

IV. Environmental Impact Analysis



IV. Environmental Impact Analysis

A. Aesthetics

1. Introduction

This section describes the existing visual setting of the proposed TCN Structures and vicinity within the context of the surrounding community; identifies applicable laws, regulations, guidelines and policies relating to aesthetics; and evaluates potential aesthetic impacts related to implementation of the Project, including potential impacts to views of scenic vistas, the Project's consistency with regulations governing scenic quality, and the Project's potential to create a new source of substantial light and glare. These topics are described in more detail below. The Project's impact related to potentially damaging scenic resources within a scenic highway was fully evaluated in the Initial Study prepared for the Project included in Appendix A of this Draft EIR, and determined to result in no impact. This analysis included in the Initial Study prepared for the Project is summarized below. The analysis of light and glare provided below is based on the Metro TCN Lighting Study (Lighting Study) prepared by Francis Krahe & Associates, Inc. dated August 2022 and included as Appendix B to this Draft EIR.

The following provides an overview of the environmental topics related to aesthetics that are evaluated in this section of the Draft EIR.

a. Scenic Vistas

The term "scenic vista" generally refers to visual access to, or the visibility of, a particular sight from a given vantage point or corridor. The Los Angeles County Metropolitan Transportation Authority (Metro) recognizes the value of preserving sightlines (view access) to designated scenic resources or subjects of visual interest from public vantage points. The subjects of valued or recognized views may be focal (meaning of specific individual resources), or panoramic (meaning broad geographic area). The nature of a view may be unique, such as a view from an elevated vantage point or particular angle. Existing views may be focused on a single feature, such as a building or garden, or panoramic encompassing a broad field of view, such as ocean/coastal views, distant mountain range, or hilltop ridgelines.

b. Scenic Resources

Scenic resources refer to natural or manmade features of high aesthetic quality. Such features can include landscaping, heritage trees, or natural trees and landforms, as well as historic buildings and other structures with aesthetic value. Pursuant to CEQA Guidelines Appendix G, this area of consideration includes specific mention of such natural or manmade features when they are located within the viewshed of a State scenic highway.

c. Scenic Quality

Scenic quality refers to the visual appeal of an area and is informed by features that contribute to overall aesthetic character. Aesthetic features may include unique or prominent natural or man-made attributes or several small features that, when viewed together, create a whole that is visually interesting or appealing. The City has plans, policies and regulations that are relevant to the assessment of scenic quality. Accordingly, the analysis of the Project's consistency with regulations governing scenic quality is based on the local plans, policies, and regulations that address aesthetic-related topics. The regulations that are applicable to the Site Locations include the City of Los Angeles General Plan Framework Element and Conservation Element, the Community Plans, the Citywide Urban Design Guidelines, and the Los Angeles Municipal Code.

d. Visual Character

The analysis of visual character focuses on the Project's visual relationship with existing and planned land uses in the vicinity of the Site Locations. The analysis considers qualities related to visual character and the general composition of aesthetic features, as well as the relationships between these elements. The analysis also considers both natural and man-made features with aesthetic value. In addition, the loss of existing features of aesthetic value and the introduction of contrasting features that contribute to a decline in overall visual character (e.g., the introduction of contrasting features that overpower familiar features, eliminate context or associations with history, or create visual incompatibility where there may have been apparent efforts to maintain or promote a thematic or consistent character) are considered.

e. Light and Glare

Sources of artificial light that operate during evening and nighttime hours may include streetlights, illuminated signage, vehicle headlights, and other point sources. Uses, such as residences, are considered light-sensitive since they are typically occupied by persons who have an expectation of darkness and privacy during evening hours and who can be disturbed by bright light sources.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light from highly polished surfaces, such as window glass or reflective materials, and, to a lesser degree, from broad expanses of light-colored surfaces. Glare can also be produced during evening and nighttime hours by artificial light directed toward a light-sensitive land use. Activities, such as driving, and land uses, such as parks and residences, are considered glare sensitive as the presence of glare could interfere with vision and/or result in an irritant to these activities/uses.

In addition, the following definitions are relevant to the analysis of light and glare provided further below:

- Brightness:** The attribute of a visual sensation according to which an area appears to emit more light or less light. The magnitude of sensation results from viewing a source of light. This sensation is determined partly by the source of light and partly by the conditions of observation (context). The context establishes the state of adaptation of the eye. For example, auto head lamps appear bright at night and dim during the day because the eye adapts to the higher brightness of daylight.
- Candela:** The Standard International (SI) unit of luminous intensity. One candela is one lumen per steradian (lm/sr). Candela is a measure of light energy from a source at a specific standard angle and distance. Candela (cd) is a convenient measure to evaluate output of light from a light source in terms of both the intensity of light and the direction of travel of the light energy away from the source.
- Luminous Flux:** Mean value of total candelas produced by a light source. Luminous Flux describes the total amount of light emitted by a light source, units Lumen (lm).
- Illuminance:** Illuminance is the means of evaluating the density of Luminous Flux. Illuminance indicates the amount of Luminous Flux from a light source falling on a given area. Illuminance is measured in footcandles (fc) which is the lumens per square foot, or Lux (lumens per square meter). Illuminance need not necessarily be related to a real surface since it may be measured at any point within a space. Illuminance is determined from the Luminous intensity of the light source. Illuminance of a point source decreases with the square of the distance from the light source.

- Light trespass:** Electric light from subject property incident onto adjacent properties, measured in footcandles or lux, usually analyzed by measurement at or near the adjacent property line.
- Vertical Illuminance:** Illuminance incident upon a vertical plane. The orientation of the illuminance meter or calculation point will be 90° from nadir.
- Luminance:** Luminance is a measure of emissive or reflected light from a specific surface in a specific direction over a standard area. Luminance is measured in footlamberts (fL) ($1/\pi$ candela per square foot) or cd/m^2 (candela per square meter), $1 \text{ fL} = 3.43 \text{ cd}/\text{m}^2$.
- Contrast:** Calculated comparison ratio of luminance, where luminance of a subject is compared to a second luminance of an adjacent subject, or to the average luminance within the field of view of an observer. High contrast, where the ratio exceeds 30 to 1, is usually deemed uncomfortable; contrast ratios greater than of 10 to 1 are clearly visible; and contrast ratios less than 3 to 1 appear to be equal.
- Glare:** The sensation produced by luminance within the visual field that are sufficiently greater than the luminance to which the eyes are adapted to cause annoyance, discomfort, or loss in visual performance or visibility. It should be noted that the magnitude of the sensation of glare depends on such factors as the size, position, and luminance of a source; the number of sources; and the luminance to which the eyes are adapted.
- Glare is visual discomfort experienced from high luminance or high range of luminance. For exterior environments at night, glare occurs when the range of luminance in a visual field is too large. The light energy incident at a point is measured by a scale of footcandles or lux, and is described in the technical term Illuminance. This incident light is not visible to the eye until it is reflected from a surface, such as pavement, wall, dust in the atmosphere or the surface of a light bulb. The visible brightness of a surface is measured in footlamberts (or metric equivalent candelas per square meter) and is described by the term Luminance.
- The human eye processes brightness variations across a very broad spectrum of intensities. The range of brightness generated by direct noon sun versus a moonlight evening is over 5,000 to 1. Human

eyes are capable of accommodating to this range of intensities given adequate time to adjust. However, the eye cannot process brightness ratios of more than 30 to 1 within a view without discomfort.

2. Environmental Setting

a. Regulatory Framework

There are several regulations and plans that include policies, requirements, and guidelines that relate to aesthetics at the state, local levels. As described below, these regulations and plans that are applicable to the Project include the following:

- California Code of Regulations, Title 24
- California Vehicle Code, Division 11. Rules of the Road
- California Scenic Highways
- California Historic Parkways
- General Plan Framework Element
- General Plan Conservation Element
- Community Plans
- Los Angeles Municipal Code
- Illuminating Engineering Society of North America (IESNA) Recommended Practices

(1) State

(a) California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, includes regulations for all exterior lighting throughout the State of California, including requirements related to outdoor sign lighting. The 2022 California Code of Regulations, Title 24, includes the regulations which mandate limits to light trespass and glare at any new sign or building property line or center line of adjacent transportation right of way according to the outdoor lighting zones adopted by CEC. However, the CEC grants exceptions to Signs which comply with the energy use and lighting controls requirements within CEC Sections 130.0 following requirements regarding outdoor light pollution, which pertain to outdoor sign lighting.

California Green Building Standards (CALGreen) Code, Chapter 5, paragraph 5.106.8, Light Pollution reduction stipulates compliance with the California Energy Code (CEC) for Lighting Zones 0-4 for light trespass and Backlight, Uplight, and Glare as per IES TM-15-11. However, Exception 1 allows for exclusion as noted in Section 140.7. As described in detail in the Lighting Study, the Signs comply with the exceptions to Section 140.7(a), and therefore qualifies as an exception to the light trespass and glare requirement defined in Section 5.106.8. Therefore, the CEC light trespass and glare limits do not apply to the proposed TCN Structure's digital displays, and the Lighting Study does not further analyze the Project's light trespass or glare with respect to the CEC requirements for outdoor lighting.

(b) California Vehicle Code, Division 11. Rules of the Road

Chapter 2, Article 3 of the California Vehicle Code (CVC) stipulates limits to the location of light sources that may cause glare and impair the vision of drivers as follows:

ARTICLE 3. Offenses Relating to Traffic Devices [21450–21468] (Article 3 enacted by Stats. 1959, Ch. 3.), Section 21466.5. No person shall place or maintain or display, upon or in view of any highway, any light of any color of such brilliance as to impair the vision of drivers upon the highway. A light source shall be considered vision impairing when its brilliance exceeds the values listed below.

The brightness reading of an objectionable light source shall be measured with a 1 1/2-degree photoelectric brightness meter placed at the driver's point of view. The maximum measured brightness of the light source within 10 degrees from the driver's normal line of sight shall not be more than 1,000 times the minimum measured brightness in the driver's field of view, except that when the minimum measured brightness in the field of view is 10 foot-lamberts or less, the measured brightness of the light source in foot-lambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver's line of sight and the light source.

(c) California Scenic Highways

Appendix G of the CEQA Guidelines identifies substantial damage to a scenic resource within a California Scenic Highway as a potentially significant impact on the environment. The regulations for the establishment and maintenance of State Scenic Highways are set forth in Streets and Highways Code Section 260 et seq. The intent of this regulation is to establish the State's responsibility for the protection and enhancement of California's natural scenic beauty by identifying those portions of the state highway system which, together with the adjacent scenic corridors, require special scenic conservation treatment. By designating scenic highways, the California Legislature assigns responsibility for the development of such scenic highways and for the establishment and application of

specific planning and design standards and procedures appropriate to the location and extent of routes and areas requiring continuing and careful coordination of planning, design, construction, and regulation of land use and development, by state and local agencies, in order to protect the social and economic values provided by the State's scenic resources. Streets and Highways Code Section 263 establishes the system of State Scenic Highways and composes a list of the highways specified under the system. The only State Scenic Highway within the City of Los Angeles includes portions of the Topanga Canyon State Scenic Highway (State Route 27, between mile markers 1.0 and 3.5) whose boundaries lie within Topanga State Park. No TCN Structures are proposed along this State Scenic Highway and thus no further discussion of this topic is required in this analysis. In addition, road segments within the City of Los Angeles that are listed as "eligible" for scenic highway designation in the Scenic Highway System List, such as the Pacific Coast Highway, do not fit the CEQA criteria for State scenic highways and the Project is not located adjacent to these highways.¹

(d) California Historic Parkways

Streets and Highways Code Section 280 regulates the designation and maintenance of the system of California Historic Parkways. In order to be designated as a Historic Parkway, a freeway must have (1) original construction completed prior to 1945; (2) features of historical significance as recognized by the State Office of Historic Preservation, including notable landmarks, historical sites, or natural or human achievements that exist or have occurred during the original construction of the parkway or in the immediately adjacent land area through which the parkway currently passes; (3) any portion of the highway or corridor bound on one or both sides by federal, State, or local parkland, Native American lands or monuments, or other open space, greenbelt areas, natural habitat or wildlife preserves, or similar acreage used for or dedicated to historical or recreational uses; and (4) any portion of the highway traversed, at the time of designation and by Caltrans's best count or estimate using existing information, by not less than 40,000 vehicles per day on an annual daily average basis.

The only designated Historic Parkway within the City of Los Angeles, the Arroyo Seco Parkway (California State Route 110) runs northeasterly from the four-level interchange with US-101 just outside of downtown Los Angeles (mile post 23.69) to East Glenarm Street in the City of Pasadena (mile post 31.89). There are no TCN structures proposed along this designated Historic Parkway, and, thus, no further discussion of the Project's consistency with this regulation is required.

¹ Caltrans, *Scenic Highways*, <https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aaca>, accessed August 2, 2022.

(2) City of Los Angeles

(a) *General Plan Framework Element*

The City of Los Angeles General Plan Framework Element (Framework Element), adopted in December 1996 and readopted in August 2001, establishes the conceptual basis for the City's General Plan.² The Framework Element provides direction regarding the City's vision for growth and includes an Urban Form and Neighborhood Design chapter to guide the design of future development.³ Although the Framework Element does not directly address the design of individual neighborhoods or communities, it embodies broad neighborhood design policies and implementation programs to guide local planning efforts. The Framework Element also states that the livability of all neighborhoods would be improved by upgrading the quality of development and improving the quality of the public realm (Objective 5.5).⁴

Chapter 5 of the Framework Element, Urban Form and Neighborhood Design, establishes a goal of creating a livable city for existing and future residents with interconnected, diverse neighborhoods.⁵ "Urban form" refers to the general pattern of building heights and development intensity and the structural elements that define the City physically, such as natural features, transportation corridors, activity centers, and focal elements. "Neighborhood design" refers to the physical character of neighborhoods and communities within the City.⁶ The Project's potential to conflict with the Framework Element is provided in Section IV.I, Land Use and Planning, of this Draft EIR. To the extent the policies included therein relate to aesthetics, including the physical appearance of development, the potential for the Project to conflict with these policies is also summarized later in this section.

(b) *General Plan Conservation Element*

The City's various landforms and scenic vistas are described in the General Plan Conservation Element. The hills and mountains within the City, and the Los Angeles River and its associated tributaries and floodplains, are identified as prominent topographic

² *City of Los Angeles Department of City Planning, General Plan Framework Element, originally adopted December 11, 1996, and readopted August 8, 2001.*

³ *City of Los Angeles Department of City Planning, General Plan Framework Element, Chapter 5, originally adopted December 11, 1996, and readopted August 8, 2001.*

⁴ *City of Los Angeles Department of City Planning, General Plan Framework, Chapter 5, Goal 5A, Objective 55, originally adopted December 11, 1996, and readopted August 8, 2001.*

⁵ *City of Los Angeles Department of City Planning, General Plan Framework, Chapter 5, Goal 5A, originally adopted December 11, 1996, and readopted August 8, 2001.*

⁶ *City of Los Angeles Department of City Planning, General Plan Framework, Executive Summary, originally adopted December 11, 1996, and readopted August 8, 2001.*

features. The Conservation Element defines scenic vistas or vistas as the “panoramic public view access to natural features, including views of the ocean, striking or unusual natural terrain, or unique urban or historic features.”⁷

(c) Community Plans

The 35 Community Plans established throughout the City collectively comprise the Land Use Element of the City’s General Plan. Community plans are intended to implement the policies of the Framework Element. Community plans include, among other provisions, guidelines regarding the appearance of development and the arrangement of land uses.

The site locations for the TCN Structures (Site Locations) are located within the Central City, Central City North, Silver Lake–Echo Park–Elysian Valley, Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass, North East Los Angeles, Boyle Heights, North Hollywood–Village Valley, Sun Valley–La Tuna Canyon, Arleta–Pacoima, Granada Hills–Knollwood, Sylmar, Encino–Tarzana West Los Angeles Community Plan, South Los Angeles, Southeast Los Angeles, Palms–Mar Vista–Del Rey, Westchester–Playa del Rey, Van Nuys–North Sherman Oaks, West Adams–Baldwin Hills–Leimert, and Wilshire areas and are generally designated and zoned as commercial, public facilities, and manufacturing uses. No Site Locations are zoned for residential use. Refer to Figures II-2 and II-3 of Section II, Project Description for the locations of the proposed TCN Structures.

(d) Los Angeles Municipal Code

The Los Angeles Municipal Code (LAMC) regulates all aspects of building development in the City, including aesthetic aspects, such as lighting and signage. As discussed further in Section IV.I, Land Use, of this Draft EIR, Article 4.4 of the LAMC regulates signs within the City. These regulations address various signage types, prohibited sign types, prohibited locations, maintenance, hazards to traffic as determined by LADOT, and freeway exposure. These regulations are not applicable to signs located primarily within a public right-of-way. With regard to lighting, Section 14.4.4.E of these regulations require that “No sign shall be arranged and illuminated in a manner that will produce a light intensity of greater than three-foot candles above ambient lighting, as measured at the property line of the nearest residentially zoned property.”

Article 3 of the LAMC also provides for Specific Plan – Zoning and Supplemental Use Districts. Within this Article, Section 13.11 provides for the establishment of “SN” Sign Districts in areas of the City, the unique characteristics of which can be enhanced by the

⁷ *City of Los Angeles Department of City Planning, General Plan Conservation Element, originally adopted September 26, 2001.*

imposition of special sign regulations designed to enhance the theme or unique qualities of that district, or which eliminate blight through a sign reduction program. Each “SN” Sign District shall include only properties in the C or M Zones, with some specified limited exceptions. The development regulations for each “SN” Sign District shall be determined at the time the district is established. The sign regulations shall enhance the character of the district by addressing the location, number, square footage, height, light illumination, hours of illumination, sign reduction program, duration of signs, design and types of signs permitted, as well as other characteristics, and can include murals, supergraphics, and other on-site and off-site signs. However, the regulations for a “SN” Sign District cannot supersede the regulations of an Historic Preservation Overlay District, a legally adopted specific plan, supplemental use district or zoning regulation needed to implement the provisions of an approved development agreement.

(e) Illuminating Engineering Society of North America—Recommended Practices

The Illuminating Engineering Society of North America (IESNA) produces illumination research and engineering standards that are widely recognized and accepted as best practices for the science of lighting research, lighting terminology definitions, and the methods of analysis and application of illumination engineering.

The IESNA reference publications include American National Standards Institute (ANSI)/Illuminating Engineering Society (IES) ANSI/IES OL-IM-03 Lighting Design Criteria and Illumination Recommendations, which provides definitions of lighting science and lighting applications; ANSI/IES LP-11-20 Environmental Considerations for Outdoor Lighting, which provides definition of light trespass and glare; and ANSI/LP 2-20 Designing Quality Lighting for People in Outdoor Environment, which summarizes research of light affects on human health at night and provides guidelines for environmental regulations for outdoor lighting. These publications are the most recent supplements to the IESNA 10th Edition Lighting Handbook.

IES LP-11-20 defines outdoor lighting zones that describe the extent of human activity at night versus natural habitat (see Appendix C of the Lighting Study) for a range of existing lighting conditions, from low or no existing lighting to high light levels in urban areas. Lighting zones are included in the CEC as noted above in relation to allowable energy use for outdoor lighting. In addition, the IESNA 10th Edition Lighting Handbook defines recommended light trespass limits in Table 26.5, included in the Appendix D of the Lighting Study, relative to the Outdoor Lighting Zones. The recommended light trespass illuminance limits define the maximum light trespass values in lux at the location where trespass is under review.

The existing conditions surrounding the proposed TCN Structures are best described as Lighting Zone 3. IESNA Table 26.5 lists a Pre-curfew 8 Lux (0.74 footcandles) maximum at the location where trespass is under review for Zone 3.

b. Existing Conditions

(1) Scenic Vistas

As described above, a scenic vista is generally described as a panoramic view (visual access to a large geographic area) of visual resources or a focal view of a specific individual resource. Examples of panoramic views of visual resources might include an urban skyline, valley, mountain range, the ocean, or other water bodies. Long range views of visual resources are present in the vicinity of several of the Site Locations. However, these views are limited by intervening development located along the freeways and roadways. In particular, views of the Santa Monica Mountains, the Verdugo and San Gabriel Mountains, the Kenneth Hahn State Recreation Area, and the Downtown Los Angeles Skyline, are intermittently available along portions of the freeways and major roadways where the TCN Structures are proposed. Focal views of the Los Angeles River and historical resources are also available in the vicinity of several of the Site Locations. As discussed above, the Site Locations are not located adjacent to any State scenic highways.

(2) Visual Character

The Site Locations are located within property owned and operated by Metro along freeways and major streets, within the City. A portion of the Site Locations contain existing static displays. As shown in the aerial photographs provided for each of the Site Location in Figures III-1 through III-15 in Section III, Environmental Setting of this Draft EIR, the majority of the Site Locations are located on vacant land with limited vegetation and are generally inaccessible to the public.

As shown in the Site Photographs provided in Figure IV.A-1 through Figure IV.A-15 on pages IV.A-12 through IV.A-26, the proposed Site Locations are used primarily for Metro operations, which include rail corridors, stations, parking, bus depots, and equipment lots. The specific locations where the TCN Structure would be placed (i.e., the 10-foot by 10-foot location for the TCN Structure) do not include any trees or other valued aesthetic features.

Valued aesthetic features present within the vicinity of several Site Locations include historical resources, the Ballona Wetlands, and the Los Angeles River. Specifically, as discussed in detail in Section IV.D, Cultural Resources, 17 of the 56 Site Locations are located within 328 feet (100 meters) of a known historic resource. Site Locations FF-29 and FF-30 occur approximately 150 feet from the northeastern edge of the Ballona Wetlands, within an area mapped as non-wetland habitat. In addition, the LA River flows within 300 feet



FF-1: US-101 North Lanes at Union Station



FF-2: US-101 South Lanes at Center Street



FF-3: Northwest corner of Lankershim Boulevard and Chandler Boulevard



FF-4: US-101 South Lanes at Beaudry Avenue

Figure IV.A-1

Street View - Freeway Facing Site Location No. 1 through Freeway Facing Site Location No. 4



FF-5: US-101 North Lanes, Northwest of Lankershim Boulevard



FF-6: I-5 South Lanes at North Avenue 19



FF-7: I-5 North Lanes at San Fernando Road



FF-8: I-5 South Lanes and Exit Ramp to I-10

Figure IV.A-2

Street View - Freeway Facing Site Location No. 5 through Freeway Facing Site Location No. 8



FF-9: I-10 West Lanes (Bus Yard)



FF-10: I-10 West Lanes and Entrance Ramp from I-5



FF-11: I-10 East Lanes and Exit Ramp to SR-60 and I-5



FF-12: I-10 West Lanes at Griffith Avenue and East 16th Street

Figure IV.A-3

Street View - Freeway Facing Site Location No. 9 through Freeway Facing Site Location No. 12



FF-13: SR-2 South Lanes Northeast of Casitas Avenue



FF-14: SR-2 North Lanes Northeast of Casitas Avenue



FF-15: SR-170 South Lanes at Raymer Street



FF-16: SR-170 North Lanes North of Sherman Way

Figure IV.A-4

Street View - Freeway Facing Site Location No. 13 through Freeway Facing Site Location No. 16



FF-17: I-5 North Lanes South of Tuxford Street



FF-18: I-5 South Lanes South of Tuxford Street



FF-19: SR-118 East of San Fernando Road



FF-20: SR-118 East of San Fernando Road

Figure IV.A-5

Street View - Freeway Facing Site Location No. 17 through Freeway Facing Site Location No. 20



FF-21: I-110 South Lanes at Exposition Boulevard



FF-22: I-5 North Lanes at San Fernando Road



FF-23: I-110 North Lanes at Exposition Boulevard



FF-24: I-5 South Lanes at San Fernando Road and Sepulveda Boulevard

Figure IV.A-6

Street View - Freeway Facing Site Location No. 21 through Freeway Facing Site Location No. 24



FF-25: I-405 South Lanes at Victory Boulevard



FF-26: I-405 North Lanes at Exposition Boulevard



FF-27: I-405 South Lanes at Exposition Boulevard



FF-28: I-10 West at Robertson Boulevard

Figure IV.A-7

Street View - Freeway Facing Site Location No. 25 through Freeway Facing Site Location No. 28



FF-29: SR-90 East at Culver Boulevard



FF-30: SR-90 West at Culver Boulevard



FF-31: I-105 West Lanes at Aviation Boulevard



FF-32: I-105 East Lanes at Aviation Boulevard

Figure IV.A-8

Street View - Freeway Facing Site Location No. 29 through Freeway Facing Site Location No. 32



FF-33: I-110 South Lanes at Slauson Avenue



FF-34: I-110 North Lanes at Slauson Avenue

Figure IV.A-9

Street View - Freeway Facing Site Location No. 33 through Freeway Facing Site Location No. 34



NFF-1: Northeast corner of Vermont Avenue and Sunset Boulevard



NFF-2: Spring Street Bridge, 326 feet North of Aurora Street



NFF-3: Northwest corner of Lankershim Boulevard and Chandler Boulevard



NFF-4: Northwest corner of Lankershim Boulevard and Universal Hollywood Drive

Figure IV.A-10

Street View - Non-Freeway Facing Site Location No. 1 through Non-Freeway Facing Site Location No. 4



NFF-5: Southwest corner of Lankershim Boulevard and Universal Hollywood Drive



NFF-6: Southwest corner of 4th Street and Hill Street



NFF-7: Venice Boulevard, 240 feet West of Robertson Boulevard



NFF-8: Southeast corner of Alameda Street and Commercial Street

Figure IV.A-11

Street View - Non-Freeway Facing Site Location No. 5 through Non-Freeway Facing Site



NFF-9: Northeast corner of Van Nuys Boulevard and Orange Line Busline



NFF-10: Southeast corner of Sepulveda Boulevard and Erwin Street



NFF-11: Southwest of Crenshaw Boulevard, 175 feet South of 67th Street



NFF-12: Southeast corner of Crenshaw Boulevard and Exposition Boulevard

Figure IV.A-12

Street View - Non-Freeway Facing Site Location No. 9 through Non-Freeway Facing Site Location No. 12



NFF-13: Southeast corner of East Cesar Chavez Avenue and North Vignes Street



NFF-14: Pico Boulevard and Exposition Boulevard, South of rail



NFF-15: Pico Boulevard, 445 feet West of Sawtelle Boulevard



NFF-16: Southeast corner of South Central Avenue and East 1st Street

Figure IV.A-13

Street View - Non-Freeway Facing Site Location No. 13 through Non-Freeway Facing Site Location No. 16



NFF-17: Century Boulevard, 152 feet West of Aviation Boulevard



NFF-18: Southwest Aviation Boulevard and South of Arbor Vitae Street



NFF-19: Northwest corner of Vermont Avenue and Beverly Boulevard



NFF-20: Southwest corner of Santa Monica Boulevard and Vermont Avenue

Figure IV.A-14

Street View - Non-Freeway Facing Site Location No. 17 through Non-Freeway Facing Site Location No. 20



NFF-21: South of 4th Street 210 feet East of South Santa Fe Avenue



NFF-22: Northwest corner of East 7th Street and South Alameda Street

Figure IV.A-15

Street View - Non-Freeway Facing Site Location No. 21 through Non-Freeway Facing Site Location No. 22

of six Site Locations within the Biological Resources Study Area: FF-3, FF-6, FF-7, FF-10, FF-11, and NFF-2. In these locations, the Los Angeles River is concrete-lined and is not anticipated to support riparian vegetation. The City does not typically consider the concrete-lined portions of the Los Angeles River to be a scenic resource.

The City has roughly 8,000 off-premise signs within its boundaries, the vast majority of which are static signs, with a large majority located along surface streets. These off-premise signs are predominantly along commercial and industrial thoroughfares, with roughly 500 signs located on residentially zoned properties. The vast majority of these off-premise signs pre-date the City's ban on new off-premise signs, which was enacted in 2002.

(3) Light and Glare

As part of the Lighting Study, field visits were conducted at each of the Site Locations to document existing conditions, including existing lighting and surrounding uses and features. The existing lighting in the vicinity of the Site Locations varies and includes a wide range of lighting for safety and security. Lighting within adjacent properties and roadway lighting on the adjacent right of way contribute to the ambient lighting conditions at all Site Locations. As discussed in detail in the Lighting Study and further in the impact analysis below, the majority of the Site Locations are not located in close proximity to residential uses.

Eleven monitoring sites, which are representative of the lighting of the other sites, were selected to evaluate the Site Locations located closest to sensitive uses. As discussed in the Lighting Study, existing illuminance (light spill) at these locations is considered low at all of the locations with the exception of the Monitoring Site FF-34A located at the corner of W. 58th Street and S. Grand Avenue that has a horizontal illuminance value of 6.580 fc, which is considered high, and Monitoring Site FF-28A located at 3600 Bagley Avenue and Exposition Boulevard with a horizontal illuminance value of 0.86 fc, which is considered medium.

As discussed in detail in the Lighting Study, luminance (glare) at the monitoring sites includes values that are in the medium contrast ranges with the exception of luminance at Monitoring Site FF-29A located at SR-90 and Culver Boulevard and Monitoring Site NFF-20A, which have a low contrast ratio.

3. Project Impacts

a. Thresholds of Significance

(1) State CEQA Guidelines Appendix G

In accordance with the State CEQA Guidelines Appendix G (Appendix G), the Project would have a significant impact related to aesthetics if it would:

Threshold (a): Have a substantial adverse effect on a scenic vista; or

Threshold (b): Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or

Threshold (c): In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or

Threshold (d): Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

For this analysis, the Appendix G Thresholds are relied upon. Note that since the TCN Structures are located in urban areas, the second portion of Threshold (c) is applicable to the Project. Nonetheless, as the Project includes an amendment to the City's zoning regulations, an analysis of the Project's potential to impact the visual quality or character of public views in the vicinity of the Site Locations is also provided.

With regard to light and glare, in the context of this question from Appendix G of the CEQA Guidelines and the determination of significance, the Lighting Study takes into account the following factors:

- The change in ambient nighttime levels as a result of project sources; and
- The extent to which project lighting would spill off the property and affect adjacent residential use properties or other light-sensitive use locations.

Specifically, the Project would create a significant impact with regard to artificial light or glare if:

- Light trespass illuminance from the Project at night exceeds 3.0 fc at a residential use property (LAMC Chapter 1, Article 4.4, Sec. 14.4.4 E: E.: “Sign Illumination Limitations”), and therefore adversely changes the nighttime ambient light level at residential properties; or
- Light trespass illuminance from the Project at night exceeds 3.0 fc at sensitive use properties such as hotel or hospital use properties with nighttime occupancy; or
- The Project creates glare with new high contrast conditions, with luminance greater than 300 cd/m² or contrast ratio greater than 30:1 at night, visible from a field of view from a residential use property or other sensitive use property; or
- The Project creates glare effects on drivers of motor vehicles, where maximum brightness of the TCN Structures within 10 degrees from the driver’s normal field of view is greater than 1,000 times the minimum measured brightness in the driver’s field of view, or when the minimum measured brightness in the field of view is 10 footlamberts or less, the measured brightness of the light source in footlambert exceeds 500 plus 100 times the angle, in degrees, between the driver’s field of view and the light source.⁸

b. Methodology

(1) Scenic Vistas

A significant impact would occur if the Project would have a substantial adverse effect on a publicly available scenic vista, particularly a panoramic view of areas that have visual interest. The analysis of this impact category includes a consideration of the following factors, as appropriate:

- The nature and quality of recognized or valued views (such as natural topography, settings, man-made or natural features of visual interest, and resources such as mountains or the ocean);
- The extent of obstruction (e.g., total blockage, partial interruption, or minor diminishment); and
- The extent to which the project affects recognized views available from a length of a public roadway, bike path, or trail, as opposed to a single, fixed vantage point.

⁸ *The driver’s field of view from the center of the roadway plus 10 degrees.”*

(2) Visual Character

Significant impacts to the visual character of a site and its surroundings is generally based on the removal of features with aesthetics value, the introduction of contrasting urban features into a local area, and the degree to which the elements of the Project detract from the visual character of an area. The analysis of this impact category will include a consideration of the following factors, as appropriate:

- The amount or relative proportion of existing features or elements that substantially contribute to the valued visual character or image of a neighborhood, community, or localized area, which would be removed, altered, or demolished;
- The amount of natural open space to be graded or developed;
- The degree to which proposed TCN Structures in natural open space areas would be effectively integrated into the aesthetics of the Site Location, through appropriate design, etc.;
- The degree of contrast between proposed features and existing features that represent the area's valued aesthetic image;
- The degree to which the Project would contribute to the area's aesthetic value; and
- The potential for the Project to conflict with applicable plan polices, guidelines and regulations that address design and aesthetic topics.

(3) Light and Glare

The analysis of light and glare is based on the Lighting Study included in Appendix B of this Draft EIR. The Lighting Study evaluates the Site Locations, digital display dimensions, and digital display operating characteristics. The Lighting Study performed detailed site surveys evaluating all 56 proposed TCN Structures and surrounding properties located at a distance near enough to the Site Locations to potentially receive significant light trespass or glare from the digital displays. Further, the Lighting Study conducted detailed modeling at sensitive use property locations where there may have been a potential for light trespass and or glare.

Light degrades exponentially with distance. Therefore, residential properties and other light-sensitive uses more distant from the digital displays would receive much less light than locations close to the displays. Site Locations were analyzed to determine the locations where residential and other light-sensitive uses are within a distance where light trespass may be significant.

As discussed in Section II, Project Description, of this Draft EIR, there are three prototype sign sizes that are proposed. These three prototypes were evaluated in comparison to a conservative maximum distance where light trespass from the display would be less than 0.3 fc or 10 percent of the 3.0 fc maximum light trespass permitted by the LAMC. The distance at which the 0.3 fc illuminance value would be triggered from each of the prototype sign sizes associated with the Site Locations is shown in Table IV.A-1 on page IV.A-32. Any residential or light-sensitive properties located beyond 340 feet, 270 feet, and 175 feet from the three proposed display sizes of 30 feet by 40 feet, 14 feet by 48 feet, and 10 feet by 30 feet, respectively, would not receive significant light trespass from the displays (i.e., light trespass above 0.3 fc) and do not need further study. Site Locations with light-sensitive uses located within these distances were further evaluated by detailed calculations through the illumination modeling software program AGI32. This software utilizes the 3-dimensional architectural computer model, including display locations, dimensions, and luminous specifications to generate an accurate prediction of future illuminance from the digital display at adjacent residential use properties. Light trespass illuminance is evaluated with respect to vertical illuminance at the locations where lighting is under review. The methods of analysis within the Lighting Study are based upon the recommended practices established by the IESNA for the practice of illumination engineering design and application, and the actual measurements of light sources and illuminated surfaces.

With regard to glare, the Project's potential to introduce a new source of glare is evaluated in the Lighting Study by comparing the maximum night time digital display luminance, which is set at 300 cd/m² to the existing luminance visible from the residential use properties where the digital displays are visible. The Project's potential for glare is also evaluated with respect to the requirements of the CVC, which regulates the maximum light source luminance which may affect the visibility of drivers on roadways as discussed in the regulatory framework subsection above.

c. Project Design Features

As discussed in Section II. Project Description of this Draft EIR, implementation of the Project would include the installation of up to 34 Freeway-Facing TCN Structures and 22 Non-Freeway Facing TCN Structures, all on Metro-owned property. The total maximum amount of digital display associated with the TCN Structures would be up to approximately 55,000 square feet. Freeway Facing TCN Structures would include signage that can be viewed from the highway, while Non-Freeway Facing TCN Structures would be viewed from major arterial streets. Each TCN Structure would have one or two faces depending on the location and line of sight visibility. The digital display faces would be designed to provide efficient and effective illumination while minimizing light spill-over, reducing sky-glow, and improving nighttime visibility through glare reduction. The digital display faces of the TCN Structures would use light emitting diodes (LED) lighting with a daytime maximum up to 6,000 maximum candelas and 300 maximum candelas at nighttime, depending on the Site

**Table IV.A-1
Light Trespass at 10 Percent of 3.0 fc Maximum Allowed by LAMC (0.3 fc)**

Sign Type	Sign Dimensions (feet)	Distance at 10% of 3.0 fc Allowed by LAMC (0.3 fc)
Freeway Facing Sign FF-1	30' x 40'	345'
Freeway Facing Signs FF-2 through FF-34	14' x 48'	270'
Non Freeway Facing Signs NFF-8, NFF-17 and NFF-18	14' x 48'	270'
Non Freeway Facing Signs NFF-1 through NFF-16, and NFF-19 through NFF-22	10' x 30'	175'
<i>Source: Francis Krahe & Associates, Inc., 2022.</i>		

Location. Louvers would be installed to shade the LED lights from creating unintentional light spillage, assist in reducing reflection, and in turn would create a sharper image. Further, the digital display faces would be set to refresh every eight seconds and would transition instantly with no motion, moving parts, flashing, or scrolling messages. Illumination of the digital displays would conform to applicable Federal and State regulations for signs oriented towards roadways and freeways. The digital displays would be in compliance with Metro's System Advertising Content Restrictions which prohibits advertisement of alcohol, smoking, and cannabis, and any content containing violence, obscenities, and other related subject matters. In addition, each TCN Structure would include security features, including elevated ladders at surface grade. Additionally, the TCN Structures would be constructed to incorporate environmentally sustainable features and construction protocols required by the Metro's Green Construction Policy, Los Angeles Green Building Code, CALGreen, and Title 24 standards. Refer to Table II-1, Table II-2, and Figure II-1 through Figure II-3 in Section II, Project Description, of this Draft EIR for a listing of the proposed Site Locations, digital display square footage, number of digital displays per TCN Structure, and dimensions of the digital displays.

Construction of the Project would commence with the removal of approximately 200 static displays located within the City and a minimum removal ratio of two square feet per each one square foot of new display constructed. Removal of the existing static displays would range in size from approximately 8-foot by 8-foot to approximately 10-foot by 30-foot in size.

d. Analysis of Project Impacts

Threshold (a): Would the project have a substantial adverse effect on a scenic vista?

(1) Impact Analysis

As discussed above, long-range views of visual resources are present in the vicinity of several of the Site Locations. However, these views are limited due to intervening development located along the freeways and roadways. In particular, views of the Santa Monica Mountains, the Verdugo and San Gabriel Mountains, the Kenneth Hahn State Recreation Area, and the Downtown Los Angeles Skyline, are intermittently available along portions of the freeways and major roadways where the Site Locations are proposed. More focal views include views of the Los Angeles River, the Ballona Wetlands, and views of historic resources. Specifically, the LA River flows within 300 feet of six TCN Structures: FF-3, FF-6, FF-7, FF-10, FF-11, and NFF-2. In these locations, the Los Angeles River is concrete-lined and is not anticipated to support riparian vegetation and is not considered by the City to be a scenic resource. TCN Structures FF-29 and FF-30 occur approximately 150 feet from the northeastern edge of the Ballona Wetlands, within an area mapped as non-wetland habitat. In addition, as discussed in detail in Section IV.D, Cultural Resources, of this EIR, 17 of the 56 Site Locations are located within 328 feet (100 meters) of a known historical resource.

With regard to Project construction impacts on scenic vistas, take down of the existing static displays and installation of the TCN Structures would occur in an urbanized area and would require a limited footprint and limited construction equipment. In addition, construction activities would be limited in duration (i.e., approximately a half day for taking down a sign and four weeks for installing a TCN Structure). As such, construction activities would not cause a permanent impact on a scenic vista.

As discussed above, once constructed, the Freeway Facing TCN Structures would include digital displays that can be viewed from the highway, while Non-Freeway Facing TCN Structures would be viewed from major streets. Each TCN Structure would have one or two faces depending on the location and line of site visibility. The digital display faces would be set to refresh every eight seconds and would transition instantly with no motion, moving parts, flashing, or scrolling messages. The digital displays would be in compliance with Metro's System Advertising Content Restrictions which prohibits advertisement of alcohol, smoking, and cannabis, and any content containing violence, obscenities, and other related subject matters. In addition, each TCN Structure would include security features, including elevated ladders at surface grade and other features to reduce the potential for graffiti.

As described in detail in Table II-1 of Section II, Project Description, of this EIR, the digital displays of the 34 Freeway Facing TCN Structures would be 14 feet in height and 48 feet in width with the exception of FF-1, which would be 30 feet in height and 40 feet in width. The heights of the Freeway Facing TCN Structures would range from 40 to 95 feet above grade. However, as several of the Freeway Facing Structures are located adjacent to elevated freeways or freeway on/off ramps, the Freeway Facing Structures would be located

up to a maximum 50 feet in height above finished grade of the adjacent highway. The displays of the Non Freeway Facing TCN Structures would generally be 10 feet in height and 30 feet in width, with the exception of NFF-8, NFF-17 and NFF-18, which would be 14 feet in height and 48 feet in width. The heights of the Non Freeway Facing TCN Structures would range from 30 to 85 feet above grade.

As described above and shown in Figure IV.A-1 through Figure IV.A-15 on pages IV.A-12 through IV.A-26, the Site Locations are within urban areas that have already been developed with roadway infrastructure, with surrounding buildings, sources of light, and in many cases existing signage. Based on the locations, size and heights of the proposed structures, the proposed displays would not block views of long range scenic vistas, such as the mountains or downtown skyline. Rather, the TCN Structures would be oriented to the freeway and roadway, where views of the digital displays would be brief and transitory. In addition, given their size and height, any obstruction of long-range scenic views from a public area, such as a sidewalk, would be limited. Furthermore, long-range views of the TCN Structures themselves would be limited due to surrounding development. Elimination of approximately 200 static displays that range in size from approximately 8-foot by 8-foot to approximately 10-foot by 30-foot and the reduction ratio of 2 square feet of existing displays for each square foot of new displays would also result in a net decrease in signage across the City. Many of these static displays to be removed are in a state of disrepair.

As shown in Figure IV.A-1 through Figure IV.A-3 on pages IV.A-12 through IV.A-14 and in Figure IV.A-10 on page IV.A-21, Site Locations FF-3, FF-6, FF-7, FF-10, FF-11, and NFF-2 that are located near the Los Angeles River are urban in nature. Existing utility lines, roadway infrastructure, rail lines, and buildings are the primary visual elements at these locations. In addition, the Los Angeles River is concrete-lined in the vicinity of these locations, and the City does not consider the concrete-lined portions of the Los Angeles River to be a scenic resource. With implementation of the Project, these predominant urban visual elements would remain. The TCN Structures would also be constructed such that the digital displays would be at a substantially higher grade than the Los Angeles River. Thus, based on their location and size, and existing urban visual elements to remain, the TCN Structures at Site Locations FF-3, FF-6, FF-7, FF-10, FF-11, and NFF-2 would not substantially obstruct views of the Los Angeles River from public locations. Thus, potential impacts to views of these more focal views of the Los Angeles River would be less than significant.

As shown in Figure IV.A-8 on page IV.A-19, Site Locations FF-29 and FF-30 are located on Metro properties immediately adjacent to SR-90 that are within a chain link fenced area. As discussed in Section IV.C, Biological Resources, of the Draft EIR, these Site Locations occur approximately 150 feet from the northeastern edge of the Ballona Wetlands, within an area mapped as non-wetland habitat. Site Location FF-29 is separated from the Ballona Wetlands by the SR-90 Freeway off-ramp and Site Location FF-30 is separated from the Ballona Wetlands by the SR-90 Freeway and the off-ramp. Given the orientation of the

digital displays to the SR-90 and the size of the displays, public views of the displays would primarily be from the SR-90 Freeway. In addition, given the location and size of the two TCN Structures, the intermittent and transitory views of the Ballona Wetlands from the SR-90 and other more distant public locations would be obstructed on a limited basis. Thus, potential impacts to views of the Ballona Wetlands would be less than significant.

As discussed in detail in Section IV.D, Cultural Resources, of this Draft EIR, the proposed TCN Structures at Site Locations NFF-2, NFF-3, NFF-16 and NFF-21 are located in close proximity to five historical resources, including the North Spring Street Bridge (Caltrans Bridge No. 53C0859), Lankershim Depot, the Little Tokyo Historic District, the Japanese Village Plaza, and the Fourth Street Bridge (Caltrans Bridge No. 53C0044). While the TCN structures would not physically impact these historical resources, the TCN structures would impede visibility of and thus detract from the character defining features of these five historical resources. While these historical resources are located within urban areas where public views of these historical resources are affected by existing infrastructure and buildings, for purposes of providing a conservative analysis, impacts on the scenic vistas of these historical resources are concluded to be significant as the proposed TCN Structures would further contribute to the urban visual components surrounding the historical resources. **As such, the Project would result in a substantial adverse effect on a scenic vista, and impacts would be significant.**

As to the other historical resources identified in Section IV.D, Cultural Resources of this Draft EIR, as discussed therein, these other historical resources are not located such that their visual setting or scenic views of these resources would be significantly impacted by the proposed TCN Structures.

(2) Mitigation Measures

Project-level impacts related to scenic views of historical resources would be significant. Review of potential measures to reduce the Project's significant impacts, such as modification to the size and height of the signs was considered. However, such modifications would not materially reduce these impacts. Rather, the primary way to substantially reduce these impacts would be to eliminate several of the Site Locations. Refer to Section V, Alternatives, of this Draft EIR for a discussion of alternatives that eliminate the Site Locations in order to substantially reduce the Project's impacts relative to scenic views.

(3) Level of Significance After Mitigation

No feasible mitigation measures have been identified. Therefore, Project-level impacts related to scenic vistas of historical resources were determined to be significant and unavoidable. Refer to Section V, Alternatives, for an analysis of alternatives that have been proposed to address this impact.

Threshold (b): Would the project substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings or other locally recognized desirable aesthetic natural feature within a state-designated scenic highway?

As discussed in Section VI, Other CEQA Considerations, of this Draft EIR, and evaluated in the Initial Study prepared for the Project, included in Appendix A of this Draft EIR, the Site Locations are located within property owned and operated by Metro along freeways and major streets within the City. The majority of the Site Locations are located on vacant land with limited vegetation and are generally inaccessible to the public. In addition, the Site Locations are not adjacent to any state-designated scenic highways. Thus, the Project would not result in the removal of any structures or trees or be located within a state scenic highway that may be considered scenic resources. **Therefore, as determined in the Initial Study, impacts with respect to scenic resources within a state-designated scenic highway would be less than significant.**

Threshold (c): In non-urbanized areas, would the Project 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.

(1) Impact Analysis

Note that for purposes of providing a conservative analysis, the analysis below focuses on the potential for the Project to substantially degrade the existing visual character or quality of public views of the site and its surroundings, as well as the potential for the Project to conflict with applicable zoning and other regulations governing scenic quality despite the fact that the TCN Structures are located in urban areas.

Visual Character and Quality of Public Views

As discussed above, the majority of the Site Locations are located on vacant land with limited vegetation and are generally inaccessible to the public. The Site Locations are located within property owned and operated by Metro along freeways and major streets within the City. As shown in the aerial photographs provided for each of the Site Locations in Figure III-1 through Figure III-15 in Section III, Environmental Setting, of this Draft EIR and the site photographs provided in Figure IV.A-1 through Figure IV.A-15 on pages IV.A-12 through IV.A-26, the majority of the Site Locations are used primarily for Metro operations which include rail corridors, stations, parking, bus depots, and equipment lots. None of the Site Locations are zoned for residential uses and the majority of the Site Locations are not located in close proximity to residential uses. For those locations that are in closer proximity

to residential uses, the displays would not be facing the residential uses and would be oriented to the roadway and not the residential use.

As discussed above, the Freeway Facing TCN Structures would include digital displays that can be viewed from the highway, while Non-Freeway Facing TCN Structures would be viewed from major streets. Each TCN Structure would have one or two faces depending on the location and line of site visibility. The digital display faces would be set to refresh every eight seconds and would transition instantly with no motion, moving parts, flashing, or scrolling messages. The digital displays would be in compliance with Metro's System Advertising Content Restrictions, which prohibits advertisement of alcohol, smoking, and cannabis, and any content containing violence, obscenities, and other related subject matters. In addition, each TCN Structure would include security features, including elevated ladders at surface grade, and other features to reduce the potential for graffiti.

As described in detail in Table II-1 of Section II. Project Description, the digital displays of the 34 Freeway Facing TCN Structures would be 14 feet in height and 48 feet in width with the exception of FF-1, which would be 30 feet in height and 40 feet in width. The heights of the Freeway Facing TCN Structures would range from 40 to 95 feet above grade. However, as several of the Freeway Facing Structures are located adjacent to elevated freeways or freeway on/off ramps, the Freeway Facing Structures would be located up to a maximum 50 feet in height above finished grade of the adjacent highway. The digital displays of the Non-Freeway Facing TCN Structures would generally be 10 feet in height and 30 feet in width, with the exception of NFF-8, NFF-17 and NFF-18, which would be 14 feet in height and 48 feet in width. The heights of the Non-Freeway Facing TCN Structures would range from 30 to 85 feet above grade. As described above and shown in the photographs provided in Figure IV.A-1 through Figure IV.A-15 on pages IV.A-12 through IV.A-26, the Site Locations are within urban areas that have already been developed with roadway infrastructure, with surrounding buildings, sources of light, and in many cases existing signage. Other than the removal of existing static displays at several of the Site Locations, no structures or trees would be removed to construct the TCN Structures. In addition, no natural open space areas would be graded or developed. Furthermore, based on the Site Location of the proposed TCN Structure next to a freeway or major roadway, their size and height, and the existing urban setting of the Site Locations and surroundings, the TCN Structures would not substantially contrast with existing aesthetics features, such as trees, landscaping, and open space areas. Nonetheless, as discussed in Section IV.D. Cultural Resources of this Draft EIR, the proposed TCN Structures at Site Locations NFF-2, NFF-3, NFF-16 and NFF-21 are located in close proximity to five historical resources, including the North Spring Street Bridge (Caltrans Bridge No. 53C0859), Lankershim Depot, the Little Tokyo Historic District, the Japanese Village Plaza, and the Fourth Street Bridge (Caltrans Bridge No. 53C0044). While the TCN structures would not physically impact the historical resources, the TCN structures would detract from the character defining features of these five historical resources. Overall, for purposes of providing a conservative analysis, impacts on the existing visual character or

quality of public views in the vicinity of these historical resources are concluded to be significant.

Based on the above, the Project would result in a substantial adverse effect on the existing visual character and quality of public views and impacts would be significant.

Potential Conflict with Plans Policies and Regulations Governing Scenic Quality

The analysis of the Project's potential to conflict with applicable plan policies and regulations governing scenic quality is based on a review of the following plans and regulations: City of Los Angeles General Plan Framework Element, the Conservation Element, the Community Plans, the LAMC, and CVC regulations.

(a) General Plan

(i) Framework Element

The City of Los Angeles General Plan Framework Element provides direction regarding the City's vision for future development in the City and includes several policies and objectives that address scenic quality. While most of these policies and objectives are related to new buildings and City programs, the Framework Element does include Objective 9.40 and Policy 9.40.3 regarding lighting that pertain to the Project. As discussed in Table 3 in Appendix I, the Project would be consistent with this objective and policy. Specifically, the digital display faces would be designed to provide efficient and effective illumination while minimizing light spill-over, reducing sky-glow, and improving nighttime visibility through glare reduction. The digital display faces of the TCN Structures would use LED lighting with a daytime maximum up to 6,000 maximum candelas and 300 maximum candelas at nighttime, depending on the Site Location. Louvers would be installed to shade the LED lights from creating unintentional light spillage, assist in reducing reflection, and in turn would create a sharper image. Further, the digital display faces would be set to refresh every eight seconds and would transition instantly with no motion, moving parts, flashing, or scrolling messages. Illumination of the digital displays would also conform to applicable Federal and State regulations for signs oriented toward roadways and freeways.

As discussed in Section IV.I, Land Use, of this Draft EIR, one of the policies of the Open Space and Conservation Chapter of the Framework Element is to seek new opportunities for private development to enhance the open space resources of the neighborhoods. The Project would not conflict with this policy as the Site Locations are located on limited footprints inconspicuous throughout the City. Further, the majority of the Site Locations are located on vacant land with limited vegetation and are generally inaccessible to the public. Additionally, the Site Locations are used primarily for Metro operations, which include rail corridors, stations, parking, bus depots, and equipment lots. Therefore, the

Project would not conflict with the applicable goals, objectives, and policies set forth in the Framework Element's Open Space and Conservation Chapter.

Overall, the Project would not conflict with the relevant objectives and policies of the Framework Element regarding scenic quality.

(ii) Los Angeles General Plan Conservation Element

As discussed above, the Conservation Element addresses the preservation, conservation, protection, and enhancement of the City's natural resources and recognizes the City's responsibility for identifying and protecting its cultural and historical heritage. As discussed in the Initial Study included in Appendix A of this Draft EIR, no trees would be removed as part of the Project. Any trees in the vicinity of the Site Locations would be avoided and preserved in place. Therefore, the Project is not subject to the City of Los Angeles Protected Tree and Shrub Relocation and Replacement Ordinance (Ordinance No. 186873).⁹ Overall, the Project would not conflict with the applicable goals, objectives and policies set forth in the Conservation Element regarding scenic resources, such as trees.

With respect to historical resources, as discussed in detail in Section IV.D, Cultural Resources, of this Draft EIR, four of the Site Locations, including NFF-2, NFF-3, NFF-16, and NFF-21, would result in significant visual impacts to historical resources. Related significant aesthetic resources impacts would also result at these four Site Locations. Therefore, the Project would be inconsistent with several of the applicable goals, objectives, and policies set forth in the Conservation Element adopted for the purpose of avoiding or mitigating an environmental effect.

(iii) Community Plans

The Project's general consistency with the applicable goals, objectives, and policies set forth in the Community Plans are discussed in Table 6 in Appendix I of this Draft EIR. The Site Locations are located within the Central City, Central City North, Silver Lake–Echo Park–Elysian Valley, Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass, Northeast Los Angeles, Boyle Heights, North Hollywood–Village Valley, Sun Valley–La Tuna Canyon, Arleta–Pacoima, Granada Hills–Knollwood, Sylmar, Encino–Tarzana, West Los Angeles, South Los Angeles, Southeast Los Angeles, Palms–Mar Vista–Del Rey, Westchester–Playa del Rey, Van Nuys–North Sherman Oaks, West Adams–Baldwin Hills–Leimert, and Wilshire

⁹ *The City of Los Angeles Protected Tree and Shrub Relocation and Replacement Ordinance (Ordinance No. 186873) protects Oak, Southern California Black Walnut, Western Sycamore, and California Bay tree species and Mexican Elderberry and Toyon shrubs that are native to Southern California, and excludes trees or shrubs grown by a nursery or trees planted or grown as part of a tree planting program.*

Community Plan areas and are generally designated and zoned as commercial, public facilities, and manufacturing uses.

As detailed within Table 6 in Appendix I of this Draft EIR, the Project would be consistent with several of the Community Plans policies related to enhancement of and compatibility with adjacent development, provision of high quality design, lighting, and signage. The TCN Structures would be strategically located on Metro-owned property in the vicinity of Metro operations, including existing transit stops, parking areas, and depots, as well as within key geographic locations to assist Metro's transportation public messaging and ability to broadcast information to commuters in a variety of ways to increase public safety, maximize efficiency of the congested road network, and promote public awareness of travel alternatives based on geography and time constraints. In addition, As part of the TCN Program, a take-down component would be implemented including the removal of at least 110,000 square feet (2 to 1 square footage take-down ratio) of existing off-premise static displays. Signage to be removed would include, at a minimum approximately 200 off-premise static displays located within the City. Further, the Project's digital display faces would be designed to provide efficient and effective illumination while minimizing light spillover, reducing sky-glow, and improving nighttime visibility through glare reduction. The digital display faces of the TCN Structures would use LED lighting with a daytime maximum up to 6,000 maximum candelas and 300 maximum candelas at nighttime, depending on the Site Location. Louvers would be installed to shade the LED lights from creating unintentional light spillage, assist in reducing reflection, and in turn would create a sharper image. Illumination of the digital displays would also conform to applicable Federal and State regulations for signs oriented toward roadways and freeways. The uniform design specifications of the new TCN Structures together with the take-down component would create a more compatible aesthetic environment. With regard to signage, a "SN" Sign District would codify modern standards for illumination of the TCN Structures based on current light measuring technology, which would not drastically change the current illumination allowance, but rather would provide a more definitive measurement based on the most recent technology available. In a similar vein, the adoption of digital display standards for the TCN Structures would create centralized, modern, and uniform standards for the TCN Structures.

Nonetheless, as shown in Table 6 in Appendix I of this Draft EIR, the Project would be inconsistent with several goals and policies of the Central City North, Central City, and North Hollywood–Valley Village Community Plans regarding historic resources and visual impacts at four of the Site Locations would result in significant impacts associated with views of historical resources. As discussed in Section IV.I, Land Use, the Project would also be inconsistent with Palms – Mar Vista – Dey Community Plan policies regarding placement of off-site premises signs within the coastal area (relative to Site Locations FF-29 and FF-30).

Overall, based on the above, the Project would conflict with the applicable goals, objectives, and policies set forth in the Community Plans with regard to scenic quality.

(b) Los Angeles Municipal Code

As discussed above, the TCN Program would be implemented through the adoption of an enabling Zoning Ordinance by the City. The proposed Zoning Ordinance would amend the City's sign regulations to authorize the TCN Structures. The Zoning Ordinance would create a mechanism for the review and approval of the TCN Structures and would not authorize new signage other than the TCN Structures. The Zoning Ordinance would address the time, manner, and place aspects of the TCN Program, including the allowable locations, size and height limitations, urban design requirements, and applicable community benefits, including the take-down requirements for the removal of existing static off-premise signs. The Zoning Ordinance would not otherwise change the existing regulations for signs, including off-site and digital signage, in the City. Allowable development from the Zoning Ordinance would be limited to the 56 TCN Structures, as well as the take-down of approximately 200 static displays and the overall removal of the square footage of existing static displays at a ratio of 2 square feet per each square foot of new digital display constructed. Therefore, with implementation of the Zoning Ordinance for the TCN Structures, the Project would not conflict with the LAMC regulations that influence aesthetics. In addition, as discussed in detail above, light trespass from the TCN Structures would not exceed the maximum 3.0 fc at residential uses permitted by the LAMC. Rather, light trespass would be 2.5 fc or less at the TCN Structure locations.

(c) California Vehicle Code, Division 11. Rules of the Road

As discussed above, the Project's potential glare impacts were also evaluated with respect to the requirements of the CVC, which regulates the maximum light source luminance, which may affect the visibility of drivers on roadways. As discussed in detail in the lighting analysis below, the maximum Project Sign luminance is 82 percent less than the maximum permitted by the CVC during the night and during the day. As such, the Project would be consistent with the regulatory requirements set forth by the CVC with regard to glare.

Based on the above, the Project would result in significant impacts related to conflicts with applicable plan policies governing scenic quality.

(2) Mitigation Measures

Project-level impacts related to visual character and consistency with plan policies regarding aesthetics would be significant. Review of potential measures to reduce the Project's significant impacts, such as modification to the size and height of the signs was considered. However, such modifications would not materially reduce these impacts. Rather, the primary way to substantially reduce these impacts would be to eliminate the Site Locations or to relocate them out of the Coastal Zone. Refer to Section V. Alternatives for a

discussion of alternatives that eliminate or relocate the Site Locations in order to substantially reduce the Project's significant impacts related to visual character and consistency with plan policies regarding aesthetics.

(3) Level of Significance After Mitigation

No feasible mitigation measures have been identified. Therefore, Project-level impacts related to visual character and consistency with plan policies regarding scenic quality were determined to be significant and unavoidable. Refer to Section V. Alternatives for an analysis of alternatives that have been proposed to address this impact.

Threshold (d): Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

(1) Impact Analysis

The following provides a summary of the detailed light and glare analyses included in the Lighting Study provided in Appendix B. The Lighting Study presents a conservative analysis with respect to light trespass and glare since the analysis assumes all display operating at the maximum luminance and all white conditions.

Illuminance (Light Trespass)

As discussed in the methodology section above, field surveys of each of the Site Locations were conducted and distances from residential and other light-sensitive uses were identified. The distance at which a proposed display would generate light trespass illuminance equal to 0.3 fc (10 percent of the LAMC criteria and less than the IESNA limit of 0.74 fc) was calculated in order to focus the analysis on the Site Locations that have the potential to result in substantial light trespass at residential and other sensitive uses.

As discussed in the methodology section, any residential or light-sensitive properties located beyond 345 feet, 270 feet, and 175 feet from the three proposed display sizes of 30 feet by 40 feet, 14 feet by 48 feet, and 10 feet by 30 feet, respectively, would not receive significant light trespass from the displays (i.e., light trespass above 0.3 fc) and do not need further study. The Site Location Plans provided in Appendix B of the Lighting Study provide a map of the Site Locations and include a radius of the circle that corresponds with the distance of 345 feet, 270 feet, and 175 feet for each of the digital displays where light trespass illuminance equals 0.3 fc. Where these graphic overlays include sensitive use properties within the circumference of the circle, further detailed analysis has been conducted within the Lighting Study. Table IV.A-2 on page IV.A-43 provides an overview of these Site Locations that were studied in more detail.

**Table IV.A-2
Site Location Visibility Analysis for Site Locations with Nearby Sensitive Uses**

Site Location	Distance to Nearest Residential or Sensitive Use (ft)	Visibility Analysis
FF-13	265	Visible from residential property. Further Analysis Required
FF-21	295	Hotel and adjacent residential property are located more than 270 feet from the Sign, therefore light trespass is less than 0.30 fc. No Further Analysis is Required
FF-26	125	Visible from residential property. Further Analysis Required.
FF-28	125	Visible from residential property. Further Analysis Required.
FF-29	113	Visible from residential property. Further Analysis Required.
FF-30	229	Visible from residential property. Further Analysis Required.
FF-33	170	Sign oriented to south, visible from residential property to the south. Further Analysis Required.
FF-34	167	Visible from residential property. Further Analysis Required.
NFF-1	165	Sign orientation is east & west, therefore existing buildings obstruct view of NFF-1 from residential buildings to the northeast of the Project Site and Hospital Patient Facilities to the east and west of the Project Site. No Further Analysis Required.
NFF-14	400	Further Analysis Required as Part of Cumulative Analysis Only
NFF-15	130	Commercial use building located south of NFF-15 and north of the nearest residential use, block all view of NFF-15 from the residential properties. No Further Analysis Required.
NFF-20	60	Visible to future residential properties uses located directly west of the NFF-20. Further Analysis Required.
<hr/> <p><i>Source: Francis Krahe & Associates, Inc., 2022.</i></p>		

As set forth in Table IV.A-2, Site Location FF-21 is located 295 feet from a hotel property line to the west of the digital display, which is greater than the 270 feet distance to 0.3 fc. Therefore, the Site Location FF-21 light trespass illuminance will be less than 0.3 fc at the hotel property line, which indicates there is no light trespass impact at the hotel property line. In addition, Site Location NFF-1 is located 165 feet from the hospital property line which is less than the 175 feet distance to 0.3 fc identified in Table IV.A-2. Therefore, the Site Location NFF-1 light trespass illuminance would be greater than 0.30 fc but substantially less than the threshold of 3.0 fc, which occurs at 80 feet from the Site Location. Furthermore, the

view of the digital display from the adjacent hospital property is obstructed by the office and lab buildings adjacent to the Site Location. Therefore, there is no light trespass impact at the hospital property locations near Site Location NFF-1. Similarly, Site Location NFF-15 would not result in significant light trespass at residential properties as there is an intervening commercial building that would block the view of Site Location NFF-15 from the nearby residential properties.

Table IV.A-3 on page IV.A-45 provides the illuminance calculations for the digital displays where detailed modeling was conducted (Site Locations FF-13, FF-21, FF-26, FF-28, FF-29, FF-30, FF-33, FF-34, NFF-1, NFF-15 and NFF-20). As shown in Table IV.A-3, the illuminance at the locations where detailed lighting analysis was performed varies from a minimum of 0.0 fc at NFF-14 to a maximum of 2.5 fc at the vertical plane for Site Location NFF-20. The vertical light trespass illuminance at all vertical planes is below the 3.0 fc limit established by LAMC and therefore does not present a significant light trespass impact at the locations where light trespass is calculated. Furthermore, the maximum light trespass illuminance is also less than the maximum recommended by IESNA (0.74 fc) for all Site Locations with the exception of Site Location NFF-20. All sensitive properties further from the proposed TCN Structures would receive exponentially less light trespass. Therefore, the proposed digital displays would not introduce a light trespass impact at any sensitive uses, including residential uses.

The cumulative impact of multiple adjacent digital displays at nearby residential properties was also evaluated in the Lighting Study. Sector 27 map in Appendix B of the Lighting Study identifies the locations for the proposed TCN Structures and calculation plane locations utilized to conduct the cumulative impact analysis. Sign distances within the Sector 27 map are less than the distances defined in Table IV.A-1 on page IV.A-32 from residential use properties and there are multiple proposed TCN Structures within close proximity to each other. Freeway Facing TCN Structures FF-26 and FF-27, and Non Freeway Facing TCN Structures NFF-14, and NFF-15 were specifically evaluated for cumulative light trespass illuminance. All other Freeway Facing TCN Structures and Non Freeway Facing TCN Structures are located farther from nearby TCN Structures, and are farther from residential properties. Cumulative light trespass illuminance calculation data is shown in Table IV.A-3 corresponding to Signs FF-26, FF-27, NFF-14 and NFF-15. All calculated cumulative light trespass illuminance at the location where the largest quantity of signs exists is less than the maximum permitted by LAMC and would therefore not create a significant light trespass impact.

Glare

Glare from the Project was evaluated at adjacent residential properties and for drivers on adjacent streets and freeways. TCN Structure Lighting luminance (glare) was evaluated by the contrast ratio, which equals the maximum Project luminance divided by the measured

**Table IV.A-3
Calculated Illuminance (Light Trespass) at Site Locations Near Sensitive Uses**

Site Location	Sector Map (See Appendix B)	Vertical Plane	Illuminance (fc) Max Vertical	LAMC Analysis (3.0 fc threshold)
FF-13	10	VP-13A	0.30	Less than Threshold
FF-26	27	VP-26A	0.20	Less than Threshold
FF-28	28	VP-28A	0.10	Less than Threshold
	28	VP-28B	0.20	Less than Threshold
FF-29 & FF-30	33	VP-29A	0.60	Less than Threshold
FF-33	31	VP-33A	0.10	Less than Threshold
	31	VP-33B	0.10	Less than Threshold
FF-34	31	VP-34A	0.50	Less than Threshold
	31	VP-34B	0.20	Less than Threshold
NFF-14	27	VP-14A	0.00	Less than Threshold
NFF-15	27	VP-15A	0.10	Less than Threshold
NFF-20	25	VP-20A	2.50	Less than Threshold
<hr/> <i>Source: Francis Krahe & Associates, Inc., 2022.</i>				

average existing luminance within the visual field as measured at the monitoring sites identified in the field survey of existing conditions. Contrast ratios greater than 30:1 are considered potential glare conditions.

Table IV.A-4 on page IV.A-46 compares the measured existing background luminance at the monitoring sites to the luminance of the proposed TCN Structures to calculate the contrast ratio. As shown therein, the highest contrast occurs at Monitoring Site FF-29A (near FF-29 located at Culver Boulevard and the SR-90 Freeway) with a calculated contrast ratio of 28:1. This represents a medium contrast condition (greater than 10:1 but less than 30:1). All other contrast ratios presented in Table IV.A-4 are evaluated at as low contrast conditions (less than 10:1). The calculated display contrast ratios at all monitoring sites are less than the threshold of 30:1 and therefore the TCN Structures would not cause a new significant source of glare.

Roadway Glare

The potential roadway glare impacts were also analyzed with respect to compliance with the CVC luminance requirements for night, twilight, and day conditions. Bright sources within the driver's field of view, from the centerline of the roadway to angles up to 90 degrees from the center line of the roadway may create glare if the light source is brighter than the limits established by the CVC.

**Table IV.A-4
Luminance Calculations**

Monitoring Site	Existing Luminance Average	Project Lighting Luminance		Evaluation
		Max CD/M ²	Contrast Ratio	
FF-4A	144.5	300	2:1	Low Contrast Ratio, No Glare Impact
FF-4B	475.1	300	1:1	Low Contrast Ratio, No Glare Impact
FF-8A	436.9	300	1:1	Low Contrast Ratio, No Glare Impact
FF-8B	181.3	300	2:1	Low Contrast Ratio, No Glare Impact
FF-9A	162.5	300	2:1	Low Contrast Ratio, No Glare Impact
FF-9B	56.8	300	5:1	Low Contrast Ratio, No Glare Impact
FF-13A	76.1	300	4:1	Low Contrast Ratio, No Glare Impact
FF-21A	46.8	300	6:1	Low Contrast Ratio, No Glare Impact
FF-28A	200.4	300	1:1	Low Contrast Ratio, No Glare Impact
FF-29A	10.5	300	28:1	Medium Contrast Ratio, No Glare Impact
FF-32A	223.6	300	1:1	Low Contrast Ratio, No Glare Impact
FF-33A	398.6	300	1:1	Low Contrast Ratio, No Glare Impact
FF-34A	482.6	300	1:1	Low Contrast Ratio, No Glare Impact
NFF-20A	202.4	300	1:1	Low Contrast Ratio, No Glare Impact

Source: Francis Krahe & Associates, Inc., 2022.

The roadway glare analysis evaluated the maximum digital display luminance during night, twilight, and day with respect to the most stringent requirements of the CVC to determine if the Project creates distracting glare to drivers. The maximum digital display luminance at night and during twilight in all white mode is 300 cd/m², and the maximum digital display luminance during the day in all white mode is 6000 cd/m². As discussed above in the methodology subsection, the most stringent condition contained within the CVC Section 21466.5 states: “except that when the minimum measured brightness in the field of view is 10 foot-lamberts or less, the measured brightness of the light source in foot-lambert [(fL)] shall not exceed 500 plus 100 times the angle, in [roadway] degrees, between the driver’s line of sight and the light source.” Thus, a conservative evaluation occurs where a digital display is visible within the centerline of a driver’s field of view, the angle noted above within the field of view is 0, the surrounding surface luminance is less than 10 fL, and therefore the maximum allowable luminance is 500 fL. Therefore, the most conservative condition at night or at twilight evaluates the digital display maximum luminance in comparison to the maximum permitted luminance defined by CVC, which is 500 fL.

A measured brightness within the drivers field of view of less than 10 fL occurs at night when the maximum Sign luminance is 300 cd/m², which converts to English units from metric

units as 87.6 fL. The digital display maximum luminance would not exceed 87.6 fL, which is 17.5 percent of the 500 fL CVC maximum, which is the most conservative limit provided by the CVC for conditions where the minimum brightness in the driver's field of view is less than 10 fL. Therefore, at night, the digital displays within the driver's field of view would not exceed 500 fL and, therefore, would not introduce a new source of glare as defined by the CVC Section 21466.5.

For digital displays located beyond the driver's 10 degree field of view, the maximum luminance is permitted to increase under the CVC. For example, light sources located 15 degrees from the centerline of the driver's field of view are limited to a maximum of 1,000 fL (500 fL plus 100 times the angle (5 degrees) = 1,000 fL). The maximum digital display luminance at night is 300 cd/m² or 87.6 fL, or less than approximately 8.8 percent of the maximum allowed by the CVC for digital displays located at 15 degrees from the center of the driver's field of view. Therefore, at night, the digital displays beyond the driver's 10 degree field of view would not exceed 1000 fL and would not introduce a new source of glare as defined by the CVC Section 21466.5.

The digital displays were also evaluated during twilight (the transition period from day to night, from sunset to 45 minutes after sunset, and from 45 minutes before sunrise to sunrise). Sunlight increases gradually from the minimum brightness during the night to maximum brightness at mid-day, and then decreases gradually to the minimum brightness after sunset during the night. The minimum ambient luminance from sunlight occurs 45 minutes after sunset or later, until at least 45 minutes before sunrise. During evening twilight, from sunset and for 45 minutes thereafter, the ambient sunlight would be greater than the minimum values at night due to the light from the setting sun. Similarly, during morning twilight, from 45 minutes prior to sunrise until sunrise, the minimum luminance would be greater than the minimum luminance during the night due to the rising sun. The Lighting Study applies the CVC minimum light criteria for night conditions (10 fL) during twilight, extending the duration of minimum sunlight, to present a conservative evaluation of glare. Therefore, the maximum luminance during twilight permitted by the CVC is 500 fL, which equals 1,579 cd/m². The digital display luminance would not exceed 300 cd/m² (87.6 fL), from sunset to sunrise. At 45 minutes prior to sunset the digital displays would transition from the maximum daytime luminance of 6,000 cd/m² to the maximum nighttime luminance of 300 cd/m². This transition is completed no later than sunset to avoid potential high contrast, glare conditions. Similarly, the digital displays would transition from the night maximum luminance of 300 cd/m² to the day maximum luminance of 6,000 cd/m², beginning no earlier than 45 minutes prior to sunrise. Therefore, the digital displays would not exceed the CVC maximum of 500 fL, and therefore would not introduce a new source of glare during twilight.

The evaluation of the digital display luminance during the day (from sunrise until 45 minutes before sunset) compared the daytime, ambient brightness to the maximum sign brightness required by the CVC during full sun conditions and overcast sky conditions. CVC

Section 21466.5, above, permits the digital displays to generate light intensity levels greater than “1,000 times the minimum measured brightness in the driver’s field of view, except when the minimum values are less than 10 [fL], the measured brightness of the light source in foot-lambert shall not exceed 500 plus 100 times the angle, in degrees, between the driver’s line of sight and the light source.” During the day (sunrise until 45 minutes before sunset), sunlight with clear sky conditions or light overcast conditions provides sufficient illuminance to generate surface brightness greater than 10 fL and up to 1200 fL on the least reflective surfaces, such as roadway pavement. Utilizing the value of 10 fL as the minimum within the driver’s field of view, the maximum allowable brightness would be 1,000 times 10 fL, or 10,000 fL. The daytime maximum Sign luminance for the digital displays would be 6,000 cd/m² (1,751 fL), which is less than 17.5 percent of the maximum luminance stipulated by the CVC. Therefore, the digital displays would not create a new source of glare during day time hours of operation with clear sky or light overcast conditions.

Severe storms, heavy cloud cover, or other atmospheric conditions may occur during the day, which may cause the minimum brightness within the driver’s field of view to be less than 10 fL. The digital displays would include an electronic control system to reduce the sign luminance from 6,000 cd/m² (1,751 fL) to 300 cd/m² (87.6 fL) maximum when the ambient sun light falls to illuminance values similar to night, less than 100 fc. During the day, when storms, cloud cover, or other low ambient sunlight conditions occur and when the ambient sunlight is less than 100 fc, the digital displays would transition from the daytime 6,000 cd/m² (1,751 fL) to 300 cd/m² (87.6 fL) maximum, and thereby ensure that the sign brightness remains less than the maximum brightness required by the CVC. Therefore, the digital displays would not create a new source of glare during day time periods with storm or severe overcast weather conditions and would not exceed 87.6 fL, or 17.5 percent of the 500 fL maximum allowed by the CVC during overcast conditions.

Based on the above, the digital displays would not result in significant impacts associated with glare.

(2) Mitigation Measures

Project-level impacts related to light and glare would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

Project-level impacts related to light and glare were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

e. Cumulative Impacts

(1) Impact Analysis

(a) Scenic Vistas and Visual Character

As discussed above, it is conservatively concluded that the proposed TCN Structures would result in significant impacts associated with views and visual character at Site Locations NFF-2, NFF-3, NFF-16 and NFF-21. Specifically, five historical resources, including the North Spring Street Bridge (Caltrans Bridge No. 53C0859), Lankershim Depot, the Little Tokyo Historic District, the Japanese Village Plaza, and the Fourth Street Bridge (Caltrans Bridge No. 53C0044) are located in close proximity to these TCN Structures. While the TCN structures would not physically impact the historical resources, the TCN structures would impede visibility of and thus detract from the character defining features of these five historical resources. To the extent that there are related projects that introduce additional visual features that distract from these historical resources, cumulative impacts associated with scenic views would be significant.

(b) Consistency with Plan Policies and Regulations Regarding Scenic Quality

As discussed above, the Project would conflict with plan policies regarding scenic quality. To the extent that there are related projects that also result in inconsistencies with plan policies regarding scenic quality, cumulative impacts associated with scenic views would be significant.

(d) Light and Glare

As demonstrated by the detailed light and glare analysis included in Appendix B and summarized above, potential light and glare impacts associated with implementation of the proposed TCN Structures would be less than significant. As with the Project, related projects would be subject to City and/or Metro review and regulatory requirements to ensure that the projects are designed such that significant light trespass and glare impacts would not occur. Thus, cumulative impacts would be less than significant, and the Project would not result in a cumulatively considerable impact associated with light trespass or glare.

(2) Mitigation Measures

Review of potential measures to reduce the Project's significant scenic vista, visual character, and consistency with plan policies regarding scenic quality, such as modification to the size and height of the signs was considered for policies related to cultural or historic resources. However, such modifications would not materially reduce these impacts. Rather, the primary way to substantially reduce these impacts would be to eliminate the Site Locations. For impacts related to Site Locations within the coastal area of the Palms–Mar

Vista–Del Rey Community Plan, impacts could be reduced by removal or relocation out of the coastal area. Refer to Section V. Alternatives for a discussion of alternatives that eliminate or relocate the Site Locations in order to substantially reduce the Project’s contribution to these cumulative impacts.

(3) Level of Significance After Mitigation

No feasible mitigation measures have been identified. Therefore, cumulative impacts related to scenic views, and visual character, and consistency with plan policies regarding scenic quality were conservatively determined to be significant and unavoidable. Refer to Section V. Alternatives for an analysis of alternatives that have been proposed to address this cumulative impact.

Cumulative impacts related to light and glare were determined to be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.