"Land Use" Discipline Report), over 11 percent has already been converted to urban uses with growth occurring adjacent to the Project study area (CH2M HILL, 2008g).

Coordination with these plans or projects is ongoing throughout the corridor. The design elements in the Idaho 16 DEIS will be included in the intersecting corridor studies. Construction on I-84 is projected to proceed through at least 2015 and is projected to be ongoing through construction staging of the Idaho 16 Project. These planned and coordinated transportation improvements, along with the Proposed Action, would make small incremental contributions to cumulative land use conversions while, at the same time, making large contributions to the region's ability to accommodate the region's shift from a predominately rural/agricultural land use to an urban/suburban/commercial land use character.

Past and future development in the study area and beyond, combined with planned transportation improvements have the potential to effect cultural resources in the APE. As noted in the "Historical, Cultural, and Archaeological Resources" Discipline Report, four previously recorded historic properties identified in previous studies within 1 mile of the APE were non-extant in 2008.

Construction Impacts. There are no construction impacts on cultural resources beyond the direct impacts discussed.

Additional details can be found in the "Historical, Cultural, and Archaeological Resources" Discipline Report available on the CD-ROM that accompanies this document (CH2M HILL, 2008f).

5.5 Visual Quality

5.5.1 Methodology

FHWA visual quality assessment methodology was used to analyze visual quality and aesthetics effects from the Proposed Action. The FHWA process consists of the following activities:

- Establish the Proposed Action's visual limits in terms of views and contiguous landscape units.
- Determine the viewers, or those who have views of and from the Proposed Action.
- Describe and assess the landscape before construction of the Proposed Action as the affected environment.
- Assess viewer sensitivity, which is the likely response of viewers looking at and from the Proposed Action, before, during, and after construction of the Proposed Action.
- Evaluate views of and from the Proposed Action before, during, and after construction using visual simulations of the proposed alternatives.
- Describe the potential visible changes to the study area and its surroundings that would result from the proposed alternatives.

The visual analysis was accomplished by driving through the study area, selecting 16 locations to illustrate the visual character, and taking photographs. In addition, four key viewpoints were selected to establish existing visual quality and to use as indicators of how the Proposed Action would change visual quality.

Visual quality evaluation forms were completed for each viewpoint. The evaluation forms, which used the established FHWA format and numerical values, scored and rated the alternatives and views. Each viewpoint was scored on three basic criteria: vividness, intactness, and unity, with the average of the three establishing the existing condition visual quality score. An evaluation scale of 1 to 7 points was used for each criterion, with 1 = very low, 4 = medium, and 7 = very high. For each viewpoint, the existing visual conditions were scored using the three criteria. An average score was generated for existing conditions.

Changes in visual quality were determined by subtracting the existing visual quality score of each viewpoint from the proposed visual quality score. A positive result indicated an overall increase in visual quality from the viewpoint while a negative result indicated an overall decrease.

5.5.2 Regulatory Framework

Applicable laws, regulations and guidance include the following:

- Highway Beautification Act (23 USC Sections 131, 136, and 319 and 23CFR750-752)
- FHWA's visual quality assessment methodology (FHWA, 1989)
- Section 2100 of ITD "Environmental Manual—Visual Impacts—Light and Glare"

5.5.3 Impacts

No Action Alternative

Land uses within the study will continue to change over time. By 2030, the mix of land uses will be very different than it currently is and the area will have a more developed appearance and character. The existing visual character will change and become more uniform as residential development occurs on lands that are now vacant or used for agriculture. Most of study area is predicted to become more rural/suburban residential in character and areas that currently have extensive, open views will have these views blocked by future buildings and trees.

Although the character of areas along the Boise River are expected to change quite a bit by 2030 due to increased development, the character of the riparian river corridor itself is not likely to change very much. Additional recreational amenities like trails may be built through the corridor as demand for recreation increases, but the general undeveloped, natural character of the river corridor is largely expected to remain.

Land use and the appearance of areas just north and south of the Boise River will continue to change over time as agricultural uses are replaced by residential development. The open character of much of the area near the river will change as houses and trees replace open fields. Views in this area will be much less extensive than they currently are and it will be harder to distinguish the riparian-lined Boise River corridor from adjacent lands because of the likely planting of trees by future residents.

Build Alternatives

Direct Impacts. To varying degrees, the visual character of the areas near the Build alternatives would be affected by the proposed improvements (interchanges, roadways, overpasses, and underpasses). However, the proposed improvements would, with one exception, have low impacts on overall visual quality. The crossing of the Boise River (KV-4) is the one area where the Proposed Action would lower visual quality enough to have a moderate to high impact. The elevated structure passing through the river corridor, the riparian forest, and over the river would be very noticeable from the river (Exhibit 5-4). The structure would alter the undeveloped, natural character of the area and lower the existing high visual quality rating to slightly above average. This reduction would be the largest decrease of any of the detailed impact assessments that were conducted. The No Action Alternative would not have visual impacts on the proposed Boise River area.

To the extent practicable, every effort would be made to reduce the size and bulk of the elevated structure as it crosses the Boise River. For a complete listing of proposed mitigation, see Chapter 9, "Mitigation."

Indirect Impacts. To varying degrees, the visual character of the areas near the Proposed Action would be changed by the components associated with the alternatives presented. These components include interchanges, roadways, overpasses, and underpasses. The crossing of the Boise River is the one area where Proposed Action components would lower visual quality enough to have a moderate to high impact. Development occurring in tandem to the roadway has the potential to contribute to the changing visual character of the study area.

Cumulative Impacts. Land uses within the study area will continue to change over time, and the study area will have a more developed appearance and character by 2030. The existing rural character will change and become more uniform as planned commercial, residential, mixed-use, and industrial development occurs in accordance with existing zoning ordinances and comprehensive plans. Areas that currently have extensive, open views will have these views altered by the components of the Proposed Action, future buildings, and trees.

Construction Impacts. There are no permanent construction impacts on visual resources beyond those described above. During construction there would be dust and temporary visual impacts caused by the introduction of heavy equipment to be used, moved, and stored near work sites, and by increasing vehicular traffic along detour routes.

Additional details can be found in the "Visual Quality" Discipline Report available on the CD-ROM that accompanies this document (CH2M HILL, 2008k).

EXHIBIT 5-4
"Before" and "After" Views of the Proposed Boise River Bridge (KV-4), Looking East-southeast
Idaho 16, I-84 to Idaho 44 Environmental Study

5.6 Transportation

5.6.1 Methodology

Data on existing highway and road facilities were obtained from ITD, county officials, and local highway districts. Existing access information was gained from field observations and