization, mitigation, or enhancement measures that are required to be implemented as a condition of approval of the transportation program or project.

4.4.1.2 Historic Sites

With respect to historic sites, the Secretary may make a finding of *de minimis* impact only if the Secretary has determined, in accordance with the consultation process required under Section 106 of the NHPA (16 U.S.C. 470f) that:

- The transportation program or project will have No Adverse Effect on the historic site; or
- There will be no historic properties affected by the transportation program or project;
- The finding of the Secretary has received written concurrence from the applicable State Historic Preservation Officer or tribal historic preservation officer (and from the Advisory Council on Historic Preservation if the Council is participating in the consultation process);
- The finding of the Secretary has been developed in consultation with parties consulting as part of the process referred to in subparagraph (A); and
- A “No Adverse Effect” determination, as part of the Section 106 process, is anticipated for all the impacted historic resource for this Project. FHWA will request that the SHPO concurs with the finding of No Adverse Effect to historic properties (see letter in Appendix C). This will qualify the historic resources for the “*de minimis*” exemption to the avoidance analysis as required by Section 4(f). Accordingly, this Section 4(f) Evaluation does not contain an analysis of avoidance alternatives.

The finding of “No Adverse Effect” concludes that the impacts resulting from the Build Alternative for the K Coulee Canal, Oregon Short Line Railroad, L Canal, and D5 Ditch, will not “alter, directly or indirectly, any of the characteristics of [the] historic property(s) that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association.”⁴ Based on those findings, and taking into consideration the harm minimization and mitigation measures that have been incorporated into the Build Alternative as documented in this Section 4(f) Evaluation, it is the conclusion of FHWA that the Build Alternative will have *de minimis* impact on the historic resources listed above. Therefore, an analysis of feasible and prudent avoidance alternatives under Section 4(f) is not required.

³ This provision will be codified as 23 U.S.C. § 138(b). Section 6009(a)(2) of SAFETEA-LU adds identical language at 49 U.S.C. § 303(d).

⁴ See 36 CFR § 805(a)(1)

SHPO has agreed to the finding of *de minimis* (see Appendix D – ITD form 1502 signed by SHPO).

4.5 MEASURES TO MINIMIZE HARM

Minimizing impacts to all the Section 4(f) resources were considered throughout the development of the Build Alternative. The Build Alternative (shown in Appendix B) minimizes harm to Section 4(f) resources along the US-93 corridor. This alternative was selected in part because it completely avoids impacting the Wild Rose Ranch, Mountain View Ranch and Van Wagener Barn, Van Wagener Caretakers House and Cistern, and the North Side Canal Water Masters House. The Build Alternative includes shifting the alignment west to avoid impacting the Wild Rose Ranch, Mountain View Ranch and Van Wagener Barn (listed on the NRHP), and the Van Wagener Caretakers House (listed on the NRHP) and shifted east to avoid impacting the North Side Canal Water Master's House.

The Section 4(f) resources impacted by the Build Alternative are linear features that traverse beyond the Project study area. To minimize harm to these linear historic resources the Build Alternative will use the minimal cross section at each location. Vertical headwalls will be used at the K Coulee Canal, Oregon Short Line Railroad, L Canal, and the D5 Ditch to minimize the impacts. The vertical headwalls will minimize the linear length of canal or ditch needed for this transportation Project. The canal slopes and channel configuration will be restored to their original shape as part of the construction.

4.6 MITIGATION

The Section 4(f) resources impacted by the Build Alternative are linear irrigation canals or ditches and the Oregon Short Line Railroad. The canals and ditches are owned, operated and maintained by the North Side Canal Company; the Oregon Short Line Railroad is owned, operated, and maintained by the Eastern Idaho Railroad. ITD will continue to coordinate with these companies.

4.7 COORDINATION

As discussed, two cultural resource inventories were conducted along the Project corridor. The canals are owned and maintained by the North Side Canal Company based out of Jerome. Coordination efforts have included the canal company. In addition, the canal company and the Eastern Idaho Railroad (owners and operators of the Oregon Short Line Railroad) will be coordinated with during the final design and construction of this Project.

4.8 SUMMARY

- The Build Alternative will use a segment of the K Coulee Canal, Oregon Short Line Railroad, L Canal, and the D5 Ditch. ITD through FHWA has determined that the impacts result in a “No Adverse Effect” for purposes of Section 106 of the NHPA with SHPO concurrence (see letter in Appendix C);
- The Build Alternative will have a *de minimis* impact on the resources listed above and that an avoidance analysis under SAFETEA-LU is not required as part of this Section 4(f) Evaluation;

- Although the use of the K Coulee Canal, Oregon Short Line Railroad, L Canal, and the D5 Ditch cannot be completely avoided, the Build Alternative considered measures to minimize harm to these resources;
- There are no additional ways to further minimize Section 4(f) impacts by additional measures to minimize harm; and
- ITD will continue to coordinate with the North Side Canal company and the Eastern Idaho Railroad. There are no adverse impacts to Section 4(f) resources, and therefore, no mitigation is required.

4.9 DETERMINATION

The Build Alternative will have *de minimis* impacts on the K Coulee Canal, Oregon Short Line Railroad, L Canal, and the D5 Ditch and avoidance is therefore not required. The Build Alternative includes all possible planning to minimize harm to these resources resulting from such use.

CHAPTER 5.0 - PUBLIC INVOLVEMENT

The public involvement effort for the US-93 Corridor Environmental Assessment (EA) was designed to meet the National Environmental Policy Act (NEPA) requirements while keeping the residents, stakeholders, and resource agencies apprised of the Project. The specific goal of the public involvement process was to support the EA process and develop understanding and support by local governments, interested agencies, and the general public for the Build Alternative. The most significant objectives of this plan included the following elements:

- Clearly present an updated schedule and activities for the EA and completion of the Project;
- Further build upon the earlier Project¹, communications, and information gathered through previous public involvement efforts;
- Clearly identify the public's issues, concerns and future needs for the roadway;
- Educate the public and stakeholders regarding the existing conditions, projected needs and related technical issues affecting the potential alternatives and final configuration for the roadway,
- Reestablish the Purpose and Need statement and goals for the corridor; and
- Provide clear, understandable written, graphic and visual information to effectively convey Project issues, needs, alternatives and the Build Alternative.

The public involvement activities completed for the EA built on earlier public involvement efforts associated with previous planning and environmental studies along the Project Corridor. Due to this work, the public involvement efforts for this EA focused on confirming issues raised during scoping and planning, and gathering comments on the feasible and recommended alternatives.

A very brief summary of the public involvement activities completed as part of the initial Project is included for reference in Section 5.3.

5.1 PUBLIC INVOLVEMENT ACTIVITIES

Stakeholders were invited from local governments in Jerome City and Jerome County, Jerome Highway District, North Side Canal Company, members of the US-93 Citizen Committee and the Jerome Water and Sewer District. Corridor property owners, business operators and the general public were also invited and included at appropriate times in the process. The remainder of this Chapter summarizes the public involvement activities that were implemented and highlights of the results.

5.1.1 Activities

The following activities and supporting tools were implemented as part of the public involvement plan to appropriately engage area residents, businesses and affected local governments and resource agencies in the process. These included:

- *Stakeholder Meeting #1* – to introduce the current corridor access management concept plan alternatives and gather comments;

¹ US-93 Needs Assessment Project

- *Future Land Use Discussion Session* – to understand the planned and potential future land uses along and around the corridor;
- *Public Open House* – to present and gather comments on the recommended alternative; and
- *Public Hearing* – planned to afford formal public review and comment regarding the draft EA document.

5.1.2 Supporting Tools and Communications

- *Mailing list* – a mailing list was developed to include all local governments, affected agencies and corridor residents and businesses within a ¼ mile of the corridor. The mailing list was used for distribution of invitation to upcoming activities including the public open house and the public hearing;
- *Introductory letter and Project Kick-off* – an introductory letter introducing the new Project consultant, explaining the current status of the Project and inviting stakeholders to the first stakeholder meeting was sent to local governments, affected agencies, and key stakeholders;
- *Media announcements and advertisements* – media announcements were sent to local newspapers, television and radio stations to announce upcoming public events, public open house, and the public hearing. Announcements included text media releases and paid advertisements illustrating the corridor and inviting attendance at the upcoming public meeting; and
- *Comment forms* – comment forms were provided as part of the public meeting to afford participants an opportunity to register their comments regarding the recommended alternative. Input from the comment forms is included in the summary results highlights from the public meeting shown below.

5.1.3 Previous Public Involvement Efforts as Part of the US-93 Needs Assessment

A series of events and activities were implemented as part of the previous Project efforts for the US-93 Needs Assessment. These events and activities were planned to integrate fully into the planning process and satisfy the NEPA requirements. In general, those activities included initial public and local government scoping meetings, organization of the US-93 Committee to discuss issues and identify development potential and preliminary access management plans, and meetings with corridor property owners to discuss preliminary access management plans and alignments. The public, local governments, affected agencies, corridor residents and stakeholders were then all invited to review and discuss specific revised corridor alignments and access management plans. The effort included the use of a Project mailing list, distribution of six Project newsletters, presentations to selected organizations, and media releases as needed to provide appropriate notification of upcoming public events. The results from these events were used as a basis for the design of the public involvement efforts for the current Project.

- *Public meeting #1: July 2000* – Jerome and Shoshone – Project kick-off/issues scoping;
- *Interagency meeting: August 2000* – discuss issues and preliminary access management concepts;
- *Property Owner's meeting: October 2000* – to present and gather comments regarding preliminary access management concepts;

- *Jerome County/Jerome Highway District meeting:* November 2000 – to discuss preliminary access management concepts, initial alignment alternatives and corridor cultural resources;
- *Neighborhood meeting:* February 2002 – to discuss Project status, cultural resource issues and possible alternatives to avoid potentially eligible historic properties and to gather comments;
- *Commissioner's meeting:* March 2002 – to discuss Project Corridor status, current access management alternatives and gather comments; and
- *Idaho Transportation Department (ITD)/Team Planning meeting:* April 2002 – to discuss Project status and determine next steps.

5.1.4 Meetings as Part of this Environmental Assessment

Below is a list of the meetings and attendees. Also included is a brief description of the meeting and decisions that were made.

5.1.4.1 Access Management and Concept Plans Meeting: November 4, 2004

A meeting with local governments and related agencies was held on Thursday, November 4th 2004 at the Jerome Recreation Center in Jerome, Idaho. Meeting attendees were invited via the introductory letter described above which was sent on October 11th, 2004. The purpose of the meeting was:

- To present and discuss the initial access management concept plans; and
- To seek consensus on four primary points:
 - 1) Maximum ½ mile access to US-93 at public roads (500 South, 450 South, 400 South, etc);
 - 2) Allow existing intermediate access (between ½ mile public access points) until land is re-developed and the land use changes;
 - 3) Jerome County Planning and Zoning to require developers to create frontage connecting roads to ½ mile access points at public roads (if not developed as part of the ITD reconstruction Project); and
 - 4) Jerome Highway District to agree to maintenance of new public frontage roads (if constructed to Jerome Highway District standards).

The meeting was attended by representatives from the ITD, City of Jerome, Jerome County, Jerome Highway District, North Side Canal Company, a major corridor business representative and the consultant team. The meeting began with an overview of the status of the corridor and related issues followed by a presentation of the current concept alternatives and access management options. The presentation was supported by large scale corridor aerial maps depicting the conceptual alternative alignment and location of access alternatives. This presentation was followed by an informal open discussion on the concept alternative and related issues.

Unanimous agreement was reached by all attendees including both policy setting entities, Jerome County and City of Jerome, for the following principles:

- Maximum ½ mile public access at public roads²;
- Allow intermediate access (between ½ mile access points, primarily via right-in/right-out opportunities) until land is re-developed – then connect via frontage roads;
- Jerome County Planning and Zoning to require developers to create frontage connecting roads to ½ mile access points at public roads; and
- Jerome Highway District agrees to maintenance of new public frontage roads, if they are built to their standards.

5.1.4.2 Future Land Use Meeting: February 17, 2005

Effective planning for the US-93 corridor is closely related to the future land uses of property adjacent to the roadway. In order to understand the potential future land uses, it was determined that a collective discussion among the related entities should be held.

Therefore, a meeting was held with local governments, planning and zoning representatives and affected agencies on February 17th, 2005 at the Jerome City Council chambers. The specific purpose of the meeting was to discuss and identify potential future development along the study corridor for use in development of the No Build Alternative. The meeting was attended by representatives from ITD, the City of Jerome, Jerome County, Jerome Highway District, the Jerome Water and Sewer District, Jerome County Planning and Zoning, Jerome Economic Development, and the consultant team.

The meeting began with an overview of what is already known about the planned development along the corridor and the existence of the ½ mile wide Commercial Overlay Zone created by Jerome County. This information was developed through preliminary research with the City of Jerome, Jerome County planning department, known private developers, and a visual reconnaissance of the corridor. Following the overview, participants were encouraged to provide input regarding other known development projects or plans that are highly likely along the Project Corridor. The highlights of comments received are listed below.

- The primary commercial development area is ¼ mile wide each side of US-93 center line, with wider commercial development anticipated near the I-84/US-93 interchange;
- Development outside of the ¼ mile (each side of US-93) commercial corridor will likely be mixed use and residential;
- Crossroads Point Business Center development (at the northwest corner of the I-84/US-93 interchange) is a mixed-use development planned to include a new hospital, convention center, possibly professional offices, restaurants, and four to six motels;
- A new 85 home subdivision around the 93 Golf Ranch is planned and has been proposed for County approval;
- “Big box” development may occur if not specifically limited or controlled by Jerome County ordinance and development standards;
- Other potential development may include, transportation/distribution hub facilities, mixed use commercial and planned installation of a major fiber optic line from the 93 Technical Park (northeast of the SH-25/US-93 intersection) south along US-93 to

² Jerome County and the City of Jerome want formal action (recommend approval) by the ITD Transportation Board on the proposed ½ mile access management plan as soon as possible to support their subsequent ordinance change.

Twin Falls and west along SH-25 into Jerome. This may promote development of other technology-related businesses; and

- Three key related issues were raised:
 - 1) Jerome County will need to develop ordinances regarding access, setbacks, landscaping, etc. to support the appropriate development within the adjacent to the commercial overlay zone;
 - 2) New accesses will need to conform to the new access policy and may require frontage roads provided by developers and built to Jerome Highway District standards; and
 - 3) Corridor facility development should accommodate a bicycle and pedestrian pathway through the corridor as proposed in the Jerome County plan.

5.1.4.3 Public Open House: May 26, 2005

A public open house was held for area residents, stakeholders and the general public to view and comment on the recommended corridor Build Alternative and access management concept. The open house was held on Thursday, May 26th from 7:00 to 9:00 p.m. at the Jerome City Council chambers. Invitations to the meeting were sent from the Project mailing list and notifications were provided via a media release and newspaper advertisement. The newspaper advertisement was published in the North Side News on Thursday, May 19th and in the Times News on Sunday, May 22nd, 2005. The open house was attended by 30 area residents and stakeholders, plus representatives from ITD and the consultant team. Comments were gathered by the planning team on flip charts and via comment forms. In general, those attending were very supportive of the recommended build alternative and access management concept. The highlights of comments received are listed below.

- Three lanes (center being turn or passing lane) with some entry lanes and frontage roads would accomplish the needs;
- The bike path is great and hopefully the ½ mile crossing will work if the traffic gets really heavy without proposed signals. Prefer bike path on east side (currently planned along the west side of US-93);
- Liked full access at ½ mile;
- Concern for losing direct access to commercial property;
- Concern for loss of trees along the 93 Golf Ranch (east side of the highway);
- Can width be reduced if center lane is removed;
- What about the phasing? Desire to start reconstruction on the south end first;
- Question the need for such an elaborate Project; and
- It will take too long to construct the four lane highway between Crossroads Parkway and SH-25. 2010 construction date is a disaster if Crossroads Point Business Center is built.

5.1.4.4 Public Hearing: October 23, 2007

A public hearing will be held on October 23, 2007 from 4 to 7 PM at the Idaho Department of Fish and Game located adjacent to the US 93 corridor. The public hearing provides an opportunity for individuals and stakeholder to make comments regarding the Build Alternative. Efforts to inform the public regarding the hearing included letters sent to

adjacent property owners, advertisements in local newspapers, and roadside banners with public hearing information. This Environmental Assessment will be made available for public review for more than 30 days. Comments received at the public hearing regarding the Build Alternative will be addressed.

Acronyms

Acronym	Definition
AASHTO	American Association of State Highway and Transportation Officials
ac	acres
APE	area of potential effect
ASTM	American Society of Testing and Materials
BLM	Bureau of Land Management, U.S Department of Interior
BMPs	Best Management Practices
CAA	Clean Air Act
CDC	Conservation Data Center (Idaho)
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
CO	carbon monoxide
CO ₂	carbon dioxide
COZ	Commercial Overlay Zone
CSI	College of Southern Idaho
dB	decibels
dBA	A-weighted decibels
EA	Environmental Assessment
EDA	U.S. Economic Development Administration
EIRR	Eastern Idaho Railroad
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Endangered Species Act
ESRPA	Eastern Snake River Plain Aquifer
FEMA	Federal Emergency Management Agency (U.S. Department of Homeland Security)
FHWA	Federal Highway Administration
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
FIFRA	Federal Insecticide, Fungicide, & Rodenticide Act
FIRM	flood insurance rate map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
ft ²	square feet
FTTS	FIFRA/TSCA Tracking System
HMIRS	hazardous materials information reporting system
I-84	Interstate 84
IDEQ	Idaho Department of Environmental Quality
IDFG	Idaho Department of Fish and Game
IFARM	Idaho Farm and Ranch Museum
IMP	city impact area
ITD	Idaho Transportation Department
L _{dn}	day/night sound level
L _{eq} (h)	equivalent sound level (for specific time frame)
L _{max}	maximum sound level
L _{min}	minimum sound level

Acronym	Definition
LOS	level of service
MOA	memorandum of agreement
MP	Milepost
mph	miles per hour
MUTCD	Manual on Uniform Traffic Control Devices
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAFTA	North American Free Trade Agreement
NEPA	National Environmental Policy Act
NFRAP	No Further Remedial Action Planned sites
NHPA	National Historic Preservation Act of 1966
NO _x	nitrogen oxide
NO ₂	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List
NRCS	U.S Department of Agriculture, Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI maps	National Wetland Inventory maps
O&M	operation and maintenance
OSL	Oregon Short Line
PM10	particulate matter less than 10 micrometers in size
ppm	parts per million
psi	pounds per square inch
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
ROW	right-of-way
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users
SIEDO	Southern Idaho Economic Development Organization
SFHAs	Special Flood Hazard Areas
SQG	Small quantity generator
SH-25	State Highway 25
SHPO	State Historic Preservation Officer
SWF/LF	solid waste landfills
SWPPP	Storm Water Pollution Prevention Plan
TNM	Traffic Noise Model
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
US-93	U.S. Highway 93
USC	United States Code
USDOT	United States Department of Transportation
USGS	United States Geologic Survey
USFWS	U.S. Fish and Wildlife Service
UST	Underground Storage Tank

References

CHAPTER ONE

Idaho Transportation Department (ITD), 2005. Statewide Transportation Improvement Program. Boise, Idaho. September 2005.

Idaho's Transportation Partners, 2004. Idaho's Transportation Future: Getting There Together, 2004-2034. Developed by Idaho's Transportation Partners through support of the Idaho Transportation Department and Idaho Transportation Board with technical support provided by CH2MHill. Adopted June 2004.

Jerome County, 1996. Jerome County Joint Agency Comprehensive Plan. Jerome, Idaho. Adopted November 1996.

Traffic Analysis Report, Parsons Brinckerhoff. June 2006

Federal Highway Administration (FHWA), Manual on Uniform Traffic Control Devices, June 2001.

CHAPTER TWO

W & H Pacific, 2002. US 93 Needs Assessment: 500 S to Barrymore, Barrymore to SH 25, and SH 25 to US 26. Prepared for Idaho Transportation Department. July 2002.

Idaho Transportation Department, State Highway Access Control, Administrative Policy A-12-01. November 2002

CHAPTER THREE

Jerome County Comprehensive Plan

Findings of Fact & Conclusion of Law Commercial Overlay Comprehensive Plan Amendment

Southern Idaho Telecom Corridor project

Jerome County Bicycle Plan

US-93 Needs Assessment

Soil Survey of Jerome County and Part of Twin Falls County, Idaho] United States Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service). 1991. Soil Survey of Jerome County Area, Idaho. 254 pp.

- U.S. Department of Agriculture Handbook No. 18, October 1993
- Soil Survey of Jerome County and Part of Twin Falls County, Idaho 2003
- U.S. Census Bureau, 2000
- Idaho Department of Commerce and Labor, 2005a
- Church, 2004a
- U.S. Census Bureau, 2000
- Idaho Department of Commerce and Labor, 2005a
- SIEDO, 2005
- Idaho Commerce and Labor Dept, 2005
- Idaho Department of Commerce and Labor, 2005b
- Appendix B of the Idaho Bicycle and Pedestrian Transportation Plan (January 1995)
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Soil Survey of Jerome County prepared by the U.S Department of Agriculture, Natural Resources Conservation Service (NRCS) United States Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service). 1991. Soil Survey of Jerome County Area, Idaho. 254 pp.
- Jerome County Comprehensive Plan, 1997
- Soil Survey of Jerome County and Part of Twin Falls County, Idaho – USDA, NRCS United States Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service). 1991. Soil Survey of Jerome County Area, Idaho. 254 pp.
- Soil Survey of Jerome County and Part of Twin Falls County, Idaho – USDA, NRCS United States Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service). 1991. Soil Survey of Jerome County Area, Idaho. 254 pp.
- The Natural Resources Report
- Idaho's Noxious Weeds, 2005
- Idaho's Noxious Weeds, 2003
- Natural Resources Report, 2005
- U.S. Department of Transportation, 1982. U.S. Department of Transportation, Federal Highway Administration, 1982. "Procedures for Abatement of Highway Traffic Noise and

Construction Noise.” Federal-Aid Highway Program Manual. Volume 7, Chapter 7, Section 3. Washington, D.C.

U.S. DOT, 1982 U.S. Department of Transportation, Federal Highway Administration, 1982. “Procedures for Abatement of Highway Traffic Noise and Construction Noise.” Federal-Aid Highway Program Manual. Volume 7, Chapter 7, Section 3. Washington, D.C.

[Project Level Air Quality Screening Analysis, September 2001]

[Safe Drinking Water Act of 1974]

[USDA, NRCS, Soil Survey of Jerome County and Part of Twin Falls County, Idaho] United States Department of Agriculture, Natural Resources Conservation Service (formerly the Soil Conservation Service). 1991. Soil Survey of Jerome County Area, Idaho. 254 pp.

Feasibility of Large-Scale Managed Recharge of the Eastern Snake Plain Aquifer System

IDEQ Technical Guidance Manual, January 31, 2000, page 118

FWHA 23 CFR 650, Subpart B, Erosion and Sediment Control on Highway Construction Projects

ITD Catalog of EROSION AND SEDIMENT CONTROL (BMP's)

Idaho Transportation Department Standard Specifications for Highway Construction

IDEQ Technical Guidance Manual, January 31, 2000, page 118

Federal Register 1986

Federal Register 1982

United States Army Corps of Engineers, 1987 Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1, U.S. Army Corps of Engineers Engineer Waterways Experiment Station, Vicksburg, MS. 92 pp. plus appendices.

Wetland Delineation and Waters of the U.S. Report Federal Interagency Committee for Wetland Delineation (FICWD). 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service and USDA Soil Conservation Service, Washington, D.C. Cooperative technical publication.

Bionomics Environmental, Inc., Wetland Delineation and Waters of the U.S. Report, US-93 I-84 to SH-

16 USC 670a-670o, 74 Stat. 1052

August 3, 2004 letter from the Idaho Conservation Data Center in Appendix C

USFWS et al. 2005 U.S. Fish and Wildlife Service, Nez Perce Tribe, National Park Service, Montana Fish, Wildlife and Parks, Idaho Fish and Game, and USDA Wildlife Services. 2005. Rocky Mountain Wolf Recovery 2004 Annual Report. D. Boyd, ed. USFWS, Ecological Services, 100 N Park, Suite 320, Helena MT. 72 pp.

Personal communication with Scott Bailey, IDFG

Section 7(a)(2) of the Endangered Species Act (ESA) of 1973

USFWS File #912.0500, SP #1-4-05-SP-511

Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS)

National Priority List (NPL)

No Further Remedial Action Planned sites (NFRAP)

Emergency Response Notification System (ERNS)

Facility Index System/Facility Identification Initiative Program Summary Report (FINDS)

Hazardous Materials Information Reporting System (HMIRS)

Resource Conservation and Recovery Information System (RCRIS)

FIFRA/TSCA Tracking System (FTTS)

Toxic Substances Control Act (TSCA)

Toxic Chemical Release Inventory System (TRIS)

City of Jerome, EDA/RCDA Preliminary Engineering Report

Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended

US-93: Petro II to SH-25 Jerome County, Idaho, Archaeological and Historical Survey Report, Archaeological Survey of Idaho

2001 Cultural Resources Survey (Sayer 2001)] Shapiro and Associates, Inc. US-93: Petro II to SH-25 Jerome County, Idaho. Idaho Archaeological and Historical Survey Report #2001/513. For the Idaho Transportation Department, District 4.

Addendum Report prepared by Bionomics

Hudson and Bowyer 1996 Hudson, L and G. Bowyer. 1996. IMACS Site Form for 10JE146. Recording took place during the World Com Fiber Optic Survey 1996. Idaho Archaeological and Historical Survey Report #1996/1039.

Sayer, C. 2001 Shapiro and Associates, Inc. US-93: Petro II to SH-25 Jerome County, Idaho. Idaho Archaeological and Historical Survey Report #2001/513. For the Idaho Transportation Department, District 4.

Anderson 1978 Anderson, M. 1978. Idaho Historic Sites Inventory Form for 53-11241 and 53-11242. Recording took place during the inventory for the National Register of Historic Places nomination of the Lava Rock Structures of South Central Idaho.

Anderson 1978 Anderson, M. 1978. Idaho Historic Sites Inventory Form for 53-11241 and 53-11242. Recording took place during the inventory for the National Register of Historic Places nomination of the Lava Rock Structures of South Central Idaho.

Sayer, C. 2001. Shapiro and Associates, Inc. US-93: Petro II to SH-25 Jerome County, Idaho. Idaho Archaeological and Historical Survey Report #2001/513. For the Idaho Transportation Department, District 4.

Sayer 2001 Shapiro and Associates, Inc. US-93: Petro II to SH-25 Jerome County, Idaho. Idaho Archaeological and Historical Survey Report #2001/513. For the Idaho Transportation Department, District 4.

CHAPTER FOUR

Section 4(f) as defined in 23 CFR 771.135

CHAPTER FIVE

None

List of Terms

TERM	DEFINITION
Aquifer recharge area	Area with a recharging effect on aquifers used for potable water.
Adverse Effect	“When the undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register.” (36 CFR 800.5(a)).
Alignment	Center of roadway; used to design road.
Best management practices (BMPs)	Used during construction, methods that have been determined to be the most effective, practical means of preventing or reducing environmental impacts.
Block group	A subdivision of a census tract, a block group is the smallest geographic unit for which the Census Bureau tabulates sample data.
Census	The census of population and housing is taken by the Census Bureau in years ending in zero. The census form includes both a short form (100% survey) and a long form (sample survey of one in six households).
Census tract	This is a small, relatively permanent statistical subdivision for the purpose of presenting data. Census tract boundaries normally follow visible features, but may follow governmental unit boundaries or other non-visible features. Census tracts average about 4,000 inhabitants.

TERM	DEFINITION
Commercial Overlay Zone	The Jerome County Comprehensive Plan states that the Commercial Overlay Zone is to “provide for and to encourage the grouping together of businesses, public and semi-public, and other related uses...and will be compatible to this highway corridor.” Therefore, the major objective of the Commercial Overlay Zone is to spur economic development within the county and to help facilitate local transition from a largely rural, agricultural-based community to a more diversified economy.
Construction impact (see also <i>effect, impact</i>)	Temporary impact that would occur over a short period of time while a project is under construction.
Cumulative impact (see also <i>effect, impact</i>)	Impact that “results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions...” [40 CFR 1508.7 (NEPA)]. The cumulative effects of an action may be undetectable when viewed in the individual context of direct and even indirect impacts but can, nonetheless, add to other disturbances and eventually lead to a measurable environmental change.
Effect (see also <i>impact, construction impact, cumulative impact, operational impact, secondary impact</i>)	“Effect” and “impact” are synonymous. Effects include ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions that may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial. Effects include: (1) <i>direct effects</i> that “are caused by the action and occur at the same time and place,” and (2) <i>indirect effects</i> that “are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable.” [40 CFR 1508.8 (NEPA)].
Environmental justice	A federal policy that provides equitable outreach benefits to minorities and low-income populations and that any adverse environmental effects are not disproportionate to these historically underserved groups.

TERM	DEFINITION
Historic property	Any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria. The term eligible for inclusion in the National Register includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.
Impact (see also <i>effect</i> , <i>construction impact</i> , <i>cumulative impact</i> , <i>operational impact</i> , <i>secondary impact</i>)	The effect or consequence of actions. Environmental impacts are effects upon the elements of the environments listed in WAC 197-11-444 (SEPA).
Impervious area	An area where water cannot flow down to groundwater resources.
Jurisdictional wetlands	Areas that are subject to the regulations of the Clean Water Act of 1977. These areas must exhibit all three characteristics: hydrology, hydrophytes, and hydric soils.
$L_{eq}(h)$	Equivalent noise level.
Lead agency	The agency with the main responsibility for complying with NEPA procedural requirements.
Level of Service (LOS)	(1) A qualitative rating of the effectiveness of a highway in serving traffic, measured in terms of operating conditions. (2) The quality and quantity of transportation service provided, including characteristics that are quantifiable (safety, travel time, frequency, travel cost, number of transfers) and those that are difficult to quantify (comfort, availability, convenience, modal image).
Median	A value in an ordered set of values below and above which there is an equal number of values.
Median (roadway)	The center area between opposing directions of travel. For this project the median is native non-irrigated vegetated except at major cross street and other locations.

Mitigation	Measures taken to reduce impacts on the environment. "Mitigation" includes in order of sequence: (1) Avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or taking affirmative steps to avoid or reduce impacts; (3) rectifying the impact by repairing, rehabilitating, or restoring the affected environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; (5) compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and/or (6) monitoring the impact and taking appropriate correction measures [40 CFR 1508.20 (NEPA) and WAC 197-11-768 (SEPA)].
No Adverse Effect	"When the undertaking's effects do not meet the criteria of 36 CFR 800.5(a)(1) 'Adverse Effect' or the undertaking is modified or conditions are imposed to avoid adverse effects." The Proposed Action results in a <i>No Adverse Effect</i> when the impacts to a historic property are minimal but do not completely alter the historic characteristics that qualify it for eligibility onto the NRHP.
No Effect	"Either there are no historic properties present or there are historic properties present but the undertaking would have no effect upon them as defined in 36 CFR 800.16(i)."
Noise Receptors	Sensitive areas including residential units, camping site, churches, and other.
Non-Jurisdictional wetlands	Are regulated under the FHWA; jurisdictional wetlands are regulated by the Army Corps of Engineers.
PM10	Particulate matter less than 10 micrometers in size.
pH	A scientific measurement of hydrogen ion concentration used to express acidity (0.0 to <7.0 values) of alkalinity (>7.0 to 14.0 values).
Prime farmland	The NRCS defines prime farmland as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops.

Public hearing	A public proceeding conducted for the purpose of acquiring information or evidence that will be considered in evaluating a proposed transportation project and that affords the public an opportunity to present for the record their views, opinions, and information on such projects. [CFR 327.3 (a)]
Race	Race is a self-identification characteristic of population and the 2000 census included White and Non-White (Persons of Color). Non-White includes Black or African-American alone, American Indian or Alaska Native alone, Asian alone, Native Hawaiian or other Pacific Islander alone, some other race alone, or a mixture of two or more races. Non-white can include persons of Hispanic/Latino heritage. Some Hispanic/Latinos, however, are White.
Riparian	Relating to or living or located on the bank of a watercourse (as a river) or sometimes of a lake or a tidewater.
Scoping	Determining the range of proposed actions, alternatives, and impacts to be discussed in an EIS. The required scoping process provides agencies and the public opportunity to comment. Scoping is used to encourage cooperation and early resolutions of potential conflicts, to improve decisions, and to reduce paperwork and delay.
Secondary impact (see also <i>effect, impact</i>)	Impacts that “are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use; population density or growth rate; and related effects on air and water and other natural systems, including ecosystems” [40 CFR 1508.8 (NEPA)].
Section 4(f)	A provision of the U.S. Department of Transportation providing protection for publicly owned public parks, recreation areas, wildlife and waterfowl refuges, or historic sites on or eligible for the National Register of Historic Places [49 USC 303 and 23 USC 138, 23 CFR 771.107(e) and 771.135].
Sensitive noise receptor	Sites such as schools or neighborhoods where people would be exposed to substantially increased noise levels that approach abatement criteria due to a project.
Social resources	Social elements of the environment, including population, housing, community facilities, religious institutions, social and employment services, cultural and social institutions, government institutions, military installations, and neighborhood cohesion.

Sole Source Aquifer	A Sole Source Aquifer is an underground water supply that is the sole or principal source of drinking water for a given area. These are protected by the Safe Drinking Water Act and regulated by the EPA.
Staging area	An area near construction activities that is temporarily used by contractors to store equipment, vehicles, and construction materials. It may also include areas used to temporarily contain potentially contaminated soil or water until treated and/or disposed off-site.

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Name	Title	Project Role
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Appendix A

Existing Conditions Figures



Scale in Feet

0

250

Key to Existing Access Points:

B

Business Access

C

Canal Access

F

Farm Access

i

Unsignalized Intersection

R

Residential Access

U

Utility Access

F

Farm Access

i

Unsignalized Intersection

Si

Signalized Intersection

2

Figure A-1

Existing Conditions/No-Build Alternative



Scale in Feet

0 250

Key to Existing Access Points:

Business Access

Residential Access

Farm Access

Utility Access

Signalized Intersection

Unsignalized Intersection

Canal Access

Figure A-2

Existing Conditions/No-Build Alternative



Scale in Feet

0 250

Key to Existing Access Points:

Business Access	Canal Access	Utility Access	Signalized Intersection
Residential Access	Farm Access	Unsignalized Intersection	

Figure A-3

Existing Conditions/No-Build Alternative



Scale in Feet
0 250

Key to Existing Access Points:

Business Access

Canal Access

Farm Access

Unsignalized Intersection

Residential Access

Utility Access

Signalized Intersection

Figure A-4
Existing Conditions/No-Build Alternative



Scale in Feet

0 250

Key to Existing Access Points:

Business Access	Canal Access	Utility Access	Signalized Intersection
Residential Access	Farm Access	Unsignalized Intersection	

Figure A-5
Existing Conditions/No-Build Alternative



Scale in Feet

0 250

Key to Existing Access Points:

Business Access	Canal Access	Utility Access	Signalized Intersection
Residential Access	Farm Access	Unsignalized Intersection	

Figure A-6

Existing Conditions/No-Build Alternative



<p>Scale in Feet</p> <p>0 250</p> 	<p>Key to Existing Access Points:</p> <table><tr><td> Business Access</td><td> Canal Access</td><td> Farm Access</td><td> Unsignalized Intersection</td></tr><tr><td> Residential Access</td><td> Utility Access</td><td> Signalized Intersection</td><td></td></tr></table>	 Business Access	 Canal Access	 Farm Access	 Unsignalized Intersection	 Residential Access	 Utility Access	 Signalized Intersection		<p>Figure A-7</p> <p>Existing Conditions/No-Build Alternative</p> 
 Business Access	 Canal Access	 Farm Access	 Unsignalized Intersection							
 Residential Access	 Utility Access	 Signalized Intersection								



<p>Scale in Feet</p> <p>0 250</p> 	<p>Key to Existing Access Points:</p> <table border="0"><tr><td> Business Access</td><td> Canal Access</td><td> Farm Access</td><td> Unsignalized Intersection</td></tr><tr><td> Residential Access</td><td> Utility Access</td><td> Signalized Intersection</td><td></td></tr></table>	 Business Access	 Canal Access	 Farm Access	 Unsignalized Intersection	 Residential Access	 Utility Access	 Signalized Intersection		<p>Figure A-8</p> <p>Existing Conditions/No-Build Alternative</p> 
 Business Access	 Canal Access	 Farm Access	 Unsignalized Intersection							
 Residential Access	 Utility Access	 Signalized Intersection								



Scale in Feet

0 250

Key to Existing Access Points:

Business Access	Residential Access	Utility Access	Signalized Intersection
Canal Access	Farm Access	Unsignalized Intersection	

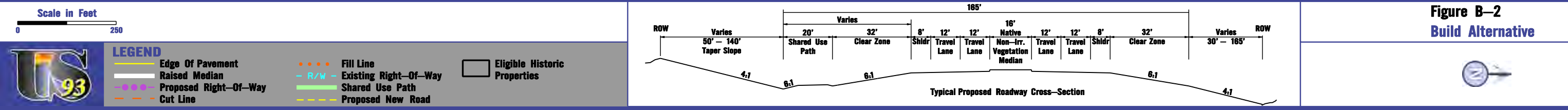
Figure A-9

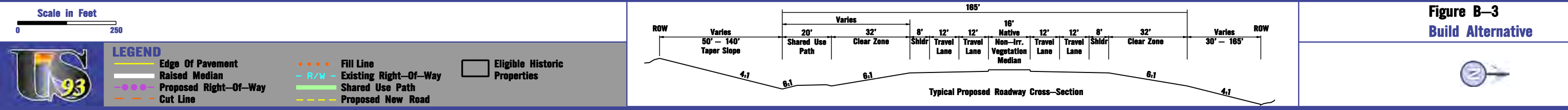
Existing Conditions/No-Build Alternative

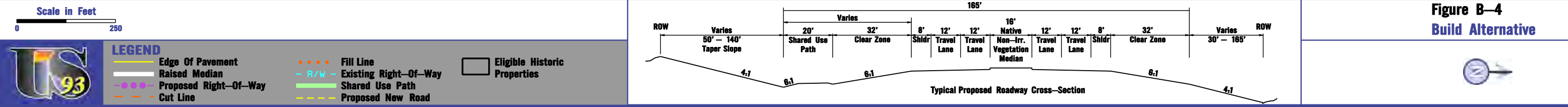
Appendix B

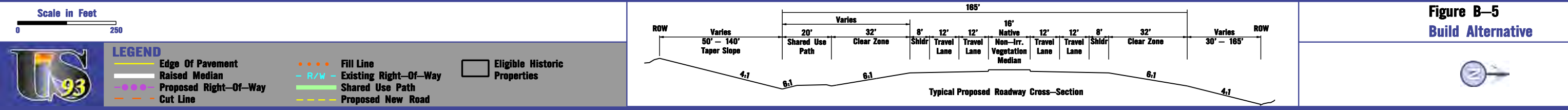
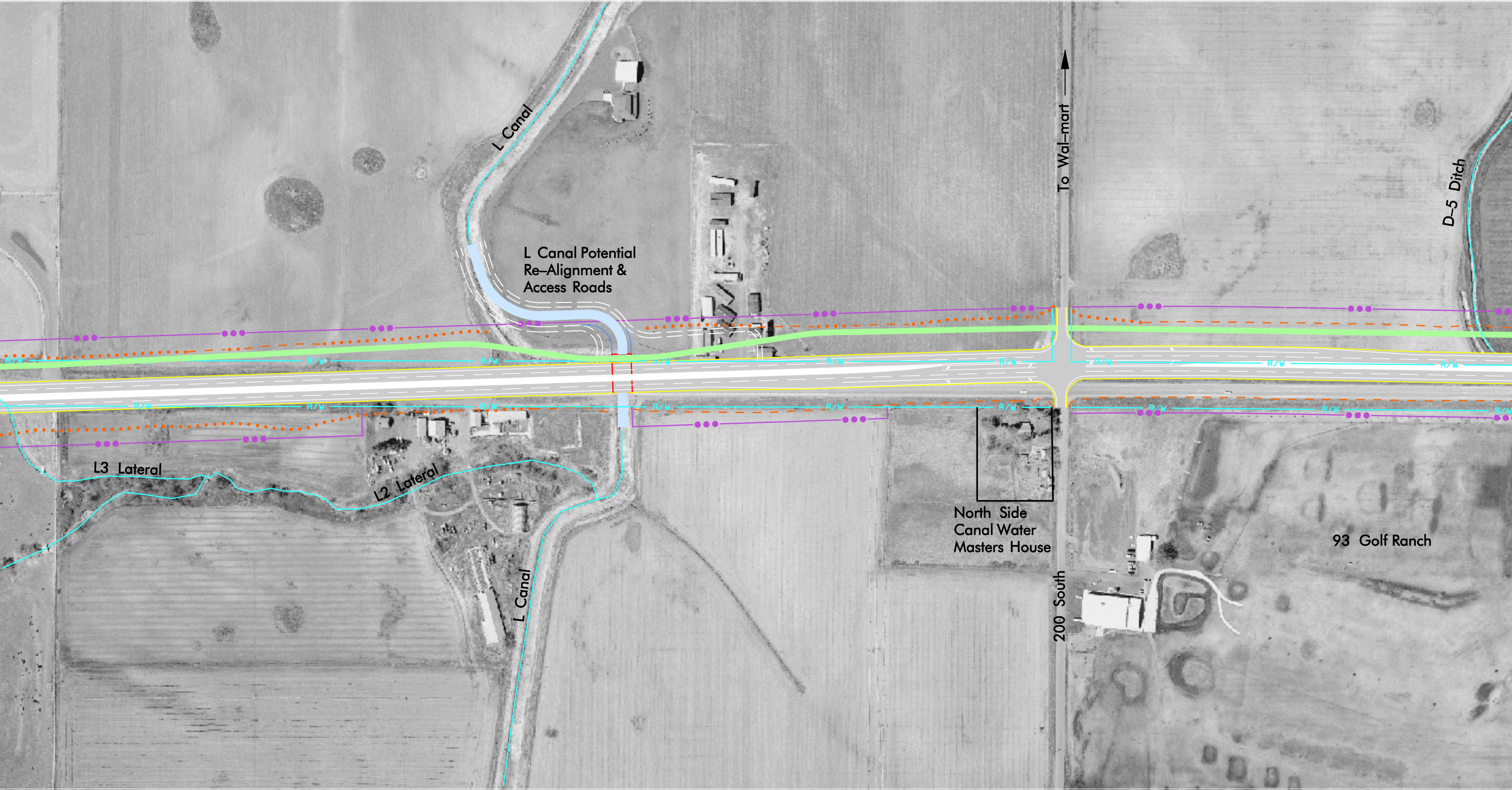
Build Alternative Figures

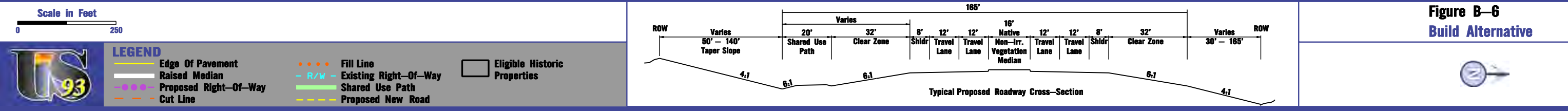
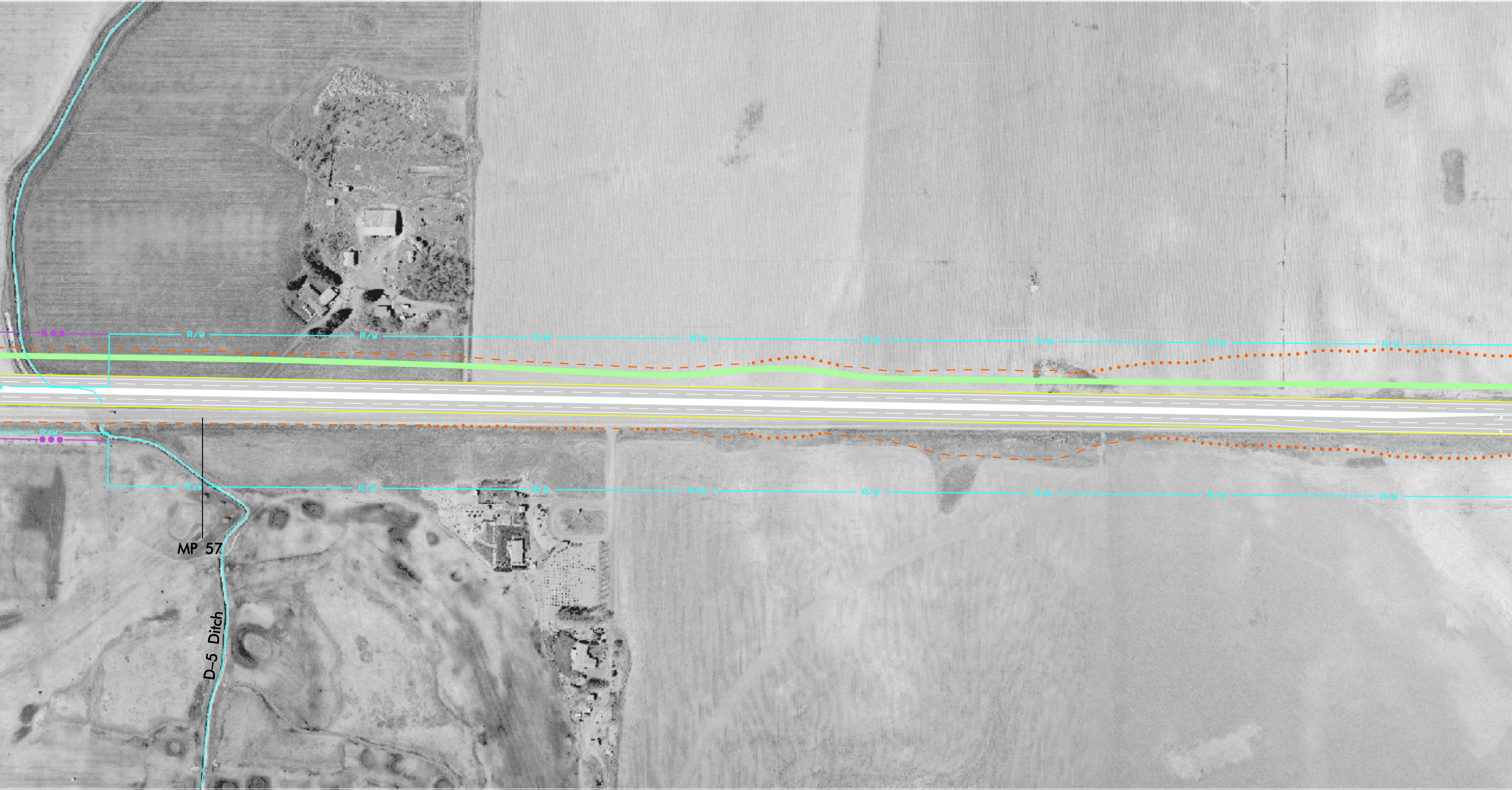


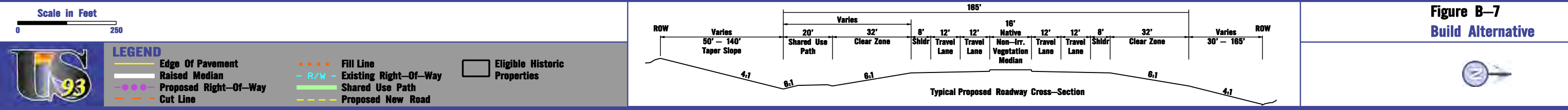
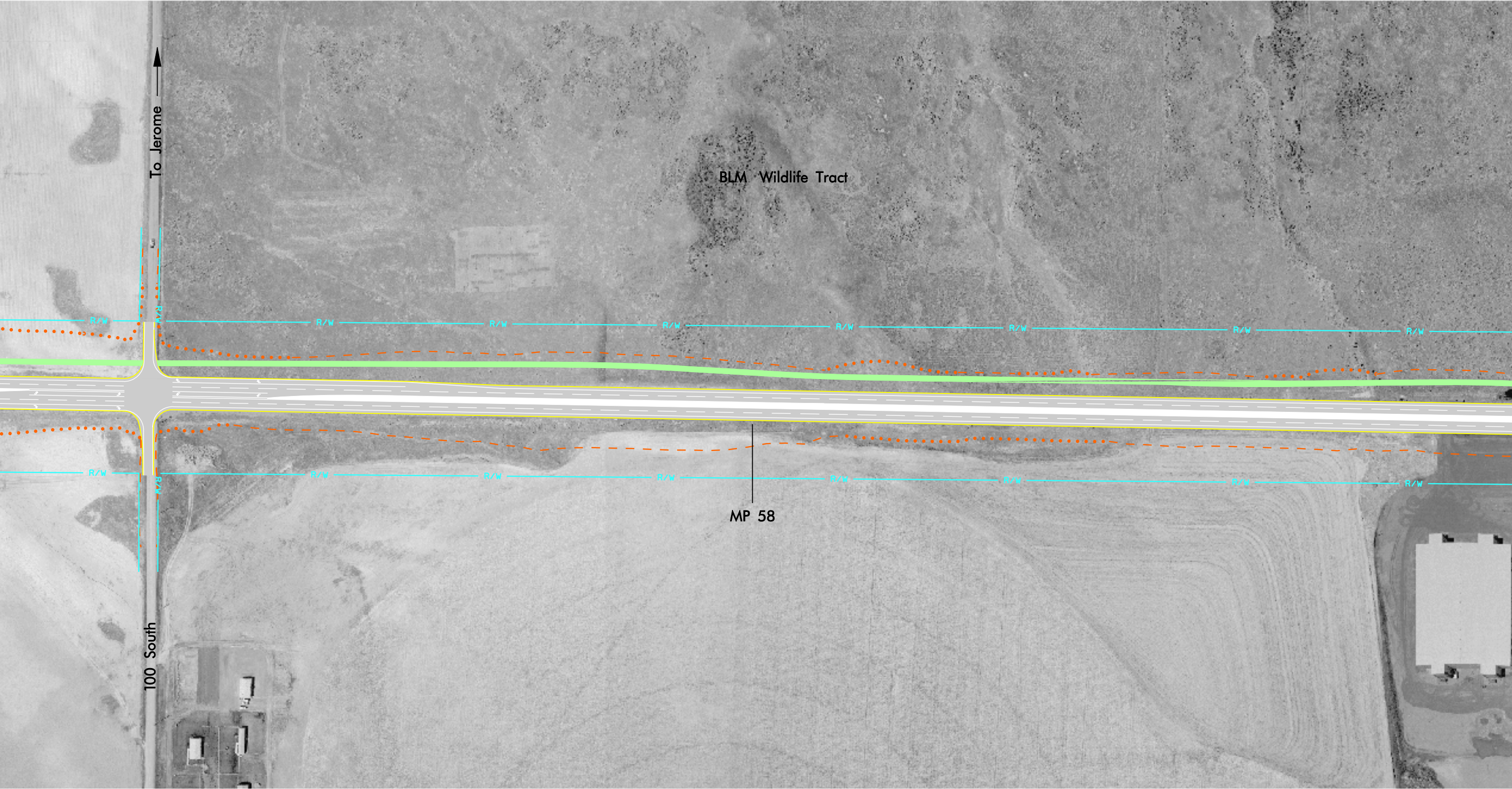


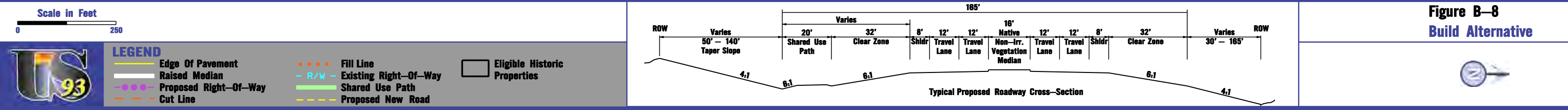
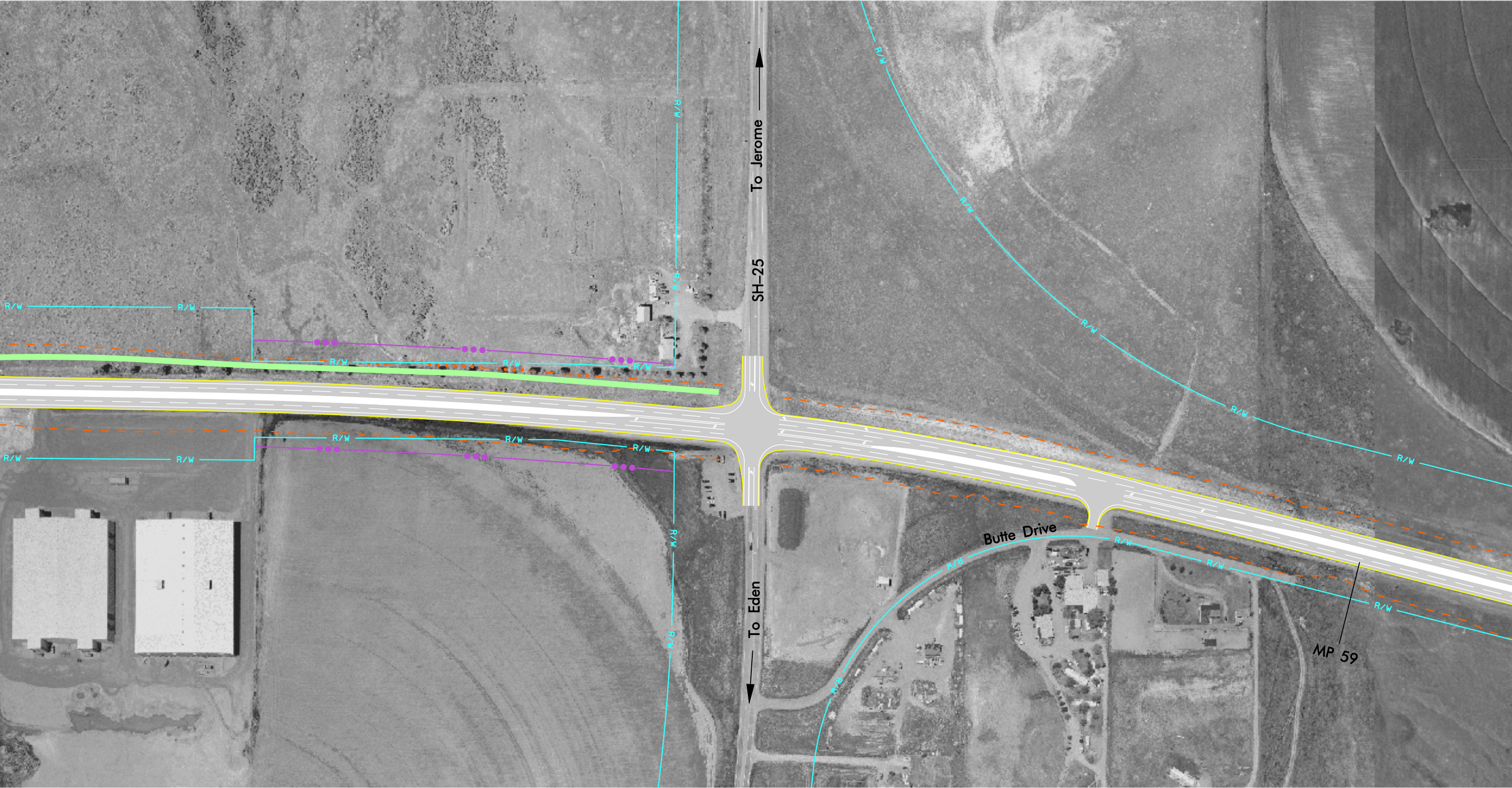


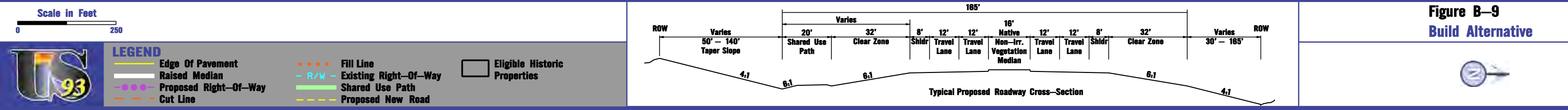
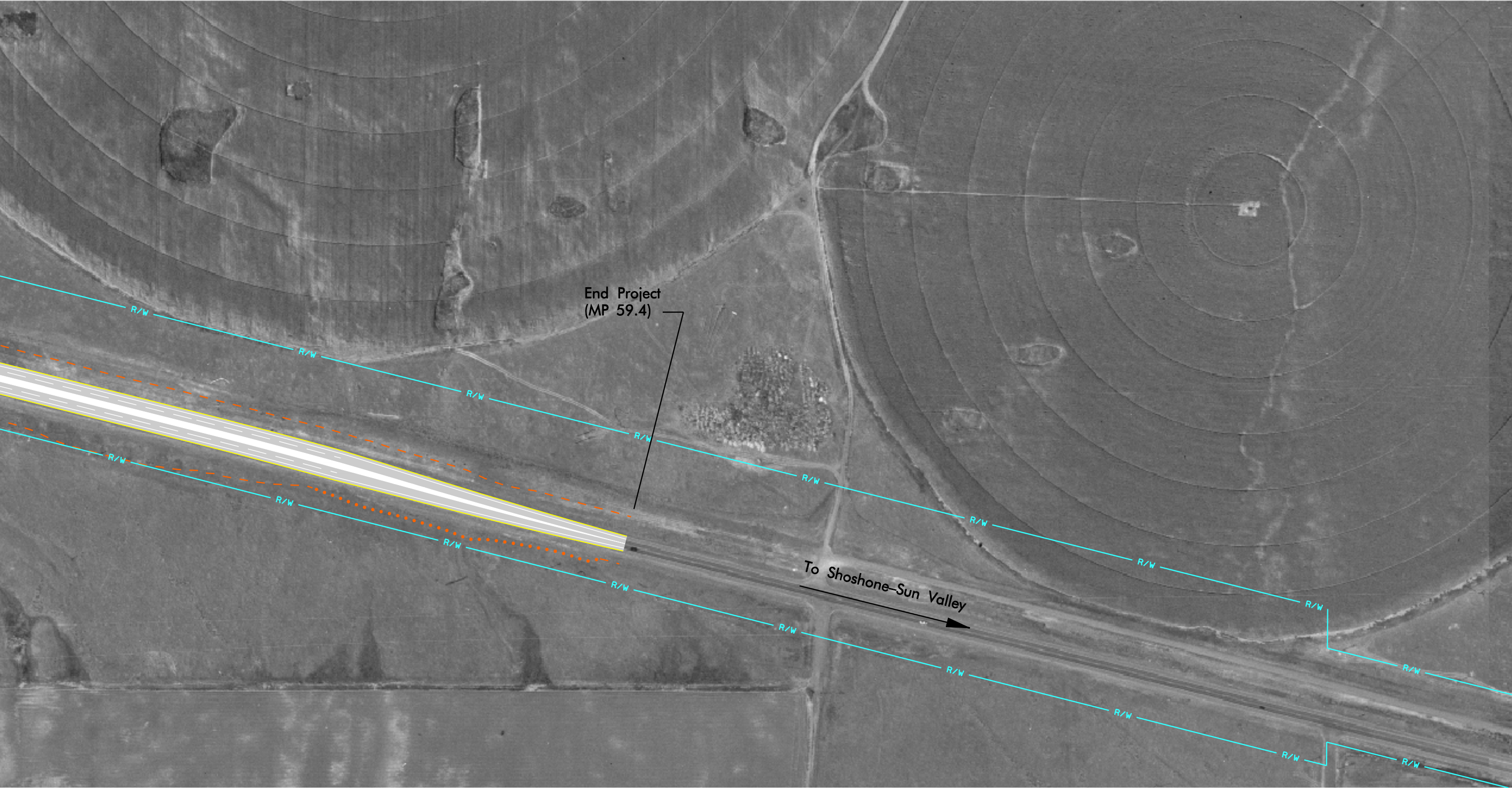












Appendix C

Correspondence

Agricultural and Farmlands

NRCS – letter and form AD-1006 Farmland Conversion Impact Rating
with figures (May 24, 2006) C-1 to C-4

Cultural Resources

Idaho State Historical Society – letter (May 23, 2001) C-5

Determination of Significance and Effect – form ITD 1500-A (May 2, 2001)..... C-6

Idaho State Historical Society – letter (August 31, 2006) C-7 and C-8

Determination of Significance and Effect – form ITD 1502 (January 24, 2007) C-9

Water Resources

U.S. Environmental Protection Agency – letter on Sole Source Aquifer (November 28, 2005) ... C-10

Wetlands and Waters of the U.S.

U.S. Environmental Protection Agency – email regarding wetlands (March 29, 2007)..... C-11

U.S. Army Corps of Engineers – letter regarding wetlands (April 4, 2007) C-12 and C-13

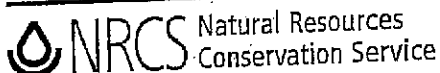
Wildlife and Threatened and Endangered Species

Bureau of Land Management – email (July 6, 2005)..... C-14

Idaho Conservation Data Center – letter, map, and species list (August 3, 2004)..... C-15 to C-18

FHWA – email regarding No Effect on T&E species (June 1, 2006) C-19 and C-20

U.S Fish and Wildlife Service – letter and species list (June 1, 2007) C-21 to C-23



9173 W. Barnes Dr., Ste. C, Boise, Idaho 83709

May 24, 2006

RECEIVED
MAY 31 2006

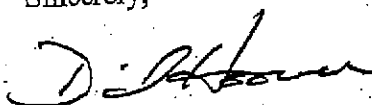
Parsons Brinckerhoff
Utah Office

Chris Elison, P.E.
Parsons Brinckerhoff
488 E. Winchester Street, Suite 400
Murry, Utah 84107

Dear Mr. Elison,

Enclosed, please find the completed Farmland Conversion Impact Rating form (AD-1006) for the US-93, I-84 to SH 26 Roadway improvement project in Jerome County, Idaho. In order for soils to meet the criteria for Important Farmlands in this area, they must be irrigated and not urban or a water area. If you have any questions please contact Hal Swenson, Assistant State Soil Scientist, at 378-5728 or e-mail Hal.Swenson@id.usda.gov.

Sincerely,



P.R.

RICHARD SIMS
State Conservationist

Cc: Hal Swenson, Assistant State Soil Scientist, NRCS, Boise, ID w/o enclosure
David Hoover, State Soil Scientist, NRCS, Boise, ID w/o enclosure
Terry Edwards, District Conservationist, NRCS, Jerome, ID w/enclosure

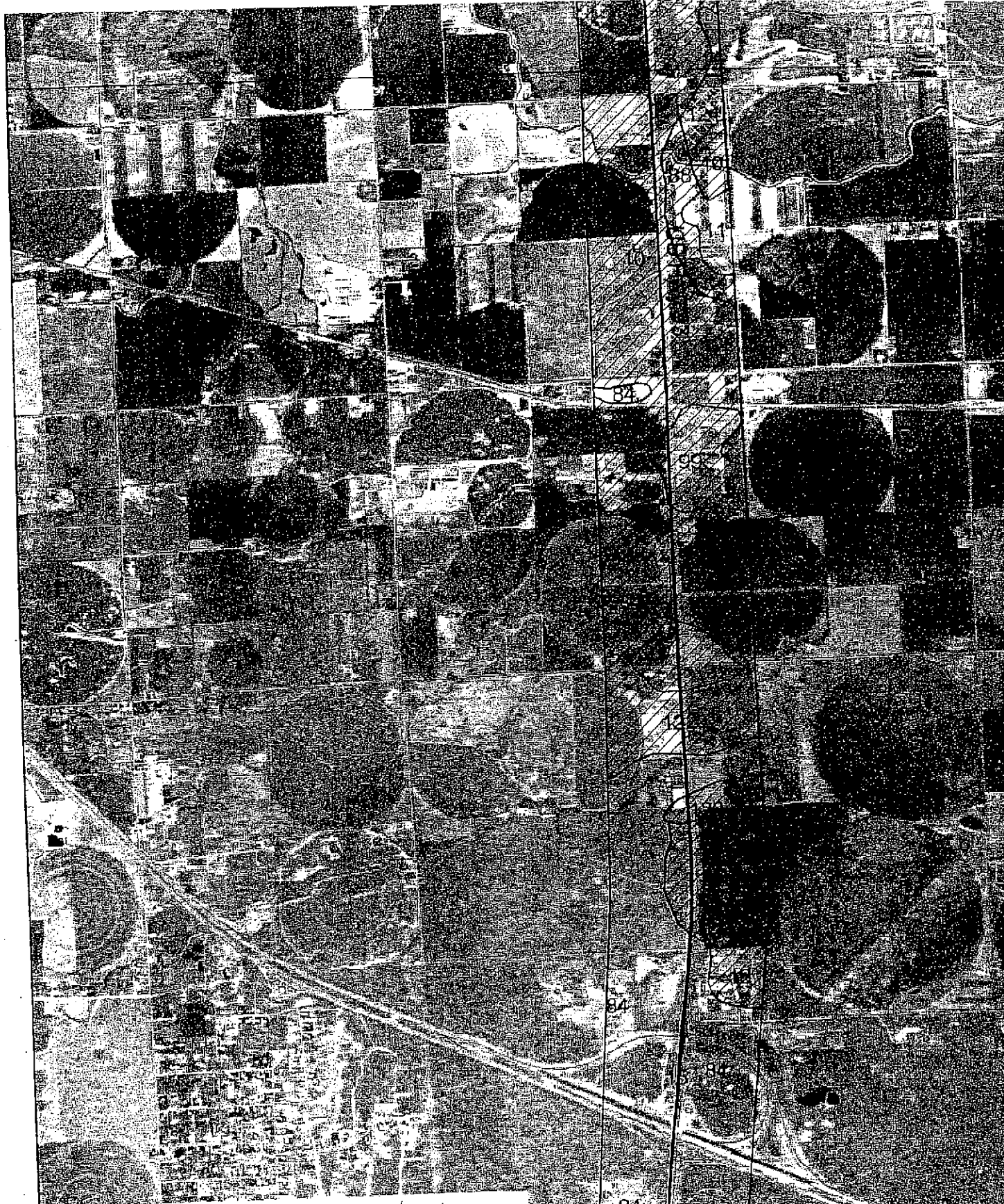
Enclosure

FARMLAND CONVERSION IMPACT RATING

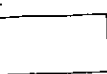
PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request 3/31/06			
Name Of Project US-93, I-84 to SH-25, Jerome County, Idaho		Federal Agency Involved Federal Highway Administration			
Proposed Land Use Roadway widening and improvements		County And State Jerome, Idaho			
Date Request Received By NRCS					
PART II (To be completed by NRCS)					
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form.)		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s) sugar beets, potatoes, grain		Farmable Land in Govt. Jurisdiction Acres 0 % 0		Amount Of Farmland As Defined in FPPA Acres %	
Name Of Land Evaluation System Used		Name Of Local Site Assessment System		Date Land Evaluation Returned By NRCS	
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly		47.8			
B. Total Acres To Be Converted Indirectly		0.0			
C. Total Acres In Site		47.8	0.0	0.0	0.0
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland		20.7			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted		0.3			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value		0.10			
PART V (To be completed by NRCS) Land Evaluation Criterion		86	0	0	0
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency)					
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))		Maximum Points			
1. Area In Nonurban Use		15	12		
2. Perimeter In Nonurban Use		10	8		
3. Percent Of Site Being Farmed		20	16		
4. Protection Provided By State And Local Government		20	0		
5. Distance From Urban Builtup Area			0		
6. Distance To Urban Support Services			0		
7. Size Of Present Farm Unit Compared To Average		10	9		
8. Creation Of Nonfarmable Farmland		25	0		
9. Availability Of Farm Support Services		5	5		
10. On-Farm Investments		20	18		
11. Effects Of Conversion On Farm Support Services		25	0		
12. Compatibility With Existing Agricultural Use		10	0		
TOTAL SITE ASSESSMENT POINTS		160	68	0	0
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100	86	0	0
Total Site Assessment (From Part VI above or a local site assessment)		160	68	0	0
TOTAL POINTS (Total of above 2 lines)		260	154	0	0
Site Selected: Site A		Date Of Selection 3/30/06		Was A Local Site Assessment Used?	
Reason For Selection:				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

Highway 93, I-84 to SH 25 Jerome County, Idaho

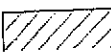




Legend

 State Important Farmland if Irrigated

Prime

 Prime Farmland if Irrigated

0 0.5 1

Idaho Transportation Department/State Historic Preservation Office
DETERMINATION OF SIGNIFICANCE AND EFFECT

Project Title		US93 Petro II to Barrymore US-93 Barrymore to SH-25		Project No.		NH-2390(134) NH-2390(135)	
District	4	Key No.	7800 7801	County	Jerome	Field Notes	None. Consultant: Shapiro
CLEARANCE AUTHORIZED WITHOUT SURVEY PA ___ ER ___ Other X							
Determination of Eligibility		Site Numbers		Comments			
___ No Sites _X_ Not eligible _X_ Potentially eligible _X_ Eligible		CR-1; CR-3; CR-4; CR-6; CR-7; CR-8; CR-10 CR-2; CR-5; CR-9 53-11241 (Update) 53-11242, CR-2, CR-5, CR-9		SEE ATTACHED			
Determination of Effect							
___ No site(s) ___ There will be no effect to the following site(s) because: <u>Rationale:</u> ___ They are outside project area ___ They are outside impact zone ___ Final project plans will avoid them ___ NR character will not be changed _X_ Sites will be affected as indicated below and in the attached explanation: SEE ATTACHED. A Determination of Effect and MOA will be prepared subsequent to the final Determination of Eligibility and final engineering design. Historic properties will be avoided where feasible. ___ Project will be monitored during construction due to the potential for cultural resources.							
<u>J. Gaston</u> Highway Archaeologist				<u>3-27-01</u> Date			
SHPO Comment: I have reviewed the documentation and recommendations provided by ITD.							
<input type="checkbox"/> I agree with the above determination of eligibility and effect and with the conditions of compliance. <input type="checkbox"/> I agree with the above determinations of eligibility and effect given stipulations explained below or in the attached letter. as changed above <input checked="" type="checkbox"/> I disagree with the above determinations of eligibility and effect as explained below or in the attached letter. CR-7 is eligible but this project should not affect it.							
<u>Glenn L. King</u> for State Historic Preservation Officer				<u>5/2/01</u> Date			



"The History and Preservation People"

Our mission: to educate through the identification, preservation, and interpretation of Idaho's cultural heritage.
www.idahohistory.net

Dirk Kempthorne
Governor of Idaho

Steve Guerber
Executive Director

Administration
2205 Old Penitentiary Road
Boise, Idaho 83712-8250
Office: (208) 334-2682
Fax: (208) 334-2774

Archaeological Survey of Idaho
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3847
Fax: (208) 334-2775

Historical Museum and
Education Programs
30 North Julia Davis Drive
Boise, Idaho 83702-7695
Office: (208) 334-2120
Fax: (208) 334-4059

Historic Preservation Office
210 Main Street
Boise, Idaho 83702-7264
Office: (208) 334-3861
Fax: (208) 334-2775

Historic Sites Office
2445 Old Penitentiary Road
Boise, Idaho 83712-8254
Office: (208) 334-2844
Fax: (208) 334-3225

Public Archives and
Research Library
2205 Old Penitentiary Road
Boise, Idaho 83712-8250

Public Archives
Office: (208) 334-2620
Fax: (208) 334-2626

Research Library
(208) 334-3556

Oral History
Office: (208) 334-3863
Fax: (208) 334-3198

August 31, 2006

Dan Everhart
Architectural Historian
Idaho Transportation Department
Statehouse Mail

RE: Addendum, US93, I-84 to SH25, Jerome County;
NH-2390(134), Key 7800 & NH-2390(135), Key 7801

Dear Dan,

Thank you for sending the addendum and additional information requested for the projects referenced above. We agree with the determinations of eligibility for cultural resources in and abutting the project area as summarize in Table 3 of the Addendum (Theisen, 2006; pgs 5-6).

Eligible Properties include:

- K Coulee Canal (B-1)
- Wild Rose Ranch (53-17012)
- Oregon Short Line RR (10JE146)
- Mountain View Ranch (53-17018)
- Jacob B. Van Wagener Barn (53-11241) and Caretaker's House (53-11242)
- L Canal (53-17014)
- North Side Canal Water Mater's House (53-17016)
- D-5 Ditch (B-2)

Properties Not Eligible includes:

- Isolate (10JE377)
- Lickley Farm (53-17009) & Tenant House (53-17010)
- House (53-17013)
- L Canal Bridge (53-17023)
- House & Shed (53-17015)
- Trash Scatter (10JE378)

Furthermore we agree the projects reference above will have No Adverse Effect upon historic properties eligible for the National Register of Historic Places.

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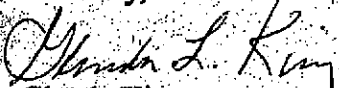


The Idaho State Historical Society is an Equal Opportunity Employer.

Dan Everhart
August 31, 2001
Page 2

We appreciate your cooperation. If you should have any questions regarding these comments please feel free to contact Travis Pitkin at 208-334-3847 or travispitkin@ishs.idaho.gov.

Sincerely,


Glenda King
Curator of Archaeology

Determination Of Significance And Effect

Idaho Transportation Department – State or Tribal Historic Preservation Office



Key Number 7800 & 7801	Project Number NH-2390(134) & NH-2390(135)	Project Title US-93, Barrymore to Jct. SH-25 & US-93, 200 Rd. South to Jct. SH-25 (Formally Petro II to Barrymore)
District 4	County Jerome	Township/Range/Section Various (See Report)
Clearance Authorized Without Survey <input type="checkbox"/> PA <input type="checkbox"/> ER <input type="checkbox"/> Review		Field Notes Various Consultants and ITD HQ Cultural Resources

SHPO or THPO 4(f) De minimis Comment (applies only when a determination of effect results in a *No Historic Properties Affected* or *No Adverse Effect* determination under Section 106):

De minimis impacts related to historic sites are defined as the determination of either "no adverse effect" or "no historic properties affected" in compliance with Section 106 of the National Historic Preservation Act (NHPA).

☒ I understand that the FHWA Division Administrator or FTA Regional Administrator may make a *de minimis* impact finding for one or more Section 4(f) resources based on Section 106 findings in this document.

Sites Temp # B-1, Temp # B-2, 53-11241, 53-11242, 53-17012, 53-17014, 53-17016, 53-17018, 10JE146

State or Tribal Historic Preservation Officer's Signature

Glenn L. King

Date

1/24/07

SEP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

November 28, 2005

Reply to: OEA-095

Connie F. Jones
Environmental Planner
Idaho Transportation Department
P.O. Box 2-A
Shoshone, ID 83352-0820

RE: US-93, I-84 Interchange to SH-25 in Jerome County, ID
Project Nos. NH-2390(134) and NH-2390(135)

Dear Ms. Jones:

I have reviewed all the information received from your office regarding the reconstruction of US-93 in Jerome County, Idaho. I have had several conversations and email correspondences with Mr. Chuck Carnahan, of your office, and he has provided me with the additional information that I originally requested regarding the project stormwater runoff controls and abandonment of nearby wells. I understand that all wells within the project boundary will be located and abandoned following the appropriate state well abandonment rules. The runoff BMP's that you are planning on using will also be protective of the Eastern Snake River Plain Aquifer, which has a water level that varies from approximately 100 feet below ground surface (bgs) to 400 feet bgs in your project area. You can consider the US-93 project approved by EPA.

Chuck was very helpful, and very friendly, and I look forward to working with you both on any future projects that occur in the Eastern Snake River Plain Sole Source Aquifer.

Sincerely,

Martha Lentz
Hydrogeologist

Braspennickx, Nicholle M NWW

From: Olson.John@epamail.epa.gov
Sent: Thursday, March 29, 2007 4:17 PM
To: Braspennickx, Nicholle M NWW
Subject: JD concurrence

Nicholle,

I've reviewed your draft letter re Clean Water Act jurisdiction for waters of the U. S. for the proposed US 93, I-84 to SH-25 project in Jerome County (ITD Key No. 7800). I concur with your jurisdictional determinations. Thanks for coordinating with me.

John M. Olson, Wetland Ecologist
US EPA Region 10, Idaho Operations Office
1435 North Orchard
Boise, ID 83706
Office: 208-378-5756 Fax: 208-378-5744
olson.john@epa.gov



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
BOISE REGULATORY OFFICE
304 NORTH EIGHTH STREET, ROOM 140
BOISE, IDAHO 83702-5833

DE
ADE
SEP 6/11
DF

April 4, 2007

Regulatory Division

SUBJECT: NWW No. 002300260-B02, ITD Key No. 7800

Ms. Connie Jones
Idaho Transportation Department
P.O. Box 2-A
Shoshone, Idaho 83352-0820

Dear Ms. Jones:

Our preliminary jurisdictional determination indicates the site of the proposed US 93, I 84 to SH-25 project located in Jerome County, appears to contain wetlands and waters of the United States that are regulated under Section 404 of the Clean Water Act. A copy of our determination and a map of the project boundary are enclosed. Though this determination is advisory in nature and may not be appealed, the enclosed appeals form explains your options if you do not agree with this determination.

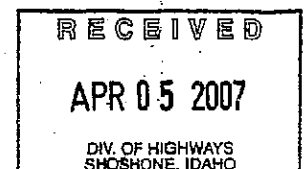
For clarification, this office, and the Environmental Protection Agency of Boise, Idaho, have reviewed the report dated May 2006, prepared by Parsons Brinckerhoff, and agree with its findings. All of the canals and ditches within the project area, with the exception of the L4A Lateral, were determined to qualify as waters of the U.S., as they are part of a surface tributary system to the Snake River. No jurisdictional wetlands were identified within the project area; and all eight (8) irrigation ponds are considered isolated, and therefore not jurisdictional.

A recent decision by the U.S. Supreme Court in the Rapanos/Carabell cases has brought into question the Corps' regulatory jurisdiction over certain waters of the United States regulated under Section 404 of the Clean Water Act. At this time we are awaiting guidance from our Headquarters regarding our jurisdiction and hope to have that guidance within the next few weeks. This guidance may change our enclosed preliminary jurisdictional determination. Until we receive this guidance, we cannot complete an approved jurisdictional determination. If you believe our preliminary jurisdictional determination is inappropriate in light of the Rapanos/Carabell court decision, you may ask the Corps to reevaluate it and issue an approved jurisdictional determination once we receive further guidance from our Headquarters.

Section 404 of the Clean Water Act (33 U.S.C. 1344) requires a Department of the Army permit be obtained for the discharge of dredged or fill material into waters of the United States. This includes most perennial and intermittent rivers and streams, natural and man-made lakes

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APR 11 2007

Parsons Brinckerhoff
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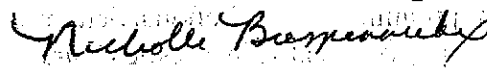
and ponds, and wetlands, as well as irrigation and drainage canals and ditches that are tributaries to other waters.

If the proposed project will involve discharging dredged or fill material into waters of the United States, including wetlands, Idaho Transportation Department will need to obtain a Department of the Army permit before the start of work.

Please be advised that discharging dredged or fill material into waters of the United States, including wetlands, before obtaining the required Department of the Army permit constitutes a violation of the provisions of the Clean Water Act.

Thank you for contacting us early in your project planning. We look forward to working with you. If you have any questions, please contact me at 208-345-2287. A copy of this letter is being sent to: Mr. John Olson, Environmental Protection Agency, 1435 N. Orchard, Boise, Idaho 83706.

Sincerely,



Nicholle Braspennickx
Regulatory Project Manager

Enclosures

From: Rebecca Thompson [rebeccat@bionom.com]

Sent: Wednesday, July 06, 2005 9:13 AM

To: Zaref, Amy

Subject: RE: Barrymore project

Hi Amy

I spoke with the BLM wildlife biologist at the Shoshone FO and he has no project concerns for sensitive spp.

The only BLM land directly adjacent to the project is in section 22 - the SE 1/4 of the E 1/2 and the SE 1/4 of the NE 1/4 of this area.

I recall you mentioning that you have the land ownership maps showing this land? If so, could you please send it to me?

Also, the BLM mentioned that you might need a right-of-way with them if the project were to go on their land. He said their land goes right up to the highway. I assume you've already been in touch with BLM reality on this. If not, he gave me the name of the Reality specialist at the Shoshone Office - Terra Hagen 208-732-7205

Rebecca

Rebecca Thompson
Wildlife Biologist
Bionomics Environmental
110 W 31st Street
St. 200, Boise, ID 83714

208-939-1022
rebeccat@bionom.com



The Idaho
Conservation Data
Center collects,
analyzes, maintains,
and disseminates
scientific information
necessary for the
management and
conservation of Idaho's
biological diversity.



August 3, 2004

Lawrence Barea
Wildlife Biologist
Bionomics
110 W. 51st Street, Suite 200
Boise, ID 83714

Dear Mr. Barea:

I am responding to your request for a list of plant and animal species of special concern for two Idaho Transportation Department Projects in Jerome County, ID.

NH-2390 (134), Key No. 7800
NH-2390 (135), Key No. 7801
T8S R17E Sections 14, 15, 22, 23, 34, 35
T9S R17E Sections 2, 3, 10, 11, 14, 15

The Idaho Conservation Data Center database contains the following known occurrences either within or within the vicinity of the project area (see map and database records for detailed information):

Animals

Bald eagle (USFWS Listed Threatened): one occurrence.
Western toad (BLM Type 2): one occurrence.

Plants

The Idaho Conservation Data Center database contains no known plant species of special concern either within or adjacent to the project area.

Other

Gray wolf: project area is within the USFWS Idaho Experimental Nonessential Population Zone.
Pygmy rabbit (USFS Sensitive): needs to be considered if big sagebrush habitat is present.

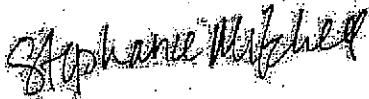
Idaho Conservation Data Center, Idaho Department of Fish and Game, 600 South Walnut, P.O. Box 25, Boise, ID 83707
Phone: 208.334.3402 FAX: 208.334.2114 <http://www.state.id.us/fishgame/info/cdc/cdc.htm>

StreamNet provides the fish species of special concern data and then response is included as a separate letter.

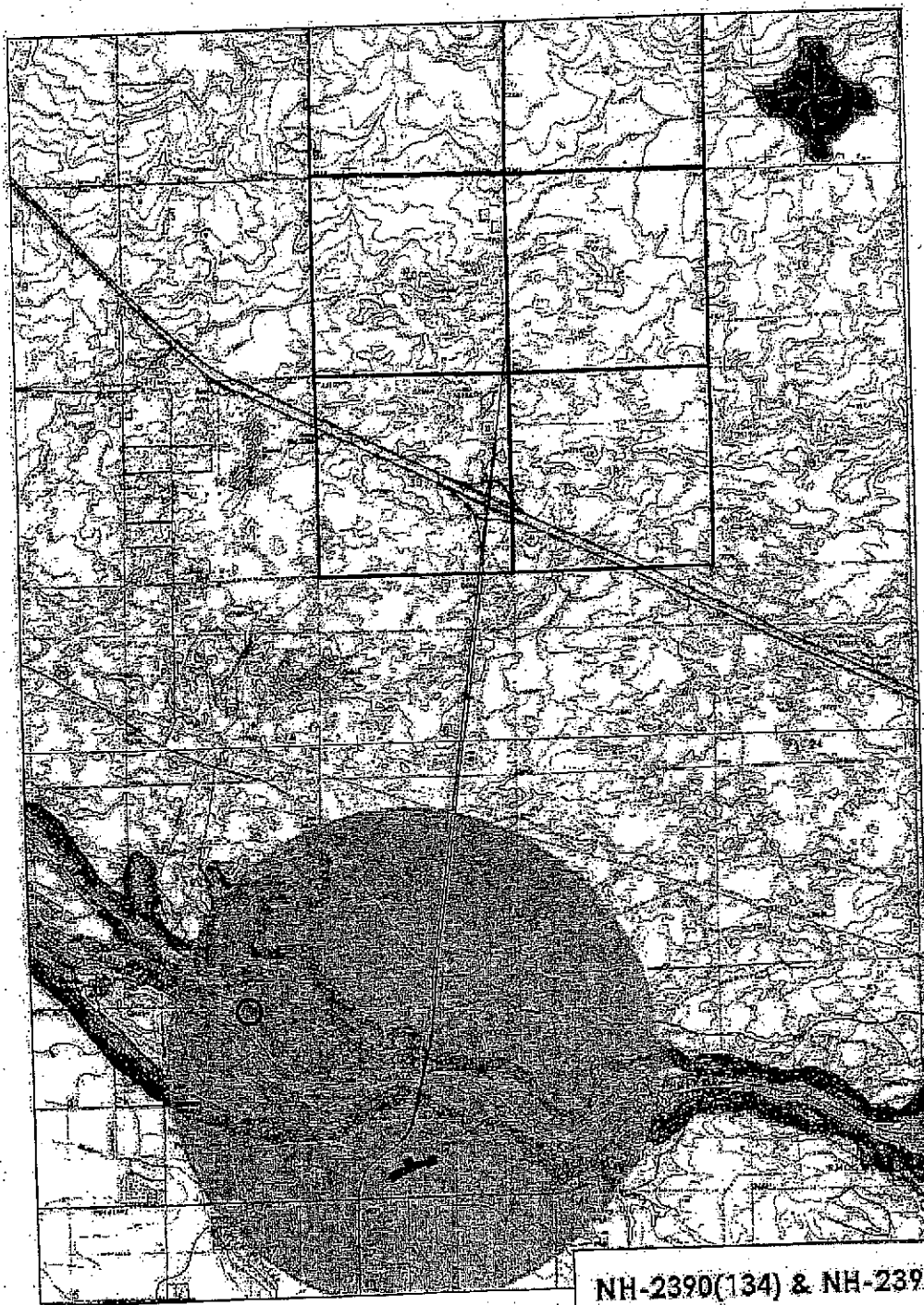
For animal status definitions please go to <http://www2.state.id.us/fishgame/info/cdc/animal.htm> and for plant status definitions please go to <http://www2.state.id.us/fishgame/info/cdc/plant.htm> and follow the links for the species you are searching for. On the pages with species and status information you can click on the heading (BLM, USFS, etc.) at the top of the status columns and you will automatically go to the page with the status definitions for that heading.

If there are questions pertaining to this request please contact me at 208-287-2730 or gmitchell@idfg.state.id.us.

Sincerely,






Stephanie Mitchell
Ecology Information Manager
Office Manager



For: Laurence Bared From: Stephanie Mitchell
 Bionomics ID Conservation Data Center
 208-939-1022 Idaho Dept. of Fish and Game
 208-287-2730

NH-2390(134) & NH-2390(135)

-  Project area (southern portion)
-  Bald eagle, 107
-  Western toad, 26



IDAHO FISH AND GAME
600 South Walnut/Box 25
Boise, Idaho 83707-0025

Dirk Kempthorne/Governor
Steve Huffaker/Director



STREAMNET
(208) 334-3180

Date: August 3, 2004

STREAMNET DATA REQUEST

FOR: Laurence Barea, Wildlife Biologist, Bionomics, 110 W. 31st Street, Suite 200, Boise, ID 83714
208-939-1022

RE: Fish species of special concern

Location: Jerome Project, TRS: T8S R17E Sections 14, 15, 22, 23, 26, 27, 34, 35 and
T9S R17E Sections 2, 3, 10, 11, 14, 15

Federally listed threatened or endangered species and other special status fish species present and their status.

Scientific Name	Common Name	Use Type	Presence	Status	F	S	USFS	BLM
none								

We do not have any data for fish species of special concern in the GIS for this area at this time. Please consult with the Magic Valley regional fisheries personnel for further information.

Federal Status	Use Type (Anadromous)	Presence (Resident)
LE Listed Endangered	1 Spawning and Rearing	2 Historical Distribution
LT Listed Threatened	2 Rearing Only	3 Documented Not Present
SC Species of Concern	3 Migration or Present	5 Suspected Not Present
W Watch	5 Not Present	6 Suspected Present
G Gamefish	6 Suitable Habitat Blocked	7 Documented Present
S Sensitive	0 Not Applicable	

This report is the result of a query of the StreamNet fish distribution database at the Idaho Department of Fish and Game (IDFG). Efforts have been made to ensure an accurate and complete database. However, not all IDFG fishery databases have been incorporated into StreamNet. In addition, other agencies have their own databases that may contain fisheries information not included in StreamNet. We recommend that you follow up this report at your local IDFG regional office and both state and federal natural resource agency offices.

C:\Documents and Settings\smithch\Local Settings\Temporary Internet Files\OLK3\SN_REC_20040803\JeromeProjectNoData.doc
Name: _____

Leaving Idaho's Wildlife Legacy Better Than He Found It

208/334-3700 D Fax: 208/334-2114 C Idaho Relay (TDD): Service: 1/800-377-3529 G <http://www.state.id.us/fishgame>

Elison, Chris

From: Connie Jones [Connie.Jones@itd.idaho.gov]
Sent: Thursday, June 01, 2006 2:46 PM
To: Chuck Carnohan; Zaref, Amy
Cc: Elison, Chris
Subject: FW: K # 7800 and 7801 NO AFFECT REPORT

Please include this response from FHWA in the E.A.

Connie Jones
ITD D-4 Environmental Planner
208-886-7824

From: Glasgow, Cameron [mailto:Cameron.Glasgow@fhwa.dot.gov]
Sent: Thursday, June 01, 2006 9:19 AM
To: Connie Jones
Subject: RE: K # 7800 and 7801 NO AFFECT REPORT

Connie,

I have reviewed your memo dated May 23, 2006 and No Effect Statement for Threatened and Endangered Species dated May 2006 for projects NH-2390(134) and NH-2390(135), Key Numbers 7800 and 7801, and concur that this project will still have no effect the listed T&E species. Please include your report and this concurrence with the environmental document. I have copied them to our project file.

Cameron Glasgow
FHWA - Idaho Division
Bridge/Operations Engineer
(208) 334-9180 x122

From: Connie Jones [mailto:Connie.Jones@itd.idaho.gov]
Sent: Tuesday, May 23, 2006 8:56 AM
To: Glasgow, Cameron
Subject: K # 7800 and 7801 NO AFFECT REPORT

Mr. Glasgow,

Attached you will find the analysis for a No Effect determination for the proposed federally funded project named US-93 from I-84 to SH-25 in Jerome County, Idaho Key # 7800 and 7801. In accordance with the MOA between FHWA and ITD, dated 2-28-03, please review this information. The response will be included in the Environmental Assessment. If the determination is concurred upon by FHWA, consultation will not be necessary with the USFWS.

TO: Cameron Glasgow

FHWA Operations Engineer Key No.(s): 7800 and 7801

FROM: Connie Jones.
County, Etc.: Environmental Planner DISTRICT 4
in Jerome County, Idaho

Project Identification,
US-93 from I-84 to SH-25

RE: Impacts to listed T&E species

A current list (March 1, 2006) has been reviewed. I have reviewed the above project for impacts to listed species on the D-4 list supplied by the USFWS. ITD's consultant's evaluation shows the project will have *no effect* to any of the listed species. Please review the information in this memo. This information will be included in the environmental documentation.

Please note that this project will be an Environmental Assessment. No consultation is needed per the current District 4 Jerome County list SL # 06-0303/ File #912.0500, dated March 1, 2006. Should you have any questions concerning this project, please call me at 886-7824.

Sincerely,
Connie Jones
ITD D-4 Environmental Planner
208-886-7824



United States Department of the Interior
FISH AND WILDLIFE SERVICE

Snake River Fish and Wildlife Office
1387 S. Vinnell Way, Room 368
Boise, Idaho 83709
Telephone (208) 378-5243
<http://IdahoES.fws.gov>



JUN 01 2007

Pamela Lowe
Director
(Attention: Dennis Clark)
Idaho Transportation Department
P.O. Box 7129
Boise, Idaho 83707-1129

Subject: 90-Day Species List Update
File #912.0000 2007-SL-0497

Dear Ms. Lowe:

The Snake River Fish and Wildlife Office of the Fish and Wildlife Service (Service) is providing you with an updated list of threatened, endangered, proposed, and candidate species that occur in Idaho. This updates species list 2007-SL-0263 and provides you with a new number, 2007-SL-0497. You should refer to the new number in subsequent correspondence and documentation. This letter and list are being provided to your agency via electronic mail. Included with it is a list of individuals who are receiving the information. Please Contact Tina Balbi at (208)685-6961 to notify our office of any necessary corrections or additions to the distribution list.

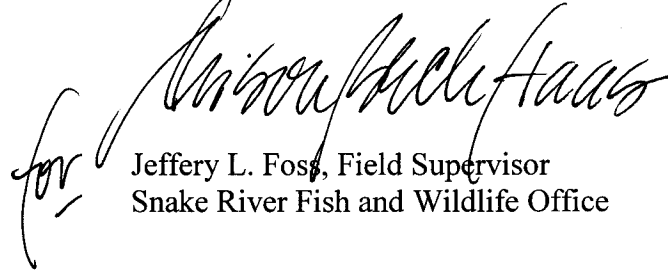
Grizzly bear (*Ursus arctos*) formerly appeared on species lists for Clark, Fremont, and Teton counties in southeast Idaho. In a decision published in the March 29, 2007 Federal Register, the Service concluded that protections for the Yellowstone grizzly bear Distinct Population Segment (DPS) under the Endangered Species Act of 1973 (Act), as amended, were no longer warranted. This DPS is no longer an endangered or threatened population pursuant to the Act. Grizzly bear populations in Bonner and Boundary counties in northern Idaho continue to be protected as threatened under the Act.

Information about Federal agency obligations under section 7 of the Act has been provided to you in the past. If you would like us to send you any of this information

again or if you have questions, please contact Mark Robertson at (208)378-5287. If you have questions regarding species under the National Marine Fisheries Service (NOAA Fisheries) jurisdiction, please call Nikki Leonard at (208)378-5696.

Thank you for your continued interest in the conservation of threatened and endangered species.

Sincerely,

for

Jeffery L. Foster, Field Supervisor
Snake River Fish and Wildlife Office

Attachments (3)

Appendix D

ITD Forms

ITD 652 – Hazardous Materials Administrative Review	D-1
ITD 654 – Environmental Evaluation	D-2 and D-3
ITD 1500-A – Determination of Significance and Effect (signed by SHPO on May 2, 2001)	D-4
ITD 1502 – Determination of Significance and Effect (signed by SHPO on January 24, 2007).....	D-5
ITD 2784 – NPDES Storm Water Permit Project Checklist for Construction	D-6 and D-7

Hazardous Material (HM) Administrative Review

Complete all sections. Attach additional sheets and/or maps as needed to provide information pertinent to the proposed project.

Project Number 2390(134) INT-2390	Key Number 7800 7801	District 4
Project Name/Location US-93, I-84 to SH-25 in Jerome County		

Mark features involved in this project

<input checked="" type="checkbox"/> New R/W	<input checked="" type="checkbox"/> Subsurface utility relocation
<input checked="" type="checkbox"/> Excavation	<input checked="" type="checkbox"/> Structures (buildings, bridges, etc.)
<input checked="" type="checkbox"/> Railroad involvement	<input type="checkbox"/> Other (list):

Contacts (Contact each of the following and provide information below)

	Contact Name	Date	Summary
EPA			
DEQ			
Health Dept.			

Review of Published Lists (Review all lists. Check off as they are reviewed and note findings in right hand column)

<input checked="" type="checkbox"/> NPL	See Section 3.12 Hazardous Materials/Underground Storage Tanks
<input checked="" type="checkbox"/> CERCLIS	"
<input checked="" type="checkbox"/> CERCLIS/NFRAP	"
<input checked="" type="checkbox"/> RCRA Corrective Actions	"
<input checked="" type="checkbox"/> RCRA TSD	"
<input checked="" type="checkbox"/> RCRA Generators	"
<input checked="" type="checkbox"/> ERNS	"
<input checked="" type="checkbox"/> SWLF	"
<input checked="" type="checkbox"/> LUST	"
<input checked="" type="checkbox"/> UST	"

Windshield Survey (List and comment on suspect land uses/operations identified.)

Person(s) Performing Survey Chris Ellison	Survey Date July 26, 2005
Results No evidence of hazardous materials on proposed alignment.	

HM conclusion (No evidence or low probability of encountering HM; evidence of probable HM (Phase I), warrants more detailed assessment/sampling/testing (Phase II); site will be avoided without further analysis, etc.)

See Section 3.17 of the Environmental Evaluation

Review Conducted By (Print Name) Chris Ellison	Company Parsons Brinckerhoff
Signature 	Date 9/13/06

Environmental Evaluation



Date 5/31/06	District 4	Route # US-93	City/County Jerome
Project Name US-93, I-84 to SH-25		Project # NH-2390(134) NH-2390(135)	Key # 7800 7801
Work Authority		Program Year	Termini (Mp To Mp) MP 53.3 to MP 59.4

Acres of New Public R/W 0	Acres of New Private R/W 54	(Discuss the existing use of R/W to be acquired, plus adjacent land use, zoning, development plans, etc. on attached Environmental Summary Sheet)
Tribal Impact <input type="checkbox"/> Cultural <input type="checkbox"/> Archeological <input type="checkbox"/> Reservation <input checked="" type="checkbox"/> None		Public Interest Expected? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Air Quality <input checked="" type="checkbox"/> Attainment Area <input type="checkbox"/> Non-Attainment Area <input type="checkbox"/> CO <input type="checkbox"/> PM		Exempt Project <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Type One Project (i.e., New Location, Substantial Alignment Change, Addition of a Through-Traffic Lane)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Construction Impacts Requiring Special Provisions (Enter Details on Reverse Side)		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Program Year ADT 8500 DHV 800 % Trucks 10 Posted Speed 55		Design Year ADT 2500 DHV 2400 % Trucks 8 Posted Speed 55
Distance of Nearest Noise Receptor to Centerline Existing 80 Proposed 130		

Project Purpose and Benefits

Double mark (xx) only the item that best describes the Primary Reason for Proposing this Project

Single mark (x) all Other Relevant Items

<input checked="" type="checkbox"/> Maintain/Improve User Operating Conditions	<input type="checkbox"/> Enhance Accessibility for the Disabled/Safety
<input checked="" type="checkbox"/> Maintain/Improve Traffic Flow	<input checked="" type="checkbox"/> Enhance Pedestrian Safety and/or Capacity
<input checked="" type="checkbox"/> Time Savings	<input checked="" type="checkbox"/> Enhance Bicycle Safety and/or Capacity
<input checked="" type="checkbox"/> Increase Capacity	<input type="checkbox"/> Traffic Composition Enhancement (e.g., Truck Route, HOV Lane, Climbing Lane)
<input checked="" type="checkbox"/> Reduce Congestion	<input type="checkbox"/> Visual/Cultural Enhancement (e.g., Landscaping, Historic Preservation)
<input checked="" type="checkbox"/> Reduce Hazard(s)	<input type="checkbox"/> Environmental Enhancement (e.g., Air Quality, Noise Attenuation, Water Quality)
<input type="checkbox"/> Reduce Highway User Operating Costs	<input type="checkbox"/> Economic Prudence (e.g., Repair Less Expensive than Replacement, B/C Ratio)
<input type="checkbox"/> Other, List (e.g., Driver Convenience and Comfort regarding Rest Area Projects)	

Check Any of the Following That Require Avoidance, Minimization, or Discussion (If Yes, describe in the Environmental Document or CE)

	Yes	No		Yes	No
1. Noise Criteria Impacts*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	17. Threatened/Endangered Species*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Change in Access or Access Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> Listed <input type="checkbox"/> Proposed	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Change in Travel Patterns	<input checked="" type="checkbox"/>	<input type="checkbox"/>	18. Air Quality Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Neighborhood or Service Impacts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	19. Inconsistent With Air Quality Plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Economic Disruption	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> SIP <input type="checkbox"/> TIP		
6. Inconsistent W/Local or State Planning	<input type="checkbox"/>	<input checked="" type="checkbox"/>	20. Stream Alteration/Encroachment**	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Minorities, Low Income Populations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> IWDR <input type="checkbox"/> F&G <input checked="" type="checkbox"/> COE (404)		
8. Displacements*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	21. Flood Plain Encroachment*	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Section 4(f) Lands-DOT Act 1966* (i.e., Public Parks/Rec Areas/Trails, Wildlife/Waterfowl Refuges, Wild or Scenic Rivers, Historic Sites/Bridges, Archaeological Resources)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Longitudinal <input type="checkbox"/> Traverse		
10. LWCF Recreation Areas/6(f) Lands*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	22. Regulatory Floodway	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Section 106-Nat. Hist. Preserv. Act*	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> PE Cert. & FEMA Approval <input type="checkbox"/> Revision		
12. FAA Airspace Intrusion**	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23. Navigable Waters**	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Visual Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> CG (Sec 9) <input type="checkbox"/> COE (Sec 10) <input type="checkbox"/> Dept. Lands		
14. Prime Farmland*, Parcel Splits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	24. Wetlands*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
15. Known/Suspected "Hazmat" Risks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/> Jurisdictional** (404) <input checked="" type="checkbox"/> Non-Jurisdictional		
16. Wildlife/Fish Resources/Habitat**	<input type="checkbox"/>	<input checked="" type="checkbox"/>	25. Sole Source Aquifer	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/> Exempt Project <input checked="" type="checkbox"/> Non-Exempt**		
			26. Water Quality, Runoff Impacts	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			27. NPDES-General Permit	<input checked="" type="checkbox"/>	<input type="checkbox"/>

(If no, complete sediment-erosion control plan)

*If yes to these items, supplemental reports or documentation are required (e.g., Relocation Report; Wetlands Determination/Finding; Fish and Wildlife Species List Update; SCS Form AD-1006, Biological Assessment, etc.)

**If yes to these items, a letter of input is required from the appropriate agency.

Recommendation

- ☐ A. The project does not individually or cumulatively have a significant adverse effect on the human environment
(Categorical Exclusion) ☐ 23 CFR 771.117(c), i.e., Special and Programmatic
☐ 23 CFR 771.117(d), i.e., FHWA Approval
- ☒ B. There is insufficient information to support A above or no precedent exists. (Environmental Assessment)
- ☐ C. The project will result in a significant effect on the human environment. (Environmental Impact Statement)

Prepared By (Consultant, District Environmental Planner, or LHTAC Signature*)

Date

Chris Glavin

9/13/06

Reviewed By (District Environmental Planner, Project Development Engineer, or LHTAC Signature*)

Date

***One Signature by a Planner and one by Engineer or Consultant**

Construction Impacts Requiring Special Provisions

See Section 3.19 for construction impacts and mitigation

Project Description (if not attached)

See Chapter 2 of the Environmental Assessment

Idaho Transportation Department/State Historic Preservation Office
DETERMINATION OF SIGNIFICANCE AND EFFECT

Project Title		US93 Petro II to Barrymore US-93 Barrymore to SH-25		Project No.		NH-2390(134) NH-2390(135)	
District	4	Key No.	7800 7801	County	Jerome	Field Notes	None. Consultant: Shapiro
CLEARANCE AUTHORIZED WITHOUT SURVEY PA ___ ER ___ Other X							
Determination of Eligibility		Site Numbers		Comments			
___ No Sites _X_ Not eligible ___X_ Potentially eligible ___X_ Eligible		CR-1; CR-3; CR-4; CR-6; CR-7; CR-8; CR-10 CR-2; CR-5; CR-9 53-11241 (Update) 53-11242, CR-2, CR-5, CR-9		SEE ATTACHED			
Determination of Effect							
___ No site(s) ___ There will be no effect to the following site(s) because: <u>Rationale:</u> ___ They are outside project area ___ They are outside impact zone ___ Final project plans will avoid them ___ NR character will not be changed _X_ Sites will be affected as indicated below and in the attached explanation: SEE ATTACHED. A Determination of Effect and MOA will be prepared subsequent to the final Determination of Eligibility and final engineering design. Historic properties will be avoided where feasible. ___ Project will be monitored during construction due to the potential for cultural resources.							
J. Gaston Highway Archaeologist				3-27-01 Date			
SHPO Comment: I have reviewed the documentation and recommendations provided by ITD.							
<input type="checkbox"/> I agree with the above determination of eligibility and effect and with the conditions of compliance. <input type="checkbox"/> I agree with the above determinations of eligibility and effect given stipulations explained below or in the attached letter. as changed above <input checked="" type="checkbox"/> I disagree with the above determinations of eligibility and effect as explained below or in the attached letter. CR-7 is eligible but this project should not affect it.							
for <u>Glenn L. King</u> State Historic Preservation Officer				5/2/01 Date			

Determination Of Significance And Effect

Idaho Transportation Department – State or Tribal Historic Preservation Office



Key Number 7800 & 7801	Project Number NH-2390(134) & NH-2390(135)	Project Title US-93, Barrymore to Jct. SH-25 & US-93, 200 Rd. South to Jct. SH-25 (Formally Petro II to Barrymore)
District 4	County Jerome	Township/Range/Section Various (See Report)
Clearance Authorized Without Survey <input type="checkbox"/> PA <input type="checkbox"/> ER <input type="checkbox"/> Review		Field Notes Various Consultants and ITD HQ Cultural Resources

SHPO or THPO 4(f) De minimis Comment (applies only when a determination of effect results in a *No Historic Properties Affected* or *No Adverse Effect* determination under Section 106):

De minimis impacts related to historic sites are defined as the determination of either "no adverse effect" or "no historic properties affected" in compliance with Section 106 of the National Historic Preservation Act (NHPA).

☒ I understand that the FHWA Division Administrator or FTA Regional Administrator may make a *de minimis* impact finding for one or more Section 4(f) resources based on Section 106 findings in this document.

Sites Temp # B-1, Temp # B-2, 53-11241, 53-11242, 53-17012, 53-17014, 53-17016, 53-17018, 10JE146

State or Tribal Historic Preservation Officer's Signature

Glenn L. King

Date

1/24/07

NPDES Storm Water Permit Project Checklist For Construction*



Project Number NH-2390(134) NH-2390(135)	Key Number 7800 7801	Work Authority	Location US-93, I-84 to SH-25 in Jerome County
--	----------------------------	----------------	---

An NPDES Storm Water Discharge Permit is required for this project only if the answers to both questions are yes.

Will there be 1 acre of ground disturbance on the project? (To determine the total acreage of ground that will be disturbed, use the Ground Disturbing Activities Checklist below to calculate the total acreage of disturbance on the project.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Will the project discharge storm water to waters of the U.S.? (See the reverse side for Definition of Waters of the U.S.)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

If the answer to the second question is no, provide a written explanation in the Comments section on the reverse side of this form as to why there will be no discharge.

(If the project does not discharge off-site to waters of the U.S., an NPDES Storm Water Discharge Permit is not required.)

Ground Disturbing Activities Checklist

		<u>Area Disturbed</u>
Clearing	This includes areas of vegetative removal, topsoil removal, (see Definition of Soil on reverse side), sideslope grading, shoulder construction, and fence installation, removal, or replacement.	85
Grubbing	This includes both hand- and machine-removed vegetative materials such as roots and root balls.	85
Grading	All areas disturbed by grading must be included.	140
Excavation	Excavated areas are figured on the surface area of disturbance, including that disturbed by heavy equipment working in the area.	140
Total Area		140

*Construction does not include maintenance activities, such as ditch cleaning, shoulder reshaping, etc., unless there is new construction included as part of the maintenance project.

Definition of Waters of the U.S.:

Waters of the U.S. essentially mean all lakes, rivers, streams (including intermittent streams), mud flats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, and irrigation canals that connect to any of the above and use degradation

Definition of Soil:

EPA Region X gives the definition of soil as "any unconsolidated material that will pass through a 4.75 mm or smaller sieve."

Comments:

Name

is Elison

Date

9/13/06

Appendix E

Wetland Mitigation

US-93, I-84 to SH-25 in Jerome County, Idaho
ITD Project Nos. NH-2390 (134) and NH-2390 (135)
Key Nos. 07800 and 07801

WETLAND MITIGATION APPROACH

In 2005, the Idaho Transportation Department (ITD) investigated the potential for a mitigation site at Castle Rock State Park administered by the Idaho Department of Parks and Recreation (IDPR). The U. S. Army Corp of Engineers (USACOE) and Federal Highway Administration (FHWA) held a field visit to determine the suitability of a mitigation site within the Park. Negotiations with all of the responsible parties on March 16, 2005 led ITD to a wetland mitigation plan to protect in perpetuity approximately 10 acres of existing wetlands.

There is an additional approximately 2.5 acre parcel described as the Fringe Area on the attached map. This Fringe Area contains a minimum of 500 square feet of wetland on Almo Creek that will be protected as mitigation for the non-jurisdictional wetlands impacted on the US-93, I-84 to SH-25 project in Jerome County (07800 & 07801).

Implementation of the proposed roadway reconstruction project, US-93, I-84 to SH-25 in Jerome County, will entail encroachment into 45 square feet of non-jurisdictional wetland. The hydrologic source for these wetlands is the L4A Canal. The total estimated amount of wetlands to be filled is approximately 45 square feet.

The proposed mitigation for the wetland impacts involves the project sponsor, ITD working with IDPR at the Castle Rock State Park to implement a wetland mitigation site for the US-93, I-84 to SH-25 project in Jerome County (Key # 7800 and Key # 7801).

Rather than create new on-site wetland habitat adjacent to the highway, it is environmentally preferable to protect existing wetlands. Funds from an in-lieu-fee mitigation arrangement will compensate the IDPR for the costs that they will bear in this mitigation plan. The purpose of coordinating with IDPR is to establish the protection, maintenance, and monitoring of the wetland mitigation site in perpetuity on land administered by IDPR. This approximately 2.5 acre existing upland and wetland area is within the boundaries of the Castle Rock State Park. The area contains a minimum of 500 square feet of wetlands that will be preserved from degradation by cattle.

The U.S. Army Corps of Engineers (COE), the Idaho Department of Water Resources (IDWR) and the Federal Highway Administration (FHWA) met on site with the representatives of ITD, IDPR and Cassia County in March of 2005. The existing wetlands were presented as a potential mitigation site during the field visit to Castle Rock State Park on March 16, 2005. The COE agreed that this site met the criteria to be predominantly classified as wetlands.

IDPR will implement grazing restrictions on both the approximately ten acres and 2.5 acres that will promote the end goal of preserving these wetland areas in perpetuity. Noxious weed control will be provided by the IDPR (as necessary). Herbicides will be used as needed to control noxious weed

infestation on a limited as needed basis, and will be applied selectively to protect the native plant species and water quality. Blanket herbicide spraying of the site will not be permitted. IDPR will monitor and repair the constructed fences to prevent cattle from intruding into the protected wetland areas.

Documentation will be sent to the FHWA when the fence is completed which will keep cattle out of this 2.5 acre Fringe Area. The documentation will be submitted to FHWA through the District 4 ITD Senior Environmental Planner.

In consideration of the preservation goals cited by the COE and FHWA during the on-site review held March 16, 2005, the proposed mitigation site provides more than a 10:1 ratio of protected existing wetlands to wetlands lost due to roadway construction. The goal of this mitigation effort is to preserve existing wetlands that are presently impacted by grazing and in doing so, achieve the following objectives:

- Maintain foraging areas and shelter for small mammals and large game animals
- Maintain strong habitat for bird nesting and feeding
- Maintain habitat for local amphibians
- Maintain/improve the existing vegetation structure by removing and controlling invasive vegetation.

Existing Wetland Site Preservation

The mitigation plan entails the preservation of an existing wetland site adjacent to Almo Creek that is presently on State of Idaho owned property. The site is currently used by livestock for grazing and bedding and has areas containing the invasive and noxious weed species *Cirsium arvense* (Canada thistle), but the weed appears to be at minimal coverage.

The wetland preservation site, identified as the Fringe Area, is located on a parcel of ground located on both the west and east side of the existing Almo Creek respectively in a portion of the NW Sec 9, T15S, R24E. To prevent damage to the site from livestock and ranching operations, a wildlife friendly three-rail wood fence will be constructed. It will connect to the adjacent owner's fence so that cattle will be prevented from entering the preservation site.

IDPR will maintain public access through the wetland mitigation site. This would be for the benefit of the public to view birds, wildlife and plants. IDPR will assist in the inspection of the fence installation providing guidance as to the proper placement.

IDPR will control noxious weeds, and protect in perpetuity, the wetland mitigation site called the "fringe area" as shown on the attached map. The list of noxious weeds shall be as defined by the Cassia County Weed Control Office. IDPR will continue the activities of noxious weed control, fence maintenance, monitoring, and protection of these wetlands in perpetuity.

Within the wetland mitigation site there are existing irrigation diversions. It is agreed that IDPR will continue to operate these diversions for the benefit of the Park and the wetland mitigation site. The Water Master also has access for diverting water to a neighboring shareholder.

This Fringe Area mitigation site is approximately two and one-half (2.5) acres. No cattle grazing will be allowed within the protected wetland site.

CASTLE ROCK STATE PARK WETLANDS MITIGATION SITE

