CDOT Visual Impact Assessment Memorandum

I-270 Corridor Improvements

STU 2706-043 (23198)

September 2021

COLORADO
Department of Transportation

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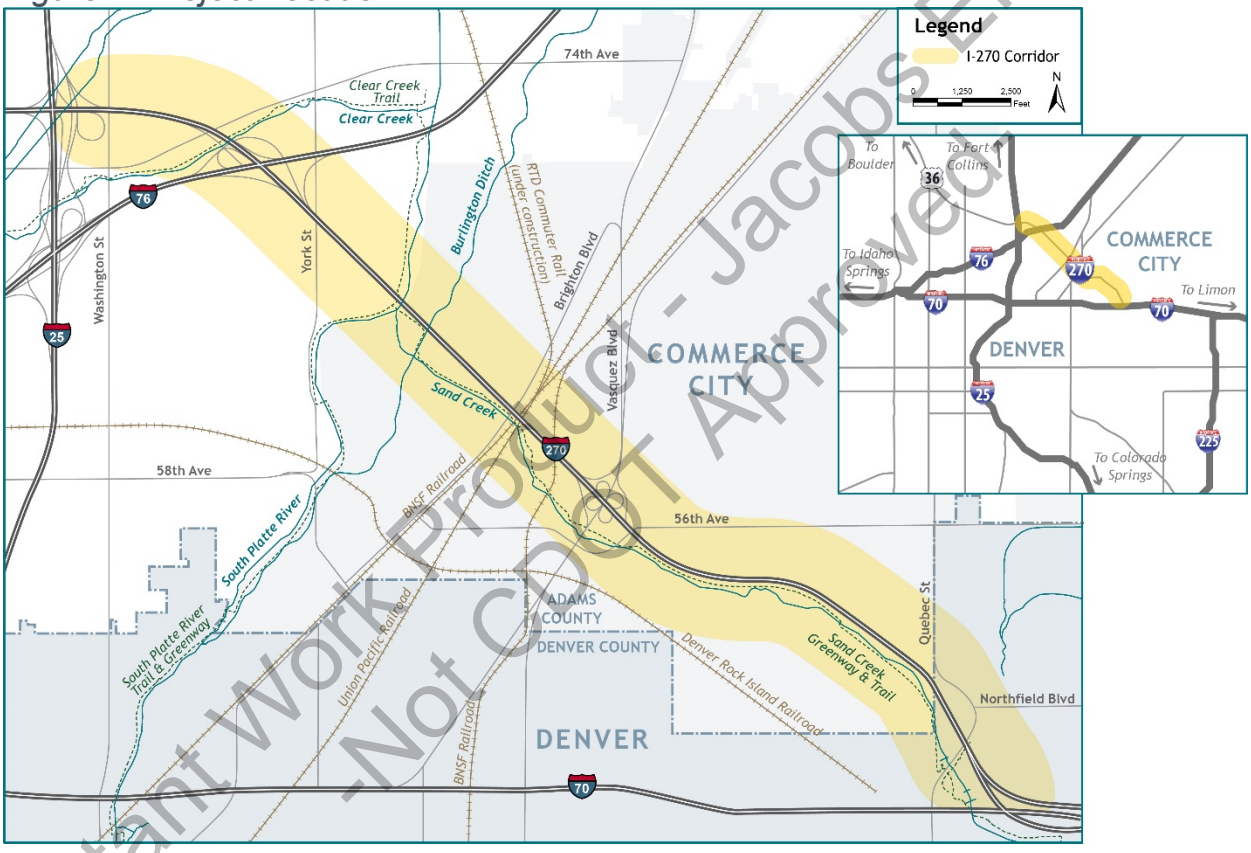
List of Acronyms and Abbreviations

AVE	Area of Visual Effect
CDOT	Colorado Department of Transportation
FHWA	Federal Highway Administration
I-25	Interstate 25
I-270	Interstate 270
I-70	Interstate 70
ITS	intelligent transportation system
LA	Landscape Architecture
NEPA	National Environmental Policy Act
VIA	visual impact assessment

1. INTRODUCTION

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA), in conjunction with local partners Adams County and Commerce City, are proposing improvements to 6 miles of Interstate 270 (I-270) in Adams County, Commerce City, and the City and County of Denver, Colorado, primarily between Interstate 25 (I-25) and Interstate 70 (I-70) (Figure 1). CDOT and FHWA are preparing an Environmental Assessment for this project, referred to as the I-270 Corridor Improvements project. CDOT's *2019 VIA Guidelines* (hereinafter referred to as CDOT's Guidelines) apply because the project involves CDOT sponsorship.

Figure 1. Project Location



Source: Jacobs

I-270 is a 6.5-mile-long controlled-access interstate highway with two through lanes in each direction, providing a direct connection from I-25 to I-70 between the northern and eastern Denver metro communities (Figure 1). I-270 is a key link to the Denver International Airport and large business clusters from the energy, manufacturing, and freight distribution centers, and is a major truck corridor, providing access to adjacent industrial areas. Between I-25 and I-70, I-270 has partial interchanges at Interstate 76 (I-76), York Street, Vasquez Boulevard, and Quebec Street. The posted speed limit on the freeway is 55 miles per hour. The highway crosses over the Union Pacific and Burlington Northern Santa Fe (BNSF) railroads, South Platte River, Clear Creek, and Burlington Ditch, and it parallels Sand Creek. Sections 1 and 2 of the EA, and EA Appendix A, contain the project setting and a detailed description of alternatives. This visual impact

assessment (VIA) evaluates effects of the Proposed Action on visual resources, following criteria set out in CDOT's Guidelines (available on CDOT's Landscape Architecture [LA] website).

2. VIA SCOPING

VIA scoping findings are documented through CDOT's Visual Resource Scoping Documentation (**Appendix A**), which includes a detailed summary of the following:

- Visual attributes of the Proposed Action
- Landscape **context**
- Issues and regulatory framework
- Level of VIA documentation (and the related scoping questionnaire)

This analysis considers views in the foreground (up to 0.25 to 0.5 mile), middle ground (extending up 3 to 5 miles), and background (extending to infinity) as defined by CDOT's Guidelines. These definitions were used to help define the visual study area for the project, known as the Area of Visual Effect (AVE). The AVE includes Front Range panoramas, defined in CDOT's Guidelines as "visually prominent features" that are "visible from the project area but separated by great distance" (CDOT 2019a). Landscape units are used to establish context for the visual inventory, and are defined as a spatially defined landscape with a visually distinctive identity or "sense of place" (CDOT 2019a). Because of the study area's mostly homogenous landscape character, one LU was defined for the study area, common with the AVE boundary.

Figure 2 depicts the AVE for this project, which was developed in Esri ArcGIS 10.7.1 by identifying areas that are visible from I-270 up to and including the middle ground, according to elevation data from the National Elevation Dataset provided by the U.S. Geological Survey. This visibility mapping process used ground contour data and height information for buildings and vegetation. Green areas on Figure 2 depict the extent of views for travelers on I-270. Using these data, a line was superimposed that roughly defines the visual extent of "visually distinctive natural and cultural features and dominant focal points" (CDOT 2019a). In some open areas, buildings do not crowd as close to I-270, allowing for more expansive views, such as near the South Platte River. In such locations, the AVE deviates slightly farther from the highway. However, these areas also include prominent visual intrusions, such as warehouses, a refinery, and large transmission line structures.

Figure 3 depicts areas along I-270 and potentially affected roads within the AVE that offer travelers background views of the mountains or downtown Denver. This information was captured to help plan locations of highway elements that could potentially obstruct distant views. Mountain views are fairly constant for northbound travelers along the entire length of I-270. However, the quality of those views varies; the view quality is indicated as high, medium, and low on Figure 3, which also includes representative photos of each view type. Elements affecting view quality primarily include viewing direction and obstacles, such as overpasses. Views of downtown Denver for southbound travelers are infrequent and typically of low quality because of distance and obstruction by industrial features. These views are also to the south and out of the direct line of sight for drivers, who would be looking southeast. Therefore, views of downtown Denver are limited primarily to vehicle passengers.

Figure 2. Area of Visual Effect

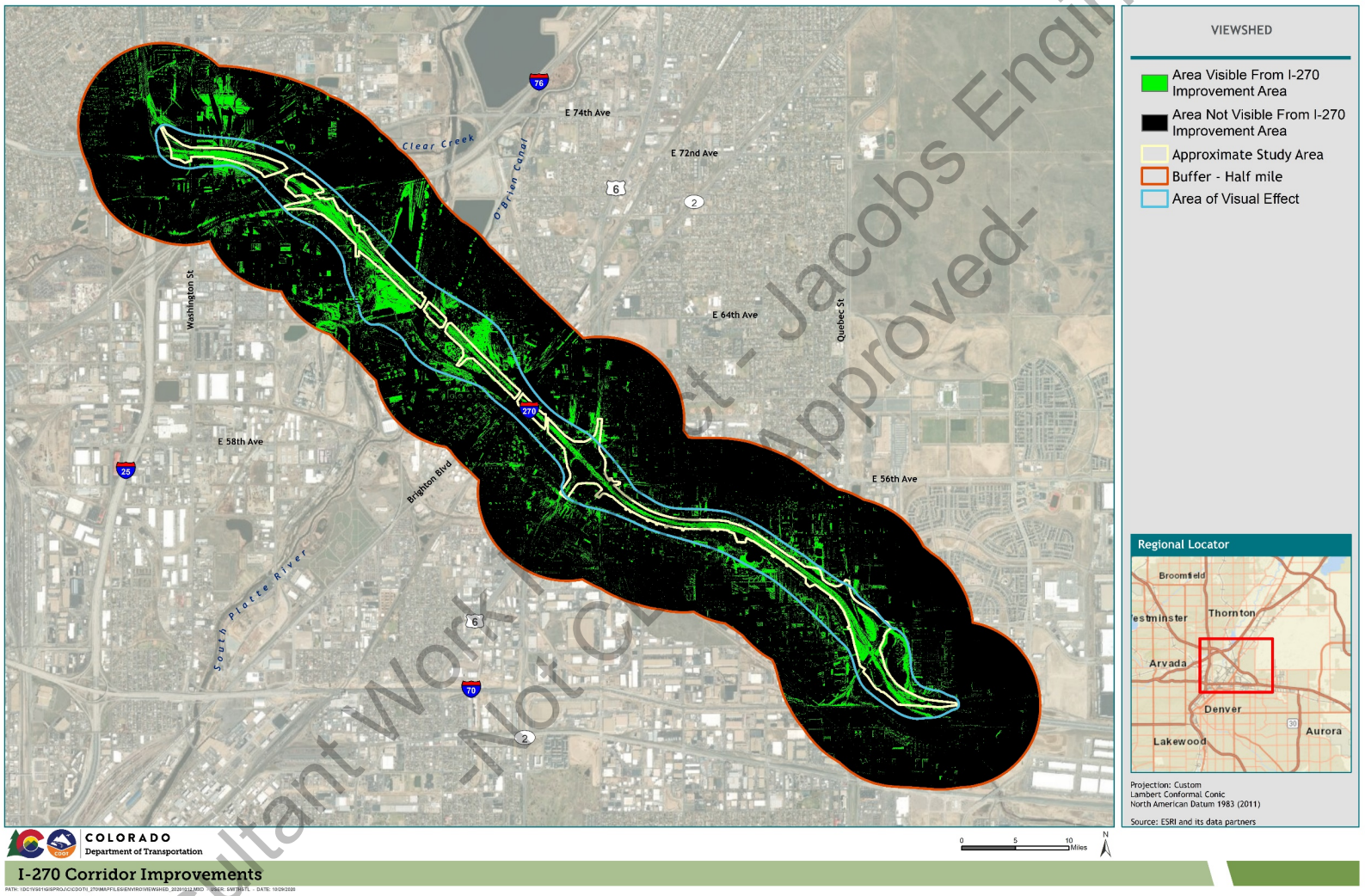


Figure 3. Distant Views

Figure 4 shows representative views of the study area, which is within a regional context identified in CDOT's Guidelines as Front Range Urban. I-270 travels through predominantly industrial and transportation land uses, which characterize the surrounding landscape and views. Warehouses, parking lots occupied by freight vehicles, and construction cranes are typical visual components. The Suncor Energy refinery, south of I-270 and east of Brighton Boulevard, is a notable industrial feature because of its widespread footprint and conspicuous vertical features, which remain prominent at night because of extensive lighting. The night sky is currently impacted by highway lights and lights from motor vehicles, as well as other adjacent industrial and commercial facilities. I-270 itself is a noticeable visual element, consisting of four paved travel lanes, major interchanges, and prominent signage suspended on overhead gantries. A large amount of traffic, often at a standstill during rush hours, includes a high number of large freight vehicles mixed with automobiles. Two railroads cross under I-270 just south of Brighton Boulevard, contributing additional transportation features to the landscape. All of these elements primarily occupy foreground views (0.25 to 0.5 mile away).

Figure 4. Representative Views

I-270 northbound looking northwest toward Vasquez Boulevard on-ramp. Industrial storage tanks at right, Suncor refinery to the left out of the frame.

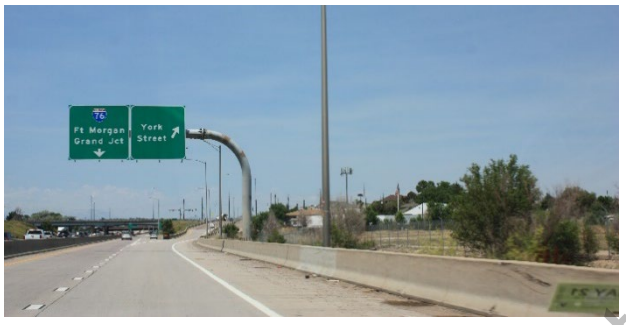
I-270 southbound looking south toward Sand Creek Greenway, observation platform, and spillway approximately 0.5 mile south of 56th Avenue.

I-270 northbound looking northwest approximately 1.0 mile south of Vasquez Boulevard. Sand Creek Greenway to the left, distant Front Range mountains, residential area to the right.

Southbound I-270 South Platte River crossing looking southeast. River to the right, Sand Creek to the left, and downtown Denver in the distance.

Northbound I-270 south of I-76 overpass looking northwest.

I-270 southbound looking southwest (passenger view) toward Brighton Blvd from Brighton Blvd overpass; Suncor refinery, Sand Creek, and Brighton Boulevard.



Northbound York Street off-ramp looking northwest. Welby Reservoir to right, residential area on slight hill below signs.

View toward I-270 (southwest) from residential area on North Sand Creek Drive approximately 1.0 mile south of Vasquez Boulevard.

Source: Jacobs

All photos: July 2021

Minor exceptions to this setting interject slight variations into the landscape but are insufficient to change its overall industrial nature. These exceptions, also within foreground views, include the South Platte River, which I-270 crosses, and Sand Creek, which roughly parallels the south side of I-270 from the river to I-70. The creek is flanked by a narrow riparian area of deciduous trees and is most visible where it is closest to I-270, generally south of 56th Avenue. As I-270 is above the creek in this area, it is seldom visible from the highway; its presence is indicated by the creekside vegetation. This vegetation offers a negligible amount of vividness during leaf-on seasons where the leaves' texture and color contrast with the surrounding human-made features that characterize the landscape. During leaf-off seasons, the river is likely more visible but not a dominant feature. A south-facing viewing platform approximately 0.5 mile south of 56th Avenue provides views of a spillway and the riparian vegetation. Welby Reservoir and Bambei-Walker Reservoir are north of the highway on opposite sides of the South Platte River. Only Welby Reservoir is readily visible from I-270 and is surrounded by a chain-link fence. A former gravel mine (Denver Water 2020), this reservoir can be dry during droughts, as evidenced during project reconnaissance. Front Range mountains are visible in the background (defined as extending to infinity) for northbound travelers, and the downtown Denver skyline is occasionally visible in the middle ground (up to 3 to 5 miles) for southbound travelers, particularly from elevated interchanges.

A handful of residences are north of Welby Reservoir on both sides of I-270, but most are screened from highway views by elevated on- and off-ramps. A noise wall helps obscure views of I-270 for

residents on the west side of the highway. A larger residential area (South Rose Hill) is north of I-270 generally between Newport Street and Krameria Street. Few of these residences have views of I-270, with some views blocked by existing fences. However, I-270 is within 125 feet of those viewers closest to the highway, who have a level line of sight with it. View duration for residents, considered to be sensitive viewers, is high. Other neighbors with views toward I-270 include employees of the industrial areas, although the buildings are primarily windowless.

Travelers with views from I-270 include truckers and commuters. Because of the area's industrial nature, I-270 is not likely used for leisure driving, although tourists may use it to access farther destinations and nearby Rocky Mountain Arsenal National Wildlife Refuge. Heavy congestion increases the duration of views, which include more vehicles and vehicles in closer proximity. Travelers also include users of the Sand Creek Greenway multiuse trail, who would typically be moving through the landscape at a slower pace than drivers. Because I-270 is mostly above the creek, the highway's visibility varies along the greenway.

The landscape character reflects a disorderly composition out of balance with the few natural and cultural features present, as they are powerfully overshadowed by industrial and transportation elements. The industrial facilities show no visual interrelation and lack unity of form, line, color, and texture, particularly where large visual intrusions such as the Suncor refinery dominate views. The Suncor refinery, Robert W. Hite Treatment Facility, and Xcel Energy's Cherokee Generating Station occupy substantially large parcels on the west side of I-270 between Franklin Street and Brighton Boulevard, where views from the highway are more open, therefore giving these facilities heightened visual prominence. The sprawling Suncor refinery, with its soaring vertical, lattice-like structures, is distinctive even within the industrial landscape, making an immediate and vivid, but not positive, impression. Similarly, the power station's expansive structures, particularly its tall, red-and-white-striped smokestack and shorter, unpainted smokestacks, are strikingly disparate visual elements even though the site is 0.75 mile from I-270. Despite these visually pronounced intrusions, the industrial setting lacks vividness because of its overall homogeneity. Although I-270 follows the contours of Sand Creek south of the South Platte River, the highway is not a unified element of the landscape, as the form, line, color, texture, and scale of the roadway elements overpower the presence of the creek, which is already an anomaly in the industrial setting. I-270 does not blend into the landscape, which generally lacks landforms, vegetation, or visually coherent development patterns that the highway could reflect. The discordant setting displays no integrity of composition and therefore is not intact or unified. For these reasons, the landscape is inharmonious, and vividness is moderately low, resulting in low overall visual quality.

No federal, state, or local regulations affecting visual resources apply. The *Commerce City Comprehensive Plan* includes directives to improve visual quality to and from I-270 in specific "focus areas," as follows (City of Commerce City 2010):

- Southern Industrial (all of Commerce City south of I-270): "Improve image along I-270."
- Tiffany (between I-270 and 56th Avenue, and Quebec Street and Park Industrial Center entrance): "Work with CDOT and private owners to improve appearance of I-270 corridor; improve appearance from I-270."
- Adams City (generally between I-270 and I-76, and Brighton Boulevard and South Platte River): "Improve the area's image seen from I-270."
- Clermont (triangular area bordered by I-270, Brighton Boulevard, and Vasquez Boulevard): "Image from I-270 needs improvement."

Comments received during public scoping reinforce these goals. Commenters specifically mentioned the "unfavorable impression of the area," describing it as "slummy and unattractive," a "blight," and an "eyesore." Commenters also focused on the need for more "greenery," particularly at the Vasquez Boulevard interchange, described as "not very welcoming and gives you the feeling of being forgotten and of no consequence. An exit with trees, grass, and shrubs will help in changing that area." Some commenters specifically referred to preserving, maintaining, and improving the Sand Creek Greenway. Despite the "unattractive" nature of the corridor, one commenter noted, "Drivers can also appreciate the green and wildness of the creek corridor, which adds to their experience." Another commenter stated that "the retaining wall of rocks and stone [along the greenway] is interesting to admire while walking."

3. INVENTORY AND IMPACT EVALUATION

This section documents the extent of visual resources being considered as part of this project and anticipated impacts. **Table 1** provides an overview of these VIA considerations in a format compatible with the accompanying Template Environmental Assessment document.

Table 1. Visual Resource Impacts

Context/Visual Inventory	No Action Alternative Impacts	Proposed Action Alternative Impacts
The study area is located in a primarily industrial and transportation setting. The Suncor refinery and Excel power station, with their soaring vertical structures and expansive footprints, are distinctive even within the industrial landscape, making a vivid, but not positive, impression. I-270 and its components are a prominent visual feature. Minor exceptions to this landscape character include the South Platte River, which crosses under the highway, and Sand Creek and the Sand Creek Greenway, which parallel the south side of I-270 from the river to I-70. Riparian vegetation offers a negligible amount of vividness during leaf-on seasons. Welby Reservoir is visible from the north side of I-270 and is surrounded by a chain-link fence. Front Range mountains are visible in the background for northbound travelers, and the downtown Denver skyline is occasionally visible in the middle ground for southbound travelers. The night sky is affected by lights from the highway, vehicles, and surrounding industrial and commercial facilities. A few houses within small residential areas adjacent to I-270 have views of it. These residents constitute sensitive viewers. Travelers include drivers on I-270 with views of the road, and users of the Sand Creek Greenway; the latter are also considered sensitive viewers. I-270 is not likely used for leisure driving. The landscape is inharmonious and lacks vividness because of its homogenous industrial setting, resulting in low overall visual quality.	No noticeable visual change would occur in the study area under the No Action Alternative. Existing visual elements would remain. As congestion continues, slow-moving traffic would occupy views both from and toward the highway, further degrading the area's image. No actions would be implemented to improve the area's visual image. Temporary visual intrusions would occur in the form of ongoing and periodic highway maintenance activities.	**Permanent Impacts** Long-term visual changes would result primarily from widening I-270 by adding new travel and auxiliary lanes, widening bridges and shoulders, reconfiguring existing interchanges, and, to a lesser extent, flattening some curves. Although the highway would occupy a wider footprint and introduce some new highway features, the proposed changes would be compatible with the visual character of the landscape, as they would employ similar lines, colors, and textures, and repeat transportation elements already in the landscape. Visual contrast between the existing landscape and the proposed project would be primarily weak for the same reasons. Horizontally extending the visual impact of I-270 would be most noticeable to travelers driving on I-270, resulting in slight adverse impact. Although a new lane would widen the extent of vehicle lights, the change would be negligible compared with existing conditions and the surrounding industrial environment. Reconfiguring the Vasquez Boulevard interchange from a full cloverleaf to a partial cloverleaf interchange would be noticeable, but the ramp slopes would not exceed a 5 percent grade, and other vertical alignments would not exceed a 3 percent grade. Therefore, views toward the mountains are expected to remain unhindered. In addition, the new interchange design would remove two "leaves" from the full cloverleaf configuration and replace one with an on-ramp, reducing the visual impact of this transportation feature and providing slight beneficial impacts. Installing new traffic signals as a result of the reconfiguration would not noticeably impact views and landscape character. Overall, impacts at Vasquez Boulevard would be both adverse and beneficial, but negligible. All of the proposed retaining walls would be west of Vasquez Boulevard and would primarily affect views for I-270 travelers; adverse impacts would vary based on wall height, which would range from 5 to 30 feet. Retaining walls may visually impact views for two or three residents on either side of the highway in the vicinity of York Street, but could also screen views of the highway. New areas of cut and fill would remain within the I-270 right-of-way but would be visible at the open areas between the South Platte River and O'Brien Canal. New drainage structures and water quality ponds may introduce some natural elements (water) to the landscape, with

Context/Visual Inventory	No Action Alternative Impacts	Proposed Action Alternative Impacts
		slight beneficial effects. ITS improvements, particularly variable message signs and tolling infrastructure for the express lane option, would add new vertical features that could potentially temporarily block distant views, particularly of mountains for northbound travelers. The I-270 bridge over Clear Creek would not be replaced or rehabilitated, and the creek is not readily visible from the highway. Therefore, there would be no changes to views of Clear Creek. Trees may be removed from the greenways to accommodate highway expansion, removing natural elements that are uncommon in the area and resulting in a potential adverse impact. Any impacts to trees would be subject to the tree mitigation plan developed for this project. No other change would be made to the South Platte River Trail and Sand Creek Greenway, the latter of which would remain below the highway's grade, thereby precluding highway views. The new pedestrian path at Vasquez Boulevard would offer more views of the new highway infrastructure for pedestrians. Landscaping within the Vasquez Boulevard interchange would introduce some natural elements to the industrial setting, with slight beneficial impacts. Design guidelines developed for this project would help "improve the image" of the study area, particularly the appearance of I-270 corridor (see Section 4). Overall, the study area would retain its industrial and transportation visual character, and visual quality in the study area would remain low. **Temporary Impacts** Temporary visual impacts would result from views of staging areas to cache construction materials. Temporary visual impacts would also result from views of large, slow-moving and stationary construction vehicles, as well as construction personnel and temporary construction mitigation measures, such as silt fences.

4. MITIGATION

Throughout this project, interdisciplinary coordination has occurred as the potential for adverse visual impacts has been considered. In accordance with CDOT's Guidelines, the team has considered options to minimize and/or compensate for visual impacts. The study team met with representatives from several organizations, including the Platte River Greenway and Sand Creek Greenway, as well as members of the general public, including Cultivando, a community nonprofit organization that helped convene a community focus group that met with the study team and provided input (see pages 8 and 9). As a result of public input, the Proposed Action includes landscaping to address comments received that the Vasquez Boulevard interchange area has low visual quality, thereby helping to compensate for visual impacts at that area.

In addition, I-270 Corridor Design Guidelines will be prepared for this project to "provide a vision to guide the design of future projects and improvements. The design philosophy captures how an overall corridor will look and … may include reducing contrast, maintaining background views of key visual resources, or integrating the project into the surrounding context" (CDOT 2019a). The design guidelines will provide opportunities to both minimize and compensate for adverse visual impacts. These project-specific guidelines will be developed in coordination with the existing I-70 and I-25 Design Guidelines, with reference to the Stapleton Design Guidelines, US 36 Guidelines, and I-76 Guidelines, to help ensure a cohesive highway design within the larger geographic area. Per discussion with CDOT, a tree mitigation plan will be incorporated into the design guidelines developed for this project. Any tree with a diameter greater than 4 inches will be inventoried and mitigated, as specified in the plan, with a goal to limit impacts and enhance views. The Proposed Action also includes landscaping to address comments received that the Vasquez Boulevard interchange area has low visual quality.

As an overview, CDOT applies SMART (specific, measurable, achievable, realistic, timely) criteria to develop effective National Environmental Policy Act (NEPA) mitigation commitments for visual impacts that are financially feasible and can be included in CDOT's project delivery process. **Table 2** summarizes visual impacts and mitigation measures for inclusion in the accompanying NEPA document.

Table 2. Visual Resources Impact Mitigation

Visual Impact	Mitigation Commitment for I-270 Corridor Improvements	Responsible Branch	Timing/Phase That Mitigation Will Be Implemented
Visual impacts associated with highway widening and other infrastructure changes.	Prepare Corridor Design Guidelines to guide the design and future corridor improvements.	CDOT Engineer, Landscape Architect, and Design PMs	Design, preconstruction
Install new traffic signals at Vasquez Boulevard, which would have negligible impacts to views and landscape character.	Add landscaping features to the new intersections.	CDOT Engineer, Landscape Architect, Design and Construction PMs	Design, construction

Visual Impact	Mitigation Commitment for I-270 Corridor Improvements	Responsible Branch	Timing/Phase That Mitigation Will Be Implemented
Install retaining walls, which would primarily affect views for I-270 travelers. Retaining walls may visually impact views for two or three residents on either side of the highway in the vicinity of York Street.	Design retaining walls per aesthetic guidelines developed for this project.	CDOT Engineer, Design and Construction PMs	Design, construction
ITS improvements, particularly variable message signs and tolling infrastructure for the express lane option, would introduce new vertical features that could potentially block distant views, particularly of mountains for northbound travelers.	Based on Figure 3, work with designers to identify locations of large vertical structures to avoid impacts to distant views.	CDOT Engineer, Design and Construction PMs	Design, preconstruction
Trees may be removed from the greenways to accommodate highway expansion, removing natural elements that are uncommon in the area.	Colorado Senate Bill 40 (SB 40) Wildlife Certification will be required for this project. Per the requirements of SB 40, "all practicable effort shall be expended to avoid unnecessary destruction of trees and shrubs in the vicinity of streams and in riparian areas. Trees removed should be considered for use onsite in a manner that improves riparian and instream habitat and for bank stabilization purposes." Any riparian trees removed will be replaced per the tree mitigation plan developed for this project, which will be based on SB 40. Any tree identified for removal with a diameter greater than 4 inches will be inventoried, as specified in the plan. Riparian trees and shrubs will be planted along the waterways to replace any trees greater than 4 inches lost to construction work.	CDOT Engineer, Landscape Architect, Design and Construction PMs	Design, pre- and post-construction

Visual Impact	Mitigation Commitment for I-270 Corridor Improvements	Responsible Branch	Timing/Phase That Mitigation Will Be Implemented
Temporary visual impacts would result from views of staging areas to cache construction materials; from views of large, slow-moving and stationary construction vehicles; and construction personnel and temporary construction mitigation measures, such as silt fences.	Restore staging areas and construction mitigation such as silt fences per CDOT Design Specification 106.08, Storage of Materials: "All storage sites shall be restored to their original condition at the Contractor's expense" (CDOT 2019b) and Section 208.4(f), Control Measures for Stormwater: "If [temporary control measures are] removed, the area in which these control measures were constructed shall be returned to a condition similar to that which existed prior to its disturbance" (CDOT 2019c).	CDOT Engineer, Design and Construction PMs	Post-construction

5. REFERENCES

City of Commerce City. 2010. *City of Commerce City C3 Vision Comprehensive Plan*. May 1. https://www.c3gov.com/home/showdocument?id=798.

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Appendix A. Visual Resource Scoping Documentation

Overview

Visual resource scoping is conducted early in the visual impact assessment (VIA) process to identify issues, determine if a VIA is necessary, and identify the appropriate level of VIA evaluation.

This appendix includes formatted documentation of the following steps to be conducted in the scoping process:

- **Step 1: Project information and Visual Attributes**
- **Step 2: Visual Context**
- **Step 3: Policies, Guidelines, and Feedback**
- **Step 4: VIA Scoping Questionnaire** – Issues and VIA requirements (*Not Required*, *Memorandum*, or *Standard*)

This step-by-step approach should be conducted in coordination with the CDOT environmental team and visual resource specialist assigned to the project. **Chapter 2** of CDOT's Guidelines (available on CDOT's LA website) includes further information about the Establishment/Scoping Phase.

Completion of the visual resource scoping steps and documentation may be accomplished through desktop research and reconnaissance, collaboration with CDOT, and/or field observations.

Project Information and Visual Attributes

Project Name:	I-270 Corridor Improvements
Project Location:	Adams County and Denver County, Colorado, between I-25 and I-70
Author:	Patti Steinholtz
Visual Attributes of Proposed Action	Roadway Elements ▪ Widened inside and outside shoulders ▪ Two 12-foot general purpose lanes, 12-foot express lane, 4-foot buffer separating general purpose lane from and express lane, 12-foot shoulders (some 10-foot shoulders over bridges) ▪ 12-foot auxiliary lane between York Street and Vasquez Boulevard (both directions) Interchanges ▪ Redesign of the I-270/Vasquez Boulevard interchange from a full cloverleaf to a partial cloverleaf ▪ New I-270 westbound off-ramp at Quebec Street ▪ New eastbound collector/distributor road for I-76 and York Street on-ramps would consolidate on-ramps on the south side of I-270 Vertical Alignments ▪ Vertical alignments no steeper than 3 percent ▪ Ramp vertical alignments less than 5 percent where possible Structural Elements ▪ Retaining wall heights vary from approximately 5 feet to 20 feet. ▪ Cut/fill limits would remain within existing right-of-way except at open areas.

Bridges

- Bridges would be widened by approximately 10 feet to the outside.
- Existing bridges would be replaced at these locations:
  - Vasquez Boulevard over Sand Creek; would also be widened to accommodate a proposed sidewalk on the east side
  - South Platte River
  - O'Brien Canal; new structure would span limits of O'Brien Canal

Drainage Structures/Water Quality Ponds

- New water quality pond in the infield area of the following:
  - I-76 interchange
  - Vasquez Boulevard interchange
- Water quality pond on three parcels owned by CDOT along Sand Creek

Trails

- New pedestrian trail/path linking Vasquez Boulevard from the south side of I-270 to 56th Avenue and Eudora Street

ITS Improvements

1 Visual Context

Landscape Observations:

The study area is within an area described in CDOT's Guidelines as Front Range Urban. The topography is primarily flat with no adjacent landforms. Front Range mountains are visible in the distance to the west and north, but are faint and low on the horizon. The landscape character reflects predominantly industrial and transportation uses. Buildings are generally one- to two-story blocky forms of utilitarian design (no or few windows or aesthetic treatments) and differing colors. Expansive parking lots house numerous commercial trucks and earth-moving equipment behind chain-link fences. Several associated transportation features are prevalent, such as large green overhead directional signs, guardrails, light fixtures, on- and off-ramps, overpasses, and jersey barriers. Weeds are also evident in the grassed median. Traffic is often congested, creating views of tightly spaced commercial trucks and commuter vehicles. Small deciduous trees occasionally occupy the clear zones.

Traveling west to east, the six-lane highway narrows to four lanes where it crosses 70th Avenue. The highway itself is a strong visual element, creating a wide swath of gray pavement. An elevated ramp that connects with the I-76 interchange roughly parallels I-270 to the south, creating a strong horizontal form. I-270 crosses Clear Creek, which is not readily visible from the highway. Elevated views at this point are generally of the highway's horizon line.

I-270 passes under I-76, where I-76 and the southbound on-ramp are prominent linear forms. I-270 then rises from a road cut, where deciduous trees to the south add a natural element for a short distance, replaced by a stone wall until I-270 crosses under York Street. I-270 continues through a grassy road cut, which generally blocks views to either side. The highway reaches level ground, with views of Welby Reservoir to the north behind a tall chain-link fence and clusters of deciduous trees to the south. The landscape is more open and undeveloped in this area, but unremarkable. Large lattice-style transmission towers are prominent vertical elements traveling north-south across the highway, and transmission lines create multiple horizontal lines across the sky.

I-270 crosses the South Platte River, which is approximately 110 feet wide in this area. Sand Creek can be seen branching from the river on the south side of the highway. A multiuse bridge gently curves over both waterways where the Sand Creek Greenway path begins paralleling I-270 to the south. A narrow swath of deciduous trees and riparian vegetation line these waterways. The landscape remains somewhat open as the highway gently climbs toward Vasquez Boulevard, passing over Burlington Ditch/O'Brien Canal and under an elevated railroad track, marking the entrance to Commerce City.

The Suncor refinery becomes visible to the south. This sprawling facility is a notable visual feature, with multiple cylindrical storage tanks of varying heights and girths, low warehouse-

	type buildings, parking lots, and an extensive number of pipelines and prominent vertical towers densely clustered together, forming several visual "islands." On the opposite side of the highway, Purina Feed's tall, blocky structures, several bright blue industrial crane parts and parked commercial trucks, and wide white storage tanks crowd closer to I-270 and are dominant visual features. Two railroad tracks cross under I-270 in this area, cutting a linear swath through the refinery and adjacent industrial areas. The highway passes over Vasquez Boulevard, a major cloverleaf interchange. The buildings of downtown Denver can be seen in the distance to the south, but they are low on the horizon line. The highway continues to parallel Sand Creek east of Brighton Boulevard, curving slightly to follow the creek's alignment. The creek is flanked by a narrow riparian area, and deciduous trees line the creek's greenway, interjecting natural features along the remaining length of the highway that are mostly overwhelmed by the industrial and transportation setting. I-270 then passes a residential area, South Rose Hill. The residences front the north side of Sand Creek Drive, which parallels the north side of the highway, for approximately 900 feet. The houses are small, one-story single-family structures, some of which are behind 6-foot-high wooden privacy walls of differing construction. Deciduous trees in this neighborhood are visible from I-270. Continuing south, the general pattern of industrial uses to the north and Sand Creek to the south continues until the highway reaches Quebec Street, where a northbound highway entrance ramp creates an opaque "wall" to the north. I-270 passes under Quebec Street and the landscape opens somewhat where I-270's traffic lanes diverge to merge with I-70.
Influence of Roadway on Natural and Cultural Environment Settings:	The highway is a prominent constructed feature in an area with few natural elements. As a constructed feature within a highly industrial area, I-270 fits within the context of the surrounding urban environment. Industrial uses crowd the highway, particularly south of Brighton Boulevard. I-270 generally follows the course of Sand Creek south of Vasquez Boulevard, curving slightly where the creek curves. However, the creek itself is not visible from the highway, although riparian vegetation indicating its presence is. Because of the extensively developed surroundings, no other natural surface relief remains.
Landscape Context(s) and Development Patterns:	☐ Natural/ Undeveloped ☑ Rural ☐ Suburban ☒ Urban The landscape adheres to historical development patterns that started in the 1930s and 1940s, when burgeoning industrial uses emerged along the railroad as Denver's industrial development spread north along Brighton Boulevard. Heavy industries such as refineries, grain elevators, and flour mills became established in the area. In 1942, the U.S. Army created the Rocky Mountain Arsenal, a chemical weapons facility, which operated into the 1960s. It was then converted into a chemical facility for Shell Petroleum, and later converted into a wildlife refuge in 1992. The *Commerce City Comprehensive Plan* calls for a continuation of industrial uses in this area, and includes goals to retain existing general industrial use, particularly south of I-270 (City of Commerce City 2010). Therefore, these development patterns are expected to continue into the future.

1 Policies, Guidelines, and Feedback

Needs for Federal, State, or Local Agency Consultation:	The study area is not adjacent to any U.S. Forest Service, National Park Service, or Bureau of Land Management lands, or other visually sensitive areas that would require agency consultation during development of the VIA.
Involvement with Federal Lands Memorandum of Understanding:	The project is not adjacent to, and would not affect, any federal lands.
Involvement with Scenic, Historic District, or Historic Byways:	I-270, I-25, and I-70 and the roads adjacent to the study area are not designated as Scenic or Historic Byways and do not travel through a Historic District.
Associated Regulations, Policies, or Guidelines:	The *Commerce City Comprehensive Plan* indicates a desire to improve "the image" and "appearance" of I-270, and includes a goal to "Work with CDOT and private

	owners to improve appearance of I-270 corridor" (City of Commerce City 2010). These goals indicate concern for aesthetics along I-270.
Influence of Agency & Public Feedback:	The following comments were received during the public scoping period concerning visual resources: ▪ This route creates an unfavorable impression of the area for visitors. Installation of trees would help screen some of the unsightly activities and potentially mitigate some of the air pollution in this area. ▪ The Vasquez cloverleaf is a blight to Commerce City. Commerce City is home to many people and it is very unappealing to get off work and exit at Vasquez Boulevard. It is not very welcoming and gives you the feeling of being forgotten and of no consequence. An exit with trees, grass, and shrubs will help in changing that area. May even bring change throughout the city and help put more greenery on our roadways. ▪ More greenery. ▪ The corridor looks slummy and unattractive; What transportation amenities? ▪ 270 is just an eyesore and Commerce City could think about rezoning. ▪ I frequently use the Sand Creek Greenway along the corridor for walking and cycling. Some really nice things about the Greenway along 270 is ... 2) you can't see the interstate traffic 3) the retaining wall of rocks and stone is interesting to admire while walking .... Please keep all of this. ▪ It would be nice to maintain and improve the Sand Creek greenway area... ▪ All care should be taken to preserve the Sand Creek corridor and trail during construction, and minimize negative consequences to the trail user during and after the project is over. More attractive, user-friendly, and green-oriented connectors to the Greenway should be built as interchanges are designed and constructed.... Plus, thoughtful design to make trailheads to the Greenway safer and more accessible will be a benefit to the community.... Please take care to preserve and protect Sand Creek, the riparian areas and the trail. Drivers can also appreciate the green and wildness of the creek corridor, which adds to their experience....
Additional Details:	No additional details apply.

VIA Scoping Questionnaire

Environmental Compatibility

1. Will the project result in a noticeable visual change in the physical characteristics of the existing or future project setting? *(Consider all project components and construction impacts—both permanent and temporary, including landform changes, structures, noise barriers, vegetation removal, railing, signage, and construction activities.)*

☐ High level of permanent change (3)
☒ Low level of permanent or temporary change (1)
☐ Moderate level of permanent change (2)
☐ No noticeable change (0)

Assumptions/issues: Project elements are expected to remain primarily within existing right-of-way and would not result in changes to landforms. Potential highway widening and bridge and interchange replacements would be of similar size, height, and design as existing structures. No to minimal vegetation removal is expected. A small residential area (South Rose Hill) is separated from the highway by a frontage road where a noise barrier may be warranted if reasonable and feasible. However, less than 0.25 linear mile of this residential area fronts the highway. Other residential areas in the study area consist of fewer than five properties, most with restricted views of the highway. No noise

walls would be constructed in these areas. Construction equipment and personnel would be visible in the short term as construction moves in phases along the alignment.

2. Will the project complement or contrast with the community visual character? *(Evaluate the scale and extent of project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community? Do you anticipate that the public will view the change as positive or negative? Research planning documents or talk with local planner/community representatives to understand the type of visual character local residents envision for their community.)*

☐ Low compatibility (3) ☒ High compatibility (1)
☐ Moderate compatibility (2)

Assumptions/issues: The project's visual setting is heavily industrial and transportation related. Visual changes would be consistent with the existing visual character in both scale and extent, with no change to the overall landscape character. Given the existing setting, the public is not expected to view the visual change as negative, particularly if some visual features suggested by the public, particularly more trees, can be incorporated (see item 3 below). Implementation of design guidelines would help ensure a consistent visual approach throughout the corridor and greater geographic area.

3. What level of local concern is there for the types of proposed project features (e.g., bridge structures, large excavations, noise barriers, or median planting removal) and construction footprint? *(Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern and requiring a more focused visual analysis.)*

☐ High concern (3) ☐ Low concern (1)
☒ Moderate concern (2) ☐ Negligible project features (0)

Assumptions/issues: The project is expected to incorporate features that are similar to existing conditions. Noise barriers, if deemed feasible and reasonable, would likely be expected for only a short distance (less than 0.25 mile) adjacent to a small residential area within close proximity of the highway. No large excavations are expected, and no landscaped medians or similarly designed features exist. The construction footprint is not expected to substantially deviate from the existing right-of-way.

The *Commerce City Comprehensive Plan* indicates a desire to improve "the image" and "appearance" of I-270, and includes a goal to "Work with CDOT and private owners to improve appearance of I-270 corridor" (City of Commerce City 2010). These goals indicate concern for aesthetics along I-270. Working with the city to develop corridor design guidelines could potentially help them achieve some of these goals. Comments received during public scoping reinforce these desires and goals; these are captured under the Policies, Guidelines, and Feedback section of this appendix. Commenters specifically mentioned the "unfavorable impression of the area," describing it as "slummy and unattractive," a "blight," and an "eyesore." Commenters also focused on the need for more "greenery," particularly at the Vasquez Boulevard interchange, which was noted as "not very welcoming and gives you the feeling of being forgotten and of no consequence. An exit with trees, grass, and shrubs will help in changing that area. May even bring change throughout the city and help put more greenery on our roadways." Some commenters specifically referred to preserving, maintaining, and improving the Sand Creek Greenway. Despite the "unattractive" nature of the corridor, one commenter noted, "Drivers can also appreciate the green and wildness of the creek corridor, which

adds to their experience." Another commenter stated that "the retaining wall of rocks and stone [along the greenway] is interesting to admire while walking."

4. Do design changes that could minimize impacts (e.g., landscaping, architectural treatment, color choices) appear to be:

☐ Extensive changes or redesign (3)
☐ Some redesign or minimization measures (2)
☒ Few, minimal design options (1)
☐ No minimization likely (0)

Assumptions/issues: Because of the heavily industrial and transportation setting, few opportunities exist for landscaping. No clear or consistent architectural designs or color schemes are evident within the roadway corridor or adjacent land uses. However, project-specific design guidelines were developed and will help ensure consistency within the corridor and with other highways in the greater geographic area. The guidelines also include a tree mitigation plan, described in Section 4 of this document, to limit impacts and enhance views.

5. Will this project, when seen collectively with other projects, likely result in cumulative impacts to landscape character, views, or visual quality? *(Identify any projects [both state and local] in the area that have been constructed in recent years and those currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's perception.)*

☐ Cumulative impacts likely: 0–5 years (3)
☐ Cumulative impacts likely: 6–10 years (2)
☒ Cumulative impacts unlikely (1)

Assumptions/issues: The US 36 Express Lanes Project reconstructed US-36 from Federal Boulevard to Table Mesa Drive in Boulder. I-270 is a continuation of US-36 from its intersection with I-25; Federal Boulevard is approximately 1.3 miles west of I-25. The completed project includes an express lane in each direction and two free general purpose lanes. The project replaced several bridges, built a commuter bikeway, added Bus Rapid Transit improvements, and installed ITSs for tolling, transit and traveler information, and incident management (CDOT n.d.a).

The Central 70 Project, which is currently under construction, is adjacent to the I-270 study area. Central 70 will reconstruct a 10-mile stretch of I-70 between Brighton Boulevard and Chambers Road, add one new express lane in each direction, replace the aging 56-year-old viaduct between Brighton and Colorado boulevards with a below-grade highway, and place a 4-acre park over a portion of the lowered interstate. The project is expected to be completed in 2022 (CDOT n.d.b).

The design guidelines developed for the US 36 Express Lanes and Central 70 Projects were incorporated, where applicable, into the I-270 Improvements Project. In addition, design guidelines developed for I-25 South between Colorado Springs and Denver, as well as the formerly named Stapleton neighborhood, were also consulted. Although the I-25 South project is approximately 40 miles south of I-270, it is possible that the guidelines developed for it could eventually be applied throughout all of I-25. For these reasons, cumulative impacts are expected to be beneficial from applying a consistent visual approach in the area. Applying the I-270 design guidelines will help ensure that transportation elements are visually consistent with the study area landscape and adjacent major transportation corridors.

Viewer Sensitivity

6. What is the potential for the project proposal to become controversial within the community or to be opposed by the public or any organized group? *(This can be researched initially by talking with the state DOT and local agency management and local or regional planning staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.)*

☐ High potential (3)
☐ Moderate potential (2)
☒ Low potential (1)
☐ No potential (0)

Assumptions/issues: Although small residential areas and the Sand Creek Greenway represent areas of high viewer sensitivity, the potential for controversy from a visual standpoint is low because of the low number of adjacent residences and the nature of views from the trail. Views of I-270 from the trail are typically blocked by hills, vegetation, or inferior viewing positions.

7. How sensitive are viewers likely to be to the scale and character of visible project features? *(Consider among other factors the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment and by soliciting information from other DOT staff, local agencies, and community representatives familiar with the affected community's sentiments and demonstrated concerns.)*

☐ High sensitivity (3)
☐ Moderate sensitivity (2)
☒ Low sensitivity (1)

Assumptions/issues: Viewers would be predominantly highway users. Few residences have views of the road, and those that do would experience little change compared with existing conditions. Views of I-270 for users of the Sand Creek Greenway are primarily screened by topography and vegetation, which is not expected to change. Remaining viewers would be employees working at the industrial and commercial facilities adjacent to the highway, who would be focused on work-related activities and are also aware of the existing industrial setting. Therefore, viewer sensitivity to the scale and character of project features is expected to be generally low.

8. Are there applicable laws, ordinances, regulations, policies, or standards that would affect or influence this project?

☐ Yes, in a complex manner (3)
☐ Yes, not complex (2)
☒ No (1)

Assumptions/issues: The *Commerce City Comprehensive Plan* indicates a desire to improve "the image" and "appearance" of I-270, and includes a goal to "Work with CDOT and private owners to improve appearance of I-270 corridor" (City of Commerce City 2010). Working with the city to develop corridor design guidelines could potentially help them achieve some of these goals.

9. Will the project change the views or character of visually sensitive public use areas, historic properties, or scenic designations? *(Identify proximity and potential visual influence of the proposed project to parks, open space, trails, vistas and protected viewsheds, historic properties, Colorado Byways, Wild and Scenic Rivers, and other scenic designations.)*

☐ Yes (3)
☐ Maybe (2)
☒ No (1)

Assumptions/issues: No sensitive public use areas, historic properties, or designated scenic areas are adjacent to or within the study area. A small overlook along the Sand Creek Greenway faces south, away from I-270, and views of I-270 for trail users are primarily screened by topography, vegetation, and an inferior viewing position, which is not expected to change.

10. Will a more detailed visual analysis assist in the screening of alternatives or project design? *(Consider the proposed project features, possible visual impacts, and probable mitigation recommendations.)*

☐ Yes (3) ☒ No (1)
☐ Maybe (2)

Assumptions/issues: Given the existing industrial and transportation-related visual character and low overall visual quality, as well as minimal visual changes expected from the proposed actions, no additional detailed analysis would assist in the screening of alternatives or project design.

VIA Requirements

Date of Assessment	June 10, 2021		
VIA Requirements: Based on initial scoping, collaboration with CDOT, and the VIA Scoping Questionnaire score, this level of analysis and documentation is required:	☐ VIA not required *(Score 1-9)*[1]	☒ VIA Memorandum *(Score 10-19)*	☐ Standard VIA *(Score 20-30)*
☐ VIA not required *(Score 1-9)*	Consider this as the visual resource clearance for the I-270 Corridor Improvements project. If the scope of work changes or additional information warrants further review and analysis, a reevaluation may be required.		
<CDOT Clearance when VIA is not required>	**<insert signature and date>**		
☒ VIA Memorandum *(Score 10-19)*	In Appendix A of CDOT's Guidelines		
☐ Standard VIA *(Score 20-30)*	In Appendix A of CDOT's Guidelines		

The level of the VIA can initially be based on the following ranges of total scores:

Score 6 to 9: VIA Not Required
No noticeable visual or physical changes to the environment are proposed; therefore, no further analysis is required. The VIA questionnaire and a project memo may be used to document that there is no effect and to explain the approach used for the determination.

Score 10 to 19: VIA Memorandum
A *VIA Memorandum* addressing minor visual issues, indicating the nature of the limited impacts and identifying any necessary mitigation strategies that should be implemented, would likely be sufficient, along with an explanation of why no further analysis is required.

Score 20 to 30: Standard VIA

A *Standard VIA* is recommended. This technical study will likely receive extensive local, perhaps statewide, public review. It would typically include several visual simulations. It would also include a thorough examination of public planning and policy documents supplemented with a direct public engagement process (usually part of the overall NEPA public scoping and stakeholder involvement) to determine visual preferences.