

APPENDIX 2F

Compliance with Clean Water Act Section 404(b)(1) Guidelines Memo

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Memo

Date: Tuesday, December 02, 2025

Project: Heber Valley Corridor EIS

To: Craig Hancock, Naomi Kisen, UDOT

From: HDR

Subject: Compliance with Clean Water Act Section 404(b)(1) Guidelines

1 Introduction

This memo documents how the Utah Department of Transportation's (UDOT) selection of the preliminary preferred alternative for the Draft Environmental Impact Statement (EIS) for the Heber Valley Corridor Project complies with the Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material (*40 Code of Federal Regulations* [CFR] Section 230), referred to as the "Guidelines" in this memo.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this action are being, or have been, carried out by UDOT pursuant to 23 *United States Code* (USC) Section 327 and a Memorandum of Understanding dated May 26, 2022, and executed by the Federal Highway Administration (FHWA) and UDOT.

The Draft EIS evaluates alternatives for meeting the project's purpose. As described in Chapter 2, *Alternatives*, of the Draft EIS, UDOT identified two action alternatives—Alternative A and Alternative B (UDOT's preliminary preferred alternative)—through the alternatives development and screening process for detailed study in the Draft EIS. According to the Draft EIS, both alternatives would affect wetlands and other waters of the United States (aquatic resources such as streams and wetlands), and these impacts would require a Section 404 permit from the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA). When evaluating individual permit applications, USACE must analyze project alternatives in accordance with the Guidelines. If Alternative B is selected in the Final EIS and Record of Decision, UDOT would submit a permit application to USACE identifying Alternative B as the proposed project. USACE would then apply the Guidelines as part of its permit evaluation. This memo evaluates Alternative B for compliance with the Guidelines.

Overview of CWA Section 404(b)(1) Guidelines. The fundamental precept of the Guidelines is that discharges of dredged or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem. The Guidelines specifically require that "no discharge of dredged or fill material [to Section 404-regulated waters] shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the

alternative does not have other significant adverse environmental consequences" (40 CFR Section 230.10(a)).

Under Subpart B of the Guidelines, USACE considers four tests (or "restrictions on discharge") that a proposed project must pass, in addition to other requirements, to be issued a Section 404 permit. These tests (with reference to the Guidelines) include:

- **40 CFR Section 230.10(a).** Whether there is a practicable alternative to the proposed discharge, which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. The alternative identified by this test is referred to as the least environmentally damaging practicable alternative (LEDPA).

For projects with a basic project purpose that is not water-dependent, it is presumed that a practicable alternative exists that does not involve special aquatic sites unless the permit applicant demonstrates otherwise.

- **40 CFR Section 230.10(b).** Whether the discharge would violate any applicable state water quality standards, Section 307 of the CWA, the Endangered Species Act (ESA), or federal laws concerning marine sanctuaries.
- **40 CFR Section 230.10(c).** Whether the discharge would cause or contribute to significant degradation of waters of the United States.
- **40 CFR Section 230.10(d).** Whether appropriate and practicable steps have been taken that will minimize potential adverse impacts of the discharge on the aquatic ecosystem.

USACE's evaluation of a proposed project under all four of these tests constitutes a determination of compliance with the Guidelines. To assess the first test (40 CFR Section 230.10(a)), Section 2, *Project Purpose*, and Section 3, *Alternatives Analysis*, of this memo provide information on the purpose of and need for the project, development and screening of the alternatives, practicability of the alternatives, and identification of the LEDPA.

In USACE's decision-making process, if the applicant's proposed alternative is determined to be the LEDPA, findings related to the other discharge restrictions in 40 CFR Sections 230.10(b) and (c) apply only to that alternative. The Draft EIS provides detailed information relevant to these restrictions. In its permit application to USACE, UDOT will either reference relevant EIS content or paraphrase it and supply additional information if requested. Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*, of the Draft EIS describes the anticipated beneficial and adverse impacts of the action alternatives and identifies proposed mitigation measures. Based on these impacts and mitigation measures, UDOT believes that both action alternatives would comply with the other discharge restrictions. Discharges from either alternative would not violate Utah water quality standards or CWA Section 307 (toxic effluent standards or prohibitions) or jeopardize any listed threatened or endangered species. Federal marine sanctuary laws do not apply to this project. Through avoidance, minimization, and mitigation measures—including controlling erosion and sediment, maintaining hydrologic connectivity, restoring temporary impacts, and providing compensatory

mitigation for permanent impacts—discharges from either alternative would not cause or contribute to significant degradation of waters of the United States.

Regarding the fourth test (40 CFR Section 230.10(d)), many of the mitigation measures listed in Chapter 3 of the Draft EIS would help minimize potential adverse impacts from discharges associated with either action alternative on the aquatic ecosystem. In its permit application to USACE, UDOT will summarize applicable mitigation measures from the EIS and coordinate with USACE to identify any additional measures that are appropriate and practicable.

2 Project Purpose

This section summarizes the purpose of the Heber Valley Corridor Project in the context of the Guidelines. For detailed information, see Chapter 1, *Purpose and Need*, of the Draft EIS, which explains how the purpose of and need for the Heber Valley Corridor Project were developed as part of the environmental review process, presents the project's purpose and need, and provides a comprehensive needs assessment.

2.1 Basic Project Purpose

The basic project purpose, defined in the Guidelines, is a general description of the project's purpose and relates to the question of water dependency. The purpose of the Heber Valley Corridor Project is to improve regional and local mobility and to provide opportunities for nonmotorized transportation while allowing Heber City to achieve their vision for the historic town center. Therefore, **the basic purpose is not water-dependent**.

2.2 Overall Project Purpose

According to the Guidelines, the overall project purpose helps determine the practicability of the evaluated alternatives and whether the alternatives satisfy the applicant's objectives for the project. As stated above, UDOT is proposing improvements to enhance existing and future mobility in the Heber Valley in Wasatch County, Utah, through 2050. The purpose of the Heber Valley Corridor Project is to improve regional and local mobility on U.S. Highway 40 (US-40) from River Road/State Route (SR) 32 north of Heber City to U.S. Highway 189 (US-189) south of Heber City and provide opportunities for nonmotorized transportation while allowing Heber City to achieve their vision for the historic town center.

3 Alternatives Analysis

This section summarizes the history of alternatives development and screening, evaluates the practicability of alternatives, and identifies the LEDPA for the Heber Valley Corridor Project. For more detailed information about the alternatives development and screening process, refer to the following elements of the Draft EIS: Chapter 2, *Alternatives*; Appendix 1A, *Existing and 2050 No-build Traffic Report*; Appendix 2A, *Final Alternatives Development and Screening Report*; Appendix 2B, *Addendum to the Final Alternatives Development and Screening Report*; Appendix 2C, *Action Alternatives Traffic Memo*; Appendix 2D, *Action Alternatives Figures*; and Appendix 2E, *Preferred Alternative Report*.

3.1 Alternatives Development History

Heber City and Wasatch County have been considering a bypass road around Heber City for more than 20 years and have conducted multiple planning studies in conjunction with the Mountainland Association of Governments (MAG) and UDOT.

To help develop alternatives for the EIS, UDOT used an early scoping process to solicit public and agency input, presented transportation improvement concepts at public meetings, and solicited comments on alternatives screening methodology and criteria. In consideration of public and agency comments, UDOT modified existing transportation improvement concepts, developed new concepts, and considered comments on alternatives screening. Alternatives screening was initially completed in early 2023. In fall 2023, as UDOT was preparing to publish the Draft EIS including a preferred alternative, an updated internal draft version of the Summit-Wasatch travel demand model became available. The Summit-Wasatch travel demand model is a robust model maintained through a multi-agency cooperative effort using resources from MAG, the Wasatch Front Regional Council, UDOT, and Summit County. It covers all of Summit and Wasatch Counties. Regional travel demand models typically undergo comprehensive updates every 4 years, coinciding with the 4-year update cycle for the long-range plan. Model updates included revisions to growth assumptions based on coordination between regional planning partners and local governments and considering statewide projections and locally approved developments and land use plans.

The project team for the EIS conducted a sensitivity analysis and found that the draft updated model projected substantially more traffic in 2050 compared to the previously approved model that had been used to prepare the Draft EIS (version 1.0). Typically, updates to the regional travel demand models that occur in the middle of the EIS process produce changes to traffic forecasts that are small enough to support reliance on decisions made with the previous model. In this case, the new growth assumptions in the draft updated travel demand model resulted in a 30% increase in traffic volume on north US-40 compared to previous forecasts. As a result, all five action alternatives that previously passed through screening would fail to meet the purpose of the project.

UDOT met with MAG, Wasatch County, and Heber City in winter 2023/2024 to discuss the differences between the models and understand why the projected growth had increased substantially. In spring 2024, an official version of the updated travel demand model was released. Through summer 2024, the project team validated the updated travel demand model and evaluated the changes between versions 1.0 and 2.1 of the updated model.

By fall 2024, UDOT had thoroughly reviewed the official calibrated and finalized version of the updated travel demand model (version 2.1 2024-03-28), and the project team confirmed the findings of the sensitivity analysis. The updated travel demand model (version 2.1) forecasts a 30% increase in traffic on the North US-40 segment (US-40 between SR-32 and 900 North) and a 10% increase in traffic on Main Street (US-40 in downtown Heber City) compared to the travel demand model that was previously used. UDOT determined that the change was significant enough to require revisions to the traffic analysis using projections from version 2.1 of the model, as well as revisions to the alternatives to handle the additional projected traffic, before

publishing the Draft EIS. This change ensured that UDOT was using the best available travel demand data for the Heber Valley.

All five action alternatives that made it through screening in 2023 were refined to accommodate the additional projected traffic. Revisions included adding additional travel lanes and converting intersections with traffic signals to free-flow (or grade-separated) interchanges. The revised alternatives followed the same alignment as the 2023 action alternatives except where changes were necessary to meet design standards. The revised alternatives were published on the project website in spring 2025 in the form of a technical report, fact sheets, and a video. For more information, see Appendix 2B, *Addendum to the Final Alternatives Development and Screening Report*.

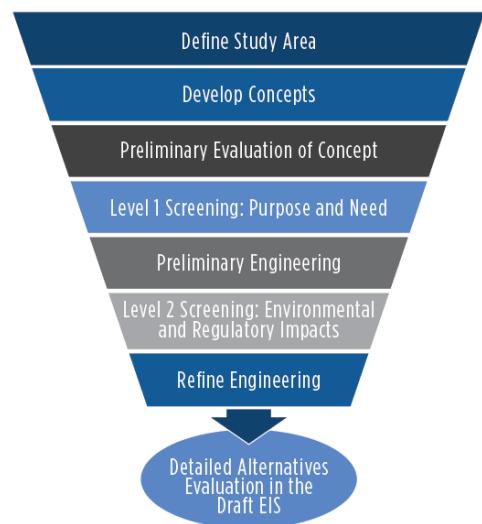
While the project team was updating the travel demand model, Wasatch County voted to fund a 165-acre conservation easement in the north fields that would conflict with all action alternatives being evaluated. The proposed easement included Natural Resources Conservation Service (NRCS) funding, which could have jeopardized UDOT's ability to construct a western corridor around Heber City because UDOT does not have the authority to condemn property held in an NRCS easement. Ultimately, NRCS decided not to fund the conservation easement; however, working through the issue contributed to delaying the study timeline (see Section S.13 of the Draft EIS for more details). The update in the travel demand model, coordination regarding conservation easements, revisions to the alternatives, and revisions to the detailed alternatives analysis shifted the project timeline by about 2 years.

3.2 Alternatives Screening Process

As illustrated in Figure 1, UDOT conducted a three-level screening evaluation (Preliminary, Level 1, and Level 2) of transportation improvement concepts. Seventeen original concepts were brought forward that had been drawn from previous studies, suggested by the public, and developed by the study team. Following the public comment period for these original concepts, 6 new concepts were developed, for a total of 23 concepts (not including the No-action Alternative) to consider during the screening process in 2023. In 2025, following review of the updated travel demand model, an additional 8 alternatives (derivatives of the 5 alternatives that passed screening in 2023) were screened.

For preliminary screening, UDOT first evaluated the concepts for fatal flaws or redundancy with other concepts to determine whether they should be further developed and advanced to Level 1 screening. Level 1 screening was based on the project purpose. Each of the initial concepts was evaluated using criteria that identified whether the concept would meet the purpose of the project.

Figure 1. Screening Process Overview



The concepts that passed Level 1 screening were refined with additional engineering and were then evaluated in Level 2 screening in terms of their expected impacts to key resources, residents and landowners, and project costs.

Alternative Analysis Criteria in CWA Section 404(b)(1) Guidelines (40 CFR Section 230.10(a)). As stated in Section 1, *Introduction*, of this memo, the Guidelines state that “no discharge of dredged or fill material [to CWA Section 404-regulated waters] shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. For projects that are not water-dependent, practicable alternatives that do not involve special aquatic sites are presumed to be available, unless clearly demonstrated otherwise. In addition, where a discharge is proposed for a special aquatic site, all practicable alternatives to the proposed discharge that do not involve a discharge into a special aquatic site are presumed to have less adverse impact on the aquatic ecosystem unless clearly demonstrated otherwise.

In 2023 and 2025, the alternative concepts were refined to avoid natural resources, such as wetlands, and property impacts where feasible. Due to the abundance of wetlands in the north fields, it was not possible to avoid wetlands entirely. UDOT explored several route options through the north fields and was unable to identify a route that avoided all wetlands while still meeting design standards and addressing the project purpose. Routes that would reduce wetland impacts while meeting design standards and addressing the project purpose were explored. When choosing the alignment, UDOT also considered nearby parks and school athletic fields, which are protected under Section 4(f) of the Department of Transportation Act of 1966. Section 4(f) requires evidence that there is no feasible and prudent alternative to the use of (impact to) protected Section 4(f) properties (public parks, recreation areas, and refuges, as well as historic properties and sites that are eligible for the National Register of Historic Places), and that all possible planning to minimize harm has been incorporated, before a Section 4(f) protected property can be incorporated into transportation use. [The full Section 4(f) Evaluation is included as Chapter 4 in the Draft EIS.] South of the 900 North segment, the selected route was the one that minimized wetland impacts, avoided Section 4(f) resources, and met design requirements. Similarly, for the North US-40 segment, the alignments were designed to reduce wetland impacts while meeting design standards.

Sections 3.2.1 and 3.2.2 briefly summarize alternative concepts that were eliminated during screening in 2023 and rescreening in 2025. Supported by detailed information in the Draft EIS, this summary demonstrates that **no practicable alternatives exist that avoid special aquatic sites**. For the Heber Valley Corridor Project, “special aquatic sites” include wetlands, which are common in the western part of the Heber Valley and are particularly extensive in the northwestern area (known as the north fields, which stretch from west of US-40 to the Provo River). Concepts that could completely or mostly avoid wetlands would need to be located along US-40 in downtown Heber City or on the east side of Heber City (east of US-40). As described

below, all such concepts were eliminated during screening because they would not meet the overall project purpose and therefore are not practicable under the Guidelines. The two action alternatives—Alternatives A and B—carried forward for detailed evaluation in the Draft EIS are the only practicable options, and both would result in impacts to wetlands.

3.2.1 CONCEPTS ELIMINATED IN SCREENING (2023)

Concepts Eliminated in Preliminary Screening. Two concepts—the Transit Concept and the Bridging over or Tunneling under US-40 Concept—were eliminated in the preliminary level of screening. The Transit Concept would not meet the project purpose because it would not remove enough traffic from Main Street to improve local mobility (that is, congestion issues would remain). The Bridging over or Tunneling under US-40 Concept would not meet the project purpose because it would have considerable impacts to Heber City's historic town center.

Concepts Eliminated in Level 1 Screening. Fifteen concepts—comprising six concepts for improving US-40, three concepts for an eastern bypass, and six concepts for the western bypass—were eliminated in Level 1 screening. Four of the six US-40 concepts would not improve local mobility, and none of the six concepts would allow Heber City to achieve their vision for the historic town center. Three concepts for an eastern bypass were eliminated because they would not improve local mobility. None of the eastern bypass concepts met the purpose of the project because they would not attract enough traffic away from Main Street. Six concepts for a western bypass were eliminated because they would not sufficiently improve local or regional mobility.

Concepts Eliminated in Level 2 Screening. One western bypass concept was eliminated in Level 2 screening because it would perform similarly to other concepts that continued to be evaluated with respect to the purpose of the project but would result in greater impacts to wetlands.

Five western bypass concepts passed through the screening process and were advanced for further consideration as alternatives in the Draft EIS in 2023. Four of the concepts were at grade (WB1, WB2, WB3, and WB4), and one concept included grade separation for a portion of its length (WA1 followed the same alignment as WB1 but included interchanges instead of at-grade intersections between 900 North and US-189, along the Western Corridor segment).

3.2.2 CONCEPTS ELIMINATED IN RESCREENING (2025)

Only those concepts that passed Level 1 screening in 2023 were rescreened in 2025 because the previously considered concepts would continue to fail with the additional traffic projected in the updated travel demand model. To accommodate the increase in projected 2050 traffic and to develop a longer-term transportation solution, UDOT refined the designs of all five western bypass alternatives to add capacity, ending up with a total of eight concepts for rescreening in 2025. Design refinements included widening north US-40 to three travel lanes, adding larger intersections with more turning capacity to the previous four at-grade alternatives (WB1, WB2, WB3, and WB4), and evaluating free-flow (or grade-separated) intersections along the same alignments (revisions to the previous version of WA1 and new free-flow versions of WB2, WB3, and WB4). These design refinements resulted in eight concepts developed for screening in 2025.

Concepts Eliminated in Preliminary Screening. Four concepts that would realign US-189 were eliminated in the preliminary level of screening because they were redundant with or similar to their counterparts that would not realign US-189 and had greater impacts.

Concepts Eliminated in Level 1 Screening. Two at-grade concepts were eliminated in Level 1 screening based on how well they satisfied the project purpose. The at-grade concepts would be slower for regional travel times (30% to 50% slower than the free-flow concepts) and would have additional conflict points (that is, additional intersections, driveways, and other accesses), making them less safe. Because the at-grade concepts would be slower, they would attract less traffic away from Main Street and would thus limit Heber City's ability to implement their vision for the historic town center. Additionally, UDOT does not expect the at-grade concepts to support regional mobility in the long term as development and population increase in the Heber Valley.

Concepts Evaluated in Level 2 Screening. Neither free-flow concept was eliminated as a result of Level 2 screening. UDOT determined that the trade-offs between the two free-flow concepts warranted full review in the Draft EIS and an opportunity for the community to comment on them. The two free-flow concepts were designed with more engineering detail and were advanced for further consideration as alternatives in the Draft EIS in 2025.

3.3 Alternatives Evaluated in Detail

3.3.1 NO-ACTION ALTERNATIVE

The National Environmental Policy Act (NEPA) requires an analysis of the No-action Alternative, including an analysis of any negative environmental impacts of not implementing the proposed agency action, to serve as a baseline so that decision-makers can compare the environmental effects of the action alternatives. The No-action Alternative evaluates traffic conditions in 2050 and assumes that all the projects listed in the *Utah Long-range Transportation Plan 2023–2050* would be constructed except for the Heber Valley Corridor Project. For more information, see Section 1.3.1.4, *2050 No-action Conditions*, in Chapter 1, *Purpose and Need*, of the Draft EIS.

3.3.2 ACTION ALTERNATIVES

Two free-flow western corridor concepts made it through the screening process and were further refined to become the two action alternatives that are studied in the Draft EIS. Both action alternatives would provide a freeway-type facility with a combination of bridges, directional ramps, and grade-separated interchanges so that drivers would not be required to stop once they are on the Heber Valley Corridor. The action alternatives are the same throughout their alignments except for the North Fields Extension segment. In this area, the action alternatives differ as follows:

- **Alternative A (on US-40 alignment)** is located on the North US-40 segment.
- **Alternative B (off US-40 alignment)** is located on a new road (the North Fields Extension segment).

As described in the previous sections, **Alternatives A and B are the only practicable alternatives**. An overview of Alternative A is shown in Figure 2, and an overview of Alternative B is shown in Figure 3.

Figure 2. Alternative A Overview

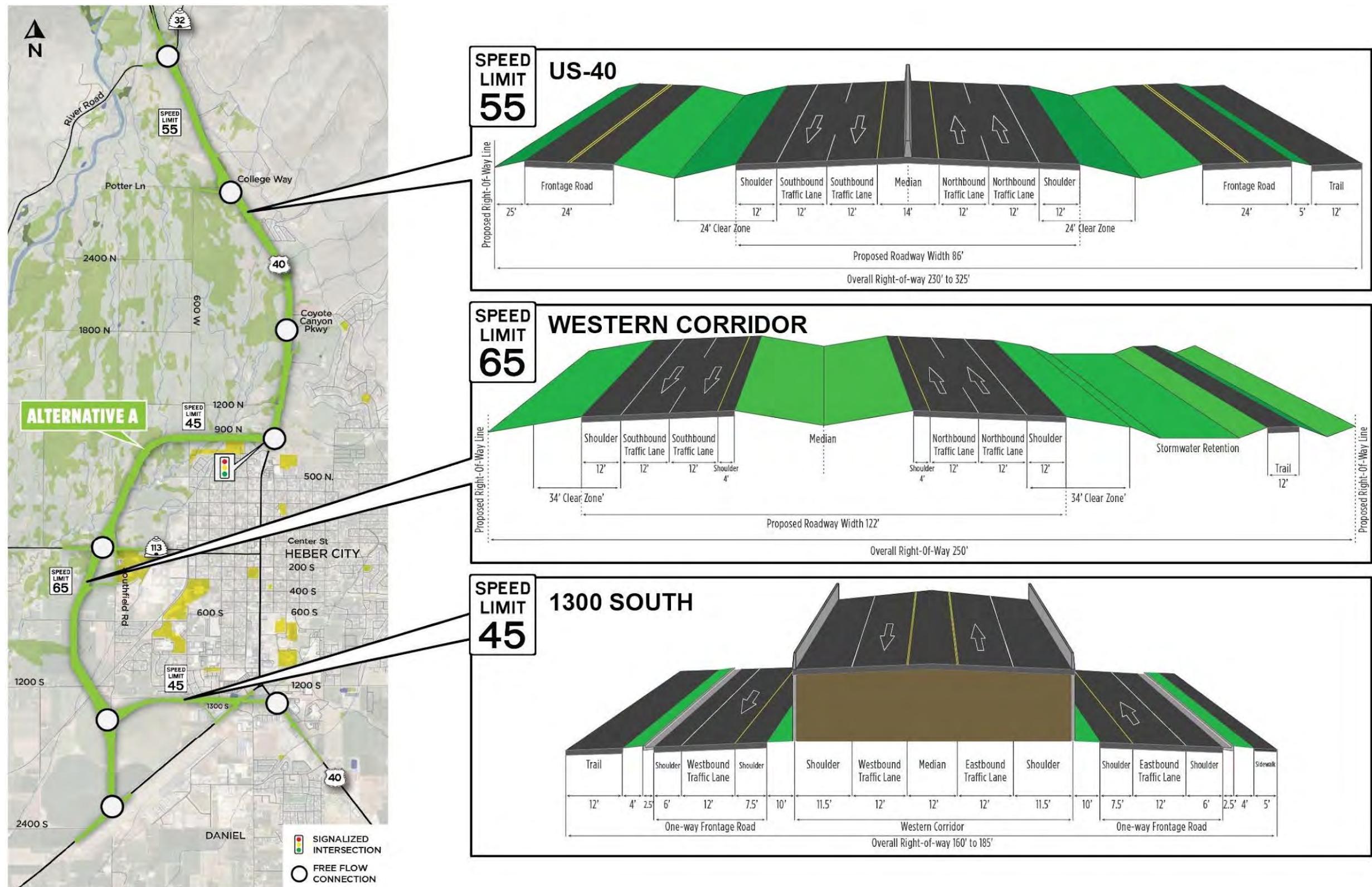
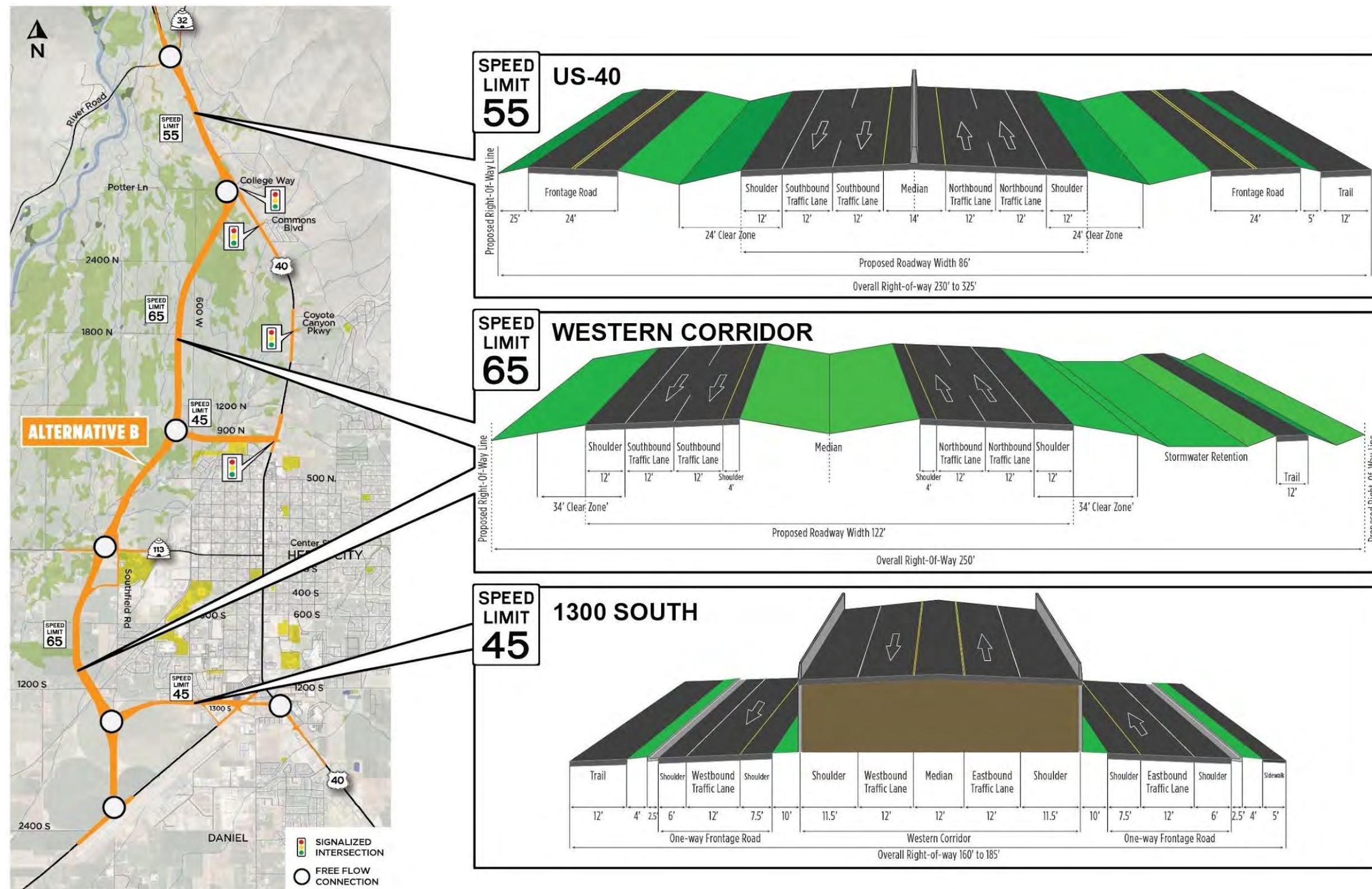


Figure 3. Alternative B Overview



3.3.3 IMPACTS TO AQUATIC RESOURCES

Jurisdictional waters of the United States were delineated in the field. Both action alternatives would convert aquatic resources to transportation use. Table 1 shows the impacts, by alternative, to aquatic resources that UDOT identified as likely jurisdictional. Alternative B would convert greater acreages of aquatic resources to transportation use.

Table 1. Direct Impacts to Aquatic Resources in the Ecosystem Resources Evaluation Area by Alternative

Aquatic Resource Type	Impacts by Alternative (acres)	
	Alternative A	Alternative B
Palustrine emergent wetland	19.91	50.34
Perennial stream	0.98	2.12
Canals and ditches	1.63	1.46
Open water	<0.01	<0.01
Total	22.52	53.92

It should be noted that on November 17, 2025, EPA and USACE announced their proposed revisions to the 2023 definition of “waters of the United States.” The proposed revisions are focused on relatively permanent, standing or continuously flowing bodies of water and wetlands that are connected and indistinguishable from such waterbodies (USACE and EPA 2025b). The definition of “waters of the United States” is an evolving issue that UDOT is following closely.

Indirect effects on aquatic resources could occur from sediment discharges associated with stormwater, erosion, hydrologic modifications, and the establishment of noxious weeds. Most of these indirect effects could be reduced or eliminated through implementation of the mitigation measures committed to in the Draft EIS.

3.3.4 OTHER IMPACTS TO ENVIRONMENTAL RESOURCES

The impacts of the action alternatives on various environmental resources are summarized in Table S-2, *Environmental Impacts of the Project Alternatives*, of the Draft EIS; more details regarding the environmental effects are provided in Chapter 3, *Affected Environment, Environmental Consequences, and Mitigation Measures*, of the Draft EIS and the technical reports prepared for specific resources.

The effects on many resources are similar between the two action alternatives and are not particularly distinguishing between the two alternatives. Table 2 focuses on the more noteworthy differences in impacts between the action alternatives. As shown in the table, Alternative A would impact fewer farmland acres and would have fewer residential noise receptors exceeding noise criteria. Alternative A would have fewer impacts on aquatic resources (22 acres) compared to Alternative B (53 acres). In contrast, Alternative B would result in the demolition of only one eligible historic structure compared to four structures for Alternative A. Alternative B would also displace fewer businesses (2) and residences (4) than would Alternative A (15 businesses and 10 residences). Both action alternatives would have adverse visual effects. Alternative A would be more visually intrusive to the north US-40 corridor, while Alternative B would be more visually intrusive to the north fields.

Table 2. Noteworthy Environmental Effects of the Action Alternatives

Impact Category	Unit	Alt A	Alt B	Notes
Section 4(f) resources	Number	4	1	These impacts would be greater than <i>de minimis</i> due to demolition of historic structures.
Federally regulated farmland impacts	Acres	179	223	This impact is acreage of land protected by the Farmland Protection Policy Act (prime farmland and farmland of statewide importance).
Agriculture Protection Areas impacts	Acres	11.8	38.4	This impact is the acreage of land protected by state and local laws that would unreasonably restrict farming.
Economic impacts	Yes/no	Yes	Yes	Businesses on Main Street would be affected by changes in congestion and changes in traffic volumes. Destination businesses could be positively impacted by reduced congestion; convenience businesses could be negatively impacted by reduced traffic.
Right-of-way: Potential business relocations	Number (estimated cost)	15 (\$45 million)	2 (\$6 million)	Alternatives A and B would require relocating two businesses along the 1300 South segment. Alternative A would also require relocating an additional 13 businesses that are in various stages of approval or construction at the intersection of 900 North and US-40.
Right-of-way: Potential residential relocations	Number (estimated cost)	12 (\$12 million)	6 (\$6 million)	Most of the residential relocations for Alternatives A and B would be on the North US-40 segment.
Receptors with modeled noise levels above criteria	Number (residential)	230 (227)	277 (273)	The traffic noise analysis included receptors for planned developments (some buildings with modeled impacted receptors have not been constructed yet).
Adverse visual impacts	Qualitative	See notes	See notes	Alternative A would be more visually impactful to the north US-40 corridor. Alternative B would be more visually impactful to the north fields.
Aquatic resources impacts	Acres	22.52	53.92	Assumptions about jurisdictional waters (wetlands, streams, canals, and ditches) are based on the professional judgement of aquatic resource specialists.

3.3.5 RATIONALE FOR ALTERNATIVE B AS THE LEDPA

Alternatives A and B both address the purpose of the Heber Valley Corridor Project to varying degrees; each would affect different environmental resources. UDOT evaluated these benefits and impacts along with the No-action Alternative. Although numerous resources and performance measures were analyzed in the Draft EIS, no single measure was determinative; rather, a combination of factors led UDOT to identify Alternative B as the preliminary preferred alternative. A detailed comparison of alternatives is provided in the Draft EIS.

During the resource identification process for the EIS, UDOT gave specific consideration to resources subject to avoidance and minimization requirements under federal and state laws. These include resources regulated by Section 4(f) of the Department of Transportation Act of 1966, wetlands and waters regulated under Section 404 of the Clean Water Act, wetlands regulated by Executive Order 11990, farmland regulated by the Utah Agricultural Protection Act,

and floodplains regulated by Executive Order 11988. Each of these laws requires efforts to avoid impacts or uses of the specified resources, except under certain conditions; however, complete or collective avoidance of all these resources was not possible.

As previously stated, the Guidelines require that “no discharge of dredged or fill material [to Section 404-regulated waters] shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, **so long as the alternative does not have other significant adverse environmental consequences**” (40 CFR Section 230.10(a); emphasis added). **Alternative A would have fewer impacts in terms of impacts on aquatic resources; however, it would result in other significant adverse environmental consequences**, including significant impacts to businesses and residences (as identified in Table 2) and to properties protected under Section 4(f) of the Department of Transportation Act of 1966. Alternative A would have a combined business and residential relocation cost of \$57 million versus Alternative B, which would have a combined business and residential relocation cost of \$12 million.¹

Section 4(f) of the Department of Transportation Act of 1966 (23 CFR Part 774).

Section 4(f) of the Department of Transportation Act of 1966 is a law that applies to the U.S. Department of Transportation and governs the use of land from publicly owned parks, recreation areas, wildlife and waterfowl refuges, and public or private historic sites. Title 23 CFR Part 774 contains the Section 4(f) implementing regulations for FHWA. FHWA has also developed guidance in the form of the *Section 4(f) Policy Paper*. UDOT has assumed FHWA's responsibilities for implementing Section 4(f) pursuant to 23 USC Section 327.

Section 4(f) states that an alternative may not be selected unless it is determined that there is “no feasible and prudent alternative to the use (impact) of Section 4(f) properties” and unless “all possible planning to minimize harm” has been incorporated. For projects for which there are no alternatives that totally avoid use of Section 4(f) properties, a “least overall harm” assessment is conducted. The least overall harm assessment evaluates seven factors to determine which alternative results in the least overall harm.

No Section 4(f) total avoidance alternatives were determined to be feasible and prudent. Both Alternative A and Alternative B would use Section 4(f) properties. UDOT conducted a least overall harm assessment, considering and balancing the seven factors listed in 23 CFR Section 774.3(c). The full assessment is provided in Section 4.7, *Least Overall Harm Analysis*, in Chapter 4, *Section 4(f) Evaluation*, of the Draft EIS.

¹ These cost estimates are not based on an appraised value. The costs are estimated at \$3 million per business relocation and \$1 million per residential relocation.

Based on an assessment of all seven of the least overall harm factors, **UDOT determined that Alternative B is the least overall harm alternative**. UDOT determined that there is no feasible and prudent avoidance alternative, and **UDOT may approve only the alternative that causes the least overall harm in light of the preservation purpose of Section 4(f) of the Department of Transportation Act of 1966**; therefore, compliance with Section 4(f) limits UDOT's ability to select Alternative A.

Given the constraint presented by Section 4(f) and the significant impacts to businesses and residences, UDOT has identified that **Alternative B is the LEDPA** in accordance with the Guidelines.