City of Carlsbad

# **Beach Access Repair Project**



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# **Addendum**

This document contains information and data from a study that was prepared for a prior version of the proposed Project. The data contained within remains relevant and applicable to the proposed Project; however, may contain information that is no longer representative of the proposed Project. Please reference the Initial Study Mitigated Negative Declaration document for any information pertinent to the proposed Project description.

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# 1.0 INTRODUCTION

# 1.1 Purpose of the Visual Impact Analysis

The purpose of this study is to assess the visual impacts of the proposed project on the surrounding visual environment, determine the potential significance of the impacts under the California Environmental Quality Act (CEQA), and to propose measures to avoid, minimize, or mitigate adverse visual impacts associated with the construction of the proposed Beach Access Repair Project (proposed project).

#### 1.2 PROJECT LOCATION

The Project area is regionally located in the northwestern portion of the City of Carlsbad; refer to **Figure 1**, Project Location. Locally, the Project area extends along the western area of Carlsbad Boulevard and the beach promenades from Pine Avenue at the north to Tamarack Avenue at the south; refer to **Figure 2**, Project Vicinity.

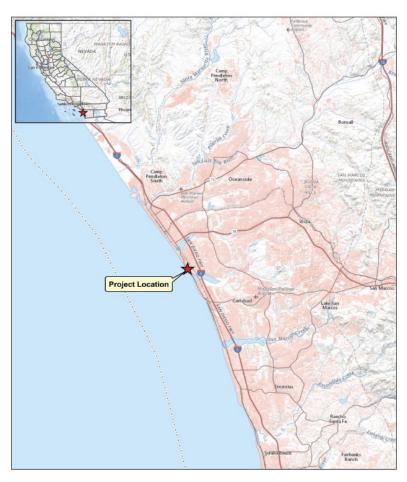


Figure 1: Project Location

## 1.3 Key Issues

This analysis addresses the potential of the proposed project to adversely affect scenic vistas, damage scenic resources, or substantially degrade the existing visual character or quality of the site and its surroundings. This analysis also addresses the potential of the proposed project to conflict with applicable regulations governing scenic quality, and whether the proposed project would create a source of substantial light or glare which would adversely affect day or nighttime views.

This report includes an assessment of the proposed project in comparison to the existing visual resources of the project setting, and the potential viewer response to the proposed changes. Elements of this report also assess a previously explored option to widen the upper sidewalk towards Carlsbad Boulevard that was later dismissed as a result of a determination by the City of Carlsbad, Traffic and Mobility Commission during their October 5, 2020 meeting.

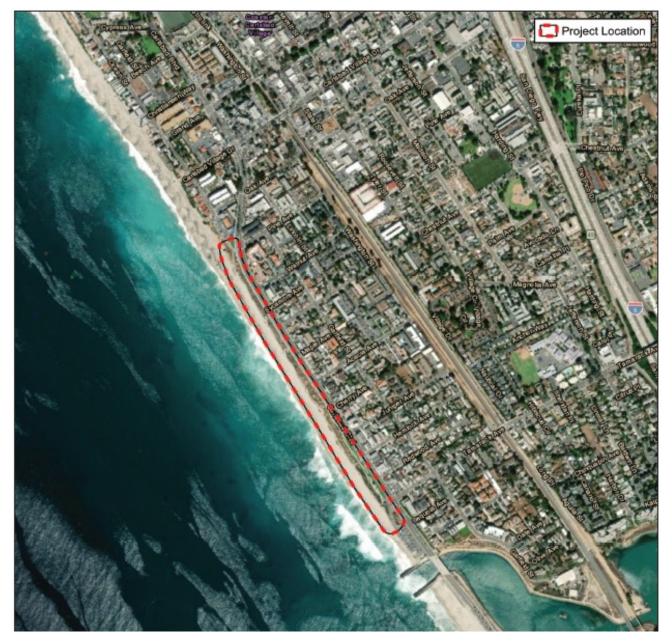


Figure 2: Project Vicinity

## 2.0 STUDY FOCUS

The visibility of the project site and the proposed project elements is evaluated and discussed in subsequent sections of this chapter. Key views within the view-shed are analyzed based on the number of viewers, their potential sensitivity, as well as the location of the project site within the view. Two key views have been selected as representative views and are analyzed with full simulations. These key viewpoints include:

- 1. A southward view from the west side of Carlsbad Boulevard.
- 2. A northward view from the west side of Carlsbad Boulevard.

This report also includes a discussion of the key views, potential viewers, and the visual character of the study area. The key views and simulations were prepared to analyze sidewalk widening, new railing, road edge barrier removal and the subsequent shifts of the traffic lanes eastward.

## 3.0 PROJECT DESCRIPTION

The Beach Access Repair Project (Project) proposes structural repairs and improvements to the existing concrete sidewalks, retaining walls, and beach access stairways located along Carlsbad Boulevard. These stairways provide access along and to the popular Carlsbad State Beach. The Project consists primarily of repairing or replacing existing features in-kind, with the exception of the upper sidewalk, which is proposed to be widened 2.5' to accommodate heavy pedestrian traffic from passive and active recreational user groups. The locations of the proposed sidewalk improvements and repairs, proposed stairway replacements as well as the proposed staging area for the Project is shown in **Figure 3**. The Project is within City and California State Parks jurisdiction (State Parks).

The sidewalks and stairways were built in the 1980's and need repairs and or replacements to maintain structural integrity and safe public access. The proposed repairs were identified as being necessary according to a structural condition assessment prepared by TTG Engineers in 2017. Replacement of the elevated sidewalk would be a long-term solution (approximately 50 years) to the existing deteriorated sidewalk, with the new beams anticipated to be designed with high-strength, corrosion resistant pre-cast concrete.

The proposed Project consists of two major elements: The Upper Sidewalk Improvements and Beach Access Stairway Replacements. The proposed actions associated with these elements are outlined below:

# 3.1 Upper Sidewalk Improvements

- Replacement and widening by 2.5' through the removal of a surface mounted railing and metal
  beam guardrail (1' gained) and a 1.5' sidewalk widening/extension to the west. This upper sidewalk
  is heavily trafficked by various user groups and the proposed widening was identified by the City as
  being critically important to allow for adequate space for these user groups. The total upper sidewalk
  width would be increased from 9' to 11'-4" to 11'-10" in the proposed condition.
- Replacing the existing upper sidewalk surface-mounted railing between Pine Ave and Tamarack Ave with a side-mounted railing to provide an additional extra sidewalk walking width.

# 3.2 Beach Access Stairway Replacements

- Replacement of four (4) existing elevated access stairways and railings in same configuration (size and shape) at each access location. The replacements will utilize the existing reinforced concrete pile that support the stairway landings. The handrails edging the stairs and platforms would be replaced with similar railings and handrails that meet applicable codes and would include downward facing lighting.
- Replace one (1) on-grade access stairway and railings at Tamarack Avenue within the footprint of the
  existing stair curbs and walkway.
- Replace existing sandbags with short retaining wall extensions (no more than 20 linear feet) at the base of the Maple, Sycamore and Hemlock Avenue stairways to control soil sloughing from the bluff from impacting use of the stairs.
- Install new under rail accent lighting at the elevated access platforms and the Tamarack Avenue ongrade access stairway.

The Project also includes miscellaneous improvements in the Project vicinity such as replacing the existing streetlight poles along the beach side of Carlsbad Blvd from Pine Ave to Tamarack Ave and replacing the existing sidewalk and railing around the beach shower along the upper sidewalk near the Tamarack Ave restroom.





Figure 3: Beach Access Repairs Project Overview

# 3.3 Upper Sidewalk Detail

Upper sidewalk improvements will increase the walking width from 9' to 11'-4" to 11'-10" through the removal of a surface mounted railing and metal beam guardrail (approximately 1' walking width gained) and a 1.5' sidewalk widening/extension to the west. Removal of the metal beam guardrail is allowable per the American Association of Highway and Transportation Officials (AASHTO) Roadside Design Guide due to the low posted road speed and clear-zone width at top of slope.

The existing sidewalk varies from north to south within the Project area; therefore, the proposed structural solutions vary as well. Specifically, the sidewalk between Pine and Maple Avenue is supported by concrete piles, while the sidewalk from Maple to Cherry Avenue is on-grade. The proposed sidewalk improvements within these two discrete sections of the upper sidewalk are detailed below:

- Pine to Maple Avenue: The pile-supported sidewalk would be extended to the west on a cantilever via a number of proposed structural elements (e.g., new concrete beams, see Figure 4 and 5).
- Maple to Cherry Avenue: The on-grade sidewalk with retaining wall would be extended to the west via a new concrete wall and pier (Figure 6 & 7).

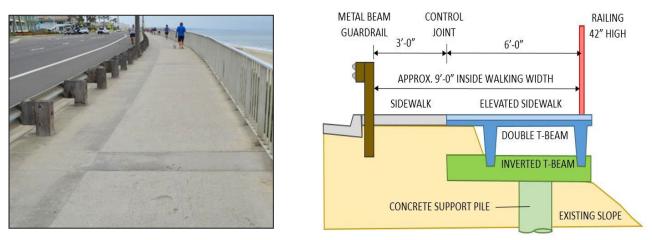


Figure 4: Existing Upper Sidewalk - Pine Avenue to Maple Avenue

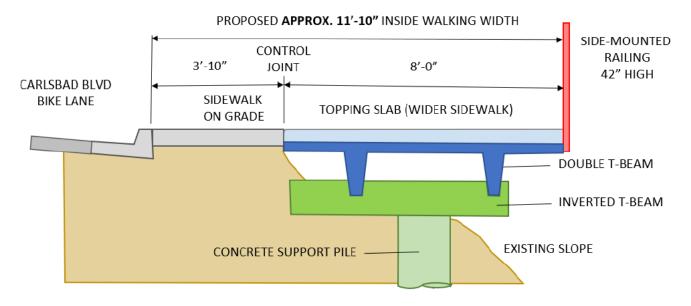


Figure 5: Proposed Upper Sidewalk - Pine Avenue to Maple Avenue

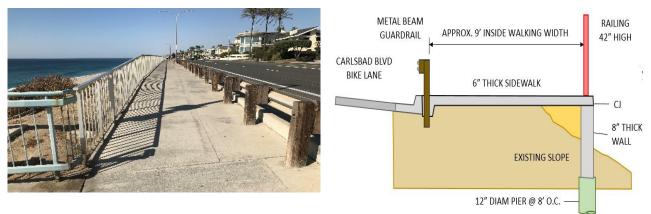
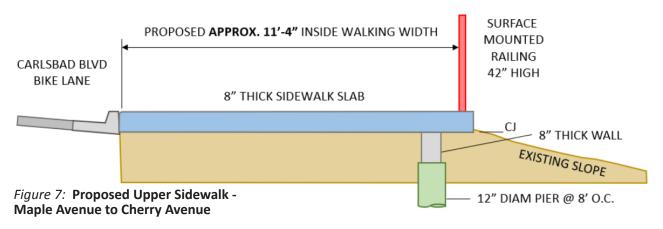


Figure 6: Existing Upper Sidewalk - Maple Avenue to Cherry Avenue



The two elevated upper sidewalk overlooks at Walnut Avenue, between Chestnut Avenue and Maple Avenue, and the on-grade upper sidewalk overlook at Acacia Avenue would be replaced but are not proposed to be widened. The surface-mounted railing at each of the elevated overlooks would be replaced with new side-mounted railing, and the on-grade overlook railing would be replaced with new surface-mounted railing, which would provide additional usable space.

# 3.4 Beach Access Stairway Detail

The beach access stairways between the upper and lower sidewalks consist of one set of stairs on-grade at the south end of the project near Tamarack Avenue, and four sets of elevated stairs supported on reinforced concrete platforms near the intersections of Sycamore Ave., Maple Ave., Cherry Avenue, and Hemlock Ave. (Figure 8).



Figure 8: Proposed Stairway Replacement Location and Phasing

Source: Google Earth Pro

The on-grade stairway treads will be replaced, while the stair curbs and railing will remain in place. The four sets of elevated stairways have deteriorated to the point of needing continual maintenance to remain safe and will be completely replaced, including railing, concrete platforms and stair treads, and phased to allow for continuous public access to the beach (Figure 9). The large 48-inch diameter reinforced piles supporting the stairway platforms on the bluff will remain in place to be reused for supporting the new platforms of similar dimensions (Figure 10).



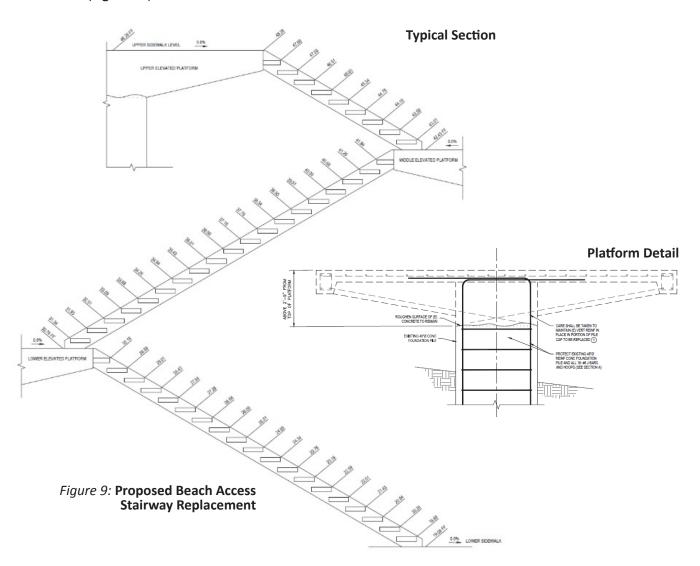


Figure 10: Beach Access Stairway 48-inch
Diameter Support Piles to Remain



# 3.5 Construction Phasing and Methods

Construction of the proposed Project will be phased to maintain public access to the beach over the duration of the Project. The proposed construction staging, and lay down area is proposed within a grassy area/lawn along the west side of Carlsbad Boulevard. The area was minimized as much as possible to allow for efficient construction while limiting impacts to beach access and coastal resources.

The construction of the Project is estimated to take approximately 20 months. No on site work is proposed during the summer months (i.e., between Memorial Day through Labor Day) to minimize recreational impacts. The anticipated construction equipment that may be required for the Project include the following: work trucks; dump trucks; backhoe; portable generator; traffic control signage; crane; concrete saw, mixer and pump; long reach excavator; semi-trailer flatbed; skid steer; and material handler.

Work is anticipated to take place along the western edge/shoulder of Carlsbad Boulevard; no beach work is proposed. Given the proposed work area, the Project is anticipated to require traffic control measures during construction, such as the temporary closure of lanes along Carlsbad Boulevard. Traffic control measures necessary to accomplish the work will require a traffic control permit from the City and will be the responsibility of the selected contractor. Lateral and vertical beach access will be maintained to Carlsbad State Beach during all construction activities.

#### 4.0 VISUAL SETTING

The proposed Beach Access project work would occur along the walkways and access ways paralleling Carlsbad Boulevard on the east, and Tamarack Beach on the west. Carlsbad Boulevard is a four-lane roadway along the east edge of the project area, with bike lanes on each side, striped turning pockets, and near the north end of the project, a vegetated median. Refer to **Photograph 1, Figure 11**, which is a view of Carlsbad Boulevard, including the bike lanes, a pedestrian crossing, and the vegetated median in the background.

The east side of Carlsbad Boulevard is bordered mostly by single and attached residential units, a few restaurants, and a hotel. Most of the structures are two- or three-stories tall, with some single-story houses among them. The lots generally are fronted by trimmed shrubs and small palm trees generally not extending above 6 feet tall, and a concrete sidewalk. The streetscape is divided at semi-regular intervals by driveways and roadways that are used for circulation access and parking.

At the south end of the project, Tamarack Avenue provides vehicular access to Tamarack State Beach parking lot near the beach level. North of this roadway is a single-story restroom building, the only building visible west of Carlsbad Boulevard from the street in the project area. A pedestrian ramp and staircase provide access to the lower walkway and beach next to this restroom building. **Photograph 2, Figure 11,** is a view of this restroom building from the short ramp that provides access to the building and the beach access stairs. There is an additional restroom building at the north end of the project site, located at the lower walkway area that is not visible from Carlsbad Boulevard.

Between Tamarack Avenue and Cherry Avenue (a little less than 1,000 feet), an area of turf separates the upper walkway from Carlsbad Boulevard, and a secondary walkway meanders away from and back toward the cliff-edge walkway. **Photograph 3, Figure 11,** is a view of this area, and also shows the typical buildings aligned along the east side of Carlsbad Boulevard in the background. A few trees are growing west of Carlsbad Boulevard, south of Cherry Avenue. Between Cherry Avenue and Pine Avenue, at the north end of the project area, the walkway directly borders the west side of Carlsbad Boulevard.

Between the upper walkway and the lower walkway is a steep slope vegetated mostly with native shrubs. The slope is approximately a 2:1 slope where two feet of horizontal distance occurs for every one-foot of vertical height change. Native shrubs cover most of the slope, with some brown exposed soil visible in places, a bit darker and warmer than the beach sand. There is very little vegetation beneath the staircases and under the areas that have exposed sidewalk cantilevers. **Photograph 4, Figure 11**, illustrates a typical view of the slope from an overlook along the upper sidewalk. **Photograph 5, Figure 11**, shows the bare and eroded soil near one of the stairways.

A 42" tall aluminum, vertical picket railing extends along the length of the upper walkway to protect pedestrians from the steep slope above the beach. This railing is visible in each of the photographs above. Three wider concrete overlooks extend west from the walkway between Pine Avenue and Cherry Avenue. Five staircases provide access to the lower walkway and the beach. The four elevated staircases each have hexagonal landings and three flights of stairs, metal vertical-picket railings similar in appearance to the railing along the upper walkway. **Photograph 6, Figure 11,** is a view of one of the elevated staircases, viewed from the upper platform. Seen from the lower walkway, the elevated staircases are a large, geometric structures contrasting with the natural slope. The hexagonal landings are supported by large, round, concrete pillars and fins. The concrete steps are supported by metal stringers painted pale blue. The vertical-picket railings are also painted pale blue. **Photograph 7, Figure 12,** is a view of the northernmost staircase, as seen from the lower walkway.

Visual Impact Analysis Figure 11



Photograph 1
Looking north along Carslbad Boulevard



Photograph 2
Looking south down the ramp at the south end restroom



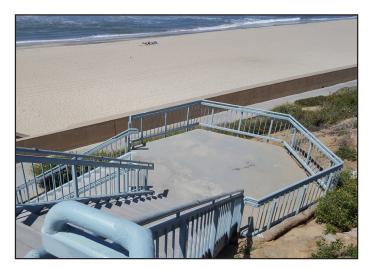
**Photograph 3** *Turf area between Tamarack Avenue and Cherry Avenue* 



The vegetated slope as seen from the upper sidewalk



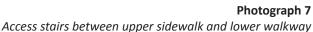
**Photograph 5**The vegetated slope as seen from the lower walkway



**Photograph 6**Access stairs between upper sidewalk and lower walkway, looking down

Figure 12 Visual Impact Analysis







Photograph 8
Lower walkway and slope

The lower walkway is separated from the beach by a substantial concrete seawall approximately three feet above the walkway surface. A smaller 8-inch-thick concrete wall retains the lower edge of the slope on the inland side. These walls are integrally-colored a warm brown to match the color of the adjacent natural slope. Occasional openings in the seawall provide access stairways to the sandy beach abutting it on the west. From the lower walkway, the beach and ocean extending westward is the main visible feature. The vegetated slope east of the lower walkway shields views of the road above and the buildings east of Carlsbad Boulevard. **Photograph 8, Figure 12,** shows a view of the lower walkway and natural slope. The walkway and walls, the stairways, two lifeguard stations, and the restroom buildings are the only structures generally visible from the lower walkway. Some houses to the north are visible in the distance, but do not dominate the view.

# 4.1 Viewer Groups

The proposed project consists primarily of improvements of pedestrian access and resources, and pedestrians will be the primary viewer group that will directly and closely see the project. Changes to the upper sidewalk will also be visible to motorists on Carlsbad Boulevard, as well as bicyclists and local residents.

Pedestrians are the largest viewer group, as they will have access to both the upper sidewalk and the lower walkway, as well as the staircases. Users of these walkways are both residents and visitors, and whether passing through while exercising or pausing to spend time on the beach, most pedestrian users are sensitive to the views of the ocean from this area and also notice a great deal of detail. The ocean and beach are the predominant scenic features, followed by the natural slope and park areas. Pedestrians have the highest viewer exposure to all aspects of the project and are also highly aware of the scenery and visual environment.

Residents of buildings bordering the eastern edge of Carlsbad Boulevard, while fewer in number than pedestrians, are also highly aware of the scenic resources and sensitive to any changes to the visual environment. Residents have stationary views, and long exposures, where pedestrians have shorter exposure and dynamic views as they move through the project area. However, for most residents, the position of the foreground compared to the middle-ground of the beaches and near shore line areas and the background, the viewer's attention is not on the walkways and railing.

Motorists and bicyclists on Carlsbad Boulevard are aware of the scenic resources around them, but also must pay attention to the roadway. Their sensitivity is less than pedestrians and residents as a result. They also are not able to see the lower sidewalk area or most of the stairways, and thus their exposure is lower as well.

## 5.0 REGULATORY SETTING

#### 5.1 California Coastal Act

The propose project is located within the State of California Coastal Zone, defined in the California Coastal Act as the area between the seaward limits of the state's jurisdiction and 1,000 yards landward from the mean high tide line. In Carlsbad, the coastal zone boundary generally encompasses the area east of the Pacific Ocean to El Camino Real, including the lower and upper walkways, the steep natural slopes of the coastal bluff between, and Carlsbad Boulevard.

The California Coastal Act (Public Resources Code Section 30000 et seq.) authorizes the State of California to regulate development within the State Coastal Zone. While scenic resources are not specifically mentioned, Public Resources Code Section 30001.5 calls to "protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources."

# 5.2 Local Regulations

The City of Carlsbad does not have a specific code or General Plan element related to lighting or glare. Lighting is addressed by land use type in the Zoning Ordnance, (Municipal Code Title 21), nor does the City have a specific interpretation and guidance for Thresholds of Significance for Aesthetics. This then means that the project should focus on public views since no private view protection issues are considered to rise to the level of a significant CEQA impacts.

# 5.3 City of Carlsbad Zoning

#### 5.3.1 Scenic Preservation Overlay Zone

The City of Carlsbad's Municipal Code includes a Scenic Preservation Overlay Zone (Chapter 21.40). The Coastal Zone restrictions (21.40.135) within this Scenic Preservation Overlay Zone would apply to Carlsbad Boulevard. Under the Coastal Zone Restrictions, "public views and panoramas shall be maintained." The restrictions apply mainly to sites considered for development, "so as not to obstruct or otherwise damage the visual beauty of the coastal zone."

#### 5.3.2 Coastal Shoreline Development Overlay Zone

The Coastal Shoreline Development Overlay Zone (21.204.010) "is intended to provide land use regulations along the coastline area including the beaches, bluffs, and the land area immediately landward thereof. The purpose of the coastal shoreline development zone is to provide for control over development and land use along the coastline so that the public's interest in maintaining the shoreline as a unique recreational and scenic resource, promoting public safety and access, and in avoiding the adverse geologic and economic effect of bluff erosion, is adequately protected" (Ord. NS-365 § 22, 1996).

The overlay zone outlines permitted and conditional uses, requirements for public access, and requires site plan reviews with the following criteria: "The site plans required by Section 21.204.090 shall be reviewed and evaluated by the city planner for conformance with the following criteria:

- A. Coastal Development Regulations. All elements of the proposed development are consistent with the intent and purpose of the coastal shoreline development overlay zone.
- B. Appearance. Buildings and structures will be so located on the site as to create a generally attractive appearance and be agreeably related to surrounding development and the natural environment.
- C. Ocean Views. Buildings, structures, and landscaping will be so located as to preserve to the degree feasible any ocean views as may be visible from the nearest public street.

- D. Retention of Natural Features. Insofar as is feasible, natural topography and scenic features of the site will be retained and incorporated into the proposed development.
- E. Grading and Earth-Moving. Any grading or earth-moving operations in connection with the proposed development are planned and will be executed so as to blend with the existing terrain both on and adjacent to the site.
- F. Public Access. The policies of the local coastal program pertaining to public access have been carried out" (Ord. CS-164 § 10, 2011; Ord. NS-365 § 22, 1996).

# 5.4 City of Carlsbad Master Plan

#### 5.4.1 The Land Use and Community Design Element

The Land Use and Community Design Element of the City of Carlsbad Master Plan includes Community Character and Design policies, including Beach Access and Waterfront Activity policies that identify opportunities to increase public park land and beach access along Carlsbad Boulevard coastal corridor, particularly in the project area. Policy 2-P.53, "Plan and design Carlsbad Boulevard and adjacent public land (Carlsbad Boulevard coastal corridor)." These principles include the following related to aesthetics and visual character:

- a. Carlsbad Boulevard shall become more than a road. This transportation corridor shall provide for recreational, aesthetic and community gathering opportunities that equal the remarkable character of the land.
- d. Open views are desirable and important to maintaining the character of the area. Preservation and enhancement of views of ocean, lagoons, and other water bodies and beaches shall be a high priority in road, landscaping, and amenity design and development.
- i. A signature scenic corridor shall be created through design that honors the coastline's natural beauty. The resulting improvements will capture the 'essence' of Carlsbad, making it a special place for people from throughout the region with its natural beauty and vibrant public spaces. Properly carried out, the realigned boulevard will maximize public views and encourage everyone to slow down and enjoy the scenery.

#### 5.4.2 Local Coastal Program

Developed in conformance with the Coastal Act, the City of Carlsbad Local Coastal Program outlines policies to "Protect, maintain, and where feasible, enhance and restore the overall quality of the Coastal Zone environment and its natural and man-made resources."

The specific policy related to Visual/Land Resources include the implementation of the Scenic Preservation Overlay Zone (discussed above), and the preservation of natural vegetation on steep slopes.

Within the Local Coastal Program, Land Use Policy 7-13, Visual Access states, "Visual access over more than 80% of the Carlsbad coastline is unobstructed because of public ownership. No future public improvements which would obstruct this visual access shall be permitted."

## 6.0 IMPACT ANALYSIS

Analysis of a project's impacts to visual resources is based on the identification of the change that would occur when a project proposes to alter the existing visual character of the environment. The amount of contrast between the proposed elements and the existing setting is critical in determining how visible and how much of a contrast will occur with the setting. The viewers' response to the change must also be considered in the impact analysis. If the project is hidden from sight and will only be seen by the project users and the contrast with the setting is not high, viewer response will likely be minimal. However, if the project is visible to many existing viewers, the viewers' sensitivity to and expectations of the view may place more importance on the change. The change must alter either the visual character or quality, or the viewers' response to the view, in a negative way to be considered an adverse impact. The viewer response to project changes is determined by viewer exposure and viewer sensitivity to the project. The resulting visual impact is determined by combining the severity of resource change with the degree to which people are likely to oppose or be disturbed by the change.

# **6.1** Definition of Visual Impact Levels

The following definitions will be used in subsequent sections of this document:

**No impact**: No visual impact would occur as a result of construction of the proposed project. Actual improvements to the visual environment may also occur in this category.

**Less than significant impact**: Adverse changes to the existing visual resources will not be perceived negatively by viewers, or the contrast is too small and occurs in an area with low visual quality and low sensitivity to visual changes, or the proposed project already incorporates features that reduce the potential contrast of the overall project to less than significant levels.

**Less than significant impact with mitigation:** A moderate or high level of contrast to the visual resource is expected with a moderate or high level of likely viewer negative response. Mitigations would be required to reduce the impact to a less than significant level.

**Unmitigable Significant impact**: A moderate or high level of contrast to the visual resource is expected with a moderate or high level of viewer negative response. Mitigation would be required to reduce the impact to a less than significant level. If after mitigation, the project is still considered to be significant, then it would be considered an unmitigable significant impact.

# 6.2 Significance Criteria

For the purposes of this report, the project will generally be considered to have a significant effect if it proposes any of the following changes. Conversely, if a project does not propose any of the following, it will generally not be considered to have a significant effect on visual resources:

- i. Have a substantial adverse effect on a scenic vista
- ii. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- iii. Substantially degrade the existing visual character or quality of public views of the site and its surroundings. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- iv. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

These guidelines are analyzed through the key views and computer simulations and discussed below. The project's conformance with applicable zoning and other regulations governing scenic quality, as listed above, is discussed in **Table 2**, **Policies and Guidance**, in **Section 6.0**.

## 6.3 Key Views

It is not possible to analyze every point in a view-shed, therefore representative or "key views" with the highest degree of visibility, the greatest number of viewers, and the potential to reveal the most change due to the proposed project have been chosen to illustrate the potential project impacts. A total of 10 "Candidate Key Views," were identified. The Candidate Key Views are illustrated in **Figures 13 and the** location of each Key View is shown on **Figure 14.** 

**Table 2, Candidate Key View Table**, is a summary of each view and a brief assessment of which were selected to use for full simulations and in-depth analysis. Of the 11 Candidate Key Views, three were selected: Candidate Key Views 9, 10 and 11.

# 6.4 Review of Photo Simulations for Candidate Key Views

Figures 15 (CK 9, Simulation 1), Figure 16 (CK 10, Simulation 2) and Figure 17 (CK11, Simulation 3) represent photo-realistic computer simulations of the proposed project, including sidewalk widening, shifted lanes, and the removal of the existing roadway edge barrier. The simulations were developed through the use of three-dimensional computer modeling of the existing site topography and the current and previously proposed project elements. The model was then transposed over the top of the photographs of the site. Additional texture, color, details, and shadows were added to increase the realistic look of the simulations. Each view is shown as currently exists and is simulated to represent the project after construction.

#### 6.4.1 Candidate Key View 9-Simulation 1

Candidate Key View 9 was taken from west edge of Carlsbad Boulevard near Walnut. The view looks at northbound traffic lanes from the Coast walkway. The viewer is at the edge of the existing southbound bike lane, as seen from the sidewalk. The vegetated median south of Pine Avenue to the north is visible on the right of the view. The lanes have shifted in this simulation based on the widened walkway. The walkway has expanded in both directions and new railing has been added to the new extended width of the walkway on its west side. **Simulation 1, Figure 15** represents the proposed project features as they would be visible to pedestrian using this new expanded walkway. The existing roadway barrier has been removed. The new railing shown in the simulations is a proposed project feature that has greater transparency and therefore greater visibility for lower views to the beach.

#### 6.4.2 Candidate Key View 10- Simulation 2

Candidate Key View 10 was also taken from the center of Carlsbad Blvd. and looks north along the edge of the upper pedestrian walkway and at the southbound bike lane and traffic lanes. The viewer is at the Sycamore intersection. The vegetated median south of Pine Avenue is visible in the background with some of the palm plantings blocking views of buildings abutting Carlsbad Blvd. on the east side of the street. The ocean comprises the horizon line, although the metal vertical-picket railing west of the upper walkway slightly screens the ocean's lower views. **Simulation 2, Figure 16** represents the proposed project features as would be visible for most northbound drivers and cyclists as well as pedestrians crossing the street. The existing roadway barrier has been removed. The lanes have been reduced in size and the walkways have expanded in both directions. The new railing shown in the simulations is a proposed project feature that has greater transparency and therefore greater visibility for lower views to the beach.

Candidate Key View #					Viewer Viewer Sensitivity Exposure		Notes	Simulate	
1	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Middleground to background	Southbound Carlsbad Blvd. north of Pine Ave. Median plantings and neighboring buildings visible.	No
2	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Middleground	Southbound Carlsbad Blvd. north of Pine Ave. Median that would be impacted is prominent in the middleground. The guardrail that would be replaced is not a highly visible feature, but is present beyond the traffic light. The ocean is visible to the right.	No
3	High	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Middleground	Westbound Pine Avenue. Median that would be impacted is in middleground, with ocean in the background. Surface features that would be changed (lane lines, etc.) aren't visible	No
4	High	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Background	Westbound Pine Avenue. Median that would be impacted is in not highly visible (to the left, behind building). The ocean is in the background. Surface features that would be changed (lane lines, etc.) aren't visible.	No
5	Moderate	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	Southbound Carlsbad Blvd. south of Pine Avenue, within the lanes that would shift. Median is at viewer's left. The ocean is blocked by the fence and slight hill in this area.	No
6	Moderately High	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	Similar to #5. Southbound Carlsbad Blvd. south of Pine Avenue, within the lanes that would shift. The guardrail that would be replaced is to the viewer's right. Median is at viewer's left. A little bit of ocean view is available at the right side of the photo.	Yes
7	Moderate	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	West side of Carlsbad Blvd. (southbound) looking north. Lanes that would shift are in the foreground. The guardrail that would be replaced is to the viewer's right. Median that would be affected is in the middleground, with neighboring building in the background. This photo looks away from the beach and ocean view	No

Candidate Key View #	Existing Visual Quality Vividness / Unity / Intactness			Viewer Groups	Viewer Sensitivity	Viewer Exposure	Distance from Viewer to Proposed Project	Notes	Simulate
8	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Middleground to background	Northbound Carlsbad Blvd. at Walnut Avenue. Lanes that would shift are on the far side of the street. The guardrail that would be replaced is visible, with the ocean behind it. The median is prominent in the far middleground to background.	No
9	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	West side of Carlsbad Blvd. (southbound) south of Walnut Avenue, looking north. Lanes that would shift are in the foreground. The guardrail that would be replaced directly in front of the viewer. The view has neighboring building in the background and on the right. This photo looks away from the beach and ocean view to the roadway to the north.	Yes
10	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	Median of Carlsbad Blvd. at Sycamore, looking north. Lanes that would shift are in the foreground. The guardrail that would be removed is to the viewer's left. Neighboring building are to the right, and the ocean to the left.	Yes
11	Moderately high	Moderately high	Moderately high	Pedestrians, bicyclists, motorists	Moderately High	High	Foreground to Middleground	Median of Carlsbad Blvd. at Sycamore, looking south. Lanes that would shift are in the foreground to the right. The guardrail that would be removed is to the viewer's right. Neighboring building are to the left, and the ocean to the right.	Yes

#### 6.4.3 Candidate Key View 11- Simulation 3

Candidate Key View 11 was also taken from the center of Carlsbad Blvd and looks south along the edge of the pedestrian walkway and at the southbound bike lane and traffic lanes of Carlsbad Boulevard. The viewer is at the Sycamore intersection. The ocean presents a magnificent horizon line, although the metal vertical-picket railing west of the upper walkway slightly screens the ocean view. **Simulation 3, Figure 16**, represents the proposed project features as they would be visible from southbound drivers and cyclists as well as pedestrians crossing the roadway. The existing guardrail has been removed as can seen by comparing the existing and proposed conditions. The new railing shown in the simulations is a proposed project feature that has greater transparency and therefore greater visibility for lower views to the beach..

## 6.5 Proposed Project Features

Most of the proposed project consists mainly of repairing or replacing existing features in-kind, with the exception of expanding the upper sidewalk 2.5 feet westward toward the bluff to accommodate heavy pedestrian traffic from passive and active recreational user groups.

The existing aluminum vertical picket railing would be replaced with a similar railing that meets applicable codes and would be attached to the shifted western edge of the upper sidewalk. The replaced vertical picket railing would be similar in appearance to the existing railing. The new railing would be the same height, and would have more, but smaller-diameter pickets resulting in a slightly less view blockage as the current condition.

The metal beam guardrail (MBGR) that extends between Carlsbad Boulevard and the upper sidewalk along the northern (approximate) half of the project area (between Pine Avenue and Cherry Avenue) would remain. The roadway safety barrier has been removed from all locations along the walk. Each of the simulated views show the previously proposed bike and traffic lane shifts that would result from the sidewalk's eastward expansion. The stairways and landing platforms would be replaced with stairs and landings of the same size and shape. The handrails edging the stairs and platforms would be replaced with similar railings and handrails that meet applicable codes and may include integrated downward facing lighting.

Project construction would disrupt some of the vegetation surrounding the staircases, landings, and sidewalks. Approximately three feet below the upper walkway, three feet above the lower walkway where the retaining walls would be expanded, one foot above the lower walkway where the curb is being replaced, and six feet on either side of the elevated stairways and platforms would be included in the construction zone and may be affected by construction activities. Any existing vegetation within these areas may be removed but would be replaced with the same species of shrubs that currently are growing on the slopes. The bare areas resulting from construction would be visible to pedestrians on the stairs and lower walkway until the new vegetation grows in to cover the soil.

# 6.6 Project Effects

While the upper sidewalk widened toward the bluff would be slightly more noticeable, the expanded walkway would not change the visual environment or the street-like character of the view. Views in this area currently encompass the roadway and sidewalk pavement, and the flat surfaces do not obstruct the ocean views. The views would remain unobstructed due to the widening. Removal of the roadway safety barrier would be one of the most noticeable new features of expanding the upper sidewalk toward the roadway. The resulting change to the visual environment would be positive in comparison.

Figure 13 Visual Impact Analysis



Candidate Key View 1
Southbound view from the west side of Carlsbad Boulevard



Southbound view from the west side of Carlsbad Boulevard north of Pine Avenue



Candidate Key View 3
Westbound view from the north side of Pine Avenue at
Carlsbad Boulevard



**Candidate Key View 4**Southbound view from east side of Carlsbad Boulevard at Pine Avenue



Candidate Key View 5 Southbound view from west side of Carlsbad Boulevard crosswalk at Pine Avevenue



**Candidate Key View 6**Southbound view from west side of Carlsbad Boulevard crosswalk at Pine Avevenue

Visual Impact Analysis Figure 13



Candidate Key View 7 Northward view from west side of Carlsbad Boulevard south of Pine Avenue



Candidate Key View 8

Northwestward view from east side of Carlsbad Boulevard at
Walnut Avenue



Candidate Key View 9

Northbound view from west side of Carslbad Boulevard at

Walnut Avenue



**Candidate Key View 10** *Northbound view from center of Carlsbad Boulevard at Sycamore* 



Candidate Key View 11
Southbound view from center of Carslbad Boulevard at Sycamore

A red outline indicates a Key View selected for Simulation

The widened upper sidewalk and railing replacement between Pine Avenue and Cherry Avenue would be visible to all viewer groups: pedestrians, motorists, bicyclists, and residents. The stairway and landing replacement would be visible only to pedestrians. The replaced-in-kind elevated stairways and landing platforms would have the same footprint as the existing stairs and landings and would not obstruct scenic views. The stair handrails and railings surrounding the landing platforms would be the same height and be similar in appearance to the existing handrails and railings, and the change would not be highly visible. In general, these changes would be considered positive from an aesthetic impact standpoint.

The handrails and railings surrounding the landings could accommodate down-lighting from under the top rail, to shine on stairs and pavement surfaces of the landings. This lighting, if included, would be new, and would be visible from the lower sidewalk and beach area when looking up the slope. A small portion of the lighting may be visible at the top of the stairs where they meet the upper sidewalk as well. The lighting would be shielded to prevent glare when seen from below and directed to shine only on the stairs and pavement, to prevent any light spill into the native vegetation areas surrounding the stairs and platforms.

The small extensions of existing retaining walls on the east side of the lower walkway are underneath the existing elevated stairways and would match the existing retaining walls, and the resulting change to the visual environment would be minor.

The vegetation within the construction area at the edges of the sidewalk and stairs may be removed but would be replaced with similar species of shrubs to those currently growing on the slope. The change would be minor, and temporary. It is anticipated that the vegetation would cover the disturbed areas in approximately the same density as the existing vegetation within five years.

# 7.0 DETERMINATION OF SIGNIFICANCE

# 7.1 Summary of Impacts

The proposed project would have no impact on scenic vistas or scenic resources and would comply with applicable policies and regulations governing scenic quality. The basis threshold questions that need to be asked includes the following criteria:

#### 7.1.1 Criterion 1: Have a substantial adverse effect on a scenic vista.

The visual setting within which the proposed project is located in is highly scenic area. The ocean views immediately west of the project are highly valued with all areas of the project site providing ocean vistas. None of the proposed project features would obstruct the available scenic vistas. The replaced vertical picket railing along the upper walkway is planned to have smaller pickets, and thus may increase the visibility of the ocean views when looking through the railing.

The proposed project would have no impact on scenic vistas.

# 7.1.2 Criterion 2: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

The proposed project is not located near or within a scenic highway corridor, however it is a scenic resource as seen from Carlsbad Boulevard. The area surrounding the project does not support rock outcroppings or historic buildings, and the proposed project would not impact any such resources.

The proposed project would not have a negative or signi icant impact on scenic resources.

BEACH ACCESS REPAIR PROJECT

Key View Location Map

Visual Impact Analysis Figure 14



Figure 15 Visual Impact Analysis



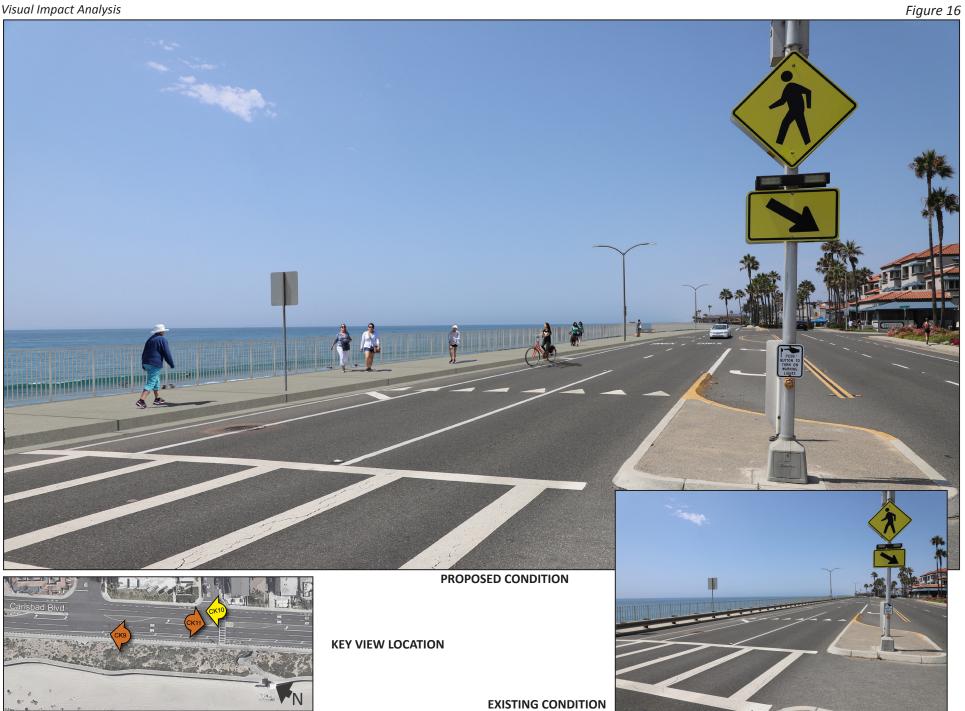


Figure 17 Visual Impact Analysis



7.1.3 Criterion 3: Substantially degrade the existing visual character or quality of public views of the site and its surroundings. If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

As discussed above, the proposed project features would create minor changes to the visual environment, character, and quality of public views of the site and its surrounding. The most noticeable changes that would result from the proposed project would be the widened upper sidewalk as well as the removal of the existing roadway barrier. These changes would be visible to the public, particularly pedestrians, motorists, and bicyclists. The increased, more slightly open views of the ocean resulting from the proposed changes would result in an increase in the quality of the public views available in this area.

None of the proposed changes would degrade the existing visual character or quality of the site and its surroundings and therefore would not impact the existing visual character or quality of public views.

The proposed project is located in an urbanized area, and the applicable zoning and other regulations governing scenic quality have been listed above in **Section 4.0**, **Regulatory Setting.** The project's conformance with these regulations is outlined in **Table 2**, **Policies and Guidance.** 

The project would not conflict with applicable zoning and other regulations governing scenic quality and would result in no impact since the project is in conformance with all applicable policies.

Table 2: Policies and Guidance

	REGULATION		
California Coastal Act	POLICY	PROJECT CONFORMANCE	CONFORMS?
	Public Resources Code Sec	tion 30001.5	
City of Carlsbad	(a) Protect, maintain, and, where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.	The proposed project maintains the quality of the coastal zone and enhances the artificial resources by repairing and upgrading access.	Yes
Zoning Ordinance Chapte	er 21.40 S-P Scenic Preservation Ov	erlay Zone	
	21.40.135 Coastal Zone F	Restrictions	
Zoning Ordinance Chapter 21.204 Coast Shoreline Development Overlay Zone 21.204.100 Site Plan Review Criteria	Within the coastal zone, existing public views and panorama shall be maintained. Through the individualized review process, sites considered for development shall be conditioned so as to not obstruct or otherwise damage the visual beauty of the coastal zone. In addition to the above, height limitations and see-through construction techniques should be employed. (Ord. NS-365 § 5, 1996).	The proposed project does not obstruct views of the ocean or coastal area and maintains panoramic public views.	Yes

REGULATION						
California Coastal Act	POLICY	PROJECT CONFORMANCE	CONFORMS?			
General Plan Chapter 2.0 Land Use and Community Design	The site plans required by Section 21.204.090 shall be reviewed and evaluated by the city planner for conformance with the following criteria:  A. Coastal Development Regulations. All elements of the proposed development are consistent with the intent and purpose of the coastal shoreline development overlay zone.  B. Appearance. Buildings and structures will be so located on the site as to create a generally attractive appearance and be agreeably related to surrounding development and the natural environment.  C. Ocean Views. Buildings, structures, and landscaping will be so located as to preserve to the degree feasible any ocean views as may be visible from the nearest public street.	A. The proposed project includes mainly replacement of existing features, and thus are consistent with the intent and purpose of the coastal shoreline development overlay zone.  B. The proposed project does not include any structures. It does include the replacement of the shrubs that may disturbed by construction with vegetation of the same type.  C. The proposed project features (railings, and vegetation) will not obstruct ocean views from the nearest public street (Carlsbad Boulevard).	Yes			

Table 2: Policies and Guidance CONTINUED

REGULATION						
California Coastal Act	POLICY	PROJECT CONFORMANCE	CONFORMS?			
General Plan Chapter 2.0 Land Use and Community Design	D. Retention of Natural Features. Insofar as is feasible, natural topography and scenic features of the site will be retained and incorporated into the proposed development.  E. Grading and Earth-Moving. Any grading or earth-moving operations in connection with the proposed development are planned and will be executed so as to blend with the existing terrain both on and adjacent to the site.  F. Public Access. The policies of the local coastal program pertaining to public access have been carried out. (Ord. CS-164 § 10, 2011; Ord. NS-365 § 22, 1996)	D. The natural topography of the slope between the upper and lower sidewalks will be retained, and not be disrupted or disturbed by the proposed project features.  E. The proposed project includes only earthmoving to repair existing erosion and will blend with existing terrain.  F. The proposed project retains and enhances public access to the coastal area.	Yes			

7.1.4 Criterion 4: Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The proposed project would not include any changes to lighting along the upper sidewalk or the lower walkway. The replaced stairway handrails and landing platform railings may include low-level lighting shining from the upper rail onto the stairs and the landing platform. If included, the down-lighting would be a new source of light seen from the stairs, landings, and lower walkway. The down-lighting at the top of the elevated stairs where they meet the upper sidewalk may be visible from street level at four locations along Carlsbad Boulevard, and by nearby residences as well. The proposed lighting would be a low lumen light addition that would not create any nuisance glare or lighting spill over beyond a few feet from the light source and would not be uplighted that could result in driver, pedestrian or bike travelers.

Carlsbad Boulevard and the upper sidewalk are currently lit with tall, double-fixture streetlights. The proposed railing down-lighting, if included in the proposed project, would be noticeable, but would not increase the levels of night lighting in the project area nor would they dominate, spill over or combine with other incompatible light sources. The railing down-light fixtures have the potential to be visible from the lower walkway, and to create night lighting when viewed from below. However, the lights would low-output, shielded LEDs, with integrated materials designed to diffuse the light and reduce any glare.

The proposed down-lighting, if included in the project, would not create a new source of substantial light or glare, would not adversely affect nighttime views, and would result in a low light or glare impact.

Metal surfaces on site features such as polished aluminum railing, could have the potential to reflect sunlight in such a way as to disrupt views. The potential for glare can be reduced by painting using a non-polished matte anodized finish. The proposed features, therefore, would not create a new source of glare in daytime views, and would be limited to a low visual impact.

# 8.0 CONSTRUCTION PERIOD IMPACTS

# 8.1 Proposed Project Elements that Reduce the Impact

Construction of the proposed Project will be phased to maintain public access to the beach over the duration of the Project. The proposed construction staging, and lay down area is proposed within a grassy area/lawn along the west side of Carlsbad Boulevard. The area was minimized as much as possible to allow for efficient construction while limiting impacts to beach access and coastal resources.

The construction of the Project is estimated to take approximately 20 months. No on site work is proposed during the summer months (i.e., between Memorial Day through Labor Day) to minimize recreational impacts. The anticipated construction equipment that may be required for the Project include the following: work trucks; dump trucks; backhoe; portable generator; traffic control signage; crane; concrete saw, mixer and pump; long reach excavator; semi-trailer flatbed; skid steer; and material handler.

Work is anticipated to take place along the western edge/shoulder of Carlsbad Boulevard; no beach work is proposed. Given the proposed work area, the Project is anticipated to require traffic control measures during construction, such as the temporary closure of lanes along Carlsbad Boulevard. Traffic control measures necessary to accomplish the work will require a traffic control permit from the City and will be the responsibility of the selected contractor. Lateral and vertical beach access will be maintained to Carlsbad State Beach during all construction activities.

Phased construction will also allow one southbound lane of traffic to remain open during the upper sidewalk repairs and widening. Demolition, removal, and construction of the upper sidewalk and elevated stairways and platforms will require the use of a large crane, material handlers, and long reach excavators as well as other specialized equipment.

The construction trucks, generators, signs, and any other equipment would be highly visible during the construction period. Railings surrounding the construction site to control pedestrian traffic would potentially block ocean views from the upper sidewalk and from Carlsbad Boulevard as well, potentially degrading and the existing visual character and quality of public views of the site and its surroundings and having a negative effect on scenic vistas.

Construction of the project, however, is planned to occur in phases, to include one half of the project in one phase, and the other half in the second phase. This would ensure that public access to the lower walkway and beach are available at all times, even while portions of the upper walkway are blocked. Additionally, construction is planned to occur outside the busiest times of the year, when fewer people are present to see the equipment or have views blocked by railings and vehicles.

Each construction phase is anticipated to occur within approximately five months. This would ensure that construction impacts, while potentially substantial, would be brief.

Therefore, due to the anticipated limited time frame of construction impacts, temporary construction period visual impacts would be less than significant and not permanent.

## 9.0 MITIGATION MEASURES

No visual impacts would occur due to the proposed project, therefore no mitigation measures are required.

# 10.0 REPORT PREPARERS

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