

3.14 VISUAL QUALITY

3.14.1 Introduction

This section describes existing visual resources in the regional study area. It includes a discussion of:

- ▶ Landscape character units used to evaluate visual resources and visual quality considerations associated with each unit
- ▶ An inventory of existing visual resources and significant views in the regional study area
- ▶ A summary of important visual resources and visual quality considerations for local communities based on a review of local land use planning documents

The visual assessment process includes determining effects to visual resources by improvements that would:

- ▶ Block or impede views of scenic value (such as mountains or pastoral landscapes)
- ▶ Change the existing visual character or quality of the site, such as:
 - Introducing new visual elements
 - Relocating homes and businesses
 - Impacting town character
 - Impacting wetland resources, floodplains, and unique landforms

This visual assessment process also examines the consistency of improvements with any visual resource protection policies and goals stated in comprehensive plans and ordinances.

Specific design elements that could affect visual quality are:

- | | |
|---|---|
| ▶ Sound walls | ▶ Lighting |
| ▶ Retaining walls | ▶ Elevation changes to roads |
| ▶ Bridges | ▶ Additional landscaping |
| ▶ Road widening- new expanses of pavement | ▶ New rails, stations, and maintenance facilities |

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3.14 Visual Quality

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3.14.2 Affected Environment

Due to the magnitude of the regional study area, project area corridors were evaluated according to distinct landscape character units. Physical elements of a landscape are what form the visual patterns that strongly influence our response to the landscape. The six landscape character units evaluated consisted of:

- ▶ Existing transportation corridors
- ▶ Agricultural, open space, and undeveloped land
- ▶ Parks, recreation areas, and trails
- ▶ Water and natural resources
- ▶ Commercial, light industrial, and municipal uses
- ▶ Residential (urban, suburban, rural) uses

A visual quality assessment was performed, which considered the existing visual quality of the regional study area and how existing visual resources (natural areas, important viewsheds, and land use) help to define the scenic backdrop of a community. It also evaluated whether existing visual resources would remain the same or change based on improvements associated with components of the No-Action Alternative and the two build packages.

Visual quality considerations associated with each of the six landscape character units in the project corridor are described below.

Existing Transportation Corridors.

There are three primary transportation corridors in the project area. US 85, I-25 and the BNSF, and UPRR corridors were assessed as landscape character units.

The US 85 corridor runs from the City of Greeley in the north to Denver Union Station in the south. The corridor traverses large tracts of agricultural land along the northern portion of the corridor interspersed with rural towns. The southern portion of the corridor is more urban in nature associated with the Denver metropolitan area.

The I-25 corridor begins in the north at the Town of Wellington and terminates at Denver Union Station. The northern portion of the corridor traverses agricultural lands, but moving south becomes more urban in nature, with increasing residential and commercial uses.



Photo 3.14-1. BNSF Rail Corridor, Ft. Collins
This view reflects a more urban residential corridor.



Photo 3.14-2. Big Dry Creek Open Space
Open space is highly regarded by many viewers for its scenic values.

1 The BNSF Railway and UPRR corridors travel through undeveloped fields, rural residential
2 areas, and in built up urban areas. In urban areas, the BNSF rail bed traverses along urban
3 streets as seen in **Photo 3.14-1**, which depicts a typical gravel rail bed that intersects city
4 streets.

5 **Parks, Recreation Areas, and Trails.** There are
6 numerous parks, recreation areas, and trails
7 adjacent to the project corridors. Often these areas
8 offer views to on-site natural resources and views of
9 mountains, hills, and valleys. These resources
10 increase the scenic integrity values of viewsheds
11 within the corridors. These recreation areas
12 sometimes function as open space “buffers”
13 dedicated to enhancing scenic values of an area.
14 (**Photo 3.14-2**)



Photo 3.14-3. Federal and 119th Street
This view is representative of development
land uses adjoining undeveloped areas and
natural corridors, with wide sweeping
background views of the Front Range and
foothills.

15 **Water and Natural Resources.** Adjacent floodplains
16 and riparian areas with grasslands, shrubs, and
17 trees are common to larger natural drainage
18 systems. Natural resources also include views to the
19 mountains, hills and valleys that are typical to the
20 more rural undeveloped landscapes. The occurrence
21 of this landscape character unit increases the scenic
22 integrity value of viewsheds within the project
23 corridors. In addition, the more varied the viewshed
24 with natural resource elements such as rock
25 outcroppings, the higher the scenic value is
26 (**Photo 3.14-3**).



Photo 3.14-4. Grain Elevator, Larimer County
Historic landscape elements, such as this six-
chamber grain elevator, can increase a
landscape’s scenic quality.

27 **Commercial, Light Industrial, and Municipal.**
28 Notable components of this landscape character unit
29 are any historical landscape elements such as those
30 found in historic towns, including historic grain
31 elevators, other farm or ranch outbuildings, and
32 historic government buildings. These elements are
33 often considered to increase the scenic quality of a
34 landscape or viewshed (**Photo 3.14-4**).

35 **Residential: Urban, Suburban, and Rural.** Each of
36 the project corridors bisects residential areas that
37 can be classified as urban, suburban, and rural.
38 Urban residential areas contain higher density
39 housing units with very minimal open space or
40 landscaped areas surrounding the units. Suburban
41 areas are less dense and have larger lots with
42 greater landscaped areas. Rural residential areas are often associated with agriculture. In
43 general, the less dense the land use, the greater the natural scenic integrity remaining intact.
44 The development density associated with residences generally increases when moving from
45 north to south in the regional study area. Visual resources in the regional study area were
46 identified through a review of planning documents and through field observation. Generally,
47 significant visual resources include historic structures, parklands, open space, and natural

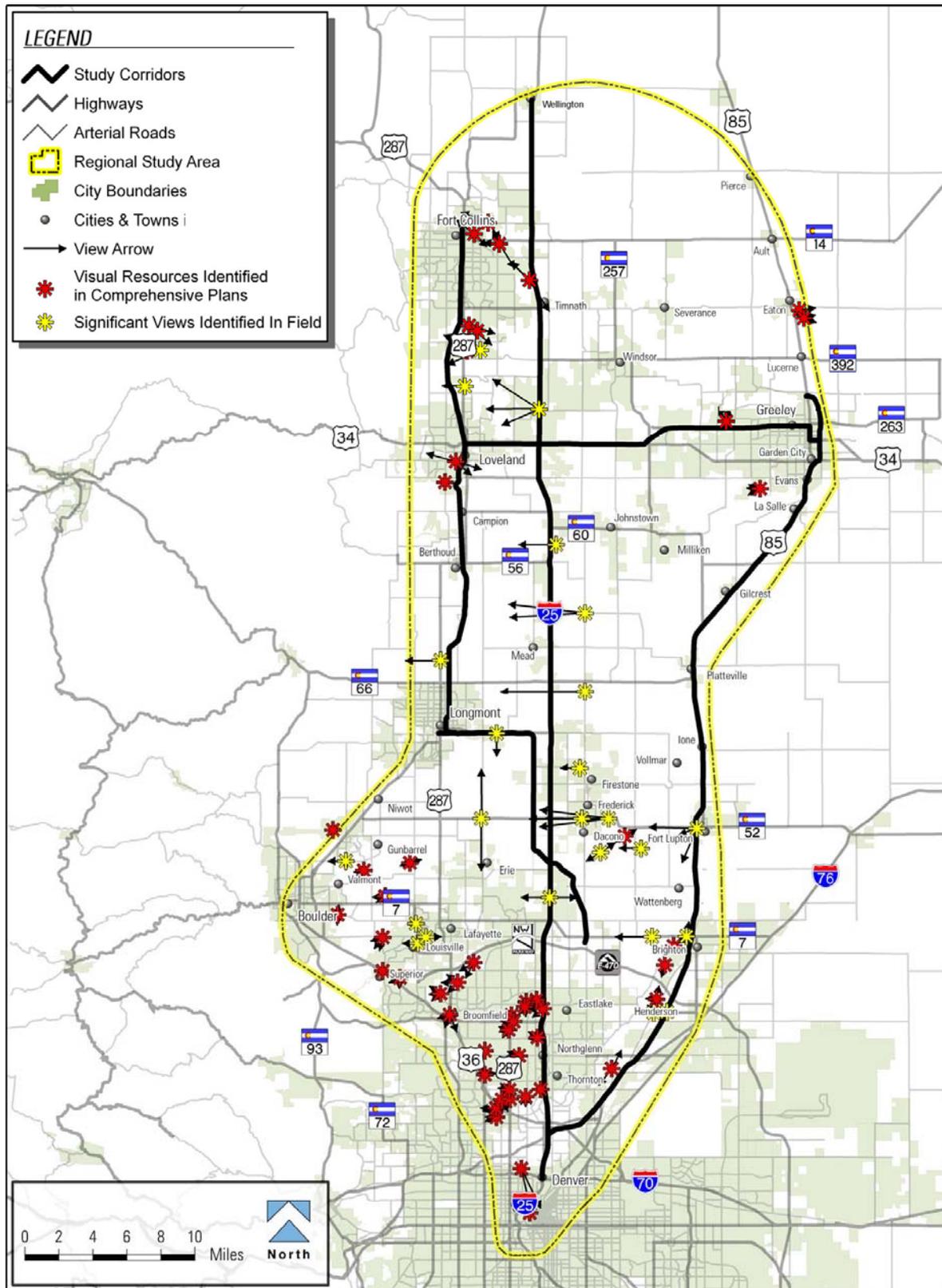
1 resources/areas (e.g., lakes, streams, rivers, wetlands). Field observations were performed to
2 determine the locations of sensitive viewsheds and dominant existing views. Desirable,
3 important, and protected views in the regional study area were documented. These views are
4 identified on **Figure 3.14-1**.

5 Based on a review of local land use planning documents, some of the primary visual goals
6 important to local communities are:

- 7 ▶ Important ecological and scenic resources, such as wetlands, floodplains, and unique
8 landforms, should be protected and enhanced.
- 9 ▶ The small-town character of Berthoud should be maintained.
- 10 ▶ Significant natural features in the Boulder Valley planning area, including Davidson Mesa,
11 Gunbarrel Hill, and Boulder Reservoir, should be preserved.
- 12 ▶ Numerous natural landmarks were defined as prominent landscape features, deemed
13 important because of the views they afford and for scenic, visual, or aesthetic values.
- 14 ▶ Active protection of farmland and open space should be encouraged.
- 15 ▶ The greenbelt around the city of Broomfield should be preserved, where feasible, to protect
16 environmentally constrained lands, steep slopes, creek corridors, and buffer growth in
17 nearby communities.
- 18 ▶ Wildlife preserves, riparian corridors, Rocky Mountain views, and greenbelt buffers along
19 roadways should be identified as visually important to provide visual relief from more
20 intense land uses.
- 21 ▶ Mountain and downtown views from public places, such as parks, should be preserved.
- 22 ▶ Design guidelines for both public and private developments should be maintained to
23 promote protection and enhancement of the visual environment.
- 24 ▶ Mountain backdrops were identified as significant visual resources.
- 25 ▶ Historic buildings should be preserved as landscape features that help to create community
26 identity.

27

1 Figure 3.14-1 Visual Resources Identified in the Regional Study Area



3.14.3 Environmental Consequences

Many of the North Front Range communities comprising the regional study area have unimpeded views to the Front Range of the Rocky Mountains, including Longs Peak and Mount Meeker. Proposed improvements associated with the packages are minor relative to the large scale of this view.

Proposed improvements that affect visual quality in the project area were identified and evaluated for the degree of effect. Effects were rated as minor, moderate, or high. An effect is categorized as minor if it does not block or impede scenic views or diminish the visual character. This would include walls that are 5 feet or less in height and interchanges and bridges that are built at the same height. An effect was categorized as moderate if it either would block or impede a scenic view of value to adjacent businesses or residences (within half-mile radius) or diminish the visual character. This would include walls from 5 feet to 15 feet in height and bridges and interchanges raised 6 feet or less in height. An effect was categorized as high if it would block or impede a scenic view of value (within ½-mile radius) and also diminish the visual character. This would include walls greater than 15 feet in height and bridges and interchanges raised greater than 6 feet.

The visual effects that occur as a result of highway widening, rail construction, bridge and wall construction, carpool lots, stations, and maintenance facilities were evaluated for each component.

Transportation improvements associated with the project could result in both short-term and long-term visual impacts. Short-term impacts include disruptions during construction while long-term impacts are the result of permanent alterations that change the way people commute in and around the area. Short-term impacts would include detours, an increase in roadway congestion in and around the area, the presence of large equipment, dust from construction, and general disruption to the surrounding neighborhoods and businesses. These short-term impacts would have a temporary visual effect to the community. Long-term impacts include relocation of businesses and residences; new interchanges; increased right-of-way; addition of station amenities (lighting); and changes to the surrounding landscape through the use of overpasses, bridges, retaining walls, medians, as well as from alterations to the existing roadway grade.

3.14.3.1 NO-ACTION ALTERNATIVE

Direct Impacts

The No-Action Alternative would generally have minimal effect on visual resources. Existing conditions, described in **Section 3.14.1**, would continue.

Indirect Impacts

Traffic and congestion would continue to increase. Even without highway or transit improvements associated with the project, growth would continue to occur on undeveloped agricultural land. This would change the landscape character along the I-25, the BNSF and US 287 corridors, and alter views and perception of visual character.

1 **3.14.3.2 PACKAGE A**

2 Visual impacts are discussed below for transportation improvement components in Package A.
3 Visual elements associated with highway improvements include interchange upgrades,
4 replacement and modification of bridges, new retaining walls, new sound walls, and the
5 addition of carpool lots. **Table 3.14-6**, provided later in this section, summarizes visual impacts
6 from highway widening and structure upgrades under each Package A highway component.

7 Structural elements include retaining walls, sound walls, bridges, box culverts and
8 interchanges.

9 Retaining walls are proposed in areas that currently do not have them. Retaining walls would
10 be either the Colorado Department of Transportation (CDOT) standard retaining walls or
11 mechanically stabilized earth (MSE) walls and would range from 3 feet, 6 inches to 21 feet,
12 6 inches in height. If the retaining wall goes up vertically from I-25, it would reduce the visual
13 effect of the highway on surrounding homes and businesses while limiting motorists' views. If
14 the retaining wall goes down vertically from I-25, it would limit the views of the surrounding
15 homes to the surrounding community and long-range views from areas east of I-25 to the
16 mountains.

17 Sound walls are proposed in areas which currently do not have them. The new sound walls
18 would range from 10 feet to 12 feet in height. While new sound walls would reduce noise
19 impacts to the surrounding community, they could increase visual impacts. The new sound
20 walls would reduce the visual effect of the highway on surrounding homes and businesses
21 while limiting motorists' views and long-range views of the surrounding community.

22 **A-H1 Highway Safety Improvements (SH 1 to SH 14).**

23 **Structural Impacts.** **Table 3.14-1** identifies the location and height range of one A-H1
24 retaining wall that would be greater than 15 feet in height. This wall would have a high effect to
25 the surrounding community. One retaining wall would be 15 feet in height or less, this wall
26 would have a moderate visual effect.

27 **Table 3.14-1 Retaining Wall Locations in Component A-H1**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
North of LCR 58, south of LCR 60 on I-25	3'-5" to 21'-5"	Surrounding community
Near SH 1 and I-25 (NW quadrant)	3'-5" to 15'-0"	Surrounding community

28

1 **Table 3.14-2** identifies the location and height for the one sound wall in this component. It
2 would have a moderate visual effect to the surrounding community.

3 **Table 3.14-2 Sound Wall Locations in Component A-H1**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet/inches)	Sound Wall Length
North of SH 1 on I-25	West	10'-12'	1,000'

4 Two interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Ten bridges
5 and box culverts in the project area are proposed to be modified or reconstructed at the same
6 heights as the structures that they are replacing. Four bridges and box culverts are proposed
7 to be reconstructed with a grade change of 6 feet or less. The addition of retaining walls, a
8 sound wall, and the reconstruction of existing bridges and interchanges would overall have a
9 moderate visual effect to motorists and adjacent homes and businesses, since similar
10 structures already exist in these locations.

11 **Carpool Lots.** A carpool lot is proposed in the southwest quadrant of I-25 and SH 1. Carpool
12 lots would consist of parking, lighting, and landscaping. The lighting associated with the
13 carpool lot would be designed to minimize shadows. Light sources would be shielded so that
14 night-time lighting is focused on the carpool lots. There would be minimal light overspill and no
15 significant impacts on nearby properties and streets. The amount of landscaping depends on
16 municipal standards. The addition of the carpool lot would have a minor visual effect because
17 it does not block any views and would not require the relocation of businesses or residences.

18 **A-H2 General Purpose Lanes (SH 14 to SH 60)**

19 **Highway Widening.** Widening the highway from SH 14 to SH 60 would require the relocation
20 of residences and businesses. Highway widening would have a moderate visual effect to the
21 surrounding community because of the required relocation of businesses and residences. The
22 greater expanse of pavement, from 68 feet to 120 feet between SH 14 and Crossroads and
23 from 68 feet to 144 feet between Crossroads and SH 60, would result in a change in the visual
24 experience for motorists.

25 **Structural Impacts.** **Table 3.14-3** identifies the location and height range of eighteen A-H2
26 retaining walls that would be greater than 15 feet in height, which would have a high visual
27 effect to the surrounding community. **Table 3.14-4** identifies the location and height of one
28 sound wall in A-H2 which would have a moderate visual effect to the surrounding community.

29

1 **Table 3.14-3 Retaining Wall Locations in Component A-H2**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
North of Harmony Road, south of LCR 40 on I-25	11'-0" to 15'-5"	Motorist
North of SH 392, south of LCR 36 on I-25	11'-0" to 69'-0"	Surrounding community
North of SH 392, south of LCR 36 on I-25	11'-0" to 20'-0"	Surrounding community
North of SH 392, south of LCR 36 on I-25	18'-0" to 23'-0"	Motorist
North of SH 392, south of LCR 36 on I-25	14'-0" to 22'-0"	Surrounding community
Near SH 392 and I-25	3'-5" to 20'-5"	Surrounding community
Near Crossroads Blvd and I-25	19'-0" to 34'-0"	Motorist
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	4'-5" to 35'-0"	Surrounding community
Near US 34 and I-25	10'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	5'-0" to 22'-0"	Surrounding community
Near US 34 and I-25	3'-5" to 31'-0"	Surrounding community
Near US 34 and I-25	3'-0" to 35'-0"	Surrounding community
North of LCR 18, south of LCR 20E on I-25	5'-5" to 19'-0"	Surrounding community
North of LCR 18, south of LCR 20E on I-25	4'-5" to 30'-0"	Surrounding community
Near LCR 16 and I-25	27'-0" to 39'-5"	Surrounding community
Near SH 60 and I-25	10'-5" to 29'-5"	Surrounding community

2 **Table 3.14-4 Sound Wall Locations in Component A-H2**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet)	Sound Wall Length
South of SH 392 and north of CR 30 on I-25 at Mountain Range Shadows	West	12'	2,500'

3 Five interchanges are proposed to be rebuilt with a grade change of 6 to 12 feet. Rebuilding
4 the interchange with the grade change would have a moderate effect on visual conditions. Two
5 interchanges are proposed to be rebuilt with a change to the vertical alignment. The
6 interchange I-25 and SH 402 would be modified to have SH 402 go over I-25 and the
7 interchange I-25 and LCR 16 would be modified to have LCR 16 go over I-25. Modifying the
8 vertical alignment of I-25 and the cross street would have a moderate visual effect because it
9 would block existing views from I-25 to the mountains. Lowering the vertical alignment of I-25
10 would limit the views of the vehicular traveler, while opening the view to adjacent properties.
11 One interchange is proposed to be rebuilt with a grade change of 6 to 12 feet. Nine bridges
12 that make up the US 34 interchange would be constructed in two levels. One level
13 approximately 24 feet above the existing US 34 and another level approximately 48 feet above
14 existing US 34. The US 34 eastbound and westbound by-pass over LCR 5, and the US 34
15 over Rocky Mountain Avenue would require relocation of businesses. The increase of size and
16 vertical alignment of the US 34 interchange would have a high visual effect to the vehicular
17 traveler and adjacent properties.

1 Nine bridges and box culverts in the project area are proposed to be reconstructed or modified
2 at the same heights as the bridges that they are replacing. Eighteen bridges and box culverts
3 are proposed to be reconstructed with a grade change of 6 feet or less. Four bridges and box
4 culverts are proposed to be constructed with a grade change from 6 to 12 feet. Three bridges
5 are proposed to be reconstructed with a grade change of 28 feet. The introduction of
6 numerous retaining walls over 15 feet in height, a sound wall, reconstructed interchanges and
7 bridges that vary in their degree of visual effect to the surrounding community would have a
8 high visual effect overall.

9 **Carpool Lots.** Five carpool lots are proposed at the following locations: I-25 and SH 14, I-25
10 and Prospect Road, I-25 and Harmony Road, I-25 and SH 392, and I-25 and SH 402. The
11 carpool lots would consist of parking, lighting, and landscaping. The lighting associated with
12 the carpool lots would be designed to minimize shadows. Light sources would be shielded so
13 that night-time lighting is focused on the carpool lots. There would be minimal light overspill
14 and no significant impacts on nearby properties and streets. The amount of landscaping
15 depends on municipal standards. The addition of carpool lots would have a minor visual effect
16 because they would not block views or require the relocation of businesses or residences.

17 **A-H3 General Purpose Lanes (SH 60 to E-470)**

18 **Highway Widening.** The widening of the highway from SH 60 to SH 66 and from SH 52 to
19 E-470 would require the relocation of residences and businesses and naturalized type
20 landscaping. Highway widening would have a moderate visual effect to the surrounding
21 community because it would require the relocation of businesses. The greater expanse of
22 pavement, from 68 feet to 120 feet between SH 60 and SH 66, from 128 feet to 144 feet
23 between SH 52 and SH 7, and from 136 feet to 168 feet between SH 7 and E-470, would
24 result in a change in the visual experience for motorists.

25 **Structural Impacts.** Table 3.14-5 identifies the location and height range of 13 A-H3 retaining
26 walls that would be greater than 15 feet in height. These would have a high visual effect to the
27 surrounding community. One retaining wall would be 15 feet in height or less, this wall would
28 have a moderate visual effect.

Table 3.14-5 Retaining Wall Locations in Component A-H3

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
North of WCR 40, south of SH 56 on I-25	3'-5" to 29'-0"	Motorist
North of WCR 40, south of SH 56 on I-25	14'-0"	Motorist
North of WCR 40, south of SH 56 on I-25	14'-0" to 18'-0"	Surrounding community
Near WCR 34 and I-25	24'-0" to 30'-0"	Surrounding community
Near WCR 34 and I-25	12'-0" to 34'-0"	Motorist
Near WCR 34 and I-25	34'-0" to 38'-0"	Surrounding community
North of SH 66, south of WCR 32 on I-25	5'-0" to 25'-5"	Surrounding community
North of SH 66, south of WCR 32 on I-25	21'-0" to 27'-0"	Surrounding community
North of 160th, south of SH 7 on I-25	1'-0" to 18'-2"	Surrounding community
SH 7 and I-25	2'-0" to 42'-0"	Surrounding community
SH 7 and I-25	2'-6" to 33'-1"	Surrounding community

1 **Table 3.14-5 Retaining Wall Locations in Component A-H3 (cont'd)**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
SH 7 and I-25	2'-0" to 34'-9"	Surrounding community
SH 7 and I-25	1'-9" to 45'-2"	Surrounding community
SH 7 and I-25	5'-8" to 16'-5"	Surrounding community

2 Five interchanges are proposed to be rebuilt at the same heights that exist today. Rebuilding
3 the interchanges at the same heights would have a minor effect on visual conditions. One
4 interchange is proposed to be rebuilt with a change to its vertical alignment. The interchange
5 of I-25 and SH 56 would be modified to have I-25 go over SH 56. Lowering the vertical
6 alignment of SH 56 would limit the views of adjacent properties and improve the views to
7 motorists on I-25. Modifying the vertical alignment of I-25 and the cross street would have a
8 moderate effect to visual conditions because it would impact the views of surrounding
9 businesses and residences to the mountains and require relocation of a residence.

10 Nine bridges and box culverts in the project area are proposed to be reconstructed at the
11 same heights as the bridges that they are replacing. Reconstruction of existing structures
12 would have a minor visual effect to the highway because the area already has structures in
13 these locations. Nine bridges and box culverts are proposed to be reconstructed with a grade
14 change of 6 feet or less. Nine bridges and box culverts are proposed to be reconstructed with
15 a grade change of 7 to 14 feet. The introduction of new interchange alignments and bridges
16 that vary in their degree of visual effect to the surrounding community would have a high visual
17 effect overall to a highway that already has numerous bridges and interchanges.

18 **Carpool Lots.** Six carpool lots are proposed at the following locations: I-25 and SH 60, I-25
19 and SH 56, I-25 and SH 66, I-25 and SH 119, I-25 and SH 52, and I-25 and SH 7. The carpool
20 lots would consist of parking, lighting, and landscaping. The lighting associated with the
21 carpool lots would be designed to minimize shadows. Light sources would be shielded so that
22 night-time lighting is focused on the carpool lots. There would be minimal light overspill and no
23 significant impacts on nearby properties and streets. The amount of landscaping depends on
24 municipal standards. The addition of the carpool lot would have a minor visual effect because
25 it would not block views or require relocation of businesses or residences.

26 **A-H4 Structure Upgrades (E-470 to US 36)**

27 Bridges in the A-H4 component project area are proposed to be reconstructed at the same
28 height as the bridges that they are replacing. Reconstruction of existing bridges and
29 interchanges would have a minor visual effect to a highway that already has bridges and
30 interchanges in these locations.

31 **Table 3.14-6 Package A Highway Components Effects Analysis**

Package A Highway Components	Highway Widening effect	Structural Upgrade effect
A-H1	None	Moderate
A-H2	Moderate	High
A-H3	Moderate	High
A-H4	None	Minor

A-T1 Commuter Rail – Fort Collins to Longmont

Rail Impacts. This portion of the commuter rail alignment is proposed to be located in the BNSF right-of-way. Between the BNSF North Yard and the CSU station at University Avenue, the commuter rail alignment would use the existing track through Fort Collins. Since there would be no improvements to the track through this portion, there would be no visual effects. South of CSU to North Longmont, the commuter rail alignment would transition to a double track. The commuter rail alignment would utilize the existing BNSF track and proposes a new track to the east of the existing track. For the majority of this component, the new track would follow the horizontal and vertical alignment of the existing track. A 6-foot chain link fence would run parallel on the east and west sides of the tracks. At all railroad crossings, gates would be upgraded or installed in order to provide safe crossings and potentially limit horns at crossings. Ten railroad crossings would be upgraded to a four-quadrant gate. This would add two additional gates in the medians of the adjacent cross street. Adding gates would reduce noise impacts to the community, but would have a minor visual effect on surrounding businesses and residences. The new track and chain link fence would represent a moderate effect to the surrounding community because they would require relocation of residences and businesses.

Structural Impacts. Table 3.14-7 identifies the location and height range of five A-T1 retaining walls that could be greater than 15 feet in height. These would have a high visual effect.

Table 3.14-7 Retaining Wall Locations in Component A-T1

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts transit rider or surrounding community?
North of Fossil Creek Trail, south of Fairway Lane along BNSF	14'-5" to 16'-4"	Transit rider
North of Fossil Creek Trail, south of Fairway Lane along BNSF	11'-5" to 16'-3"	Transit rider
North of Fossil Creek Drive, south of Fossil Creek Trail along BNSF	15'-4" to 16'-5"	Surrounding community
North of Fossil Creek Drive, south of Fossil Creek Trail along BNSF	12'-7" to 18'-6"	Surrounding community
24th Street SW and BNSF	8'-6" to 16'-2"	Surrounding community

Table 3.14-8 identifies the location of 15 A-T1 sound walls, all of which would have a high visual effect to the surrounding community.

1 **Table 3.14-8 Sound Wall Locations in Component A-T1**

Sound Wall Location	East/West Side of tracks	Sound Wall Length (feet)
East of 23rd St- Mountain Ash Place (Loveland)	East	1,400'
35th Street SW (Champion)	East	600'
South CR 15 (Berthoud)	East	400'
21st Avenue - 23rd Avenue (Longmont)	West	900'
17th Avenue - 19th Avenue (Longmont)	West	1,300'
17th Avenue - 21st Avenue (Longmont)	East	2,500'
15th Avenue - 17th Avenue (Longmont)	East	1,200'
Mountain View Avenue - 15th Avenue (Longmont)	East	1,300'
11th Avenue - Mountain View Avenue (Longmont)	East	1,500'
9th Avenue- 10th Avenue (Longmont)	East	600'
8th Avenue - 9th Avenue (Longmont)	East	600'
7th Avenue - 8th Avenue (Longmont)	East	500'
5th Avenue - 6th Avenue (Longmont)	East	500'
4th Avenue - 5th Avenue (Longmont)	East	500'
3rd Avenue - 4th Avenue (Longmont)	East	500'

2 New bridges would run parallel to the existing track and cross at the same height. The
 3 introduction of new bridges would have a minor visual effect to a railroad corridor that already
 4 has tracks and bridges in these locations. Although the effect associated with the bridges
 5 would be minor, with the addition of the sound walls and new bridges, this would have an
 6 overall high visual effect to the rail corridor. **Table 3.14-9** summarizes commuter rail impacts
 7 associated with Component A-T1.

8 **Commuter Rail Stations.** Standard commuter rail stations would consist of two platforms,
 9 which measure 400 feet by 25 feet. The commuter rail platforms would require a pedestrian
 10 overpass that is 12-feet wide and 23-feet high between the platforms with elevator and stair
 11 towers. Amenities associated with stations would include: shelters, fare boxes, benches,
 12 windscreen, elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss and
 13 ride, lighting, and landscaping. The lighting associated with the commuter rail stations would
 14 be designed to minimize shadows. Light sources would be shielded so that night-time lighting
 15 is focused on commuter rail stations. There would be minimal light overspill. Shielding the light
 16 would minimize the impacts of the lights to the surrounding residential and commercial
 17 properties. The addition of a parking lot would create an asphalt area. **Table 3.14-9**
 18 summarizes commuter rail station impacts associated with Component A-T1.

19 The Fort Collins Downtown Transit Center would be an exception to the standard commuter
 20 rail station. This station is proposed to be served by one platform with no overpasses or stair
 21 towers required. The parking at the Downtown Transit Center is proposed to be either surface
 22 parking or a parking structure. The addition of a parking lot would create a large area of
 23 asphalt while a parking structure would introduce a three-story building in an urban area where
 24 the average building height is two to four stories. Adding a station at the Fort Collins
 25 Downtown Transit Center would have a moderate visual effect to the urban downtown area
 26 because it would require relocation of the City of Fort Collins parking lot but would not affect
 27 views.

1 **Table 3.14-9 Component A-T1 Commuter Rail Stations Effects Analysis**

Station Name	Effects	Classification
Fort Collins Downtown Transit Center	Relocation of parking lot	Moderate
Colorado State University	Views to mountains blocked	Moderate
South Fort Collins Transit Center	Views to mountains blocked	Moderate
North Loveland	Business relocation, views to mountains blocked	High
Downtown Loveland	Parking lot relocation, views to mountains blocked	High
Berthoud	Business relocation, views to mountains blocked	High
North Longmont	Residential relocation, views to mountains blocked	High

2 The North Loveland, Downtown Loveland, Berthoud, and North Longmont stations would have
3 a high visual effect because they would require relocation of a business or residence and the
4 station would impede views from the east to the mountains.

5 Stations at CSU and South Fort Collins Transit Center would have a moderate visual effect to
6 the surrounding community because they would impede views from the east to the mountains,
7 particularly Longs Peak. The effect would be moderate because, while it would impede views,
8 it would not require the relocation of any businesses.

9 **Figure 3.14-2** and **Figure 3.14-3** are visual simulations that depict the Berthoud commuter rail
10 station.

11 **Maintenance Facility.** Two commuter rail maintenance facility locations are being considered
12 in Package A. The standard maintenance facility would consist of additional tracks, offices,
13 dispatch/driver support areas, vehicle maintenance bays, repair shops, vehicle wash areas,
14 fueling facilities, storage, and parking. Visual impacts associated with each commuter rail
15 maintenance facility location are summarized in **Table 3.14-10**.

16 **Figure 3.14-2 Berthoud Station, View at Commuter Rail Plaza**



1 **Figure 3.14-3 Berthoud Station, View at Commuter Rail Station**



2 **Table 3.14-10 Package A Maintenance Facility Effects Analysis**

Maintenance Facility Name	Effects	Classification
East Vine and Timberline	Visible to surrounding community	Moderate
CR 46 and US 287	Visible to surrounding community	Moderate

3 East Vine Drive and North Timberline. The land identified to accommodate the maintenance
 4 facility is currently vacant. It is adjacent to vacant land and to residential and commercial
 5 buildings. The maintenance facility would be visible to Vine Drive and the surrounding
 6 neighborhood. The proposed maintenance facility would have a moderate visual effect
 7 because it would be visible to the surrounding community and change the visual character of
 8 the area.

9 CR 46 and US 287. The land identified to accommodate the maintenance facility is currently
 10 vacant. It is adjacent to residential and commercial development. Additional traffic would be
 11 added to local streets. The maintenance facility would be visible to motorists on US 287,
 12 3rd Street, and in the surrounding neighborhood. The proposed maintenance facility would
 13 have a moderate visual effect because it would be visible to the surrounding community and
 14 change the visual character of the area.

15 **A-T2 Commuter Rail – Longmont to FasTracks North Metro**

16 **Rail Impacts.** The commuter rail alignment from the Sugar Mill station would utilize the
 17 existing BNSF track and place a new track to the east of the existing track. The new track
 18 would follow the horizontal and vertical alignment of the existing BNSF track. A double track
 19 with two new tracks would provide the connection from the Sugar Mill station to the proposed

1 FasTracks North Metro end-of-line station. The track would run parallel to SH 119 east from
2 Sugar Mill, turn south and parallel CR 7, then follow the UPRR alignment across I-25 to the
3 FasTracks North Metro end-of-line station. A six-foot chain link fence would run parallel to the
4 tracks on the east and west sides of the tracks. At all railroad crossings, gates would be
5 installed to improve safety and limit noise effects. While the addition of gates would reduce
6 noise effects, they could increase effects to the visual environment. The introduction of a new
7 track would require the relocation of residences and businesses. The relocation of businesses
8 and residences, new track, chain link fence, railroad, and crossing elements would have an
9 overall moderate effect on the surrounding community.

10 Component A-T2 would include three new grade separations where one does not currently
11 exist. These are at the following locations:

- 12 ▶ SH 52 – this grade-separated crossing would moderately impact adjacent residences. The
13 new structure over SH 52 would impede views to the Front Range that have been identified
14 as significant.
- 15 ▶ Wyndham Hill Parkway – just north of SH 52, there would be a new bridge that would be
16 visible from residential areas both east and west of County Road 7. The structure over
17 Wyndham Hill Parkway would impede views to the Front Range. This impact would be
18 moderate.
- 19 ▶ SH 119 (Longmont) – on the eastern side of Longmont, a new bridge would be constructed
20 to carry the commuter rail tracks over SH 119. This would affect views from motorists
21 traveling east and west on SH 119 and residents in the area. This impact would be
22 moderate.

23 **Structural Impacts**

24 **Table 3.14-11** identifies the location and height ranges for 16 A-T2 retaining walls that would
25 be greater than 15 feet in height. This would have a high visual impact.

26

1 **Table 3.14-11 Retaining Wall Locations in Component A-T2**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Transit Rider or Surrounding Community?
East of Emery Street, west of Martin Street on BNSF/1st Avenue	8'-5" to 25'-0"	Surrounding community
East of Emery Street, west of Martin Street on BNSF/1st Avenue	10'-5" to 25'-0"	Surrounding community
West of Alpine Drive, east of Martin Street on BNSF	14'-2" to 21'-3"	Transit rider
West of Alpine Drive, east of Martin Street on BNSF	4'-7" to 21'-3"	Transit rider
West of the intersection of SH 119 and Ken Pratt Boulevard	17'-0" to 26'-0"	Transit rider
West of the intersection of SH 119 and Ken Pratt Boulevard	3'-5" to 20'-9"	Transit rider
East of the intersection of SH 119 and Ken Pratt Boulevard	10'-6" to 25'-0"	Transit rider
East of the intersection of SH 119 and Ken Pratt Boulevard	10'-6" to 25'-0"	Transit rider
North of SH 52, south of CR 14.5 on CR 7	10'-1" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	9'-3" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Transit rider
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Transit rider
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community
SH 52 and CR 7	13'-2" to 17'-3"	Surrounding community
South of 168th Avenue and Colorado Blvd	9'-3" to 19'-8"	Surrounding community

2 **Table 3.14-12** identifies the location of the A-T2 sound wall, which would have a high visual
3 effect on the surrounding community.

4 **Table 3.14-12 Sound Wall Locations in Component A-T2**

Sound Wall Location	East/West Side of I-25	Sound Wall Length (feet)
CR 8 (Dacono)	East	1,500'

5 The new bridges would run parallel and cross at the same height as the existing track from
6 Longmont to Sugar Mill. The introduction of these new bridges would have a minor visual
7 effect to a railroad corridor that already has tracks and bridges in these locations. The bridges
8 over ditches and creeks would not be raised in height from the surrounding grade; therefore,
9 they would have a minor visual effect. The new bridge that crosses SH 119 would be 30 feet
10 with structure depth over the roadway. This would have a high visual effect to the surrounding
11 community because it would impede views to the mountains and surrounding development.
12 The introduction of retaining walls, sound walls, and new bridges would have an overall high
13 visual effect on the rail corridor. A summary of the results of the A-T2 commuter rail effects
14 analysis is provided in **Table 3.14-13**.

1 **Table 3.14-13 Package A Commuter Rail Effects Analysis**

Commuter Rail Components	Rail	Structural
A-T1	Moderate	High
A-T2	Moderate	High

2 **Commuter Rail Stations.** Table 3.14-14 summarizes A-T2 commuter rail station visual
3 impacts.

4 **Table 3.14-14 Component A-T2 Commuter Rail Stations Effects Analysis**

Station Name	Effects	Classification
Longmont at Sugar Mill	Business relocation, views to mountains blocked	Moderate
I-25 and WCR 8	Views to mountains blocked	Moderate
FasTracks North Metro	None	None

5 The stations at I-25 and WCR 8 and at the Longmont and Sugar Mill would have a moderate
6 visual effect to the surrounding community because they would impede views from the east to
7 the mountains and Longs Peak. Commuter rail would stop at all of the North Metro corridor
8 stations. These stations have not been included in the analysis since the stations are being
9 designed and built as part of FasTracks, and no additional improvements are proposed as part
10 of Package A.

11 **A-T3 and A-T4 Commuter Bus – Greeley to Denver/DIA**

12 **Commuter Bus Stations.** The standard commuter bus station would include parking, bus
13 bays, kiss and ride, lighting, and landscaping. The lighting associated with the commuter bus
14 stations would be designed to minimize shadows. Light sources would be shielded so that
15 night-time lighting is focused on the commuter bus stations. There would be minimal light
16 overspill and no significant impacts on nearby properties and streets. The amount and type of
17 landscaping would depend on city standards. Table 3.14-15 summarizes visual impacts
18 associated with proposed commuter bus stations.

19 The Greeley, South Greeley, Evans, Platteville and Fort Lupton stations would have a
20 moderate visual effect because they would result in the relocation of a business or residence.
21 These stations would not, however, impede views to the mountains. Commuter bus would stop
22 at the existing Brighton park-n-Ride, Denver Union Station and DIA and the proposed
23 Commerce City park and ride. These stations have not been included in the analysis and are
24 assumed to be in existence at the time the EIS improvements and no additional improvements
25 are proposed as part of Package A.

26

1 **Table 3.14-15 Component A-T3 Commuter Bus Station Effects Analysis**

Station Name	Impact	Classification
Greeley	Relocation of business	Moderate
South Greeley	Use of existing parking lot	Moderate
Evans	Relocation of residence	Moderate
Platteville	Relocation of business	Moderate
Fort Lupton	Relocation of business	Moderate
Brighton	None	None
Commerce City	None	None
Denver Union Station	None	None
DIA	None	None

2 **Maintenance Facility.** Two locations for the commuter bus maintenance facility are being
 3 considered in Package A. The standard maintenance facility would consist of offices, dispatch/
 4 driver support areas, vehicle maintenance bays, repair shops, vehicle wash areas, fueling
 5 facilities, storage, and parking. **Table 3.14-16** summarizes visual impacts associated with each
 6 of the two potential locations for the commuter bus maintenance facility.

7 **Table 3.14-16 Package A Maintenance Facility Effects Analysis**

Maintenance Facility Name	Impact	Classification
Portner Road and Trilby Road	Visible to surrounding community	Moderate
31st Street and 1st Avenue	Visible to surrounding community	Moderate

8 Portner Road and Trilby Road. The land identified to accommodate the maintenance facility is
 9 currently vacant. It is adjacent to vacant land and to residential and commercial buildings.
 10 The maintenance facility would be visible to Trilby Road and the surrounding neighborhood.
 11 The proposed maintenance facility would have a moderate effect on the visual environment
 12 because it would change the visual character of the area.

13 31st Street and 1st Avenue. The land identified to accommodate the maintenance facility is
 14 currently vacant. It is adjacent to vacant land and commercial development. The maintenance
 15 facility would be visible to 31st Street and the surrounding neighborhood. The proposed
 16 maintenance facility would have a moderate effect on the visual environment because it would
 17 change the visual character of the area.

18 **Summary of Package A Impacts**

19 **Direct Impacts.** Highway and transit improvements would include rebuilding interchanges,
 20 replacement and modification of bridges, new retaining walls, new sound walls, and the
 21 addition of carpool lots, tracks, platforms, shelters, fare boxes, benches, windscreen,
 22 elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss and ride, lighting,
 23 and landscaping. In a project area that primarily consists of undeveloped agricultural land with
 24 extensive views to the mountains, including Longs Peak to the west, most of the proposed
 25 improvements would not have a substantial effect to the visual quality of the corridor.

1 Both the highway and transit components in Package A would have short-term and long-term
2 impacts. Short-term impacts would result from disruptions during construction while long-term
3 impacts would result from permanent alterations that change the way people commute in and
4 around the area. Short-term impacts under Package A would include detours, increased
5 roadway congestion in and around the area, the presence of large equipment, dust from
6 construction, and general disruption to the surrounding neighborhoods and businesses. These
7 short-term impacts would have a temporary visual effect to the community. Long-term impacts
8 include relocation of businesses and residences, new interchanges, increased right-of-way,
9 additions of station amenities, and changes to the surrounding landscape through the use of
10 overpasses, bridges, retaining walls, medians, as well as alterations to the existing roadway
11 grade.

12 **Indirect Impacts.** The proposed highway and transit improvements could encourage
13 development that is more compact and denser, especially within walking distance of a
14 commuter rail station. This would change the visual character.

15 The addition of stations and a maintenance facility would add additional traffic to local streets.
16 Both the stations and maintenance facility would generate lighting that would be seen by
17 motorists, as well as from adjacent businesses and residences.

18 **3.14.3.3 PACKAGE B**

19 Package B includes the same basic structural elements (retaining walls, sound walls, bridges,
20 box culverts, and interchanges) that were described for Package A. Visual elements
21 associated with highway improvements include highway widening, reconstruction and
22 modification of interchanges, new bridges, replacement and modification of bridges, new
23 retaining walls, new sound walls, and the addition of three carpool lots. **Table 3.14-24**, later in
24 this section, summarizes visual impacts from highway widening and structure upgrades for
25 each Package B highway component.

26 ***B-H1 Highway Safety Improvements (SH 1 to SH 14)***

27 **Structural Impacts.** **Table 3.14-17** identifies the location and heights of two B-H1 retaining walls
28 that would be less than or equal to 15 feet in height. These would have a moderate visual effect to
29 the surrounding community.

30 **Table 3.14-17 Wall Locations in Component B-H1**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near SH 1 and I-25 (NW quadrant)	3'-5" to 15'-0"	Surrounding community
Near SH 1 and I-25 (SE quadrant)	3'-5" to 15'-0"	Surrounding community

31 The location of the B-H1 sound wall is provided in **Table 3.14-18**. This would have a moderate
32 visual effect to the surrounding community.

33

1 **Table 3.14-18 Sound Wall Locations in Component B-H1**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet/inches)	Sound Wall Length
North of SH 1 on I-25	West	10'-12'	1,000'

2 Two interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Ten bridges
3 and box culverts in the project area are proposed to be modified or reconstructed at the same
4 elevation as the bridges that they are replacing. Two bridges and box culverts would be
5 reconstructed with a grade change of 6 feet or less. The addition of retaining walls, a sound
6 wall, and reconstruction of existing bridges and interchanges would overall have a moderate
7 visual effect because these structures would block and impede views to the mountains.

8 **Carpool Lots.** A carpool lot is proposed in the southwest quadrant of I-25 and SH 1. Carpool
9 lots would consist of parking, lighting, and landscaping. The lighting associated with the
10 carpool lots would be designed to minimize shadows. Light sources would be shielded so that
11 night-time lighting is focused on the carpool lots. There would be minimal light overspill and no
12 significant impacts on nearby properties and streets. The amount of landscaping depends on
13 municipal standards. The addition of the carpool lot would have a minor visual effect because
14 it would not block views or require relocation of businesses or residences.

15 ***B-H2 Tolled Express Lane (SH 14 to SH 60)***

16 **Highway Widening.** The widening of the highway from SH 14 to Harmony Road would require
17 a buffer separating the tolled express lanes (TELS) in each direction. The widening of the
18 highway from Harmony Road to SH 60 would require one new barrier separating the two TELS
19 in each direction. The widening of the highway from SH 14 to SH 60 would require the
20 relocation of residences and businesses. The greater expanse of pavement, from 68 feet to
21 128 feet between SH 14 and Harmony Road and 68 feet to 192 feet between Harmony Road
22 and SH 60, would result in a change in the visual experience for the motorist. Highway
23 widening would have a moderate effect on visual conditions because it would require
24 relocation of businesses or residences.

25 **Structural Impacts.** **Table 3.14-19** identifies the location and heights of 19 B-H2 retaining
26 walls greater than 15 feet in height. These would have a high visual effect to the surrounding
27 community. Three retaining walls would be 15 feet in height or less, these would have a
28 moderate visual effect.

29

1 **Table 3.14-19 Retaining Wall Locations in Component B-H2**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
Near SH 14 and I-25	3'-5" to 15'-0"	Surrounding community
North of LCR 40, south of Prospect Road on I-25	3'-5" to 33'-5"	Motorist
Near LCR 40 and I-25, north of Harmony Road	3'-5" to 18'-5"	Surrounding community
Near Harmony Road and I-25	3'-5" to 16'-0"	Surrounding community
Near 392 and I-25	3'-5" to 15'-0"	Surrounding community
North of Crossroads Blvd, south of LCR 30 on I-25	3'-5" to 25'-0"	Motorist
North of Crossroads Blvd, south of LCR 30 on I-25	6'-0" to 29'-0"	Motorist
North of US 34, south of Crossroads Blvd. on I-25	11'-0" to 22'-0"	Surrounding community
North of US 34, south of Crossroads Blvd. on I-25	5'-0" to 22'-0"	Surrounding community
North of US 34, south of Crossroads Blvd. on I-25	5'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	4'-5" to 35'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	10'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	5'-0" to 22'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 31'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-0" to 35'-0"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	3'-5" to 25'-5"	Surrounding community
North of LCR 18, south of US 34 on I-25	14'-0" to 31'-5"	Surrounding community
North of LCR 16, south of LCR 18 on I-25	3'-5" to 19'-5"	Motorist
North of LCR 16, south of LCR 18 on I-25	26'-0" to 36'-5"	Surrounding community
Near SH 60 (WCR 48) and I-25	3'-5" to 15'-0"	Surrounding community

2 The location of the B-H2 sound wall is shown in **Table 3.14-20**. This would be a moderate
3 visual effect to the surrounding community.

4 **Table 3.14-20 Sound Wall Locations in Component B-H2**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet)	Sound Wall Length
South of SH 392 and North of CR 30 on I-25 at Mountain Range Shadows	West	12'	2,500'

5 Five interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Two
6 interchanges are proposed to be rebuilt with a change to the vertical alignment. The
7 interchange of I-25 and SH 402 would be modified to have SH 402 go over I-25 and the
8 interchange of I-25 and LCR 16 would be modified to have LCR 16 go over I-25. Modifying the
9 vertical alignment of I-25 and the cross street would have a moderate effect to visual
10 conditions. Lowering the vertical alignment of I-25 would limit views of motorists, while opening
11 the view to adjacent properties and to motorists of the raised cross street. One interchange is
12 proposed to be rebuilt with a grade change of 6 to 12 feet. Nine bridges that make up the

1 US 34 interchange would be constructed in two levels. One level approximately 24 feet above
2 the existing US 34 and another level approximately 48 feet above existing US 34. The US 34
3 eastbound and westbound by-pass over LCR 5, and the US 34 over Rocky Mountain Avenue
4 would require relocation of businesses. The increase of size and vertical alignment of the
5 US 34 interchange would have a high visual effect to the vehicular traveler and adjacent
6 properties.

7 Nine bridges and box culverts in the project area are proposed to be modified or reconstructed
8 at the same elevation as the structures that they are replacing. The reconstruction of existing
9 structures would have a minor visual effect to a highway that already has structures in these
10 locations. Eighteen bridges and box culverts would be reconstructed with a grade change of
11 6 feet or less. Four bridges and box culverts are proposed to be constructed with a grade
12 change from 6 to 12 feet. Three bridges are proposed to be rebuilt at a grade change of
13 28 feet. The introduction of numerous retaining walls over 15 feet in height, a sound wall,
14 reconstructed bridges, and interchanges would have a high visual effect overall because these
15 structures would block views and require relocation of residences or businesses.

16 **Carpool Lots.** Three carpool lots are proposed at the following locations: the northeastern
17 corner of I-25 and SH 14, the northwestern corner of I-25 and Prospect and the southwestern
18 corner of I-25 and SH 402 (alternative location at the southeastern corner). The carpool lots
19 consist of parking, lighting, and landscaping. The lighting associated with the carpool lots
20 would be designed to minimize shadows. Light sources would be shielded so that night-time
21 lighting is focused on the carpool lots. There would be minimal light overspill and no significant
22 impacts on nearby properties and streets. The amount of landscaping depends on municipal
23 standards. The addition of the carpool lots would have a minor visual effect because they do
24 not block views and do not require relocation of businesses or residences.

25 ***B-H3 Tolled Express Lanes (SH 60 to E-470)***

26 **Highway Widening.** The widening of the highway from SH 60 to E-470 would require the
27 addition of a new buffer-separated TEL in each direction. The widening of the highway from
28 SH 60 to E-470 would require relocation of businesses and naturalized type landscaping. The
29 greater expanse of pavement, from 128 feet to 152 feet between SH 66 and SH 7, would result
30 in a change in the visual experience for the motorist. The highway widening and relocation of
31 businesses would represent a moderate effect to the surrounding community.

32 **Structural Impacts.** The location and heights of nine B-H3 retaining walls greater than 15 feet
33 in height are included in **Table 3.14-21**. These walls would have a high visual effect to the
34 surrounding community.

35

1 **Table 3.14-21 Retaining Wall Locations in Component B-H3**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
North of WCR 36, south of WCR 38 on I-25	6'-0" to 18'-5"	Surrounding community
North of WCR 34, south of WCR 36 on I-25	23'-5" to 32'-5"	Surrounding community
North of WCR 34, south of WCR 36 on I-25	3'-5" to 25'-6"	Surrounding community
North of WCR 28, south of SH 66 on I-25	12'-5" to 39'-0"	Surrounding community
North of 160th, south of SH 7 on I-25	2'-0" to 20'-0"	Surrounding community
SH 7 and I-25	11'-0" to 22'-0"	Surrounding community
SH 7 and I-25	12'-0" to 25'-0"	Surrounding community
SH 7 and I-25	11'-0" to 27'-0"	Surrounding community
SH 7 and I-25	13'-0" to 18'-0"	Surrounding community

2 Seven interchanges are proposed to be rebuilt at the same height that exists today. Rebuilding
 3 the interchanges at the same heights would have a minor effect on visual conditions. One
 4 interchange is proposed to be rebuilt with a change to the vertical alignment. The interchange
 5 of I-25 and SH 56 would be modified to have I-25 go over SH 56. Lowering the vertical
 6 alignment of SH 56 would limit the views of adjacent properties to the mountains and
 7 surrounding development and improve views of motorists on I-25. Modifying the vertical
 8 alignment of I-25 and the cross street would overall have a moderate effect to visual conditions
 9 because it would block and impede views to the mountains.

10 Eighteen bridges and box culverts in the project area are proposed to be reconstructed at the
 11 same elevation as the structures that they are replacing. Eleven bridges and box culverts
 12 would be reconstructed with a grade change of 6 feet or less. Six bridges and box culverts
 13 would be reconstructed with a grade change of 6 to 14 feet. The introduction of numerous
 14 retaining walls over 15 feet in height, reconstructed bridges, and interchanges would have a
 15 high visual effect overall because these structures would block views and require relocation of
 16 residences or businesses.

17 **Carpool Lots.** Three carpool lots are proposed at the following locations: the southeastern
 18 corner of I-25 and SH 60, the northwestern corner of I-25 and SH 56, and the southwestern
 19 corner of I-25 and SH 66. The carpool lots would consist of parking, lighting, and landscaping.
 20 The lighting associated with the carpool lots would be designed to minimize shadows. Light
 21 sources would be shielded so that night-time lighting is focused on the carpool lots. There
 22 would be minimal light overspill and no significant impacts on nearby properties and streets.
 23 The amount of landscaping depends on municipal standards. The addition of a carpool lot
 24 would have a minor visual effect because it would not block views or require relocation of
 25 businesses or residences.

26

B-H4 Tolled Express Lane (E-470 to US 36)

Highway Widening. The widening of the highway from E-470 to just south of US 36 would require the addition of one buffer-separated TEL in each direction, which would require the relocation of residences and businesses. The greater expanse of pavement, from 136 feet to 176 feet between SH 7 and US 36, would result in a change in the visual experience for the motorist. This would have a moderate effect on visual conditions because widening would require relocation of businesses or residences.

Structural Impacts. The location and heights of 23 B-H4 retaining walls greater than 15 feet in height are included in **Table 3.14-22**. These walls would have a high visual effect to the surrounding community. Two retaining walls would be 15 feet in height or less, these would have a moderate visual effect.

Table 3.14-22 Retaining Wall Locations in Component B-H4

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts Motorist or Surrounding Community?
North of US 36, south of 84th on I-25	2'-0" to 20'-0"	Surrounding community
North of 84th , south of 88th on I-25	31'-0" to 32'-0"	Motorist
North of 84th, south of 88th on I-25	26'-0" to 27'-0"	Motorist
North of 84th, south of 88th on I-25	15'-0" to 30'-0"	Surrounding community
North of 84th, south of 88th on I-25	3'-0" to 20'-0"	Surrounding community
North of 84th, south of 88th on I-25	17'-0" to 34'-0"	Surrounding community
North of 84th, south of 88th on I-25	2'-0" to 17'-0"	Motorist
North of 84th, south of 88th on I-25	2'-0" to 16'-0'	Surrounding community
North of 84th, south of 88th on I-25	4'-0" to 14'-0"	Surrounding community
North of 84th, south of 88th on I-25	5'-0" to 27'-0"	Surrounding community
North of 84th, south of 88th on I-25	4'-0" to 33'-0"	Motorist
North of 84th, south of 88th on I-25	5'-0" to 16'-0"	Surrounding community
North of 84th, south of Thornton Pkwy on I-25	2'-0" to 28'-0"	Motorist
North of 84th, south of 104th on I-25	2'-0" to 20'-0"	Surrounding community
South of 104th and I-25	3'-0" to 15'-0"	Motorist
104th and I-25	26'-0" to 28'-0"	Surrounding community
104th and I-25	2'-0" to 17'-0"	Surrounding community
104th and I-25	3'-0" to 22'-0"	Surrounding community
104th and I-25	9'-0" to 19'-0"	Surrounding community
North of 104th, south of 112th on I-25	3'-0" to 22'-0"	Surrounding community
112th and I-25	2'-0" to 29'-0"	Surrounding community
120th and I-25	14'-0" to 19'-0"	Surrounding community
120th and I-25	8'-0" to 24'-0"	Surrounding community
North of 120th, south of 128th on I-25	2'-0" to 31'-0"	Surrounding community
North of 128th, south of 136th on I-25	10'-0" to 27'-0"	Surrounding community

1 The location and heights of the four B-H4 sound walls are provided in **Table 3.14-23**. This
2 would have a moderate visual effect to the surrounding community.

Table 3.14-23 Sound Wall Locations in Component B-H4

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet/inches)	Sound Wall Length (feet)
North of 128th Ave on I-25, Thorncreek	East	14'	1,850'
North of Community Center Drive on I-25	East/West	14'	1,300'
North of Thornton Parkway on I-25, Badding Reservoir	West	10'-12'	600'
North of US 36 on I-25	East	12'	1,300'

3 One interchange is proposed to be rebuilt at the same vertical alignment that exists today. Two
4 interchanges would be rebuilt with a grade change of 6 feet or less.

5 Six bridges and box culverts in the project area are proposed to be reconstructed at the same
6 elevation as the structures that they are replacing. Four bridges and box culverts would be
7 rebuilt with a grade change of 6 feet or less. The introduction of new retaining walls, sound
8 walls, and reconstruction of existing bridges and interchanges would have a moderate visual
9 effect overall to a highway that already has sound walls, bridges, and interchanges in these
10 locations. **Table 3.14-24** summarizes visual impacts from highway widening and structure
11 upgrades under each Package B highway component.

12 **Table 3.14-24 Package B Highway Effects Analysis**

Components	Widening Effect	Structural Effect
B-H1	Minor	Moderate
B-H2	Moderate	High
B-H3	Moderate	High
B-H4	Moderate	Moderate

13 **B-T1 Bus Rapid Transit (BRT) – Fort Collins/Greeley to Denver**

14 **BRT Impacts.** BRT is proposed to travel on arterial roads and share the TEL lanes on I-25.
15 When BRT travels on arterial roads, it would function similar to commuter bus. The BRT would
16 load and unload passengers in the park-and-ride or at an on-street bus stop. When BRT
17 travels on I-25, the BRT would stop at a platform located in the median of I-25. The new TEL
18 lanes would represent a minor visual effect to the surrounding community.

19 **BRT Stations.** Typical BRT stations would include one platform that is 20 feet in width by
20 300 feet in length, a pedestrian overpass, parking, bus bays, kiss and ride, lighting and
21 landscaping. The lighting associated with the BRT stations would be designed to minimize
22 shadows. Light sources would be shielded so that night-time lighting is focused on the BRT
23 stations. There would be minimal light overspill and no significant impacts on nearby properties
24 and streets. A pedestrian overpass would be provided from the median platform over I-25 to
25 the proposed park-and-ride with the exception of SH 7 where the grade separated cross street

1 would be utilized for pedestrian connectivity. The pedestrian overpass would be 17 feet,
2 6 inches from the top of road to the bottom of the bridge. For stations located on I-25, barriers
3 would run parallel on the east and west sides of the bus loading lanes at the platform. BRT
4 stations that are not located on the I-25 corridor would not include the platform or pedestrian
5 overpass. Instead, these stations would function similar to commuter bus stations.

6 **Table 3.14-15** summarizes visual impacts associated with BRT stations.

7 The Windsor and Firestone stations would have a high visual effect because these locations
8 would require relocation of a business or residence and the stations would impede views to the
9 mountains.

10 **Figure 3.14-4** and **Figure 3.14-5** are visual simulations that depict the Windsor BRT station.

11 **Figure 3.14-4 Windsor Station, View from BRT Plaza**



12 **Figure 3.14-5 Windsor Station, View from BRT Loading/Unloading Zone**

13



1 **Table 3.14-25 Package B BRT Stations Effects Analysis**

Station Name	Effect	Classification
South Fort Collins Transfer Center	None*	Minor
Harmony Road and Timberline	None*	Minor
I-25 and Harmony Road	None*	Minor
Windsor	Pedestrian overpass may impede view	High
Crossroads Boulevard	Block views to the mountains	Moderate
Berthoud	Block views to the mountains	Moderate
Firestone	Relocation of business	High
Frederick/Dacono	Block views to the mountains	Moderate
I-25 and SH 7	None*	Minor
US 34 and SH 257	None*	Minor
Greeley Downtown Transfer Center	None*	Minor
West Greeley	None*	Minor

* The visual impact of these sites would include one or more of the following: new landscaping and addition of a large mass of asphalt. These impacts have been determined to represent negligible visual impact and not diminish the visual character of the area.

2 Stations at Crossroads, Berthoud, and Frederick/Dacono would have moderate visual effects
3 to the surrounding community. The stations would impede views to the mountains, including
4 Longs Peak, but would not require relocation of any businesses.

5 Stations at South Fort Collins Transit Center, Harmony Road and Timberline, I-25 and
6 Harmony Road, I-25 and SH 7, Greeley Downtown Transfer Center, West Greeley, and US 34
7 and SH 257 would have a minor effect because these locations would not require relocation of
8 any businesses and would not block views to the mountains.

9 **Maintenance Facility.** Two bus maintenance facility locations are being considered in
10 Package B. The standard maintenance facility would consist of offices, dispatch/ driver support
11 areas, vehicle maintenance bays, repair shops, vehicle wash areas, fueling facilities, storage,
12 and parking. **Table 3.14-26** summarizes visual impacts associated with each of the proposed
13 bus maintenance facility locations.

Table 3.14-26 Maintenance Facility Effects Analysis

Maintenance Facility Name	Impact	Classification
Portner Road and Trilby Road	Visible to surrounding community	Moderate
31st Street and 1st Avenue	Visible to surrounding community	Moderate

14 Portner Road and Trilby Road. The land identified to accommodate the maintenance facility is
15 currently vacant. It is adjacent to vacant land and to residential and commercial buildings.
16 Additional traffic would be added to local streets. The maintenance facility would be visible to
17 Trilby Road and the surrounding neighborhood. The proposed maintenance facility would have
18 a moderate effect on the visual environment.

19

1 31st Street and 1st Avenue. The land identified to accommodate the maintenance facility is
2 currently vacant. It is adjacent to vacant land and commercial development. The maintenance
3 facility would be visible to 31st Street and the surrounding neighborhood. The proposed
4 maintenance facility would have a moderate effect on the visual environment.

5 ***B-T2 Bus Rapid Transit Fort Collins/Greeley to DIA***

6 ***Summary of Package B Impacts***

7 **Direct Impacts.** Package B highway and transit improvements would include rebuilding
8 interchanges, the replacement and modification of bridges, new retaining walls, new sound
9 walls, and the addition of carpool lots, platforms, shelters, fare boxes, benches, windscreen,
10 elevators, stairs, pedestrian overpass, parking, bike parking, bus bays, kiss and ride, lighting,
11 and landscaping. In a project area that primarily consists of undeveloped agricultural land with
12 extensive views to the mountains, such as Longs Peak to the west, most of the proposed
13 improvements would not have a substantial effect on the visual quality of the corridor.

14 Both Package B highway and transit components would result in short-term and long-term
15 impacts. Short-term impacts would result from disruptions during construction while long-term
16 impacts would be the result of permanent alterations that change the way people commute in
17 and around the area. Package B short-term impacts would include detours, increase in
18 roadway congestion in and around the area, the presence of large equipment, dust from
19 construction, and general disruption to the surrounding neighborhoods and businesses. These
20 short-term effects would have a temporary visual effect to the community. Long-term effects
21 would include the relocation of businesses and residences, new interchanges, increased right-
22 of-way, addition of station amenities, and changes to the surrounding landscape through use
23 of overpasses, bridges, retaining walls, and medians, as well as from alterations to the existing
24 roadway grade.

25 **Indirect Impacts.** The proposed Package B highway and transit improvements could
26 encourage development, therefore, changing the landscape character as described in this
27 section. The addition of stations and a maintenance facility would add additional traffic to local
28 streets. Both the stations and maintenance facility also would generate lighting that would be
29 seen by motorists, as well as from adjacent businesses and residences.

30 **3.14.3.4 PREFERRED ALTERNATIVE**

31 Visual impacts are discussed below for transportation improvement components in the
32 Preferred Alternative.

33 ***I-25 Highway Improvements (SH1 to US 36)***

34 Visual elements associated with highway improvements include highway widening,
35 reconstruction and modification of interchanges, replacement and modification of bridges, new
36 retaining walls, new sound walls, and the addition of carpool lots.

37 Retaining walls are proposed in areas that require them. Retaining walls would be either the
38 CDOT standard retaining walls or mechanically stabilized earth (MSE) walls and would range
39 up to 50 feet- 6 inches in height. If the retaining wall extends upward from I-25, it would reduce
40 the visual effect from the highway to surrounding homes and businesses while limiting

1 motorists' views. If the retaining wall extends downward from I-25, it would limit the views of
2 the surrounding homes to the surrounding community and long-range views from areas east of
3 I-25 to the mountains.

4 Sound walls are proposed in areas which currently do not have them. The new sound walls
5 would range from 8 to 18 feet in height. While new sound walls would reduce noise impacts to
6 the surrounding community, they could increase visual impacts. The new sound walls would
7 reduce the visual effect of the highway on surrounding homes and businesses while limiting
8 motorists' views and long-range views of the surrounding community.

9 **I-25 Highway Widening.** The widening of the highway from SH 1 to north of SH 14 would
10 require the widening of both the inside and outside shoulders in each direction. The ultimate
11 cross section would utilize some of the existing grass median but retain 32 feet of grass. A
12 tension cable barrier and grass median would be included at all locations. The widening of the
13 highway from SH 1 to SH 14 would require the relocation of residences and businesses. The
14 greater expanse of pavement from 76 feet to 128 feet would result in a change in the visual
15 experience of the motorist. This would have a moderate effect on visual conditions because
16 widening would require relocation of businesses or residences. The reduction in grassy area
17 from 56 feet to 32 feet would accentuate the experience of an expanse of pavement. This is a
18 reduction in grassy area both from the existing situation and when compared with the other
19 two packages.

20 The widening of the highway from SH 14 to SH 66 would require the addition of one general
21 purpose lane and one buffer separated TEL in each direction. This would require widening of
22 both the inside and outside shoulders. The ultimate cross section would utilize some of the
23 existing grass median but retain 32 feet of grass. A tension cable barrier would be included in
24 all locations with a grass median. The widening of the highway from SH 14 to SH 66 would
25 require the relocation of residences and businesses. The greater expanse of pavement from
26 68 feet to 184 feet would result in a change in the visual experience of the motorist. This would
27 have a moderate effect on visual conditions because widening would require relocation of
28 businesses or residences. The reduction in grassy area from 56 feet to 32 feet would
29 accentuate the experience of an expanse of pavement. This is a reduction in grassy area both
30 from the existing situation and when compared with the other two packages.

31 The widening of the highway from SH 66 to SH 7 would require the addition of one buffer
32 separated TEL in each direction. The ultimate cross section would utilize some of the existing
33 grass median but retain 32 feet of grass. A tension cable barrier would be included in all
34 locations with a grass median. The widening of the highway from SH 66 to SH 7 would require
35 the relocation of residences and businesses. The greater expanse of pavement from 68 feet to
36 184 feet would result in a change in the visual experience of the motorist. This would have a
37 moderate effect on visual conditions because widening would require relocation of businesses
38 or residences. The reduction in grassy area from 56 feet to 32 feet would accentuate the
39 experience of an expanse of pavement. This is a reduction in grassy area both from the
40 existing situation and when compared with Package A.

41 The widening of the highway from SH 7 to US 36 would require the addition of one buffer
42 separated TEL in each direction. The widening would occur to the outside. The widening of the
43 highway from SH 7 to US 36 would require the relocation of residences and businesses.
44 Similar to the existing cross section, northbound and southbound lanes would be separated
45 with a concrete barrier. The greater expanse of pavement, from 136 feet to 178 feet between

1 SH 7 and US 36, would result in additional pavement changing the visual experience for the
2 motorist. This would have a moderate effect on visual conditions because widening would
3 require relocation of businesses or residences.

4 **I-25 Structural Impacts. Table 3.14-27** identifies the location and heights of 98 retaining walls
5 greater than 15 feet in height. These would have a high visual effect to the surrounding
6 community, because views toward I-25 and beyond would be blocked by the wall. Eighty six
7 retaining walls would be 15 feet in height or less, these would have a moderate visual effect.
8 Retaining walls under 5 feet high were not identified.

9 **Table 3.14-27 I-25 Highway Improvements (SH 1 to US 36) Wall Locations**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near SH 1 and I-25 (NW quadrant)	8'-0" to 26'-0"	Motorist
Near SH 1 and I-25 (SE quadrant)	5'-0" to 15'-6"	Motorist
Near SH 1 and I-25 (SW quadrant)	13'-0" to 19'-6"	Motorist
Near LCR 58 and I-25	5'-0" to 6'-6"	Motorist
North of LCR 58, south of SH and I-25	5'-0" to 9'-6"	Motorist
North of SH 14, near GWRR on I-25	5'-6" to 26'-6"	Motorist
Near SH 14 and I-25	10'-6" to 21'-6"	Motorist
Near SH 14 and I-25	5'-0" to 8'-6"	Motorist
Near SH 14 and I-25	5'-0" to 6'-6"	Surrounding community
Near SH 14 and I-25	18'-6" to 30'-0"	Surrounding community
Near SH 14 and I-25	12'-0" to 27'-6"	Motorist
South of Prospect Rd, near GWRR on I-25	5'-0" to 15'-0"	Motorist
South of Prospect Rd, near GWRR on I-25	7'-0" to 21'-0"	Motorist
Near Harmony Road and I-25	5'-0" to 28'-6"	Motorist
Near Harmony Road and I-25, on Harmony Road	5'-0"	Motorist
Near Harmony Road and I-25, on Harmony Road	5'-0" to 6'-0"	Motorist
Near Harmony Road and I-25	5'-0" to 25'-0"	Motorist
Near LCR 36 and I-25	9'-0" to 12'-6"	Motorist
Near LCR 36 and I-25	5'-0" to 26'-0"	Motorist
Between SH 392 and LCR 36 on I-25	5'-0"	Motorist
Between SH 392 and LCR 36 on I-25	19'-0" to 28'-0"	Motorist
Between SH 392 and LCR 36 on I-25	5'-0" to 10'-6"	Motorist
Near SH 392 and I-25	5'-0" to 21'-6"	Motorist
Near SH 392 and I-25	5'-0" to 8'-6"	Motorist
Near Crossroads Blvd and I-25	3'-0" to 28'-6"	Motorist
North of US 34, near UPRR	5'-0" to 14'-0"	Motorist
Near US 34 and I-25 (NW Quadrant)	5'-0" to 9'-0"	Surrounding community
Near US 34 and I-25 (NW Quadrant)	6'-0" to 26'-6"	Motorist
Near US 34 and I-25 (NW Quadrant)	5'-0" to 9'-0"	Motorist
Near US 34 and I-25 (NW Quadrant)	5'-0" to 9'-0"	Surrounding community
Near US 34 and I-25 (NW Quadrant)	5'-0" to 11'-6"	Motorist
Near US 34 and I-25 (NW Quadrant)	12'-0" to 26'-6"	Motorist
Near US 34 and I-25 (NW Quadrant)	19'-6" to 32'-0"	Motorist
Near US 34 and I-25 (NW Quadrant)	5'-0" to 8'-6"	Surrounding community
Near US 34 and I-25 (NW Quadrant)	6'-0" to 25'-0"	Motorist
Near US 34 and I-25 (SW Quadrant)	5'-0" to 24'-6"	Motorist
Near US 34 and I-25 (SW Quadrant)	8'-0" to 23'-0"	Motorist
Near US 34 and I-25 (SW Quadrant)	5'-0" to 8'-6"	Motorist

1 **Table 3.14-27 I-25 Highway Improvements (SH1 to US 36) Wall Locations (cont'd)**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near US 34 and I-25 (SW Quadrant)	11'-6" to 45'-0"	Surrounding community
Near US 34 and I-25 (SW Quadrant)	10'-0" to 40'-6"	Motorist and Surrounding Community
Between LCR 20E and GWRR	36'-6" to 42'-6"	Surrounding community
Between LCR 20E on I-25	7'-0" to 44'-0"	Surrounding community
South of LCR 20E on I-25	5'-6" to 23'-6"	Motorist
Between SH 402 and LCR 20E on I-25	20'-0" to 33'-0"	Motorist
South of SH 402 on I-25	26'-6" to 33'-6"	Motorist
South of SH 402 on I-25	31'-0" to 40'-0"	Motorist
Near SH 60 and I-25	28'-6" to 36'-0"	Motorist
North of SH 14, near GWRR on I-25	5'-0" to 19'-0"	Surrounding community
Near SH 14 and I-25	7'-0" to 19'-0"	Motorist
Near SH 14 and I-25	5'-0" to 24'-6"	Motorist
Near SH 14 and I-25	5'-0" to 14'-0"	Motorist and Surrounding Community
South of Prospect Rd, near GWRR on I-25	13'-6" to 30'-0"	Motorist
North of Harmony Road on I-25	11'-0" to 13'-6"	Motorist
Near Harmony Road and I-25	8'-0" to 13'-0"	Motorist
Near LCR 36 and I-25	8'-0" to 15'-6"	Motorist
Between SH 392 and LCR 36 on I-25	9'-6" to 13'-6"	Motorist
Between SH 392 and LCR 36 on I-25	13'-0" to 16'-0"	Motorist
Between SH 392 and LCR 36 on I-25	14'-6" to 22'-0"	Motorist
Between SH 392 and LCR 36 on I-25	21'-0" to 25'-0"	Motorist
Between SH 392 and LCR 36 on I-25	16'-6" to 24'-0"	Motorist
Near SH 392 and I-25	5'-0" to 14'-0"	Surrounding community
Near SH 392 and I-25	10'-0" to 17'-6"	Motorist
Between Crossroads Blvd and SH 392, near LCR 30	6'-6" to 10'-6"	Motorist
Between Crossroads Blvd and SH 392, near LCR 30	11'-6" to 15'-6"	Motorist
North of Crossroad Blvd on I-25	5'-0" to 16'-6"	Motorist
Near US 34 and I-25 (NE Quadrant)	5'-0" to 32'-6"	Motorist
Near US 34 and I-25 (NE Quadrant)	36'-0" to 50'-6"	Surrounding community
Near US 34 and I-25 (NE Quadrant)	6'-6" to 11'-0"	Motorist
Near US 34 and I-25 (NE Quadrant)	5'-0" to 13'-6"	Surrounding community
Near US 34 and I-25 (NE Quadrant)	17'-0" to 28'-6"	Motorist
Near US 34 and I-25 (NE Quadrant)	17'-6" to 29'-6"	Motorist
Near US 34 and I-25 (NE Quadrant)	7'-0" to 18'-0"	Surrounding community
Near US 34 and I-25 (NE Quadrant)	18'-0" to 26'-6"	Motorist
Near US 34 and I-25 (SE Quadrant)	18'-6" to 27'-6"	Motorist
Near US 34 and I-25 (SE Quadrant)	14'-6" to 19'-6"	Surrounding community
Near US 34 and I-25 (SE Quadrant)	19'-0" to 30'-6"	Motorist
Near US 34 and I-25 (SE Quadrant)	15'-0" to 29'-0"	Motorist
Near US 34 and I-25 (SE Quadrant)	5'-0" to 33'-6"	Surrounding community
Near US 34 and I-25 (SE Quadrant)	6'-0" to 10'-6"	Motorist
Near US 34 and I-25 (SE Quadrant)	28'-0" to 34'-0"	Motorist
Near US 34 and I-25 (SE Quadrant)	5'-0" to 36'-0"	Motorist
Near US 34 and I-25 (SE Quadrant)	20'-6" to 38'-6"	Motorist
Near US 34 and I-25 (SE Quadrant)	5'-0" to 19'-0"	Motorist
Near US 34 and I-25 (SE Quadrant)	5'-6" to 19'-0"	Surrounding community

2

1 **Table 3.14-27 I-25 Highway Improvements (SH1 to US 36) Wall Locations (cont'd)**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near US 34 and I-25 (SE Quadrant)	20'-0" to 27'-0"	Surrounding community
North of GWRR 2 on I-25	33'-0" to 35'-0"	Surrounding community
Between LCR 20E and GWRR	31'-6" to 35'-6"	Surrounding community
South of LCR 20E on I-25	15'-6" to 31'-6"	Surrounding community
South of LCR 20E on I-25	13'-0" to 21'-6"	Motorist
South of LCR 20E on I-25	8'-0" to 18'-6"	Motorist
Between SH 402 and LCR 20E on I-25	5'-6" to 12'-6"	Motorist
South of SH 402 on I-25	20'-6" to 28'-0"	Motorist
South of SH 402 on I-25	28'-6" to 29'-0"	Motorist
North of LCR 16 on I-25	7'-6" to 14'-0"	Motorist
Near SH 60 and I-25, on SH 60	5'-0" to 16'-6"	Motorist
Near SH 56 and I-25	12'-6" to 27'-6"	Motorist
Near SH 56 and I-25	10'-6" to 13'-0"	Motorist
Near SH 56 and I-25 (Little Thompson River)	16'-6" to 18'-6"	Motorist
Near SH 56 and I-25 (Little Thompson River)	18'-0" to 20'-0"	Motorist
Between WCR 38 and SH 56 on I-25	12'-6" to 30'-0"	Motorist
Between WCR 38 and SH 56 on I-25	5'-0" to 30'-0"	Motorist
North of WCR 34 near GWRR on I-25	29'-0" to 37'-6"	Motorist
North of WCR 34 and I-25	5'-0" to 30'-0"	Motorist
Near WCR 32 and I-25	7'-6" to 28'-6"	Motorist
Near WCR 32 and I-25	19'-0" to 27'-0"	Motorist
Near SH 52 and I-25	5'-0" to 16'-0"	Motorist
Near SH 7 and I-25	5'-0" to 13'-6"	Motorist
Near SH 7 and I-25	11'-0" to 16'-6"	Motorist
Near SH 7 and I-25	13'-0" to 18'-6"	Motorist
Near SH 7 and I-25	16'-0" to 23'-6"	Motorist
Near SH 7 and I-25	5'-0" to 8'-0"	Motorist
South of SH 7 and I-25, on I-25	5'-0" to 21'-0"	Motorist
Between 144th Ave & Northwest Parkway on I-25	5'-0" to 6'-6"	Motorist
Near SH 56 and I-25 (Little Thompson River)	5'-0" to 8'-6"	Motorist
Near SH 56 and I-25 (Little Thompson River)	6'-0" to 11'-6"	Motorist
South of WCR 38 on I-25	11'-0" to 15'-0"	Motorist
North of WCR 34 near GWRR on I-25	5'-0" to 13'-0"	Motorist
Near WCR 32 and I-25	5'-6" to 28'-6"	Motorist
Near WCR 32 and I-25	7'-0" to 26'-6"	Motorist
North of SH 52 and I-25	5'-0" to 13'-0"	Motorist
North of SH 52 and I-25	5'-0" to 12'-0"	Motorist
North of SH 7 on I-25	5'-0" to 10'-0"	Surrounding community
North of SH 7 on I-25	5'-0" to 10'-0"	Surrounding community
Near SH 7 and I-25	15'-0" to 18'-6"	Motorist
Near SH 7 and I-25	14'-6" to 26'-6"	Motorist
Near SH 7 and I-25	5'-6" to 17'-0"	Motorist
Near SH 7 and I-25	5'-0" to 6'-0"	Motorist
Near SH 7 and I-25	*	Motorist
Between 144th Ave and Northwest Parkway	6'-6" to 8'-0"	Motorist
Near Big Dry Creek and I-25	10'-0" to 14'-0"	Motorist
Near Big Dry Creek and I-25	6'-6" to 14'-0"	Motorist
South of Big Dry Creek on I-25	5'-0" to 10'-0"	Motorist
South of 128th Ave on I-25	5'-0" to 8'-6"	Motorist

*No height data. Wall for detention pond.

1 **Table 3.14-27 I-25 Highway Improvements (SH1 to US 36) Wall Locations (cont'd)**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near 120th Ave and I-25	5'-0" to 36'-6"	Motorist
Between Community Center Drive and Wagon Road on I-25	5'-6" to 36'-0"	Motorist
Near Community Center Drive on I-25	6'-0" to 14'-0"	Motorist
Near 104th Avenue on I-25	5'-0" to 12'-0"	Surrounding community
Near 104th Avenue and I-25, to existing Pedestrian Overpass	5'-0" to 12'-0"	Motorist
Near 104th Avenue and I-25	5'-0" to 7'-0"	Motorist
South of 104th Avenue on I-25	5'-0" to 10'-0"	Motorist
South of 104th Avenue	*	Motorist
Near Thornton Parkway and I-25, on I-25	7'-0" to 8'-6"	Surrounding community
Near Thornton Parkway and I-25, on I-25	5'-0" to 10'-0"	Surrounding community
Near 88th Avenue and I-25, on I-25	5'-0" to 10'-0"	
Near 88th Avenue and RTD underpass on I-25	5'-0" to 10'-0"	Surrounding community
South of 88th Avenue	*	Motorist
Near 88th Avenue and RTD underpass on I-25	5'-6" to 10'-0"	Motorist
Near 84th Avenue and I-25	5'-0" to 12'-0"	Surrounding community
Near 84th Avenue and I-25	5'-0" to 17'-0"	Motorist
Near 84th Avenue and I-25	9'-0" to 10'-6"	Motorist
Near 84th Avenue and I-25	5'-0" to 9'-6"	Motorist
Between 84th Avenue and US 36 on I-25	5'-0" to 12'-0"	Motorist
South of I-270/ US 36/ I-25 Interchange	5'-0" to 10'-0"	Surrounding community
South of I-270/ US 36/ I-25 Interchange	5'-0" to 10'-0"	Surrounding community
Between 144th Avenue and Northwest Parkway on I-25	5'-0" to 10'-0"	Motorist
Between 144th Avenue and Northwest Parkway on I-25	8'-6" to 9'-6"	Motorist
Between 136th Avenue and 144th Avenue on I-25	6'-0" to 6'-6"	Motorist
Near Big Dry Creek and I-25	5'-0" to 15'-6"	Motorist
Near Big Dry Creek and I-25	6'-0" to 15'-6"	Motorist
South of Big Dry Creek on I-25	5'-0" to 9'-0"	Motorist
Near 120th Avenue and I-25, on I-25	5'-6" to 10'-6"	Motorist
Near 120th Avenue and I-25	5'-6" to 15'-6"	Motorist
Near 120th Avenue and I-25	5'-0" to 11'-6"	Motorist
North of Wagon Road on I-25	14'-0" to 19'-6"	Motorist
Near Wagon Road on I-25	5'-0" to 6'-0"	Motorist
Near Community Center Drive on I-25	5'-0" to 11'-0"	Motorist
South of Community Center Drive	9'-6" to 12'-0"	Motorist
Between 104th Avenue and Community Center Drive, on I-25	7'-0" to 16'-0"	Motorist
Near 104th Avenue and Community Center Drive on I-25	7'-0" to 16'-0"	Motorist
Near 104th Avenue	7'-0" to 10'-0"	Motorist
Near 104th Avenue	5'-0" to 20'-0"	Motorist
Near 104th Avenue	5'-0" to 14'-0"	Motorist
Between Thornton Parkway and 104th Avenue	5'-0" to 10'-0"	Surrounding community
Between Thornton Parkway and 104th Avenue	5'-0" to 10'-0"	Motorist
Near Thornton Parkway and I-25	7'-6" to 12'-0"	Surrounding community
Near Thornton Parkway and I-25	7'-0" to 10'-0"	Surrounding community

*No height data. Wall for detention pond.

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3

1 **Table 3.14-27 I-25 Highway Improvements (SH1 to US 36) Wall Locations (cont'd)**

Retaining Wall Location	Retaining Wall Height Range (feet/inches)	Impacts motorist or surrounding community?
Near 88th Avenue and I-25	5'-0" to 30'-6"	Motorist
Near 88th Avenue and I-25, on 88th Avenue	5'-0" to 9'-6"	Motorist
Near 88th Avenue and RTD underpass	12'-6 to 37'-0"	Motorist
Near 88th Avenue and RTD underpass	8'-0" to 15'-0"	Motorist
Near 84th Avenue and I-25	13'-6" to 16'-0"	Motorist
Near 84th Avenue and I-25	10'-6" to 11'-6"	Surrounding community
Near 84th Avenue and I-25, on 84th Avenue	7'-6" to 12'-0"	Motorist
Near 84th Avenue and I-25	10'-6"	Motorist
Near 84th Avenue and I-25	5'-0" to 11'-6"	Motorist
South of 84th Avenue on I-25	5'-0" to 11'-6"	Motorist
Between E 70th and US 76	*	Motorist
Between E 70th and US 76	*	Motorist
North of US 36 on I-25	5'-6" to 31'-0"	Motorist

*No height data. Wall for detention pond.

2 Proposed retaining walls that are identified to impact the surrounding community could block
 3 views to the west of the mountains for short distances. Many of the North Front Range
 4 communities comprising the regional study have unimpeded views to the Front Range of the
 5 Rocky Mountains, including Longs Peak and Mount Meeker. The Preferred Alternative has
 6 98 retaining walls that are greater than 15 feet, while Package A has 32 retaining walls greater
 7 than 15 feet and Package B has 53 retaining walls greater than 15 feet. The number of
 8 retaining walls increased in the Preferred Alternative to minimize and avoid environmental and
 9 right-of-way impacts. While the Preferred Alternative does have more retaining walls than
 10 Package A and Package B, the proposed retaining walls would have a minor impact relative to
 11 the large scale of the views.

12 The locations of the sound walls are provided in **Table 3.14-28**. The introduction of sound
 13 walls would have a moderate visual effect to the surrounding community.

14 The proposed sound walls would not impact significant views for the surrounding communities
 15 of the mountains.

16 **Table 3.14-28 Sound Wall Locations in the Preferred Alternative**

Sound Wall Location	East/West Side of I-25	Sound Wall Height Range (feet/inches)	Sound Wall Length
North of SH 1 on I-25	West	10'-12'	1,000'
South of SH 392 and North of CR 30 on I-25 at Mountain Range Shadows	West	12'	2,500'
North of 128th Ave on I-25, Thorncreek	East	14'	1,850'
North of Community Center Drive on I-25	East	14'	1,300'
North of Community Center Drive on I-25	West	10'-12'	600'
North of Thornton Parkway on I-25, Badding Reservoir	West	12'	900'
North of US 36 on I-25	East	12'	1,000'

1 Eight interchanges are proposed to be rebuilt at the same height that exists today. Rebuilding
2 the interchanges at the same heights would have a minor effect on visual conditions. Nine
3 interchanges are proposed to be rebuilt with a grade change of 6 feet or less. Three
4 interchanges are proposed to be rebuilt with a change to the vertical alignment. The
5 interchange of I-25 and SH 402 would be modified to have SH 402 go over I-25, the
6 interchange of I-25 and LCR 16 would be modified to have LCR 16 go over I-25 and the
7 interchange of I-25 and SH 56 would be modified to have I-25 go over SH 56. Modifying the
8 vertical alignment of I-25 and the cross street would have a moderate effect to visual
9 conditions. Lowering the vertical alignment of I-25 would limit views of motorists, while opening
10 the view to adjacent properties and to motorists of the raised cross street. One interchange is
11 proposed to be rebuilt with a grade change of 6 to 12 feet.

12 Forty-three bridges and concrete box culverts (CBC) in the project area are proposed to be
13 modified or reconstructed at the same elevation as the bridges that they are replacing. The
14 reconstruction of existing structures would have a minor visual effect to a highway that already
15 has structures in these locations. Thirty five bridges and CBC would be reconstructed with a
16 grade change of 6 feet or less. Ten bridges and CBC are proposed to be constructed with a
17 grade change from 6 to 14 feet. Nine bridges that make up the US 34 interchange would be
18 constructed in two levels. One level would be approximately 24 feet above the existing US 34
19 and another level approximately 48 feet above existing US 34. The US 34 eastbound and
20 westbound by-pass over LCR 5, and the US 34 over Rocky Mountain Avenue would require
21 relocation of businesses. The increase of size and vertical alignment of the US 34 interchange
22 would have a high visual effect to the vehicular traveler and adjacent properties. Three bridges
23 are proposed to be rebuilt at a grade change of 28 feet. The introduction of numerous retaining
24 walls over 15 feet in height, a sound wall, reconstructed bridges, and interchanges would have
25 a high visual effect overall because these structures would block views and require relocation
26 of residences or businesses.

27 The introduction of new retaining walls, sound walls, and reconstruction of existing bridges and
28 interchanges for the I-25 highway improvements would have a moderate visual effect to a
29 highway that already has sound walls, bridges, and interchanges in these locations. The
30 exception would be the US 34 interchange. The increase of size and vertical alignment of the
31 US 34 interchange would have a high visual effect to the vehicular traveler and adjacent
32 properties.

33 **Carpool Lots.** Five new carpool lots are proposed at the following locations: the southwest
34 quadrant of I-25 and SH 1; the northeast quadrant of I-25 and SH 14; the northwest quadrant
35 of I-25 and Prospect; the southwest quadrant of I-25 and SH 402; and the southeast quadrant
36 of I-25 and SH 60. Carpool lots would consist of parking, lighting, and landscaping. The
37 lighting associated with the carpool lots would be designed to minimize shadows. Light
38 sources would be shielded so that night-time lighting is focused on the carpool lots. There
39 would be minimal light overspill and no significant impacts on nearby properties and streets.
40 The amount of landscaping depends on municipal standards. The addition of the carpool lot
41 would have a minor visual effect because it does not block any views and would not require
42 the relocation of businesses or residences.

43 ***Summary of I-25 Highway Improvements (SH1 to US 36) Impacts***

44 **Direct Impacts.** I-25 highway improvements would include rebuilding interchanges, the
45 replacement and modification of bridges, new retaining walls, new sound walls, and the
46 addition of carpool lots, and landscaping. The Preferred Alternative proposes widening the

1 highway to a larger cross section than proposed in Package A and Package B and proposes
2 more retaining walls and sound walls than the other packages. The number of retaining walls
3 increased in the Preferred Alternative to minimize and avoid environmental and right-of-way
4 impacts. The interchange and bridge impacts are similar for the Preferred Alternative,
5 Package A, and Package B. In a project area that primarily consists of undeveloped
6 agricultural land with extensive views to the mountains, such as Longs Peak and the Front
7 Range to the west, most of the proposed improvements would not have a substantial effect on
8 the visual quality of the corridor.

9 The highway improvements would result in short-term and long-term impacts. Short-term
10 impacts would result from disruptions during construction while long-term impacts would be the
11 result of permanent alterations that change the way people commute in and around the area.
12 Construction of highway improvements, short-term impacts would include detours, increase in
13 roadway congestion in and around the area, the presence of large equipment, dust from
14 construction, and general disruption to the surrounding neighborhoods and businesses. These
15 short-term effects would have a temporary visual effect to the community. Long-term effects
16 would include the relocation of businesses and residences, new interchanges, increased right-
17 of-way, addition of carpool lots, and changes to the surrounding landscape through use of
18 overpasses, bridges, retaining walls, and medians, as well as from alterations to the existing
19 roadway grade.

20 **Indirect Impacts.** I-25 highway improvements could minimally encourage development,
21 therefore, changing the landscape character as described in this section. The addition of
22 carpool lots would add traffic to local streets. The carpool lots would generate lighting that
23 would be seen by motorists, as well as from adjacent businesses and residences.

24 ***Express Bus (Fort Collins/Greeley to Denver/DIA)***

25 **Express Bus Impacts.** Express bus is proposed on arterial roads and would share the TELs
26 on I-25. When the express bus travels on arterial roads, it would function similar to commuter
27 bus. The bus would load and unload passengers in the park-and-ride or at an on-street bus
28 stop. When the express bus travels on I-25, the bus would stop at a platform located on slip
29 ramps off I-25, the exception would be the Windsor Station. The slip ramps would be buffer
30 separated from the on and off ramp with a painted 4-foot strip. The slip ramp at the Crossroads
31 Station would be the exception and is proposed to be barrier separated. The new TELs and
32 slip ramps would represent a minor visual effect to the surrounding community.

33 **Express Bus Stations.** Typical I-25 express bus stations would include a bus plaza that
34 varies in width, a pedestrian overpass, parking, bus bays, kiss and ride, lighting and
35 landscaping. The lighting associated with the express bus stations would be designed to
36 minimize shadows. Light sources would be shielded so that night-time lighting is focused on
37 the express bus stations. There would be minimal light overspill and no significant impacts on
38 nearby properties and streets. A pedestrian overpass would be provided across I-25
39 connecting the slip ramp bus stops. The Windsor Station is the exception and would not have
40 a pedestrian overpass. The pedestrian overpasses would be 17 feet- 6 inches from the top of
41 road to the bottom of the bridge. Express bus stations that are not located on the I-25 corridor
42 would not include a pedestrian overpass. Instead, these stations would function similar to
43 commuter bus stations. **Table 3.14-29** summarizes visual impacts associated with express bus
44 stations.

1 **Table 3.14-29 Express Bus Stations Effects Analysis**

Station Name	Effect	Classification
Harmony Road and Timberline	Negligible*	Minor
I-25 and Harmony Road	Negligible*	Minor
Windsor	Negligible*	Minor
Crossroads Boulevard	Block views to the mountains	Moderate
Berthoud	Block views to the mountains	Moderate
Firestone	Relocation of Business and blocks views to the mountains	High
Frederick/Dacono	Relocation of Business and blocks views to the mountains	High
I-25 and SH 7	Block views to the mountains	Moderate
US 34 and SH 257	Negligible*	Minor
Greeley Downtown Transfer Center	Negligible*	Minor
West Greeley	Negligible*	Minor

* The visual impact of these sites would include one or more of the following: new landscaping and addition of a large mass of asphalt. These impacts have been determined to represent negligible visual impact and not diminish the visual character of the area.

2 The South Fort Collins Transit Center and the I-25 and WCR 8 stations would serve both
3 express bus and commuter rail. Refer to **Table 3.14-32** for visual effects as a result of these
4 stations.

5 Stations at Frederick/Dacono and Firestone would have a high visual effect because it would
6 require the relocation of a business or residence and the station would impede views to the
7 mountains.

8 Stations at Crossroads, Berthoud, Firestone, and I-25 and SH 7 would have moderate visual
9 effects to the surrounding community. The stations would impede views to the mountains,
10 including Longs Peak, but would not require relocation of any businesses.

11 Stations at Harmony Road and Timberline, I-25 and Harmony Road, Windsor, Greeley
12 Downtown Transfer Center, West Greeley, and US 34 and SH 257 would have a minor effect
13 because these locations would not require relocation of any businesses and would not block
14 views to the mountains.

15 **Maintenance Facility.** A maintenance facility located at 31st Street and 1st Avenue in Greeley
16 is proposed. The maintenance facility would consist of offices, dispatch/ driver support areas,
17 vehicle maintenance bays, repair shops, vehicle wash areas, fueling facilities, storage, and
18 parking. The land identified to accommodate the maintenance facility is currently vacant. It is
19 adjacent to vacant land and commercial development. The maintenance facility would be
20 visible to 31st Street and the surrounding neighborhood. The proposed maintenance facility
21 would have a moderate effect on the visual environment.

22 **Summary of I-25 Express Bus (Fort Collins/Greeley to Denver/DIA) Impacts**

23 **Direct Impacts.** Express bus improvements would include plazas, shelters, fare boxes,
24 benches, windscreens, elevators, stairs, pedestrian overpasses, parking, bike parking, bus
25 bays, kiss and rides, lighting, and landscaping. The visual impacts for express bus in the
26 Preferred Alternative are similar to the visual impacts for BRT in Package B. The design for
27 BRT and express bus are different, but many of the elements that would have a visual impact
28 are the same. Elements such as plazas, shelters, fare boxes, benches, windscreens,

1 elevators, stairs, pedestrian overpasses, parking, bike parking, bus bays, kiss and rides,
2 lighting, and landscaping would be present for both alternatives, which results in similar visual
3 impacts. In a project area that primarily consists of undeveloped agricultural land with
4 extensive views to the mountains, such as Longs Peak and the Front Range to the west, most
5 of the proposed improvements would not have a substantial effect on the visual quality of the
6 corridor.

7 The express bus would result in short-term and long-term impacts. Short-term impacts would
8 result from disruptions during construction while long-term impacts would be the result of
9 permanent alterations that change the way people commute in and around the area. The
10 short-term impacts would include the presence of large equipment, dust from construction, and
11 general disruption to the surrounding neighborhoods and businesses. These short-term effects
12 would have a temporary visual effect to the community. Long-term effects would include the
13 relocation of businesses and residences, increased right-of-way and the addition of station
14 amenities.

15 **Indirect Impacts.** The proposed express bus service is not anticipated to change
16 development, although there could be some minimal development inducement in the
17 immediate vicinity of the stations. The addition of stations and a maintenance facility would
18 add additional traffic to local streets. Both the stations and maintenance facility also would
19 generate lighting that would be seen by motorists, as well as from adjacent businesses and
20 residences.

21 ***Commuter Rail (Fort Collins to North Metro)***

22 **Commuter Rail Impacts.** The commuter rail alignment is proposed to be located in the BNSF
23 railroad right-of-way and use existing BNSF track from the Downtown Transit Center to the
24 Sugar Mill Station. A maintenance road would run parallel to the BNSF line. The new
25 maintenance road would follow the horizontal and vertical alignment of the existing BNSF
26 track. East of the Sugar Mill station a new track is proposed to connect the North I-25
27 commuter rail service to the proposed FasTracks North Metro end-of-line station. The track
28 would run parallel to SH 119 east from Sugar Mill, turn south and parallel CR 7, then follow the
29 UPRR alignment across I-25 to the FasTracks North Metro end-of-line station. Commuter rail
30 track that is not within the BNSF right-of-way would not include a maintenance road.

31 Passing track is proposed for four segments along the commuter rail alignment. Passing track
32 would include a new track that would follow the horizontal and vertical alignment of the existing
33 or proposed track.

34 Passing track would be located at the following four locations:

- 35 ▶ Beginning at 6th Street in Loveland, continuing north to 0.04 mile south of West 57th Street
36 in Loveland. (Length = 3.7 miles)
- 37 ▶ Beginning 0.3 mile south of East CR 6c in Berthoud, continuing north to 0.4 mile north of
38 WCR 14. (Length = 4.5 miles)
- 39 ▶ Beginning in Longmont 0.05 mile west of Martin Street, continuing north along existing
40 BNSF corridor to 19th Avenue. (Length = 2.3 miles)
- 41 ▶ Beginning 0.6 mile west of I-25, continuing north along existing UPRR to 0.3 mile south of
42 CR 20. (Length = 5.2 miles)

1 The Preferred Alternative increased visual impacts with the addition of a maintenance road
2 that was not included in Package A. The Preferred Alternative was able to minimize the visual
3 impacts as a result of the maintenance road by reducing tracks from double track to single
4 track with passing tracks. The passing track would have a moderate effect because it would
5 require the relocation of residences and businesses.

6 A six-foot fence would run parallel on the east and west sides of the tracks. The aesthetic and
7 form of the fence would be designed to be compatible with the surrounding land uses. Future
8 coordination with the local jurisdictions regarding fencing, including the use of existing fencing
9 at specific locations along the proposed alignment will need to occur. At all railroad crossings,
10 gates would be upgraded or installed to provide safe crossings and potentially limit horns at
11 crossings. Twelve railroad crossings would be upgraded to a four-quadrant gate. This would
12 add two gates in the medians of the adjacent cross street. Adding gates would reduce noise
13 impacts to the community, but would have a minor visual effect on surrounding businesses
14 and residences. The new track and chain link fence would represent a moderate effect to the
15 surrounding community because they would require relocation of residences and businesses.

16 When the commuter rail alignment uses existing BNSF track but adds a maintenance road,
17 there would be a moderate visual impact because it would require the relocation of a residence
18 or business. The introduction of a passing track or new track from east of the Sugar Mill station
19 to the North Metro end of the line station would require the relocation of residences and
20 businesses and have a moderate visual impact. The relocation of businesses and residences,
21 new track, chain link fence, railroad and crossing elements would have an overall moderate
22 effect on the surrounding community.

23 **Commuter Rail Structural Impacts. Table 3.14-30** identifies the location and height ranges
24 of retaining walls along the Preferred Alternative. There are 11 retaining walls that would be
25 greater than 15 feet in height. This would have a high visual impact. Ten retaining walls would
26 be 15 feet in height or less. These would have a moderate visual effect.

27 **Table 3.14-30 Retaining Wall Locations in the Preferred Alternative**

Location	Height Range (feet/inches)	Impacts Transit Rider or Surrounding Community?
East 16th Street to East 22nd Street	1'-2" to 4'-5"	Surrounding community
West 43rd Street to Filbert Drive	6" to 9'-1"	Surrounding community
North of CR 10E on the west side of the tracks	1'-6"	Surrounding community
West of the intersection of SH 119 and 3rd Avenue	17'-0" to 26'-0"	Surrounding community
West of the intersection of SH 119 and 3rd Avenue	3'-5" to 20'-9"	Surrounding community
East of the intersection of SH 119 and 3rd Avenue	10'-6" to 25'-0"	Surrounding community
East of the intersection of SH 119 and 3rd Avenue	10'-6" to 25'-0"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	10'-1" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	9'-3" to 18'-6"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Surrounding community
North of SH 52, south of CR 14.5 on CR 7	20'-5" to 25'-0"	Surrounding community
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community

1 **Table 3.14-30 Retaining Wall Locations in the Preferred Alternative (cont'd)**

Location	Height Range (feet/inches)	Impacts Transit Rider or Surrounding Community?
SH 52 and CR 7	9'-0" to 20'-3"	Surrounding community
West of Fairview Street along park	1'-6" to 14'-10"	Surrounding community
West of CR 7/ west of proposed bridge	2' to 4'-2"	Surrounding community
West side of CR 7 along pond	6" to 1'-5"	Surrounding community
North of Harbor Drive	6" to 1'-7"	Surrounding community
North of Harbor Drive	6" to 4'-9"	Surrounding community
South of Harbor Drive	6" to 3'-4"	Surrounding community
South of Harbor Drive	1' to 1'-9"	Surrounding community
East of I-25 bridge	13'-2" to 17'-4"	Surrounding community

2 Commuter rail in the Preferred Alternative has an increased number of retaining walls than
3 Package A. The proposed retaining walls would not impact significant views for the
4 surrounding communities of the mountains.

5 **Table 3.14-31** identifies the location of three sound walls, all of which would have a high visual
6 effect to the surrounding community. The proposed sound walls would be used in combination
7 with quiet zones that would be implemented by local governments.

8 **Table 3.14-31 Sound Wall Locations in the Preferred Alternative**

Location	East/West Side of tracks	Sound Wall Length (Feet)
East of 29th St- CR 28 (Loveland)	East	1,300
CR 14-CR 18 (Campion)	East	500
SR 52- CR 18 (Frederick)	West	600

9 Commuter rail in the Preferred Alternative has a reduced number of sound walls than
10 Package A. The proposed sound walls would not impact significant views for the surrounding
11 communities of the mountains.

12

1 **Table 3.14-32** summarizes visual impacts associated with five new commuter rail grade
2 separations

3 **Table 3.14-32 New Grade Separations for Commuter Rail in the Preferred Alternative**

Structure Location and Design	Effect	Classification
SH 52 Commuter rail goes over SH 52	The new structure over SH 52 would over SH 52 impede views to the Front Range from significant viewers east of the new structure.	Moderate
Wyndham Hill Parkway Commuter rail goes over Wyndham Hill Parkway	The new structure over Wyndham Hill Parkway would be visible from residential areas east and west of CR 7. The new structure impedes views to the Front Range from viewers located east of the new bridge.	Moderate
SH 119 (Longmont) Commuter rail goes over SH 119 on the eastern side of Longmont	The new structure would affect views from motorist traveling east and west on SH 119. The new structure would be 30 feet above SH 119 and would impede views to the mountains from viewers located east of the new bridge.	High
SH 119 and CR 7 (Longmont) Commuter rail goes over an existing gravel pit.	The new structure over the gravel pit would not be raised in height from the surrounding grade. The new structure would not impede views.	Minor
I-25 (Dacono) South of CR 8 Commuter rail would go over I-25	The new structure over I-25 is replacing a recently removed bridge. The new structure would impact motorist's views traveling north and south on I-25 and residents in the area.	Minor

4 Bridges and box culverts are proposed at ditches and creeks. The bridges over ditches and
5 creeks would not be raised in height from the surrounding grade; therefore, they would have a
6 minor visual effect. The introduction of retaining walls, sound walls, and new bridges for
7 commuter rail would have an overall moderate visual effect on the rail corridor.

8 **Commuter Rail Stations.** Commuter rail stations would consist of either one or two platforms,
9 which measure 400 feet by 25 feet. When there are two platforms (which occurs at two
10 locations) a pedestrian overpass that is 12 feet wide and 23 feet high would be required
11 between the platforms with elevator and stair towers. Amenities associated with stations would
12 include: shelters, fare boxes, benches, windscreen, elevators, stairs, pedestrian overpass,
13 parking, bike parking, bus bays, kiss and ride, lighting, and landscaping. The lighting
14 associated with the commuter rail stations would be designed to minimize shadows. Light
15 sources would be shielded so that night-time lighting is focused on commuter rail stations.
16 There would be minimal light overspill. Shielding the light would minimize the impacts of the
17 lights to the surrounding residential and commercial properties. The addition of a parking lot
18 would create an asphalt area. **Table 3.14-33** summarizes commuter rail station impacts
19 associated with the preferred alternative.

20 The Fort Collins Downtown Transit Center, CSU, South Fort Collins Transit Center, Downtown
21 Loveland, North Longmont, Longmont at Sugar Mill, and I-25 and WCR 8 stations are
22 proposed to be served by one platform with no overpass or stair towers required. Berthoud
23 and North Loveland would be served by two platforms with a pedestrian overpass.

24

1 **Table 3.14-33 Commuter Rail Stations Effects Analysis**

Station	Effects	Classification
Fort Collins Downtown Transit Center	Relocation of parking lot	Moderate
Colorado State University	None*	Minor
South Fort Collins Transit Center	None*	Minor
North Loveland	Business relocation, views to mountains blocked	High
Downtown Loveland	Parking lot relocation	Moderate
Berthoud	Business relocation, views to mountains blocked	High
North Longmont	None*	Minor
Longmont at Sugar Mill	Business relocation	Moderate
I-25 and WCR 8	None*	Minor
FasTracks North Metro	None	None

*The visual impact of these sites would include one or more of the following: new landscaping and addition of a large mass of asphalt. These impacts have been determined to represent negligible visual impact and not diminish the visual character of the area.

2 The North Loveland and Berthoud stations would have a high visual effect because they would
3 require relocation of a business or residence and the station would impede views from the east
4 to the mountains.

5 Fort Collins Downtown Transit Center, Downtown Loveland and the Longmont at Sugar Mill
6 stations would have a moderate visual effect to the surrounding community because it would
7 require the relocation of a business or residence. The parking at the Downtown Transit Center
8 is proposed to be a parking structure. The addition of a parking structure would introduce a
9 two-story building in an urban area where the average building height is two to four stories.

10 Stations at CSU, South Fort Collins Transit Center, North Longmont, and I-25 and WCR 8
11 would have a minor visual effect to the surrounding community because they would not
12 impede views to the mountains or require the relocation of any businesses or residences.
13 Commuter rail would stop at all of the North Metro corridor stations. These stations have not
14 been included in the analysis since the stations are being designed and built as part of
15 FasTracks and no additional improvements are proposed as part of the North I-25 Final EIS.

16 Visual simulations depicting a two platform station with vertical circulation at the Berthoud
17 commuter rail station are presented in **Figure 3.14-2** and **Figure 3.14-3**.

18 **Maintenance Facility.** A commuter rail maintenance facility located in Berthoud is included as
19 a part of the Preferred Alternative. The maintenance facility would consist of additional tracks,
20 offices, dispatch/ driver support areas, vehicle maintenance bays, repair shops, vehicle wash
21 areas, fueling facilities, storage, and parking. The land identified to accommodate the
22 maintenance facility is currently vacant. It is adjacent to residential and commercial
23 development. Additional traffic would be added to local streets. The maintenance facility would
24 be visible to motorists on US 287, 3rd Street, and in the surrounding neighborhood. The
25 proposed maintenance facility would have a moderate visual effect because it would be visible
26 to the surrounding community and change the visual character of the area.

1 **Summary of Commuter Rail Impacts (Fort Collins to North Metro)**

2 **Direct Impacts.** Commuter rail improvements would include retaining walls, sound walls,
3 tracks, maintenance road, platforms, shelters, fare boxes, benches, windscreens, elevators,
4 stairs, pedestrian overpasses, parking, bike parking, bus bays, kiss and rides, lighting, and
5 landscaping. Commuter rail in the Preferred Alternative reduces the amount of new track and
6 sound walls from Package A, but adds a maintenance road and increased number of retaining
7 walls. Four of the stations that were proposed to have two platforms with a pedestrian
8 overpass, elevators and stairs in Package A, are now proposed to have a single platform with
9 no vertical circulation. The elimination of pedestrian overpasses lessens the visual impact of
10 the stations in Preferred Alternative. In a project area that primarily consists of undeveloped
11 agricultural land with extensive views to the mountains, including Longs Peak to the west,
12 most of the proposed improvements would not have a substantial effect to the visual quality of
13 the corridor.

14 The commuter rail improvements would have short-term and long-term impacts. Short-term
15 impacts would result from disruptions during construction while long-term impacts would result
16 from permanent alterations that change the way people commute in and around the area.
17 Short-term impacts would include detours, the presence of large equipment, dust from
18 construction, and general disruption to the surrounding neighborhoods and businesses. These
19 short-term impacts would have a temporary visual effect to the community. Long-term impacts
20 include relocation of businesses and residences, increased right-of-way, additions of station
21 amenities, and changes to the surrounding landscape through the use of overpasses, bridges,
22 and retaining walls.

23 **Indirect Impacts.** The proposed commuter rail improvements could encourage development
24 that is more compact and dense, especially within walking distance of a commuter rail station.
25 This would change the visual character.

26 Stations and a maintenance facility would add traffic to local streets. Both the stations and
27 maintenance facility would generate lighting that would be seen by motorists, as well as from
28 adjacent businesses and residences.

29 **US 85 Commuter Bus (Greeley to Denver)**

30 **Commuter Bus Stations.** The standard commuter bus station would include parking, bus
31 bays, kiss and ride, lighting, and landscaping. The amount and type of landscaping would
32 depend on city standards. **Table 3.14-34** summarizes visual impacts associated with proposed
33 commuter bus stations.

34

1 **Table 3.14-34 Commuter Bus Station Effects Analysis**

Station	Impact	Classification
Greeley	Relocation of business	Moderate
South Greeley	Reconfiguration of existing parking lot	Moderate
Evans	Relocation of residence	Moderate
Platteville	Relocation of business	Moderate
Fort Lupton	Relocation of business	Moderate
Brighton	None	None
Commerce City	None	None
Denver Union Station	None	None
DIA	None	None

2 The Greeley, South Greeley, Evans, Platteville, and Fort Lupton stations would have a
 3 moderate visual effect because they would result in the relocation of a business or residence.
 4 These stations, however, would not impede views to the mountains. Commuter bus would stop
 5 at the existing Brighton park-and-Ride, Denver Union Station, DIA and the proposed
 6 Commerce City park-and-Ride. These stations have not been included in the analysis and are
 7 assumed to be in existence at the time the EIS improvements and no additional improvements
 8 are proposed as part of the North I-25 Final EIS.

9 **Maintenance Facility.** The maintenance facility would serve both commuter bus and express
 10 bus. Refer to express bus (Fort Collins/Greeley to Denver/DIA) Maintenance Facility for visual
 11 effects as a result of the maintenance facility.

12 **Summary of US 85 Commuter Bus (Greeley to Denver)**

13 **Direct Impacts.** Commuter bus improvements would include benches, parking, bike parking,
 14 bus bays, kiss and rides, lighting, and landscaping. In a project area that primarily consists of
 15 undeveloped agricultural land with extensive views to the mountains, including Longs Peak to
 16 the west, most of the proposed improvements would not have a substantial effect to the visual
 17 quality of the corridor. The visual impacts for commuter bus in the Preferred Alternative would
 18 be the same as Package A.

19 The commuter bus improvements would have short-term and long-term impacts. Short-term
 20 impacts would result from disruptions during construction while long-term impacts would result
 21 from permanent alterations that change the way people commute in and around the area.
 22 Short-term impacts would include the presence of large equipment, dust from construction,
 23 and general disruption to the surrounding neighborhoods and businesses. These short-term
 24 impacts would have a temporary visual effect to the community. Long-term impacts include
 25 relocation of businesses and residences, and additions of commuter bus station amenities.

26 **Indirect Impacts.** The proposed commuter bus service is unlikely to noticeably affect
 27 development.

28 Commuter bus stations would add traffic to local streets. The stations would generate lighting
 29 that would be seen by motorists, as well as from adjacent businesses and residences.

1 **3.14.4 Mitigation Measures**

2 Mitigation measures will be implemented to minimize adverse visual impacts from proposed
3 highway and transit improvements. Mitigation measures will include providing visual buffers
4 and enhanced architectural treatments to structures.

5 **3.14.4.1 I-25 HIGHWAY IMPROVEMENTS (SH 1 TO US 36)**

6 Potential mitigation measures to soften and enhance the visual effects of the proposed
7 highway improvements will include landscaping and architectural features.

8 Mitigation measures to address the visual effects of highway widening will include
9 incorporating landscaping at interchanges and along the highway. Mitigation measures to
10 address the visual effects of structural elements will include providing architectural interest or
11 color into retaining walls, sound walls, and reducing the effect of overpasses by providing
12 architectural detailing of the railings and other features.

13 Mitigation measures to address the visual effects of carpool lots will include the use of trees in
14 combination with shrubs to filter views to the carpool lots, provide a human scale, and present
15 a positive image. Landscape islands with shade trees would be placed in parking lots to break
16 up the expanse of pavement and parked vehicles.

17 **3.14.4.2 I-25 EXPRESS BUS (FORT COLLINS/ GREELEY TO DENVER/DIA)**

18 Potential mitigation measures to soften and enhance the visual effect of the proposed express
19 bus improvements will include landscaping, and architectural features.

20 Mitigation measures to soften and enhance the visual effects of slip ramps will include
21 incorporating landscaping, providing architectural interest or color in retaining wall and limiting
22 lighting to only what is required for safety and security.

23 Mitigation measures to address the visual effects of express bus stations will include providing
24 distinctive treatments at station plazas to designate distinct station locations. Local
25 communities, business districts, or other entities should be involved in upgrading or enhancing
26 the currently proposed features. The effects of overpasses will be reduced with architectural
27 detailing of the railing and other features. Station effects will be reduced with the use of trees
28 in combination with shrubs to filter views to the station and parking lots, provide a human
29 scale, and present a positive image to attract ridership. Landscape islands with shade trees
30 would be placed in parking lots to break up the expanse of pavement and parked vehicles.
31 Lighting at the express bus stations would be designed to minimize shadows. Light sources
32 would be shielded so that night-time lighting is focused on the express bus stations and light
33 overspill is minimized.

34 **3.14.4.3 COMMUTER RAIL (FORT COLLINS TO NORTH METRO)**

35 Potential mitigation measures to soften and enhance the visual effect of the proposed
36 commuter rail service will include fencing types, landscaping, and architectural features.

37

1 Mitigation measures to soften and enhance the visual effects of track widening will include
2 incorporating landscaping, considering vinyl coated chain link fencing, providing architectural
3 interest or color in retaining wall and bridge design, and limiting lighting to only what is required
4 for safety and security.

5 Mitigation measures to address the visual effects of stations will include providing distinctive
6 treatments at platform station locations to designate station locations. Local communities,
7 business districts, or other entities should be involved in upgrading or enhancing the currently
8 proposed features. The effects of overpasses will be reduced with architectural detailing of the
9 railing and other features. Station effects will be reduced with the use of trees in combination
10 with shrubs to filter views to the station and parking lots, provide a human scale, and present a
11 positive image to attract ridership. Landscape islands with shade trees will be placed in
12 parking lots to break up the expanse of pavement and parked vehicle. Lighting at the
13 commuter rail stations would be designed to minimize shadows. Light sources would be
14 shielded so that night-time lighting is focused on the commuter rail stations and light overspill
15 is minimized.

16 **3.14.4.4 US 85 COMMUTER BUS (GREELEY TO DENVER)**

17 Mitigation measures to address the visual effects of commuter bus stations will include
18 providing distinctive treatments to designate distinct station locations. Local communities,
19 business districts, or other entities should be involved in upgrading or enhancing the currently
20 proposed features. Station effects will be reduced with the use of trees in combination with
21 shrubs to filter views to the station and parking lots, provide a human scale, and present a
22 positive image to attract ridership. Landscape islands with shade trees would be placed in
23 parking lots to break up the expanse of pavement and parked vehicles. Lighting at the
24 commuter bus stations would be designed to minimize shadows. Light sources would be
25 shielded so that night-time lighting is focused on the commuter bus stations and light overspill
26 is minimized.

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