

VOLUME I

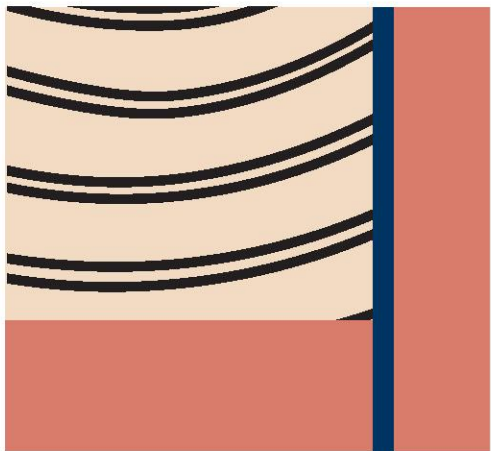
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT

THE DISTRICT AT SOUTH BAY SPECIFIC PLAN AMENDMENT



SCH No. 2005051059

OCTOBER 2021



VOLUME I

**DRAFT SUPPLEMENTAL
ENVIRONMENTAL IMPACT REPORT**

**THE DISTRICT AT SOUTH BAY
SPECIFIC PLAN AMENDMENT**

LEAD AGENCY

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SCH No. 2005051059

OCTOBER 2021



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I. SUMMARY

I.A PURPOSE OF THIS 2021 SEIR

This Supplemental Environmental Impact Report (2021 SEIR) augments and supplements the environmental analysis previously provided in the following documents: (i) the previously certified 2006 Final EIR (2006 FEIR) for a project development located on the former Cal Compact Landfill Site in the City of Carson (also known and referred to as the 157-Acre Site), along with a separate 11-acre site located north of Del Amo Boulevard (which was not formerly part of the Cal Compact Landfill, but has been developed with the Evolve South Bay apartment complex) pursuant to the Carson Marketplace Specific Plan approved by the City Council of the City of Carson (City) in 2006; (ii) an Addendum to the 2006 FEIR adopted by the City in 2009 to address changes in the remediation activities at the 157-Acre Site; and (iii) the previously certified 2018 Supplemental Final EIR (2018 SEIR) for a revised project proposal for the 157-Acre Site (the 2018 Project), which included a revision and re-naming of the Carson Marketplace Specific Plan adopted for the 157-Acre Site as the District at South Bay Specific Plan (the 2018 Specific Plan). A newly proposed development on the 157-Acre Site is analyzed under this 2021 SEIR (the 2021 Project), which constitutes an amendment to portions of the District at South Bay Specific Plan (2021 Specific Plan Amendment), specifically with respect to a 96-acre portion of the 157-Acre Site; however, this 2021 SEIR evaluates the 2021 Project on the entire 157-Acre Site.¹

The City of Carson will serve as the Lead Agency for purposes of this environmental document. The Developer (consisting of Carson Goose Owner LLC and Carson Mylo Owner LLC) is the entity entitling the 2021 Specific Plan Amendment and the Applicant responsible for development and remediation at PA3.² Other Applicant(s) will be the entity or entities constructing any development project on PA1 or PA2.

¹ *The 2006 Environmental Impact Report (EIR) (the 2006 FEIR) analyzed three Development Districts (DDs) (DD1, DD2, and DD3), totaling 168 acres. However, DD3, which is located north of Del Amo Boulevard and totals 11 acres, has been developed by a separate owner for a 300-unit apartment complex project known as Evolve South Bay. Therefore, the 2018 Supplemental EIR (2018 SEIR) analyzed only DD1 and DD2, which is the same approach for this 2021 SEIR. Accordingly, the Project Site for the 2021 Project and this 2021 SEIR is also 157 acres, excluding DD3.*

² *Carson Mylo Owner LLC is responsible for the vertical development of the Project Site, while Carson Goose Owner LLC, who is also part of the development team, is only responsible for construction of the remedial systems and site development improvements underlying the surface lot of PA3, which are required for the development of PA3.*

This 2021 SEIR has been prepared to evaluate the 2021 Project as compared to the previously approved 2018 Project (and if applicable, the 2006 Project) to determine whether the 2021 Project would result in new significant environmental effects or a substantial increase in the severity of previously identified significant environment effects as compared to the projects evaluated in either the 2006 FEIR and/or the 2018 SEIR.

I.B 2021 PROJECT DESCRIPTION

I.B.1 Project Location

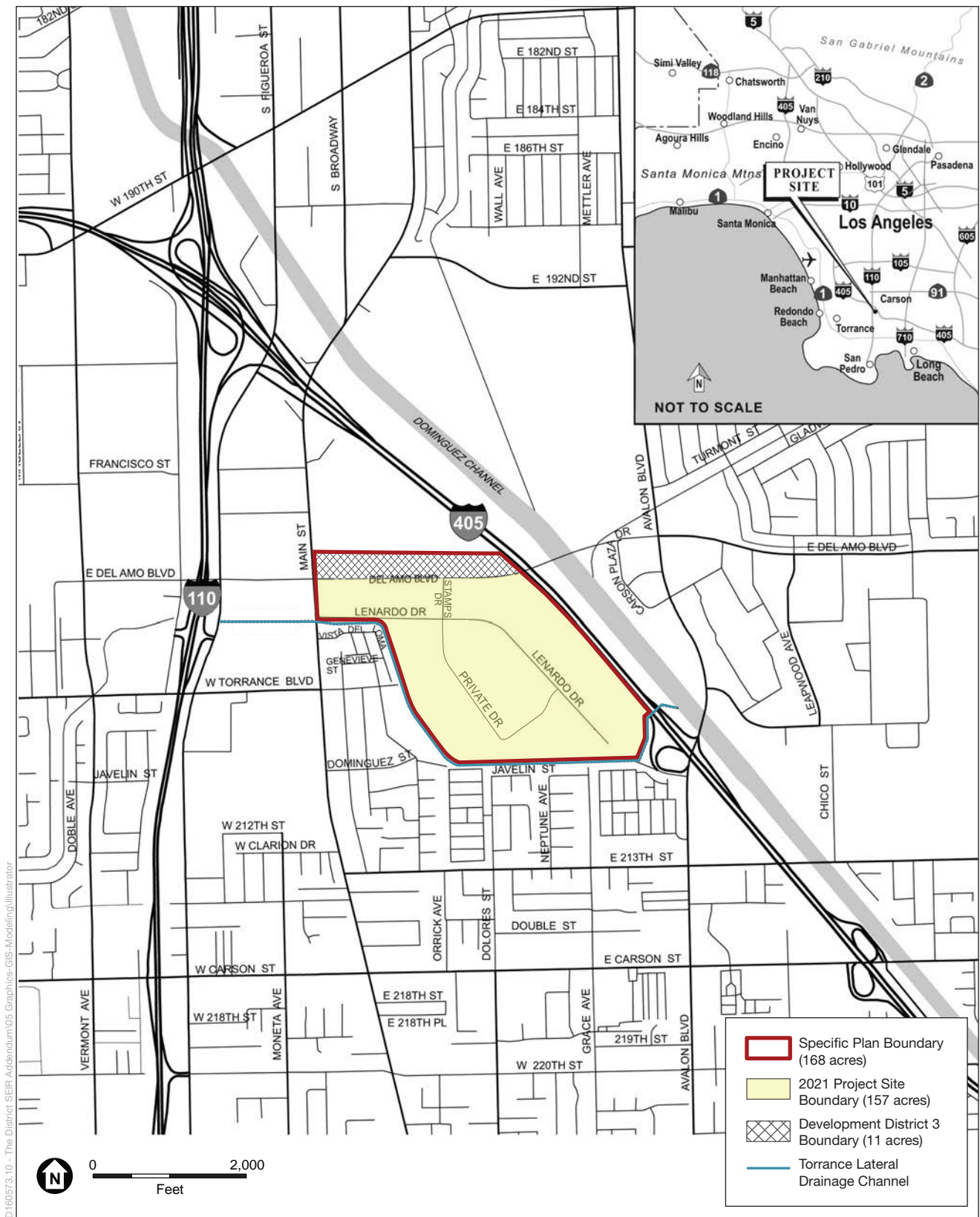
The 157-Acre Site (also referred to herein as the Project Site) is generally located at 20400 South Main Street in the City of Carson (City), approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The Project Site is located in the South Bay area of Los Angeles County. It is located west of the San Diego Freeway (Interstate 405 [I-405] Freeway), south of Del Amo Boulevard, and north of the Avalon Boulevard interchange with the I-405 Freeway. **Figure I-1, Regional Location**, depicts the 157-Acre Site in a regional context.

The Project Site is divided into three planning areas (PAs) and one Development District (DD) under the 2018 Specific Plan (which remain the same under the 2021 Specific Plan Amendment), as illustrated by **Figure I-2, Planning Areas**. The 2021 Project does not change the residential or regional commercial uses previously approved under the 2018 Specific Plan for 61 acres of the 157-Acre Site (i.e., Planning Areas 1 [PA1] and 2 [PA2]) as compared to the 2018 Project; however, it changes the general commercial and hotel uses that were approved in the 2018 Specific Plan on the other 96 acres of the 157-Acre Site (i.e., Planning Area 3 [PA3]) to allow for light industrial uses, and a separate community amenity area referred to herein as the Carson Country Mart, which would include commercial uses (including retail and restaurant uses), and privately maintained, publicly accessible open space and community amenity areas.

I.B.2 Summarized Project Description

As noted above, the previously approved 2018 Project covered PA1, PA2, and PA3 pursuant to the 2018 Specific Plan and 2018 SEIR. PA1 included the provision for up to 1,250 residential units and/or commercial uses pursuant to Mixed-Use Marketplace (MU-M) zoning, which would remain the same under the 2021 Project.³ In PA2, the 2018 Project included the allowance for up to 714,000 square feet (sf) of regional commercial uses and up to 15,000 sf of restaurant uses within a Commercial Marketplace (CM) zone, which would also remain the same under the 2021

³ The "Mixed-Use Marketplace" land use category provides opportunities for the vertical or horizontal integration of housing with commercial services. MU-M does not, however, require a mix of uses and development can consist entirely of either residential or commercial uses.



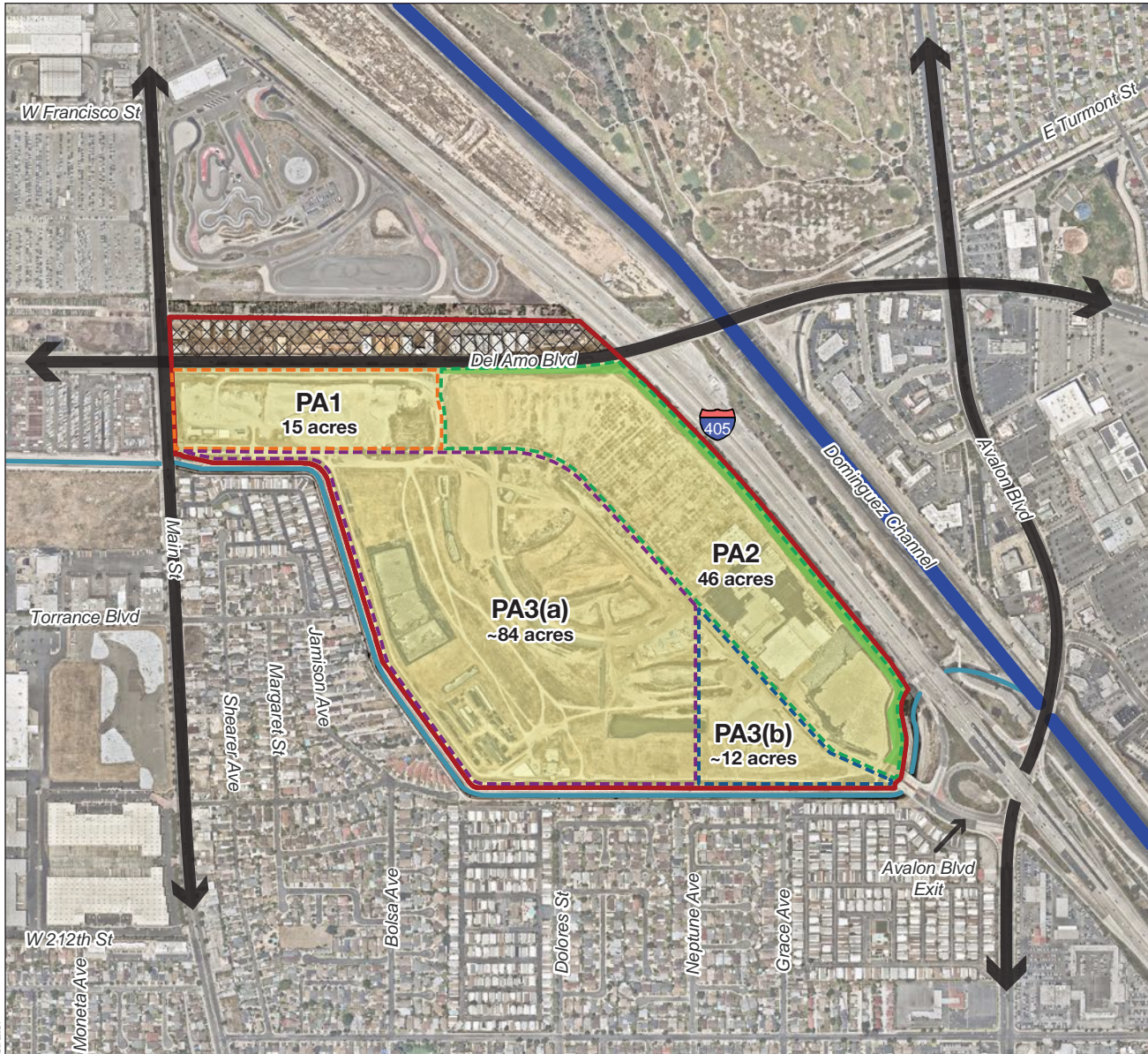
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SOURCE: ESA, 2020

The District at South Bay Specific Plan Amendment

Figure I-1
Regional Location





- Specific Plan Boundary (168 acres)
- Planning Area 1
- 2021 Project Site (157 acres)
- Planning Area 2
- Planning Area 3(a)
- Planning Area 3(b)
- Development District 3 Boundary (11 acres)
- Torrance Lateral Drainage Channel
- Embankment Lot (5 acres)



Note: this is a graphic representation of a planning concept. All graphics in this document are conceptual and should not be interpreted literally. Other solutions, locations and/or concepts may be proposed and reviewed during site plan review and other permit and mapping processes.

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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure I-2
Planning Areas



Project. The 2018 SEIR also analyzed the development allowances within the 2018 Specific Plan for PA3, which included regional retail, neighborhood-serving retail, restaurant, entertainment, and hospitality uses (e.g., theater, gym, hotel, etc.) within a CM zone. The only change proposed by the 2021 Project under the 2021 Specific Plan Amendment would occur in PA3.

In PA3, the 2021 Project would replace the previously approved general commercial uses under the 2018 Project with a maximum of 1,567,090 sf of light industrial supportive office uses under a Light Industrial (LI) zone; and the Carson Country Mart, which would include up to approximately 12 acres of publicly accessible but privately maintained open space and commercial/community-uses and amenity areas under a CM zoning designation. The 2021 Project proposes that PA3 would be designated into two separate property areas: PA3(a) and PA3(b). PA3(a) will contain light industrial with supportive office uses and an approximately 0.62-acre area consisting of open space, which would include shade trees and native planting, a meandering walking path, and a sidewalk, located just south of Street A (Lenardo Drive) along the northwestern corner of PA3(a), referred to herein as the Enhanced Parkway. PA3(b) will contain commercial, restaurant, and park/open space uses, referred to herein as the Carson Country Mart. The parking for PA3 will be provided via surface parking area provided throughout PA3(a) and PA3(b). **Figure I-3, 2021 Conceptual Site Plan**, illustrates the proposed uses on the Project Site. **Table I-1, Proposed 2021 Project Land Uses in Planning Area 3**, provides a summary of the light industrial (with ancillary office), restaurant, retail, and open space and community amenity uses that would be provided in PA3.

The light industrial uses proposed by the 2021 Project on PA3(a) would be contained in six main buildings (Buildings A through F). Buildings A, B, C, and F (totaling 803,300 sf, inclusive of 50,000 sf of ancillary office) are anticipated to be used for an e-commerce and fulfillment center⁴ uses whereas Buildings D and E (totaling 763,790 sf, inclusive of 25,000 sf of ancillary office) are anticipated to be designated for distribution center and parcel hub⁵ uses. Two private drives off of Lenardo Drive will provide both vehicular and truck access to PA3(a). An access road adjacent to the Torrance Lateral Flood Control Channel (Torrance Lateral) will also allow for fire/emergency access for Buildings A, D, and F and operation and maintenance for the utility lot and Torrance Lateral. **Figure I-4, 2021 Project: PA3(a) Light Industrial Uses**, illustrates the location of these uses within PA3(a).

⁴ The October 2016 "High Cube Warehouse Vehicle Trip Generation Analysis" prepared for the SCAQMD by the Institute of Transportation Engineers defines "fulfillment center" as the "storage and direct distribution of e-commerce product to end users" (see p. 3).

⁵ The October 2016 "High Cube Warehouse Vehicle Trip Generation Analysis" prepared for the SCAQMD by the Institute of Transportation Engineers describes a "parcel hub" use as usually involving transload functions (i.e., "pallet loads or larger handling products of manufacturers, wholesalers/distributors, or retailers with little or no storage durations") for a parcel delivery company (see p. 3).



SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

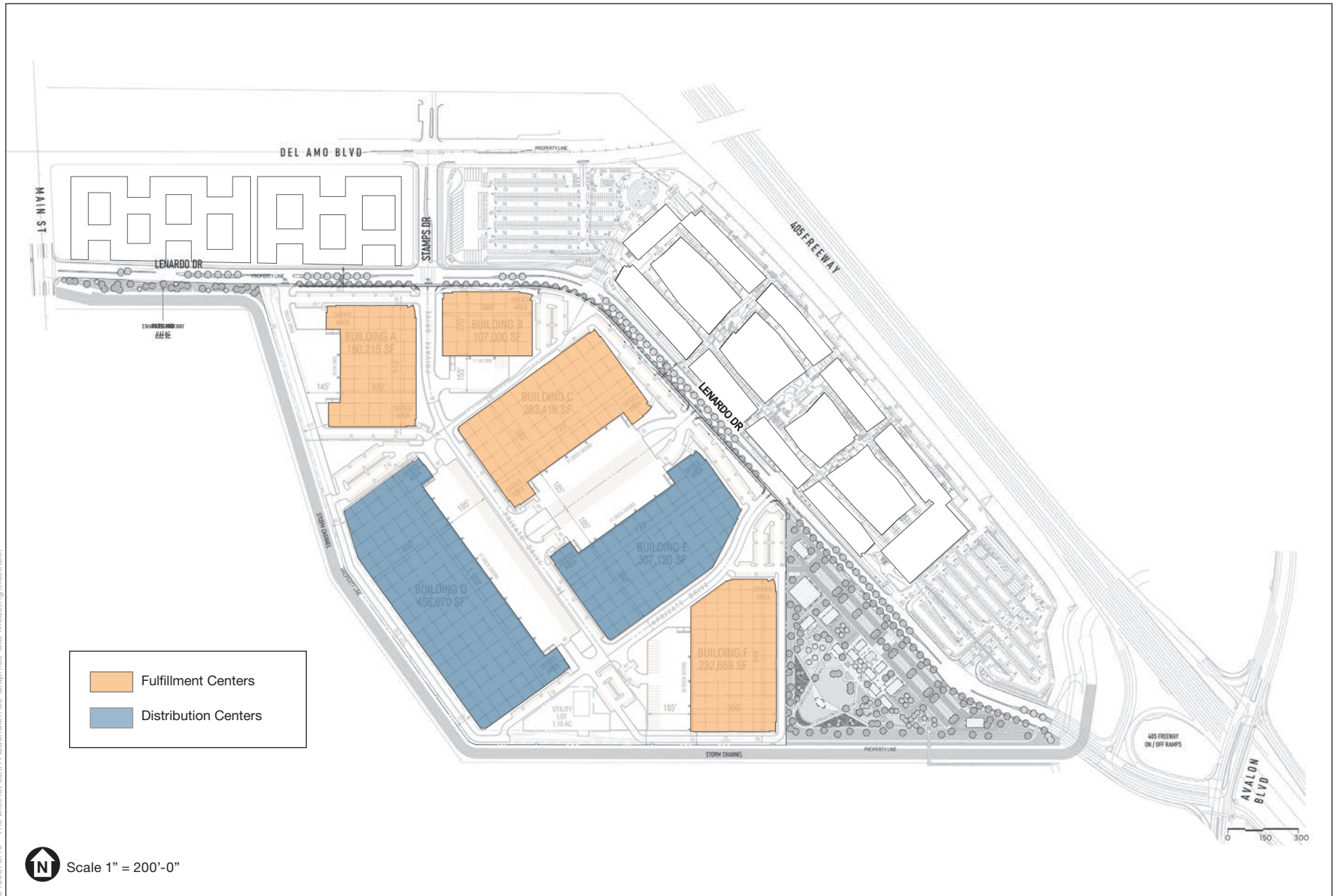
Figure I-3
2021 Conceptual Site Plan



**Table I-1
Proposed 2021 Project Land Uses in Planning Area 3**

Site Characteristic	Site Size
PA3(a) – Light Industrial and Ancillary Office Uses	
E-Commerce/Fulfillment Center	753,300 sf
Distribution Center/Parcel Hub	738,790 sf
Ancillary Office	75,000 sf
<i>Subtotal Light Industrial</i>	<i>1,567,090 sf</i>
Parking, Circulation, Setbacks	1,608,738 sf (35.98 acres)
Enhanced Parkway	27,000 sf (0.62 acres)
Total PA3(a)	3,202,828 sf (73.53 acres)
PA3(b) – Park, Recreation, Retail, and Restaurant Uses Carson Country Mart	
Restaurant/café	23,800 sf
Retail	10,000 sf
<i>Subtotal Commercial</i>	<i>33,800 sf (0.78 acres)</i>
Parking/Vehicular Use Areas	107,613 sf (2.47 acres)
Programmed Spaces	170,973 sf (3.93 acres)
Open Space/Park Amenity	102,933 sf (2.36 acres)
Pedestrian Circulation/Maintenance Roads	69,251 sf (1.59 acres)
Total PA3(b)	484,570 sf (11.12 acres)

The 2021 Project’s proposed Carson County Mart located on PA3(b) would consist of passive and active uses including a dog park, botanic garden, children’s play area, plaza areas, garden terrace, event and social lawn, performance pavilion, beer garden, water feature, sculpture garden, bioretention garden, games terrace, and pedestrian and bicycle pathways. Commercial uses and activities will also be integrated within the Carson Country Mart to draw in patrons and activate and enliven the overall area. Specifically, the Carson Country Mart would include 10,000 sf of commercial/retail uses, 12,600 sf of restaurants (with drive-through capability), a 2,200 sf walk-up cafe adjacent to the dog park and event lawn, and 9,000 sf of food and beverage kiosks. The retail, restaurant and food and beverage kiosks/uses may also include alcohol sales consistent with requirements under the 2021 Specific Plan Amendment. Public access to the Carson Country Mart would be provided by Lenardo Drive, connecting to Main Street and Avalon Boulevard; in addition, an access road with easements for operation and maintenance of the Torrance Lateral and fire access to the Project Site would be provided around the southern/western boundary of the Carson Country Mart, adjacent to the Torrance Lateral. **Figure I-5, 2021 Project: PA3(b) Carson Country Mart**, illustrates the location of the commercial uses proposed by the 2021 Project within PA3(b).



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SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure I-4
2021 Project: PA3(a) Light-Industrial Uses





SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure I-5
2021 Project: PA3(b) Carson Country Mart



I.C NOTICE OF PREPARATION AND SCOPING MEETING

I.C.1 Notice of Preparation

In compliance with CEQA Guidelines Section 15082, a notice of preparation (NOP) was prepared by the City and distributed for a 30-day public comment period to the State Clearinghouse, Office of Planning and Research, to responsible agencies, agencies, and other interested parties from April 16, 2021, to May 17, 2021, to solicit public input on the scope and content of this 2021 SEIR. The NOP determined that there would be no impacts related to agriculture and forestry resources, mineral resources, or wildfire; therefore, they would not be analyzed in this 2021 SEIR.

In response to the 2021 NOP (for the 2021 Project), a total of 7 comment letters were received by the following agencies and groups.

1. Native American Heritage Commission, April 20, 2021
2. Los Angeles County Sanitation Districts (Sanitation Districts), May 6, 2021
3. South Coast Air Quality Management District (SCAQMD), May 11, 2021
4. California Department of Fish and Wildlife (CDFW), May 12, 2021
5. California Department of Transportation (Caltrans), May 12, 2021
6. Southwest Regional Council of Carpenters, May 17, 2021
7. California Air Resources Board (CARB), May 18, 2021

The 2021 NOP and 2021 NOP comment letters are provided in Appendix A1 of this 2021 SEIR.

I.C.2 Scoping Meeting

The 2021 Project is determined to be of statewide, regional, or areawide significance pursuant to CEQA Guidelines Section 15206 because it proposes residential development of more than 500 dwelling units and it includes industrial uses encompassing more than 650,000 sf of floor area. Pursuant to CEQA Guidelines Section 15082(c)(1), a public scoping meeting is required for any project of statewide, regional, or areawide significance; therefore, a virtual public scoping meeting was held on April 29, 2021 during the NOP public comment period. The purpose of the scoping meeting was to obtain input from agencies and the public regarding the scope and content of the Draft 2021 SEIR, including opportunities to avoid or minimize environmental impacts through mitigation measures and/or project alternatives.

The public scoping meeting was attended by a total of 18 individuals, with 15 individuals attending virtually and three attending telephonically. Of those that attended virtually, 17 individuals were from the City and/or the Developer team, and one was a member of the public. No comments were provided on the scope or content of this 2021 SEIR.

The Scoping Meeting presentation and the list of attendance at the Scoping Meeting is provided in Appendix A2 of this 2021 SEIR.

I.D 2021 PROJECT: TOPICS EVALUTED IN THIS 2021 SEIR

The City determined that implementation of the 2021 Project may either by itself or in conjunction with past, present, and reasonably foreseeable future development in the vicinity have new or substantially more-severe significant effects in the following environmental topics, thereby triggering evaluation in this 2021 SEIR:

- Aesthetics
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems

Of these topics, this 2021 SEIR determined that some topics (and/or thresholds within a topic) would be classified as an Effect Found Not to Be Significant pursuant to CEQA Guidelines Section 15128 and, therefore, would not need to be discussed in detail in this 2021 SEIR. To make an Effect Found Not to Be Significant determination, the analysis must conclude there is no change in circumstances and/or no new information of substantial importance as a result of the 2021 Project relative to the 2018 Project that would result in new or substantially more-severe environmental impacts. If there are no new or substantially more-severe environmental impacts, no detailed analysis is required in this 2021 SEIR. However, the analysis must explain

the reasons for the conclusion. These topics are addressed in Chapter VI, *Effects Found Not to Be Significant*, of this 2021 SEIR, which provides the reasons for the conclusions made.

In accordance with the CEQA Guidelines, this 2021 SEIR determined that other environmental topics (and/or thresholds within a topic) would require detailed analysis to determine whether the previous environmental documentation, as updated to reflect land use changes proposed by the 2021 Project, could result in new or substantially more-severe environmental impacts. This analysis, and the reasons for the conclusions, are provided in Sections IV.A through IV.I of this 2021 SEIR.

Table I-2, Environmental Topics and Thresholds Evaluated in This 2021 SEIR, identifies which topics and thresholds are evaluated either as an Effect Found Not to Be Significant or as a separate section in this 2021 SEIR. This table also identifies where each threshold is evaluated, by section. There are some thresholds that were contained in the 2018 CEQA Threshold Guidelines Appendix G and, therefore, were evaluated in the 2018 SEIR; however, the CEQA Threshold Guidelines Appendix G thresholds questions were updated in 2019 and, as such, the thresholds evaluated in this 2021 SEIR do not include some of the thresholds that were contained in the 2018 SEIR.

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
I. Aesthetics	
a) Have a substantial adverse effect on a scenic vista?	Section VI, <i>Effects Found Not to Be Significant (EFNTBS)</i>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Section VI, <i>EFNTBS</i>
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?	Full Section, Section IV.B
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Full Section, Section IV.B
II. Agriculture and Forestry Resources	
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Scoped out in NOP
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Scoped out in NOP

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Scoped out in NOP
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Scoped out in NOP
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Scoped out in NOP
III. Air Quality	
a) Conflict with or obstruct implementation of the applicable air quality plan?	Full Section, Section IV.D
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Full Section, Section IV.D
c) Expose sensitive receptors to substantial pollutant concentrations?	Full Section, Section IV.D
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Section VI, <i>EFNTBS</i>
IV. Biological Resources	
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Full Section, Section IV.G
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Full Section, Section IV.G
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Full Section, Section IV.G
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Full Section, Section IV.G
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Full Section, Section IV.G
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Full Section, Section IV.G
V. Cultural Resources	
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Section VI, <i>EFNTBS</i>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Section VI, <i>EFNTBS</i>

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
c) Disturb any human remains, including those interred outside of formal cemeteries?	Section VI, <i>EFNTBS</i>
VI. Energy	
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Full Section, Section IV.H
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Full Section, Section IV.H
VII. Geology and Soils	
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:	Section VI, <i>EFNTBS</i>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	
ii) Strong seismic ground shaking?	Section VI, <i>EFNTBS</i>
iii) Seismic-related ground failure, including liquefaction?	Section VI, <i>EFNTBS</i>
iv) Landslides?	Section VI, <i>EFNTBS</i>
b) Result in substantial soil erosion or the loss of topsoil?	Section VI, <i>EFNTBS</i>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Section VI, <i>EFNTBS</i>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Section VI, <i>EFNTBS</i>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Section VI, <i>EFNTBS</i>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Section VI, <i>EFNTBS</i>
VIII. Greenhouse Gas Emissions	
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Full Section, Section IV.I
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Full Section, Section IV.I
IX. Hazards and Hazardous Materials	
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Section VI, <i>EFNTBS</i>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Section VI, <i>EFNTBS</i>

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Section VI, <i>EFNTBS</i>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Section VI, <i>EFNTBS</i>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Section VI, <i>EFNTBS</i>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Section VI, <i>EFNTBS</i>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Section VI, <i>EFNTBS</i>
X. Hydrology and Water Quality	
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Section VI, <i>EFNTBS</i>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Section VI, <i>EFNTBS</i>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:	Section VI, <i>EFNTBS</i>
i) result in substantial erosion or siltation on or off site;	
ii) substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;	Section VI, <i>EFNTBS</i>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Section VI, <i>EFNTBS</i>
iv) impede or redirect flood flows?	Section VI, <i>EFNTBS</i>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Section VI, <i>EFNTBS</i>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Section VI, <i>EFNTBS</i>
XI. Land Use and Planning	
a) Physically divide an established community?	Full Section, Section IV.A
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Full Section, Section IV.A

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
XII. Mineral Resources	
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Scoped out in NOP
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Scoped out in NOP
XIII. Noise	
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Full Section, Section IV.E
b) Generation of excessive groundborne vibration or groundborne noise levels?	Full Section, Section IV.E
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Section VI, <i>EFNTBS</i>
XIV. Population and Housing	
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Section VI, <i>EFNTBS</i>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Section VI, <i>EFNTBS</i>
XV. Public Services	
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	Section VI, <i>EFNTBS</i>
i) Fire protection?	
ii) Police protection?	Section VI, <i>EFNTBS</i>
iii) Schools?	Section VI, <i>EFNTBS</i>
iv) Parks?	Section VI, <i>EFNTBS</i>
v) Other public facilities?	Section VI, <i>EFNTBS</i>
XVI. Recreation	
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Section VI, <i>EFNTBS</i>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Section VI, <i>EFNTBS</i>

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
XVII. Transportation	
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Full Section, Section IV.C
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Full Section, Section IV.C
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Section VI, <i>EFNTBS</i>
d) Result in inadequate emergency access?	Section VI, <i>EFNTBS</i>
XIX. Tribal Cultural Resources	
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Section VI, <i>EFNTBS</i>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Section VI, <i>EFNTBS</i>
XX. Utilities and Service Systems	
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Section VI, <i>EFNTBS</i>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Section VI, <i>EFNTBS</i>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Section VI, <i>EFNTBS</i>
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Section VI, <i>EFNTBS</i>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Section VI, <i>EFNTBS</i>
XXI. Wildfire	
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Scoped out in NOP
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Scoped out in NOP
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Scoped out in NOP

**Table I-2
Environmental Topics and Thresholds Evaluated in This 2021 SEIR**

2021 CEQA Thresholds	Location Where Threshold Is Analyzed in This 2021 SEIR
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Scoped out in NOP
XXII. Mandatory Findings of Significance	
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	
b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	

I.E SEIR ORGANIZATION

This 2021 SEIR is organized into the following nine chapters:

- **Chapter I, Summary.** This chapter describes the purpose of this 2021 SEIR; a summarized description of the 2021 Project; the outcome of the NOP and Scoping Meeting processes; topics evaluated in this 2021 SEIR; organization of this 2021 SEIR; areas of controversy; issues to be resolved; 2021 Project Objectives; summary of alternatives; and a table summarizing environmental impacts and mitigation measures, including the level of significance before and after implementation of the identified mitigation measures.
- **Chapter II, 2021 Project Description.** The 2021 Project Description provides a description of the Project Site location; a summary of existing off-site and on-site land uses; a description of the Project Site planning designations; a description of the uses previously proposed for the 157-Acre Site; a description of previous and future remediation activities; a comparison of the 2021 Project to the 2018 Project; a detailed description of the 2021 Project, including Project characteristics, general plan zoning designations, utilities and infrastructure, signage and lighting, employees, and anticipated project construction activities and the construction schedule; 2021 Project Objectives; and a list of necessary approvals required to implement the 2021 Project, if approved by the City.
- **Chapter III, Introduction to the Analysis.** This chapter described the methodological background; scope of analysis; format of the sections provided in Chapter IV,

Environmental Impact Analysis; methodology for the cumulative impact analysis; and provides a list of cumulative projects that, in combination with the 2021 Project, could cause related impacts. The cumulative projects include both a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts.

- **Chapter IV, *Environmental Impact Analysis*.** This chapter provides a general introduction; a discussion of existing conditions; a discussion of the regulatory framework; lists the significance thresholds used for the analysis; discusses the methodology, project design features (PDFs), if applicable, and Project impacts; mitigation measures applied to the 2021 Project, as applicable, to reduce potentially significant impacts; a cumulative impacts analysis; and conclusions regarding the level of impact significance after mitigation for each of the environmental issues addressed in this 2021 SEIR. The environmental setting is discussed in Chapter III, *General Description of the Environmental Setting*, of this 2021 SEIR, but may be further addressed, as appropriate, in this section.
- **Chapter V, *Alternatives*.** This chapter provides an analyses of each of the alternatives to the 2021 Project, including the alternatives considered but rejected from further analysis and the environmentally superior alternative.
- **Chapter VI, *Effects Found Not to Be Significant*.** This 2021 SEIR determined that some topics (and/or thresholds within a topic) would be an Effect Found Not to Be Significant pursuant to CEQA Guidelines Section 15128 and, therefore, would not be discussed in detail in this 2021 SEIR. This chapter provides the reasons for this conclusion.
- **Chapter VII, *Other Environmental Considerations*.** This chapter presents an analysis of the significant and unavoidable impacts, significant and irreversible impacts, growth-inducing impacts, and secondary impacts (i.e., impacts that would result from implementation of the 2021 Project's off-site mitigation measures) that could occur as a result of construction or implementation of the 2021 Project.
- **Chapter VIII, *References*.** This chapter lists all of the references and sources used in the preparation of this 2021 SEIR.
- **Chapter IX, *List of Preparers*.** This chapter lists the persons, agencies, and organizations that were consulted or contributed to the preparation of this 2021 SEIR.

I.F AREAS OF CONTROVERSY

Issues known to be of concern are those raised by the various agencies that commented on the 2021 NOP, which are provided in Appendix A1 of this 2021 SEIR. A brief summary of the comments raised is provided below, although the full text of the comment letters was considered in preparation of the technical analyses provided in this 2021 SEIR:

1. Native American Heritage Commission, April 20, 2021
 - Requested that the 2021 Project comply with AB 52 and AB 18 requirements
2. Los Angeles County Sanitation Districts (Sanitation Districts), May 6, 2021
 - 2021 Project must obtain approval to construct sewer facility improvements
 - Requested that the 2021 Project sewer plans be submitted for review and approval
 - Indicated that the 2021 Project would require payment of a connection fee
 - Indicated that the size of the 2021 Project and service sewer facilities should be consistent with the SCAG regional growth forecast
3. South Coast Air Quality Management District (SCAQMD), May 11, 2021
 - Provided recommendations for air quality analysis methodology
 - Provided recommended reduction strategies for operational air quality impacts from mobile sources
 - Suggested health risk reduction strategies
4. California Department of Fish and Wildlife (CDFW), May 12, 2021
 - Requested analysis of impacts to jurisdictional waters (i.e., Torrance Lateral and the Dominguez Channel), burrowing owls, and nesting birds
 - Provided a variety of information sources and identified accepted survey methodologies
 - Requested an analysis of baseline conditions, cumulative impacts, and alternatives
5. California Department of Transportation (Caltrans), May 12, 2021
 - Indicated that the 2021 Project use vehicle miles traveled (VMT) as the primary metric for identifying transportation impacts
 - Requested incorporation of multi-modal and complete streets transportation elements in the 2021 Project design
 - Requested evaluation of the potential of Transportation Demand Management (TDM) Strategies
6. Southwest Regional Council of Carpenters, May 17, 2021
 - Requested that the 2021 Project include provisions for community benefits (e.g., local hire and skilled and trained workforce requirements)

- Raised concerns related to COVID-2019
 - Raised a potential issue with NOP notification
7. California Air Resources Board (CARB), May 18, 2021
- Raised concerns regarding air pollution and health risk concerns related to project activities and increases in greenhouse gas (GHG) emissions
 - Recommended emission reduction measures and strategies

There were no additional issues raised in response to the NOP for this 2021 SEIR.

I.G ISSUES TO BE RESOLVED

According to CEQA Guidelines Section 15123(b)(3), issues to be resolved include the choice among alternatives and whether or how to mitigate the significant effects.

I.H PROJECT OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), the 2006 FEIR contained a statement of objectives for the 2006 Project in its Project Description and some of those objectives were slightly modified for the 2018 Project pursuant to the 2018 SEIR. Given the changes in land uses proposed by the 2021 Project, changes to the project objectives are shown below and are summarized in **Table I-3, 2021 Project Objectives**.

Similar to the 2006 Project assessed by the 2006 FEIR and the 2018 Project assessed by the 2018 SEIR, the 2021 Project will be defined by a series of development standards that would regulate the amount and types of development, the size and arrangement of buildings, on-site circulation, and open space, as well as the general appearance of the development occurring on the Project Site. These standards would be implemented through amendments to the 2018 Specific Plan, upon adoption and approval by the City Council of the 2021 Specific Plan Amendment.

**Table I-3
2021 Project Objectives**

-
1. Provide a diversity of both short-term and long-term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term light industrial and commercial jobs.
 2. Improve the housing stock by approving a project that includes a substantial residential component.
 3. Provide a project that contributes to the creation of a vibrant urban core for the City and takes advantage of the Project Site's proximity to the San Diego Freeway.
 4. Develop the Project Site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the Project Site.
 5. Provide a project that includes a variety of residential, commercial, and retail uses with the potential to generate increased sales and property tax revenue.
 6. Develop a project with a balanced mix of land uses that stimulate economic activity, commerce, and new development opportunities in and around the Project Site.
 7. Promote an economically viable development at the Project Site that will enable the Developer/Applicant(s) to pay for the substantial costs associated with environmental remediation, and development of a former landfill as well as construction and maintenance of required infrastructure improvements.
 8. Provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site.
 9. Develop a project that is consistent with a live, work, and play environment through uses that provide for residential occupancy, substantial job opportunities, and attractive recreational/retail amenities.
-

I.I SUMMARY OF ALTERNATIVES

Sections I.I.1 through I.I.5 summarize alternatives to the 2021 Project that would feasibly attain most of the basic project objectives, but avoid or substantially lessen any significant environmental impacts that have been identified in this 2021 SEIR. Section I.I.6 identifies the environmental superior alternative.

I.I.1 Alternative 1A: No Project – No Development

The No Project – No Development Alternative (Alternative 1A) assumes that the 2021 Project would not be developed and that no vertical development would occur. However, the Project Site would still require remediation as required by the Department of Toxic Substances (DTSC) in various DTSC-approved documents (e.g., the Upper Operating Unit Remedial Action Plan [Upper OU RAP]⁶). Since the 2018 SEIR, the Project Site has undergone, and continues to undergo, remediation, capping, and maintenance of the former Cal-Compact Landfill consistent the Upper OU RAP. This alternative would involve completion of the remediation required for the 157-Acre Site, including the capping of existing waste materials at the former Cal Compact

⁶ A detailed discussion of the Upper Operating Unit RAP, as well as other DTSC-approved documents that apply to the 157-Acre Site, is provided in Section II.F, Remediation Activities, of this 2021 SEIR.

Landfill site, as required under the Upper OU RAP and other DTSC-imposed regulatory requirements applicable to the Project Site. However, this alternative would require the Carson Reclamation Authority (CRA) to find an alternate means of funding in order to complete the required remediation for the Project Site, including long-term operation and maintenance (O&M) costs associated with the Project Site (based upon applicable regulatory requirements imposed on the Project Site given the fact that it is a former landfill site). Since the CRA currently does not have sufficient funds available to cap off and remediate the 157-Acre Site and/or fund the ongoing O&M costs associated with the 157-Acre Site indefinitely, it is unclear whether this Alternative 1A is feasible. The evaluation of Alternative 1A addresses the requirements of CEQA Guidelines Section 15126.6(e)(3)(B).

I.I.2 Alternative 1B: No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning

The No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning Alternative (Alternative 1B) assumes that the 2018 Project analyzed in the 2018 SEIR would be developed on the 157-Acre Site pursuant to the 2018 Specific Plan. Maximum development on the Project Site, would consist of a total of 1,834,833 sf of commercial uses and up to 1,250 residential units. Specifically, under the 2018 Specific Plan, PA1 included the provision for up to 1,250 residential units and/or commercial uses pursuant to Mixed-Use Marketplace (MU-M) zoning. PA2 included the allowance for up to 714,000 sf of regional commercial uses and up to 15,000 sf of restaurant uses within a Commercial Marketplace (CM) zone. PA3 included 1,123,333 sf of regional retail, neighborhood-serving retail, restaurant, entertainment, and hospitality uses (e.g., theater, gym, hotel, etc.) within a CM zone. Under Alternative 1B, the Project Site would continue to undergo remediation, capping, and maintenance and operation as required under the Upper OU RAP and the other applicable regulatory requirements.

I.I.3 Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)

The Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Light Industrial Uses in PA3) Alternative (Alternative 2) assumes that the square footage the 2021 Project would be reduced by 25 percent within PA3 only. The land uses in PA1 and PA2 would remain the same (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

The proportionate mix of neighborhood serving commercial, restaurant, and light industrial uses proposed within PA3 would be the same under the 2021 Project; however, maximum development would be reduced by 25 percent and thus, would consist of 7,500 sf of neighborhood serving commercial uses; 17,850 sf of restaurant use; and 1,175,218 sf of light industrial uses for a total floor area of 1,200,668 sf in PA3. Light industrial uses, as with the

2021 Project, would be approximately 50 percent e-commerce and fulfillment center uses and 50 percent traditional distribution center and parcel hub type uses similar to the 2021 Project. The Carson Country Mart would still occupy the same acreage as the 2021 Project (11.12 acres), but commercial development within the Carson Country Mart would be reduced by 25 percent. The park/open space provided under Alternative 2 would be similar to the 2021 Project's proposed 6.29 acres of park/open space. This alternative would also include the 0.62 acres of Enhanced Parkway located northwest of the proposed light industrial uses along Lenardo Drive. The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the Upper OU RAP and other applicable regulatory requirements. It is assumed that similar heights and the number of light industrial and commercial buildings proposed would be similar under Alternative 2 as with the 2021 Project; however, given the smaller building square footages, it is assumed that building setbacks would be greater.

I.I.4 Alternative 3: Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/Fulfillment Only) Uses in PA3

The Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/Fulfillment Only) Uses in PA3 Alternative (Alternative 3) assumes that PA3 would exclusively include light industrial uses, but with a reduction in square footage as compared to the 2021 Project light industrial uses. This alternative would not include the Carson Country Mart or any associated neighborhood serving commercial, restaurant, or park uses within PA3(b) or the Enhanced Parkway in PA3(a) proposed by the 2021 Project. The entire developable acreage of PA3 would be used for light industrial uses. The land uses in PA1 and PA2 would remain the same as the 2021 Project (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

Specifically, this alternative would include up to 1,000,000 sf of light industrial uses, with the light industrial uses consisting of exclusively e-commerce and/or fulfillment center uses (and no distribution center/parcel hub uses). The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the Upper OU RAP and other applicable regulatory requirements. It is assumed that one light industrial building would be developed under this alternative. The building height of the proposed light industrial building is assumed to be similar to the heights proposed under the 2021 Project (i.e., maximum of 65 feet); however, given the reduction in building square footage, the building setbacks would be greater from the western boundary of the Project Site. Vehicular parking spaces would be provided adjacent to the northern, northwestern and southeastern portion of the proposed light industrial building. Loading docks provided on the southwestern portion of the proposed light industrial building and trailer parking spaces located adjacent to the loading dock area, between the proposed light industrial building and the Torrance Lateral. A screen wall of 12 feet would be provided for the trailer parking area.

I.I.5 Alternative 4: Commercial/Industrial PA3 Hybrid

The Commercial/Industrial PA3 Hybrid Alternative (Alternative 4) assumes that the total square footage under PA3 would be the same as proposed under the 2021 Project (i.e., 1,600,890 sf), but the uses would be 50 percent light industrial pursuant to a new light industrial land use designation, and 50 percent commercial uses pursuant to the CM uses allowed under the 2018 Specific Plan. The land uses in PA1 and PA2 would remain the same (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

Light industrial uses in PA3 would total 800,445 sf under this alternative and would consist of approximately 50 percent e-commerce and fulfillment center uses (approximately 400,223 sf) and 50 percent traditional distribution center and parcel hub type uses (approximately 400,222 sf), as with the 2021 Project. The commercial uses in PA3 would consist of neighborhood serving commercial, restaurant, studio, and self-storage uses. Specifically, Alternative 4 includes: 100,000 sf of neighborhood serving commercial, including 40,000 sf of grocery uses and 20,000 sf of gym uses, 50,000 sf of restaurant uses, 520,000 sf of studio uses, and 130,000 sf of self-storage uses. While the Carson Country Mart and Enhanced Parkway would both not be developed as part of this alternative, Alternative 4 does assume some outdoor recreational amenities would be provided; however, no lawn and amphitheater spaces are assumed to be proposed as part of this alternative. The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the Upper OU RAP and other applicable regulatory requirements. It is assumed that similar heights and building setbacks would be similar under Alternative 4 as with the 2021 Project.

I.I.6 Environmentally Superior Alternative

As determined in Chapter V, *Alternatives*, of this 2021 SEIR, Alternative 2, Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3), is the environmentally superior alternative because Alternative 2 would reduce the environmental effects compared to the 2021 Project more so than Alternatives 1B, 3, and 4. However, Alternative 2 would reduce the amount of revenue and/or property tax that could be generated on site due to the reduction in square footage, as well as the number of employment opportunities offered on the Project Site. Consequently, Alternative 2 would not allow the City to achieve the same level of productive reuse of a large brownfield site as the 2021 Project. In addition, since Alternative 2 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the 2021 Project due to the reduction of commercial uses within the Carson Country Mart.

I.J SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts previously disclosed in the 2006 FEIR and/or 2018 SEIR, this analysis considers the impacts that would result from construction and operation of the 2021 Project under current environmental and regulatory requirements and applicable mitigation measures. The analysis compares impacts under the 2021 Project to those identified in the 2006 FEIR and/or 2018 SEIR and also includes implementation of the 2018 mitigation measures, either as adopted in the 2018 Mitigation Monitoring and Reporting Program (MMRP) or as revised in this 2021 SEIR, and new mitigation measures provided in this 2021 SEIR.

Consistent with CEQA Guidelines Section 15162(a)(1–3), the 2021 Project was evaluated to determine if it would result in one or more of the following: (1) substantial changes that require major revisions of the previous EIR due to the involvement of new significant impacts or a substantial increase in the severity of previously identified significant impacts; (2) substantial changes in circumstances that would result in new or substantially more-severe environmental impacts; or (3) new information of substantial importance that would result in new or substantially more-severe environmental impacts. Based on this analysis, which is contained in this 2021 SEIR, an SEIR is the appropriate CEQA document. In addition, there are no mitigation measures or alternatives that were previously found not to be feasible that would be feasible or are considerably different from those analyzed in the 2018 SEIR that would reduce one or more significant effects and the project proponents decline to adopt those mitigation measures or alternatives (CEQA Guidelines Section 15162(a)(3)(C and D)).

The significant impacts of the 2021 Project that cannot be avoided, even with implementation of feasible mitigation measures, are provided in **Table I-4, Significant and Unavoidable Project-Related Impacts**. Table I-4 also identifies the significant and unavoidable impacts associated with construction and/or operation of the 2018 Project and the 2021 Project for comparative purposes.

**Table I-4
Significant and Unavoidable Project-Related Impacts**

	Topic	2018 Project Conclusion	2021 Project Conclusion
Aesthetics	Conversion of the Appearance of the Site	Significant and Unavoidable (2018 SEIR pp. I-25, IV.B-19, and VII-1)	Significant and Unavoidable
	Cumulative Contribution Related to the Conversion of the Appearance of the Site	Significant and Unavoidable (2018 SEIR p. IV.B-32)	Significant and Unavoidable
Transportation	Intersection Operations	Significant and Unavoidable (Main Street/I-405 Freeway southbound ramps; Vermont Avenue/Del Amo Boulevard; Figueroa Street/Del Amo Boulevard; Main Street/Del Amo Boulevard; Avalon Boulevard/Del Amo Boulevard; Figueroa Street/I-110 Freeway northbound ramps; Vermont Avenue/Carson Street; Avalon Boulevard/Carson Street; Hamilton Avenue/Del Amo Boulevard) (2018 SEIR pp. I-42, IV.C-37, IV.C-51, IV.C-64, IV.C-70, IV.C-71, VII-1)	N/A – An intersection level of service analysis is no longer required by CEQA; the analysis of transportation impacts is now provided by a VMT analysis
	Freeway Service Levels	Significant and Unavoidable (three segments of the I-110 Freeway; four segments of the I-405 Freeway; and one segment of the I-710 Freeway) (2018 SEIR pp. I-43, IV.C-69, IV.C-71, VII-1)	N/A – A freeway level of service analysis is no longer required by CEQA
	VMT	N/A – A VMT analysis was not required by CEQA in 2018	Significant and Unavoidable
	Cumulative VMT	N/A – A VMT analysis was not required by CEQA in 2018	Significant and Unavoidable
Air Quality	Regional Construction Emissions	Significant and Unavoidable (VOC and CO) (2018 SEIR pp. I-52, IV.G-1, and VII-1)	Less than Significant Impacts with Mitigation
	Regional Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-1, IV.G-55, and VII-1)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)
	Regional Concurrent Construction and Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-57, IV.G-58, VII-1, and VII-2)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)
	Cumulative Regional Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-1, IV.G-55, and VII-1)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)

**Table I-4
Significant and Unavoidable Project-Related Impacts**

	Topic	2018 Project Conclusion	2021 Project Conclusion
Noise	Construction Noise	Significant and Unavoidable (2018 SEIR pp. IV.H-35 and VII-2) (Pile Driving and Deep Dynamic Compaction in PA1, PA2, and PA3)	Significant and Unavoidable (Pile Driving occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8; Deep Dynamic Compaction occurring in PA1 and PA2 at sensitive receptors R2 through R8; and concurrent pile driving and deep dynamic compaction (DDC) occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8)
	Cumulative Construction Noise	Significant and Unavoidable (2018 SEIR pp. IV.H-32)	Significant and Unavoidable
	Cumulative Operational Noise – Contribution to Roadway Noise	Less than Significant	Significant and Unavoidable (Future Plus Project in 2024, 2025, and 2026 at three roadway segments: Main Street between Lenardo Drive and Torrance Boulevard; Del Amo Boulevard between Main Street and Stamps Drive; and Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard)

Table I-5, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, p. I-31, identifies each significance threshold; the level of significance before mitigation; applicable and feasible mitigation measures; and the level of significance after mitigation.

PDFs are also identified in Table I-5 that would reduce impacts related to aesthetics, air quality emissions, greenhouse gas (GHG) emissions, and energy use resulting from the 2021 Project. These PDFs represent 2021 Project design, construction, and/or operational features or regulatory requirements. With respect to air quality, energy, and GHG, the PDFs identified in those sections are used in the unmitigated modeling scenario.⁷ The mitigated modeling scenario then applies any identified 2021 mitigation measures. Because these PDFs must be implemented, in addition to the 2021 mitigation measures, each PDF is provided an alphanumeric designation in this impact summary table (e.g., 2021 SEIR PDF-X#), similar to mitigation measures (Mitigation Measure X-#). All PDFs and mitigation measures will be monitored in the 2021 SEIR MMRP.

⁷ *Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.*

With respect to the mitigation measures identified in Table I-5, a footnote is also provided where a mitigation measure is also: (1) included in the 2021 Specific Plan Amendment and is a regulatory requirement; (2) included in the 2021 Specific Plan Amendment; and (3) considered a regulatory requirement.

Due to revisions in the thresholds between 2018 and 2021 and/or other reasons, some mitigation measures that were identified in 2018 are no longer applicable to the 2021 Project and are not shown in Table I-5. Refer to the topical sections contained in Chapter IV, *Environmental Impact Analysis*, for an identification of those deleted mitigation measures and the reason for deletion in the 2021 SEIR.

In addition, compliance requirements for PA2 are limited to those mitigation measures that were identified in the 2018 SEIR because: (1) PA2 has already been approved for development by the City (following approval of the 2018 SEIR); (2) the Applicant for that property (CAM-Carson LLC) has vested rights to its project proposal; and (3) remedial system and site development construction has already begun for PA2 in compliance with the 2018 SEIR. As such, PDFs and mitigation measures reflected in Table I-5 that are new or have been revised are not applicable to PA2.

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**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
I. Aesthetics					
a) Have a substantial adverse effect on a scenic vista?	Chapter VI, <i>Effects Found Not to Be Significant (EFNTBS)</i>	N/A	No Impact	None required.	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	Chapter VI, <i>EFNTBS</i>	N/A	No Impact	None required.	No Impact
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?	Full Section, Section IV.B	N/A	Potentially Significant	<p>Mitigation Measure B-1: The buildings in PA3 at the western boundary of the Project Site (i.e., Buildings A and D) shall maintain a 70-foot setback from the property line adjacent to the Torrance Lateral. The minimum setback for all buildings greater than 60 feet in height along the Torrance Lateral, adjacent to residential uses, shall be 250 feet.</p> <p>Mitigation Measure B-4:^b All Project development shall undergo site plan review by the Community Development Director (or a designee) to ensure that the following design measures have been implemented:</p> <ul style="list-style-type: none"> • Landscaping. All Landscaping shall be consistent with a plant palette of native trees, shrubs, and groundcovers that shall add uniformity to the Project Site. Plants shall be selected to support and complement the themes of the various Project components. Specially themed landscaping treatments shall occur at key locations (e.g., freeway edge and channel slope). Of more detailed note: (1) continuous shrub and ground cover plantings shall be provided in the medians and edges of internal streets with vertical landscape and/or sculptural hardscape elements on average every 50 feet along the edges; (2) a minimum of 5% landscape coverage shall be provided in parking lots, including landscaping adjacent to edges of parking fields; and (3) 50% landscape coverage of visible concrete surfaces shall be provided on the edges of parking structures adjacent and visible to residences, not inclusive of commercial over podium. • Buildings. Buildings shall include the following design features: varied and articulated building façades, with a variety of architectural accent materials for exterior treatment at visually accessible locations. • Accessory Facilities and Walls. Wall facades shall be varied and articulated. Accessory facilities such as trash bins, storage areas, etc., shall be covered and screened as set forth in the 2021 Specific Plan Amendment. • Lighting. Lighting shall be limited in intensity, light control methods, and pole heights, so as to be directed on site, and not interfere with off-site activities. <p>Signage. A comprehensive sign program shall be prepared that provides the final design, size, location, and illuminance of signage within a Planning Area. As part of the application submittal for the comprehensive sign program, if necessary, a technical lighting study shall be prepared to ensure that the proposed signs comply with Mitigation Measures B-3a and B-3b regarding illuminance and that no spillover or adverse effects to adjacent residential uses shall occur.</p>	Significant and Unavoidable – Construction Cumulatively Significant and Unavoidable – Construction

**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	Full Section, Section IV.B	<p>2021 SEIR PDF-A1: Sign lighting luminance shall not exceed 500 candelas per square meter (cd/m²) at night from 45 minutes after sunset until 45 minutes prior to sunrise, and 10,000 cd/m² during day-time hours from 45 minutes after sunrise until 45 minutes prior to sunset.</p> <p>2021 SEIR PDF-A2: Sign lighting where sign illumination has the potential to exceed 500 cd/m² will include an electronic control mechanism to reduce sign luminance to 500 cd/m² at any time when ambient sunlight is less than 100 foot-candles (fc).</p> <p>2021 SEIR PDF-A3: Sign owners and/or Applicants shall submit documentation for the City's review and approval verifying the luminance of applicable signage and confirm that the electronic control mechanism is functioning so as to achieve the necessary transition of luminance as required by 2021 SEIR PDF-A1 and PDF-A2 on an annual basis, or as otherwise required by the Community Development Director (or a designee). If the City determines based on the review of the documentation that adjustments are necessary, the sign owners and/or Applicants responsible for the signage shall make the adjustments to the satisfaction of the City.</p>	Potentially Significant	<p>Mitigation Measure B-2: The distribution, placement, and orientation of signs along the I-405 Freeway shall be in substantial compliance with the signage concepts and in compliance with the sign standards in the 2021 Specific Plan Amendment.</p> <p>Mitigation Measure B-3a:^c If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign at night, then the proposed modified Project sign luminance shall be reduced to less than 300 cd/m² at night.</p> <p>Mitigation Measure B-3b:^c If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign, sign area and/or sign luminance shall be limited so that the light trespass illuminance is less than 0.74 foot-candle at said residential property line.</p> <p>Mitigation Measure B-4,^a as provided above.</p>	Less than Significant with Mitigation
● Adversely affect the viability of retail uses within the market area that the proposed modified Project is intended to serve such that the existing retail uses could fall into long-term physical disrepair unable to recover with forecasted increases in economic demand in the future? ⁸ (not a specific 2018 or 2021 Appendix G Threshold, but evaluated in 2018 and 2021 to determine whether there would be secondary, physical impacts to the environment)	Chapter VI, <i>Effects Found Not to Be Significant (EFNTBS)</i>	N/A	Less than Significant	N/A	Less than Significant
II. Agriculture and Forestry Resources					
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A

⁸ This threshold was provided in the 2018 SEIR. Because it was not an Appendix G CEQA threshold in 2018, the threshold was not designated with an alphanumeric designation; instead, it was denoted with a "bullet." Therefore, as with the 2018 SEIR, the 2021 SEIR also designates this threshold with a bullet to continue to indicate that it is not an Appendix G CEQA threshold.

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c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
d) Result in the loss of forest land or conversion of forest land to non-forest use?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
III. Air Quality					
a) Conflict with or obstruct implementation of the applicable air quality plan?	Full Section, Section IV.D	N/A	Less than Significant	None required.	Less than Significant
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Full Section, Section IV.D	<p>2021 SEIR PDF-C1: Mobile off-road construction equipment (wheeled or tracked) used during construction of the 2021 Project shall meet the U.S. EPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, then the equipment shall, at a minimum, meet the Tier 3 standard. Zero-emissions construction equipment shall be incorporated when commercially available. This requirement shall be incorporated into applicable bid documents, purchase orders, and contracts with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. (Applicable to PA1, PA2, and PA3; zero-emissions construction equipment use is not required for PA2.)</p> <p>2021 SEIR PDF-C2: Limiting excavations to avoid exposing landfill contents. (Applicable to PA1, PA2, and PA3.)</p> <p>2021 SEIR PDF-C3: General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403. Grading in PA1 and PA3 shall be prohibited on days when Air Quality Index Forecast exceed 100 for particulates or ozone.</p>	<p>Potentially Significant – Construction</p> <p>Potentially Significant – Operation</p> <p>Potentially Significant – Construction and Operation</p>	<p>Mitigation Measure G-2:^d All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. Maintenance records and data sheets, including design specifications and emissions control tier classification shall be maintained on site and furnished to the lead agency or regulatory agencies upon request. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-3: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-7: To reduce VOC emissions associated with construction activities, the contractor for PA1 shall ensure that VOC emissions from architectural coating activities have low/no VOC content, or that architectural coating activities for PA1 do not occur at the same time as architectural coating activities for PA2. (Applicable to PA1.)</p> <p>Mitigation Measure G-9: All construction vehicle tires shall be washed at the time these vehicles exit the Project Site, or use vehicle tracking pad per approved SWPPP. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-10: All fill material carried by haul trucks shall be covered by a tarp or other means. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-11: Any intensive dust-generating activity such as grinding concrete shall be controlled to the greatest extent feasible. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-12: Each Applicant shall provide documentation to the City indicating both on- and off-site air-borne risks associated with construction have been evaluated to the satisfaction of DTSC (in accordance with all DTSC requirements/regulations), and at a minimum, perimeter air monitoring shall be completed for dust,</p>	<p>Less than Significant with Mitigation – Construction</p> <p>Significant and Unavoidable – Regional Operational Emissions</p> <p>Significant and Unavoidable – Concurrent Construction and Regional Operational Emissions</p> <p>Cumulatively Significant and Unavoidable – Regional Operational Emissions</p>

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		<p>2021 SEIR PDF-C4: Electric hook-ups to the power grid shall be used rather than temporary diesel- or gasoline-powered generators for electric construction tools whenever feasible. For PA3 and PA1, mobile off-road construction equipment of less than 50 horsepower shall be electric, including: air compressors, concrete/ industrial saws, welders and plate compactors. Mobile off-road construction equipment with a power rating of 19 kilowatts or less shall be battery powered. If generators need to be used to reach remote portions of the site, non-diesel generators shall be used. (Applicable to PA1, PA2, and PA3.)</p> <p>2021 SEIR PDF-C5: All construction vehicles shall be prohibited from idling in excess of 5 minutes per occurrence and location, both on and off site. (Applicable to PA2.) All construction vehicles shall be prohibited from idling in excess of 2 minutes per occurrence and location, both on and off site. Individual pieces of diesel-powered off-road diesel equipment shall be prohibited from being in the "on" position for more than 10 hours per day. (Applicable to PA1 and PA3.)</p> <p>2021 SEIR PDF-C6: All fleet-contracted on-road heavy-duty haul trucks used for remediation and construction hauling activities from PA1 and PA3 shall be model year 2014 or newer if diesel fueled. The requirement for the use of 2014 or newer vehicles does not apply to delivery trucks or other non-contracted fleets. (Applicable to PA1 and PA3.)</p> <p>2021 SEIR PDF-C7: Contractors shall conduct routine inspections to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts. Inspection reports shall be maintained on site throughout the construction period. (Applicable to PA1, PA2, and PA3.)</p> <p>2021 SEIR PDF-C8: 2021 Project contractors shall provide information on transit and ride sharing programs and services to construction employees. As feasible, provide for meal options on site, or shuttle buses between the site and nearby meal destinations for use by construction contractors. (Applicable to PA1 and PA3.)</p> <p>2021 SEIR PDF-O1: The 2021 Project would include an impervious barrier to control odiferous and air toxic emissions in compliance with the approved RAP. (Applicable to PA1, PA2, and PA3.)</p>		<p>particulates, and constituents determined to be Constituents of Concern (COCs). (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-13:^d All point source facilities shall obtain all required permits from SCAQMD. The issuance of these permits by SCAQMD shall require the operators of these facilities to implement Best Available Control Technology and other required measures that reduce emissions of criteria air pollutants. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-16: All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-17: Building materials shall comply with all applicable SCAQMD rules and regulations. The 2021 Project shall incorporate the use of low-VOC architectural coating for repainting and maintenance/touch-up of the non-residential buildings and residential buildings for all common/non-living space/outdoor areas. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-18: Each Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-19: Each Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-20: During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-21: Each Applicant shall pay a fair-share contribution for a low-emissions shuttle service between the Project Site and other major activity centers within the 2021 Project vicinity (i.e., the Metro Rail Blue Line station at Del Amo Boulevard and Santa Fe Avenue and the Carson Transfer Station at the SouthBay Pavilion). (Applicable to PA1 and PA2. Not applicable to PA3 as it is an industrial land use.)</p> <p>Mitigation Measure G-27: The on-site residential units shall not contain any hearths, either wood burning, natural gas, or propane. (Applicable to PA1, PA2, and PA3.)</p> <p>Mitigation Measure G-29:^d The 2021 Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean air vehicles and comply with California Green Building Standards Code (CALGreen). (Applicable to PA2.)</p>	

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		<p>2021 SEIR PDF-O2: All stationary-source emissions sources (e.g., landfill gas flares, emergency generator) would utilize Best Available Control Technology (BACT) to meet SCAQMD requirements, and would maintain appropriate SCAQMD permits. (Applicable to PA1, PA2, and PA3.)</p> <p>2021 SEIR PDF-O3: Land uses within the Project Site shall not allow for high levels of potential (i) toxic contaminants or (ii) odors. All TAC sources shall be permitted through SCAQMD as appropriate. (Applicable to PA1, PA2, and PA3.)</p> <p>2021 SEIR PDF-O4: All residential and non-residential buildings shall meet or exceed the more stringent of the 2019 California Title 24 Efficiency standards or others adopted by the City. (Applicable to PA1 and PA3; PA2 applicability is limited to the Title 24 efficiency standards effective at the time construction began.)</p> <p>2021 SEIR PDF-O5: The Applicant(s) of each planning area within the Project Site shall implement the following trip demand measures:</p> <ul style="list-style-type: none"> a) Provide bicycle racks located at convenient locations throughout the 2021 Project. (Applicable to PA1, PA2, and PA3.) b) Provide bicycle paths along the main routes throughout the Project Site consistent with the 2021 Specific Plan Amendment. (Applicable to PA1, PA2, and PA3.) c) Provide convenient pedestrian access throughout the Project Site. (Applicable to PA1, PA2, and PA3.) d) Provide on-site shower facilities for use by all employees bicycling/walking to work. (Applicable to the light industrial uses in PA3(a).) e) Light industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards. (Applicable to the light industrial uses in PA3(a).) f) Each light industrial tenant within PA3(a) shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities. (Applicable to the light industrial uses in PA3(a).) 			

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		<p>2021 SEIR PDF-O6: The 2021 Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. (Applicable to PA1, PA2, and PA3.)</p>			
		<p>2021 SEIR PDF-O7: Electric vehicle charging stations shall be provided as follows:</p>			
		<p>a) The Applicant of PA1 shall provide passenger vehicle charging stations for a minimum of 6 percent parking spaces (169 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA1.)</p>			
		<p>b) The Applicant of PA3 shall provide passenger vehicle charging stations for a minimum of 10 percent parking spaces (82 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA3.)</p>			
		<p>c) Each of the Applicant(s) of PA1 and PA3 shall install Level 2 or better electric vehicle charging stations for 325 spaces on site between the beginning of construction and December 2039 (the 325 spaces are in addition to the 169 spaces in PA1 and 82 spaces in PA3). If on-site charging stations cannot be accommodated, charging stations may be distributed throughout the City. The 325 electrovoltaic (EV) supplied spaces will be provided for passenger and light-duty vehicles. Level 4 EV charging for trucks can be substituted at 0.11 truck spaces for every passenger vehicle space in PA3. Passenger and light-duty vehicle and truck charging requirements can be satisfied on or off site; however, on-site charging will be prioritized. (Applicable to PA1 and PA3.)⁹</p>			
		<p>d) Provide infrastructure, as the parking area is developed, to support the energy load for electric truck vehicle charging. Truck charging infrastructure shall be designed to support a minimum of 25 percent of the truck parking spaces for each of the light industrial use in PA3(a). (Applicable to the uses in PA3(a).)</p>			
		<p>2021 SEIR PDF-O8: All on-site equipment, such as forklifts and yard trucks shall be electric with the necessary electrical infrastructure and charging stations provided. (Applicable to PA3.)</p>			

⁹ At the discretion of the Applicant(s) of PA2, additional EV charging stations may be incorporated beyond those required of PA2 as part of the 2018 SEIR mitigation requirements.

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		<p>2021 SEIR PDF-O9: When not in use all truck engines shall be turned off. Idling will be limited to 2 minutes or less per occurrence and location for PA3. Idling and operation restrictions shall be posted for view from both on-site and off-site personnel. Appropriate signage shall identify idling restrictions and contact information to report violations to CARB and SCAQMD within PA3. Consistent with the 2018 SEIR, idling restrictions of 5 minutes or less per occurrence and location are applicable to PA1 and PA2. (Applicable to PA3.)</p> <p>2021 SEIR PDF-O10: All dock doors shall be equipped with electric plugs for electric transportation refrigeration units (TRUs). All TRUs operating on site would be required to be electric (no diesel-powered TRUs permitted at all in PA3(a)) and certification and maintenance records shall be maintained for all TRUs. (Applicable to the light industrial uses in PA3(a).)</p> <p>2021 SEIR PDF-O11: To the extent feasible and permitted by local codes and regulations, all emergency-standby generators shall be non-diesel. If diesel generators are required, generators will conform to EPA Tier 4 emissions standards. (Applicable to the light industrial uses in PA3(a).)</p> <p>2021 SEIR PDF-O12: Tenants shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. Staff in charge of keeping vehicle records shall be trained in diesel technologies and compliance with CARB regulations by attending CARB-approved courses as well as maintaining on-site records demonstrating compliance. (Applicable to uses in PA3(a).)</p> <p>2021 SEIR PDF-O13: As applicable, tenants shall be required to enroll in U.S. EPA's SmartWay program and shall use carriers that are SmartWay carriers. (Applicable to the uses in PA3(a).)</p> <p>2021 SEIR PDF-O14: Tenants shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets. (Applicable to the uses in PA3(a).)</p> <p>2021 SEIR PDF-O15: All light industrial buildings shall implement a combination of sky lights and solar photovoltaic (PV) infrastructure such that a minimum of 25 percent of the rooftops will include solar PV arrays at buildout. (Applicable to uses in PA3(a).)</p>			

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		2021 SEIR PDF-O16: For the uses within PA3(a), leasing preference shall be given to prospective tenants with facility-owned and operated fleet that is alternative/zero-emissions. All owned or contracted fleets shall meet or exceed the 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Light Industrial tenants shall ensure that of all trucks of model year 2021 and newer 75 percent will be zero- or near-zero-emissions vehicles by 2035, and 100 percent zero- or near-zero-emissions vehicles by 2040. Facility operators shall maintain records on site demonstrating compliance with this requirement and shall make records available to inspection by local jurisdiction, air districts, and the State upon request. (Applicable to the uses in PA3(a).)			
c) Expose sensitive receptors to substantial pollutant concentrations?	Full Section, Section IV.D	Refer to 2021 SEIR PDF-C1 through 2021 SEIR PDF-C8 and 2021 SEIR PDF-O1 through 2021 SEIR PDF-O16, above.	Less than Significant	Refer to Mitigation Measures G-2, G-3, G-7 through G-13, G-16 through G-21, G-27, and G-29, above.	Less than Significant
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Chapter VI, EFNTBS	Refer to 2021 SEIR PDF-O3, above.	Less than Significant	Mitigation Measure G-8: ^d Each Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities. (Applicable to PA1, PA2, and PA3.)	Less than Significant
IV. Biological Resources					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	Full Section, Section IV.G	N/A	Less than Significant	Mitigation Measure K-1. Impacts to nesting birds would be avoided by conducting all construction activities outside of the bird nesting season (i.e., from September 1 to February 14 for most birds, from July 1 to January 14 for raptors). However, if construction activities must occur during the nesting season, the following measures shall apply: A. Prior to work during the bird nesting season (February 15 to August 31 for most birds, January 15 to June 31 for raptors), a qualified biologist shall conduct a pre-construction survey of all suitable habitat for the presence of nesting birds no more than 7 days prior to construction activities. The results of the pre-construction survey shall be valid for 7 days; if vegetation removal activities do not commence within 7 days following the survey or if activities cease for more than 7 consecutive days, a new pre-construction nesting bird survey shall be conducted before construction resumes. B. If any active nests are found during a pre-construction nesting bird survey, a buffer of up to 300 feet for most bird species and 500 feet for raptors, or as determined appropriate by the qualified biologist (based on species-specific tolerances and site-specific conditions), shall be delineated, flagged, and avoided until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). The qualified biologist may also recommend other measures to minimize disturbances to active nests that may include but are not limited to limiting the duration of certain activities, placing sound barriers (e.g., noise blankets), or	Less than Significant

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				visual barriers (e.g., straw bales), and/or providing full-time monitoring by a qualified biologist. C. As a provisional additional mitigation element, in case surveys identify burrowing owl as present on site, such occurrence shall be documented and CDFW shall be notified. Although it is considered highly unlikely that a pair of burrowing owls might attempt to nest on the site (due to disturbance, limited food resources, and presence of coyotes), if an active burrowing owl nest is encountered, a minimum buffer of 500 feet shall be delineated, flagged, and avoided by construction activity until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). A qualified biologist may recommend other measures as noted in Item B, above. However, CDFW will be consulted prior to any reduction of avoidance buffers or implementation of other measures, such as passive relocation.	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	Full Section, Section IV.G	N/A	No Impact	None required.	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	Full Section, Section IV.G	N/A	No Impact	None required.	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	Full Section, Section IV.G	N/A	Less than Significant	Refer to Mitigation Measure K-1, above.	Less than Significant
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	Full Section, Section IV.G	N/A	No Impact	None required.	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	Full Section, Section IV.G	N/A	No Impact	None required.	No Impact
V. Cultural Resources					
a) Cause a substantial adverse change in the significance of a historical resource pursuant to § 15064.5?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
c) Disturb any human remains, including those interred outside of formal cemeteries?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant

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VI. Energy					
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	Full Section, Section IV.H	Refer to 2021 SEIR PDF-C1, 2021 SEIR PDF-C2, 2021 SEIR PDF-C4 through 2021 SEIR PDF-C6, 2021 SEIR PDF-C8, and 2021 SEIR PDF-O4 through 2021 SEIR PDF-O16 provided under III. Air Quality, above.	Less than Significant	None required.	Less than Significant
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	Full Section, Section IV.H	N/A	Less than Significant	None required.	Less than Significant
VII. Geology and Soils					
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:					
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
ii) Strong seismic ground shaking?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
iii) Seismic-related ground failure, including liquefaction?	Chapter VI, EFNTBS	N/A	Less than Significant	<p>Mitigation Measure E-1:^d In accordance with City of Carson Municipal Code, each Applicant shall comply with site-specific recommendations set forth in engineering geology and geotechnical reports prepared to the satisfaction of the City of Carson Building Official, as follows:</p> <ul style="list-style-type: none"> • The engineering geology report shall be prepared and signed by a California Certified Engineering Geologist and the geotechnical report shall be prepared and signed by a California Registered Civil Engineer experienced in the area of geotechnical engineering. Geology and geotechnical reports shall include site-specific studies and analyses for all potential geologic and/or geotechnical hazards. Geotechnical reports shall address the design of pilings, foundations, walls below grade, retaining walls, shoring, subgrade preparation for floor slab support, paving, earthwork methodologies, and dewatering, where applicable. • Geology and geotechnical reports may be prepared separately or together. • Where the studies indicate, compensating siting and design features shall be required. • Laboratory testing of soils shall demonstrate the suitability of underlying native soils to support driven piles to the satisfaction of the City of Carson Building Official. <p>Mitigation Measure E-2:^d Due to the classification of portions of the Project Site as a liquefaction zone, each Applicant shall demonstrate that liquefaction either (a) poses a sufficiently low hazard to satisfy the defined acceptable risk criteria, in accordance with CGS Special Bulletin 117A, or (b) implements suitable mitigation measures to effectively reduce the hazard to acceptable levels (CCR Title 14, Section 3721). The analysis of</p>	Less than Significant

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iv) Landslides?	Chapter VI, EFNTBS	N/A	No Impact	liquefaction risk shall be prepared by a registered civil engineer and shall be submitted to the satisfaction of the City building official. None required.	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	Chapter VI, EFNTBS	N/A	Less than Significant	Mitigation Measure E-3: ^d Any roads realigned from the existing configuration, or otherwise located in areas underlain by waste soils, shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of the City of Carson building official.	Less than Significant
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	Chapter VI, EFNTBS	N/A	Less than Significant	Refer to Mitigation Measures E-1 and E-2, above.	Less than Significant
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
VIII. Greenhouse Gas Emissions					
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Full Section, Section IV.I	Refer to 2021 SEIR PDF-C1, 2021 SEIR PDF-C2, 2021 SEIR PDF-C4 through 2021 SEIR PDF-C8, 2021 SEIR PDF-O2, and 2021 SEIR PDF-O4 through 2021 SEIR PDF-O16 provided under III. Air Quality, above.	Less than Significant	Refer to Mitigation Measures G-3, G-16, G-18, G-19, G-20, G-21, G-27, and G-29, provided under III. Air Quality, above, and Mitigation Measure C-18, provided under XVII. Transportation, below.	Less than Significant
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Full Section, Section IV.I	N/A	Less than Significant	None required.	Less than Significant
IX. Hazards and Hazardous Materials					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant

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within one-quarter mile of an existing or proposed school?					
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	Chapter VI, EFNTBS	N/A	Potentially Significant	<p>Mitigation Measure D-1:^d To the extent each Applicant desires to refine or modify requirements in the RAP, the Applicant shall provide documentation to the City indicating DTSC approval of such refinements or modifications prior to commencement of construction.</p> <p>Mitigation Measure D-2:^d Each Applicant shall provide documentation to the City indicating DTSC shall permit any proposed residential uses prior to issuance of a building permit for residential development.</p> <p>Mitigation Measure D-3:^d Each Applicant shall provide documentation to the City indicating <u>that</u> both on- and off-site risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs). Should the air monitoring indicate any violations of air quality as defined in the RAP, then construction activities causing the exceedance shall cease until modifications have been implemented to remedy the exceedances.</p> <p>Mitigation Measure D-4:^d Each Applicant shall provide to the City documentation indicating that (1) a cell-specific risk assessment has been prepared by the Applicant and approved by DTSC demonstrating that the risk of exposure for occupancy of that cell is within acceptable levels to DTSC and (2) DTSC has approved a remedial action completion report documenting that the remedial systems are properly functioning prior to issuance of a Certificate of Occupancy.</p> <p>Mitigation Measure D-6: Each Applicant's construction contractor shall incorporate the contingency plan recommended under the July 9, 2008, Oil/Water Well Investigation report by Arcadis into construction specifications. The contingency plan shall be physically on site during any earthwork activities and implemented in the event that a previously unknown well is encountered at the Project Site.</p>	Less than Significant
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact

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X. Hydrology and Water Quality¹⁰					
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
i) result in substantial erosion or siltation on or off site;					
ii) substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
iv) impede or redirect flood flows?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
XI. Land Use and Planning					
a) Physically divide an established community?	Full Section, Section IV.A	N/A	Less than Significant	None required.	Less than Significant
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	Full Section, Section IV.A	N/A	Less than Significant	None required.	Less than Significant

¹⁰ Referred to as "Surface Water Quality" in the 2018 SEIR.

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XII. Mineral Resources																																												
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A																																							
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A																																							
XIII. Noise																																												
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Full Section, Section IV.E	N/A	Potentially Significant – Construction Potentially Significant – Operation	<p>Mitigation Measure H-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, each Applicant shall provide proof satisfactory to the Building and Safety and the Community Development Department that all construction documents require contractors to comply with City of Carson Municipal Code Sections 4101(i) and (j), which requires all construction and demolition activities, including pile driving, to occur between 7:00 a.m. and 8:00 p.m. Monday through Saturday and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:</p> <p>1. Noise-generating equipment operated at the Project Site shall achieve a minimum noise level reduction of 10 dBA lower than the reference noise levels used in this analysis, as listed below, to be verified by submittal of manufacturer specifications, evidence of retrofit (i.e., mufflers, intake silencers, lagging, and/or engine enclosures), or monitoring data. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, would be generated.</p> <table border="1"> <thead> <tr> <th>Equipment Type</th> <th>Reference Noise Level at 50 Feet (dBA L_{max})</th> <th>Mitigated Noise Level at 50 Feet (dBA L_{max})</th> </tr> </thead> <tbody> <tr><td>Welder</td><td>74</td><td>64</td></tr> <tr><td>Forklift</td><td>75</td><td>65</td></tr> <tr><td>Tractor Trailer</td><td>76</td><td>66</td></tr> <tr><td>Paver</td><td>77</td><td>67</td></tr> <tr><td>Air Compressor</td><td>78</td><td>68</td></tr> <tr><td>Loader</td><td>79</td><td>69</td></tr> <tr><td>Concrete Mixer Trucks</td><td>79</td><td>69</td></tr> <tr><td>Water Trucks</td><td>80</td><td>70</td></tr> <tr><td>Rollers</td><td>80</td><td>70</td></tr> <tr><td>Trencher</td><td>80</td><td>70</td></tr> <tr><td>Excavators</td><td>81</td><td>71</td></tr> <tr><td>Cranes</td><td>81</td><td>71</td></tr> </tbody> </table>	Equipment Type	Reference Noise Level at 50 Feet (dBA L _{max})	Mitigated Noise Level at 50 Feet (dBA L _{max})	Welder	74	64	Forklift	75	65	Tractor Trailer	76	66	Paver	77	67	Air Compressor	78	68	Loader	79	69	Concrete Mixer Trucks	79	69	Water Trucks	80	70	Rollers	80	70	Trencher	80	70	Excavators	81	71	Cranes	81	71	<p>Significant and Unavoidable – Construction (Pile Driving occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8; Deep Dynamic Compaction occurring in PA1 and PA2 at sensitive receptors R2 through R8; and concurrent pile driving and DDC occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8)</p> <p>Less than Significant with Mitigation – Operation</p> <p>Cumulatively Significant and Unavoidable – Construction</p> <p>Cumulatively Significant and Unavoidable – Operation (Future Plus Project in 2024, 2025, and 2026 at three roadway segments: Main Street between Lenardo Drive and Torrance Boulevard; Del Amo Boulevard between Main Street and Stamps Drive; and Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard)</p>
Equipment Type	Reference Noise Level at 50 Feet (dBA L _{max})	Mitigated Noise Level at 50 Feet (dBA L _{max})																																										
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				Dozer	82	72
				Compactor	83	73
				Scraper	84	74
				Grader	85	75
				Concrete Saw	90	80
				Pavement Scarifier		
				<p>2. Pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques (e.g., use of noise attenuation shields or shrouds) having a minimum quieting factor of 10 dBA, or equivalent measures shall be used to result in a minimum reduction of 10 dBA at the source.</p> <p>3. Effective continuous temporary sound barriers (at least 8-foot-foot-tall as measured from the grade upon which the noise-producing equipment are operating) equipped with noise blankets rated to achieve sound level reductions of at least 20 dBA shall enclose the active construction work area to block line-of-site between the construction equipment and occupied noise-sensitive receptors. In the alternative, equivalent measures may be used that will achieve sound level reductions of at least 20 dBA, or such lesser fraction thereof required to reach 65 dBA, at the boundary of occupied residential uses.</p> <p>4. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the Building and Safety and the Community Development Department.</p> <p>5. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible.</p> <p>6. A construction relations officer shall be designated to serve as a liaison with residents, and a contact telephone number shall be provided to residents.</p> <p>Mitigation Measure H-3: Continuous vibration monitoring shall be conducted on an ongoing basis during DDC and pile driving activities. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City. If DDC and/or pile driving vibration levels at any time exceed the 0.2 inch per second (in/s) PPV (at the residential side of Torrance Lateral) or 2.0 in/s PPV (at Development District 3 [DD3]) threshold levels, DDC and/or pile driving activity shall immediately stop, until modified construction methods are established that would reduce the vibration levels to less than the applicable threshold levels, as defined above.</p> <p>Mitigation Measure H-4: A construction and construction-related monitor satisfactory to the Community Development Director (or a designee) shall be retained by each Applicant to document compliance with the mitigation measures. Said Monitor's qualifications, identification, address, and telephone number shall be listed in the contracts and shall be placed in the pertinent files of the Community Development Department. The Monitor will be required to monitor all construction and construction-related activities on the Project Site on a periodic basis; keep all written records, which</p>		

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				<p>shall be open for public inspection; and to file monthly reports with the City and appropriate permit granting authorities. In addition:</p> <ol style="list-style-type: none"> Information shall be provided on a weekly basis regarding construction activities and their duration. A Construction Relations Officer shall be established and funded by the Applicant, and approved by the Community Development Director (or a designee), to act as a liaison with neighbors and residents concerning on-site construction activity. As part of this mitigation measure, the Applicant shall establish a 24-hour telephone construction hotline, which will be staffed between the hours of 8:00 a.m. and 5:00 p.m. on a Monday through Saturday basis throughout the 2021 Project's entire construction period for the purposes of answering questions and resolving disputes with adjacent property owners. The hotline number shall be posted on the Project Site. The Applicant shall require in all construction and construction-related contracts and subcontracts, provisions requiring compliance with special environmental conditions included in all relevant entitlement approval actions of the City of Carson. Such provisions shall also include retention of the power to effect prompt corrective action by the Applicant, its representative, or prime contractor, subcontractor, or operator to correct noticed noncompliance. During construction, loading and staging areas must be located on site and away from occupied noise-sensitive uses surrounding the Project Site as determined by the Community Development Director. <p>Mitigation Measure H-6:^c All parking structures shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral) unless the exterior wall of the parking structure that faces the off-site residential use is a solid wall or provides acoustical louvers (or equivalent noise reduction measures).</p>	
b) Generation of excessive groundborne vibration or groundborne noise levels?	Full Section, Section IV.E	N/A	Potentially Significant – Construction Less than Significant – Operation	Refer to Mitigation Measure H-3, above.	Less than Significant with Mitigation – Construction Less than Significant – Operation
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
XIV. Population and Housing					
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant

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b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
XV. Public Services					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
i) Fire protection?	Chapter VI, EFNTBS	N/A	Potentially Significant	<p>Mitigation Measure 1.1-1:^d Prior to construction, each Applicant shall submit buildings plans to the Los Angeles County Fire Department (LACoFD) for review. Based on such plan check, any additional fire safety recommendations shall be implemented to the satisfaction of the LACoFD.</p> <p>Mitigation Measure 1.1-2:^d Each Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.</p> <p>Mitigation Measure 1.1-3:^d Each Applicant shall comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants as required by the LACoFD.</p> <p>Mitigation Measure 1.1-4:^d Every building shall be accessible to LACoFD apparatus by way of access roadways, with an all-weather surface of not less than the width prescribed by the LACoFD. The roadway shall extend to within 150 feet of all portions of exterior building walls when measured by an unobstructed route around the exterior of the building or as otherwise required by the LACoFD according to Los Angeles County Fire Code.</p> <p>Mitigation Measure 1.1-5:^d Requirements for access, fire flows, and hydrants shall be addressed during the City's subdivision tentative map stage or prior to the transfer of any portion of the Project Site to the Applicant.</p> <p>Mitigation Measure 1.1-6:^d Fire sprinkler systems shall be installed in all residential and commercial occupancies to the satisfaction of the LACoFD.</p> <p>Mitigation Measure 1.1-7:^d Each Applicant shall ensure that adequate water pressure is available to meet Code-required fire flow. Based on the size of the buildings, proximity of other structures, and construction type, a maximum fire flow up to 4,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a four-hour duration may be required.</p> <p>Mitigation Measure 1.1-8:^d Fire hydrant spacing shall be as required by the LACoFD according to Los Angeles County Fire Code, which is anticipated to be 300 feet and meeting the following requirements:</p> <ul style="list-style-type: none"> • No portion of a lot's frontage shall be more than 200 feet via vehicular access from a properly spaced fire hydrant; 	Less than Significant

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				<ul style="list-style-type: none"> ● No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant; ● Additional hydrants shall be required if spacing exceeds specified distances; ● When a cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block; ● A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use; and ● Turning radii in a commercial zone shall not be less than 32 feet. The measurement shall be determined at the centerline of the road. A turning area shall be provided for all driveways exceeding 150 feet in length at the end of all cul-de-sacs, to the satisfaction of the LACoFD. <p>Mitigation Measure 1.1-9:^d All on-site driveways and roadways shall provide a minimum unobstructed (clear-to-sky) width of 28 feet. The on-site driveways shall be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet of, an exterior wall on one side of the proposed structure or as otherwise required by the LACoFD according to Los Angeles County Fire Code.</p> <p>Mitigation Measure 1.1-10:^d All on-site driveways shall be provided as required by the LACoFD according to Los Angeles County Fire Code, which is anticipated to be a minimum unobstructed (clear-to-sky) width of 28 feet but may be increased under the following conditions:</p> <ul style="list-style-type: none"> ● If parallel parking is allowed on one side of the access roadway/driveway, the roadway width shall be 34 feet; and ● If parallel parking is allowed on both sides of the access roadway/driveway, the roadway width shall be 36 feet in a residential area or 42 feet in a commercial area. <p>Mitigation Measure 1.1-11:^d The entrance to any street or driveway with parking restrictions shall be posted with LACoFD-approved signs stating “NO PARKING – FIRE LANE” in 3-inch-high letters, at intermittent distances of 150 feet. Any accessway that is less than 34 feet in width shall be labeled “Fire Lane” on the final tract map and final building plans.</p> <p>Mitigation Measure 1.1-12:^d The following standards apply to the 2021 Project’s residential component or as otherwise required by the LACoFD according to Los Angeles County Fire Code:</p> <ul style="list-style-type: none"> ● A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length; ● The length of the cul-de-sac may be increased to 1,000 feet if a minimum 36-foot-wide roadway is provided; and ● An LACoFD-approved turning radius shall be provided at the terminus of all residential cul-de-sacs. <p>Mitigation Measure 1.1-14:^d All access devices and gates shall meet the following requirements or as otherwise required by the LACoFD according to Los Angeles County Fire Code:</p> <ul style="list-style-type: none"> ● Any single-gated opening used for ingress and egress shall be a minimum of 26 feet clear-to-sky; 	

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ii) Police protection?	Chapter VI, EFNTBS	N/A	Potentially Significant	<ul style="list-style-type: none"> ● Any divided gate opening (when each gate is used for a single direction of travel, i.e., ingress or egress) shall be a minimum width of 20 feet clear to sky; ● Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device; ● All limited access devices shall be of a type approved by LACoFD; and ● Gate plans shall be submitted to LACoFD prior to installation. These plans shall show all locations, widths, and details of the proposed gates. <p>Mitigation Measure 1.1-15: All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to LACoFD for review prior to implementation.</p> <p>Mitigation Measure 1.1-16: Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/structural plans are not necessary.</p> <p>Mitigation Measure 1.1-17: Any temporary bridges shall be designed, constructed, and maintained to support a live load of at least 70,000 pounds. A minimum vertical clearance of 13'6" shall be required throughout construction.</p> <p>Mitigation Measure 1.1-18: Disruptions to water services shall be coordinated with LACoFD, and alternate water sources shall be provided for fire protection during such disruptions.</p> <p>Refer to Mitigation Measure J.1-8, provided under XIX, Utilities and Service Systems, below.</p> <p>Mitigation Measure 1.2-1:^c The Applicant shall provide private security services within PA2 and PA3 that are occupied by commercial development. On-site security services shall maintain an ongoing dialogue with the Sheriff's Department so as to maximize the value of the security service provided.</p> <p>Mitigation Measure 1.2-3:^c The Applicant shall install video cameras throughout the commercial development within PA2 and PA3 with a digitally recorded feed to the substation that is also accessible via the internet at the Carson Sheriff's Station.</p> <p>Mitigation Measure 1.2-4:^c The Applicant shall develop jointly with the Sheriff's Department a community policing plan, subject to final review and approval by the Sheriff's Department.</p> <p>Mitigation Measure 1.2-5:^c Each Applicant shall develop a private security plan that shall be provided to the Sheriff's Department for input on the adequacy of the private security plan and provide further recommendations, as necessary, to be incorporated into the private security plan.</p> <p>Mitigation Measure 1.2-6: The management of the entertainment venues (e.g., performance pavilion) located within the Project Site shall annually notify the Sheriff's Station in advance of planned activities.</p> <p>Mitigation Measure 1.2-7: The Sheriff's Department Crime Prevention Unit shall be contacted for advice on crime prevention programs that could be incorporated into the Project, including Neighborhood Watch.</p>	Less than Significant

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				Mitigation Measure 1.2-8: ^d Applicant(s) of PA1, PA2, and PA3 shall pay an annual Citywide Community Facilities District (CFD) fee payment as part of their fair-share contribution for Sheriff department services, facilities, and equipment that is required to offset the impacts of the Project.	
iii) Schools?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
iv) Parks?	Chapter VI, EFNTBS	N/A	Less than Significant	Mitigation Measure 1.4-1: ^c Residential uses of the 2021 Project shall provide park and recreation facilities that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu Development Impact Fees (DIF). Mitigation Measure 1.4-2: ^d Residential uses of the 2021 Project shall meet the intent of Municipal Code Sections 9128.15 and 9128.54 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs. Mitigation Measure 1.4-3: ^c Public open space for residential uses of the 2021 Project shall be calculated on a per-unit basis: <ul style="list-style-type: none"> • For PA1: <ul style="list-style-type: none"> – Studio and 1-Bedroom Units: a minimum of 150 sf per unit – 2-Bedroom Units: a minimum of 220 sf per unit – 3+-Bedroom Units: a minimum of 250 sf per unit – All with a minimum dimension of 15 feet in any direction 	Less than Significant
v) Other public facilities?	Chapter VI, EFNTBS	N/A	Less than Significant	Mitigation Measure 1.5-1: ^d Applicants for residential uses shall pay a fair-share contribution for the improvement of library facilities that are required to offset impacts of the 2021 Project, subject to approval of the County of Los Angeles Public Library.	Less than Significant
XVI. Recreation					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	Chapter VI, EFNTBS	N/A	Less than Significant	Refer to Mitigation Measures 1.4-1 through 1.4-3, provided under XV. Public Services, above.	Less than Significant
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	Chapter VI, EFNTBS	N/A	Less than Significant	Refer to Mitigation Measures 1.4-1 through 1.4-3, provided under XV. Public Services, above.	Less than Significant
XVII. Transportation					
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	Full Section, Section IV.C	N/A	Less than Significant	None required.	Less than Significant
b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Full Section, Section IV.C	N/A	Potentially Significant	Mitigation Measure C-1: A Construction Traffic Management Plan shall be developed by the contractor and approved by the City of Carson to alleviate construction period impacts, which may include but is not limited to the following measures:	Significant and Unavoidable – VMT Cumulatively Significant and Unavoidable – VMT

**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
				<ul style="list-style-type: none"> ● In the unlikely case that on-site truck staging areas are insufficient, provide off-site truck staging in a legal area (per the local jurisdiction’s municipal code) furnished by the construction truck contractor. Anticipated truck access to the Project Site will be off Street B and Street A. ● Schedule deliveries and pick-ups of construction materials during non-peak commute travel periods (e.g., early morning, midday) to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods. ● As a vehicular travel lane, parking lane, bicycle lane, and/or sidewalk closures are anticipated, worksite traffic control plan(s), approved by the City of Carson, should be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures. ● Establish requirements for loading/unloading and storage of materials on the Project Site, including the locations where parking spaces would be affected, the length of time traffic travel lanes would be blocked, and sidewalk closures or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses and residences. ● Ensure that access will remain unobstructed for land uses in proximity to the Project Site during project construction. ● Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project Site and neighboring businesses and residences. <p>Mitigation Measure C-18: The PA1 and PA3 Applicant(s) shall implement a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The TDM Program shall be subject to review and approval prior to issuance of certificate of occupancies by the City of Carson Department of Public Works subject to the requirements specified below. Mandatory strategies in the TDM Program shall include the TDM strategies summarized below. This TDM program is estimated to reduce total VMT per service population by about 2 percent based on the trip reduction methodology described in the California Air Pollution Control Officers Association (CAPCOA) <i>Quantifying Greenhouse Gas Mitigation Measures</i> report.</p> <ul style="list-style-type: none"> ● <i>Unbundled Parking</i>—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. (Applicable to PA1.) ● <i>Rideshare Programs</i>—Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more commonly provided for Project Site employees but residents could also benefit from a similar program. (Applicable to PA1 and PA3.) ● <i>Transit Pass Discount Program</i>—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk and, 	

**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
				therefore, at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project Site employees but could also be sold to residents. (Applicable to PA1 and PA3.)	
				<ul style="list-style-type: none"> ● <i>Bicycle Parking and Bike Share Program</i>—The 2021 Project shall include bicycle facilities within the Project Site as well as short-term bicycle parking. The 2021 Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the Project Site. (Applicable to PA1 and PA3.) ● <i>Car Share Program</i>—A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. (Applicable to PA1 and PA3.) 	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	Chapter VI, EFNTBS	N/A	Less than Significant	None required.	Less than Significant
d) Result in inadequate emergency access?	Chapter VI, EFNTBS	N/A	Less than Significant	Refer to Mitigation Measure I.1-2, provided under XV. Public Services, above.	Less than Significant
XVIII. Tribal Cultural Resources					
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Chapter VI, EFNTBS	N/A	No Impact	None required.	No Impact
XIX. Utilities and Service Systems					
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	Chapter VI, EFNTBS	N/A	Potentially Significant	<p>Mitigation Measure J.1-1:^d The Building Department and the Community Development Department shall review building plans to ensure that water-reducing measures are utilized, as required by Title 20 and Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.</p> <p>Mitigation Measure J.1-2:^c The 2021 Project shall comply with the City's landscape ordinance, "A Water Efficient Landscape Ordinance," as required by the State Water Conservation Landscape Act.</p>	Less than Significant

**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
				<p>Mitigation Measure J.1-3: Each Applicant shall provide reclaimed water for the 2021 Project's non-potable water needs, if feasible.</p> <p>Mitigation Measure J.1-4: Landscaping of the Project Site shall utilize xeriscape (low-maintenance, drought-resistant) plantings.</p> <p>Mitigation Measure J.1-5: Automatic irrigation systems shall be set to ensure irrigation during early morning or evening hours to minimize water loss due to evaporation. Sprinklers must be reset to water less in cooler months and during rainfall season so that water is not wasted on excessive landscape irrigation.</p> <p>Mitigation Measure J.1-6: The 2021 Project shall be designed to recycle all water used in cooling systems to the maximum extent possible.</p> <p>Mitigation Measure J.1-7: To the maximum extent feasible, reclaimed water shall be used during the grading and construction phase of the 2021 Project for the following activities: (1) dust control, (2) soil compaction, and (3) concrete mixing.</p> <p>Mitigation Measure J.1-8:^d Water lines and hydrants shall be sized and located so as to meet the fire flow requirements established by the Los Angeles County Fire Department.</p> <p>Mitigation Measure J.2-1:^d All required sewer improvements shall be designed and constructed according to the standards of the City of Carson and County of Los Angeles.</p> <p>Mitigation Measure J.2-2:^d Fee payment is required prior to the issuance of a permit to connect to district sewer facilities.</p> <p>Mitigation Measure J.2-3:^d The Building and Safety and Planning Divisions of the Community Development Department shall review building plans to ensure that water-reducing measures are utilized, as required by Title 24 of the California Administrative Code. These measures include, but are not limited to, water-conserving dishwashers, low-volume toilet tanks, and flow-control devices for faucets.</p> <p>Mitigation Measure J.2-4: When available, the 2021 Project shall use reclaimed water for the irrigation system and for other appropriate purposes such as during construction.</p>	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	Chapter VI, EFNTBS	N/A	Potentially Significant	Refer to Mitigation Measures J.1-1 through J.1-8, above.	Less than Significant
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	Chapter VI, EFNTBS	N/A	Potentially Significant	Refer to Mitigation Measures J.2-1 through J.2-4, above.	Less than Significant
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	Chapter VI, EFNTBS	N/A	Potentially Significant	<p>Mitigation Measure J.3-1:^c All structures constructed or uses established within any part of the Project Site shall be designed to be permanently equipped with clearly marked, durable, source-sorted recycling bins at all times to facilitate the separation and deposit of recyclable materials.</p> <p>Mitigation Measure J.3-2: Primary collection bins shall be designed to facilitate mechanized collection of such recyclable wastes for transport to on- or off-site recycling facilities.</p>	Less than Significant

**Table I-5
District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions**

CEQA Threshold	Location Where Threshold Is Analyzed in This 2021 SEIR	Applicable Project Design Feature	Level of Significance before Mitigation	2018 SEIR Mitigation Measures (with Strike-Out/Underline to Show Changes Proposed in this 2021 SEIR) ^a	Level of Significance after Mitigation
				<p>Mitigation Measure J.3-3: Each Applicant shall coordinate with the City of Carson to continuously maintain in good order for the convenience of patrons, employees, and residents clearly marked, durable, and separate recycling bins on the same lot, or parcel to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times, for collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.</p> <p>Mitigation Measure J.3-4: Any existing on-site roads that are torn up shall be ground on site and recycled into the new road base.</p> <p>Mitigation Measure J.3-5:^c Compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 square feet in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible.</p> <p>Mitigation Measure J.3-6:^c All construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.</p>	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	Chapter VI, EFNTBS	N/A	Potentially Significant	Refer to Mitigation Measures J.3-1 through J.3-6, above.	Less than Significant
XX. Wildfire					
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Scoped out in NOP; No Impact	N/A	N/A	N/A	N/A

SOURCE: ESA 2021.

N/A = Not Applicable

^a The 2018 mitigation measures have been carried forward to this 2021 SEIR and are reflected herein. In some cases, the 2018 SEIR mitigation measures have been revised to address the potential impacts that may result from the 2021 Project. Edits to the 2018 SEIR mitigation measures are provided as strikethrough for removed text and double underline for added text. In addition, new mitigation measures that are proposed to reduce impacts resulting from the 2021 Project are shown entirely with double underline.

^b These mitigation measures are both reflected in the 2021 Specific Plan Amendment and considered regulatory requirements.

^c These mitigation measures are reflected in the 2021 Specific Plan Amendment.

^d These mitigation measures are considered regulatory requirements.

II. 2021 PROJECT DESCRIPTION

II.A INTRODUCTION

This proposed project (the 2021 Project) constitutes a modification to the permitted land uses and development standards for the 157-acre site (157-Acre Site or Project Site) that is currently subject to The District at South Bay Specific Plan (the 2018 Specific Plan). The Project Site is generally located at 20400 South Main Street in the City of Carson (City). The 2021 Project does not propose any changes to the residential or regional commercial uses previously approved under the 2018 Specific Plan for 61 acres of the 157-Acre Site (i.e., Planning Areas 1 [PA1] and 2 [PA2]), but instead, proposes to replace the general commercial and hotel uses that were previously approved under the 2018 Specific Plan for 96 acres of the 157-Acre Site (within Planning Area 3 [PA3]) with light industrial uses, and separate commercial uses, together with privately maintained, publicly accessible open space and community amenity areas described and referred to herein as the Carson Country Mart.

The City of Carson will serve as the Lead Agency for purposes of this environmental document. The Developer (consisting of Carson Goose Owner LLC and Carson Mylo Owner LLC) is the entity entitling the 2021 Specific Plan Amendment and developing PA3.¹¹ The Applicant(s) will be the entity or entities constructing any future development project on any of the Planning Areas (i.e., PA1, PA2, or PA3) within the 157-Acre Site.

This Project Description provides: (1) a description of the project location; (2) a summary of existing off-site and on-site land uses; (3) a description of the uses previously proposed for the 157-Acre Site, as well as previous and future remediation activities; (4) 2021 Project Objectives; (5) a comparison of the 2021 Project to the 2018 Project (defined below); (6) a detailed description of the 2021 Project, including circulation and parking; (7) anticipated project construction activities and the construction schedule; and (8) a list of necessary approvals required to implement the 2021 Project, if approved by the City.

¹¹ *Carson Mylo Owner LLC is responsible for the vertical development of the Project Site, while Carson Goose Owner LLC, who is also part of the development team, is only responsible for construction of the remedial systems and site development improvements underlying the surface lot of PA3, which are required for the development of PA3.*

II.B PROJECT LOCATION

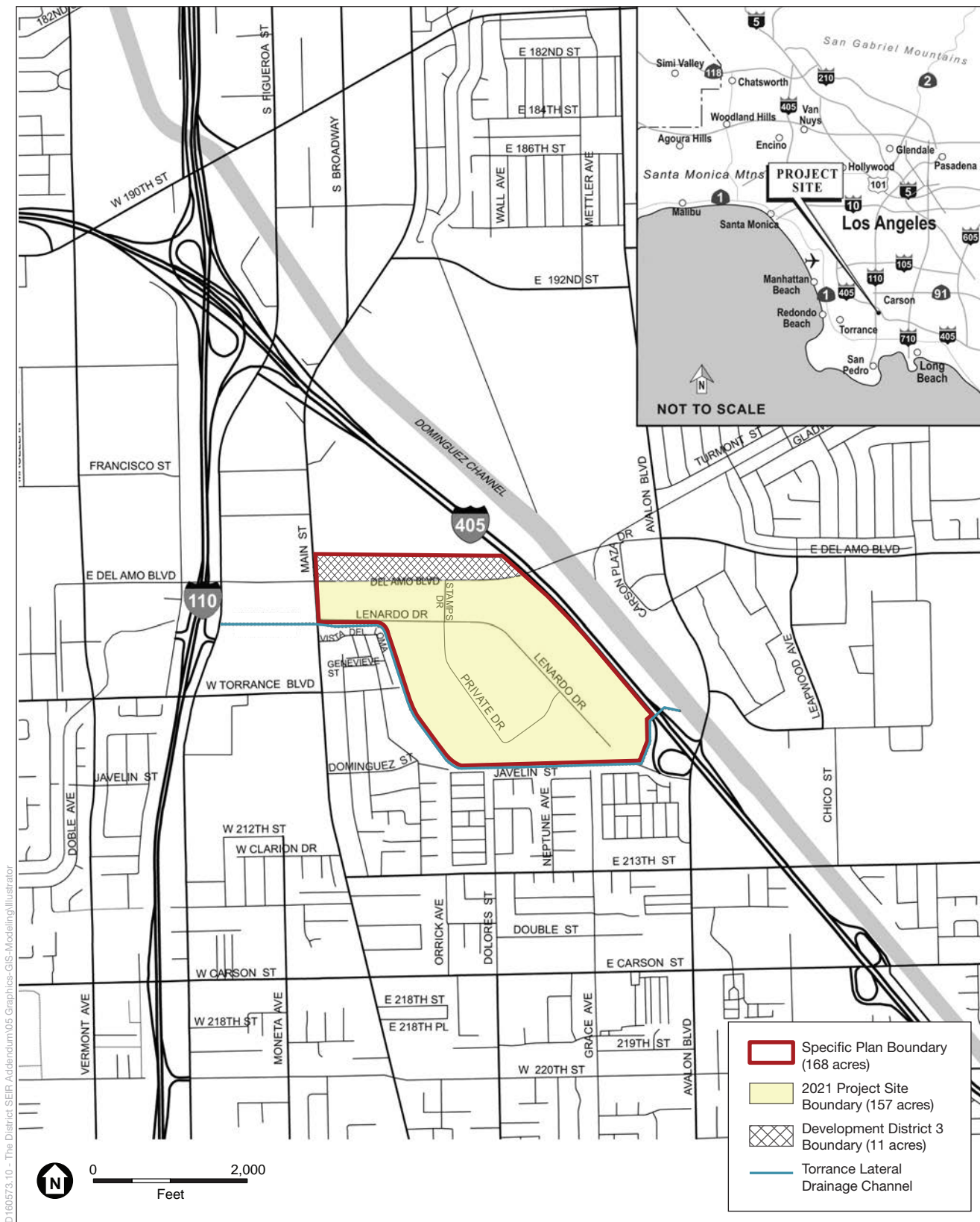
The 157-Acre Site is located in the City of Carson, approximately 17 miles south of downtown Los Angeles and approximately 6.5 miles east of the Pacific Ocean. The 157-Acre Site is in the South Bay area of Los Angeles County. It is located west of the San Diego Freeway (Interstate 405 [I-405] Freeway), south of Del Amo Boulevard, and north of the Avalon Boulevard interchange with the I-405 Freeway. **Figure II-1, Regional Location**, depicts the 157-Acre Site in a regional context.

Regional access to the 157-Acre Site is provided from the I-405 Freeway, Harbor Freeway (I-110 Freeway), Artesia Freeway (State Route [SR-]91 Freeway), and Long Beach Freeway (I-710 Freeway). The I-405 Freeway is located adjacent to the 157-Acre Site's eastern boundary, the I-110 Freeway is located directly west of the 157-Acre Site, and the SR-91 Freeway is located approximately 2.5 miles north of the 157-Acre Site. The I-710 Freeway, which is located on the City's eastern boundary and approximately 0.27 miles west of the 157-Acre Site, links the City with the Long Beach and Harbor areas.

Locally, access to the Project Site is available via Main Street, a north/south thoroughfare on the western side of the Project Site; Avalon Boulevard, an exit from the I-405 Freeway and a major north/south arterial, with a proposed direct link into the Project Site; and Del Amo Boulevard, which forms the Project Site's northern boundary.

II.C EXISTING OFF-SITE AND ON-SITE LAND USES

The Project Site is surrounded by a variety of land uses, as illustrated by **Figure II-2, Existing On-Site and Off-Site Uses**. East of I-405 Freeway, land uses include neighborhood and regional retail, including the South Bay Pavilion at Carson. To the north and east of the 157-Acre Site are the Porsche Experience Center and the Victoria Golf Course, respectively. Residential areas, consisting of one-story and two-story detached residences and mobile homes, are located to the south and west. The residences are separated from the 157-Acre Site by the Torrance Lateral Flood Control Channel (Torrance Lateral), an approximately 75-foot-wide concrete-lined drainage channel that parallels the southern and western border of the 157-Acre Site. The Torrance Lateral flows along the southwestern and south sides of the Project Site into the Dominguez Channel under the I-405 Freeway, which conveys storm runoff and nuisance flows. To the west of the 157-Acre Site, extending away from the 157-Acre Site on Torrance and Del Amo Boulevards, are commercial and light industrial uses. Further north on the west side of Main Street are light industrial uses, with Dignity Health Sports Park and California State University, Dominguez Hills, located northeast of the 157-Acre Site.



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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure II-1
Regional Location

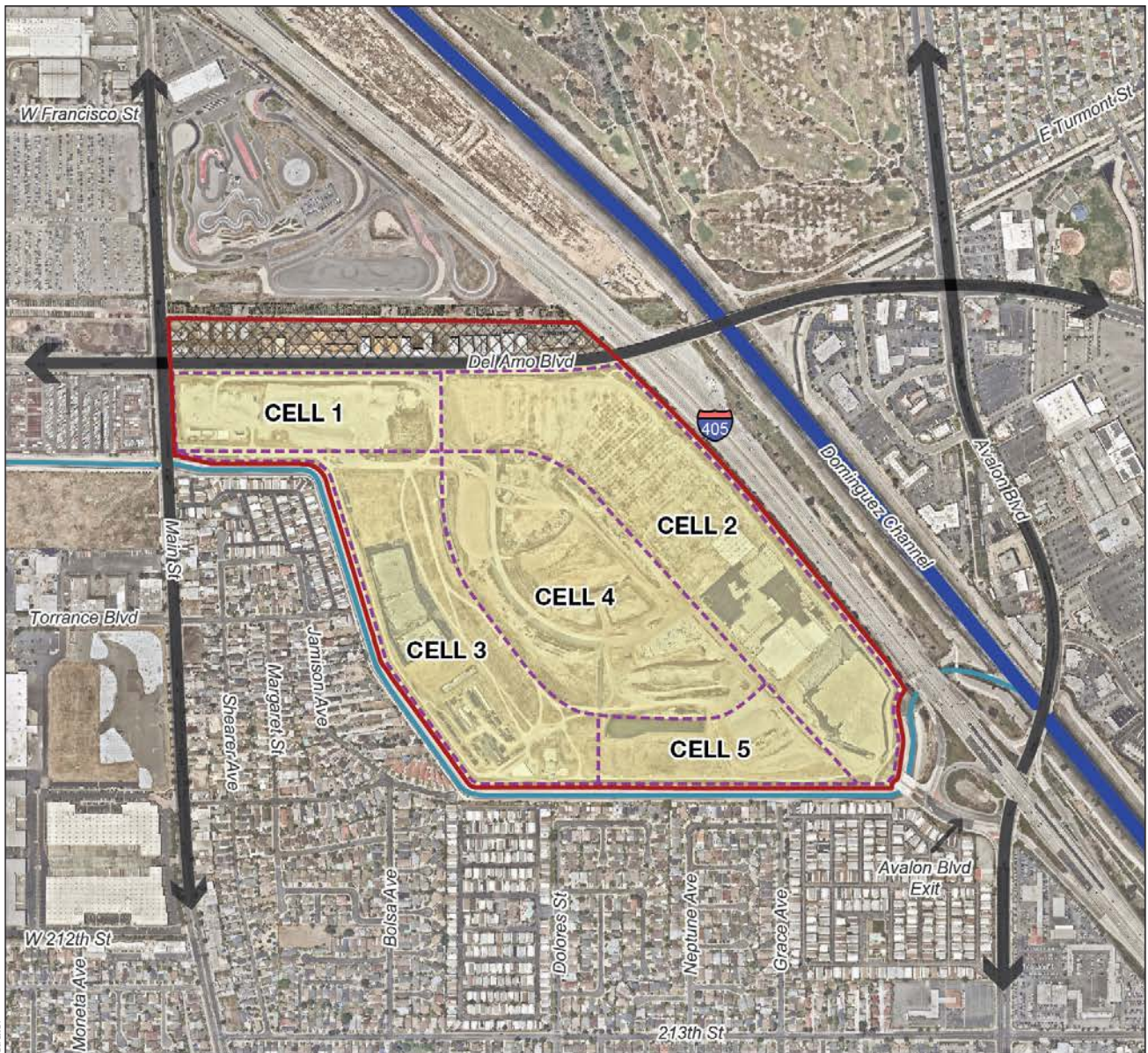


The 157-Acre Site itself is essentially undeveloped but was used as a Class II landfill site between 1959 and 1965, prior to the incorporation of the City of Carson, for the deposition of waste/refuse from areas throughout Los Angeles County, and thus the 157-Acre Site contains elevated levels of chemicals of concern and toxic/hazardous materials within the landfill and groundwater underlying the site. Therefore, the 157-Acre Site has been subject to certain regulatory requirements, including, without limitation, those imposed by the Department of Toxic Substances Control (DTSC), which have required the performance of remediation activities on the Project Site, which have included (among other things) groundwater monitoring systems for the presence of contamination, grading and compaction of the landfill waste, installation of a liner to separate the subsurface hazardous waste from the surface clean soils, the creation of detention and retention ponds, and the partial construction of a site-wide landfill gas collection and control system (LGCCS) and a groundwater extraction and treatment system (GETS). A description of the remediation activities that have occurred on the 157-Acre Site is described below in Section II.F, *Previous Use of the Project Site/Remediation Activities*. Generally, the 157-Acre Site is elevated above existing grades at the edges and generally slopes inward. Due to grading in preparation for the previous development, large amounts of dirt and landfill cap materials have been stockpiled on site.

II.D PROJECT SITE PLANNING DESIGNATIONS

The 157-Acre Site was used as a Class II landfill beginning in 1959, known as the Cal Compact Landfill, and was designated to consist of five waste cells (Cells) separated by haul roads formed from native soil under an Industrial Waste Disposal Permit issued to Cal Compact, Inc. (the original owner of the 157-Acre Site) by the County of Los Angeles. **Figure II-3, Landfill Cell Areas**, illustrates the location of the five landfill (waste) Cells on the 157-Acre Site.

The 157-Acre Site was originally studied environmentally under the California Environmental Quality Act (CEQA) as part of an Environmental Impact Report (EIR), which was certified by the City in 2006 (the 2006 FEIR). The 2006 FEIR identified three Development Districts (DDs) for the area (i.e., DD1, DD2, and DD3), as illustrated by **Figure II-4, Development Districts**, totaling 168 acres. One of those Districts, DD3, which consists of 11 acres, was not part of the former Cal Compact Landfill as it was located just north of the 157-Acre Site (i.e., north of Del Amo Boulevard). DD3 was ultimately developed by a separate owner for a 300-unit apartment complex project known as Evolve South Bay. Therefore, the 2018 Supplemental EIR (2018 SEIR) analyzed only DD1 and DD2 (which constitute 157 acres comprised entirely of the area constituting the former Cal Compact Landfill). Accordingly, the Project Site for the 2021 Project and this 2021 SEIR is also 157 acres, which is consistent with the analysis under the 2018 SEIR.



- Specific Plan Boundary (168 acres)
- Cell Boundaries
- 2021 Project Site (157 acres)
- Development District 3 Boundary (11 acres)
- Torrance Lateral Drainage Channel



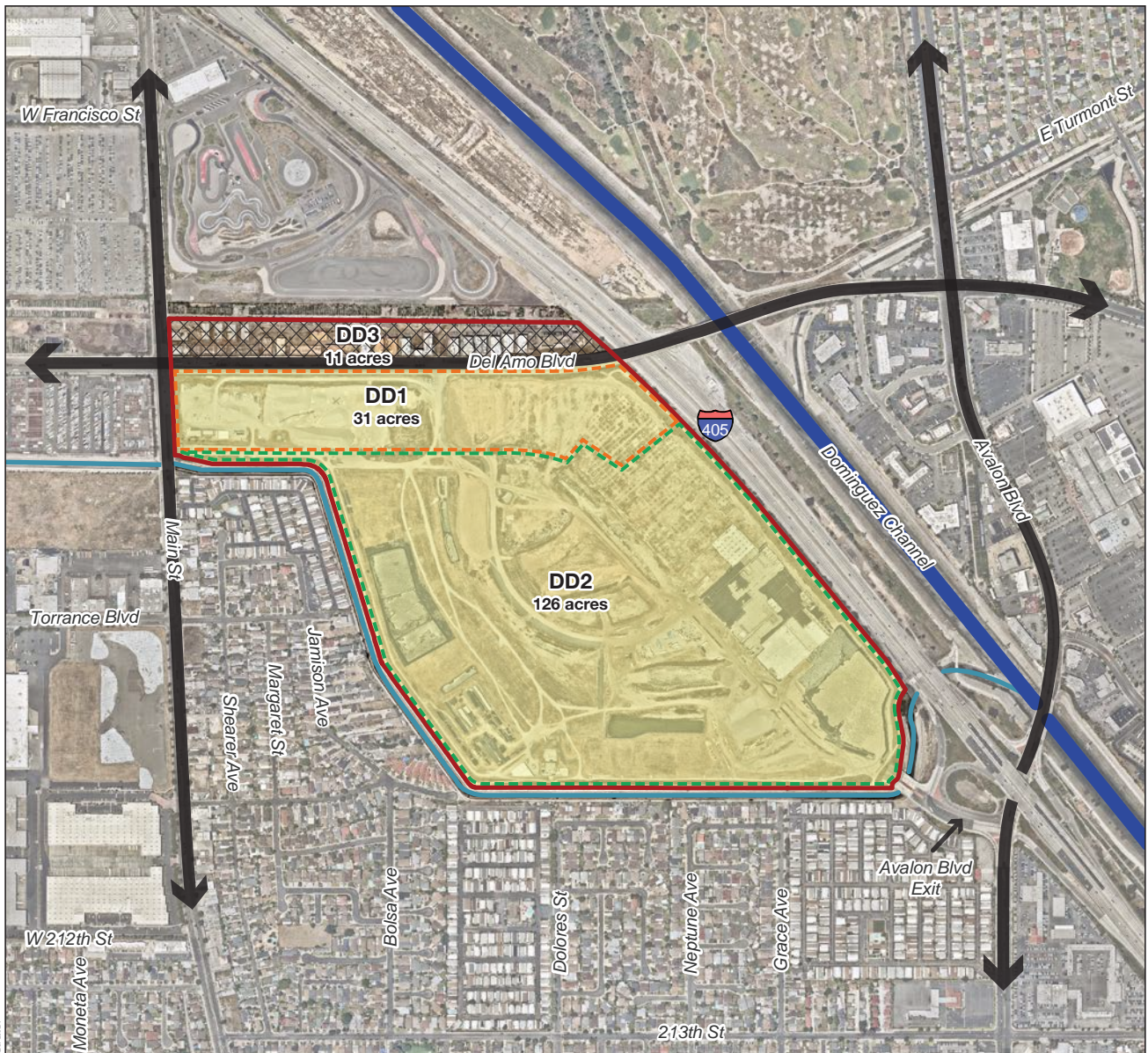
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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure II-3
Landfill Cell Areas





- Specific Plan Boundary (168 acres)
- Development District 1
- 2021 Project Site (157 acres)
- Development District 2
- Development District 3 Boundary (11 acres)
- Torrance Lateral Drainage Channel



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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure II-4
Development Districts



As part of the 2018 Specific Plan, DD1 and DD2 were additionally divided into three planning areas, as illustrated by **Figure II-5, Planning Areas**.¹² These same planning designations are used for the 2021 Specific Plan Amendment and this 2021 SEIR. The three planning areas correlate to the DDs and cells as follows:

- PA1 = Cell 1 and a portion of DD1
- PA2 = Cell 2 and a portion of DD1 and DD2
- PA3 = Cells 3, 4, and 5 and a portion of DD2

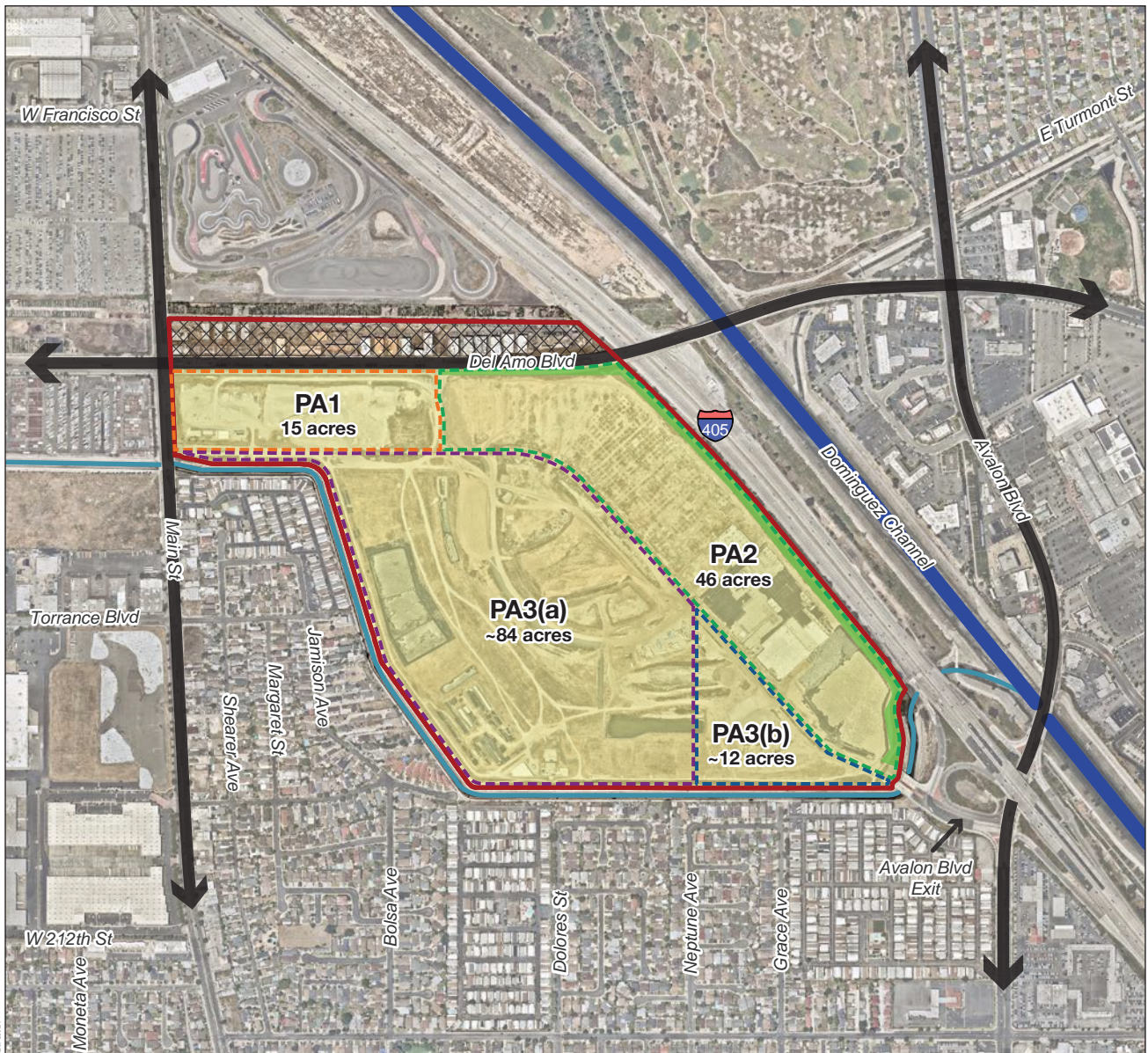
II.E PREVIOUSLY PROPOSED PROJECTS ON THE PROJECT SITE

In 2006, Carson Marketplace LLC, the former owner of the 157-Acre Site, proposed a development plan that consisted of a 1,995,125 square feet (sf) mixed-use commercial project (including retail, 300 hotel rooms, and entertainment uses) and 1,550 residential units. In 2006, in accordance with CEQA, the Carson Redevelopment Agency (RDA), as the lead agency, certified a project-level FEIR for the Carson Marketplace Project (State Clearinghouse [SCH] No. 2005051059) (2006 FEIR) and the City approved the Carson Marketplace Specific Plan for the 157-Acre Site and the 11-acre DD3 project area (referred to herein as the 2006 Project or 2006 Specific Plan).

In 2009, an Addendum to the 2006 FEIR was prepared and subsequently adopted to include changes in the remediation activities for the Project Site in connection with DTSC regulatory requirements (hereinafter, the term “2006 FEIR” represents the 2006 FEIR and its Addendum, and the term “approved” in connection with the FEIR refers to certification of the 2006 FEIR and the adoption of the 2009 Addendum).

In 2011, the City, relying upon the 2006 FEIR, amended the Carson Marketplace Specific Plan and, as part of that amendment, renamed the 2006 Specific Plan to be The Boulevards at South Bay Specific Plan. During its period of ownership, Carson Marketplace LLC began to implement certain remedial actions to enable development of the approved mixed-use development project pursuant to the 2006 Specific Plan, in coordination with Tetra Tech Inc.

¹² PA2 contains an “Embankment Lot,” which is comprised of a 5-acre strip of land along the I-405 Freeway between the I-405 Freeway and the commercial uses on PA2. The Embankment Lot provides a location for future freeway signage that allows for both on-site and off-site advertising. The CRA is the owner of the Embankment Lot; therefore, the CRA shall retain all rights to development of any signage upon the Embankment Lot, unless otherwise granted to developers of the Project Site pursuant to a Development Agreement approved by the City. The location of the Embankment Lot is shown in Figure II-5.



- Specific Plan Boundary (168 acres)
- Planning Area 1
- 2021 Project Site (157 acres)
- Planning Area 2
- Planning Area 3(a)
- Planning Area 3(b)
- Development District 3 Boundary (11 acres)
- Torrance Lateral Drainage Channel
- Embankment Lot (5 acres)



Note: this is a graphic representation of a planning concept. All graphics in this document are conceptual and should not be interpreted literally. Other solutions, locations and/or concepts may be proposed and reviewed during site plan review and other permit and mapping processes.

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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure II-5
Planning Areas



Following the statewide dissolution of redevelopment agencies in 2012 pursuant to the state's dissolution statutes (i.e., ABx1 26, AB 1484, AB 471, and SB 107), which including the City's RDA, the City formed the Carson Successor Agency (Successor Agency). One of the Successor Agency's approved enforceable obligations was to maintain the bonds previously issued by the City's former RDA for the 157-Acre Site, which then culminated in the amount of approximately \$120 million, which were issued in order to support Carson Marketplace LLC's proposed project and the remediation of the 157-Acre Site. Due to the lingering effects of the Great Recession in 2009, Carson Marketplace LLC (CM LLC) was ultimately unable to develop its proposed project (as entitled by The Boulevards at South Bay Specific Plan). Thus, in 2014, CM LLC offered to convey the 157-Acre Site to the City for free but required indemnification from any environmental liability associated with the Project Site from the City. The City determined that the remediation and development of the 157-Acre Site would require a governmental entity to act as the entity responsible for the remediation required for the 157-Acre Site, but the City was unwilling to put its general fund and taxpayers at risk for the environmental liability and cleanup costs of the 157-Acre Site, which were then estimated to exceed one hundred million dollars (\$100,000,000). At that time, the City was in negotiations with Cardinal Calvary for the potential redevelopment of the Project Site into a National Football League (NFL) Stadium, and the City believed there was a significant opportunity to realize the development potential of the site.

Accordingly, the City established the Carson Reclamation Authority (CRA) as a joint powers authority under the provisions of the California Joint Powers Act (Govt. Code Section 6500 et seq.), and on January 20, 2015, the governing boards of the City of Carson Housing Authority, and of Community Facilities District No. 2012-1 and Community Facilities District No. 2012-2 (the CFDs) approved a Joint Powers Agreement for the formation of the CRA for the purpose of overseeing and facilitating the remediation of contaminated properties in the City (including the 157-Acre Site), and for the maintenance and development of same. Thereafter, the CRA acquired the 157-Acre Site from CM LLC in May 2015. However, the NFL ownership ultimately rejected the Project Site for the new proposed Los Angeles stadium and instead chose to locate a new stadium in Inglewood (now known as the SoFi Stadium).

Thereafter, following the CRA's issuance of a Request for Proposal for potential developers of the Project Site, the CRA ultimately entered into extensive negotiations between the CRA and a new developer/Applicant, CAM-Carson LLC (CAM), for a new project proposal on PA2 of the Project Site, which included a retail outlet mall to be named the Los Angeles Premium Outlets (LAPO Project).

A 2018 SEIR was prepared which supplemented the previously approved 2006 FEIR, as described above, in order to address the impacts of the new LAPO Project proposal on PA2 of the Project Site. The 2018 SEIR evaluated changes to only the commercially zoned land located

south of Del Amo Boulevard, comprising approximately 157 acres.¹³ The 2018 Project analyzed under the 2018 SEIR modified or otherwise reduced the scope of the original project analyzed in the 2006 FEIR to ultimately consist of approximately 1,601,500 sf of regional commercial, general commercial, and related uses, including retail outlet and entertainment uses, up to 1,250 residential units,¹⁴ and up to 350 hotel rooms. Overall, with these proposed modifications, the total square footage was roughly 100,000 sf less than that studied for the 2006 Project analyzed in the 2006 FEIR. In April 2018, the City approved the 2018 SEIR to implement the 2018 Project as modified therein and adopted The District at South Bay Specific Plan (thus renaming the previously-approved Boulevards at South Bay Specific Plan).

II.F REMEDIATION ACTIVITIES

As discussed above, the 157-Acre Site was previously used as a Class II landfill site between 1959 and 1965. Landfill activities on the 157-Acre Site began in April 1959, shortly after the banning of incinerators in Los Angeles County in 1957, and continued until December 1964 with a closing date of approximately February 1965. During the life of the Cal Compact Landfill, approximately 6.2 million cubic yards (cy) of solid municipal waste and a total of approximately 7.8 million cy of waste were disposed of on the 157-Acre Site. Waste received included organic wastes, such as solvents, oils, and sludges, as well as heavy metals, paint sludges, and inorganic salts.

Hazardous substances detected in subsurface soil and groundwater on the 157-Acre Site consist of volatile organic compounds (VOCs), heavy metals, and petroleum hydrocarbons. As a result of the contamination on and adjacent to the landfill, the 157-Acre Site is listed by DTSC as a hazardous substances release site. On March 18, 1988, Remedial Action Order No. HSA87/88-040 was issued for the 157-Acre Site requiring the implementation of environmental remedial activities to ensure the non-release of any hazardous substances and the health and safety of nearby residents and surrounding areas.

¹³ As previously noted, DD3 comprises 11 acres and was sold to MBK Homes in 2017 and thus, was not part of the 2018 SEIR; however, DD3 remained within the 2018 Specific Plan boundary.

¹⁴ The 2018 Specific Plan restricts the residential density in PA1 to 60 dwelling units per acre, which would allow for 900 residential units. However, density can be increased under the 2018 Specific Plan through a General Plan Amendment to 80 dwelling units per acre, which would allow for a maximum of 1,250 residential units. The maximum residential units were conservatively analyzed in the 2018 SEIR by including the maximum 1,250 residential units as a baseline, which has been carried forward as the baseline assumption under this 2021 SEIR.

As indicated in the 2006 FEIR, DTSC divided the required remediation of the 157-Acre Site's contaminated areas into two operable units.¹⁵ The operable units were established to prioritize the remedial response to the areas of known impacts (Upper OU) versus areas of potential impacts (Lower OU). The Upper Operable Unit (Upper OU) consists of the site soils, the waste zone above and within the Bellflower Aquitard, and the Bellflower Aquitard down to, but not including, the Gage Aquifer. The Lower Operable Unit (Lower OU) is composed of the Gage, Lynwood, and Silverado Aquifers, and all other areas potentially impacted by the geographic extent of any hazardous substances that may have migrated or may migrate from the aforementioned areas or from the Upper OU.

Investigations performed by DTSC of the Upper OU documented the presence of landfill gases (methane and carbon dioxide), VOC's and metals in the landfill's soil and groundwater. A Remedial Action Plan (RAP) was prepared and approved by DTSC for the Upper OU in 1995 (Upper OU RAP). The Upper OU RAP requires the installation, operation, and maintenance of (1) an impermeable landfill cap designed to encapsulate the waste and create a barrier between future improvements and buried waste; (2) an active GETS designed to remove landfill gases from under the landfill cap; and (3) a groundwater collection and treatment system designed to contain the groundwater plume and treat the extracted groundwater prior to discharge.

Consistent with the 2006 FEIR and the Upper OU RAP, the GETS was installed in 2013 and 2014 and has been operating on the 157-Acre Site since May 27, 2014. The GETS consists of a network of 29 groundwater extraction wells around the 157-Acre Site, which are pumped to collect and control groundwater in and beneath the waste zone.

The Upper OU RAP was modified by DTSC in 2009 through an Explanation of Significant Differences (ESD), which allowed for the use of a geosynthetic membrane material as a component of the landfill cap, instead of the low-permeability clay specified in the Upper OU RAP.¹⁶

A separate RAP was prepared to address the Lower OU, which was approved by DTSC on January 24, 2005 (Lower OU RAP). The Lower OU RAP determined that the Lower OU would result in minimal risks and would not require additional remedial investigation. As such, the

¹⁵ Federal regulations at 40 CFR 300.5 define an operable unit as "... a discrete action that comprises an incremental step toward comprehensively addressing site problems. This discrete portion of a remedial response manages migration, or eliminates or mitigates a release, threat of release, or pathway of exposure. The cleanup of the site can be divided into a number of operable units, depending on the complexity of the problems associated with the site. Operable units may address geographical portions of a site, specific site problems, or initial phases of an action, or may consist of any set of actions performed over time or any actions that are concurrent but located in different parts of a site."

¹⁶ The Upper OU Explanation of Significant Differences is included as Appendix F of the certified 2018 SEIR: California Department of Toxic Substances Control, Explanation of Significant Differences, July 31, 2009, <https://ci.carson.ca.us/communitydevelopment/thedistrict.aspx>.

Lower OU RAP is not applicable to the 2021 Project. Therefore, in this analysis provided in this 2021 SEIR, any reference to the RAP (in terms of implementation related to the 2021 Project) is assumed to refer to the Upper OU RAP.

Both the Upper OU RAP and Lower OU RAP were separately subject to CEQA clearance. The Upper OU RAP, and its associated CEQA documentation, is included as Appendix E in the certified 2018 SEIR. The Lower OU RAP, and its associated CEQA documentation, is included as Appendix G1 and G2 of this 2021 SEIR, respectively.

In addition to the Upper OU RAP and Lower OU RAP, certain Consent Decrees were issued for the 157-Acre Site by DTSC in December 1995, October 2000, and January 2004 in order to resolve claims made regarding the resolution of the contamination issues afflicting the 157-Acre Site (each, a Consent Decree); the 1995 Consent Decree is the only remaining Consent Decree that applies to the remedial obligations for the 157-Acre Site. In addition, the development of the 157-Acre Site is subject to the terms and conditions set forth in that certain document entitled Management Approach to Phased Occupancy (File No. 01215078.02), approved by DTSC in April 2018 (the Management Approach to Phased Occupancy [MAPO]) and the phased development letter issued by DTSC to the CRA, dated October 17, 2017 (the Phased Development Letter). The MAPO and the phased development letter are included in this 2021 SEIR as Appendix G3 and G4, respectively.

The 2006 FEIR and Addendum 1 to the 2006 FEIR also included an analysis of construction and operation of a LGCCS, which has now been designed to collect landfill gas (LFG) and treat it by combustion (“flaring”), with the condensate routed to the groundwater treatment facility.

The following specific LGCCS components have already been installed on the 157-Acre Site: 65 vertical landfill gas extraction wells connected to the header system in Cells 3 and 5; 101 other wells that have been installed, but are not connected; 29 horizontal landfill gas extraction wells that are not currently operational; approximately 50,000 feet of below-ground piping; 9 below-ground condensate sumps; and 46 perimeter methane monitoring probes for Cells 3 and 5 that are being monitored, as well as 19 other probes that have been installed, but are not being monitored.¹⁷ In addition, the existing central treatment unit is operational for the control of LFG collected from the existing active LGCCS on the 157-Acre Site.

Completion of the LGCCS to serve the entire 157-Acre Site will consist of installation of the remaining horizontal collectors and vertical wells; lateral piping for new and existing vertical wells; relocation of existing LGCCS components where in conflict with the 2021 Project; startup of the existing installed but inactive horizontal collectors and vertical wells ; startup of the newly installed LGCCS components; documentation of the LGCCS completion on the 157-Acre Site

¹⁷ *Tetra Tech Inc., Final Draft Landfill Operations, Maintenance, and Monitoring Plan for the Landfill Gas Collection and Treatment System and Condensate Control System, 2016.*

via submittal of a Remedial Action Completion Report (RACR) to DTSC; and approval of such RACR by DTSC.

Collectively, the LGCCS and GETS, along with a (yet to be constructed) Landfill Operation Center (LOC) are located on an approximately one-acre lot (the “utility lot”) between Buildings D and F in PA3(a) (refer to Figure II-2), adjacent to the Torrance Lateral. The utility lot is not a part of the 2021 Project as it will be retained by the CRA and operated by the CRA after implementation of the 2021 Project. The GETS and LGCCS, including the flare stacks associated with the LGCCS, are fully constructed and operational. In addition, the slab for the LOC has been constructed. However, because there are more wells and piping to install, as well as the LOC building itself, the system itself is considered only partially constructed.¹⁸ The additional wells and piping, the LOC, and all future remediation activities on PA3 will be completed by the Developer in accordance with the terms of the RAP and in coordination with the CRA.

As detailed in the 2006 FEIR, any changes in the design of the remedial systems would only be allowed if DTSC determines that the proposed design accomplishes the same performance objectives as the previously approved design and is protective of human health and the environment. The 2006 Project anticipated that the remedial work and subsequent vertical construction on each of the planning areas (i.e., PA1, PA2, and PA3) would be completed in a phased manner, but that occupancy of any one Cell would not occur until all remedial work was completed pursuant to the RAP, MAPO, and Phased Development Letter, and a site-wide human health risk assessment (HHRA) was performed.

The 2018 SEIR analyzed phased occupancy of certain commercial uses concurrent with remediation and construction activities, subject to DTSC approval. However, pursuant to the 2006 approval by DTSC of phased development, residential occupancy on the 157-Acre Site is not allowed until all areas of the former Cal Compact Landfill are capped and all necessary remedial actions completed for the entire 157-Acre Site. Phased occupancy of certain commercial uses was approved by DTSC in March 2018 through the approval of the MAPO.

As with the 2018 Project and the 2018 SEIR, compliance with and implementation of the Upper OU RAP is required to make the 157-Acre Site safe for the 2021 Project. Implementation of the Lower OU RAP would be protective of groundwater resources, but is not required to make the Project Site safe for the 2021 Project; however, groundwater within the 157-Acre Site is currently being treated and will continue to be performed post completion of the 2021 Project.

¹⁸ *In this 2021 SEIR, when the GETS, LGCCS, and/or LOC are mentioned, it is assumed that not all of the wells have been installed nor has the LOC building itself been built. When constructed, the LOC building would provide offices, system controls, and storage space.*

Remediation of the Cal Compact Landfill commenced in 2009 by CM LLC through its contractor, Tetra Tech Inc., which involved the installation of various features associated with the GETS, the LGCCS, and construction of a slab for the future LOC. Following the transfer of the 157-Acre Site from CM LLC to the CRA in 2015, significant additional remediation work began on Cell 2 (PA2) in October 2018, but was halted in October 2019 due to disagreements between the CRA and CAM regarding CAM's failure to reimburse the CRA for expenses it incurred with respect to pre-development activities on PA2 on CAM's behalf. Once remediation re-commences, the installation of the remedial systems necessary to serve Cell 2 are expected to be completed within 6 months. Aside from the already-installed remedial improvements on Cells 3 and 5, no remediation activities have occurred in Cell 1 (PA1) or Cells 3, 4, and 5 (PA3). In connection with the remedial activities currently being performed on the 157-Acre Site and ongoing operations and maintenance of the 157-Acre Site, the 157-Acre Site currently includes groundwater and landfill gas treatment facilities that serve the entire 157-Acre Site as well as construction trailers and equipment located on Cell 1, subsurface utilities located on Cell 2, and soil, refuse, and material stockpiles and construction materials stored in various locations on the 157-Acre Site.

II.G COMPARISON OF THE 2021 PROJECT AND THE 2018 PROJECT

As noted above, the previously approved 2018 Project covered PA1, PA2, and PA3 pursuant to the 2018 Specific Plan. PA1 included the provision for up to 1,250 residential units and/or commercial uses pursuant to Mixed-Use Marketplace (MU-M) zoning, which will remain the same under the 2021 Project.¹⁹ In PA2, the 2018 Project included the allowance for up to 714,000 sf of regional commercial uses and up to 15,000 sf of restaurant uses within a Commercial Marketplace (CM) zone, which will also remain the same under the 2021 Project. The 2018 Project also analyzed PA3, which included 1,123,333 sf of regional retail, neighborhood-serving retail, restaurant, recreation/entertainment, and hospitality uses (e.g., theater, gym, hotel, etc.) within a CM zone. The only change in land uses proposed under the 2021 Project will occur within PA3.

In PA3, the 2021 Project will replace the previously approved general commercial uses under the 2018 Project with a maximum of 1,567,090 sf of light industrial development and supportive office uses under a new Light Industrial (LI) General Plan designation and up to approximately 12 acres of publicly accessible but privately maintained open space and commercial/community-use and amenity areas under the existing CM zone. Under the 2021 Specific Plan Amendment, PA3 will be designated into two separate areas: PA3(a) and PA3(b). PA3(a) will contain the light industrial and supportive office uses with an approximately 0.62-acre parkway space that will include shade trees

¹⁹ The "Mixed-Use Marketplace" land use category provides opportunities for the vertical or horizontal integration of housing with commercial services. MU-M does not, however, require a mix of uses and development can consist entirely of either residential or commercial uses.

and native planting, a meandering walking path, and a sidewalk along Lenardo Drive from Main Street to the western entrance to Building A in PA3(a) (the Enhanced Parkway). PA3(b) will contain commercial, restaurant, and open space uses, including associated amenity areas.

The light industrial uses proposed for PA3(a) with the 2021 Project will be contained in six main buildings (Buildings A–F). Buildings A, B, C, and F, totaling 788,790 sf, are anticipated to be occupied by e-commerce and fulfillment center²⁰ uses, including 50,000 sf of ancillary office space. Buildings D and E, totaling 778,300 sf, are planned for more traditional distribution center and parcel hub²¹ type uses, including 25,000 sf of ancillary office space.

The privately maintained, publicly accessible open space and community commercial use and amenity area located on PA3(b) proposed by the 2021 Project are referred to herein and described as the Carson Country Mart. The Carson Country Mart will consist of passive and active uses including a dog park, botanic garden, children’s play area, plaza areas, garden terrace, flexible event/social lawn, performance pavilion, beer garden, water feature, sculpture garden, bioretention garden, games terrace, and pedestrian and bicycle pathways. Commercial uses and activities will also be integrated within the Carson Country Mart to draw in patrons and visitors to activate and enliven the overall area. Specifically, the Carson Country Mart will include up to 10,000 sf of commercial/retail uses, 12,600 sf of restaurants (with drive-through capability), a 2,200 sf walk-up cafe adjacent to the dog park and event lawn, and 9,000 sf of food and beverage kiosks. The commercial/retail and restaurant uses within the Carson Country Mart may also include alcohol sales consistent with the requirements under the 2021 Specific Plan Amendment. Public access to the Carson Country Mart will be provided along Lenardo Drive, as shown in **Figure II-6, 2021 Conceptual Site Plan**, connecting to Main Street and Avalon Boulevard; in addition, an access road with easements for operation and maintenance of the Torrance Lateral will be provided around the southern/western boundary of the Carson Country Mart, adjacent to the Torrance Lateral. Each of the uses in PA3(a) and PA3(b) are described in more detail in Section II.H, *Planning Area 3 Project Characteristics*.

Table II-1, Planning Areas 1, 2, and 3 Land Use Summary (2018 Project and 2021 Project), provides a comparison of the 2018 Project and the 2021 Project by planning area.

²⁰ Fulfillment center is the “storage and direct distribution of e-commerce product to end users” (South Coast Air Quality Management District [SCAQMD], High Cube Warehouse Vehicle Trip Generation Analysis, prepared by Institute of Transportation Engineers, October 2016, p. 3).

²¹ A parcel hub use usually involves transload functions (i.e., “pallet loads or larger handling products of manufacturers, wholesalers/distributors, or retailers with little or no storage durations”) for a parcel delivery company (SCAQMD, High Cube Warehouse Vehicle Trip Generation Analysis, prepared by Institute of Transportation Engineers, October 2016, p. 3).



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SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-6
2021 Conceptual Site Plan



**Table II-1
Planning Areas 1, 2, and 3 Land Use Summary (2018 Project and 2021 Project)**

Land Uses	2021 Specific Plan Amendment Land Use Category	2018 Project (units or sf)	2021 Project (units or sf)
Planning Area 1 (15 Acres)^a			
Residential	MU-M	1,250 units ^b	1,250 units ^b
Total – Planning Area 1		1,250 units	1,250 units
Planning Area 2 (46 Acres)			
Regional Commercial ^c	CM	696,500 sf	696,500 sf
Regional Commercial/Restaurant ^c	CM	15,000 sf	15,000 sf
Total – Planning Area 2		711,500 sf	711,500 sf
Planning Area 3 (96 Acres)^d			
Light Industrial (Including Ancillary Office) (PA3(a))			
Ancillary Office	LI	N/A	75,000 sf
E-Commerce/Fulfillment Center	LI	N/A	753,300 sf
Distribution Center/Parcel Hub	LI	N/A	738,790 sf
Subtotal – Light Industrial		N/A	1,567,090 sf
Enhanced Parkway (PA3(a))	LI	—	27,000 sf/0.62 acres
Commercial Marketplace (PA3(b))			
Regional Retail Center	CM	585,000 sf	N/A
Neighborhood-Serving Commercial/Retail	CM	90,000 sf	10,000 sf (in Carson Country Mart)
Restaurant/Cafe (one, sit-down)	CM	85,000 sf	2,200 sf (in Carson Country Mart)
Restaurants (four, with drive-through capability)	CM	N/A	12,600 sf (in Carson Country Mart)
Food & Beverage Kiosks (six, walk-up)	CM	N/A	9,000 sf (in Carson Country mart)
Commercial Recreation/Entertainment	CM	130,000 sf	N/A

**Table II-1
Planning Areas 1, 2, and 3 Land Use Summary (2018 Project and 2021 Project)**

Land Uses	2021 Specific Plan Amendment Land Use Category	2018 Project (units or sf)	2021 Project (units or sf)
Hotel	CM	233,333 sf (350 rooms)	N/A
<i>Subtotal – Commercial Marketplace</i>		<i>1,123,333 sf (350 rooms)</i>	<i>33,800 sf (0.78 acres)</i>
Park Amenities/Active and Passive Open Spaces (PA3(b))	CM	—	273,906 sf (6.29 acres) ^e
Total – Planning Area 3		1,123,333 sf	1,600,890 sf (including 11.12 acres of Carson Country Mart^f)
GRAND TOTAL		1,834,833 sf (1,250 residential units^a)	2,312,390 sf (1,250 residential units) 11.74 acres of Carson Country Mart and PA3(a) Enhanced Parkway

NOTES:

sf = square feet; N/A = Not Applicable

- ^a The 2018 Project and the 2021 Project do not include an analysis of DD3, and, instead, include DD3 as a cumulative project in the analysis under this 2021 SEIR, where 300 rental residential units have been recently constructed. Including the 300 units from DD3 results in a maximum residential unit count is 1,550. The units could be either rental or ownership units.
- ^b In PA1, residential uses at 60 dwelling units per acre (du/ac) are permitted by right. The remaining units (up to 1,250 residential units) can be constructed in PA1 with a General Plan Amendment to increase the maximum permitted dwelling unit density or can be transferred to and constructed in specific areas of PA2 (which has CM zoning) with an administrative permit, with CEQA review, as applicable.
- ^c A variety of regional commercial uses are permitted in the CM land use designation, including outlet and restaurant uses. The 15,000 sf allocated for “restaurant” uses in PA2 are intended to accommodate a full-service-restaurant. All other non-restaurant food service uses, including, without limitation, VIP lounges, food halls, kiosks, and similar food or beverage serving uses, are included in the gross building area square footage for regional commercial uses established for PA2.
- ^d PA3 consists of approximately 86 acres of light industrial uses, the Carson Country Mart, and the Enhanced Parkway along Lenardo Drive. In addition, PA3 also consists of: approximately 1 acre for the utility lot, which contains the GETS and the LGCCS; approximately 5 acres between the sidewalk of PA3(a) and PA3(b) to the centerline of Lenardo Drive; and approximately 4 acres from the developable edge of PA3(a) and PA3(b) downslope to the Torrance Lateral.
- ^e The Carson Country Mart’s 273,906 sf (6.29 acres) of total active and passive open spaces include: a 6,365 sf arrival plaza, 26,265 sf food and beverage plaza area, 22,740 sf dog park, 3,343 sf performance pavilion, 19,400 sf botanic garden, 25,400 sf children’s play area, 19,490 sf bioretention garden, 1,800 sf beer garden, 2,990 sf games terrace, 35,210 sf event lawn, 2,975 sf sculpture garden, and 4,425 sf water feature and iconic element, planted open spaces and buffers, and 570 sf arrival area for a potential pedestrian community bridge. In addition, this area also includes 1.17 acres of planted open spaces and 1.2 acres of planted buffer areas on west and south sides of park.
- ^f The overall 11.12-acre Carson Country Mart area includes 33,800 sf (0.78 acres) total of commercial/retail uses as follows: 10,000 sf single retail use, four restaurants (with drive-through capability) totaling 12,600 sf, 9,000 sf of food and beverage kiosks, and a 2,200 sf café adjacent to the dog park. Table II-2, below, provides a further break down of the Carson Country Mart components.

II.H PLANNING AREA 3 PROJECT CHARACTERISTICS

As discussed above, the 2021 Project proposes that PA3 will be designated into two separate areas: PA3(a) and PA3(b). PA3(a) will contain light industrial with supportive office uses and open space, and PA3(b) will contain commercial, restaurant, and park/open space uses. **Table II-2, Proposed 2021 Project Land Uses in Planning Area 3**, provides a summary of the light industrial (with ancillary office), commercial, restaurant, and open space and community amenity uses that will be provided in PA3. The light industrial and office uses and the commercial, restaurant, park, recreation, and community uses are separately described in more detail in the following sections.

**Table II-2
Proposed 2021 Project Land Uses in Planning Area 3**

Site Characteristic	Site Size
PA3(a) – Light Industrial and Ancillary Office Uses	
E-Commerce/Fulfillment Center	753,300 sf
Distribution Center/Parcel Hub	738,790 sf
Ancillary Office	75,000 sf
<i>Subtotal Light Industrial</i>	<i>1,567,090 sf</i>
Parking, Circulation, Setbacks	1,608,738 sf (35.98 acres)
Enhanced Parkway	27,000 sf (0.62 acres)
Total PA3(a)	3,202,828 sf (73.53 acres)
PA3(b) – Park, Recreation, Retail, and Restaurant Uses Carson Country Mart	
Retail	10,000 sf
Restaurant/cafe	23,800 sf
<i>Subtotal Commercial</i>	<i>33,800 sf (0.78 acres)</i>
Parking/Vehicular Use Areas	107,613 sf (2.47 acres)
Programmed Spaces	170,973 sf (3.93 acres)
Open Space/Park Amenity	102,933 sf (2.36 acres)
Pedestrian Circulation/Maintenance Roads	69,251 sf (1.59 acres)
Total PA3(b)	484,387 sf (11.12 acres)

II.H.1 PA3(a) – Light Industrial and Ancillary Office Uses

The 2021 Project includes the development of up to 1,567,090 sf of light industrial uses, including 75,000 sf of ancillary office uses in six buildings (Buildings A through F). The light industrial buildings will be distributed over approximately 74 acres of PA3(a).

As previously mentioned, Buildings A, B, C, and F (for a total of 803,300 sf, inclusive of 50,000 sf of ancillary office) are anticipated to be used for an e-commerce/fulfillment center uses. Buildings D and E (totaling 763,790 sf, inclusive of 25,000 sf of ancillary office) are anticipated to be designated for distribution center/parcel hub uses. PA3(a) also includes the 0.62-acre Enhanced Parkway along Lenardo Drive. The Enhanced Parkway will be 20 feet to 40 feet in width. **Figure II-7, 2021 Project: PA3(a) Light Industrial Uses**, illustrates the location of these uses within PA3(a), and a summary of the square footage of each these uses by building is provided in **Table II-3, Proposed 2021 Project Light Industrial and Office Uses in Planning Area 3(a)**.

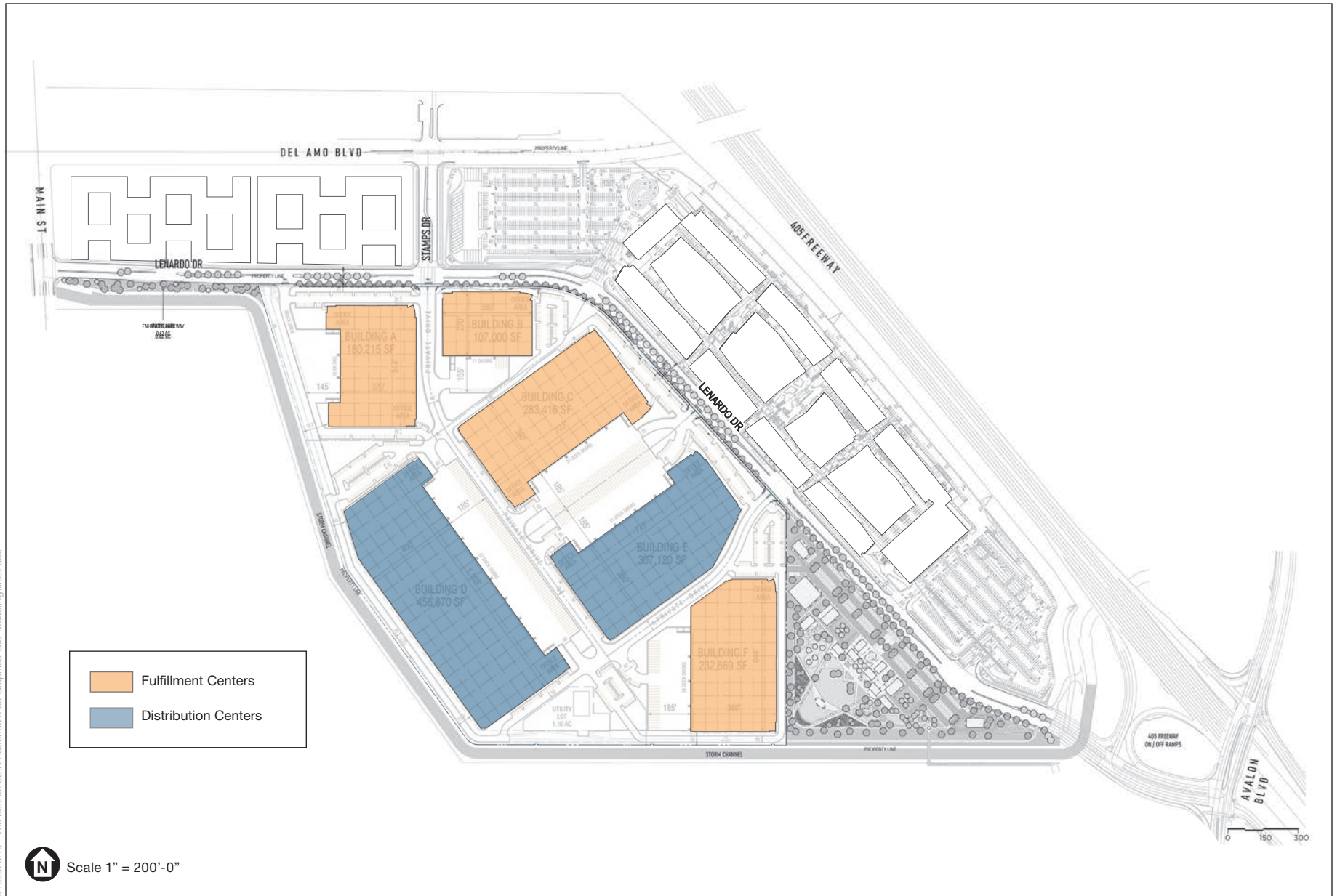
Table II-3
Proposed 2021 Project Light Industrial Uses in Planning Area 3(a)

Building	Office	Light Industrial	Mezzanine	Total
Building A	12,500 sf	162,715 sf	5,000 sf	180,215 sf
Building B	12,500 sf	89,500 sf	5,000 sf	107,000 sf
Building C	12,500 sf	260,916 sf	10,000 sf	283,416 sf
Building D	12,500 sf	434,170 sf	10,000 sf	456,670 sf
Building E	12,500 sf	284,620 sf	10,000 sf	307,120 sf
Building F	12,500 sf	210,169 sf	10,000 sf	232,669 sf
Total	75,000 sf	1,442,090 sf	50,000 sf	1,567,090 sf

The light industrial uses provided in PA3(a) will operate 24 hours per day, 7 days per week. Operational activities associated with loading and forklift usage will occur within the light industrial buildings. In addition, trucks accessing the PA3(a) will have an idling time limit of 2 minutes. The only outdoor activities, beyond the arrival and departure of trucks and/or other automobiles, will be landscaping activities and the removal of trash.

The light industrial areas within PA3(a) will not be air-conditioned, but will be ventilated; however, the ancillary office uses, totaling 75,000 sf, will be air conditioned. It is assumed that one ventilator fan will be provided for each 40,000 sf of light industrial uses, and one emergency generator will be provided in each light industrial building. In addition, it is assumed that refrigeration will be provided in up to 10 percent of Buildings D and E (i.e., 76,379 sf); however, less (or no) refrigeration may occur.

Truck loading docks for each light industrial building adjacent to the Torrance Lateral (closest to the residential areas) will be designed to either face the interior of the Project Site or be screened from surrounding residents through the use of landscaping and/or sound walls.



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SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-7
2021 Project: PA3(a) Light-Industrial Uses



II.H.2 PA3(b) – Commercial, Restaurant, Park, and Recreation Uses (Carson Country Mart)

The commercial and community amenity area programmed for the Carson Country Mart will encompass 11.12 acres, within PA3(b), and will include a variety of passive and active open spaces, programmed areas, and community-serving commercial uses intended to serve local City residents and to activate the area to draw visitors to the area. Hours of operation for all uses within PA3(b) will be from 6 a.m. to 11 p.m.

The Carson Country Mart will provide for approximately 273,906 sf (6.29 acres) of programmed spaces, and open space/amenity areas that would include the following:

- (i) A 6,365 sf arrival plaza;
- (ii) A 26,265 sf food and beverage plaza area;²²
- (iii) A 22,740 sf dog park;
- (iv) A 3,343 sf performance pavilion;
- (v) A 19,400 sf botanic garden;
- (vi) A 25,400 sf children’s play area;
- (vii) A 19,490 sf bioretention garden;
- (viii) A 1,800 sf beer garden;
- (ix) A 2,990 games terrace;
- (x) A 35,210 sf event lawn;
- (xi) A 2,975 sf sculpture garden;
- (xii) A 4,425 sf water feature and iconic element;
- (xiii) A 570 sf arrival area for a potential pedestrian community bridge;²³ and
- (xiii) 50,774 sf of planted open spaces and 52,159 sf of planted buffer areas on the western and southern portions of the Carson Country Mart.

The Carson Country Mart will also include 33,800 sf total of commercial/retail uses as follows: 10,000 sf provided in a single retail use catered to pets and animals; four restaurants (with drive-through capability) totaling 12,600 sf; 9,000 sf of food and beverage kiosks; and a 2,200 sf cafe

²² The 9,000 sf of food and beverage kiosks are located within the 26,265 sf food and beverage plaza area, as illustrated by Figure II-8.

²³ The arrival area would serve a potential pedestrian bridge that is contemplated for a potential future project located at 21207 South Avalon Boulevard.

adjacent to the dog park. The restaurant drive through/pick-up and delivery feature²⁴ will cater to upscale “fast casual” type restaurant tenants as set forth in the 2021 Specific Plan Amendment, as opposed to traditional fast-food type establishments. The Carson Country Mart will also include tables and seating areas for people to eat and drink in a social setting and green environment. The sale of alcoholic beverages will be permitted consistent with the requirements specified under the 2021 Specific Plan Amendment. Amplified music will occur in the Carson Country Mart’s programmed event space (i.e., the performance pavilion and event lawn area). The restaurant components of the Carson Country Mart will operate from 7:00 a.m. until 11:00 p.m. The retail uses will likely open later and close earlier.

The Carson Country Mart also includes 107,613 sf (2.47 acres) of vehicular use area and 69,251 sf (1.59 acres) of pedestrian circulation and maintenance roads, which include internal pedestrian paths of travel, restrooms, trash and recycling areas, and a maintenance access road. Pedestrian and bicycle pathways will be provided throughout the Project Site and would connect the Carson Country Mart to the City’s street bicycle system (in accordance with the City’s Master Plan of Bikeways, adopted August 2013, and as described in Section II.J.1(b), *Pedestrian and Bicycle Circulation*, of this Project Description and the 2021 Specific Plan Amendment). Commercial building heights within the Carson Country Mart will reach approximately 25 to 30 feet, with exceedances permitted for architectural features and/or mechanical equipment.

Figure II-8, 2021 Project: PA3(b) Carson Country Mart, illustrates the location of the commercial uses within PA3(b), **Figure II-9, 2021 Project: PA3(b) Park and Open Space**, illustrates the proposed park and open space areas, and **Table II-4, Proposed 2021 Project Commercial Uses in Planning Area 3(b) (Carson Country Mart)**, provides a summary of each of the commercial uses in the Caron Country Mart area.

**Table II-4
Proposed 2021 Project Commercial Uses in Planning Area 3(b) (Carson Country Mart)**

Commercial Uses	Size
Restaurants (with drive-through capability)	12,600 sf
F&B Kiosks, walk-up only	9,000 sf
Cafe, adjacent to dog park and amenity spaces	2,200 sf
<i>Restaurant Subtotal</i>	23,800 sf
Retail	10,000 sf
<i>Retail Subtotal</i>	10,000 sf
Commercial Total	33,800 sf

²⁴ The drive-through restaurants would accommodate both patrons and delivery services, such as GrubHub, DoorDash, or Uber Eats. Trip generation from both patrons and delivery services have been assumed in the traffic analysis for the 2021 Project.



SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-8
2021 Project: PA3(b) Carson Country Mart





SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-9
2021 Project: PA3 Open Space and Streetscaping



II.H.3 PA3 – Building Heights and Elevations

As shown in **Table II-5, PA3(a) Light Industrial Building Heights**, the light industrial buildings will reach a clear height of between 50 feet and a maximum of 55 feet, with additional architectural features extending the height to between 56 feet and 65 feet. These heights will be allowed by the 2021 Specific Plan Amendment.

**Table II-5
PA3(a) Light Industrial Building Heights**

Building	Clear Building Height	Building Height with Architectural Features (e.g., Parapets)
A	50 feet	56 feet
B	50 feet	55 feet
C	55 feet	65 feet
D	50 feet	56 feet
E	55 feet	65 feet
F	50 feet	56 feet

In addition, elevations (from the north, south, east, and west) for the light industrial buildings are provided by **Figure II-10, Building A Elevations**, through **Figure II-15, Building F Elevations**.

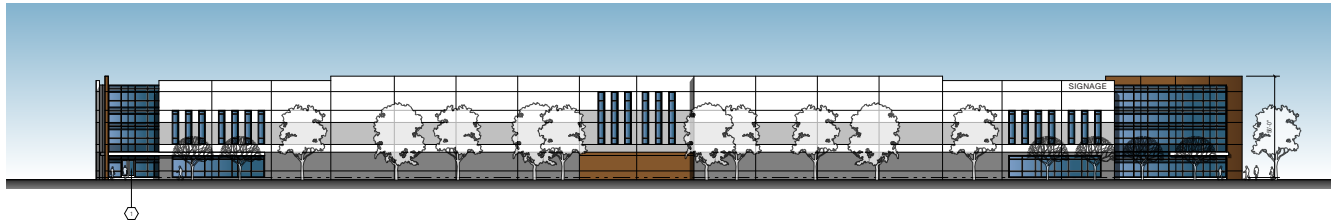
II.I GENERAL PLAN AND ZONING DESIGNATIONS

**Table II-6
General Plan and Zoning Designations under the 2018 and 2021 Specific Plan Amendments**

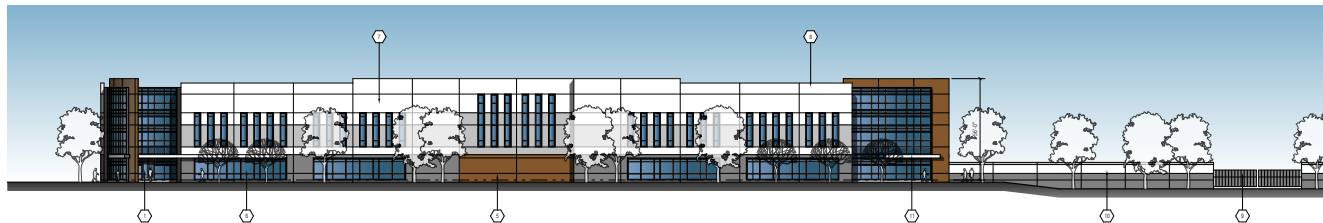
Designation Type	2018 Specific Plan Amendment	2021 Specific Plan Amendment
General Plan Designation	Mixed Use-Residential (MU-R)	Proposed General Plan Amendment from MU-R to Light Industrial (LI) in PA3(a)
Zoning	Specific Plan-10 (allowing Mixed-Use Marketplace in PA1 and Commercial Marketplace in PA2 and PA3)	Proposed change in text to allow Light Industrial uses in PA3(a)



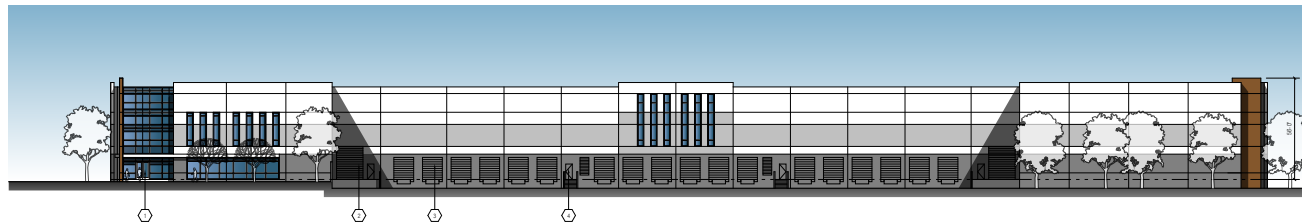
SOUTH ELEVATION
SCALE: 1" = 20'-0"



EAST ELEVATION
SCALE: 1" = 20'-0"



NORTH ELEVATION - STREET A FRONTAGE
SCALE: 1" = 20'-0"



WEST ELEVATION
SCALE: 1" = 20'-0"

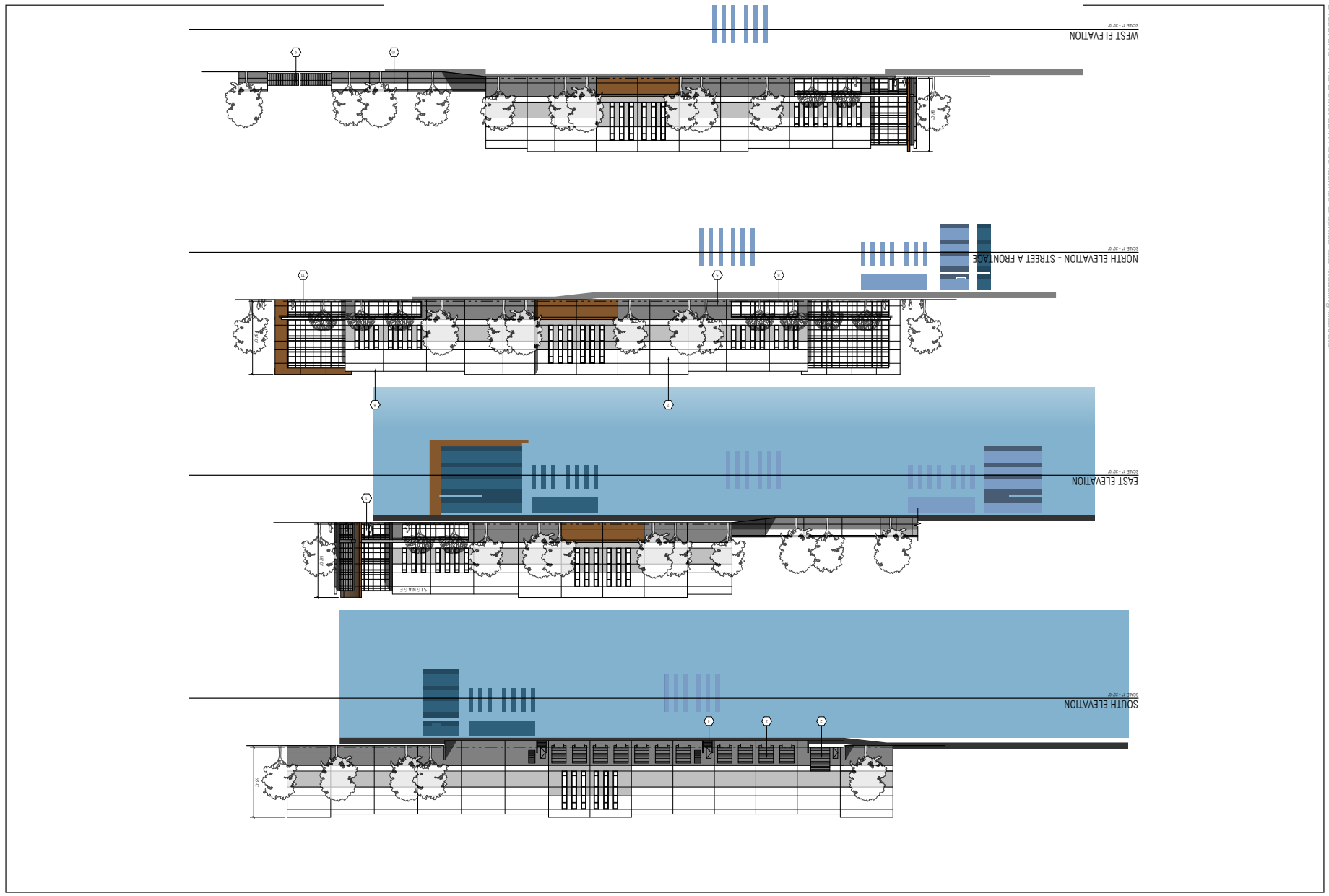
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SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

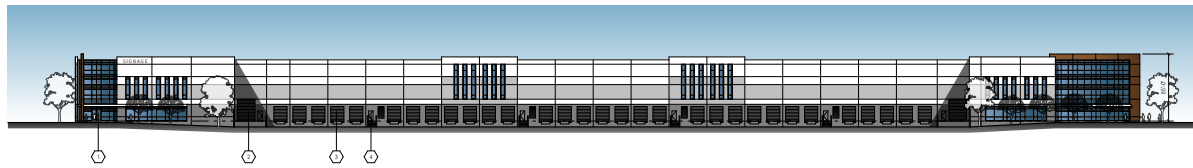
Figure II-10
Building A Elevations



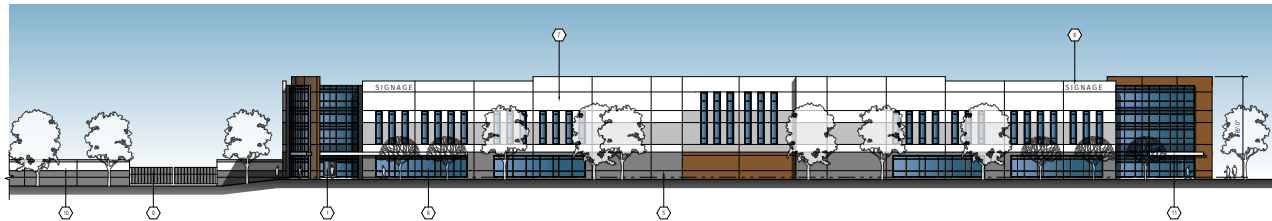




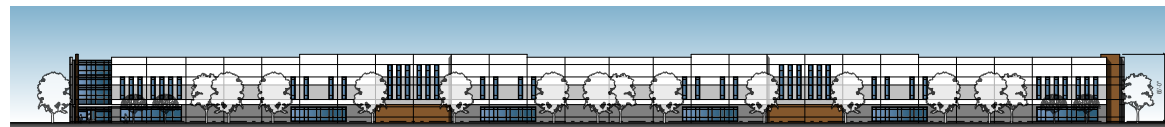
WEST ELEVATION
SCALE: 1" = 20'-0"



SOUTH ELEVATION
SCALE: 1" = 20'-0"



EAST ELEVATION - STREET A FRONTAGE
SCALE: 1" = 20'-0"



NORTH ELEVATION
SCALE: 1" = 20'-0"

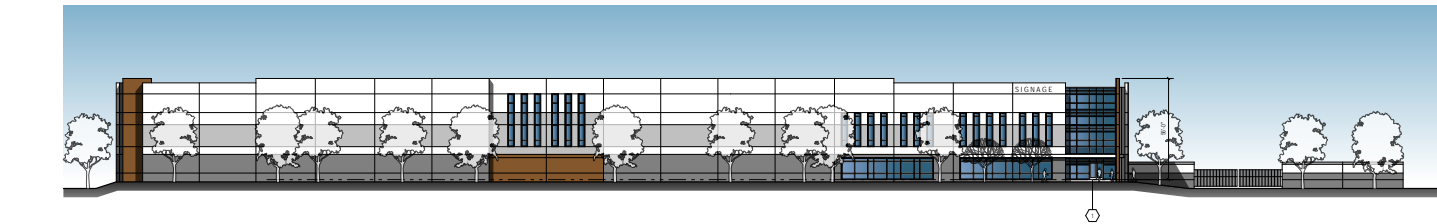
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SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-12
Building C Elevations

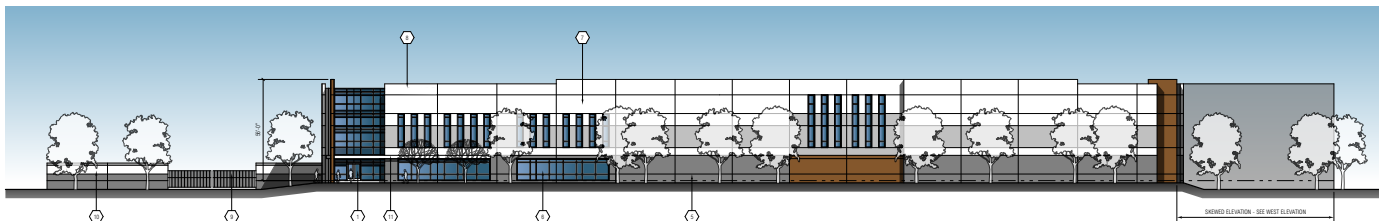




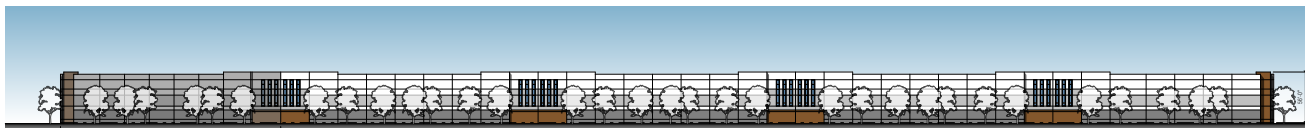
SOUTH ELEVATION
SCALE: 1" = 20'-0"



EAST ELEVATION
SCALE: 1" = 40'-0"



NORTH ELEVATION
SCALE: 1" = 20'-0"



WEST ELEVATION
SCALE: 1" = 40'-0"

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SOURCE: RGA, 2021

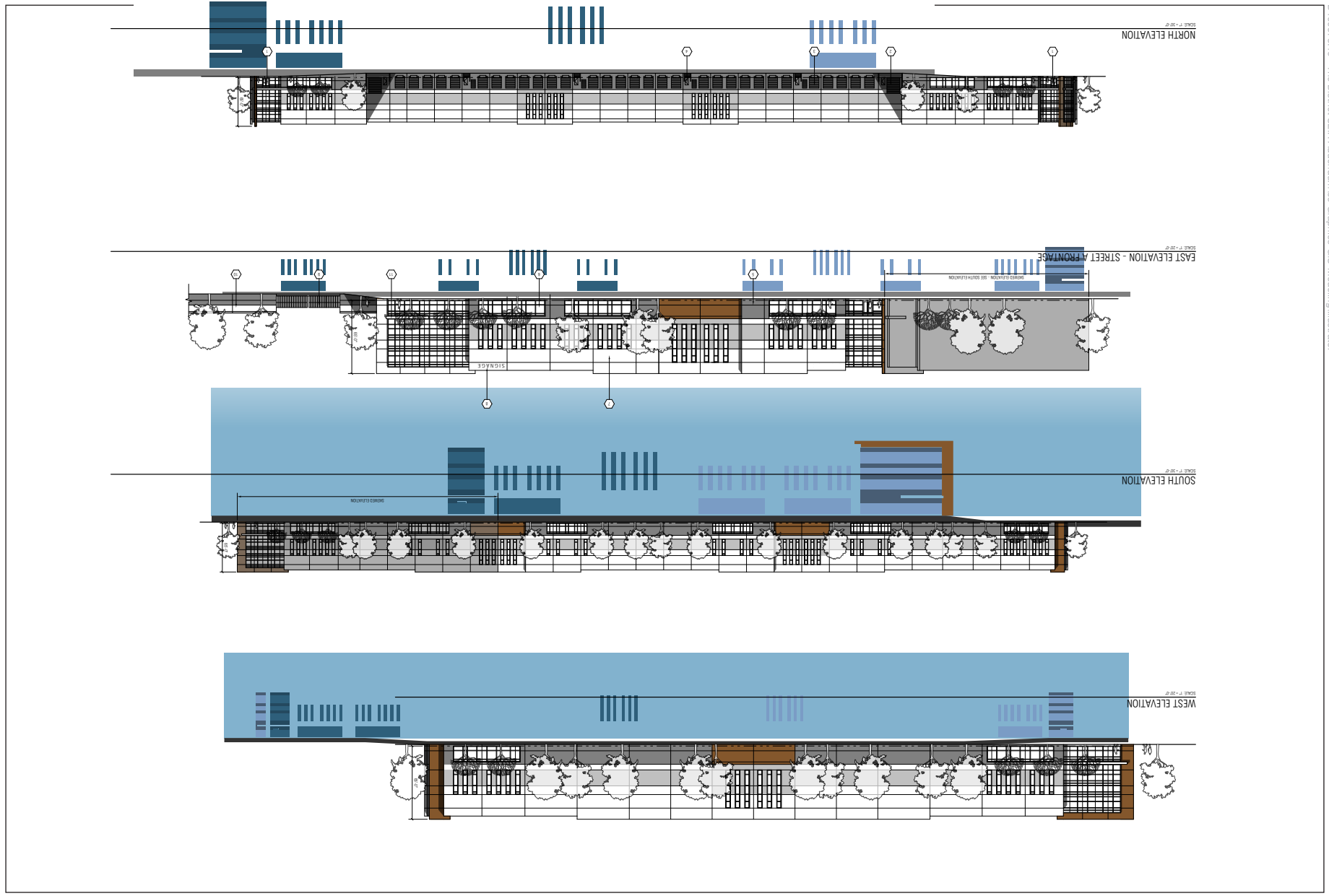
The District at South Bay Specific Plan Amendment

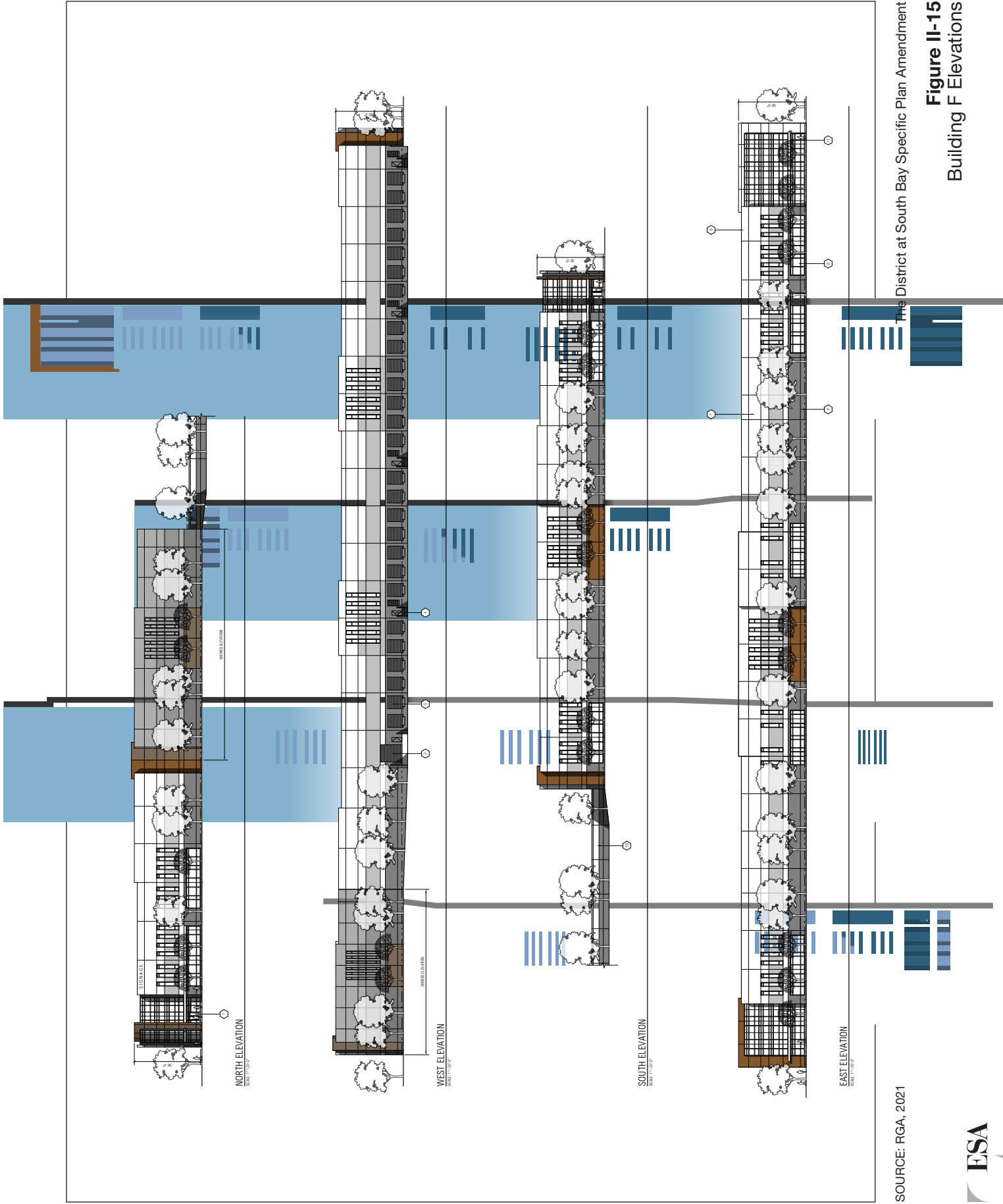
Figure II-13
Building D Elevations



Figure II-14
Build E Elevations

The District at South Bay Specific Plan Amendment





SOURCE: RGA, 2021

The District at South Bay Specific Plan Amendment

Figure II-15
Building F Elevations



II.J UTILITIES AND INFRASTRUCTURE

II.J.1 Circulation, Parking, and Transit Connections

a. Vehicular Circulation

Figure II-16, Vehicular Circulation Concept, illustrates the proposed modified Project's access points and internal circulation plan for motor vehicles. Existing roadways will be vacated as necessary and replaced by two primary routes, referred to as Lenardo Drive (referred to in the 2018 SEIR as Street A) and Stamps Drive (referred to in the 2018 SEIR as Street B). As with the 2018 Project, internal roadways will be comprised of a combination of both publicly and privately owned and maintained streets. Lenardo Drive and portions of Stamps Drive will be publicly dedicated, as necessary.

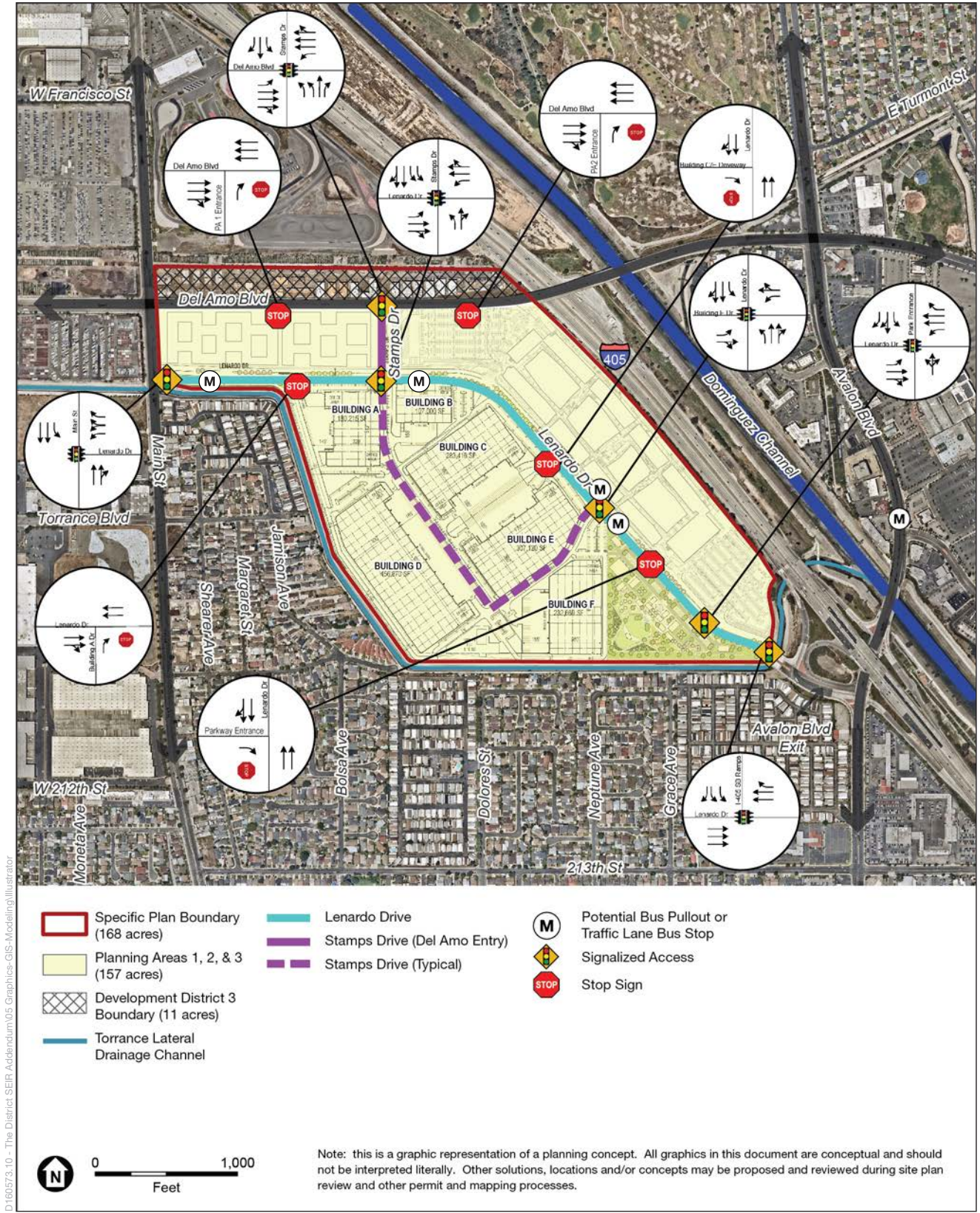
Under the 2021 Project, three main signalized access and egress points for the Project Site will be provided at the intersections of Del Amo Boulevard and Stamps Drive; Main Street and Lenardo Drive; and Avalon Boulevard and the I-405 Freeway ramps, as follows:²⁵

- The intersection of Del Amo Boulevard and Stamps Drive will allow for left and right turns from Stamps Drive and Del Amo Boulevard and straight between the Project Site and Evolve South Bay.
- The intersection of Main Street and Lenardo Drive will allow right-in and right-out from Main Street traveling north and Lenardo Drive traveling east; additionally, at this intersection, a protected left-turn will be provided from Main Street traveling south.
- The intersection of Avalon Boulevard and the I-405 Freeway ramps will allow access from Lenardo Drive through Avalon Boulevard and onto the I-405 Freeway southbound on-ramp; from the I-405 Freeway southbound off-ramp to Lenardo Drive; and from Avalon Boulevard traveling either north or south to Lenardo Drive.

One additional right-in/right-out entry will be located on Del Amo Boulevard with access to and from PA1 and Del Amo Boulevard.

An access road adjacent to the Torrance Lateral will allow for fire/emergency access for Buildings A, D, and F and operation and maintenance for the utility lot and Torrance Lateral. In addition, an access road with easements for operation and maintenance of the Torrance Lateral and fire access to the Project Site would be provided around the southern/western boundary of PA3, adjacent to the Torrance Lateral.

²⁵ Figure 7 of the TIA, which is provided as Appendix C1 of this 2021 SEIR, shows the location of the signalized intersections and the allowed turning movements.



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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure II-16
Vehicular Circulation Concept



Beyond the three access points described above, internally, access to the three planning areas will be provided by Stamps Drive, Lenardo Drive, and through two private drives that will provide both vehicular and truck access to PA3(a). Full-access and signalized intersections within the Project Site will also be provided at Lenardo Drive and Stamps Drive, Lenardo Drive and the combined entrance to PA2 and PA3, and Lenardo Drive and the combined entrance to PA2 and the Carson Country Mart. Ultimately, the internal circulation system will be subject to approval by the City Community Development Director and City Engineer and will be finalized with the approval of development plans.

b. Pedestrian and Bicycle Circulation

(1) Pedestrian Access

Pedestrian circulation will be provided throughout the Project Site through sidewalks and pathways. Protected pedestrian crossings will be provided at the signalized intersections located at Main Street and Lenardo Drive; Lenardo Drive and Stamps Drive; Stamps Drive and Del Amo Boulevard; Lenardo Drive and the combined entrance to PA2 and PA3; and Lenardo Drive and Avalon Boulevard. External pedestrian access will be provided to the Project Site from Main Street, Del Amo Boulevard, and Avalon Boulevard.

(2) Bicycle Access

Internally, buffered and striped bicycle paths will be provided along Stamps Drive from Del Amo Boulevard to Lenardo Drive and along Lenardo Drive from Main Street to the southeastern portion of the Project Site.

As shown in the City's Master Plan of Bikeways, external bicycle access to the Project Site will be primarily be provided from planned bicycle lanes along Main Street, Del Amo Boulevard, and Avalon Boulevard.²⁶ The bicycle lanes along Del Amo Boulevard and Avalon Boulevard will be colored (e.g., solid green) and buffered, and the bicycle lanes along Main Street will be buffered. In addition, both the Los Angeles County Bicycle Master Plan and the City's Master Plan of Bikeways show a planned bicycle path on either side of the Dominguez Channel in the vicinity of the Project Site.²⁷ Lastly, there is an existing bicycle route along the Torrance Lateral from Main Street to Avalon Boulevard.²⁸

²⁶ *City of Carson, Carson Master Plan of Bikeways, August 2013, <https://ci.carson.ca.us/content/files/pdfs/planning/BikeMasterPlan.pdf>, accessed July 8, 2021.*

²⁷ *County of Los Angeles, Bicycle Master Plan, March 2012, <https://pw.lacounty.gov/tpp/bike/docs/bmp/FINAL%20Bicycle%20Master%20Plan.pdf>, accessed July 8, 2021.*

²⁸ *City of Carson, Carson Master Plan of Bikeways, August 2013, <https://ci.carson.ca.us/content/files/pdfs/planning/BikeMasterPlan.pdf>, accessed July 8, 2021.*

c. Parking

(1) Vehicular Parking

The various uses proposed by the 2021 Project will be required to meet the parking standards specified in the Development Standards section of the 2021 Specific Plan Amendment, as summarized in **Table II-7, Parking Requirements of the 2021 Specific Plan Amendment**. These standards include a transportation demand management (TDM) requirement for the residential uses in PA1 to provide unbundled parking. This measure separates the cost of parking from the overall rent as an optional line item on tenant leases, and thus encourages tenants to consciously weigh the pros and cons of leasing additional parking spaces for their unit.

**Table II-7
Parking Requirements of the 2021 Specific Plan Amendment**

PA1	PA2	PA3(a)	PA3(b)
<p>Residential: 0BR (not more than 450 sf): 1 space/unit; 1BR, and 0BR units larger than 450 sf: 1.5 spaces/unit; 2BR or more: 2 spaces/unit Guest Parking: 1 space/4 units</p> <p>Commercial: 4 spaces/1,000 sf of gross leasable area, except: Theater = 1 space/4 seats Hotel = 1 space/room</p>	<p>Residential: Same as PA1 and DD3 with approval of Administrative Permit;</p> <p>Commercial: 4 spaces/1,000 sf of gross leasable area, except: Theater = 1 space/4 seats Hotel = 1 space/room</p>	<p>Light Industrial: 1 space per 1,000 sf (less than 40,000 sf) 1 space per 4,000 sf (more than 40,000 sf) Truck Trailer Parking: Per parking study submitted by Applicant</p> <p>Office: 1 space per 300 sf</p>	<p>Restaurant: 4 spaces per 1,000 sf</p> <p>Retail: 4 spaces per 1,000 sf</p> <p>Park: 2 spaces per acre</p>

A Parking Demand Analysis has been prepared in connection with the 2021 Specific Plan Amendment to establish the amount of parking to be provided within PA3, including possible sharing of parking between uses based on differing days and hours of peak demand. The parking for PA3 will be provided via surface parking as detailed in **Table II-8, Proposed 2021 Project Parking in Planning Area 3**.

If the Carson Municipal Code requirements were applied to PA3, 1,530 spaces would be required – 493 more spaces than proposed. However, the City of Carson Municipal Code parking requirement for light industrial uses does not reflect some of the unique characteristics of the e-commerce/fulfillment center/distribution center/parcel hub light industrial use proposed for PA3. Due to this issue, the Parking Demand Analysis instead applied the City of Moreno Valley’s code parking requirement for logistics and distribution facilities which more accurately reflects the PA3 light industrial use. Using the Moreno Valley code parking requirement, the 809 parking

**Table II-8
Proposed 2021 Project Parking in Planning Area 3**

Parking	Office	Light Industrial	Mezzanine (Light Industrial)	Total Light Industrial Areas	Restaurant	Retail	Park
Proposed Rates	1 space per 300 sf	1 space per 1,000 sf <40,000 sf	1 space per 4,000 sf >40,000 sf		5 spaces per 1,000 sf	2 spaces per 1,000 sf	2 spaces per acre
		240	317		119	20	18
	252	240	317	809		228	
		PA3 Parking Total			1,037		

spaces proposed for the PA3 light industrial use is more than adequate to accommodate light industrial parking demand.

The number of parking spaces proposed for the restaurant, retail and park uses – 228 spaces – is less than the Carson Municipal Code requirement – 285 spaces. Utilizing the Urban Land Institute’s shared parking methodology, the restaurant, retail and park uses can achieve a shared parking efficiency of 8 percent through differing peak demand periods and internal capture. This efficiency reduces the required peak parking demand from 285 spaces to 264 spaces.

Additionally, as part of the project design features (PDFs), the parking lot serving the light industrial Building F will be shared between Building F and the restaurant, retail and park uses. Using the Moreno Valley code parking requirement, Building F only requires 79 spaces. The remaining 41 spaces can therefore adequately accommodate the excess parking demand (264 spaces needed – 228 spaces proposed = 36) for the restaurant, retail and park uses.

(2) Bicycle Parking

Bicycle parking will also be provided consistent with 2021 Specific Plan Amendment, which assumes that bicycle parking for the various uses proposed on the Project Site will comply with the Carson Municipal Code Section 9165.3.

d. Transit Connections

Four bus stops with shelters are proposed on Lenardo Drive. One is proposed to be located near the intersection of Lenardo and Main Street; one is proposed to be located near the intersection of Lenardo Drive and Stamps Drive; one is proposed to be located near the northwestern corner of the Carson Country Mart; and, one is proposed to be located near PA2 and roughly opposite the bus stop near the northwestern corner of the Carson Country Mart. Two of the four bus stops would be located on the north side of Lenardo Drive and the other two bus stops would be located on the south side of Lenardo Drive. Service to these bus stops will be determined in coordination with Carson Circuit; Long Beach Transit; the Los Angeles Metropolitan Transit

Authority (Metro); Torrance Transit; and the Los Angeles Department of Transportation (LADOT).

II.J.2 Utilities Improvements

The following sections summarize the utilities improvements for the 2021 Project. Additional information is provided in Chapter VI, *Effects Found Not to Be Significant* (Section VI.F, *Hydrology and Water Quality*, and Section VI.N, *Utilities and Service Systems*). All infrastructure improvements will be located on site; there are no proposed off-site utility infrastructure improvements.

a. Stormwater

A portion of the backbone storm drain system has been constructed within the former haul roads, which do not contain landfill waste. All stormwater from the Project Site will continue to be contained in an on-site drainage system that will discharge to the Torrance Lateral in compliance with the City's drainage control requirements of the 2009 SUSMP and the City's Storm Water Pollution Control Measures for New Development Projects, which contains more stringent regulatory requirements than assumed in 2006 FEIR and 2018 SEIR.

The Torrance Lateral is concrete-lined and conveys runoff from off-site uses to the west and south and from the Project Site via existing drains. The 2021 Project will continue to utilize the existing connections to the Torrance Lateral from the Project Site; no new or modified connections are proposed. Further, the 2021 Project will retain the existing tributary drainages areas, which will allow the existing storm drainage system to be used with only minor adjustments.

b. Water

The Project Site is served by a 12-inch water main located in Main Street and a 16-inch water main located both on Del Amo Boulevard and Lenardo Drive. The pipeline ends at the Lenardo Drive and Stamps Drive intersection, and the 2021 Project proposes to continue the 16-inch water main south along Lenardo Drive to the south. This backbone distribution of mains and fire hydrants was engineered for future commercial/industrial uses and was approved by the Los Angeles County Department of Public Works (2018 SEIR p. VI-27). In addition, the 2021 Project will also incorporate water conservation methods such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The 2021 Specific Plan Amendment will include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features. Additionally, it is proposed to connect the on-site system to the West Basin Recycling Facility to decrease the potable water demand and enhance the water conservation efforts for the development.

c. Wastewater

The Project Site will be served by an existing 18-inch sewer pipeline in Lenardo Drive and another pipeline within PA3. The sewer pipeline in PA3 starts south of Lenardo Drive with an 8-inch pipe, which gradually increases to a 10-inch, 12-inch, 15-inch, and 18-inch pipe as it reaches north to join the 18-inch line in Lenardo Drive (at Stamps Drive). Flows continue east in the 18-inch pipe in Lenardo Drive, where it ultimately discharges into the Los Angeles County Sanitation District (LACSD) sewer in Main Street. In a Sewer Study dated May 2019, a sewer capacity analysis was completed and approved by Los Angeles County Public Works (LACPW) and can be found in Appendix 7.7 of the Sewer Study.

Based on a preliminary evaluation of the sewer infrastructure conducted by MBI in 2019, and as further described in Chapter VI, *Effects Found Not to Be Significant*, of this 2021 SEIR, the existing lines have excess capacity to serve the proposed development. The 2021 Project will also incorporate water conservation methods such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The 2021 Specific Plan Amendment will include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features.

d. Recycled Water

There is a backbone reclaimed (or recycled) water system in place on the northern side of the I-405 Freeway and Dominguez Channel, which is operated by the West Basin Municipal Water District (WBMWD). The WBMWD currently implements a program for water recycling in the South Bay area. The 2021 Project will be served by an existing 6-inch recycled water line in Lenardo Drive, with recycled water also supplied by the West Basin Municipal Water District. Recycled water will be used for landscape irrigation and other uses, such as street sweeping and toilet flushing.

e. Other Utilities

Electricity, natural gas, and telecommunications utilities will be installed, designed, and sized to meet the needs of the land uses proposed under the 2021 Project. The precise location will be determined upon submittal of future tract maps and will be approved by the Director of Public Works; where feasible, these utilities will be placed underground unless such placement conflicts with the RAP.

II.J.3 Grading

The 2021 Project will result in approximately 223,400 cubic yards (cy) of cut and approximately 334,200 cy of fill, resulting in a net import of 110,800 cy of soil material. However, as a

conservative approach, assuming needing to import suitable capping material over the consolidated waste and membrane, the total import volume is estimated to be up to 450,000 cy.

In addition, the extent and depth of grading will be similar to that proposed for the 2018 Project. As with the 2018 Project, the 2021 Project will continue to include the use of driven piles in all three planning areas, in lieu of slabs on grade as outlined by the 2006 FEIR, to provide stable building foundations. Pile caps will be used to connect the piling and the overlying impermeable cap. Piles could range from approximately 40 to 90 feet in length, with an average length of 65 feet, which is the same as proposed for the 2018 Project. As with the 2018 Project, pile driving will be used as a construction technique for the 2021 Project in all three planning areas; however, existing roadways are not underlain by fill/waste and, as such, roadway construction in existing alignments will not require the use of foundation pilings, but will still require evaluation and design in accordance with all applicable City Building Code requirements. In addition, and as with the 2018 Project, the depth of ground disturbance related to mass grading will be zero to four feet, with cuts as deep as 10 feet in a few isolated areas, in addition to the depth required for placement of the membrane liner over the existing waste material, where required. This 2021 SEIR does not modify any of the conclusions regarding the installation of piles or mass grading, and the 2021 Project shall continue to adhere to all identified City Building Code requirements.

II.J.4 Sustainability Measures

The Developer has committed to providing a range of construction and operational PDFs that will reduce air quality emissions, energy use, and greenhouse gas (GHG) emissions.²⁹ These PDFs are assumed as part of the 2021 Project and are taken into account in the analyses of potential impacts. Each of these PDFs is described in detail in Section IV.D, *Air Quality* (pp. IV.D-37 through IV.D-42); Section IV.G, *Energy* (pp. IV.G-25 to IV.G-29); and Section IV.H, *Greenhouse Gas Emissions* (pp. IV.H-43 to IV.H-47) of this 2021 SEIR and are incorporated into this Project Description by reference to these specific sections of this 2021 SEIR. These PDFs are also identified in Table I-4, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, as provided in Chapter I, *Summary*, of this 2021 SEIR and will be tracked in the 2021 Project's Mitigation Monitoring and Reporting Program (MMRP).

In summary, these 2021 SEIR PDFs describe various construction and operational methods and features, including, but not necessarily limited to, the type of construction equipment that will be used (Tier 4 or Tier 3, where Tier 4 equipment is not available); maximum length of construction

²⁹ Because PA2 has already been approved pursuant to a Development Agreement for development by the City (following the approval of the 2018 SEIR) and the Applicant for that property (CAM-Carson LLC) has vested rights to its project proposal and construction has already begun for PA2 in compliance with the 2018 SEIR, PA2's compliance requirements for PDFs are limited to those PDFs and mitigation measures that were applied in the 2018 SEIR.

truck idling; the use of electricity rather than gas or diesel for some or all on-site equipment (e.g., landscaping, forklifts, transport refrigeration units); the use of non-diesel generators or Tier 4 diesel generators; the use of skylights and solar photovoltaic (PV) arrays in all light industrial buildings such that a minimum of 25 percent of the rooftops include solar PV arrays at buildout, which exceeds the Mandatory Solar Ready Requirements of 2019 Title 24; a ban on the use of diesel truck refrigeration unit (TRU) operation with PA3; provision of passenger vehicle and truck vehicle electrovoltaic (EV) charging stations; compliance with or exceedance of Title 24 energy efficiency standards; and the implementation of trip reduction (or travel demand) measures for both construction and operational activities.

In addition, and also as a 2021 SEIR PDF, zero-emissions construction equipment shall be incorporated when commercially available and shall be required by applicable bid documents and purchase orders. More specifically, light industrial tenants shall ensure that of all trucks of model year 2021 and newer, 75 percent will be zero- or near-zero-emissions vehicles by 2035 and 100 percent will be zero- or near-zero-emissions vehicles by 2040. This supports Executive Order N-79-20, which requires 100 percent of new truck sales in California be zero-emissions by 2045.

II.K SIGNAGE/LIGHTING

The following sections summarizes the freeway, wall-mounted, and billboard signage and lighting proposed for the 2021 Project. Additional information is provided in Section IV.B, *Aesthetics*, of this 2021 SEIR.

II.K.1 Freeway Signage

The approved 2018 Specific Plan and the certified 2018 SEIR provided for and evaluated two options for freeway signage (Option A and Option B). Option A included a total of four freeway pylon signs, including two static signs and two double-faced LED, digital freeway pylon signs with a changeable message. Option B included three freeway pylon signs, one of which would be a double-faced LED, digital sign with a changeable message and two of which would be digital with a changeable message (but not double-sided).

The 2021 Project would continue to propose both Option A and Option B, but would also include a third option. Option C would include four freeway pylon signs, two of which would be double-faced LED, digital, with a changeable message, and two of which would be double-faced and static, with a changeable message. Under Options A and B, the freeway pylon signs would be a maximum of 88 feet in height (from grade) and 65 feet in width. Under Option C, the freeway pylon signs would also be a maximum of 88 feet in height (from grade), but extended to 70 feet in width.

II.K.2 Wall-Mounted Signs and Billboards

As with the 2018 Project, the 2021 Project would provide a hierarchy of signs, including entry monument signs, project name identification signage, wall signs, and wall billboard signs. Consistent with the 2018 Project, wall-mounted signs and billboards, ranging in height from 6 feet to 30 feet, may be mounted on walls or roofs of the PA2 project development. In addition, entry signage, project name identification signage and wall signs would be allowed. The entry signs in PA3(a) would be reduced compared with the 2018 Specific Plan signage. PA3(a) would include up to seven wall signs on the light industrial buildings. Wall signs would be located on the commercial buildings within PA3(b). However, as with the 2018 Specific Plan, the 2021 Specific Plan Amendment requires that the final design, size, and location of the signage within PA1 and PA3 shall be determined by each Applicant(s) in a Comprehensive Sign Program that would require City review and approval. A Comprehensive Signage Program for PA2 was prepared by 505Design Inc. on behalf of Macerich and was approved by the City of Carson City Council on April 3, 2018 (via Resolution 18-042).³⁰ The 2021 Project proposes no changes to the signage that was previously approved for PA2.

II.K.3 Building and Site Lighting

Building and site lighting would remain the same within PA1 and PA2 as proposed under the 2018 Specific Plan. However, given the change in uses and site design the building and site lighting within PA3 would be different under the 2021 Specific Plan Amendment. Building lighting includes all exterior and interior lighting associated with the structure. In addition, lighting would be located within the parking areas, at the loading docks, and along the site perimeter and along walkways within PA3. Building lighting would comply with CALGreen lighting standards, which control lighting intensity, and would be directed down so as to avoid spillover. Perimeter pole lighting in PA3(a) along the Torrance Lateral would be a maximum of 35 feet in height and pole lighting in the Carson Country Mart would be a maximum of 12 feet in height.

II.L EMPLOYEES

II.L.1 Construction Employees

During construction of PA1, construction employees are estimated to range from 32 employees during the remediation phase of development to 702 employees during the vertical construction phase; during construction of PA2, employees are estimated to range from 32 employees during the remediation phase to 212 employees during the vertical phase; and during construction of

³⁰ 505Design Inc., Fashion Outlets Los Angeles, Carson, California: Comprehensive Sign Plan, December 15, 2017.

PA3, employees are estimated to range from 32 employees during the remediation phase to 241 employees during the vertical phase. During the concurrent horizontal phase of construction of PA2 and PA3, employees are estimated to range between 132 employees and 212 employees. At a maximum, construction employees would total 702 employees on a single day during the vertical phase for PA1 (from 2024 to 2026).

II.L.2 Operational Employees

Employees generated during operation of the 2021 Project is illustrated in **Table II-9, 2021 Project – Estimated Employees Generated during Operation**. As shown, the 2021 Project conservatively assumes a maximum potential to generate a total of 5,729 employees. This includes 1,089 employees generated by PA2 and 4,640 employees generated by PA3. PA1 is a proposed residential use and no employees are anticipated to be generated by PA1.

**Table II-9
2021 Project – Estimated Employees Generated during Operation**

Planning Area	Land Use	Square Feet	Employees
PA1	Residential	N/A	N/A
PA2	Regional Commercial ^a	696,500 sf	1,066
	Restaurant ^a	15,000 sf	23
		<i>Subtotal</i>	<u>1,089</u>
PA3	Regional Commercial ^a	10,000 sf	15
	Restaurant ^a	23,800 sf	36
	E-Commerce/Fulfillment Center ^b	803,300 sf	3,443 ^c
	Distribution Center/Parcel Hub ^b	763,790 sf	1,146 ^d
		<i>Subtotal</i>	<u>4,640</u>
		Total	<u>5,729</u>

NOTES:

sf = square feet; N/A = Not Applicable

^a The employee generation factor for the Regional Commercial and Restaurant uses are taken from Los Angeles Unified School District, 2020 Developer Fee Justification Study, Los Angeles School District, March 2020, Table 14, Employees per Square Foot of Commercial Development, p. 19. Employees per average SF generation factors used include Community Shopping Centers (0.00153).

^b The employee generation for the e-commerce/fulfillment center and distribution center/parcel hub uses proposed for PA3(a) are based on a Colliers International, U.S. Industrial Services January 2018 Spotlight Report: The E-commerce Revolution: How Labor, Automation, and Amazon Will Impact Industrial Real Estate. Based on the report, e-commerce employee counts are estimated to be one employee per 700 sf per shift and distribution center employee counts are estimated to be one employee per 2,000 sf per shift.

^c (803,300 sf/700 sf per shift) * 3 shifts = 3,443 total employees

^d (763,790 sf/2,000 sf per shift) * 3 shifts = 1,1146 total employees

As the e-commerce/fulfillment center and distribution center/parcel hub uses proposed for PA3(a) would operate on a per shift basis, the total employees generated by the changed uses proposed by

the 2021 Project includes approximately 4,589 employees for the e-commerce/fulfillment center and distribution center/parcel hub uses, assuming a maximum of three shifts over a 24-hour period. The maximum number of employees generated by the light industrial uses proposed by the 2021 Project would never be on the Project Site at one given time as the potential for shift overlap is only feasible between any two shifts (i.e., an overlap of three shifts is not feasible).

II.M PROJECT CONSTRUCTION ACTIVITIES AND SCHEDULE

II.M.1 Construction Duration and Phasing

The 2021 Project construction activities remain similar to those set forth in the 2018 SEIR, namely site preparation (i.e., mass grading, placement of piles, and the construction of building pads); implementation of the Upper OU RAP; installation of on-site utilities, roads, and parking lots; connection to off-site utilities/systems; and vertical site construction.

Construction would occur in nine phases over the three planning areas. Construction of each planning area (PA1, PA2, and PA3) would consist of three distinct construction phases: remediation, horizontal, and vertical. The remediation phase consists of relocation of some of landfill trash, backfilling where necessary, compaction, and rough grading.³¹ The horizontal phase would consist of fine grading, utility installation, pad construction and paving. The vertical phase would consist of building construction and architectural coating.

To date, a portion of the remedial phase work has been completed for PA2 with approximately 6 months remaining to complete the required remediation activities once they re-commence. However, most of the remedial work (and all horizontal/vertical work) for PA1, PA2, and PA3 remains. **Table II-10, Construction Schedule**, shows the anticipated construction schedule for the 2021 Project.

³¹ *The reference to compaction in this context soil compaction rather than DDC.*

**Table II-10
Construction Schedule**

Construction Phase	Start Date	End Date
PA1		
Remediation	10/1/2022	5/31/2023
Horizontal	1/1/2023	3/1/2024
Vertical	3/1/2024	3/1/2026
PA2		
Remediation (already occurred)	10/1/2018	11/31/2019
Remediation	3/1/2022	7/30/2022
Horizontal	3/1/2022	12/1/2023
Vertical	12/31/2023	9/30/2025
PA3		
Remediation	10/1/2021	8/1/2022
Horizontal	12/1/2021	10/31/2022
Vertical	11/1/2022	5/31/2024

II.M.2 Construction Measures

During construction, electric-powered (including installation of temporary electrical poles, as needed), battery-powered, natural gas, or hybrid off-road construction equipment will be used when commercially available and suitable for the task being performed (noting the construction constraints of working in a landfill).³² When such equipment is not commercially available or suitable, any equipment used during construction of the 2021 Project shall meet the USEPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, the equipment shall, at a minimum, meet the Tier 3 standard. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. During vertical construction, each Applicant of any Planning Area shall be required to use best efforts to attain a goal of 40 percent of construction equipment be electric-powered, battery-powered, natural gas, or hybrid construction equipment. Similarly, each Applicant of any

³² Because PA2 has already been approved for development by the City (following the approval of the 2018 SEIR) and the Developer of such property (CAM-Carson LLC) has vested rights to its project proposal and construction has already begun for PA2 in compliance with the 2018 SEIR, PA2's compliance requirements for PDFs are limited to those PDFs and mitigation measures that were applied in the 2018 SEIR. As such, compliance with this construction requirement is not applicable to PA2.

Planning Area shall be required to ensure that this condition is incorporated into its general construction contract and that the general contractor will incorporate this condition in all relevant subcontracts.

II.M.3 Deep Dynamic Compaction and Pile Driving

Deep dynamic compaction (DDC) is a site preparation method used for compacting and strengthening loose or soft soils to support buildings, roadways, and other heavy construction. In the 2006 FEIR, this method was determined to be potentially necessary to enable vertical development on the Project Site. The DDC method involves the systematic and repetitive dropping of heavy weights in a pattern designed to remedy poor soil conditions at a proposed building site. The 2006 FEIR and 2018 SEIR considered DDC on all three planning areas of the 157-Acre Site. However, as part of the 2021 Project, DDC is no longer contemplated on PA3; instead, pile driving methods are assumed to be used to support vertical development. Under the 2021 Project, DDC is conservatively assumed to continue to be used as a potential construction method on PA1 and PA2, although there are no current plans to employ DDC on either of these planning areas. In addition, if DDC were to occur on PA1 or PA2, it would not occur where pile installation is required to support building pads.

Pile driving was considered as part of the construction assumptions under 2006 FEIR and 2018 SEIR for all three planning areas, and the 2021 SEIR continues to assume it would occur in PA1, PA2, and PA3.

II.N PROJECT OBJECTIVES

Consistent with CEQA Guidelines Section 15124(b), the 2006 FEIR contained a statement of objectives for the 2006 Project in Chapter II, 2021 *Project Description*, and some of those objectives were slightly modified for the 2018 Project pursuant to the 2018 SEIR. Given the changes in land uses proposed for the 2021 Project, minor changes to such project objectives are proposed below and are summarized in **Table II-11, 2021 Project Objectives**.

**Table II-11
2021 Project Objectives**

-
1. Provide a diversity of both short-term and long-term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term light industrial and commercial jobs.
 2. Improve the housing stock by approving a project that includes a substantial residential component.
 3. Provide a project that contributes to the creation of a vibrant urban core for the City and takes advantage of the Project Site's proximity to the San Diego Freeway (I-405 Freeway).
 4. Develop the Project Site in a manner that enhances the attractiveness of the City's freeway corridor and the major arterials that adjoin the Project Site.
 5. Provide a project that includes a variety of residential, commercial, and retail uses with the potential to generate increased sales and property tax revenue.
 6. Develop a project with a balanced mix of land uses that stimulate economic activity, commerce, and new development opportunities in and around the Project Site.
 7. Promote an economically viable development at the Project Site that will enable the Developer/Applicant(s) to pay for the substantial costs associated with environmental remediation and development of a former landfill, as well as construction and maintenance of required infrastructure improvements.
 8. Provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site.
 9. Develop a project that is consistent with a live, work, and play environment through uses that provide for residential occupancy, substantial job opportunities, and attractive recreational/retail amenities.
-

Similar to the 2006 Project assessed by the 2006 FEIR and the 2018 Project assessed by the 2018 SEIR, the 2021 Project will be defined by a series of development standards that would regulate the amount and types of development, the size and arrangement of buildings, on-site circulation, and open space, as well as the general appearance of the development occurring on the Project Site. These standards would be implemented through amendments to the 2018 Specific Plan, upon adoption and approval by the City Council of the 2021 Specific Plan Amendment.

II.O 2021 PROJECT APPROVALS

Implementation of the 2021 Project would likely include, but would not necessarily be limited to, the same permits and approvals identified in the 2006 FEIR and 2018 SEIR. A list of the discretionary permits that are anticipated to be required for the 2021 Project for PA1 and PA3 are identified in **Table II-12, Permits Anticipated for the 2021 Project**.³³ However, this 2021 SEIR may be used by the City and any other governmental entities, as responsible agencies, for all other approvals needed in connection with the 2021 Project, whether or not such agencies or specific approvals are listed below.

³³ *Any discretionary applications for PA2 that were approved after certification of the 2018 SEIR remain in effect.*

Table II-12
Permits Anticipated for the 2021 Project

- General Plan Amendment to allow for the development of Light Industrial (LI) in PA3(a)
 - Adoption of 2021 Specific Plan Amendment
 - Development Agreement
 - Site Plan and Design Review
 - Vesting Tentative Tract Map
 - Construction Noise Variance
 - Other discretionary approvals as needed and as may be required
-

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III. INTRODUCTION TO THE ANALYSIS

III.A METHODOLOGICAL BACKGROUND

This 2021 Supplemental Environmental Impact Report (2021 SEIR) augments and supplements the environmental analysis previously provided in the (i) 2006 Final EIR (2006 FEIR) and (ii) an Addendum to the 2006 FEIR adopted by the City in 2009 to address changes in the remediation activities at the 157-Acre Site; and (iii) the previously certified 2018 Supplemental EIR approved by the City in April 2018 (2018 SEIR), for a project development located on the former Cal Compact Landfill Site in the City of Carson (also known and referred to as the 157-Acre Site). The 2006 FEIR and 2018 SEIR also analyzed a separate 11-acre site located north of Del Amo Boulevard (which was not formerly part of the Cal Compact Landfill) pursuant to the Carson Marketplace Specific Plan approved by the City Council of the City of Carson (City) in 2006. Such 11-acre site (also referred to as DD3 under the Carson Marketplace Specific Plan) has since been developed with the Evolve South Bay apartment complex. Separately, this 2021 SEIR augments and supplements the (i) Addendum to the 2006 FEIR adopted by the City in 2009 to address changes in the remediation activities at the 157-Acre Site; and (ii) the previously certified 2018 SEIR for a revised project proposal for the 157-Acre Site (the 2018 Project), which included a revision and re-naming of the Carson Marketplace Specific Plan to be known as the District at South Bay Specific Plan (the 2018 Specific Plan). A newly proposed development on the 157-Acre Site is analyzed under this 2021 SEIR (the 2021 Project), which constitutes an amendment to portions of the District at South Bay Specific Plan (2021 Specific Plan Amendment), specifically with respect to a 96-acre portion of the 157-Acre Site; however, this 2021 SEIR evaluates the 2021 Project on the entire 157-Acre Site.³⁴ The 2021 Project has been proposed by the Developer, Carson Mylo Owner LLC, who is responsible for the vertical development.³⁵

This 2021 SEIR has been prepared to evaluate the 2021 Project as compared to the previously approved 2018 Project (and if applicable, the 2006 Project) to determine whether the 2021 Project would result in new significant environmental effects or a substantial increase in the

³⁴ The 2006 FEIR analyzed three Development Districts (DDs) for the area (DD1, DD2, and DD3). However, DD3 was ultimately developed by a separate owner for a 300-unit apartment complex project known as Evolve South Bay. Therefore, the 2018 Supplemental EIR (2018 SEIR) analyzed only DD1 and DD2. Accordingly, the Project Site for the 2021 Project and this 2021 SEIR also excludes DD3.

³⁵ Carson Goose Owner LLC is also part of the development team, but is only responsible for construction of the remedial systems and site development improvements underlying the surface lot of PA3, which are required for the development of PA3.

severity of previously identified significant environment effects as compared to the projects evaluated in either the 2006 FEIR and/or the 2018 SEIR.

To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts that were previously disclosed in the 2006 FEIR and/or 2018 SEIR, this analysis considers the impacts that would result from construction and operation of the 2021 Project under current environmental and regulatory requirements and applicable mitigation measures. The analysis contained herein compares impacts under the 2021 Project to those identified in the 2006 FEIR and/or 2018 SEIR and also includes implementation of the 2018 SEIR mitigation measures, either as adopted in the 2018 Mitigation Monitoring and Reporting Program (MMRP) and/or as revised in this 2021 SEIR, as well as new mitigation measures provided in this 2021 SEIR.

Consistent with CEQA Guidelines Section 15162(a)(1–3), the 2021 Project was evaluated to determine if it would result in one or more of the following: (1) substantial changes that require major revisions of the previous EIR due to the involvement of new significant impacts or a substantial increase in the severity of previously identified significant impacts; (2) substantial changes in circumstances that would result in new or substantially more-severe environmental impacts; or (3) new information of substantial importance that would result in new or substantially more-severe environmental impacts. Based on this analysis, which is contained in this 2021 SEIR, an SEIR is the appropriate CEQA document. In addition, there are no mitigation measures or alternatives that were previously found not to be feasible that would be feasible or are considerably different from those analyzed in the 2018 SEIR that would reduce one or more significant effects and the project proponents decline to adopt those mitigation measures or alternatives (CEQA Guidelines Section 15162(a)(3)(C) and (D)).

The analysis contained in this 2021 SEIR determined there are new impacts, increases in the severity of impacts, or new mitigation measures or alternatives that would reduce significant effects that the project proponents decline to adopt; therefore, a Supplemental Environmental Impact Report is the appropriate vehicle to achieve environmental clearance pursuant to CEQA.

III.B SCOPE OF ANALYSIS

Sections IV.A through IV.H of this 2021 SEIR provide an impact analysis for those environmental impact categories where it was determined that the 2021 Project could result in “potentially significant impacts” as a result of potential direct and indirect project-related and cumulative effects that could occur with construction and operation of the activities proposed.

This 2021 SEIR has determined that some CEQA topics (and/or thresholds within a topic) would be classified as an Effect Found Not to Be Significant pursuant to CEQA Guidelines Section 15128 and, therefore, would not need to be discussed in detail in this 2021 SEIR. To make an Effect Found Not to Be Significant determination, the analysis must conclude there is no change in

circumstances and/or no new information of substantial importance as a result of the 2021 Project relative to the 2018 Project that would result in new or substantially more-severe environmental impacts. If there are no new or substantially more-severe environmental impacts, no detailed analysis is required in this 2021 SEIR. However, the analysis must explain the reasons for the conclusion. These issues are addressed in Chapter VI, *Effects Found Not to Be Significant*, of this 2021 SEIR, which provides the reasons for the conclusions made.

Table I-1, Environmental Topics and Thresholds Evaluated in the 2021 SEIR, identifies which topics and thresholds are evaluated either as an Effect Found Not to Be Significant or as a section in this 2021 SEIR. This table also identifies where each threshold is evaluated, by section.

III.C FORMAT OF THE TOPICAL ENVIRONMENTAL ANALYSIS

Each topical analysis provided in Sections IV.A through IV.H of this 2021 SEIR includes the following information: description of the existing conditions; the regulatory framework; identification of significance criteria; an analysis of potential project-related impacts, including the methodology for the analysis and project design features (PDFs); feasible mitigation measures; cumulative effects; and the level of significance after the incorporation of all feasible mitigation measures. Each environmental topic section follows the outline provided below.

III.C.1 Introduction

The Introduction provides a brief description of the types of impacts that are analyzed in each section, any primary sources of information that have been used, and comments, if any, that were received in response to the Notice of Preparation (NOP) for that particular environmental topic. For sections that are lengthy or analytically complex, an introductory overview of the format and structure of the section is presented.

III.C.2 Existing Setting

As required by CEQA Guidelines Section 15162(a)(2), the setting section in this 2021 SEIR focuses on whether there are substantial changes with respect to the circumstances under which the project is undertaken as compared to the 2018 SEIR and/or 2006 FEIR that would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects.

III.C.3 Regulatory Framework

The regulatory framework provides a discussion of any federal, state, or local plans, policies, regulations, and/or laws that pertain to each environmental topic that are now applicable, and were not applicable to the 2018 and/or 2006 Projects, or have been revised as compared to what was presented in the 2018 SEIR and/or 2006 FEIR. In summary, this section provides a

supplement to the regulatory framework provided in the 2018 SEIR and/or 2006 FEIR. A discussion of the 2021 Project's consistency with applicable plans and policies for all environmental topics is provided in Sections IV.A through IV.H.

III.C.4 Significance Criteria

The impact significance criteria for this 2021 SEIR are based on Appendix G of the 2021 CEQA Guidelines; however, this 2021 SEIR also includes additional City-established impact significance criteria related to shade/shadow that were evaluated in both the 2016 FEIR and 2018 SEIR and light/glare related to freeway pylons and building signage that were evaluated in the 2018 SEIR.

III.C.5 Project Impacts

a. Methodology

This subsection identifies the methodology used to analyze potential environmental impacts for each environmental topic under the identified significance criteria. Some evaluations (such as for air quality, transportation, and noise) are quantitative, while others, such as for land use and planning or aesthetics, are qualitative.

Federal, state, and local regulations were considered for each environmental topic evaluated in this 2021 SEIR. In some cases, existing regulations were determined to be sufficient to prevent significant impacts from occurring under the 2021 Project, since all development projects in all planning areas, as well as cumulative projects, would be required to comply with existing regulations that are mandatory. In these cases, the 2021 Project was determined to result in a less-than-significant impact with compliance with existing regulations. For some impacts, compliance with regulatory requirements is included in a mitigation measure that may also address certain discretionary aspects of implementing the regulatory requirements.

For other impacts, based on the technical analysis, where environmental impacts were determined to be significant or potentially significant, mitigation measures are provided to reduce impacts, if feasible.

Various sources of information are used in the analysis provided for each environmental topic area, including (a) technical reports prepared by experts for the 2021 SEIR, as well as relevant technical reports from the 2006 FEIR and/or 2018 FEIR; (b) background and technical information obtained from documents prepared by local and regional planning agencies (e.g., City of Carson General Plan, the Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy); (c) information obtained from site visits conducted in 2020 and 2021 to support preparation of the aesthetics and biological resources sections for the 2021 Project; (d) information and/or comments as contained in 2021 NOP comment letters; (e) information included in the Developer's application materials and

other information provided by the Developer; and (f) other sources of information listed in the reference section of each environmental topic area.

b. Project Characteristics and/or Project Design Features

Project Characteristics include development standards, design features, and/or operational characteristics proposed by the 2021 Developer that are incorporated into the 2021 Project as described in Chapter II, *2021 Project Description*, of this 2021 SEIR, and/or the 2021 Specific Plan Amendment. The Project Characteristics highlighted in this section would avoid or reduce potential environmental effects through project design and operational characteristics.

For aesthetics, air quality emissions, energy use, and greenhouse gas (GHG) emissions, PDFs are identified in addition to Project Characteristics. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements. With respect to air quality, energy, and GHG, the PDFs identified in those sections are used in the unmitigated modeling scenario.³⁶ The mitigated modeling scenario then applies any identified 2021 mitigation measures. Because these PDFs must be implemented, in addition to the 2021 mitigation measures, each PDF is provided an alphanumeric designation (e.g., 2021 SEIR PDF-X#), similar to mitigation measures (Mitigation Measure X-#). All PDFs and mitigation measures will be monitored and enforced in the 2021 SEIR MMRP.

Some of the PDFs included in this 2021 SEIR were previously included in the 2018 SEIR, although the 2018 PDFs were not provided with specific alphanumeric designations. In addition, in some cases, requirements previously provided in a mitigation measure proposed in the 2018 SEIR may instead be incorporated into a PDF proposed in this 2021 SEIR where concepts are related (e.g., the concepts addressed in 2018 Mitigation Measure G-6 that relate to the use of clean fuels have now been updated to reflect current requirements or commitments and are appropriately included in 2021 SEIR PDF-C1, which comprehensively addresses emissions standards). To allow the reader to more easily correlate PDFs proposed under the 2021 SEIR with the PDFs and/or mitigation measures proposed under the 2018 EIR, a parenthetical reference is provided after the PDF (in **Table I-5** and the topical sections, including Effects Found Not To Be Significant) to show whether it relies on a PDF or mitigation measure proposed in the 2018 EIR, or both.

c. Analysis of Project Impacts

This subsection describes the potential direct and/or indirect environmental impacts of construction and operation of the 2021 Project and, based on the significance criteria, determines the significance

³⁶ *Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.*

of each environmental impact. Feasible mitigation measures are identified to avoid or minimize significant environmental impacts, where such impacts occur. Each impact conclusion also identifies the level of significance after implementation of the identified mitigation measures in **bold text**.

III.C.6 Mitigation Measures

Where the impact analysis identifies significant adverse environmental effects that could be reduced or avoided through implementation of a mitigation measure, the measure is presented in this section. Mitigation measures identify actions that could be taken, if adopted, to reduce potentially significant environmental impacts.

The mitigation measures identified in this 2021 SEIR include relevant 2018 SEIR mitigation measures, revised in some cases, and new 2021 SEIR mitigation measures. Any changes made to the mitigation measures in this 2021 SEIR as compared to the mitigation measures identified in the 2018 SEIR are reflected as underline (for new text) and ~~striketrough~~ (for deleted text). Where a new mitigation measure is identified in this 2021 SEIR, it is shown entirely as underline text.

The mitigation measure numbering system from the 2018 SEIR was maintained in this 2021 SEIR, even if the section numbering for this 2021 SEIR section is different (e.g., Section IV.D, *Air Quality*, of this 2021 SEIR includes mitigation measure numbering beginning with a “G,” consistent with the 2018 SEIR).

Due to revisions in the thresholds between 2018 and 2021 and/or other reasons, some mitigation measures that were identified in 2018 are no longer applicable to the 2021 Project and are not shown in Table I-5. Refer to the topical sections contained in Chapter IV, *Environmental Impact Analysis*, and Chapter VI, *Effects Found Not to Be Significant*, for an identification of those deleted mitigation measures and the reason for deletion in the 2021 SEIR.

The section numbering system for the topical sections and the associated mitigation measures that are different include:

- Air Quality (Section D, but mitigation measures are G-X)
- Noise (Section E, but mitigation measures are H-X)
- Biological Resources (Section F, but mitigation measure is K-X; new 2021 SEIR section)

In addition, compliance requirements for PA2 are limited to those mitigation measures that were identified in the 2018 SEIR because: (1) PA2 has already been approved for development by the City (following approval of the 2018 SEIR); (2) the Applicant for that property (CAM-Carson LLC) has vested rights to its project proposal; and (3) remedial system and site development construction has already begun for PA2 in compliance with the 2018 SEIR. As such, PDFs and mitigation measures that are new or have been revised are not applicable to PA2.

The MMRP, which will be provided as part of the Final 2021 SEIR, will identify the planning area to which the mitigation measure pertains; the parties responsible for implementation of each mitigation measure; a timeframe for implementation; and any applicable public agency approval, oversight, or monitoring that may be required. Such mitigation measures must be implemented with oversight by one or more public agencies, unless indicated otherwise.

III.C.7 Cumulative Project Impacts

As further discussed in Section III.D, *Cumulative Impact Analysis*, below, and as defined in CEQA Guidelines Section 15130(a)(1), a cumulative impact would result from the combination of a proposed project evaluated in an EIR (in this case, the 2021 SEIR) together with other projects that would cause related impacts. This subsection addresses cumulative impacts, as further described below in Section III.D, *Cumulative Impact Analysis*, and the 2021 Project's contribution to any cumulative impacts.

III.C.8 Level of Significance after Mitigation

This subsection concludes with a statement regarding whether the impact, after implementation of applicable mitigation measures and/or compliance with existing local, state, and federal laws and regulations and PDFs, would remain significant or be reduced to a less-than-significant level. This 2021 SEIR uses the following terms to describe the level of significance of impacts identified during the course of the environmental analysis:

- *Significant and Unavoidable Impact*—Impact that exceeds the defined significance criteria and cannot be eliminated or reduced to a less-than-significant level through compliance with existing federal, state, and local laws and regulations, PDFs, and/or implementation of all feasible mitigation measures.
- *Less-than-Significant Impact*—Impact that does not exceed the defined significance criteria or would be eliminated or reduced to a less-than-significant level through compliance with existing federal, state, and local laws and regulations, PDFs, and/or implementation of all feasible mitigation measures.
- *No Impact*—No impacts are expected as a result of construction or operation of the 2021 Project.

III.D CUMULATIVE IMPACT ANALYSIS

CEQA requires that EIRs (and SEIRs) analyze cumulative impacts. As defined in CEQA Guidelines Section 15130(a)(1), a cumulative impact would result from the combination of a proposed project evaluated in an EIR (in this case an SEIR) together with other projects that would cause related impacts. An EIR must analyze whether the cumulative impacts of a project result in incremental effects that are cumulatively considerable, as defined in Section 15065(a)(3). Where a lead agency is examining a project with an incremental effect that is not “cumulatively

considerable,” a lead agency need not consider that effect significant, but must briefly describe its basis for concluding that the incremental effect is not cumulatively considerable.

Under CEQA Guidelines Section 15065(a)(3), a project has “cumulatively considerable” or significant cumulative impacts, when its incremental effects “are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.”

CEQA Guidelines Section 15130(b) states that the analysis of cumulative impacts shall reflect the severity of the impacts and the likelihood of occurrence, but the discussion need not provide as great of detail as provided for the effects attributable to a proposed project alone. Instead, the discussion should be guided by the standards of practicality and reasonableness, and should focus on the cumulative impact to which the identified other projects contribute, rather than the attributes of the other projects which do not contribute to the cumulative impact.

A cumulative impact analysis is only provided for Effects Found Not to Be Significant that result in a less-than-significant impact, either with or without mitigation. Where an Effects Found Not to Be Significant analysis concludes that the 2021 Project would result in no impact, a cumulative impact analysis is not provided because the 2021 Project would not combine with other projects to cause related impacts.

CEQA Guidelines (Section 15130(b)(1)(A) and (B)) allow an EIR/SEIR to determine cumulative impacts and reasonably foreseeable growth based on either of the following methods:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted local, regional, or statewide plan or related planning document that describes or evaluates conditions contribution to the cumulative impact.

III.D.1 Cumulative Projects

The cumulative impact analysis included herein utilizes a listing of all anticipated cumulative projects based on information that was provided by the City of Carson, as well as the County of Los Angeles and the City of Los Angeles for those cumulative projects in the vicinity of the Project Site, but outside of the jurisdiction of the City of Carson. **Table III-1, Cumulative Projects**, presents a listing of the cumulative projects in the Project vicinity. There are 44 cumulative projects in the vicinity of the Project Site, with a range of uses including but not limited to residential, commercial, hospital, and industrial uses. The locations of the cumulative projects are shown in **Figure III-1, Cumulative Project Locations**. As required by CEQA Guidelines Section 15130(b)(3), the geographic scope of the cumulative projects was determined based on whether the 2021 Project could contribute to a cumulative impact based on the proximity of the cumulative projects to the Project Site and/or the type of uses proposed by the

cumulative projects relative to the 2021 Project. The list of cumulative projects was determined by the City of Carson, the County of Los Angeles, and the City of Los Angeles. In addition, applicable cumulative projects from the 2018 SEIR cumulative projects were also retained in the 2021 SEIR cumulative projects list as shown by Figure III-1 as further described below.

Between the date of certification of the 2018 SEIR and this 2021 SEIR, eight cumulative projects analyzed in the 2018 SEIR were issued Certificates of Occupancy and, therefore, are not included in this 2021 SEIR cumulative project list;³⁷ instead, they are assumed to be a part of the existing baseline. In addition, five cumulative projects that had previously been included within the 2018 SEIR cumulative project list were removed as the applications were withdrawn or no new applications were filed.³⁸

As shown in Figure III-1, a total of 30 new cumulative projects have been added to this 2021 SEIR cumulative project list as compared to the 2018 SEIR cumulative project list for a total of 44 cumulative projects.

Build-out and occupancy of the 2021 Project is forecasted to occur in 2024 for PA3, 2025 for PA2, and 2026 for PA1. However, to provide the most conservative analysis, this 2021 SEIR considers the effects of all 44 cumulative projects by 2026 (refer to Table III-1 and Figure III-1), even if they are expected to be constructed and/or occupied after 2026, which is consistent with assumptions provided in the transportation analysis (refer to Section IV.C, *Transportation*, and **Appendix C1, Transportation Impact Analysis**, of this 2021 SEIR).

The analysis of potential cumulative impacts is addressed in each environmental topic included in Chapter IV, *Environmental Impact Analysis*, and in Chapter VI, *Effects Found Not To Be Significant*, of this 2021 SEIR.

³⁷ Cumulative projects that completed construction include (1) 21801 Vera Street, (2) 21721 Moneta Avenue, (3) 1802 East Carson Street, (4) 200 E. Alondra Boulevard, (5) 21900 South Wilmington, (6) 21205 South Main Street, (7) 600 West Carson, and (8) 1302 West 177th Street.

³⁸ Cumulative projects that were withdrawn include (1) 1281 East University Drive, (2) 16100 South Avalon Boulevard, (3) 2666 E. Dominguez Street, (4) 140 West 223rd Street, and (5) 21138 South Western Avenue.

**Table III-1
Cumulative Projects**

No.	Project Location	Description	Amount of Development
1	19200 South Main Street	Blimp-port	Construction of a new 44,500 sf airship hangar and maintenance building
2	225 West Torrance Boulevard	Mixed-Use Residential	356-unit mixed-used SP
3	21521 South Avalon Boulevard	Multi-Family Residential/ Commercial	357 du 30,700 sf
4	2112 East 223rd Street	Tilt-up warehouse facility	292,400 sf in 3 buildings on 14.2 acres
5	21207 Avalon Boulevard (Imperial Avalon)	Mixed Use Residential/Restaurant	653 market rate apts., 180 senior apts., 380 townhomes, 10,352 sf restaurants
6	888 East Dominguez Street	Hotel	56,350 sf hotel with 118 keys
7	2254 East 223rd Street	Warehouse	120, 500 sf
8	333 West Gardena Boulevard	Warehouse	145,840 sf tilt up
9	345 & 349 East 220th Street	Multi-Family Residential – Townhome	35 du
10	20707 Avalon Boulevard	Restaurant	3,234 sf drive-thru (Raising Canes)
11	21915 South Dolores Street	Multi-Family Residential	5 detached condos
12	17706 South Main Street	Warehouse Office	94,731 sf 15,000 sf
13	1007 East Victoria Street	Multi-Family Residential	35 du
14	Northeast Corner of Central Avenue and Victoria Street	Multi-Family Residential	175 du
15	123 East 223rd Street	Multi-Family Residential	10 du
16	21000 South Normandie Avenue ^a	Multi-Family Residential	113 du
17	19210 South Vermont Avenue	Office	61,500 sf
18	2315 East Dominguez Street	Warehouse and Truck Yard	Renovate 14,432 sf industrial bldg.
19	20501 Avalon Boulevard	Restaurant	4,797 drive thru (Chick-fil-A)
20	1054 West 204th Street ^b	Park	8.5 acres
21	22410 South Vermont Avenue ^b	Apartment	41 du
22	20416 Kenwood Avenue ^b	Single-Family Residential	2 du
23	20814 Normandie Avenue ^b	Single-Family Residential	63 du
24	19606 Normandie Avenue ^b	Warehouse	13,400 sf
25	22003 Meyler Street ^b	Single-Family Residential	1 du
26	939 West 223rd Street ^b	Warehouse	5,820 sf

**Table III-1
Cumulative Projects**

No.	Project Location	Description	Amount of Development
27	Evolve South Bay	Multi-Family Residential	300 du
28	439 East Gardena Boulevard	Warehouse	3,754 sf
29	1055 Sandhill Avenue	Warehouse	127,000 sf
30	2277 East 220th Street	Warehouse	74,060 sf
31	21240–50 Main Street	Multi-Family Residential	19 du
32	16627 South Avalon Boulevard	Warehouse	115,900 sf
33	18501 South Figueroa Street	Warehouse	36,655 sf
34	20700 Avalon Boulevard	Restaurant	3,885 sf drive-thru (In-N-Out)
35	20601 South Main Street	Warehouse Retail	265,000 sf 4,000 sf
36	21212 Avalon Boulevard	Mixed Use Residential, Retail, Hotel	1,200 du; 15,000 sf restaurant; 150-key hotel
37	CSUDH – Campus Master Plan	Campus Expansion – Residential, Retail, Schools	High school, Day Care Center, 1,063 du Multi-Family Housing; 96,085 sf retail, 720,978 sf business park
38	20700 Belshaw Avenue	Warehouse	2,975 sf addition to an existing warehouse
39	20950 Brant Avenue	Commercial – Pug rescue	3,854 sf
40	17706 South Main Street	Warehouse	102,270 sf
41	20850 Normandie Avenue	Warehouse	204,000 sf
42	Carol Kimmelman Campus (corner of Avalon Boulevard and Martin Luther King Jr. Street)	Community Space	62 tennis courts, 8 soccer fields, 2 multi-use fields, and 25,000 sf learning center (including 2 basketball courts)
43	Creek at Dominguez Hills 340 Martin Luther King Jr. Street	Mixed-Use – Recreation and Retail	532,500 sf
44	Harbor-UCLA Medical Center	Hospital	468,000 sf inpatient tower and 198,000 sf outpatient building, 197,000 sf

NOTES

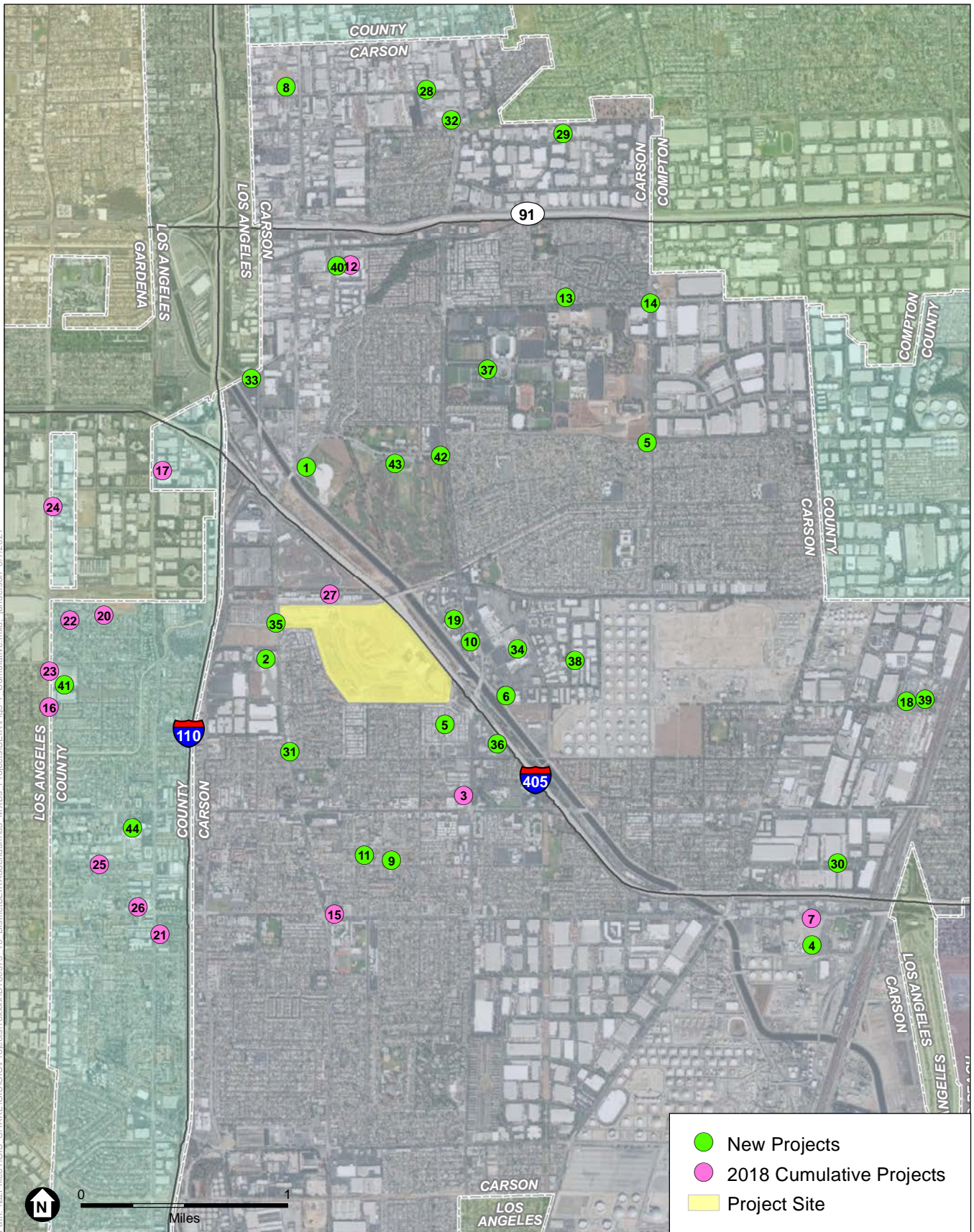
du = dwelling unit; sf = square feet

Cumulative projects list is based on information provided by the City of Carson and trip generation rates contained in ITE's Trip Generation, 10th Edition, unless otherwise noted.

^a *Cumulative projects provided by the City of Los Angeles, 2020.*

^b *Cumulative projects provided by the County of Los Angeles, 2020.*

^c *Development of the 11-acre property located north of the Project Site was constructed in 2020 and is currently known as Evolve South Bay (and referred to as DD3 in the 2018 SEIR and this 2021 SEIR).*



SOURCE: ESRI

The District at South Bay Specific Plan Amendment

Figure III-1
Cumulative Project Locations

IV. ENVIRONMENTAL IMPACT ANALYSIS

IV.A LAND USE AND PLANNING

IV.A.1 Introduction

This section analyzes the proposed land uses under the 2021 Project in relationship to applicable land use plans, policies, and regulations, as well as potential conflicts between the 2021 Project and the type and patterns of land uses in the surrounding area. Other topical sections in this Chapter IV, *Environmental Impact Analysis*, (e.g., Sections IV.C, *Transportation*; IV.D, *Air Quality*; and IV.H, *Greenhouse Gas Emissions*) also include the evaluation of relevant plans and policies as they relate to land use and planning. For example, consistency with the South Coast Air Quality Management District's (SCAQMD) 2016 AQMP is evaluated in Section IV.D, *Air Quality*, of this 2021 SEIR.

IV.A.2 Existing Conditions

The Project Site is surrounded by a variety of land uses (refer to Figure II-2, Existing On-Site and Off-Site Uses, in Chapter II, *2021 Project Description*, of this 2021 SEIR). East of the San Diego Freeway (Interstate 405 [I-405] Freeway), land uses include neighborhood and regional retail, including the SouthBay Pavilion at Carson. To the north of PA3 is the Evolve South Bay apartment complex,³⁹ which is 75 feet in height as allowed by the 2018 Specific Plan. Further north of the Project Site is the Porsche Experience Center. The Victoria Golf Course is located to the east of the Project Site. Residential areas, consisting of one-story and two-story detached residences and mobile homes, are located to the south and west. The residences to the south and west of the Project Site are separated by the Torrance Lateral Flood Control Channel (Torrance Lateral), a concrete-lined drainage channel that parallels the southern and western border of the Project Site within an approximately 75-foot-wide drainage easement. To the west of the Project Site on Torrance and Del Amo Boulevards, are commercial and light industrial uses. Further north on the west side of Main Street are light industrial uses, with Dignity Health Sports Park and California State University, Dominguez Hills, located northeast of the Project Site.

³⁹ *The Evolve South Bay apartment complex is the 300-unit residential development located in Development District 3 (DD3), which was recently completed. This development was considered as a cumulative project in the 2018 SEIR; although the development is complete, it is also considered as a cumulative project (Cumulative Project No. 27) in this 2021 SEIR.*

IV.A.3 Regulatory Framework

a. State

(1) Senate Bill 1000

Senate Bill 1000 (SB 1000), referred to as The Planning for Healthy Communities Act, amended California’s Planning and Zoning Law to require local governments with identified disadvantaged communities to incorporate an Environmental Justice Element in to their General Plans, or to integrate environmental justice-related policies, objectives, and goals throughout other elements of their General Plan. SB 1000 also includes a process for communities to become meaningfully involved in the decision-making processes that govern land use planning in their neighborhoods. If a separate element is prepared, the Environmental Justice Element is to identify objectives and policies to reduce unique or compounded health risks in disadvantaged communities through the improvement of air quality. The City of Carson is in the process of preparing an Environmental Justice Element as part of the City’s General Plan Update (GPU) process that is currently underway.⁴⁰

b. Regional

(1) Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the designated regional planning agency for Los Angeles County, within which the Project Site is located and is thus subject to SCAG’s regulatory authority. SCAG is a joint powers agency with responsibilities pertaining to regional land use and planning issues (among other issues). SCAG’s mandated responsibilities include developing plans and policies with respect to the region’s population growth, transportation programs, air quality, housing, land use, sustainability, and economic development (including the other five counties it has jurisdictional authority over, including the counties of Orange, San Bernardino, Riverside, Ventura, and Imperial).

(a) 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, SCAG’s Regional Council adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS). The 2020 RTP/SCS presents the transportation vision for the region through the year 2045 and builds upon and expands land use and transportation strategies previously established to increase mobility options and achieve a more sustainable growth pattern. The 2020 RTP/SCS includes new initiatives at the intersection of land use, transportation, and technology to reduce emissions of greenhouse

⁴⁰ *The City’s GPU process was initiated in 2017 and is currently expected to conclude following further community input and environmental review with adoption of the updated General Plan in early 2022.*

gas (GHG) and reach the State’s GHG reduction goals. Also, the 2020 RTP/SCS contains baseline socioeconomic projections that are used as the basis for SCAG’s transportation planning, and the provision of services by other regional agencies. The 2020 RTP/SCS includes ten goals that fall into four core categories: economy, mobility, environment, and healthy/complete communities. In order to provide a thorough analysis of the RTP/SCS, this section also considers the 2021 Project relative to the 2016–2040 RTP/SCS.

(b) Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA) is a key tool for SCAG and its member governments to plan for growth in the Southern California region. The RHNA quantifies the need for housing within each jurisdiction. The RHNA, since becoming effective in 2007, is in its sixth cycle, which projects housing needs between 2021 and 2029, as outlined in the *6th Cycle Regional Housing Needs Assessment Final Allocation Plan*. Communities then plan, consider, and decide how they will address this need through the process of completing the Housing Elements of their General Plans. The City of Carson was assigned a RHNA of 5,618 housing units for the 2021–2029 planning period (1,770 very low–income households, 913 low-income households, 975 moderate-income households, and 2,060 above moderate-income households).⁴¹

c. City of Carson

(1) 2004 General Plan of the City of Carson

The City comprehensively updated its General Plan in 2004. The 2004 General Plan remains applicable to the 2021 Project, although the City is currently in the process of comprehensively updating its General Plan to respond to changing needs and conditions in the city, and to reflect and incorporate new state laws that have been adopted subsequent to 2004. The City’s GPU process was initiated in 2017 and is currently expected to conclude following further community input and environmental review with adoption of the updated General Plan in early 2022.⁴² However, since the GPU is not yet adopted, the analysis must compare the 2021 Project to the current (2004) General Plan. The 2021 Project’s consistency with the city’s General Plan is provided in Table IV.A-1, 2021 Project Consistency with City of Carson General Plan, p. IV.IV.A-14.

⁴¹ Southern California Association of Governments (SCAG), SCAG 6th Cycle Final RHNA Allocation Plan, March 4, 2021, <https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1616462966>, accessed June 2021.

⁴² City of Carson, Carson2040, <https://www.carson2040.com>, accessed June 28, 2021.

(a) Land Use Element/Existing General Plan Land Use Designation

The 2004 Land Use Element functions as a guide to the ultimate pattern of development for the city. The Land Use Element includes a General Plan Land Use Map that designates all of the parcels in the city with planned land uses.

Under the existing General Plan, the Project Site is designated as Mixed Use – Residential (MU-R), which allows for horizontal or vertical retail, commercial, office, and residential mixed uses, but does not require uses to be mixed. The MU-R designation allows 60 dwelling units per acre (du/ac) with up to 80 du/ac on Planning Area 1 (PA1) with a General Plan Amendment.

Figure IV.A-1, General Plan Land Use, shows the existing land use designation for the Project Site and the surrounding area.

(b) Housing Element

The 2014 Housing Element provides for the city's housing needs and strategies through 2021. The Housing Element is being updated as required by State law as part of the GPU. The RHNA identifies a need for 5,618 additional housing units for the city that would be required between 2021 and 2029, of which 1,770 units would be for very low income households, 913 units would be for low income households, 875 units would be for moderate income households and the remaining 2,060 units would be for above moderate income households.⁴³ It also projected a future population of 106,000 residents in 2035, which is a projected population increase of approximately 16 percent from 2010. The 2014 Housing Element references the 2018 Project as including development potential on the Project Site for up to 1,550 dwelling units with an effective density of between 35 and 60 du/ac; this is considered net new units that can be applied to the city's RHNA obligations, which were derived after accounting for the application of the development standards and design guidelines of the approved 2018 Specific Plan.⁴⁴ Neither the 2018 or 2021 Projects propose any changes to the number of residential units allowed within PA1 (i.e., up to 1,250 residential units), and/or those allowed for DD3. However, although no changes are occurring within PA1, consistency with the Housing Element is evaluated below.

⁴³ SCAG, SCAG 6th Cycle Final RHNA Allocation Plan, March 4, 2021, <https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1616462966>, accessed June 2021.

⁴⁴ City of Carson, Carson General Plan, Chapter 5, City of Carson 2014–2021 Housing Element, 2014, https://ci.carson.ca.us/content/files/pdfs/planning/Carson2014-2021HousingElement_FINAL%20Draft_withAppendices.pdf, accessed June 2021.

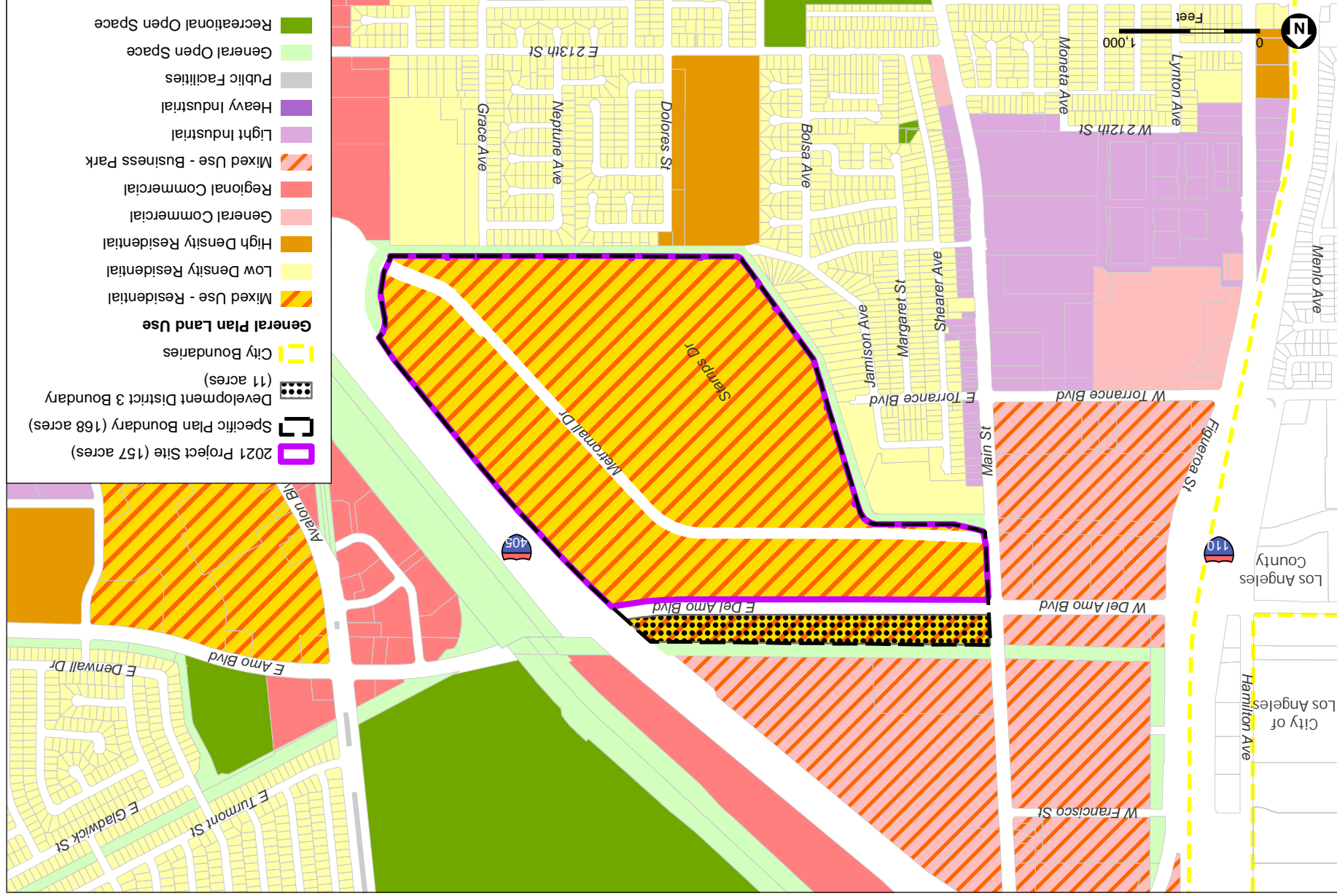


Figure IV.A-1
General Plan Land Use

(c) Economic Development Element

Although not required by State law, the City chose to adopt an Economic Development Element, which is included in the 2004 General Plan. The Economic Development Element includes goals and objectives that address a variety of economic issues that are being addressed by the City.

(d) Open Space and Conservation Element

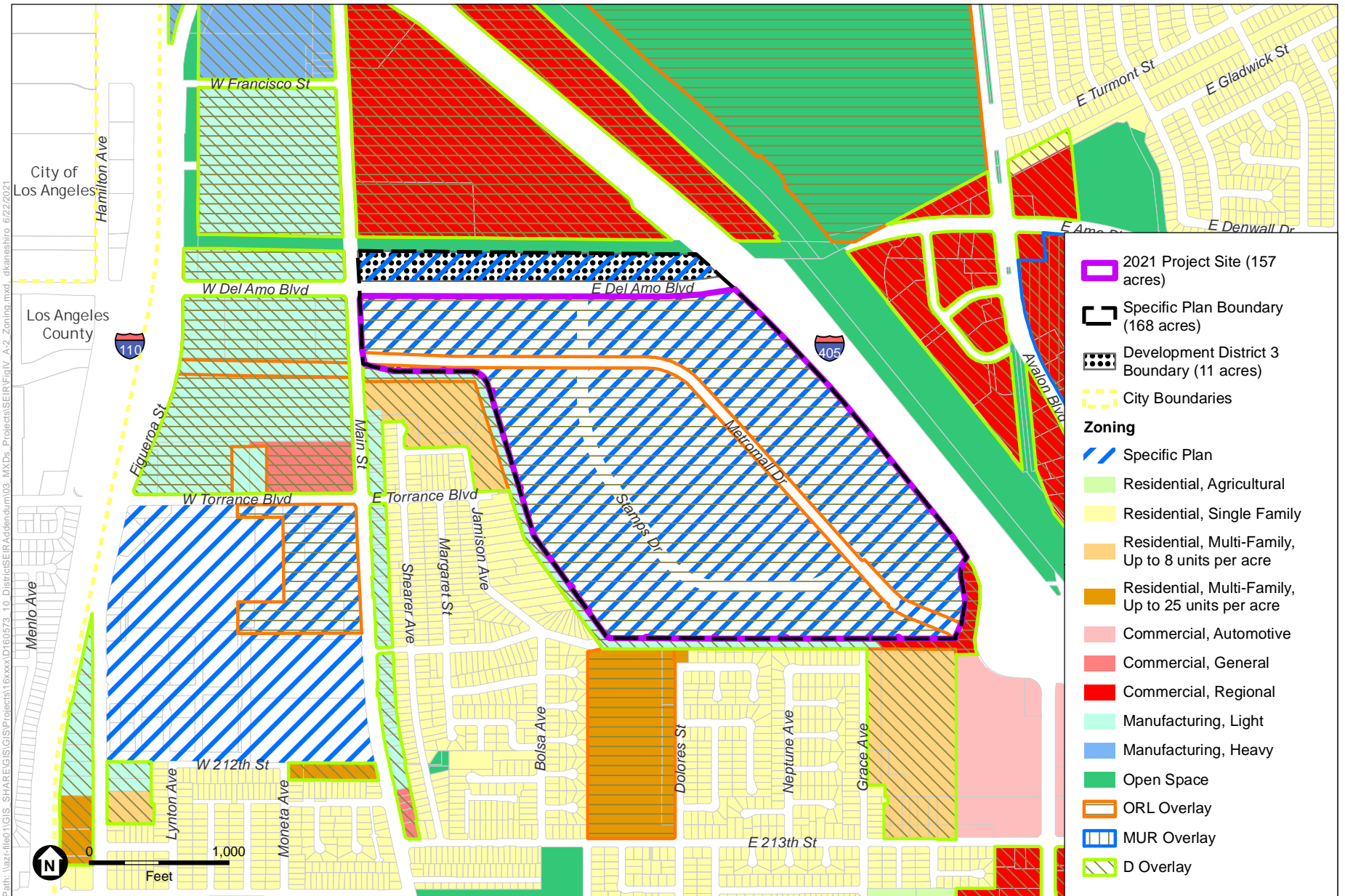
The intent of the Open Space and Conservation Element of the General Plan is to recognize and conserve open space resources within the city. Government Code Section 65302(e) defines open space for the purpose of outdoor recreation as “areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes ... and areas which serve as links between major recreation and open space reservations, including utility easements ... trails, and scenic highway corridors.” Open space in the city are comprised of Recreational Open Space and General Open Space. Utility transmission corridors, drainage and flood control facilities, and the Goodyear Blimp Port are also contained within the city’s General Plan Open Space Element. The Open Space and Conservation Element does not specify a standard for the provision of open space separate from that set forth in the Parks and Recreation Element.

(2) Carson Zoning Ordinance/Existing Zoning Designation

The General Plan is implemented through the city’s Zoning Ordinance and Specific Plans. The Zoning Ordinance provides development standards for each zoning classification and establishes uses, densities, maximum building heights, setbacks, for example. Specific Plans provide for tailored land use regulations specific for certain developments within the city. The Project Site is zoned as a site subject to the District at South Bay Specific Plan as shown in **Figure IV.A-2, Zoning**, which shows the zoning for the Project Site and the surrounding area (which Specific Plan will be amended pursuant to the 2021 Specific Plan Amendment analyzed herein).

(3) 2018 Specific Plan/Existing Allowable Uses

The District at South Bay Specific Plan was amended in 2018 and provides for two allowable uses within the Project Site: Commercial Marketplace (CM) and Mixed-Use Marketplace (MU-M). The CM land use category allows regional commercial uses; general retail uses, consisting of major retail stores and smaller neighborhood stores, entertainment, and restaurant uses; open space; and hotel uses. The MU-M land use category allows for the vertical or horizontal integration of housing with smaller commercial services, as well as a mix of uses or entirely residential or commercial uses.



SOURCE: City of Carson, 2017; ESA, 2020

The District at South Bay Specific Plan Amendment

Figure IV.A-2
Zoning

The 2018 Project allowed for a total of 1,834,833 square feet (sf) of commercial floor area and up to 1,250 residential units (with a General Plan Amendment as discussed below) as shown in Table II-1, Planning Areas 1, 2, and 3 Land Use Summary (2018 Project and 2021 Project), of Chapter II, *2021 Project Description*, of this 2021 SEIR. The 2018 Specific Plan allows residential densities of up to 60 du/ac in PA1 and DD3. In addition, up to 60 du/ac in Planning Area 2 (PA2) is allowed with an administrative permit approved by the City. Further, a density of up to 80 du/ac is allowed on PA1 with a General Plan Amendment authorizing the increased density and with CEQA review, as applicable.

IV.A.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to land use and planning are considered significant if the 2021 Project would:

- Physically divide an established community
- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect

IV.A.5 Project Impacts

a. Methodology

CEQA Guidelines Section 15125(d) requires that an EIR/SEIR discuss any project inconsistencies with applicable general plans, specific plans, and regional plans. For purposes of this analysis, the 2021 Project is considered consistent with regulatory plans if it meets the intent of the plans and/or would not preclude the attainment of their primary goals. The criterion for determining significance with respect to a land use plan emphasizes conflicts with plans adopted for the purpose of avoiding or mitigating an environmental effect, recognizing that an inconsistency with a plan, policy, or regulation does not necessarily equate to a significant physical impact on the environment. The analysis of potential land use impacts of the 2021 Project, therefore, considers consistency with adopted plans, regulations, and development guidelines that regulate land uses on the Project Site, and whether any such inconsistencies are tied to significant physical impacts on the environment associated with the 2021 Project. Furthermore, the purpose of this 2021 SEIR is to evaluate the land uses proposed in the 2021 Project as compared to the previously approved 2018 Project to determine whether the 2021 Project would result in new significant land use effects or a substantial increase in the severity of previously identified significant environment effects with respect to land use and planning.

b. Project Characteristics

As with the 2018 Project, the 2021 Specific Plan Amendment will establish the development standards and design guidelines for the development of the Project Site. The 2021 Specific Plan

Amendment will address the proposed change in Planning Area 3 (PA3), which constitutes 96 acres of the 157-Acre Site.

The 2021 Specific Plan Amendment will create two subareas within PA3: PA3(a) and PA3(b), which would constitute approximately 86 acres of developable area, including approximately 74 acres of light industrial uses in PA3(a) and 11.74 acres for the Carson Country Mart and the Enhanced Parkway along Lenardo Drive in PA3(a) and PA3(b), respectively.⁴⁵ As part of the 2021 Specific Plan Amendment, the development standards would be established for uses within PA3(b), which would be zoned for Commercial Marketplace (CM) uses, and would include passive and active spaces, programmed areas, open space, and amenities in addition to the commercial uses, as more particularly those described in Chapter II, *2021 Project Description*, of this 2021 SEIR. There are no proposed changes relative to the permitted uses, development standards, or design guidelines of the 2018 Specific Plan related to PA1 and PA2.

The 2021 Project would be subject to the regulations, standards, and guidelines in the 2021 Specific Plan Amendment, which are also discussed in Chapter II, *2021 Project Description*, and evaluated in the various impact analyses provided in Sections IV.A through IV.H of this 2021 SEIR. This 2021 SEIR evaluates a conceptual plan illustrated by Figure II-6, Conceptual Site Plan, from Chapter II, *2021 Project Description*, of this 2021 SEIR. The 2021 Specific Plan Amendment provides for regulations regarding site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage; lighting; service, trash, and utility areas; artistic features; noise; and energy conservation. A brief summary of the comparative land use differences between the 2018 Project and the 2021 Project are provided below.

More specifically, the 2021 Specific Plan Amendment will allow a maximum of 1,567,090 sf of light industrial development and supportive office uses within PA3(a) and an 11.12-acre privately maintained, publicly accessible open space and community commercial use and amenity area called the Carson Country Mart within PA3(b). The light industrial buildings would be distributed over approximately 74 acres⁴⁶ in PA3(a) and would be contained in six main buildings (Buildings A–F). Buildings A, B, C, and F, totaling 788,790 sf, are anticipated to be

⁴⁵ PA3 is 96 acres in total, consisting of approximately 86 acres in PA3(a) and PA3(b) for light industrial uses, the Carson Country Mart, and the Enhanced Parkway; approximately 1 acre for an existing utility lot; approximately 5 acres from the sidewalk of PA3(a) and PA3(b) to the centerline of Lenardo Drive; and approximately 4 acres from the developable edge of PA3(a) and PA3(b) downslope to the Torrance Lateral.

⁴⁶ Within the 96 acres of PA3, approximately 74 acres would contain light industrial uses and just under 12 acres would be occupied by the Carson Country Mart and the Enhanced Parkway along the north side of Lenardo Drive.

occupied by e-commerce and fulfillment center⁴⁷ uses, including 50,000 sf of ancillary office space. Buildings D and E, totaling 778,300 sf, are planned for more traditional distribution center and parcel hub⁴⁸ type uses, including 25,000 sf of ancillary office space.

Under the 2021 Project, the building heights of the light industrial buildings, with parapets, would range from 56 feet to a maximum of 65 feet. In addition, in conformance with the 2021 Specific Plan Amendment, buildings would be simple geometric shapes with visual interest incorporated through variation in color and materials. Buildings would be designed using durable and high-quality materials.

The Carson Country Mart, located in PA3(b), would include approximately 33,800 sf of commercial/retail uses, including a 10,000 sf single retail use catered to pets and animals; four restaurants (with drive through capability) totaling 12,600 sf; 9,000 sf of food and beverage kiosks; and a 2,200 sf cafe. The restaurant drive through/pick-up would be required to contain upscale “fast casual” type restaurant tenants as set forth in the 2021 Specific Plan Amendment, as opposed to traditional fast-food type establishments.⁴⁹ The restaurant components of the Carson Country Mart would operate from 7:00 a.m. until 11:00 p.m. The retail uses would open later and close earlier. The Carson Country Mart would also include tables and seating areas for people to eat and drink in a social setting and green environment. The sale of alcoholic beverages would be permitted consistent with the requirements specified under the 2021 Specific Plan Amendment, and subject to the State’s Alcohol and Beverage Control requirements. Commercial building heights within the Carson Country Mart would be approximately 25 to 30 feet in height, with exceedances permitted for architectural features and/or mechanical equipment.

The Carson Country Mart’s 273,906 sf (6.29 acres) of total active and passive spaces are proposed to include: a 6,365 sf arrival plaza, 26,265 sf food and beverage plaza area, 22,740 sf dog park, 3,343 sf performance pavilion, 19,400 sf botanic garden, 25,400 sf children’s play area, 19,490 sf bioretention garden, 1,800 sf beer garden, 2,990 sf games terrace, 35,210 sf event lawn, 2,975 sf sculpture garden, 4,425 sf water feature and iconic element, as well as planted open spaces and buffers. In addition, this area also includes 1.17 acres of planted open spaces and 1.2 acres of planted buffer areas on west and south sides of the Carson Country Mart.

⁴⁷ Fulfillment center is the “storage and direct distribution of e-commerce product to end users” (South Coast Air Quality Management District [SCAQMD], High Cube Warehouse Vehicle Trip Generation Analysis, prepared by Institute of Transportation Engineers, October 2016, p. 3).

⁴⁸ Parcel hub use usually involves transload functions (i.e., “pallet loads or larger handling products of manufacturers, wholesalers/distributors, or retailers with little or no storage durations”) for a parcel delivery company (SCAQMD, High Cube Warehouse Vehicle Trip Generation Analysis, prepared by Institute of Transportation Engineers, October 2016, p. 3).

⁴⁹ The drive-through restaurants would accommodate both patrons and delivery services, such as GrubHub, DoorDash, or Uber Eats,

Separately, within the Carson Country Mart, approximately 1.59 acres would contain a pedestrian circulation system (e.g., sidewalks, public parkways, and other paths of travel), restrooms, trash and recycling areas, and the maintenance road adjacent to the Torrance Lateral. Pedestrian and bicycle pathways and exercise areas would connect the Carson Country Mart's various programmed and non-programmed areas. In addition, a 570 sf arrival area would be provided for a potential pedestrian community bridge on the southeastern portion of PA3(b).⁵⁰ Parking and vehicular use areas would account for another 2.47 acres within the Carson Country Mart. Public access to the Carson Country Mart would be provided by Street A (also known as Lenardo Drive).

In addition, PA3(a) would include 0.62 acres of an Enhanced Parkway along the north side of Lenardo Drive that would include a 20- to 50-foot-wide linear park, including shade trees and native planting; a meandering pedestrian pathway; and a sidewalk along Lenardo Drive from Main Street to the area across from the vehicular entrance for Building A, which may be used by employees of the Project Site and residents of the PA1 project. Landscaping would also be planted between the light industrial buildings and the Torrance Lateral, as well as between the light industrial buildings and all along Lenardo Drive.

In total, the 2021 Project would include more landscaping as compared to the 2018 Project, and it would also provide a variety of passive and active spaces and programmed areas in the Carson Country Mart and in the Enhanced Parkway (that were not proposed in 2018).

As with the 2018 Project, the 2021 Project would provide a hierarchy of signs including freeway pylon signs, entry monument signs, project name identification signage, wall signs, and wall billboard signs. Consistent with the 2018 Project, the 2021 Project would include up to four freeway pylon signs, referred to as Option C, within the Embankment Lot,⁵¹ similar to Option A of the 2018 Project although the locations and characteristics of the signs would be different. As with the 2018 Project, the pylon signs would be 88 feet in height above grade and the size of the digital display face would be no greater than that currently allowed by law. The pylon signs would be 20 feet in height by 60 feet in width and may be surrounded by an architectural frame that could add up to 10 feet to the outer dimension, thereby totaling 30 feet by 70 feet. Under Option C, two of the signs would be double face, static digital display with changeable message display and color changing illumination. The other two signs would be double faced, static digital display with changeable message display and color changing illumination. The digital displays on each such sign would rotate messages at the maximum allowed by the Outdoor

⁵⁰ *The arrival area would serve a potential pedestrian bridge that is contemplated for a potential future project located at 21207 South Avalon Boulevard.*

⁵¹ *The Embankment Lot within PA2 is comprised of a 5-acre strip of land, along the I-405 Freeway between the freeway and the commercial uses on PA2. The CRA is the owner of the Embankment Lot; thus, the CRA shall retain all rights to development of any signage upon the Embankment Lot unless otherwise granted to developers of the Project Site pursuant to a Development Agreement approved by the City.*

Advertising Act. The pylon structures would contain up to six double-sided tenant signs each measuring 6 feet by 20 feet. Off-site advertising for such pylon signs would be allowed subject to obtaining the required Caltrans approvals. The 2021 Project would also include proposed changes in signage within PA3 and changes in building lighting given the changes to building locations, size, and uses, within PA3. An analysis of aesthetics impacts (i.e., lighting) on the Project Site is provided in Section IV.B, *Aesthetics*, of this 2021 SEIR.

c. Analysis of Project Impacts

(1) Physically Divide an Established Community

The land uses in the vicinity of the Project Site remain substantially the same as described and depicted in the 2018 SEIR, although the residential uses in DD3 began construction in 2020 and are now complete. The 2021 Project is located adjacent to the I-405 Freeway in an area with a mix of uses, including residential uses to the south and west with light industrial and commercial uses further west and north, a nursery and the Porsche Experience Center to the north, and regional commercial, commercial, office uses, single-family homes and a golf course across the I-405 Freeway to the east (refer to Figure II-2, Existing On-Site and Off-Site Uses, in Chapter II, *2021 Project Description*, of this 2021 SEIR).

As with the 2018 Project, the 2021 Project is an infill development within an existing urban setting that provides a continuation of existing and intended development patterns within the City of Carson and incorporates a mix of uses and associated infrastructure, including sidewalks and bike paths connecting the Project Site to the adjacent neighborhoods. In addition, the 2021 Project may include a 570 sf arrival area for a potential pedestrian community bridge on the southeastern portion of PA3(b).⁵² In addition, the 2021 Project provides a system of roads and sidewalks that would physically connect the Project Site, both internally (between PA1, PA2, and PA3(b)) and externally (with the community). More specifically, pedestrian circulation would be provided throughout the Project Site through sidewalks and pathways including protected pedestrian crossings at the signalized intersections located at Main Street and Lenardo Drive; Lenardo Drive and Stamps Drive; Stamps Drive and Del Amo Boulevard; Lenardo Drive and the combined entrance to PA2 and PA3; and Lenardo Drive and Avalon Boulevard. External pedestrian access would be provided to the Project Site from Main Street, Del Amo Boulevard, and Avalon Boulevard. As noted in the 2018 SEIR, the Project Site is currently separated from the residential development to the south and west with a buffer created by the Torrance Lateral and the adjacent landscaped slope, which would not change under the 2021 Project.

⁵² As previously noted, the arrival area would serve a potential pedestrian bridge that is contemplated for a potential future project located at 21207 South Avalon Boulevard.

Therefore, similar to the 2018 Project, the 2021 Project would not physically divide an established community. Impacts of the 2021 Project would remain **less than significant**.

(2) Consistency with Applicable Land Use Plans, Policies, and Regulations

(a) City of Carson

(i) Land Use Plans and Policies

The city's Land Use Element's Guiding Principle specifically states that:

“The City of Carson is committed to providing a sustainable balance of land uses, including residential, commercial, industrial, educational, recreational, and open space. The City is also committed to providing quality development that incorporates features such as integrated, walkable, and mixed use neighborhoods. Furthermore, the City is committed to facilitating the adaptive reuse of former landfills and contaminated sites. The City of Carson is committed to creating an attractive environment for its citizens by developing, implementing and enforcing community design guidelines which will assure quality development and the maintenance and beautification of properties.”

The goals and policies in the city's General Plan, particularly the Land Use Element, serve to guide future development in the city to achieve this guiding principle. While the 2018 SEIR determined that the 2018 Project would not conflict with the existing land use plans, policies or regulations intended to prevent an impact to the environment, given the changes proposed by the 2021 Project to the 2018 Project and the proposed uses within PA3, an updated consistency analysis with applicable land use plans, policies, and regulations evaluating the 2021 Project is provided in **Table IV.A-1, 2021 Project Consistency with City of Carson General Plan**.

The 2021 Specific Plan Amendment provides site design guidelines and development standards for land uses; circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage: lighting; service, trash, and utility areas; artistic features; noise; and energy conservation tailored to the 2021 Project and its geographic context in the city.

The 2021 Project would finally put to productive reuse a former toxic/brownfield site, through a mix of uses that would be sufficient to fund ongoing and future operations and maintenance (O&M) costs associated with the Project Site, which has long been the goal of the City and the Carson Reclamation Authority (CRA) (as the owner of the Project Site), given the fact that the CRA cannot fund such O&M costs associated with the Project Site indefinitely (based on its existing financing and funding sources). Prior to the CRA's ownership of the Project Site, two Community Facilities Districts (CFDs) were formed for the Project Site (CFD No. 2012-1 and No. 2012-2), in order to pay for the O&M and infrastructure associated with the former landfill site (at the direction of the Department of Toxic Substances Control [DTSC]). However, the

CFDs are only funded by the future Applicant(s) of the Project Site, with differential rates based on the type of use their project proposes and only once such developments are realized. The CRA acquired the Project Site with this understanding in 2015 and therefore, upon its formation and acquisition of the Project Site in 2015, the CRA has sought to achieve remediation and development of the Project Site and work with potential Developers/Applicants who could present project proposals that would enable them to pay for the significant increase in costs of development associated with a former landfill site. Thus, the 2021 Project is unique in that it is only the second project that has proceeded to this stage and could actually be realized in the last 6 years of the CRA’s attempts to enable project development on the site. These circumstances are further discussed in Section VII.B.1, *Reasons the Project Is Being Proposed, Notwithstanding Its Significant Unavoidable Impacts*, of this 2021 SEIR.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

Relevant Policy	Analysis of Project Consistency
Land Use Element (2004)	
Goal LU-1 Productive reuse of “brownfield” site.	Consistent. The 2021 Project would put to productive reuse a contaminated, former landfill/brownfield site through site remediation consistent with the approved RAPs and under the oversight of the DTSC. The 2021 Project would enable the full remediation of the Project Site and would contain a mix of uses that would be sufficient to fund ongoing and future operation and maintenance (O&M) costs, which has long been the goal of the City and the CRA (the owner of the Project Site). Refer to Section VII, <i>Other Environmental Considerations</i> , of this 2021 SEIR, for a more-detailed discussion regarding the reuse of this brownfield site.
LU-5.2 Implement and expand strategies to market, attract, and/or retain retail commercial areas and encourage businesses to participate.	Consistent. The 2021 Project would be developed along the I-405 Freeway, with nearby access to both the I-405 Freeway and the Harbor Freeway (I-110 Freeway). The 2021 Project would offer high visibility in a new, planned development. It would include commercial uses within PA2 adjacent to the I-405 Freeway that would attract visitors and meet the needs of local population. In addition, the 2021 Project would include the Carson Country Mart, an approximately 11.12-acre publicly accessible area in PA3(b) that would include community commercial uses and other recreational amenities. While the overall retail commercial uses would be reduced compared to the 2018 Project, the 2021 Project would continue to provide 711,500 sf of commercial floor area, as well as 33,800 sf of neighborhood-serving commercial uses, restaurant/café, and food and beverage kiosks in the Carson Country Mart. Thus, the 745,300 sf of commercial uses would provide a range of retail opportunities for both residents and visitors.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-5.3	Identify unique economic opportunities, such as niche markets, that will allow the City to capitalize on its location, its cultural diversity, and the tourism industry in the region.	Consistent. The 2021 Project would provide a mix of uses in a prime location visibly noticeable along the I-405 Freeway corridor. The 2021 Project would include residential, commercial, and light industrial uses. In addition, the 2021 Project would provide approximately 11.12 acres of passive and active spaces with local serving commercial uses in the Carson Country Mart. The 711,500 sf of commercial uses within PA2 and the 33,800 sf of commercial uses within PA3(b) would provide a mix of visitor and local serving uses that would create an opportunity to support a large range of uses and would provide a regional destination. In addition, the light industrial uses in PA3(a) would provide floor area for e-commerce/fulfillment center and distribution center/parcel hub uses, which would also provide unique economic opportunities for the city. The city's General Plan envisions an expanded commercial base, including encouraging specialty retail development. The commercial uses (i.e., retail outlet) within PA2 and the Carson Country Mart would support tourism in the region.
LU 6.2	Achieve a sustainable land use balance through provision of incentives for desired uses; coordination of land use and circulation patterns; and promotion of a variety of housing types and affordability.	Consistent. The 2021 Project would provide a mix of residential, commercial, and light industrial uses with an integrated design and a circulation system that coordinates the land uses and access. The 2021 Project would construct an internal circulation system on the Project Site that would be linked with the regional network and linked to the Avalon Boulevard interchange for the I-405 Freeway. The light industrial uses within PA3(a) would provide for distribution uses in proximity to the regional transportation system as well as the Port of Los Angeles and the Port of Long Beach, rather than in more remote locations relative to the end users. In addition, the 711,500 sf of retail uses in PA2 as well as the 33,800 sf of commercial uses in PA3(b) would serve both local (city residents) and regional populations. The 2021 Project would add up to 1,250 residential units, thus adding to the range and mix of housing types and affordability available in the City of Carson and bringing needed housing to the city and assisting the city with fulfilling its RHNA requirements.
LU-6.3	Consider establishing minimum land use density requirements in certain areas such as mixed-use zones to provide more efficient, consistent, and compatible development patterns while also promoting greater potential for pedestrian and transit oriented development.	Consistent. This policy is directed to the City to establish minimum land use density requirements and compatible development patterns. The 2021 Project would be implemented under the 2021 Specific Plan Amendment, which provides uses, densities, development and design standards, and guidelines to ensure a compatible pattern of development is achieved that also promotes safe pedestrian activity. The 2021 Specific Plan Amendment will allow for mixed-use development, including residential, commercial, light industrial, and passive and active spaces with amenities and community-serving commercial uses that are laid out in an efficient manner. In addition, the 2021 Specific Plan Amendment will also identify density and height limits for the residential development provided in PA1, as well as height limits and setbacks for the light industrial uses provided in PA3 and commercial uses in PA2. Lastly, the 2021 Project includes provisions for pedestrian uses and bicycle transit that would provide connections within the Project Site with connections to nearby public transit routes.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-6.6	Attract land uses that generate revenue to the City of Carson, while maintaining a balance of other community needs such as housing, open space, and public facilities.	Consistent. The 2021 Project would include up to approximately 711,500 sf of commercial uses within PA2 and 33,800 sf of commercial uses within PA3(b), as well as 1,567,090 sf of light industrial floor area, all of which would generate revenue to the city. The 2021 Project would provide sufficient revenue to enable the full remediation of the Project Site and to fund ongoing and future operation and maintenance costs. The 2021 Project would also add up to 1,250 residential units intermixed with plazas and open space that would assist the city in achieving its RHNA allocation. In addition, the 2021 Project would provide 11.12 acres of publicly accessible passive and active spaces with community-serving commercial uses on PA3(b) that would also contribute to the city's goal of maintaining a balance of uses to meet community needs.
LU-7.2	Locate truck intensive uses in areas where the location and circulation pattern will provide minimal impacts on residential and commercial uses.	Consistent. PA3(a) would be developed with light industrial uses and ancillary office uses that would be used for e-commerce/fulfillment center facilities and distribution center/parcel hubs. These truck intensive uses would be clustered in an area with a circulation system designed to provide safe and easy access to and from the regional transportation system and Port of Los Angeles. While these uses would operate 24/7, loading docks are sited in locations buffered from adjacent residential uses on and off site to screen the activity, either by placement of the building relative to the loading dock or through the provision of walls and landscaping to create a screening barrier. For example, Buildings C, D, and E are sited so that the buildings form a buffer between the loading dock and the adjacent and on-site residential uses. For Buildings A and F, which would be located adjacent to the western and southern property lines, respectively, sound walls and landscaping would be installed to provide screening. With regard to commercial uses in PA2, loading areas would be provided adjacent to the I-405 Freeway and/or screened loading areas in PA3(a) are located in areas on the Project Site that would minimize conflicts with other Project Site uses.
LU-7.3	Promote the use of buffers between more intensive industrial uses and residential uses.	Consistent. The 2021 Project would include light industrial uses within PA3(a), which is located across Lenardo Drive from the residential uses proposed within PA1 and across the Torrance Lateral from the existing off-site residential uses to the west and south of the Project Site. Lenardo Drive would be approximately 80 feet in width, and the light industrial buildings within PA3(a) would maintain a variety of setbacks from the property line along the Torrance Lateral. The setbacks would be 55.5 feet at Building F; 70 feet at Building D (with the implementation of Mitigation Measure B-1); and 113 feet at Building A. In addition, the Torrance Lateral would provide an additional buffer of 75 feet from the property line to the nearest off-site residential uses. The loading areas would be screened by the orientation of the building and/or the installation of sound walls, as well as landscaping. Therefore, buffers between the light industrial uses and adjacent residential uses (both on and off site) would be provided.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-8.1	Amend the Zoning Ordinance to provide for those Mixed Use areas identified on the General Plan Land Use Plan.	Consistent. This policy is directed to the City with regard to ensuring that the Zoning Ordinance provides for mixed-use development within areas identified on the General Plan Land Use Map. The 2021 Project would, through the 2021 Specific Plan Amendment, provide for a mix of residential, regional and neighborhood-service commercial, passive and active spaces, and light industrial uses on the Project Site.
LU-8.3	Locate higher density residential uses in proximity to commercial centers in order to encourage pedestrian traffic and provide a consumer base for commercial uses.	Consistent. The 2021 Project includes the potential for high-density residential development within a mixed-use project containing up to 711,500 sf of regional commercial floor area and 33,800 sf of neighborhood serving commercial space. The 2021 Project would provide up to 1,250 residential units in PA1 at an allowed density of 60 dwelling units per acre (du/ac). Densities above 60 du/ac, and up to 80 du/ac, are authorized in PA1 with a General Plan Amendment. At these densities, the residential uses would be considered high density residential or urban residential based on the city's 2004 General Plan. The 2021 Project also includes a pedestrian circulation system throughout the Project Site connecting the various components of the 2021 Project as well as with the surrounding area from Main Street, Del Amo Boulevard, and Avalon Boulevard. In addition, the 2021 Project would include a 570 sf arrival area for a potential pedestrian community bridge that is contemplated for a cumulative project located to the south of the Project Site connecting that cumulative project to the 2021 Project. The 2021 Project would provide a development within the central part of the city at a location near the Carson Civic Center, Dignity Health Sports Park, California State University at Dominguez Hills, the SouthBay Pavilion, and Evolve South Bay, as well as nearby proposed projects, including Imperial Avalon and a mixed-use residential project on Main Street, thus contributing to the mix of uses in the area. Thus, the 2021 Project would locate residential uses in proximity of commercial uses; would provide bicycle connections within the Project Site with connections to planned bike lanes on Del Amo Boulevard, Main Street, and Avalon Boulevard consistent with the city's Master Plan of Bikeways; would provide internal pedestrian access opportunity; and would locate regional commercial space in proximity of the I-405 Freeway, thereby encouraging an enhanced consumer base for the commercial uses.
LU-11.1	Target potential sites or areas for the development of signature projects.	Consistent. Project implementation would create a signature project at a location that has been identified as being conducive to such a project, due to the Project Site's location along the I-405 Freeway, providing visual accessibility, and its location within the central area of Carson. In addition, as a guiding principle, the Land Use Element of the General Plan seeks to facilitate the adaptive reuse of former landfills and contaminated sites, of which this Project Site is one.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-11.2	Encourage development of desired uses such as quality retail, restaurant uses, and entertainment in targeted areas.	Consistent. The 2021 Project would include up to 711,500 sf of regional commercial space within PA2, of which 15,000 sf would be restaurant space. In addition, the 2021 Project would provide 33,800 sf of community-serving commercial uses in PA3(b), of which 23,800 sf would be restaurant, café, and food and beverage kiosks, with the balance providing retail uses. The 2021 Project proposes development of these uses within an area of the city that has proximity to regional and local roadways and freeways and in proximity to adjacent (on- and off-site) residential uses.
LU-12.3	Review landscape plans for new development to ensure that landscaping relates well to the proposed land use, the scale of structures, and the surrounding area.	Consistent. The 2021 Specific Plan Amendment establishes landscaping concepts for the various areas of the Project Site and identifies a palette of permitted plants. The 2021 Specific Plan Amendment requires site plan and design review to that the ensure that the proposed landscape plans that are submitted with each development are consistent with the General Plan objectives and the more-specific requirements of the 2021 Specific Plan Amendment.
LU-12.5	Improve City appearance by requiring landscaping to screen, buffer and unify new and existing development. Mandate continued upkeep of landscaped areas.	Consistent. The 2021 Specific Plan Amendment requires that landscaping within the Project Site is consistent in design and is also cohesive among planning areas. The 2021 Specific Plan Amendment incorporates landscape requirements to buffer light industrial uses from existing residential uses to the north, south and west of the Project Site and requires development setbacks to establish additional buffers. In addition, the 2021 Project would provide 11.12 acres of publicly accessible, privately maintained passive and active spaces with within PA3(b), which would provide landscaping and a buffer to adjacent residential uses to the south. The 2021 Specific Plan Amendment also mandates that Applicant(s) of the Project Site would be responsible for maintaining landscaped areas within the Project Site.
LU-13.1	Promote a rhythmic and ceremonial streetscape along the City’s arterial roadways, continuing the use of landscaped medians.	Consistent. As shown in Figure II-9, which is provided in Chapter II, <i>2021 Project Description</i> , of this 2021 SEIR, when entering the Project Site from the north, at Main Street and Lenardo Drive, the 2021 Project would include the provision of 0.62 acres of Enhanced Parkway within PA3(a) that would parallel Lenardo Drive and would include a 20- to 50-foot-wide linear park with shade trees, native planting, a meandering pedestrian pathway, and a sidewalk. Landscaping would continue along Lenardo Drive and in its medians throughout the Project Site, culminating with the open space provided in the Carson Country Mart in the southeast portion of the Project Site. Thus, the 2021 Project would contribute to the provision of landscaped medians in the city.
LU-13.3	Continue and, when possible, accelerate the undergrounding of utility lines throughout the City.	Consistent. As required by the 2021 Specific Plan Amendment, utility lines would be placed underground whenever feasible.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-13.4	Encourage architectural variation of building and parking setbacks along the streetscape to create visual interest, avoid monotony and enhance the identity of individual areas.	Consistent. The Project Site would be subject to the Site Design Standards and Guidelines as provided in the 2021 Specific Plan Amendment, which addresses architectural and landscape design standards for each planning area to provide variety in architectural design, but harmonizing the aesthetics and design within the Project Site overall. The 2021 Specific Plan Amendment requires that building architecture shall vary between planning areas and yet be of a consistent design theme.
LU-13.5	Continue to require landscaping treatment along any part of a building site which is visible from City streets.	Consistent. The 2021 Specific Plan Amendment will require landscaping in various locations throughout the Project Site, including along any part of a building that is visible from city streets in order to provide screening and contribute to the overall aesthetic quality of the development. As indicated above, the 2021 Project would include the provision of 0.62 acres of Enhanced Parkway within PA3(a) on the south side of Lenardo Drive and landscaping would continue along Lenardo Drive and in its medians through to the Carson Country Mart. Landscaping would also be provided along the internal streetscapes, between buildings within parking areas, and as edge treatments. In addition, Del Amo Boulevard and Main Street are designated as landscape theme areas in the 2021 Specific Plan Amendment.
LU-13.7	Ensure proper maintenance of parkways along arterial streets and landscaping of private property visible from the public right-of way.	Consistent. The Applicant(s) of each Planning Area would be responsible for installing and maintaining parkways along arterial streets, as well as installing and maintaining landscaping in privately owned areas visible from public right-of-way. The Applicant for PA3(b) would also be responsible for maintaining the open spaces within PA3(b).
LU 14.1	Work with Caltrans to provide and maintain an attractive freeway environment in Carson, including access ramps.	Consistent. The 2021 Specific Plan Amendment provides landscape and signage guidelines for the Project Site and includes a Freeway Edge theme area facing the I-405 Freeway to ensure consistency of signage and plantings in this area. The CRA would continue to be responsible for the landscape and maintenance of the slope and would coordinate with Caltrans to ensure acceptable design. The 2021 Project proposes a third option for the provision of four pylon signs along the I-405 Freeway, with slightly different locations, heights, and widths (refer to Section IV.B, <i>Aesthetics</i> , of this 2021 SEIR, for a detailed discussion of the various sign proposals). The signs along the I-405 Freeway would comply with applicable State law and would require Caltrans approval. As concluded in Section IV.B, <i>Aesthetics</i> , the proposed signage would result in a less-than-significant aesthetics impact with implementation of the identified mitigation measures.
LU-14.2	Require new commercial or industrial development adjacent to and visible from freeways and freeway ramps to incorporate full architectural and landscape treatment of the building on the freeway side.	Consistent. The 2021 Specific Plan Amendment specifically addresses landscaping treatments for uses adjacent to and visible from the I-405 Freeway, including a screening wall covered with vines and other landscaping on the slope leading down to the I-405 Freeway. Additional landscape standards, site design standards, and architectural guidelines are provided in the 2021 Specific Plan Amendment, as previously discussed in this consistency analysis. Additionally, final architectural designs are subject to administrative review and approval by the City prior to issuance of building permits.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

Relevant Policy	Analysis of Project Consistency
LU-14.4	<p>Provide entry markers with landscaping on the major arterials.</p> <p>Consistent. Project entries from arterial roads would contain entry monuments with landscape theme areas and would be subject to enhanced landscaping standards. The purpose of the entry monuments and landscaping is to provide identity signage for the 2021 Project as a whole and for the developments on each Planning Area. In addition, the 2021 Project would include 0.62 acres of Enhanced Parkway that would run along a portion of the south side of Lenardo Drive at the entrance to the Project Site.</p>
LU-15.1	<p>Encourage the location of housing, jobs, shopping, services and other activities within easy walking distance of each other.</p> <p>Consistent. The 2021 Project, includes mixed uses with up to 1,250 residential units, up to 711,500 sf of regional commercial floor area, as well as 33,800 sf of neighborhood-serving commercial uses within PA2 and PA3(b), respectively, as well as 1,567,090 sf of light industrial and ancillary office uses within PA3(b). The conceptual site design includes a pedestrian circulation system that connects the various components of the Project Site, thereby facilitating the type of pedestrian activity targeted by this policy. The mix of uses on the Project Site and the pedestrian and bicycle access opportunities would provide for a development that would encourage a live, work, and play environment that would reduce overall vehicle trips.</p>
LU-15.2	<p>Maintain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live in Carson.</p> <p>Consistent. The 2021 Project, could result in up to 1,250 residential units, which would contribute to the range of housing opportunities within the city.</p>
LU-15.3	<p>Ensure that community transportation facilities are connected to a larger transit network.</p> <p>Consistent. The 2021 Project's internal circulation system would provide access to Main Street and Avalon Boulevard via Del Amo Boulevard, with accessibility to the I-405 Freeway via the ramps at Avalon Boulevard and I-110 Freeway via the ramps on Del Amo Boulevard or Main Street. In addition, four new bus stops would be located on Lenardo Drive. Service to the stops would be determined in coordination with the Carson Circuit; Long Beach Transit, the Los Angeles Metropolitan Transit Authority; the Metro Silver Line; Torrance Transit; and the Los Angeles Department of Transportation (Commuter Express). Therefore, the 2021 Project would be connected to the larger transit network.</p>
LU-15.4	<p>Develop a center focus within the community that combines commercial, civic, cultural and recreational uses.</p> <p>Consistent. The Project Site is located within the central part of the city. The 2021 Project would include a mix of residential, regional and neighborhood service commercial uses, and open space with a variety of passive and active spaces, programmed areas and amenities and community-serving commercial uses. The 2021 Project would provide a development within the central part of the city at a location near the Carson Civic Center, Dignity Health Sports Park, California State University at Dominguez Hills, the SouthBay Pavilion, and Evolve South Bay, as well as nearby proposed projects, including Imperial Avalon, and a mixed-use residential project on Main Street, thus connecting the Project Site to these community uses. In addition, the Carson Country Mart within PA3(b) that would provide commercial uses and community amenities, including passive and active park/recreational areas, and gathering spaces, thereby creating a focal point within the Project Site.</p>

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
LU-15.5	Ensure that the design of public spaces encourages the attention and presence of people at all hours of the day and night.	Consistent. The 2021 Project would include 11.12 acres of publicly accessible, privately maintained community-serving commercial use area within PA3(b), which would include a variety of passive and active spaces, programmed areas amenities intended to serve local city residents and to activate the area harmoniously with the proposed development on PA2. The Carson Country Mart would include 33,800 sf of neighborhood-serving commercial uses, restaurant/café, and food and beverage kiosks. The provision of open space with programmed activities on PA3(b), as well as the regional commercial uses within PA2 would result in activities would continue into the evening hours. The 2021 Specific Plan Amendment includes standards for the public spaces located within the Project Site, which would include artistic features, water features, botanic garden, lawn/event area, play areas, plazas, and landscaping to enhance the availability of public spaces for the community.
LU-15.6	Ensure development of pedestrian oriented improvements which provide better connections between and within all developments while reducing dependence on vehicle travel.	Consistent. The 2021 Project includes an internal system of pedestrian sidewalks and pathways that would interconnect all portions of the Project Site.

City of Carson General Plan, Housing Element (2014–2021)—Policies

H-1.3	Promote economic well being of the City by encouraging the development and diversification of its economic base.	Consistent. The 2021 Project would provide 711,500 sf of regional commercial floor area as well as 33,800 sf of neighborhood-serving commercial uses, restaurant/café, and food and beverage kiosks in the open space area in PA3(b). Thus, the 745,300 sf of commercial uses would provide a range of retail opportunities for residents and visitors. In addition, the 2021 Project would provide 1,567,090 sf of light industrial and ancillary office uses. This mix of non-residential uses would contribute to the city's economic base.
H-1.5	Establish and maintain development standards that support housing development while protecting the quality of life.	Consistent. The 2021 Project would provide up to 1,250 residential units in PA1. These residential units would be subject to the development and design guidelines established in the 2021 Specific Plan Amendment, and would address items, including, but not limited to, site planning, building massing, color and materials, building detailing, landscaping, and open spaces.
H-2.2	Assure residential safety and security	Consistent. Residential safety and security would be provided through the mixed-use nature of the 2021 Project, which would increase overall activity in the area. The mix of uses forms the basis of a connected community and provides for more “eyes on the street” at more times of day. In addition, development would be subject to the lighting standards set forth in the 2021 Specific Plan Amendment, which provide minimum nighttime standards to ensure safety. In addition, Mitigation Measure I.2-5 requires the Applicant to develop a private security plan for PA1, PA2, and PA3, which would further ensure residential safety and security.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

Relevant Policy	Analysis of Project Consistency
<p>H-2.7 Require excellence in the design of housing through the use of materials and colors, building treatments, landscaping, open space, parking, environmentally sensitive and sustainable building design.</p>	<p>Consistent. As previously mentioned in this consistency analysis, the residential units provided in PA1 (up to 1,250 residential units) would be subject to the development and design guidelines established in the 2021 Specific Plan Amendment and would address items, including, but not limited to, site planning, building massing, color and materials, building detailing, landscaping, and open spaces. As stated in the 2021 Specific Plan Amendment, the architectural intent of 2021 Project, including housing, is to create a development that contributes to the creation of a vibrant urban core for the City of Carson; enhances the attractiveness of the city’s freeway corridor and the major arterials that adjoin the Project Site; serves as a signature gateway into the City of Carson; and provides significant aesthetic improvement over the existing landfill. Development would meet or exceed the requirements of Title 24 and CALGreen through various energy conservation measures related to lighting, building construction, and heating/cooling systems.</p>
<p>H-3.1 Facilitate and encourage diversity in types, prices, ownership, and size of single-family homes, apartments, townhomes, mixed-use housing, transit-oriented development, and live-work housing.</p>	<p>Consistent. The proposed residential units (up to 1,250 residential units) would add multi-family residential units of varying sizes, from high density residential to urban residential, which would increase the variety of housing opportunities within the city. In addition, the 2021 Project allows for residential development in proximity to commercial development and live-work housing is permitted in portions of the Project Site.</p>
<p>H-3.2 Work to expand the resource of developable land by making underutilized land available for development.</p>	<p>Consistent. The 2021 Project would put to productive reuse a contaminated, former landfill/brownfield site through site remediation consistent with the approved RAP and under the oversight of DTSC. The 2021 Project would enable the full remediation of the Project Site and would allow for mixed-use development, including residential, commercial, light industrial, and passive and active spaces with amenities and community-serving commercial uses. The mix of uses would be sufficient to fund ongoing and future O&M costs, which has long been the goal of the City and the CRA (the owner of the Project Site).</p>
<p>H-3.6 Promote the development of multifamily housing.</p>	<p>Consistent. As previously mentioned in this consistency analysis, up to 1,250 high-density and urban residential units would be developed in PA1 at densities of up to 60 du/ac (and up to 80 du/ac with a General Plan Amendment).</p>
<p>H-3.7 Encourage residential development along transit corridors and in close proximity to employment, transportation and activity centers.</p>	<p>Consistent. The 2021 Project provides for up to 1,250 residential units in proximity to commercial and light industrial uses, which provide employment opportunities; open space uses, community serving-activity centers; and transit corridors (e.g., those along Del Amo Boulevard and Main Street). In addition, new bus stops would be located on the Project Site to allow for residential, worker, and visitor access and transportation to/from the Project Site.</p>

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
City of Carson General Plan, Economic Development Element (2013)—Policies		
ED-1.2	Encourage the development of quality housing.	Consistent. As previously mentioned in this consistency analysis, the up to 1,250 residential units provided in PA1 would be required to meet development standards in the 2021 Specific Plan Amendment for building design, setbacks, landscaping, and other standards, including minimum private and public open space standards and interior noise level restrictions that would encourage development of quality housing.
ED-1.4	<p>Strengthen the physical image of Carson through visual enhancement along freeway corridors, major traffic routes, and areas adjoining residential neighborhoods. To this end:</p> <ul style="list-style-type: none"> ● Aggressively pursue code enforcement activities; ● Develop good design standards; and ● Establish a City identity. 	Consistent. The 2021 Project has been designed specifically to take advantage of its location adjacent to the I-405 Freeway. The 2021 Project would (1) present substantial new commercial development along the freeway edge that would be developed with an appealing design that would attract public attention and region-wide visitors; (2) contain vibrant and attractive commercial uses and community amenities, including passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and create a regional draw for other visitors to the Project Site; (3) include, through the 2021 Specific Plan Amendment requirements, a set of sign standards and guidelines that would integrate the 2021 Project’s proposed signage program with the overall aesthetic concept for the 2021 Project; and (4) include, through the 2021 Specific Plan Amendment, provisions for design features and development standards for all buildings developed within the Project Site as well as landscaping/aesthetic treatment along the 2021 Project’s freeway edge as well as other perimeters of the Project Site. The 2021 Project would contribute to the city’s identity by creating a project at a location that has been identified as being conducive to such a project, due to the Project Site’s location along the I-405 Freeway and within the central area of Carson.
ED-1.6	Provide appropriate infrastructure to support economic development.	Consistent. The 2021 Project would include an internal infrastructure system that is designed to meet all on-site uses and would not have significant impacts on existing services. In addition, the Applicant of each Planning Area would be required to pay a one-time Development Impact Fee (DIF), an annual Citywide Community Facilities District Fee (Citywide CFD), and annual Community Facilities District fees (pursuant to CFD No. 2012-2, as amended or modified from time to time) ^a imposed on the Project Site that would fund a variety of on-site and off-site improvements that would further support economic development. ^b The DIF would be used for a variety of facilities and infrastructure in support of the proposed development related to general governmental facilities; transportation infrastructure; utilities and sustainability; beautification; parks; and traffic facilities. The annual Citywide CFD would be used for sheriff services, street sweeping and sidewalk cleaning and maintenance, maintenance of parkways and open space, maintenance of roadways, and flood and storm protection services.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

Relevant Policy	Analysis of Project Consistency
<p>ED-2.7 Identify unique economic opportunities, such as niche markets, that will allow the city to capitalize on the city’s location in Southern California, the community’s cultural diversity, and the tourism industry in the region.</p>	<p>Consistent. The 2021 Project would provide for a regional destination through the development of a mixed-use project, visibly noticeable and directly accessible along a major freeway corridor (i.e., the I-405 and I-110 Freeways). The 2021 Project would include regional commercial uses within PA2 (with an outlet mall that would be a tourism draw into the city) and light industrial uses within PA3(a). The 2021 Project would also include publicly accessible, privately maintained community-serving commercial use areas, within the Carson Country Mart, within PA3(b). This area would include 33,800 sf of commercial uses, restaurant/café and food and beverage kiosks as well as a variety of passive and active spaces, and programmed activities within a green environment, that would serve the local community and visitors to the Project Site. The light industrial uses within PA3(a) would provide for distribution uses, including e-commerce and fulfillment center uses and more traditional distribution center and parcel hub type uses, that will capitalize on the location of the Project Site, being in direct proximity to the consumers of such products distributed by/transported from the light industrial uses as well as to the regional transportation network and the Port of Los Angeles. Thus, the light industrial uses would serve the local area and the region.</p>
<p>ED-2.8 Capitalize on potential physical and market linkages among land uses.</p>	<p>Consistent. The 2021 Project is a mixed-use project that would develop up to 1,250 residential units, with an estimated 4,550 new residents; approximately 711,500 sf of commercial uses within PA2 and 33,800 sf of commercial uses within PA3(b); and 1,567,090 sf of light industrial floor area. The mixed-use nature of the 2021 Project would create physical and market linkages among the land uses with the proximity of the uses, proximity to the regional transportation network, and the provision of on-site infrastructure providing services and connections to the surrounding area. The new residents on the Project Site, as well as employees associated with the light industrial and commercial uses, would support the 2021 Project’s commercial components. In addition, the 2021 Project would include 11.12 acres of space within PA3(b), which would include a variety of passive and active open spaces, programmed areas amenities and community-serving commercial and recreational uses intended to serve local city residents and be a draw for regional visitors and to activate the area harmoniously with the proposed development on PA2.</p>

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
ED-3.3	Support public/private efforts and link infrastructure and service costs with development projects.	Consistent. The 2021 Project would develop a brownfield site with a mix of uses that would generate sufficient revenues to pay for the CRA's costs of remediation of the entirety of PA2 and PA3 (and the additional costs of developing a project on a landfill site), which is a requirement of DTSC and is a requirement of the CRA (as the owner of the Project Site). The 2021 Project would result in a mixed-use development that would occur through a series of private development projects financed by Applicants and developed on land currently owned by the CRA, but which would be sold/transferred to each Applicant(s) for any project within each Planning Area. As discussed above, the 2021 Project would generate sufficient revenue to fund ongoing and future O&M costs associated with the Project Site, which has long been the goal of the City and the CRA. In addition, the Applicant(s) of any Planning Area would be responsible to pay a one-time DIF and annual CFD fees that would link infrastructure and service costs with development projects. The DIF would be used for general governmental facilities; transportation infrastructure; utilities and sustainability; beautification; parks; and traffic facilities. The annual CFD would be used for sheriff services, street sweeping and sidewalk cleaning and maintenance, maintenance of parkways and open space, maintenance of roadways, and flood and storm protection services.
ED-3.4	Encourage development opportunities that increase economic gains to the City.	Consistent. The 2021 Project would include up to approximately 711,500 sf of regional commercial uses within PA2 and 33,800 sf of neighborhood-serving commercial uses within PA3(b), as well as 1,567,090 sf of light industrial floor area, all of which would generate revenue to the city.
ED-6.1	Encourage the diversification of land uses, while not alienating existing businesses or industries requiring space in Carson.	Consistent. The 711,500 sf of commercial uses within PA2 and the 33,800 sf of commercial uses within the open space area in PA3(b) would provide a mix of visitor and local serving uses that contribute to the mix of uses in the area, and would provide a regional destination. In addition, the 1,567,090 sf of light industrial and ancillary office uses in PA3(a) would provide floor area for e-commerce/fulfillment center and distribution center/parcel hub uses, which would also provide unique economic opportunities for the city. Contributing to the diversification of uses, the 2021 Project would also provide up to 1,250 residential units in PA1, and the Carson Country Mart, constituting an approximately 11.12-acre publicly accessible area in PA3(b) would include community commercial uses and other amenities.
ED-6.2	Improve the actual and perceived image of the City through improved design standards, amenities, security, continuing public improvements and positive advertising campaigns.	Consistent. Development on the Project Site would occur pursuant to the 2021 Specific Plan Amendment, which provides site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage: lighting; service, trash, and utility areas; artistic features; noise; and energy conservation. The 2021 Specific Plan Amendment will provide standards that are tailored to the Project Site to ensure a compatible pattern of development is achieved on the Project Site and that the development is integrated in to the surrounding area.

Table IV.A-1
2021 Project Consistency with City of Carson General Plan

Relevant Policy	Analysis of Project Consistency
ED-8.1 Identify target or niche industries or companies suitable for Carson looking for large areas of space, diversifying the economic base.	Consistent. As indicated previously in this consistency analysis, the 711,500 sf of regional commercial uses within PA2 and the 33,800 sf of neighborhood-serving commercial uses within the open space are in PA3(b) would provide a mix of visitor and local serving uses that would contribute to the mix of uses in the area and would provide a regional destination. In addition, the 1,567,090 sf of light industrial and ancillary office uses in PA3(a) would provide for e-commerce/fulfillment center and distribution uses, which uses would generate sufficient revenues to fund the costs of remediation of the entirety of PA2 (and the additional costs of developing a project on a landfill site), which is a requirement of DTSC and is a requirement of the CRA (as the owner of the Project Site) given DTSC's requirements and imposition on the CRA. The 2021 Specific Plan Amendment will provide the standards and guidelines for the Project Site with a mix of uses that would serve to diversify the city's economic base.
ED-9.2 Encourage development of desired uses such as quality retail, restaurant uses, and entertainment in target areas	Consistent. The 2021 Project would include up to 711,500 sf of regional commercial space within PA2, of which, 15,000 sf would be restaurant space. In addition, the 2021 Project would provide 33,800 sf of commercial space in the open space area within PA3(b), of which 23,800 would be restaurant, café, and food and beverage kiosks, with the balance providing retail uses. The 2021 Project proposes development of these uses within an area of the city that has proximity to regional and local roadways and freeways and in proximity to adjacent (on and off site) residential uses. The 2021 Specific Plan Amendment will ensure high quality, integrated development that would encourage the siting of quality uses in this area of the city. The 2021 Project is located within the city at a highly visible location, one targeted for such development in existing plans.
ED-10.1 Encourage the revitalization and cleanup of underutilized and contaminated land.	Consistent. The 2021 Project would put to productive use a brownfield site and the mix of uses would generate sufficient revenues to fund the cost of remediation of the entirety of PA2 and PA3 (and the additional costs of developing a project on a landfill site), which is a requirement of DTSC and is a requirement of the CRA (as the owner of the Project Site) given DTSC's requirements and imposition on the CRA. In addition, the mix of uses would be sufficient to fund ongoing and future O&M costs associated with the Project Site (including the remedial systems necessary to prevent the release of hazardous materials/substances into the air surrounding the Project Site and/or into the groundwater), which has long been the goal of the City and the CRA (as the owner of the Project Site), given the fact that the CRA cannot fund such O&M costs associated with the Project Site indefinitely without a development project being developed on the Project Site that will fund the costs of CFD No. 2012-2, as amended or modified from time to time, that will pay for such costs.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
ED-10.2	Maintain proper infrastructure levels and flexible financing options to encourage remediation and revitalization of brownfields.	Consistent. The 2021 Project would develop a contaminated, former landfill/brownfield site after remediation through implementation of the approved RAP under the direction of DTSC through a combination of public and private funds. The 2021 Project would result in a mixed-use development that would occur through a series of private development projects financed by Applicants and developed upon land owned by the CRA (as the owner of the Project Site), which would be sold/transferred to such Applicant(s) of each of the Planning Areas. The 2021 Project includes public financing mechanisms to ensure the maintenance of proper infrastructure levels including through the imposition of CFD and DIF fees that would be imposed on any project development within the Project Site.
ED-10.3	Understand and promote available land inventory and initiate strategies to develop balanced land use planning.	Consistent. As indicated above, the 2021 Project would put to productive use a contaminated, former landfill/brownfield site through site remediation consistent with the approved RAP and under the oversight of DTSC. The 2021 Project would include up to approximately 711,500 sf of commercial uses within PA2 and 33,800 sf of commercial uses within PA3(b), as well as 1,567,090 sf of light industrial floor area, all of which would generate revenue to the city. The 2021 Project would also add up to 1,250 residential units intermixed with plazas and open space that would assist the city in achieving its RHNA allocation. In addition, the 2021 Project would provide 11.12 acres of publicly accessible space within PA3(b), including 33,800 sf of neighborhood commercial uses, that would also contribute to the City's goal of maintaining a balance of uses to meet community needs.
ED-10.4	Encourage development of compatible uses and phase out non-conforming uses.	Consistent. Remediation of a contaminated, former landfill site is currently underway and as such there are no non-conforming uses on the Project Site that would be phased out. As indicated previously in this consistency analysis, the 2021 Specific Plan Amendment provides site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage: lighting; service, trash, and utility areas; artistic features; noise; and energy conservation that are tailored to the Project Site. The 2021 Specific Plan Amendment will ensure a compatible pattern of development is achieved on the Project Site and that the development is integrated in to the surrounding area. For example, the 2021 Project's commercial and light industrial activity would avoid conflict with nearby residences through the orientation of buildings and/or installation of sound walls, distance between uses, as well as landscaping which would provide a buffer between the non-residential uses and both on- and off-site residential uses.

**Table IV.A-1
2021 Project Consistency with City of Carson General Plan**

	Relevant Policy	Analysis of Project Consistency
Open Space and Conservation Element		
OS-1.2	Maintain existing landscaping along the City’s major streets and expand the landscaping program along other arterial streets throughout the community.	Consistent. Del Amo Boulevard and Main Street are designated as landscape theme areas in the 2021 Specific Plan Amendment. Project entries from arterials roads are designated within the 2021 Specific Plan Amendment as “Entries” within landscape theme areas and would be subject to enhanced landscaping standards. Under the 2021 Project, PA3(a) also includes the provision of 0.62 acres of Enhanced Parkway that run along the north side of Lenardo Drive at the entrance to the Project Site from Main Street. Landscaping would be required along the public and internal streets.
OS-1.3	Require that adequate, usable and permanent private open space is provided in residential developments.	Consistent. Private open space is required for residential development, which would occur within PA1. Mitigation Measure I.4-2 of this 2021 SEIR requires that residential uses meet the intent of Carson Municipal Code Sections 9128.15 and 9128.54 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents in PA1 (e.g., private fitness centers). In addition, Mitigation Measure I.4-3 of this 2021 SEIR requires that public open space for residential uses of the 2021 Project shall be provided.
OS-4.3	Facilitate physical collection of recyclable waste.	Consistent. The 2021 Specific Plan Amendment requires development of a recycling program for residential, commercial, and industrial uses to recycle paper, glass, plastic and other by-products of business or residential activities. In addition, Mitigation Measure J.3-5 requires that compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 sf in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible; and Mitigation Measure J.3-6 requires that all construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.

SOURCE: ESA 2021.

^a City of Carson, Community Facilities District Report – Community Facilities District No. 2012-2 of the City of Carson (The Boulevard at South Bay – Capital Improvements), September 12, 2012.

^b There are two annual CFD fees that would be applicable to the 2021 Project. The Citywide CFD funds support Citywide sheriff services; street sweeping; sidewalk cleaning and maintenance; maintenance of parkways and open space; maintenance of roadways; and flood and storm protection services. CFD No. 2012-2, as amended or modified from time to time, supports public on-site and/or off-site improvements related to potential impacts specifically occurring as a result of the 2021 Project, including street facilities; storm control facilities; sewer improvements; domestic water facilities; Sanitation District facilities; park, recreational, and open space facilities; school facilities; fire facilities; and library facilities.

The 2021 Specific Plan Amendment will result in a mix of residential uses, both neighborhood and regional commercial uses, publicly accessible open space and amenity areas, and light industrial uses with an integrated design and a circulation system that coordinates the land uses and access. With respect to PA1, the 2021 Project would not change the residential uses allowed for PA1 under the 2018 Specific Plan, which included 900 residential units or up to 1,250 residential units (with a General Plan Amendment) intermixed with plazas and open space that would assist the city in achieving its RHNA allocation. The 2021 Project would not change the

2018 Specific Plan land uses with respect to PA2, which allowed for up to approximately 711,500 sf of regional commercial uses within PA2.

However, the 2021 Specific Plan Amendment will modify the land uses previously allowed for PA3 under the 2018 Specific Plan by allowing for up to 1,567,090 sf of light industrial and ancillary office uses in PA3(a) that would provide for distribution uses, which would also provide unique economic opportunities for the city. Despite the new truck intensive uses proposed by the 2021 Project, these uses would be clustered in an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system given the unique location of such uses directly adjacent to the nearby I-405 and I-110 Freeways. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in a central area of the County of Los Angeles, rather than in more remote locations relative to the ultimate end users of the products/materials being distributed, such as the Inland Empire. As further discussed in Section IV.C, *Transportation*, and Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR, truck trip lengths from the Project Site to the end users are expected to be within 32.5 miles and 40 miles, depending on whether the deliveries are related to the distribution or fulfillment uses.⁵³

The 2021 Project would provide approximately 0.62 acres of Enhanced Parkway along the south side of Lenardo Drive that would include a 20- to 50-foot-wide linear park including shade trees, native planting, a meandering pedestrian pathway, and a sidewalk from Main Street to the area across from the vehicular entrance for Building A within PA3(a). In addition, landscaping would be planted between the light industrial buildings within PA3(a), and adjacent to the Torrance Lateral, as well as in parking areas and along the remainder of Lenardo Drive. The 2021 Project would modify the previously approved land uses for PA3, by providing the Carson Country Mart, an 11.12-acre area of publicly accessible space within PA3(b) that would contribute to the City's goal of maintaining a balance of uses to meet community needs. The Carson Country Mart would include a variety of passive and active community-serving uses, including programmed areas and amenities and 33,800 sf of commercial uses intended to serve local city residents and to activate the area harmoniously with the proposed development on PA2. In total, the 2021 Project would include more landscaping, open space, and recreational amenity uses as compared to the 2018 Project.

As with the 2018 Project, the 2021 Project constitutes infill development within an existing urban setting that provides a continuation of existing and intended development patterns within the city and incorporates features such as integrated, walkable, and mixed-use neighborhoods. In addition, the 2021 Project proposes additional physical features that connect the Project Site to immediately surrounding uses and the community. The 2021 Project would provide a system of roads, bike paths, and sidewalks that would physically connect the Project Site, both internally

⁵³ *Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021.*

(between PA1, PA2, PA3(a), and PA3(b)) and externally (with the neighboring community) as well as four new bus stops along Lenardo Drive that would connect to the regional transit network.

With regard to the General Plan land use designation for PA3, PA3 is currently designated as MU-R, which allows for a combination of residential, general commercial, and regional commercial uses. As indicated above, the 2021 Project would require a General Plan Amendment for the portion of the Project Site constituting PA3(a) from MU-R to LI to allow for the 2021 Project's proposed light industrial uses thereon. No changes to General Plan land use designations would occur for PA1, PA2, or PA3(b) (which would remain designated as MU-R under the General Plan). This 2021 SEIR analyzes the maximum possible intensity of light industrial uses within PA3(a) in order to conservatively evaluate the potential for environmental impacts associated with the maximum development permitted by the 2021 Specific Plan Amendment. The proposed light industrial uses under the 2021 Project would be consistent with the LI land use designation under the General Plan Amendment.

The General Plan's policies and goals are implemented through the city's Zoning Ordinance and its adopted Specific Plans. The Project Site is zoned SP-10, pursuant to the Carson Marketplace Specific Plan adopted by the City for the Project Site in February 2006. This 2006 Specific Plan was later amended on April 5, 2011, and renamed the Boulevards Specific Plan. The Boulevards Specific Plan was further amended on April 3, 2018, and renamed The District at South Bay Specific Plan following its approval by the City Council.

The proposed 2021 Specific Plan Amendment will not change the zoning for the Project Site, as it would remain zoned as SP-10; however, the 2021 Specific Plan Amendment will require a Specific Plan (zoning) text change to allow Light Industrial uses in PA3(a). In addition, a General Plan amendment would be required to allow for light industrial uses in PA3(a) by changing the designation in PA3(a) from MU-R to LI.⁵⁴ The land use changes proposed by the 2021 Project would require approval from the City Council concurrently with the approval of the 2021 Specific Plan Amendment.

As shown in Table IV.A-1, as with the 2018 Project, the 2021 Project would implement the goals and policies of the city's General Plan (as amended), thereby contributing to meeting the city's guiding principles. The 2021 Specific Plan Amendment will provide development standards and guidelines for the future development of the Project Site, consistent with the city's goals and policies. Compliance with the 2021 Specific Plan Amendment, applicable regulatory requirements, and the implementation of project design features (PDFs) and mitigation measures identified in this 2021 SEIR, would result in less-than-significant impacts with regard to all issue areas except project-level and cumulative aesthetic construction impacts, project-level and cumulative

⁵⁴ *The 2021 Specific Plan Amendment includes other changes with respect to the freeway-facing signage, allowable building heights and land uses, and setbacks.*

transportation impacts, project-level and cumulative air quality impacts, construction noise impacts, and cumulative construction and traffic-related noise. As the 2021 Project would generally implement the goals and policies of the General Plan, land use and planning impacts associated with General Plan consistency would remain **less than significant**.

(b) SCAG

(i) SCAG's 2020–2045 RTP/SCS

Connect SoCal, the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments (2020–2045 RTP/SCS),⁵⁵ charts a path toward a more mobile, sustainable and prosperous region by making key connections between transportation networks and land use planning. The 2020–2045 RTP/SCS projects growth in employment, population, and households at the regional, county, city, town, and neighborhood levels. Carson is identified as a Priority Growth Area – Job Center. However, there are no High Quality Transit Corridors near the Project Site; therefore, the Project Site is not located within a Transit Priority Area.

Table IV.A-2, Consistency of the 2021 Project with Applicable Goals of the 2020–2045 RTP/SCS, provides a detailed analysis of the 2021 Project's consistency with SCAG's applicable 2020–2045 RTP/SCS goals.

Based on the analysis presented in Table IV.A-2, the 2021 Project would be consistent with applicable 2020–2045 RTP/SCS goals. The 2021 Project would provide a mix of uses, including residential, commercial, and light industrial uses in a prime location visibly noticeable along the I-405 Freeway corridor. The 2021 Specific Plan Amendment will provide site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage: lighting; service, trash, and utility areas; artistic features; noise; and energy conservation to ensure a high-quality development that is cohesive and compatible with the surrounding area.

⁵⁵ SCAG, *Connect SoCal, 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy*, adopted September 3, 2020. https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocial-plan_0.pdf?1606001176, accessed June 2021.

Table IV.A-2
Consistency of the 2021 Project with Applicable Goals of the 2020–2045 RTP/SCS

Goal	Consistency Analysis of the 2021 Project
<p>1. Encourage regional economic prosperity and global competitiveness.</p>	<p>Consistent. While this goal pertains to SCAG funding and policies and not specifically to local jurisdictions, the 2021 Project would contribute to the regional economy through the provision of e-commerce and fulfillment center uses and more traditional distribution center and parcel hub type uses. Despite the new truck intensive uses proposed by the 2021 Project, these uses would be clustered in an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system given the unique location of such uses directly adjacent to the nearby I-405 and I-110 freeways. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in a central area of the County of Los Angeles, rather than in more-remote locations relative to the end users, such as the Inland Empire. As further discussed in Section IV.C, <i>Transportation</i>, and Section IV.H, <i>Greenhouse Gas Emissions</i>, of this 2021 SEIR, truck trip lengths from the Project Site to the end users are expected to be within 32.5 miles and 40 miles, depending on whether the deliveries are related to the distribution or fulfillment uses. In addition, the regional commercial uses that would be located in PA2 would be visible from the I-405 Freeway and would provide easy access. The Project Site’s location in proximity to the I-405 and the I-110 Freeways provides opportunities for uses that would serve the region, thereby contributing to the regional economic prosperity and global competitiveness. The 2021 Project would provide regional economic benefits in a manner consistent with other 2020–2045 RTP/SCS goals as discussed below. Therefore, the 2021 Project would support SCAG choices regarding this goal.</p>
<p>2. Improve mobility, accessibility, reliability, and travel safety for people and goods.</p>	<p>Consistent. The 2021 Project would locate a mixed-use development, that would include residential, regional and neighborhood-serving commercial use, light industrial and ancillary office uses in proximity to the I-405 Freeway. The 2021 Project would provide up to 1,250 residential units in PA1 at an allowed density of 60 dwelling units per acre (du/ac) and an increase of up to 80 du/ac with a General Plan Amendment. In addition, the Carson Country Mart, an 11.12 acres of open space within PA3(b), would include a variety of passive and active open spaces, programmed areas and amenities and community-serving commercial uses accessible to nearby residents both on and off site. The 2021 Project includes the provision for pedestrian and bicycle connections within the Project Site that can be linked to nearby public transit routes thereby providing alternate transportation options and contributing to mobility and accessibility to and around the Project Site. The 2021 Project would also provide 711,500 sf of regional commercial floor area as well as 33,800 sf of neighborhood-serving commercial uses within the Carson Country Mart. The commercial uses would provide goods and services to the residents on site and would also serve adjacent neighborhoods. The 2021 Project would provide 1,567,090 sf of light industrial floor area that would be occupied by e-commerce and fulfillment center uses and more-traditional distribution center and parcel hub type uses located in proximity to the regional transportation system, which would serve to provide greater accessibility and a more-efficient transfer of goods/products for residents and consumers within the region as a whole. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in a central area of the County of Los Angeles, rather than in more-remote locations relative to the end users, such as the Inland Empire. Through the combination of uses, the Project Site’s proximity to the I-405 and I-110 Freeways, the ports, the end users, and the provision of infrastructure to accommodate alternate modes of transportation, the 2021 Project would improve mobility and accessibility of people and goods.</p>

**Table IV.A-2
Consistency of the 2021 Project with Applicable Goals of the 2020–2045 RTP/SCS**

Goal	Consistency Analysis of the 2021 Project
3. Enhance the preservation, security, and resilience of the regional transportation system.	Consistent. As discussed above, the mix of uses on the Project Site, the infrastructure components required within the 2021 Specific Plan Amendment (both on and off site), and the proximity of the light industrial uses to the regional system would support the region’s transportation investment, sustainability, and the sustainability of the regional transportation system.
4. Increase person and goods movement and travel choices within the transportation system.	Consistent. The location of the Project Site, in proximity to the I-405 and I-110 Freeways would support an increase in person and goods movement and increase the available travel choices within the transportation system. In addition, the 2021 Project includes provisions for pedestrian and bicycle connections within the Project Site that can be linked to nearby public transit routes, which would increase person and goods movement and travel choices.
5. Reduce greenhouse gas emissions and improve air quality.	Consistent. The 2021 Project, which would be infill development, would develop a mix of uses—residential, commercial, light industrial, and open space—on a former landfill/brownfield site. The Project Site is located in a mixed-use area and in proximity to the I-405 and I-110 Freeways. The light industrial uses would be clustered in an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system given the unique location of such uses directly adjacent to the nearby I-405 and I-110 Freeways. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in a central area of the County of Los Angeles, rather than in more remote locations relative to the end users, such as the Inland Empire. In addition, the provision of regional commercial uses adjacent to the I-405 Freeway also reduces the air emissions from vehicles for people seeking regional commercial activity. The provision of 11.12 acres of open space, which would include a variety of passive and active open spaces, programmed areas and amenities and community-serving commercial uses, would be accessible to nearby residents both on and off site. In addition, the 2021 Project includes the provisions for pedestrian and bicycle connections within the Project Site that can be linked to nearby public transit routes thereby providing alternate transportation options and reducing emissions. The bicycle circulation on the Project Site would contribute to implementation of the city’s Master Plan of Bikeways. Looking to the future, the 2021 Project would include truck parking that is electrovoltaic (EV) ready to accommodate the potential future demand of allowing zero emission trucks to recharge on the Project Site. All of these implementations would minimize GHG emissions. Section IV.H, <i>Greenhouse Gas Emissions</i> , of this 2021 SEIR provides an analysis of GHG emissions.
6. Support healthy and equitable communities.	Consistent. The 2021 Project includes the provision for pedestrian and bicycle transit within the Project Site with connections to the surrounding neighborhood and with nearby public transit routes. In addition, 0.62 acres of Enhanced Parkway would be provided on the north side of Lenardo Drive, just east of Main Street to the west of the light industrial uses on PA3(a). A meandering pedestrian pathway would be provided within the 20- to 50-foot linear park, which would provide a comfortable and safe walking opportunity for residents of PA1. In addition, the 2021 Project includes 11.12 acres of community serving commercial uses within an activated green environment within PA3(b) which would include a variety of passive and active open spaces, programmed areas and amenities including tables and seating areas, botanic garden, children’s play area, bioretention garden, beer garden, games terrace, event lawn and a sculpture garden as well as restrooms, walkways, planted spaces, and planted buffers. This area would provide nearby residents both on and off site the opportunity to spend time outdoors and to walk, thereby promoting a healthier and more active lifestyle. The 2021 Project would provide regional and neighborhood-serving commercial uses, which would be easily accessible to Project residents and residents of the surrounding neighborhoods.

**Table IV.A-2
Consistency of the 2021 Project with Applicable Goals of the 2020–2045 RTP/SCS**

Goal	Consistency Analysis of the 2021 Project
7. Adapt to changing climate and support an integrated regional development pattern and transportation network.	Consistent. As discussed above, the 2021 Project would result in a mixed-use development, including residential, open space, regional and neighborhood-serving commercial uses, and light industrial floor area in proximity to the I-405 and I-110 Freeways. The 2021 Project would provide alternate modes of transportation through the provision of pedestrian and bicycle transit that would be linked to nearby public transit routes. The 2021 Project would support an integrated regional development pattern and transportation network.
8. Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Consistent. This goal pertains to SCAG leveraging new transportation technologies and data-driven solutions that result in more efficient travel. The 2021 Project would not adversely affect SCAG’s ability to develop more efficient travel consistent with this goal. In addition, as indicated above, the 2021 Project would provide alternate modes of transportation through the provision of pedestrian and bicycle opportunities that would link the Project Site with off-site areas, including public transit routes. The 2021 Project would support an integrated transportation network.
9. Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Consistent. The 2021 Project would include up to 1,250 residential units and would add to the diverse housing types in the area in support of this goal. The 2021 Project would include pedestrian, bicycle, and transit routes both through and surrounding the Project Site that would be linked to nearby public transit routes. Four bus stops would be located on Lenardo Drive. Service to the stops would be determined in coordination with the Carson Circuit; Long Beach Transit, the Los Angeles Metropolitan Transit Authority; the Metro Silver Line; Torrance Transit; and the Los Angeles Department of Transportation (Commuter Express). Therefore, the 2021 Project would be connected to the r larger transit network.
10. Promote conservation of natural and agricultural lands and restoration of habitats.	Not Applicable. The Project Site is a former landfill/brownfield site and does not contain agricultural uses or related operations, nor is the Project Site located within a designated riparian habitat or support suitable habitat for candidate, sensitive, or special status species. As such, this goal is not applicable to the 2021 Project.

SOURCE: ESA 2021.

More specifically, the 2021 Project would provide up to 1,250 residential units within PA1, which would contribute much needed housing in the region and would contribute to meeting the city’s RHNA allocation of 5,618 housing units for the sixth RHNA Cycle. In addition, the 2021 Project would provide approximately 11.12 acres of open space area within PA3(b), which would include a variety of passive and active community uses, including programmed areas and amenities and 33,800 sf of commercial uses intended to serve local city residents and to activate the area to draw in visitors to the Project Site. Public access to the Carson Country Mart would be provided by Street A (or Lenardo Drive). The Carson Country Mart would include commercial/retail uses, including a single retail use catered to pets and animals; four restaurants (with drive through capability); food and beverage kiosks; and a cafe adjacent to the dog park. The Carson Country Mart would also include tables and seating areas for people to eat and drink in a social setting and green environment. The Carson Country Mart would provide programmed spaces that also include a performance pavilion, botanic garden, children’s play area, bioretention garden, beer garden, games terrace, event lawn and a sculpture garden as well as

park amenity areas, which include restrooms, walkways, planted spaces, and planted buffers. Pedestrian and bicycle pathways and exercise areas would connect the Carson Country Mart's various programmed open space areas. The bicycle circulation system on the Project Site would provide connections to the surrounding neighborhood consistent with the city's Master Plan of Bikeways. The 2021 Project would include an internal system of pedestrian sidewalks and pathways that would interconnect all portions of the Project Site, providing safe pedestrian access between the uses.

The 711,500 sf of regional commercial uses within PA2 as well as the 33,800 sf of neighborhood commercial uses within PA3(b) would contribute to the mix of uses in the area and would provide a regional destination. In addition, as indicated above, pedestrian access would be provided from the residential units within PA1 to the commercial uses within PA2 and PA3(b). As shown in Figure II-9, PA3(a) would include 0.62 acres of Enhanced Parkway on the south side of Lenardo Drive. A meandering pedestrian pathway would be provided within the 20- to 50-foot-wide linear park, which would provide an outdoor walking opportunity for residents of PA1 within the Project Site.

The 2021 Project would include 1,567,090 sf of light industrial uses within PA3(a), which would provide for distribution uses, including by e-commerce and fulfillment center uses and more traditional distribution center and parcel hub type uses. Despite the new truck intensive uses proposed by the 2021 Project, these uses would be clustered in an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system given the unique location of such uses directly adjacent to the nearby I-405 and I-110 Freeways. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in a central area of the County of Los Angeles, rather than in more remote locations relative to the end users, such as the Inland Empire. As further discussed in Section IV.C, *Transportation*, and Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR, truck trip lengths from the Project Site to the end users are expected to be within 32.5 miles and 40 miles, depending on whether the deliveries are related to the distribution or fulfillment uses. The Project Site's proximity to the I-405 and I-110 Freeways would contribute to the efficient movement of goods since easy and efficient access to markets would be available thereby reducing the overall transportation time, which is critical to a strong economy.

With regard to GHG and air quality, while the light industrial uses proposed by the 2021 Project would result in an increase truck traffic in the surrounding area, the Project Site's location proximate to the I-405 and I-110 Freeways provides easy access to the regional transportation system thereby reducing truck travel on city roadways. The light industrial buildings proposed by the 2021 Project would be clustered and sited within PA3(a) so as to minimize impacts to the nearby residential neighborhoods. Looking to the future, the 2021 Project includes a number of PDFs including 2021 SEIR PDF-O7, which supports reduction of GHG emissions through the provision of EV charging stations beyond the regulatory requirements and a transition to an

electric truck fleet. These PDFs would support technological advancements in the movement of goods so as to minimize environmental and health impacts while allowing continued growth in trade and commerce.

(ii) SCAG's 2016–2040 RTP/SCS

As with the 2020–2045 RTP/SCS, the 2016–2040 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked, and that continued recognition of this close relationship will help the region make choices that sustain existing resources and expand efficiency, mobility, and accessibility for people across the region. The 2016–2040 RTP/SCS draws a connection between where people live and work, and offers a blueprint for how Southern California can grow more sustainably. As with the 2020–2045 RTP/SCS, the 2016–2040 RTP/SCS includes strategies focused on compact infill development and economic growth by building the infrastructure the region needs to promote the smooth flow of goods and easier access to jobs, services, educational facilities, healthcare and more. The goals in the 2016–2040 RTP/SCS are similar in nature, but more general than, the goals in the 2020–2045 RTP/SCS.

As discussed previously, the 2021 Project would put to productive use a brownfield site located in the central area of the city with easy access to the regional transportation system. As with the 2018 Project, the 2021 Project is an infill development within an existing urban setting that provides a continuation of existing and intended development patterns within the city and incorporates features such as residential development in proximity to neighborhood serving commercial uses connected by sidewalks and the Enhanced Parkway, which would include a meandering pedestrian pathway. In addition, the Carson Country Mart, located in PA3(b), would include a variety of passive and active spaces, programmed areas amenities, and community-serving commercial uses intended to serve local city residents and visitors and to activate and enliven the overall area. In addition, the 2021 Project would provide a system of roads, bike paths, and sidewalks that would physically connect the Project Site, both internally (between PA1, PA2, PA3(a), and PA3(b)) and externally (with the neighboring community). Despite the new truck intensive uses proposed by the 2021 Project, these uses would be clustered in an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system given the unique location of such uses directly adjacent to the nearby I-405 and I-110 Freeways. In addition, the Project Site is located in proximity to the Port of Los Angeles and the Port of Long Beach, and is also located in in a central area of the County of Los Angeles, rather than in more remote locations relative to the end users, such as the Inland Empire. In addition, the regional commercial uses in PA2, which is adjacent to the I-405 Freeway, would also reduce the air emissions from vehicles for people seeking regional commercial activity.

Table IV.A-2 provides a detailed consistency analysis of the 2021 Project relative to the 2020–2045 RTP/SCS. Because the goals of the 2016–2040 RTP/SCS are similar to those of the 2020–2045 RTP/SCS, the 2021 Project would also be consistent with the 2016–2040 RTP/SCS.

IV.A.6 Mitigation Measures

As with the 2006 FEIR and the 2018 SEIR, no mitigation measures related to land use and planning are necessary.

IV.A.7 Cumulative Impacts

Since the 2018 SEIR, the cumulative projects list has changed due to new proposed development in the surrounding area. Thus instead of the 27 cumulative project analyzed under the 2018 SEIR, there are now 44 cumulative projects in the vicinity of the Project Site, with a range of uses including but not limited to residential, commercial, hospital, and industrial uses. Of these, a total of 30 new cumulative projects have been added to the 2021 SEIR cumulative project list as compared to the 2018 SEIR cumulative project list and 13 cumulative projects from the 2018 SEIR were not included in the 2021 SEIR cumulative project list as the had either completed construction or the applications were withdrawn or no new applications were filed.

The 2021 Project would put to productive use a contaminated, former landfill/brownfield site through site remediation consistent with the approved RAP and under the oversight of DTSC. The 2021 Project is an infill development within an existing urban setting that provides a continuation of existing and intended development patterns within the city. The cumulative projects also reflect infill development within the larger, built-out City of Carson and adjacent County of Los Angeles area. As such, the cumulative projects would not comprise a major change in the land use patterns within the city or region. Similar to the 2021 Project, the cumulative projects would be developed within areas of the city and region intended for residential, mixed-use, commercial, and industrial uses as designated in the applicable General Plans and zoning maps. The city as a whole, and the general region within which the 2021 Project is located is urban and developed, and the cumulative projects would be built on already developed parcels or infill sites. Therefore, the 2021 Project in conjunction with the cumulative projects would not physically divide an established community.

With regard to consistency with the city’s land use plans, similar to the 2021 Project, the identified cumulative projects would be subject to compliance with applicable city and/or county regulations and subject to review by the applicable jurisdictions for compliance with the General Plan and the city’s zoning regulations and/or county land use regulatory requirements. It is reasonable to assume that future projects approved in the surrounding area would have been found, as part of their respective approval processes, to be in compliance with local and regional planning goals and policies. If a cumulative project were found to be in conflict with applicable land use plans, policies and regulations, it is reasonable to assume that its approval would

involve findings that the related development did not have adverse land use impacts or that mitigation measures were incorporated into the development to reduce potential land use impacts to less-than-significant levels.

As described above, the 2021 Project would not conflict with applicable land use policies, plans, and regulations. Therefore, the 2021 Project would not contribute to a cumulative effect of multiple projects having adverse effects on the environment due to their incompatibility with regulatory requirements related to land use. No new cumulative impacts related to compatibility with land use plans, policies, and regulations would occur and impacts would be less than significant. As such, the 2021 Project would not result in any new significant cumulative impacts as compared to the 2018 Project.

IV.A.8 Level of Significance after Mitigation

With respect to land use and planning, implementation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. All impacts related to land use and planning would remain less than significant without mitigation, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

IV.B AESTHETICS⁵⁶

IV.B.1 Introduction

This section evaluates the potential impacts of the 2021 Project compared to the 2018 Project regarding aesthetics, views, shade/shadow, and lighting. The analysis of lighting from proposed signage is based on a Supplemental Sign and Building Lighting Study Memorandum (refer to herein as the Supplemental Lighting Study) prepared by Francis Krahe & Associates, Inc., which is provided in **Appendix B1, Supplemental Lighting Study**, of this 2021 SEIR.⁵⁷ In addition, a shade/shadow analysis has been prepared by ESA to address potential shading that would occur as a result of the 2021 Project compared with the 2018 Project. The supplemental technical work is provided in **Appendix B2, Shade/Shadow Figures**, of this 2021 SEIR.

IV.B.2 Existing Conditions

The Project Site is a former landfill/brownfield site located within an urbanized area. Recent photographs (2020) of the Project Site are provided in **Figure IV.B-1, Viewpoint Location Map**, through **Figure IV.B-5, Viewpoints 13 through 16**, which are consistent with the viewpoints used in the 2018 SEIR. The updated views from these locations remain substantially similar to views depicted in the 2018 SEIR. However, the Evolve South Bay apartment complex developed in Development District 3 (DD3),⁵⁸ which can be seen under construction in Viewpoints 2, 4, 5, and 6, is now complete. In addition, the 157-Acre Site has been subject to remediation activities, including the creation of crushed concrete piles, detention and retention ponds, a groundwater treatment plant, and a gas plant extraction facility. No changes to views have occurred from the San Diego Freeway (Interstate 405 [I-405] Freeway) in Viewpoints 10 through 12, or along Main Street in Viewpoints 14 and 15 since 2018. The Porsche Driving Experience was developed in 2016 and remains to the north of DD3 (Viewpoint 16).

⁵⁶ Referred to as “Visual Resources” in the 2018 SEIR.

⁵⁷ The Supplemental Lighting Study is based on the Lighting Study prepared for the 2018 SEIR, which was provided in Appendix C of the 2018 SEIR and can be found at: https://ci.carson.ca.us/content/files/pdfs/planning/theDistrict/AppC_DistrictatSouthBayLightingStudy_128pp.pdf.

⁵⁸ The Evolve South Bay apartment complex is the 300-unit residential development located in DD3, which was recently completed. This development was considered as a Cumulative project in the 2018 SEIR; although the development is complete, it is also considered as Cumulative Project No. 27 in this 2021 SEIR.



The District at South Bay Specific Plan Amendment

Figure IV.B-1
Viewpoint Location Map



SOURCE: ESA, 2020

The District at South Bay Specific Plan Amendment

Figure II.B.2-2
Viewpoints 1 through 4



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SOURCE: ESA, 2020

The District at South Bay Specific Plan Amendment

Figure II.B.2-3
Viewpoints 5 through 8



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SOURCE: ESA, 2020

The District at South Bay Specific Plan Amendment

Figure II.B.2-4
Viewpoints 9 through 12



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SOURCE: ESA, 2020

The District at South Bay Specific Plan Amendment

Figure II.B.2-5
Viewpoints 13 through 16



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a. Aesthetic Character

The 157-Acre Site historically was used as a landfill between 1959 and 1965, prior to the incorporation of the City of Carson, for the disposal of waste from areas throughout Los Angeles County. Initial remediation of the landfill site commenced in 2009, which involved the installation of various features associated with the groundwater extraction and treatment system (GETS), the landfill gas collection and control system (LGCCS), and construction of a slab for the future LOC. Additional remediation work began on Cell 2 (PA2) in October 2018, but was halted in October 2019, and there are currently no remedial activities underway; however, the 157-Acre Site is subject to ongoing operation and maintenance activities in accordance with the Remedial Action Plan (RAP).

The Project Site currently contains an approximately one-acre lot (the “utility lot”) between proposed Buildings D and F in PA3(a) (refer to **Figure II-2**), adjacent to the Torrance Lateral Flood Control Channel (Torrance Lateral). The utility lot is not a part of the 2021 Project as it will continue to be owned and operated by the CRA after implementation of the 2021 Project. The utility lot contains the LGCCS, the GETS, and a slab for the future landfill operating center (LOC). The GETS, LGCCS, and LOC were previously analyzed in 2006 FEIR, 2009 Addendum to the 2006 FEIR, and/or the 2018 SEIR.

The LGCCS collects landfill gas (LFG) and treats it by combustion (“flaring”), with the condensate routed to the groundwater treatment facility. The LGCCS consists of horizontal collectors, vertical wells, vaults, sumps, and lateral piping associated with installed wells. The GETS is an active groundwater extraction and treatment system (GETS) designed contain the groundwater plume and treat the extracted groundwater prior to discharge. The GETS consists of a network of groundwater extraction wells, which are pumped to collect and control groundwater in and beneath the waste zone.

The GETS and LGCCS, including the flare stacks associated with the LGCCS, are fully constructed and operational. In addition, a slab for the future LOC has been constructed. However, because there are more wells and piping to install, as well as the LOC building itself, the system itself is considered only partially constructed.⁵⁹ The additional wells and piping, the LOC, and all future remediation activities in PA3 will be completed by the Developer in accordance with the terms of the RAP and in coordination with the CRA.

In addition, there are soil, refuse, and material stockpiles and construction materials stored in various locations throughout the Project Site, as well as retention ponds. Generally, the Project Site is elevated above existing grades at the edges and slopes inward. Aside from these features,

⁵⁹ *In this 2021 SEIR, when the GETS, LGCCS, and/or LOC are mentioned, it is assumed that not all of the wells have been installed nor has the LOC building itself. When constructed, the LOC building would provide offices, system controls, and storage space.*

the Project Site is predominantly bare soil and non-native common weeds and annual grasses. As indicated in the 2018 SEIR, the Project Site does not contain unique, natural resources or other features that would be considered aesthetic resources.

As described in the 2018 SEIR, residential neighborhoods consisting of one- and two-story single-family residential units and mobile home parks are located to the south and west of the Project Site, respectively. The approximately 75-foot-wide Torrance Lateral, a concrete-lined drainage channel, parallels the southern and western border of the Project Site. The eastern edge of the Project Site faces the I-405 Freeway, and beyond that the Dominguez Channel, a large flood control facility. The Victoria Golf Course, which provides visual open space, is also located to the east. The western boundary of the Project Site fronts on Main Street, with off-site uses of light industrial interspersed with vacant area, a commercial landscape nursery, and residential uses. The Project Site is bounded by Del Amo Boulevard to the north. As noted above, the Evolve South Bay apartment complex on DD3 was completed in 2020, beyond which is an open space/utility corridor with a commercial landscape nursery, grassy area, and utility lines. The Porsche Driving Experience is located further to the north. The overall aesthetic character of the area is that of a developed, urban/suburban environment with a mix of uses, including residential, commercial, and industrial uses as well as regional destinations, such as the Porsche Experience Center and the Victoria Golf Course.

b. Views

As described in the 2018 SEIR, the view-scape in the Project area is that of an urban environment characterized by an array of interspersed developments, open spaces, and infrastructure improvements. The Project Site lies in a large basin with little vertical differentiation that might provide scenic quality (e.g., hillside areas). The nearest notable geologic feature, the Palos Verdes Peninsula is located approximately 5 miles southwest of the Project Site. More distant features that define the basin are located at some distance. The San Gabriel Mountains are located approximately 25 miles to the northeast, and the Santa Ana Mountains are approximately 25 miles to the east. The Project vicinity does not contain notable features that would typically fall under the heading of view resources, e.g., unique geologic features, natural areas, etc. or contribute to scenic quality. However, there are notable features that might catch the eye of individuals travelling through the area. The Goodyear Wingfoot Two, a rigid-frame blimp, is located on the north side of the I-405 Freeway in the vicinity of the Project Site. Also, there is a large fiberglass statue of a man holding motorsport flag advertising the Porsche Driving Experience on the south side of the I-405 Freeway. This statue may be a recognizable visual feature for some travelers through the area, and it is an example of roadside mimetic (or mimic) architecture, in which a building or feature mimics the purpose or function of a building or its use and was popular as a form of advertising in the first-half of the 20th century when cars became more widespread.

The Project Site is visible to travelers along roadways that surround the Project Site: the I-405 Freeway, which is located along the eastern edge of the Project Site; Del Amo Boulevard, which is an east/west thoroughfare along the northern portion of the Project Site; and Main Street, a north/south thoroughfare. In addition, the Torrance Lateral defines the southern and western edge of the Project Site. The surrounding roadways are not designated as scenic. View changes that have occurred along these public roadways since the 2018 SEIR include the residential development in DD3 on the north side of Del Amo Boulevard, as well as changes on-site associated with remediation. The on-site remediation facilities, including the creation of crushed concrete piles, detention and retention ponds, the groundwater treatment plant, and gas plant extraction facility, are visible from off-site locations.

As was analyzed in the 2018 SEIR, the Project Site is visible from the residential neighborhoods located to the south and west of the Project Site as well as the 300-unit newly constructed Evolve at South Bay apartment complex located to the north of the Project Site. There are single-family, multifamily, and mobile homes within these neighborhoods. Distant views are also available from the Porsche Driving Experience north of DD3. Views from these and other private locations generally have not changed since the 2018 SEIR was prepared.

IV.B.3 Regulatory Framework

a. State

(1) California Code of Regulations, Title 24

Title 24 of the California Code of Regulations (CCR), also known as the California Building Standards Code, consists of regulations to control building standards throughout the State. The following components of Title 24 include standards related to lighting:

The California Building Code (Title 24, Part 1) and California Electrical Code (Title 24, Part 3) stipulate minimum light intensities for safety and security at pedestrian pathways, circulation ways, and paths of egress. All exterior lighting will comply with the requirements of the California Building Code and California Electrical Code.

The California Energy Code (CEC) (Title 24, Part 6) stipulates allowances for lighting power and provides lighting control requirements for various lighting systems (in CALGreen 2019 and Building Energy Efficiency Standards),⁶⁰ with the aim of reducing energy consumption through efficient and effective use of lighting equipment.

⁶⁰ *California Energy Commission, 2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings for the 2019 Building Efficiency Standards, <https://www.energy.ca.gov/publications/2008/2019-building-energy-efficiency-standards-residential-and-nonresidential>, accessed August 19, 2021.*

The California Green Building Standards Code, which is Part 11 of Title 24, is commonly referred to as the CALGreen Code. Section 5.106.8, Light pollution reduction, requires that all non-residential outdoor lighting must comply with the following:

- The minimum requirements in the CEC for Lighting Zones 0–4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
- Backlight (B) ratings as defined in the Illuminating Engineering Society of North America’s Technical Memorandum 15-11; and
- Uplight and Glare ratings as defined in California Energy Code; and
- Allowable BUG ratings not exceeding those shown in Table 5.106.8 [N] in Section 5.106.8⁶¹ of the CALGreen Code; or
- Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

(2) Caltrans

The Project Site is directly adjacent to the I-405 Freeway, which is a Caltrans facility, and the internal Project roadways would connect to the freeway ramp on Avalon Boulevard. Because of the adjacency to the I-405 Freeway, the 2021 Project would be expected to consider Caltrans Guidelines at locations where it would have aesthetic impacts on a Caltrans facility and effects on driver safety. The Highway Design Manual provides guidelines for Caltrans projects and generally addresses landscaping, grading, and signage considerations. For lighting effects on driver safety, the applicable regulation is California Vehicle Code, Division 11. Rules of the Road. California Vehicle Code Chapter 2, Article 3, stipulates limits to the maximum luminance within the driver’s field of view that may cause glare and impair the vision of drivers.⁶²

⁶¹ https://calgreenenergyservices.com/wp/wp-content/uploads/2019_california_green_code.pdf, accessed August 16, 2021. Table 5.106.8 [N], Footnote 2, defines the location of the property line for the purpose of evaluating compliance with the BUG ratings and provides that: “For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.”

⁶² 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 1½-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

In addition, the California Scenic Highway Program was created by the Legislature in 1963 for the purpose of preserving and protecting scenic highway corridors from change that would diminish the aesthetic values of land adjacent to highways. A scenic corridor is the land generally adjacent to and visible from the highway and is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon. Caltrans does not list I-405 Freeway as a scenic highway and there are no designated scenic highways in the Project vicinity.⁶³

b. Local

(1) General Plan of the City of Carson

The Carson General Plan, which was adopted in 2004, includes guidelines pertaining to the design of the physical environment in the Land Use and Open Space and Conservation Elements. The City is currently in the process of comprehensively updating its General Plan to respond to changing needs and conditions in the City and region, and to reflect new state laws. The process was initiated in 2017 and is currently expected to conclude following further community input and environmental review with adoption of the updated General Plan anticipated in early 2022.⁶⁴ Since the General Plan Update (GPU) is not yet adopted, the analysis in this 2021 SEIR compares the 2021 Project to the current Carson General Plan. Carson's General Plan's guidelines related to aesthetics have not changed since the 2018 SEIR, and the 2018 SEIR analysis remains fully relevant. Refer to the detailed discussion regarding consistency with land use and the City's General Plan in Section IV.A, *Land Use and Planning*, of this 2021 SEIR.

(2) City of Carson Municipal Code

The City of Carson Municipal Code Section 9162.53, Lighting, provides general guidance for lighting of off-street parking areas and requires that lighting be directed away from nearby residential properties and streets so as not to create a nuisance or hazards. Light trespass from signs in particular can be guided/reduced by illuminance limits. Since the City's Municipal Code does not include specific limits to light trespass illuminance, the City of Carson adopts the California Building Code and the California Energy Code, which address light trespass.

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."

⁶³ California Department of Transportation (Caltrans), *Scenic Highways*, <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed June 2021.

⁶⁴ City of Carson, *Carson2040, Reports and Products*, <https://www.carson2040.com/reports-and-products>, accessed June 2021.

IV.B.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to aesthetics are considered significant if the 2021 Project would:

- Have a substantial adverse effect on a scenic vista? (Evaluated in Chapter VI, *Effects Found Not to Be Significant.*)
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? (Evaluated in Chapter VI, *Effects Found Not to Be Significant.*)
- 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?
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

More specifically with regard to lighting, the 2021 Project would have a significant impact if the 2021 Project would:

- Substantially alter the character of off-site areas surrounding the Project Site.
- Interfere with the performance of an off-site activity.

In addition, these thresholds are supplemented with regard to lighting from proposed signage (14 California Code of Regulations Sections 15000–15387) taking 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 properties.

Criteria used to assess whether the 2021 Project would exceed the thresholds identified above and, thereby, create a significant impact with regard to artificial light or glare if the 2021 Project would:

- Exceed 0.74 foot-candle at the property line of a residential zoned property⁶⁵
- Create new high-contrast conditions visible from a field of view from a residentially zoned property
- 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 10 foot-lamberts (fL) or less, the measured brightness of the light source in foot-lamberts shall not exceed 500 plus 100 times the angle, in degrees, between the driver's field of view and the light source.

⁶⁵ CALGreen lighting standards

Impacts with regard to shade/shadow are considered significant if the 2021 Project would:

- Result in shadows on shadow-sensitive uses from structures on a site for more than 3 hours between the hours of 9:00 a.m. and 3:00 p.m., between late October and early April, or more than 4 hours between the hours of 9:00 a.m. and 5:00 p.m. between April and late October.

IV.B.5 Project Impacts

a. Methodology

The purpose of this 2021 SEIR is to identify any changes in the existing aesthetics in the area as well as any changes in the regulatory environment relative to aesthetics. In addition, the purpose is to evaluate the changes considered in the 2021 Project relative to the 2018 Project and to analyze the potential environmental effects of the proposed changes. The methodology employed herein is to comparatively analyze the 2021 Project to the 2018 Project to understand the revisions to the proposed development within PA3⁶⁶ that would affect aesthetics within the Project vicinity. In addition, the methodology previously used was analyzed to determine the relevance under current circumstances.

In 2018, the Natural Resources Agency adopted a substantially revised version of Appendix G, which was approved by the Office of Administrative Law and filed with the Secretary of State on December 28, 2018. The thresholds for aesthetics, which are presented above are different than those used in the 2018 SEIR. The applicable threshold for the 2021 Project, which is in an urbanized area, is to determine whether the 2021 Project would conflict with applicable zoning and other regulations governing scenic quality. As indicated above, there are no roadways that are designated scenic and no designated scenic resources or landscapes within proximity of the Project Site.

However, since the purpose of the 2021 Specific Plan Amendment is to provide development standards and guidelines for the future development of the Project Site, those standards create the regulatory framework by which the future visual character is created. Thus, while the thresholds have changed, the underlying methodology of assessing visual resource impacts through the standards and guidelines provided in a Specific Plan (now, the 2021 Specific Plan Amendment) continues to be relevant and is used in this 2021 SEIR. The existing conditions and regulatory framework have been updated as discussed above.

With regard to glare and lighting, a revised signage and lighting analysis has been prepared by Francis Krahe & Associates Inc. (i.e., the Supplemental Lighting Study referenced above) and is provided in Appendix B1 of this 2021 SEIR. Glare occurs when either the luminance is too high or the range of brightness in a visual field is too large. Glare is evaluated by measuring the

⁶⁶ Where PA3 is referenced, it is assumed to refer to both PA3(a) and PA3(b).

luminance (foot-lamberts or metric units candelas/m²) at the source of light, such as a digital display, in comparison to the surrounding adjacent luminance. Light trespass is the light that falls on a property but originates on an adjacent property. Light trespass is measured in terms of illuminance (foot-candles or metric units lux), and can be measured at any point and in any direction. Where light trespass is evaluated the illuminance is measured perpendicular to the source of light, toward the source of light, at the property line, or the location where light could cause an issue.⁶⁷ The Supplemental Lighting Study evaluates the proposed change to (i) the pylon signage proposed upon the Embankment Lot,⁶⁸ which includes revisions to the freeway billboard location, dimensions, and luminance levels; (ii) the proposed changes in signage within PA3. The Supplemental Lighting Study does not include an analysis of light trespass illuminance from future Wall Mounted Project ID Sign Lighting in PA3(b) because sign types and locations in PA3(b) are speculative at this time.

In addition, based on the changes to the site plan for PA3 a new shade/shadow analysis has been prepared by ESA. The supplemental shade/shadow technical work is provided in Appendix B2 of this 2021 SEIR.

Consistent with the 2006 FEIR and the 2018 SEIR, potential lighting and shade/shadow impacts are evaluated with respect to adjacent sensitive uses, including the residences to the south and west of the Project Site and the Evolve at South Bay apartment complex, which has been developed since preparation of the 2018 SEIR and is located on DD3 to the north of Del Amo Boulevard.

b. Project Characteristics and Project Design Features

(1) Project Characteristics

Project Characteristics include development standards and design features that are incorporated into the 2021 Project through Chapter II, *2021 Project Description*, of this 2021 SEIR, and/or the 2021 Specific Plan Amendment. As with the 2018 Specific Plan, the 2021 Specific Plan Amendment will establish development standards and design guidelines for development of the Project Site. The 2021 Specific Plan Amendment addresses the land use/project development changes that are proposed for PA3, which constitutes 96 acres of the 157-Acre Site. There are no proposed changes relative to the permitted uses, development standards, or design guidelines that were previously included in the 2018 Specific Plan related to PA1 and PA2.

⁶⁷ *Illuminating Engineering Society Handbook, 10th Edition, 19.3: Light Pollution and Trespass, p. 19.7.*

⁶⁸ *The Embankment Lot within PA2 is comprised of a 5-acre strip of land, along the I-405 Freeway between the Freeway and the commercial uses on PA2. The CRA is the owner of the Embankment Lot and, thus, the CRA shall retain all rights to development of any signage upon the Embankment Lot unless otherwise granted to developers of the Project Site pursuant to a Development Agreement approved by the City.*

The 2021 Specific Plan Amendment creates two subareas within PA3: PA3(a) and PA3(b). The 2021 Specific Plan Amendment will result in a change in use from commercial to light industrial uses within PA3(a), as well as a 0.62-acre Enhanced Parkway, and the inclusion of the Carson Country Mart within PA3(b), which would encompass approximately 11.12 acres. The Carson Country Mart would include a variety of passive and active open space uses, programmed area amenities, and community-serving commercial uses intended to serve local City residents and to activate the area harmoniously with the proposed development on PA2. The 2021 Specific Plan Amendment provides for regulations regarding site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage; lighting; service, trash, and utility areas; artwork; noise; and energy conservation. Thus, as with the 2018 Specific Plan, the 2021 Specific Plan Amendment will address Project Characteristics that provide guidelines for aesthetic elements. The following features were considered elemental to the evaluation of aesthetics impacts:

- Buildings/Uses:** The light industrial buildings would be distributed over approximately 74 acres of PA3(a) and commercial/retail and restaurant uses would be provided on PA3(b) within the 11.12-acre Carson Country Mart. The 2021 Project would allow building heights of between 50 feet and a maximum of 55 feet, with additional architectural features extending the height to between 56 and 65 feet for the light industrial uses and between 25 feet and 30 feet for the commercial/retail and restaurant uses with exceedances permitted for architectural features and/or mechanical equipment. In addition, in conformance with the 2021 Specific Plan Amendment, buildings would be developed in simple geometric shapes with visual interest incorporated through variation in color and materials within PA3. Buildings developed within PA3 must be designed using durable and high-quality materials.

Privately Maintained and Publicly Accessible Open Space: The Carson Country Mart, located in PA3(b), would provide 11.12 acres of privately maintained, publicly accessible community-serving commercial use area that would include a variety of passive and active spaces, programmed areas and amenities intended to serve local City residents and to activate the area. The Carson Country Mart's 273,906 sf (6.29 acres) of total active and passive spaces are proposed to include: a 6,365 sf arrival plaza, 26,265 sf food and beverage plaza area, 22,740 sf dog park, 3,343 sf performance pavilion, 19,400 sf botanic garden, 25,400 sf children's play area, 19,490 sf bioretention garden, 1,800 sf beer garden, 2,990 sf games terrace, 35,210 sf event lawn, 2,975 sf sculpture garden, 4,425 sf water feature and iconic element, planted open spaces and buffers, and 570 sf arrival area to serve a potential pedestrian community bridge proposed as a component of the potential future project located at 21207 South Avalon Boulevard. In addition, this area also includes 1.17 acres of planted open spaces and 1.2 acres of planted buffer areas on west and south sides of the Carson Country Mart.

- Signage:** As with the 2018 Project, the 2021 Project would provide a hierarchy of signs, including freeway pylon signs, entry monument signs, project name identification signage, wall signs, and wall-mounted billboard signs as indicated in **Table IV.B-1, Sign**

Standards. The 2021 Project proposes revisions to the freeway pylon signs and also provides a building (or wall-mounted) signage plan for PA3. No revisions are proposed for building signage in PA1 or PA2.⁶⁹ Consistent with the 2018 Specific Plan, wall-mounted signs and billboards, ranging in height from 6 feet to 30 feet, may be mounted on walls or roofs of the PA2 project development. In addition, entry signage, project name identification signage, and wall signs would be allowed as indicated in Table IV.B-1.

With regard to the freeway pylon signs, the 2018 Specific Plan included two options, Options A and B, with four freeway pylon signs in Option A and three freeway pylon signs in Option B. The location of three signs under both Option A and Option B are the same, however, Option B removes one of the two signs in the southeast of the Project Site. The 2021 Project proposes a new freeway pylon signage program under the 2021 Specific Plan Amendment, which is referred to as Option C. Option C would allow four freeway pylon signs, the same number as Option A, although the proposed locations along the I-405 Freeway frontage and dimensions would be modified. **Figure IV.B-6, Conceptual Sign Locations – Option A; Figure IV.B-7, Conceptual Sign Locations – Option B; and Figure IV.B-8, Conceptual Sign Locations – Option C**, show the conceptual sign locations under each of the options (A, B, and C) provided in the 2021 Specific Plan Amendment.

As allowed by the standards listed in Table IV.B-1, all pylon signs under Options A, B, or C would be 88 feet in height above grade and would be limited to the widths described. Under Option C, the size of the digital display face would be no greater than that currently allowed by law, which is limited to 20 feet in height by 60 feet in width and may be surrounded by an architectural frame that could add up to 10 feet to the outer dimension, thereby totaling 30 feet by 70 feet. Two of the signs would be double faced, static digital display with changeable message display and color changing illumination, and the other two signs would be double faced, static digital display with changeable message display and color changing illumination. The digital display would rotate messages at the maximum allowed by the California Outdoor Advertising Act. The pylon structures would contain up to six double-sided tenant signs each measuring 6 feet by 20 feet. Off-site advertising for such pylon signs would be allowed subject to obtaining the required approvals.

⁶⁹ *A Comprehensive Sign Program for PA2 was approved by the City Council on April 3, 2018 (Resolution No. 18-042).*

**Table IV.B-1
Sign Standards**

Sign Type ^a	Maximum Number	Maximum Sign Dimensions		Notes	Nighttime Luminance ^b	
		Height	Width		Digital	Static
Freeway Icon Pylon: (Options A and B) ^{c,d,e} Double Faced LED, Digital Display and Changeable Message	1	88 feet	65 feet	The supporting pylon width will be 10 to 25 feet. The 20-foot-high and 60-foot-long LED digital display board with Changeable Message Display and Color Changing Illumination will be attached to sign panels or a sign frame that will be a maximum of 25 feet high and 62 feet wide. The top of the reader board will be located no higher than 88 feet above measured I-405 Freeway elevation. Height is measured from the elevation of I-405 Freeway immediately adjacent to the sign location. Off-site advertising would be permitted subject to obtaining necessary approvals.	500 cd/m ²	—
Freeway Icon Pylon (Options A and B) ^{c,d,e} Static or Double Faced LED, Digital Display and Changeable Message	1	88 feet	48 feet	The base width will be 10 feet to 25 feet. If the base is greater than 15 feet, the sign will taper up to 15 feet at top. The sign face will be 14 feet by 48 feet LED digital or static billboard display attached to the pylon. Height is measured from the elevation of the I-405 Freeway immediately adjacent to the sign location. Off-site advertising would be permitted subject to obtaining necessary approvals.	500 cd/m ²	500 cd/m ²
Option A (Additional 2 signs, for a total of 4 signs)						
Freeway Icon Pylon: ^{c,d,e} Static	2	88 feet	25 feet	The base width will be 10–25 feet. If the base is greater than 15 feet, the sign will taper up to 15 feet at top. Up to 6 double-sided tenant signs. Tenant signs may be 6 feet by 20 feet each. PA3 Center ID may be placed on pylon. Height is measured from the elevation of I-405 Freeway immediately adjacent to the sign location.	—	500 cd/m ²

**Table IV.B-1
Sign Standards**

Sign Type ^a	Maximum Number	Maximum Sign Dimensions		Notes	Nighttime Luminance ^b	
		Height	Width		Digital	Static
Option B (Additional 1 sign, for a total of 3 signs)						
Freeway Icon Pylon: ^{c,d,e} Static or Double Faced LED, Digital Display and Changeable Message Allowed	1	88 feet	48 feet	The base width will be 10 feet to 25 feet. If the base is greater than 15 feet, the sign will taper up to 15 feet at top. The sign face will be 14 feet by 48 feet LED digital or static billboard display attached to the pylon. Height is measured from the elevation of the I-405 Freeway immediately adjacent to the sign location.	500 cd/m ²	500 cd/m ²
Option C (Total of 4 signs)						
Freeway Icon Pylon: ^{c,d,e} Double Faced LED, Digital Display and Changeable Message	2	88 feet (above grade)	70 feet	The supporting pylon width would be 10 to 25 feet. The size of the digital display would comply with applicable State law (currently 20 feet high and 60 feet long). The 20-foot-high x 60-foot-long LED digital display board with changeable message display and color changing illumination may be surrounded by an architectural frame no more than 10 feet to the outer dimensions of the 20-foot x 60-foot LED display face. Off-site advertising would be permitted subject to obtaining necessary approvals. Signage would rotate messages at maximum allowed by the Outdoor Advertising Act. The digital display pylon structure may contain up to six double-sided tenant signs, each 6 feet x 20 feet.	500 cd/m ²	—

**Table IV.B-1
Sign Standards**

Sign Type ^a	Maximum Number	Maximum Sign Dimensions		Notes	Nighttime Luminance ^b	
		Height	Width		Digital	Static
Freeway Icon Pylon: ^{c,d,e} Double Faced LED, Static, Digital Display and Changeable Message	2	88 feet (above grade)	70 feet	The supporting pylon width would be 10 to 25 feet. The size of the static digital display would comply with applicable State law (currently 20 feet high and 60 feet long). The 20-foot-high x 60-foot-long LED static digital display board with changeable message display and color changing illumination may be surrounded by an architectural frame no more than 10 feet to the outer dimensions of the 20-foot x 60-foot LED display face. Off-site advertising would be permitted subject to obtaining necessary approvals. Signage would rotate messages at maximum allowed by the Outdoor Advertising Act. The speed of rotation of static digital displays is slowed to comply with State law. The static digital display pylon structure may contain up to six double-sided tenant signs, each 6 feet x 20 feet.	—	500 cd/m ²
Project Name ID	4 – PA2	15 feet	45 feet	The design, size, and location of the sign shall be guided by approved 2018 Comprehensive Sign Program for PA2. ^b	—	500 cd/m ²
Project Name ID	3 – PA1 and PA3	15 feet	45 feet	The design, size, and location of the sign shall be determined by the Developer/Applicant(s) in the comprehensive sign program at a later date.	—	500 cd/m ²
Entry Monument	Up to 3 permitted — 1 at Lenardo Drive & Main St, 1 at Del Amo Blvd & Stamps Drive, and 1 at Lenardo Drive & Avalon Blvd	38 feet	15 feet	The entry monuments are to provide identity signage for the Specific Plan as a whole and for the developments on each Planning Area. The design, size, and location of the signs shall be determined by the City in one or more Comprehensive Sign Programs submitted by an Applicant at a later date.	—	500 cd/m ²
North Del Amo Entry Element	2 – DD3	8 feet	12 feet	If the signage serves residential development, the sign dimensions shall be no greater than 6 feet high by 8 feet wide. Height is measured from the finished pad.	—	500 cd/m ²

**Table IV.B-1
Sign Standards**

Sign Type ^a	Maximum Number	Maximum Sign Dimensions		Notes	Nighttime Luminance ^b	
		Height	Width		Digital	Static
Parking Garage Signage and Commercial – Elevated Podium Wall Signage	Multiple – PA2	30 feet	300 feet	The multiple letter and graphic signs for tenant names, and static billboard display shall be allowed on parking garage and commercial – elevated podium wall area facing Freeway, Lenardo Drive, and site parking fields with 60 percent maximum wall coverage.	—	500 cd/m ²
Wall-Mounted Project ID Exterior ^{f,g}	2 – PA2	12 feet	330 feet	Individual illuminated sign letters located on building walls.	—	500 cd/m ²
	2 – PA2	8 feet	230 feet			
	7 – PA3(a)	5 feet	8 feet			
	Multiple – PA3(b)	TBD	TBD			
Plaza Project ID Exterior (Entry SW and NW corners)	2 – PA2	10 feet	12 or 24 feet	Individual illuminated sign letters. 2 to 4 letters each location at grade level exterior plaza.	—	500 cd/m ²
Wall Billboard Exterior	4 – PA2	20 feet	60 feet	Static billboards with external front illumination. Billboards allowed to extend above top of building wall. Billboards allowed to convert to digital LED display board in the future. No off-site advertising permitted.	500 cd/m ²	500 cd/m ²
Wall Billboard Exterior	2 – PA2	14 feet	48 feet	Static billboards with external front illumination. Billboards allowed to extend above top of building wall. No off-site advertising permitted.	—	500 cd/m ²
Roof Billboard Interior	8 – PA2	10 feet	34 feet	Static billboards with external front illumination. Billboards located on roof above top of building wall. No off-site advertising permitted.	—	500 cd/m ²
Wall Billboard Interior	1 – PA2	14 feet	48 feet	Static billboard with external front illumination. Billboard allowed to convert to digital LED display board in the future. No off-site advertising permitted.	500 cd/m ²	500 cd/m ²

**Table IV.B-1
Sign Standards**

Sign Type ^a	Maximum Number	Maximum Sign Dimensions		Notes	Nighttime Luminance ^b	
		Height	Width		Digital	Static
Integrated Identity Architectural Wall Graphic ^h	6 – PA2	(2) 27 feet	330 feet	Painted Specific Plan ID Name integrated into architectural wall vertical fin design	—	—
		(1) 24 feet	265 feet			
		(1) 24 feet	235 feet			
		(1) 24 feet	220 feet			
		(1) 24 feet	105 feet			

NOTES:

cd/m² = candelas per square meter

A Comprehensive Sign Program was approved for PA2 on April 3, 2018, by City of Carson City Council Resolution No. 18-042 in association with certification of the 2018 SEIR.

The number, area, type and location of wall mounted business ID signs for Planning Areas 1 and 3 shall be determined through the approval of a comprehensive sign program and/or, if applicable, a Master Sign Program. As described in the 2021 Specific Plan Amendment, an increase in sign area and/or number of signs of not more than 10 percent and other than pylon signs, a relocation of sign location or an increase in sign height of not more than 10 percent is allowed with an Administrative Permit.

Except where noted for Freeway Icon Pylons set forth above, no off-site advertising shall be permitted.

^a *All free-standing signs may be double-sided. All digital LED signs may have color changing illumination.*

^b *Prior to approval of any Development Plan or comprehensive sign program, a view analysis shall be conducted by sign owners and/or the CRA/City to determine the exact location of the freestanding freeway-oriented signs (i.e., pylon signs) to ensure maximum visibility and maximum usability of all these signs. The view analysis shall be submitted as part of an application package for City review and approval. Every effort shall be made to preserve the visibility of the freeway-oriented wall mounted signs for PA2.*

^c *The Community Development Director (or a designee) shall also have the authority to select Option A, Option B, or Option C for the Freeway Icon Pylon Signs.*

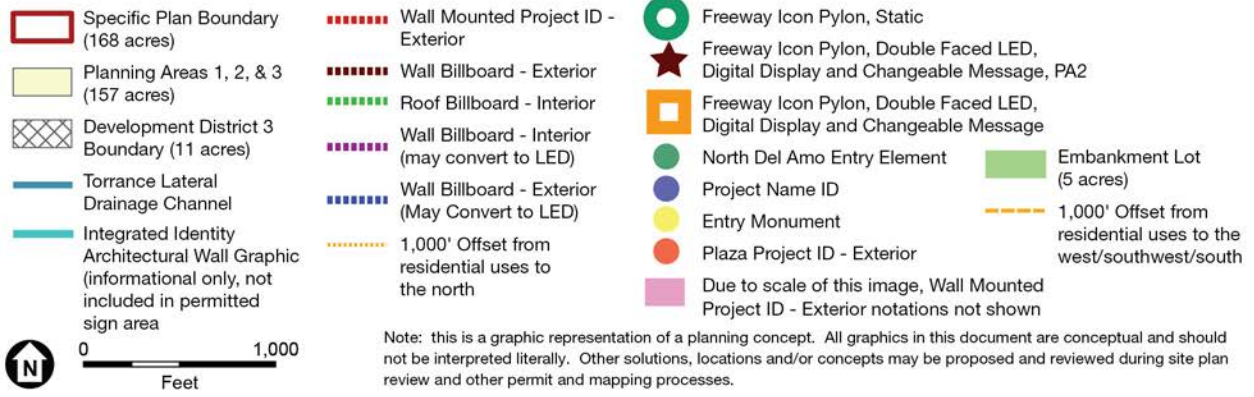
^d *Signage adjacent to a freeway will comply with applicable Caltrans standards and requirements, including the Outdoor Advertising Act.*

^e *CRA is the owner of the Embankment Lot where all Billboard Signage shall be placed and thus, the CRA shall retain all rights to development of any signage upon the Embankment Lot, unless otherwise granted to developers of the Site pursuant to a Development Agreement approved by the City.*

^f *Wall-mounted project ID exterior signs may project above top of building wall.*

^g *Only one wall-mounted project ID exterior sign will be permitted for buildings in PA3(a) building, except where a building is shared by two tenants.*

^h *Integrated Identity Graphics/Murals are not considered signage; they are considered as architectural features, which are excluded from permitted signage area.*



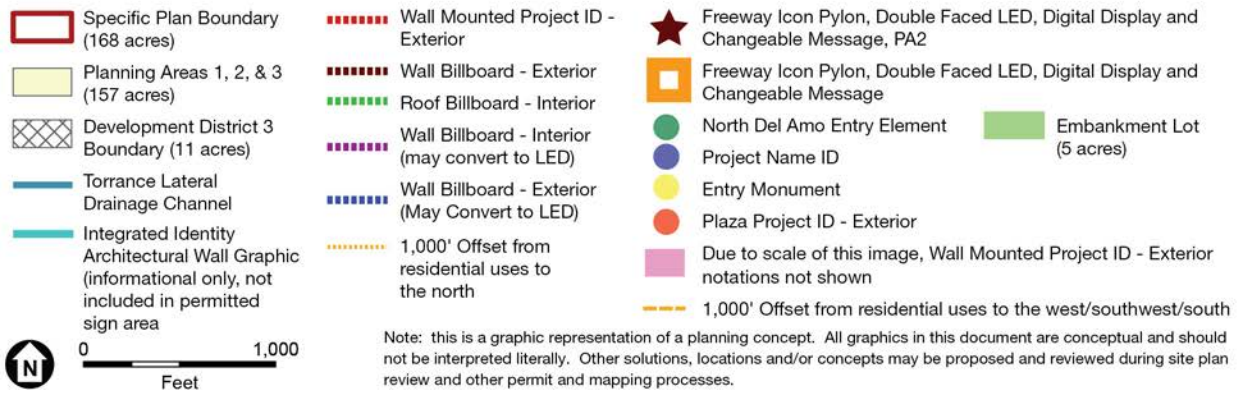
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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure IV.B-6
Conceptual Sign Locations – Option A





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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure IV.B-7
Conceptual Sign Locations – Option B





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SOURCE: ESA, 2021

The District at South Bay Specific Plan Amendment

Figure IV.B-8
Conceptual Sign Locations – Option C



Figure IV.B-8 shows the signage that is proposed in PA3 as part of the 2021 Project. The entry signs proposed by the 2021 Project in PA3(a) would be reduced compared with the 2018 Specific Plan signage. PA3(a) would include up to seven wall signs on the light industrial buildings. Wall signs would be located on the commercial buildings within PA3(b), although sign types and locations are speculative at this time. However, the 2021 Specific Plan Amendment requires that the final design, size, and location of the signage within PA3(b), as well as all other Planning Areas, shall be submitted to the City for review and approval as part of a Comprehensive Sign Program. In addition, the Comprehensive Sign Program application for PA3(b) would also require a lighting study to evaluate the potential light and glare impacts of the proposed signs. Such a lighting study would not be necessary for PA1 or PA3(a) provided the signage proposed in the Comprehensive Sign Program for those Planning Areas was sufficiently evaluated in the 2018 SEIR and this 2021 SEIR. A Comprehensive Sign Program for PA2 was approved by the City Council on April 3, 2018 (Resolution No. 18-042).

(2) Project Design Features

The 2021 Project would be developed in accordance with the regulations, standards, and guidelines established in the 2021 Specific Plan Amendment and the City's General Plan. The following project design features (PDFs) have been incorporated into the 2021 Project (through the 2021 Specific Plan Amendment) and this 2021 SEIR to ensure that sign lighting transitions would not affect adjacent residential properties (refer to Section IV.B.4, *Significance Thresholds*, above):

- **2021 SEIR PDF-A1:** Sign lighting luminance shall not exceed 500 candelas per square meter (cd/m^2) at night from 45 minutes after sunset until 45 minutes prior to sunrise, and 10,000 cd/m^2 during day-time hours from 45 minutes after sunrise until 45 minutes prior to sunset.
- **2021 SEIR PDF-A2:** Sign lighting where sign illumination has the potential to exceed 500 cd/m^2 will include an electronic control mechanism to reduce sign luminance to 500 cd/m^2 at any time when ambient sunlight is less than 100 foot-candles (fc).
- **2021 SEIR PDF-A3:** Sign owners and/or Applicants shall submit documentation for the City's review and approval verifying the luminance of applicable signage and confirm that the electronic control mechanism is functioning so as to achieve the necessary transition of luminance as required by 2021 SEIR PDF-A1 and PDF-A2 on an annual basis, or as otherwise required by the Community Development Director (or a designee). If the City determines based on the review of the documentation that adjustments are necessary, the sign owners and/or Applicants responsible for the signage shall make the adjustments to the satisfaction of the City.
- **Lighting:** Building and site lighting would remain the same within PA1 and PA2. However, given the change in uses and site design within PA3, the building and site lighting within PA3 would be different as described by the 2021 Specific Plan Amendment. Building lighting includes all exterior and interior lighting associated with the structure. In addition, lighting would be located within the parking areas, at the

loading docks, and along the site perimeter and along walkways within PA3. Building lighting would comply with CALGreen lighting standards, which control lighting intensity, and would be directed down so as to avoid spillover. Perimeter pole lighting in PA3(a) along the Torrance Lateral would be a maximum of 35 feet in height and pole lighting in the Carson Country Mart would be a maximum of 12 feet in height.

- **Landscaping:** As discussed above, the 2021 Project would include the Carson Country Mart, which would provide open space and greenery within PA3(b). The Carson Country Mart would include planted spaces and planted buffers. In addition, PA3(a) would include a 0.62-acre Enhanced Parkway along Lenardo Drive that would include landscaping and a meandering walking path. Landscaping would be provided along the Torrance Lateral, west of the light industrial buildings on PA3(a). Other landscaping would be provided between the buildings and in parking areas on the Project Site; as edge landscaping along the I-405 Freeway; and as entry landscaping. Overall, landscaping on the Project Site has been substantially increased as compared with the 2018 Project.

c. Analysis of Project Impacts

(1) In an urbanized area, conflict with applicable zoning and other regulations governing scenic quality

(a) Construction

The 2021 Project, as with the 2018 Project, would cause changes in the aesthetic conditions of the Project Site during the time of construction. The analysis provided in the 2018 SEIR is applicable to the 2021 Project. The remediation that is occurring on the Project Site is ongoing and changes have occurred on site as a result of the remediation activities. During the development of the 2021 Project, typical construction activities would occur on the Project Site. As buildings are erected on the Project Site, the loss of undeveloped area and a feeling of spaciousness would be incrementally altered. However, the 2021 Project would provide approximately 11.12 acres of privately maintained, publicly accessible open space and community commercial use and amenity area within PA3(b) in the southeastern portion of the of the Project Site resulting in less construction activity in that area of the Project Site. Although there would be some construction for the commercial buildings within this area, the 2021 Project would provide a greater amount of open space compared with the 2018 Project. Even though open space would be provided, overall the 2021 Project, as was concluded in the 2018 SEIR, would result in the loss of a valued visual resource. Therefore, the 2021 Project would result in a significant aesthetic impact due to construction.

(b) Operation

This analysis, as in the 2018 SEIR, evaluates the impact of the 2021 Project on aesthetics using the following three issues: (1) whether the 2021 Project would substantially affect a valued aesthetic resource; (2) whether the visual character of the 2021 Project would substantially

contrast with the visual character of surrounding development; and (3) whether the 2021 Project would cause greater aesthetic/visual resource impacts than those anticipated under the 2018 SEIR and under existing regulations. The visual character and visual quality are established by the development standards in the zoning code and other applicable regulations; in addition, the 2021 Specific Plan Amendment provides site-specific standards.

To provide consistency with the 2018 SEIR, the same “heading” descriptions are provided in the analysis of operational impacts; however, as with the 2018 SEIR, the impact conclusions are made with respect to the identified significance thresholds.

(i) Impacts on Valued Resources

The Project Site is substantially vacant with the exception of ongoing remediation and associated equipment and construction/maintenance trailers. The Project Site contains no unique features or valued visual features. Despite these activities and associated structures, as described in the 2018 SEIR, the Project Site contributes to the visual quality of the area by offering visual relief from development, and a sense of spaciousness to those surrounding and traveling through the Project area. Development of the Project Site, as would occur under the 2021 Project, would result in the loss and conversion of the Project Site, which historically was used as a landfill and is undergoing remediation, to an area with mixed-use development. The Project Site is generally vacant except for activity and components associated with the ongoing remediation, such as detention and retention ponds, crushed concrete piles, a landfill collection and control system, and a groundwater extraction and treatment facility, and as such, provides a sense of openness for the Project Site and the overall area, which is within a highly urbanized setting. While development in PA1 and PA2 would remain the same as that evaluated in the 2018 SEIR, PA3 would be developed with light industrial uses and the Carson County Mart, which would generally include commercial uses and passive and active spaces. The overall development would have the greatest effect for travelers along Del Amo Boulevard, which is a public view corridor traveled by a large number of passenger vehicles. However, the 2021 Project would result in development in accordance with the 2021 Specific Plan Amendment that would provide development standards and guidelines that would result in an integrated and cohesive development that would be consistent with the urban context and surrounding development in the area.

Under the 2018 Project, the Commercial – Elevated Podium buildings would have generally been approximately 55 feet with heights up to 85 feet allowed. Under the 2021 Project, the light industrial buildings within PA3(a) would be distributed over approximately 74 acres. The buildings would be allowed to be between 56 and a maximum of 65 feet in height as would be permitted by the 2021 Specific Plan Amendment, 20 feet less than the 2018 Project. In addition, the commercial/retail and restaurant uses, which would be provided on PA3(b) within the 11.12-acre Carson Country Mart, would have building heights between 25 feet and 30 feet, significantly shorter than the 2018 Project elevated podium buildings.

These changes in use, building locations, and building heights would not impact valued visual resources. In fact, the maximum building height would be reduced by 20 feet (from 85 to 65 feet) in PA3(a) compared with the 2018 Project. (Building heights in PA1 and PA2 have not been changed.)

(ii) Impacts on Contrast with Existing Development

a) Relationship to Nearby Uses

As indicated above, residential neighborhoods are located to the south and southwest of the Project Site and the newly constructed Evolve at South Bay residential project is located to the north. The I-405 Freeway is located along the eastern edge of the Project Site while open space, commercial uses, and light industrial uses are located to the west of the Project Site. With the exception of the newly constructed Evolve at South Bay residential project, none of these nearby uses has changed since the 2018 SEIR. As with the 2018 Project, the 2021 Project would include a berm separating the Project Site from the I-405 Freeway. The 2021 Project would differ visually from the 2018 Project due to the change from commercial to light industrial uses in PA3(a) and the inclusion of the Carson Country Mart in PA3(b). (The uses within PA2, which fronts the I-405 Freeway would remain regional commercial as evaluated in the 2018 SEIR.)

The on-site remediation facilities, which include the groundwater extraction and treatment system (GETS) and the landfill gas collection and control system (LGCCS), are visible from off-site locations. The GETS and LGCCS, including the flare stacks associated with the LGCCS, are located on the one-acre utility lot within PA3(A) and are fully constructed and operational. However, while there are two flares located on site, current landfill gas production requires only the operation of one flare. There would be no further components added above grade so no visual changes would occur with the development of the 2021 Project.

The Carson Country Mart, which would be located in the southeastern portion of the Project Site, would provide 11.12 acres of publicly accessible, privately maintained community-serving commercial use area that would include a variety of passive and active spaces, programmed areas amenities intended to serve local City residents and to activate the area. This area would extend almost halfway across the southernmost Project Site boundary adjacent to the Torrance Lateral. The existing residences to the south would have a view of this area, which as discussed above, would include a variety of passive and active spaces, programmed areas amenities and community-serving commercial uses intended to serve local City residents and to activate the area as well as landscaping. The commercial/retail and restaurant uses would include a single retail use, restaurants, food and beverage kiosks, and a café. Commercial building heights within the Carson Country Mart could be 25 feet to 30 feet in height, with exceedances permitted for architectural features and/or mechanical equipment although building footprints would be generally small. Within the Carson Country Mart there would be planted open spaces and

planted buffer areas on the west and south sides. Pedestrian and bicycle pathways and exercise areas would connect the Carson Country Mart's various programmed and non-programmed areas. Parking and vehicular use areas would be provided within the Carson Country Mart and public access to the Carson Country Mart would be provided by Lenardo Drive.

As shown in Figure II-6, 2021 Conceptual Site Plan, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR, there would be six light industrial buildings located within PA3(a). Buildings A and B would be located in the northern portion of PA3(a), Buildings C, D, and E in the central portion and Building F in the southeastern portion adjacent to the Carson Country Mart. Truck loading docks would be designed to either face the interior of the Project Site or be screened from surrounding residents and visitors through the use of sound walls and/or landscaping. Specifically, for each loading dock area adjacent to the Torrance Lateral that does not face the interior of the Project Site, residential uses would be shielded by 16-foot sound walls made of concrete block and landscaping. The loading docks would generally not be in view of visitors of the Carson Country Mart due to the building orientation and landscaping provided throughout PA3.

The light industrial buildings in PA3(a) adjacent to the south and western property line,⁷⁰ Buildings A, D, and F, would be approximately 50 feet in height and up to 56 feet in height including the parapet. Buildings C and E in the central portion of PA3 would be 55 feet in height and up to 65 feet in height including the parapet. Building A would be approximately 113 feet from the property line at the closest point. The setbacks from the western property line to Building D would range from approximately 65 feet at the northern end to almost 74 feet at the southern end. As shown in Figures II-10 through II-15, which illustrate the Project elevations, the buildings would be constructed of concrete with an accent base color. Vertical elements, including glass and lines would be incorporated in the design and accent colors would be used to provide visual interest and break up the mass of the building. Trees would also be potted, or planted in some instances, between the buildings and the property line, which would further minimize the aesthetic impacts of the 2021 Project.

As with the 2018 Project, the 2021 Project would locate uses on the Project Site that differ from the existing use, which is an undeveloped former landfill site. The approximately 75-foot-wide drainage easement, in which the Torrance Lateral runs, separates the existing residences south/west of the Project Site. The first portion of the Project Site from the easement is a slope that varies in height from 8 feet to 17 feet and runs for approximately 65 feet up the flat area where buildings would be located. With the easement and 55.5-foot setback, Building F would be located approximately 130 feet from the adjacent residential property lines. However, the expanse of buildings along the southeastern property line would be less than in the 2018 Project because of the provision of the Carson Country Mart. While Building F would be located at a

⁷⁰ The property line refers to the legal limits of the Project Site, used for purposes of measuring setbacks, whereas the "Project Site" refers to the general area evaluated in this 2021 SEIR.

higher elevation than the residences, the orientation of the building with the narrow side facing the residences, the 130-foot distance, as well as building design with the incorporation of features that break up the mass and the landscaped slope, aesthetic impacts would be similar or less than those identified in the 2018 SEIR.

On the western portion of the Project Site, the drainage easement and the slope also provide visual separation from the residential properties located across the Torrance Lateral. Building A, which would be located at the northern end of PA3 would be a minimum of 113 feet from the property line at the southern end of the building with increasing setbacks along the façade given the angle of the building. In addition, the western façade would have offsets, which would reduce the mass of the structure. Although Building A would be located at a higher elevation than the adjacent residential uses, the combination of distance, building orientation and articulation, as well as landscaping Building A would not result in a significant impact. With regard to the remainder of the western property line, the western side of Building D, which would be approximately 1,103 linear feet, would be located generally parallel to the property line. The setback at the northern end would be less than the 70-foot minimum set back from the property line that has been required historically in both the 2006 and 2018 Specific Plan. With the 75-foot easement of the Torrance Lateral and requiring a 70-foot minimum setback, Building D would be located approximately 145 feet from the adjacent residential property lines. Considering the effect of Buildings A and D, while the buildings would be located at a higher elevation than the residences, the distance as well as building design with the incorporation of features that break up the mass, and the landscaped slope, impacts would be similar to those identified in the 2018 SEIR. However, to ensure the 70-foot setback from the Torrance Lateral for buildings in PA3 at the western boundary of the Project Site (i.e., Buildings A and D), Mitigation Measure B-1 has been revised.

In summary, the 75-foot-wide Torrance Lateral would provide a visual buffer to the 2021 Project. In addition, as shown in Figures II-10 through II-15, the buildings would be articulated and would use a mix of building materials and colors, which would serve to soften the appearance of the structures. Trees would also be planted between the buildings and the property line, which would further serve to minimize the visual effect. With the distance, the use of articulation and variety of building materials, as well as the landscaping and walls, the visual effect would be less than significant. As indicated in the 2018 SEIR, if the conceptual plans for the 2021 Project were changed to permit development of tall buildings adjacent to existing residential uses, the variation in heights of buildings could result in a potentially significant impact. In further evaluating the distance and contrast, Mitigation Measure B-1 has been revised to allow buildings no greater than 60 feet in height along the Torrance Lateral in light of the distance, building articulation, walls, planting and the provision of open space, which serve to further reduce the potential impact to the adjacent residences. In addition, based on the shade/shadow analysis (see Appendix B2), with the proposed heights and setbacks, the shadows

cast by the buildings would not extend to the residential properties. As with the 2018 Project, Mitigation Measure B-1 is provided to ensure that buildings along the western property line maintain the minimum 70-foot setback from the property line to each building to continue to reduce impacts to a less-than-significant level. Mitigation Measure B-1 has been revised to require that buildings greater than 60 feet in height (as opposed to 52 feet in the 2018 SEIR) are setback 250 feet from the property line so as to reduce such an impact to a less-than-significant level. In addition, Mitigation Measure B-4 requires site plan review for all development projects to ensure that landscaping, building design, lighting and signage standards set forth in the 2021 Specific Plan Amendment are implemented. Mitigation Measure B-4 would ensure that building facades are varied and articulated with a variety of accent materials at visually accessible locations; that uniform landscaping is planted throughout the Planning Areas, in key locations as well as in parking lots, sides of parking structures, in medians and along streets; lighting shall be limited in intensity and directed on-site so as not to interfere with off-site activities; and that a Comprehensive Sign Program is developed for each Planning Area.

As with the 2018 Project, the 2021 Project would include four pylon signs along the I-405 Freeway as shown in Figure IV.B-8. Table IV.B-1 above provides the revised sign standards for the pylon signs and the conceptual sign plan for the 2021 Project that differs from the conceptual sign plan for the 2018 Project with respect to the location and dimensions of the pylon signs along the I-405 Freeway and the height and width of the signs, as well as the lighting intensity. The change in location and dimensions of the pylon signs compared to the 2018 Project does not result in change in conclusion regarding visual quality or character. Refer to the discussion below for an analysis regarding sign lighting. As in the 2018 SEIR, mitigation measures would be required to ensure that signs along the I-405 Freeway and the use of signage and lighting are in compliance with the conceptual sign requirements set forth in the proposed 2021 Specific Plan Amendment, to avoid a significant impact.

b) Regional Context

The Project Site is located within an urbanized area with residential neighborhoods to the south, light industrial and scattered commercial uses to the west, residential uses and the Porsche Driving Experience to the north, and I-405 Freeway to the east. The 2021 Project would include commercial/retail and restaurant uses within the Carson Country Mart on PA3(b) and the light industrial uses in PA3(a). Other portions of the proposed 2021 Specific Plan Amendment (PA1 and PA2) would include commercial and residential uses. Development of the area would have a character that is typically expected within the region. This development would be located in an active urban area adjacent to and close to nearby freeways and would contribute to the urban form in an expected manner, and would therefore be in keeping with the overall character of the regional area. As with the 2018 Project, the overall 2021 Project, including PA1 and PA2, would provide in-fill development within the regional context and would contribute to the general urban character of the area.

c) Conclusions Regarding Impacts on Contrast with Existing Development

The 2021 Project would provide a distinct development within the City's urban environment, similar to the 2018 Project although with a different mix of building types and uses. The 2021 Project would result in a character that is in keeping with similar large-scale developments within the region, whether the Conceptual Site Plan (Figure II-6, in Chapter II, *2021 Project Description*) or variations from the Conceptual Site Plan that would be allowed under the proposed 2021 Specific Plan Amendment are developed. The 2021 Specific Plan Amendment will establish development standards and guidelines to regulate the aesthetics of the 2021 Project and to reduce contrast with surrounding uses. Development along the Project Site edges would not substantially contrast with the visual character of the surrounding area, and its valued aesthetic image and impacts on aesthetic character would be less than significant. As determined in the 2018 SEIR, potentially significant impacts on aesthetic character could occur along the south and southwestern Project Site edges if building heights greater than 52 feet were to occur, which could result in a substantial contrast with the existing off-site residential development. As with the 2018 Project, the 2021 Project could have potentially significant impacts on aesthetic character if development were to vary from the standards and guidelines set forth in the proposed 2021 Specific Plan Amendment or if buildings greater than 60 feet in height were developed in close proximity to existing residential uses. The 2021 Project would result in a less-than-significant impact regarding visual character and public views because the Project design would not conflict with applicable zoning or other regulations governing scenic quality, which includes the development standards and guidelines provided in the 2021 Specific Plan Amendment. The City's current General Plan (2004) does not provide any policies (or regulations) that specifically govern visual character.

In addition, revised Mitigation Measure B-1 would require minimum setbacks from the property line adjacent to the Torrance Lateral and Mitigation Measure B-4 requires site plan review for all development projects to ensure that landscaping, building design, lighting and signage standards set forth in the 2021 Specific Plan Amendment would be implemented. Therefore, the 2021 Project would result in less than significant impacts regarding visual character and public views since the 2021 Project would not conflict with applicable zoning and other regulations governing scenic quality.

The 2021 Project would change the location of the pylon signs under Option C; however, all pylon signs under Options A, B, or C would remain the same, at 88 feet in height above grade. The size of the digital display face for any sign would be no greater than that currently allowed by law, but would be greater than proposed under Options A and B. Option C would be limited to 20 feet in height by 60 feet in width and may be surrounded by an architectural frame that could add up to 10 feet to the outer dimension, thereby totaling 30 feet by 70 feet. (For comparison, the width of pylon signs in Option A would range from 25 to 65 feet; the width of pylon signs in Option B would range from 48 to 65 feet; and the width of pylon signs in Option C would be 70 feet.)

However, as with the 2018 Project, the 2021 Specific Plan Amendment would require that the pylon signs located within the Embankment Lot along the I-405 Freeway, as well as the use of signage and lighting in other areas of the Project Site, are in compliance with the development standards and requirements set forth therein (i.e., Mitigation Measure B-2) to avoid a significant impact. As such, the 2021 Project would not result any new significant impacts or an increase in the severity of significant impacts as compared to the 2018 Project. A discussion of impacts of the pylon signs related to the introduction of artificial lighting, and its potential impacts on nearby sensitive receptors, is provided below in Section IV.B.5.c(2), *Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.*

(iii) Comparison of 2021 Project with Existing Regulations

The General Plan policies in the Land Use Element and the Open Space and Conservation Element analyzed in the 2018 SEIR have not changed. As described in Section IV.A, *Land Use and Planning*, Table IV.A-1, 2021 Project Compatibility with Land Use Plans, Policies, and Regulations, the design features of the 2021 Project are in substantial conformity with the applicable General Plan policies; thus, a less-than-significant impact would occur regarding General Plan consistency with respect to design and visual resources. The 2021 Project would be subject to the detailed regulations established by the 2021 Specific Plan Amendment, which pursuant to the City's Zoning Ordinance would be the governing regulations for the Project Site. As noted in Section IV.A, *Land Use and Planning*, of this 2021 SEIR, the 2021 Specific Plan Amendment will be in substantial conformity with the City's adopted General Plan. This regulatory structure continues to ensure substantial conformity of the 2021 Project with the General Plan. The 2021 Specific Plan Amendment will restrict the potential for adverse effects of development on the visual quality of the area by regulating the development on the Project Site, including but not limited to permitted uses, setbacks, maximum permitted building heights, landscaping, signage, and lighting. In addition, with the implementation of mitigation measures the potential significant impacts relative to building height and sign lighting impacts would be less than significant. The 2021 Project would be in substantial conformance with the General Plan policies related to design as further described in Section IV.A, *Land Use and Planning*, of this 2021 SEIR. As such, the 2021 Project would not result any new significant impacts as compared to the 2018 Project.

(iv) Impact on Views

a) Impacts from Public Vantage Points

Views toward and over the Project Site from the I-405 Freeway are limited, and have not substantially changed since the certification of the 2018 SEIR. As described above, there are no unique scenic resources in the area. However, there are two recognizable visual features along the I-405 Freeway, the Goodyear Wingfoot Two a rigid-frame blimp replacement when it is in

port and the large statue of the man holding a flag located north of the Project Site.⁷¹ The 2021 Project would not alter the view of these features from freeway locations.

Views along Del Amo Boulevard are similar to the views at the time of certification of the 2018 SEIR, except for some changes on the Project Site resulting from the ongoing remediation activities. The views are of the general urban environment and not toward any identified visual resource.

Views along Main Street include industrial uses interspersed with vacant and underdeveloped lands on the west and residential development, the Project Site, and open space on the east. Views along Main Street have not changed since the time of certification of the 2018 SEIR, except for ongoing remediation activities on the Project Site. The 2021 Project would not conflict with applicable zoning and other regulations governing scenic quality, such as views.

b) Private Vantage Points

As detailed in the 2018 SEIR and consistent with existing conditions, views over the Project Site from the adjacent residential neighborhoods located to the south and west would remain limited. There are no views of unique scenic resources from the residential areas. Views from the residential areas are largely blocked by the slope along the perimeter of the Project Site and existing development in the area. The same would apply to other private non-residential locations in the area. As with the 2018 Project, there would be no views available of unique scenic resources from vantage points within these areas. The 2021 Project would not conflict with applicable zoning and other regulations governing scenic quality, such as views.

c) Conclusions Regarding Impacts on Views

As indicated above, the Project Site is not considered a view resource given the history of use as a landfill and the ongoing remediation activities. The Project Site is degraded and does not include qualifying unique or natural qualities. In addition, the Project Site does not contain features that would typically fall under the heading of view resource, e.g., unique geologic features, natural areas, etc. Views of the two notable features that might catch the eye of travelers through the area, the Goodyear Wingfoot Two and the Big Man statue on the south of the I-405 Freeway would not be lost due to development of the 2021 Project. Views over the Project Site are limited due to intervening development, the flat terrain in the area surrounding the Project Site, and the fact that the Project Site sits atop a berm that slopes down to surrounding areas. Therefore, similar to the 2018 Project, the 2021 Project would not substantially diminish views, and impacts on views of unique, valued scenic resources would be less than significant. As such, the 2021 Project would not result in any new significant impacts as compared to the 2018 Project.

⁷¹ *These features are not identified as historic resources in the Carson 2040 Existing Conditions Report, Volume I: Chapters 5–8, January 2018.*

(v) Shade and Shadow Impacts

According to the 2006 FEIR, which included a shade/shadow study, the maximum off-site shading that could occur on sun-sensitive uses is limited. A shade/shadow analysis was prepared to evaluate shading that would occur with the changes to the site plan. The figures showing the daily shading patterns for the winter and summer solstices and the equinoxes for morning, noon, and afternoon hours are provided in Appendix B2 of this 2021 SEIR.⁷² These periods represent the portions of the day during which maximum seasonal shadows occur and which would be of concern to most people.

Based on the analysis therein, throughout the year shadows to the south would be limited and would not extend beyond the Project Site boundary. The greatest shading to the west would occur during the spring/fall equinox. However, as shown in the figures, while the shadow from Building D would extend beyond the Project Site boundary in the morning, the shadow would not reach the adjacent residential properties. Given the heights, locations and setbacks of the 2021 Project along the south and southwest boundaries of the Project Site, while impacts of the 2021 Project would be different from the shade/shadow resulting from the 2018 Project, as with the 2018 Project, the 2021 Project would result in less-than-significant shade/shadow impacts.

(vi) Conclusion Regarding Conflict with Plans (Operational)

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, with the adoption of the 2021 Specific Plan Amendment, the 2021 Project would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts related to zoning and other regulations governing scenic quality would be less than significant.

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

The 2021 Project would be located within an urbanized area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. No substantial changes in the surrounding overall urban glow of the 2021 Project area have occurred since the 2018 Project was assessed. As noted above, there are differences between the 2018 Project and the 2021 Project with regard to building location in PA3 (which is being separated in to PA3(a) and PA3(b)) and, therefore, associated lighting and signage. In addition, lighting would be provided in the Carson Country Mart in PA3(b) for the commercial buildings and the privately maintained and publicly accessible open areas, including the performance pavilion and pathways. There would be no changes to signs or lighting within PA1 or PA2 proposed by the 2021 Specific Plan Amendment in comparison to the 2018 Specific Plan. The 2021 Specific Plan

⁷² *Shading impacts at the spring equinox are similar to those of the fall equinox therefore, are represented in one figure in Appendix B2.*

Amendment will provide standards for building lighting, as well as perimeter and parking lot lighting.

A Supplemental Lighting Study to evaluate the proposed signage and associated lighting, as well as the building and site lighting was prepared and is provided in Appendix B1. As with the 2018 Project, the 2021 Project would include a hierarchy of signs. As indicated above, the 2021 Project would include up to four freeway pylon signs that would be 88 feet in height above grade, which is the same as the 2018 Project for Options A and B. However, the proposed locations and sign dimensions along the I-405 Freeway frontage have been modified under Option C. The locations are shown for Option C in Figure IV.B-8. The size of the digital display face would comply with state law and would not exceed 20 feet in height by 60 feet in width. The total size for Option C, including a 10-foot architectural frame, would be 30 feet by 70 feet. Two of the signs would be double faced, digital display with changeable message display and color changing illumination, and the other two signs would be double faced, static digital display with changeable message display and color changing illumination. The digital display would rotate messages at the maximum allowed by state law. In addition, the pylon structure would contain up to six double-sided tenant signs each measuring 6 feet by 20 feet. Off-site advertising would be allowed subject to obtaining the required approvals. The 2021 Project lighting and signage would comply with all CALGreen and Caltrans requirements, as applicable.

As indicated in the Supplemental Lighting Study, (Appendix B1), with the implementation of the 2021 Project PDFs (2021 SEIR PDF-A1 through 2021 SEIR PDF-A3) that require electronic control mechanism and transition of illuminance as well as Mitigation Measures B-2, B-3a and B-3b, which address pylon sign location and limit illuminance within 1,000 feet of residential uses, the freeway signs would not create a source of light trespass. In addition, based on the Supplemental Lighting Study, the pylon signs would result in a medium contrast ratio and therefore, would also not create a new significant source of glare.

In addition, as indicated above and shown in Figure IV.B-8, the 2021 Project would include Project Name ID signs and Wall Mounted Signs in PA3. Wall Mounted Signs were not previously evaluated in PA3 and the 2021 Project would have up to seven Wall Mounted Signs on the light industrial buildings in PA3(a). The signage in PA3(a) would be located so as to not be visible at adjacent residential properties along the Torrance Lateral. As indicated in the Supplemental Lighting Study, the illuminance levels that would be visible from the adjacent residential uses would be below the threshold of 0.74 foot-candles and therefore, no light trespass impact would occur. In addition, based on the Supplemental Lighting Study, the signage in PA3(a) would result in a medium contrast ratio of less than 30:1 with respect to glare and therefore, would not create a new significant source of glare.

As indicated previously, Wall Mounted Signs would be installed on the commercial buildings within the Carson Country Mart in PA3(b); however, sign types and locations within the Carson

Country Mart have not yet been determined because the tenants and their signage proposals have not yet been identified; therefore, the sign program in PA3(b) is speculative; therefore, signage for PA3(b) was not evaluated under the Supplemental Lighting Study. The signage in PA3(b) would be determined and analyzed through a Comprehensive Sign Program that would require a detailed lighting analysis to ensure that impacts would be below the applicable thresholds.

All Project sign lighting is subject to compliance with the California Vehicle Code which restricts glare from light sources within the drivers' field of view. Based on the Supplemental Lighting Study, the glare from the 2021 Project sign lighting would be less in comparison than the 2018 Project. Therefore, the 2021 Project sign lighting would not cause excessive glare to adjacent roadways as defined by the California Vehicle Code.

Mitigation Measure B-4 has been revised to require that a Comprehensive Sign Program be prepared that provides the final design, size, location, and illuminance of signage within PA1, PA3(a), and PA3(b). As part of the application, submittal for the Comprehensive Sign Program, if necessary, a technical lighting study would be prepared to ensure that the proposed signs comply with Mitigation Measures B-3a and B-3b regarding illuminance and that no spillover or adverse effects to adjacent residential uses shall occur. Therefore, with implementation of the PDFs (2021 SEIR PDF-A1 through 2021 SEIR PDF-A3) and Mitigation Measures B-2, B-3a, B-3b, and B-4, impacts with regard to sign lighting would be less than significant.

The 2021 Project building lighting and other exterior lighting would comply with the Carson Municipal Code Section 9162.53, which requires that lighting be directed away from nearby residential properties and streets as well as shielded thereby limiting light spillover. In addition, the 2021 Project would comply with CALGreen lighting standards, which control lighting intensity. Perimeter pole lighting in PA3(a) at the rear of the light industrial buildings would be limited and would be a maximum of 35 feet in height. As indicated in the Supplemental Lighting Study, the recommended illuminance for light industrial uses is less than the recommended illuminance for retail development. The reduced light fixture mounting height would serve to reduce the visibility of the lights from locations outside of the Property in comparison to the 2018 Project. Therefore, the 2021 Project Building Lighting would comply with CALGreen which limits light source luminance to less than high contrast conditions, and the 2021 Project Building Lighting would be mounted lower than the lighting analyzed in the 2018 Project. The 2021 Project would create less on-site illuminance in comparison to the 2018 Project and would not create a new source of glare at adjacent residential uses that could be considered significant. Mitigation Measure B-4 requires site plan review by the Community Development Director and requires that lighting be limited in intensity and directed on-site to ensure that lighting would not interfere with off-site activities. Based on the above, the 2021 Project's ambient lighting would continue to blend with surrounding areas would not spillover to adjacent residential uses, and would not create substantial contrast with overall urban lighting conditions.

A lighting plan for the commercial buildings and privately maintained and publicly accessible open space areas within the Carson Country Mart is not proposed at this time. While all building lighting must comply with light trespass requirements of the California Building Code, a lighting study provided by the Developer would be required to be reviewed and approved by the City for PA3(b) prior to installation of any lighting or signage thereon.

In summary, as indicated in the Supplemental Lighting Study, contained in Appendix B1 of this 2021 SEIR, with implementation of the PDFs (2021 SEIR PDF-A1 through 2021 SEIR PDF-A3) and Mitigation Measures B-2, B-3a, B-3b, and B-4, impacts with regard to building and sign lighting and glare would be less than significant.

IV.B.6 Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 Mitigation Monitoring and Reporting Program (MMRP).⁷³ In some cases, the 2018 SEIR mitigation measures have been revised to address the potential impacts that may result from the 2021 Project. Edits to the 2018 SEIR mitigation measures are provided as strike-out for removed text and underline for added text. All of the mitigation measures described below will be included in the MMRP for this 2021 SEIR.

Mitigation Measure B-1: The buildings in PA3 at the western boundary of the Project Site (i.e., Buildings A and D) shall maintain a 70-foot setback from the property line adjacent to the Torrance Lateral. The minimum setback for all buildings greater than ~~5260~~ feet in height along the Torrance Lateral, adjacent to residential uses, shall be 250 feet.

Mitigation Measure B-2: The distribution, placement, and orientation of signs along the I-405 Freeway shall be in substantial compliance with the signage concepts and in compliance with the sign standards in the ~~SPA~~2021 Specific Plan Amendment.

Mitigation Measure B-3a: If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign at night, then the proposed modified Project sign luminance shall be reduced to less than 300 cd/m² at night.

Mitigation Measure B-3b: If any portion of the illuminated surface of the sign is visible from a residential use within 1,000 feet of said sign, sign area and/or sign luminance shall be limited so that the light trespass illuminance is less than 0.74 foot-candle at said residential property line.

⁷³ Because PA2 has already been approved for development by the City (following the approval of the 2018 SEIR) and the Applicant of that property (CAM-Carson LLC) has vested rights to its project proposal and construction has already begun for PA2 in compliance with the 2018 SEIR, PA2's compliance requirements for mitigation measures are limited to those mitigation measures that were approved in the 2018 SEIR.

Mitigation Measure B-4: All Project development shall undergo site plan review by the Planning Manager-Community Development Director (or a designee) to ensure that the following design measures have been implemented:

- **Landscaping.** All Landscaping shall be consistent with a plant palette of native trees, shrubs, and groundcovers that shall add uniformity to the Property Project Site. Plants shall be selected to support and complement the themes of the various Project components. Specially themed landscaping treatments shall occur at key locations (e.g., freeway edge, and channel slope, and entertainment area). Of more detailed note: (1) continuous shrub and ground cover plantings shall be provided in the medians and edges of internal streets with vertical landscape and/or sculptural hardscape elements on average every 50 feet along the edges; (2) a minimum of 5% landscape coverage shall be provided in parking lots, including landscaping adjacent to edges of parking fields; and (3) 50% landscape coverage of visible concrete surfaces shall be provided on the sides-edges of parking structures adjacent and visible to residences, not inclusive of commercial over podium.
- **Buildings.** Buildings shall include the following design features: varied and articulated building façades, with a variety of architectural accent materials for exterior treatment at visually accessible locations.
- **Accessory Facilities and Walls.** Wall facades shall be varied and articulated. Accessory facilities such as trash bins, storage areas, etc., shall be covered and screened as set forth in the SPA 2021 Specific Plan Amendment.
- **Lighting.** Lighting shall be limited in intensity, light control methods, and pole heights, so as to be directed on site, and not interfere with off-site activities.
- **Signage.** A comprehensive sign program shall be prepared that provides the final design, size, location, and illuminance of signage within a Planning Area. As part of the application submittal for the comprehensive sign program, if necessary, a technical lighting study shall be prepared to ensure that the proposed signs comply with Mitigation Measures B-3a and B-3b regarding illuminance, and that no spillover or adverse effects to adjacent residential uses shall occur.

IV.B.7 Cumulative Project Impacts

Since the 2018 SEIR, the cumulative projects list has changed due to new proposed development in the surrounding area. For the purposes of assessing cumulative impacts related to aesthetics the cumulative sources must be located within close proximity (approximately 1,000 feet as was used in the 2018 SEIR) of the Project Site and in the same field of view as the 2021 Project. There are several cumulative projects within proximity of the Project Site, including Cumulative Project No. 27 (Evolve at South Bay) to the north of the Project Site and Cumulative Project Nos. 35 and 2 to the west of the Project Site. Two mixed-use cumulative Projects (Cumulative Project Nos. 5 and No. 36) are located to the south of the Project Site. While there are a number of cumulative

projects on the east side of the I-405 Freeway within 1,000 feet of the Project Site (Cumulative Project Nos. 6, 10, and 19) these are commercial uses and with the intervening freeway and the distance the 2021 Project would not result in conjunction with these cumulative projects result in cumulative aesthetic impacts.

Based on the analysis above, as also concluded under the 2018 SEIR, the 2021 Project (which proposes a new infill development upon the Project Site) will result in a significant and unavoidable impact related to the loss and conversion of the openness of the Project Site to a developed appearance, due to the current undeveloped nature of the Project Site. The 2018 SEIR identified this change as having the greatest effect for travelers along Del Amo Boulevard, which is a public view corridor traveled by a large number of people. Cumulative Project No. 27 (Evolve at South Bay) on DD3 resulted in a change from vacant land to an apartment complex. Thus, the 2021 Project in conjunction with the Evolve at South Bay to the north of Del Amo Boulevard, which had been vacant land, would result in the same significant and unavoidable impact related to the conversion of the appearance of the Project Site as described in the 2018 SEIR.

With regard to light and glare, there is a potential for a cumulative increase in light and glare in the area due to the development of nearby cumulative projects (e.g., cumulative projects 2, 5, 27, and 35; refer to Figure III-1, Cumulative Project Locations, and Table III-1, Cumulative Projects, provided in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR). However, given the urban nature of the area and the fact that many of the 2021 cumulative projects represent infill development, the change is expected and would continue the existing urban fabric. In addition, as with the 2021 Project, cumulative projects would comply with applicable CALGreen requirements, which identifies light pollution reduction requirements; Building Energy Efficiency Standards, which aims to reduce energy consumption through efficient and effective use of lighting equipment; and city lighting requirements, which requires that all lighting of buildings, landscaping, parking lots and similar facilities be directed away from adjoining and nearby residential property so as to avoid a nuisance or traffic hazard. Furthermore, lighting plans would be reviewed by the City to ensure compliance and implementation of any adopted mitigation measures that are applicable to any future project development. Therefore, the 2021 Project, in conjunction with cumulative projects, would not result in a cumulatively significant light and glare impact.

With regard to shade/shadow, as indicated above, the 2021 Project would result in less-than-significant impacts to surrounding sensitive uses, including residential uses to the south and west and the Evolve at South Bay Project located just north of Del Amo Boulevard. The cumulative projects are distant from the Project Site and therefore, the 2021 Project would not contribute to a cumulative shade/shadow impact since there would be no overlapping shade/shadow impacts.

While the number of cumulative projects within the Project vicinity is greater than in the 2018 SEIR, cumulative aesthetic impacts occur within a viewshed and within proximity to one

another. Therefore, because of the distance and intervening uses between the 2021 Project and the cumulative projects as well as the urban nature of the area, the 2021 Project would not result in any new significant cumulative aesthetic impacts as compared to the 2018 Project.

IV.B.8 Level of Significance after Mitigation

With respect to aesthetics, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as revised in this 2021 SEIR, all impacts related to aesthetics would either remain less than significant with the exception of the construction and cumulative impact that would remain significant and unavoidable for impacts related to the loss and conversion of the openness of the Project Site to a developed appearance. These conclusions are the same conclusions reached for both the 2006 Project and the 2018 Project. There is no feasible mitigation to mitigate or avoid the significant and unavoidable project-related impact related to the loss and conversion of the openness of the Project Site resulting from construction on the Project Site pursuant to the 2021 Project.

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IV.C TRANSPORTATION

IV.C.1 Introduction

This section addresses the potential impacts of the 2021 Project relative to transportation impacts assessed by the 2018 SEIR, and supplements Section IV.C, *Traffic and Circulation*, of the 2018 SEIR. This supplemental analysis compares the 2021 Project to the 2018 Project to determine if the proposed changes will require major revisions to the 2018 SEIR because of the involvement of any new significant impacts as a result of changes to the 2018 Project, changes in circumstances, or new information, including changes associated with the regulatory framework that was not previously evaluated. To determine whether the 2021 Project would result in any new impacts, or increases in the severity of transportation impacts previously disclosed in the 2018 SEIR, this analysis considers the impacts that would result from operation activities for the 2021 Project and compares these impacts to those identified in the 2018 SEIR as appropriate.

This section is based on the technical report, *The District at South Bay 2021 Project Transportation Impact Analysis* (TIA), prepared by Fehr & Peers, Inc., October 2021. The TIA has been reviewed and approved by the City's traffic engineer, and is provided in Appendix C1 of this 2021 SEIR. It addresses the 2021 Project's changes and its impacts to issues of transportation compared to the 2018 SEIR. This section describes changes in the study area environmental setting between 2018 and 2021, including:

- Approach and methodology used to analyze significant transportation impacts;
- Vehicle miles traveled (VMT) methodology; and
- A conclusion that the 2021 Project would have a significant VMT impact due to the total VMT per service population estimated for the 2021 Project exceeding the applicable level of significance threshold. Mitigation measures were considered, but would not be sufficient to mitigate such impacts. Due to the potential insufficiency of mitigation, the VMT impact for the 2021 Project is considered significant and unavoidable. Although, the 2021 Project has a significant and unavoidable impact, its VMT impact is less than what would be generated by the 2018 Project if the same VMT methodology were applied to the 2018 Project.

IV.C.2 Existing Conditions

a. Regional Network

In general, there are no substantive changes to the regional roadway network as described in the 2018 SEIR, and the discussion in the 2018 SEIR remains relevant. The San Diego Freeway (Interstate 405 [I-405] Freeway) and the Harbor Freeway (I-110 Freeway) provide the primary regional access to the Project Site. Refer to the 2018 SEIR (see 2018 SEIR [Draft SEIR p. 217]) and Appendix C1 for a full description of the regional network.

b. Local Street Network

In general, there are no substantive changes to the local street network as described in the 2018 SEIR, and the discussion in the 2018 SEIR remains relevant. The existing street system serving the Project Site includes Avalon Boulevard, Main Street, Vermont Avenue, Hamilton Avenue, and Figueroa Street in the north/south direction and Del Amo Boulevard, Carson Street, Torrance Boulevard, and 213th Street in the east/west direction. Refer to the 2018 SEIR (see 2018 SEIR [Draft SEIR p. 217]) and Appendix C1 for a full description of the local street network.

IV.C.3 Regulatory Framework

a. State

(1) Senate Bill 743 and Public Resources Code Section 21099

On September 27, 2013, California Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014. The purpose of SB 743 is to streamline the review under CEQA for several categories of development projects including the development of infill projects in transit priority areas and to balance the needs of congestion management with Statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

SB 743 added Chapter 2.7, Modernization of Transportation Analysis for Transit Oriented Infill Projects, to the CEQA Statute (Section 21099). Section 21099(d)(1) provides that aesthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment.

In addition, effective June 30, 2020, lead agencies are no longer allowed to evaluate transportation impacts under CEQA using delay that vehicles experience at intersections and on roadway segments, which is often measured using level of service (LOS) from the determination of impact significance under CEQA. Mitigation for increased delay often involves widening a roadway or the size of an intersection, which increases capacity and may, therefore, increase auto use and emissions and discourage alternative forms of transportation. Under SB 743, the focus of transportation analysis now is to focus on the evaluation of VMT, which measures the amount of vehicle travel that occurs as a result of a project and more directly links the reduction of transportation impacts with the reduction of greenhouse gas emissions, creation of multimodal networks, and promotion of a mix of land uses.

To guide lead agencies in the shift from LOS- to VMT-based impact analysis methods, SB 743 required that the Office of Planning and Research (OPR) prepare revisions to the CEQA Guidelines criteria for determining the significance of transportation impacts of projects. In 2018, OPR issued its Technical Advisory on Evaluating Transportation Impacts in CEQA, which provides guidance to

local agencies on setting VMT screening guidelines, thresholds of significance and impact analysis methodologies. The transportation impact analysis of this 2021 SEIR is consistent with SB 743, and as such, removes the LOS analysis that was conducted for the 2018 SEIR.

b. Regional

(1) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

Every 4 years, the Southern California Association of Governments (SCAG) updates its Regional Transportation Plan (RTP) for the 191-city SCAG region. The RTP assembles a regional project list based on input from cities, counties, transit agencies, congestion management agencies, regional transportation planning agencies, and Caltrans. This project list is then combined with population and employment growth forecasts to project how future (a minimum of 20 years) travel, air quality, and GHG conditions will change. Beginning with the 2012 RTP, SB 375 required the inclusion of a Sustainable Communities Strategy (SCS) in RTPs prepared by metropolitan planning organizations (MPOs) such as SCAG. The key goal of the SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies with an emphasis on considering how land use patterns influence travel demand.

As part of the transportation modeling and analysis for the RTP/SCS, SCAG prepares population and employment growth projections by Transportation Analysis Zone (TAZ) and creates a future transportation network that represents the changes to the existing network based on the regional project list. TAZs are geographic polygons representing communities and neighborhoods at a sub-city level of detail.

(2) Los Angeles County Congestion Management Program

The *Congestion Management Program for Los Angeles County* (CMP) is a state-mandated program that was enacted by the California Legislature to address the impact of local growth on the regional transportation system.⁷⁴ The Los Angeles County Metropolitan Transportation Authority (Metro), the local CMP agency, had established an approach to implement the statutory requirements of the CMP. With the adoption of SB 743, shift away from LOS, and local agencies revisiting their transportation analysis approaches, enough cities with sufficient population to disband the CMP framework voted to do so through individual council actions. These actions were shared with Metro and the CMP is no longer in effect and does not apply for the 2021 Project.

⁷⁴ *Metropolitan Transportation Authority (MTA), 2010 Congestion Management Program for Los Angeles County, September 2010.*

c. Local

(1) City of Carson General Plan

The City of Carson General Plan Transportation and Infrastructure Element, which remains unchanged since publication of the 2018 SEIR, provides information about the existing circulation system in the City as well as the future transportation system improvements needed given the anticipated development in the City and in the area surrounding the City. The Transportation and Infrastructure Element also identifies goals, policies, and implementation measures to meet the City's future transportation needs. Below are goals, policies, and implementation measures that are applicable to the 2021 Project.

Goal TI-1—*Minimize impacts associated with truck traffic through the City, as well as the truck parking locations.*

Policy TI-1.2—*Devise strategies to protect residential neighborhoods from truck traffic.*

Policy TI-1.3—*Ensure that the City's designated truck routes provide efficient access to and from the I-405, I-110, and Route-91 Freeways, as well as the Alameda Corridor.*

Policy TI-1.4—*Ensure that all new commercial projects have properly designed truck loading facilities.*

Implementation Measure TI-IM-1.2—*Require new development applications to provide estimates of truck trip generation as part of environmental studies and incorporate improvements as necessary to mitigate truck impacts.*

Implementation Measure TI-IM-1.4—*Ensure that the development review process incorporates consideration of an adequate design for off-street commercial loading requirements in all new commercial projects, where applicable.*

Goal TI-2—*Provide a sustainable, safe, convenient, and cost-effective circulation system to serve the present and future transportation needs of the Carson community.*

Policy TI-2.1—*Require that new projects not cause Level of Service for intersections to drop more than one level if it is at Level A, B, or C, and not drop at all if it is at D or below, except when necessary to achieve substantial City development goals.⁷⁵*

Policy TI-2.7—*Provide all residential, commercial, and industrial areas with efficient and safe access to major regional transportation facilities.*

Implementation Measure TI-IM-2.5—*Evaluate traffic impacts, including truck impacts, associated with proposed new developments prior to project approval. Require the implementation of appropriate mitigation measures prior to, or in*

⁷⁵ Policy TI-2.7, though related to transportation, is no longer relevant to the CEQA analysis since its focus is on intersection LOS. SB 743 specifically removes LOS analysis from the assessment of potential transportation impacts.

conjunction with, project development. Mitigation measures shall be required of the project developer on a “fair-share” basis.⁷⁶

Goal TI-6—*Cooperate to the fullest extent possible with federal, State, County, and regional planning agencies responsible for maintaining and implementing circulation standards to ensure orderly and consistent development of the entire South Bay region.*

Policy TI-6.2—*Ensure that the City remains in compliance with the County, Regional, and State CMPs through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes.⁷⁷*

Implementation Measure TI-IM-6.5—*Monitor and comply with all CMP provisions.*

(2) Carson Master Plan of Bikeways

The City of Carson Master Plan of Bikeways (Plan) lays out a strategic vision for enhancing bicycle transportation in the City. The Plan is the guiding document for all bicycle infrastructure, policies, and programs in Carson. In addition to the proposed bikeway network, the Plan also contains bikeway design guidelines, recommended programs and policies to encourage bicycle travel and increase cyclist safety, potential funding sources for implementing the Plan, and an implementation framework that prioritizes the most important bikeway projects. There are a number of bike lanes and bike routes planned throughout the study area including an extension of the bike path along the Dominguez Channel east of the I-405 Freeway. There are also two planned bicycle facilities included as part of the 2021 Project: a Class II bike lane with a buffer on Street B (Stamps Drive) between Del Amo Boulevard and Lenardo Drive and a Class I bike path on Street A (Lenardo Drive). There is also a Del Amo Boulevard bike lane with a buffer planned. In addition to the Plan, the City of Los Angeles *Mobility Plan 2035*, and Metro’s Active Transportation Strategic Plan were consulted to identify planned bicycle facilities located in the study area, but outside the City of Carson.

IV.C.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to transportation are considered significant if the 2021 Project would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)

⁷⁶ Implementation Measure TI-IM-2.5, though related to transportation, is no longer relevant to the CEQA analysis since its focus is on traffic impacts. SB 743 specifically removes traffic impact analysis from the assessment of potential transportation impacts.

⁷⁷ Policy TI-6.2 is no longer relevant since the discontinuation of the CMP.

- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (Evaluated in Chapter VI, *Effects Found Not to Be Significant.*)
- Result in inadequate emergency access (Evaluated in Chapter VI, *Effects Found Not to Be Significant.*)

a. VMT Impact Thresholds (CEQA Guidelines Section 15064.3, Subdivision (b))

The lead agency has the discretion to develop and adopt its own VMT thresholds, or rely on thresholds recommended by other agencies, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence. OPR recommends that projects with VMT exceeding 15 percent below existing VMT per capita or per employee when compared to a regional or citywide average of these metrics may indicate project impacts. For mixed-use projects, OPR generally recommends analyzing each land use individually, focusing on the VMT per capita or per employee metrics of each land use. However, these performance metrics do not include visitor or heavy truck trips. Since the 2021 Project includes a substantial amount of visitor and heavy truck trips, focusing on VMT per capita or per employee would exclude a substantial portion of the overall VMT. As described in Section 15151 of the CEQA guidelines, CEQA environmental analyses are required to reflect a “good faith effort at full disclosure.” Total VMT per service population is the standard performance metric used to assess the overall VMT impact of a mixed-use project since it includes all VMT trip types and land use types. Service population is the total count of residents and employees for all such project uses.

Based on the guidance from OPR, the City of Carson, as the lead agency, has employed a threshold of 15 percent below existing citywide total VMT per service population as the threshold that would be appropriate to apply to the 2021 Project. If the 2021 Project would generate VMT higher than the threshold, then it would be expected to have a VMT impact, and if the 2021 Project would generate VMT lower than the threshold, then it would not be expected to have a VMT impact. The City’s Baseline VMT and VMT impact threshold, derived from the 2016 RTP/SCS SCAG model, are summarized in **Table IV.C-1, City of Carson Baseline VMT and VMT Impact Threshold for Total VMT.**

**Table IV.C-1
City of Carson Baseline VMT and VMT Impact Threshold for Total VMT**

VMT Metrics	Baseline VMT	VMT Impact Threshold ^a
2016 – Total Citywide VMT per Service Population	38.2	32.5

SOURCE: Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, prepared for Environmental Science Associates and the City of Los Angeles, October 2021.

^a The VMT Impact Threshold is 15 percent below the Baseline VMT.

IV.C.5 Project Impacts

a. Methodology

VMT is the primary quantitative transportation impact analysis metric under CEQA due to the changes to the regulatory framework associated with SB 743. The City of Carson has not yet adopted new significance thresholds for transportation impacts based on VMT and has not yet revised its transportation impact assessment processes and/or guidelines to incorporate VMT analysis. In lieu of City guidelines, VMT analysis based on the OPR Technical Advisory and interim City guidance based on discussions with City staff that were conducted for the 2021 Project. The OPR technical advisory describes the components of a VMT analysis necessary to comply with the new CEQA guidelines:

(1) VMT Screening

The first step is to determine when a VMT analysis is required. OPR recommends that projects be screened from a VMT analysis based on their size, location, and/or accessibility to transit as described below.

VMT is heavily dependent on the land uses and location of a project. For example, a development site located in an urban area will typically have lower VMT because people have more options to walk, bike, take transit or drive short distances to nearby destinations in comparison to a suburban or rural environment where most people drive longer distances for their everyday work and household needs. Therefore, OPR has provided guidance related to several opportunities for screening projects that would generate low VMT as described in this section.

(a) Project Type Screening

Projects that generate less than 110 daily trips may be screened from conducting a VMT analysis. Local serving commercial uses less than 50,000 square feet may also be presumed to have a less than significant VMT impact absent substantial evidence to the contrary. This is because local serving commercial generally improves the convenience of shopping and dining close to home and has the effect of reducing vehicle travel.

(b) Low-VMT Area Screening

Residential and employment projects located within an area determined to generate low VMT may be presumed to have a less-than-significant impact absent substantial evidence to the contrary.

The SCAG Regional Travel Demand Model, which includes Los Angeles County and the City of Carson, is the most appropriate model to use for VMT forecasting within the City of Carson. This analysis used the SCAG model to measure the VMT performance for the 2021 Project's

TAZ during Base Year 2016 (the most recently adopted SCAG base year) and Cumulative Year 2040 (the horizon year of the 2016 RTP/SCS SCAG Model) conditions.

Low-VMT areas for residential projects are defined as TAZs that generate VMT on a per capita basis that is at least 15 percent lower than the Citywide or regional average. Low-VMT areas for employment projects are defined as TAZs that generate VMT on a per employee basis that is at least 15 percent lower than the Citywide or regional average.

(c) Transit Priority Area (TPA) Screening

Projects located within 0.5 miles of either an existing major transit stop or a stop along an existing high-quality transit corridor (HQTC) may also be exempt from VMT analysis. Major transit stops are defined in the OPR technical advisory as rail or bus rapid transit stations, ferry terminals served by transit, or the intersection of two HQTCs (defined as corridors with fixed-route bus service with no longer than 15-minute headways during peak commute periods).

Based on OPR guidance, projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, according to the OPR guidance, this presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75
- Includes more parking for use by residents, customers, or employees than required by the City (unless additional parking is being provided for design feasibility, such as completing the floor of a subterranean or structured parking facility, or if additional parking is located within the project site to serve adjacent uses)
- Is inconsistent with the applicable SCS (as determined by the City)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

(2) VMT Analysis Methodology

If a project is not screened from requiring a VMT analysis, the regional travel demand model is often used to estimate a project's VMT. OPR recommends that VMT be reported as "Home-Based VMT" per capita for residential projects and "Home-Based Work VMT" per employee for the employees of a project site. VMT for mixed-use projects, such as the 2021 Project, must include an analysis of resident, employee, visitor and heavy truck trips, which should be reported as "Total VMT" per service population.

Home-Based VMT includes all vehicle roundtrips originating from the residence of the trip-maker. Home-Based Work VMT includes only vehicle roundtrips between the residence of the trip-maker and their place of work. Total VMT includes these two trip purposes, as well as non-home based VMT for all users of a land use, including visitors and heavy truck trips. However, for the purposes of CEQA, total VMT does not include construction heavy truck trips associated

with a project. As described in the OPR technical advisory, using VMT as the primary significance impact metric for transportation is intended to address regional and local imbalances in the mix of residential uses, employment centers and retail uses, and is, therefore, focused on the effects of a project's operations on travel behavior post-construction. CEQA addresses the potential environmental impacts of construction through other environmental analyses, including the air quality, health risk assessment, and noise analyses sections.

The SCAG 2016 RTP/SCS trip-based model was used to estimate the baseline VMT for the City of Carson. The current SCAG model has a 2012 base year, a 2016 scenario and 2040 as the forecast year. The 2020 RTP/SCS SCAG model has not yet been released for use in analysis of projects. The VMT analysis for this project is based on year 2016 results.

This baseline VMT methodology includes vehicle trips within the SCAG model to generate the following metric, per the OPR advisory: Total VMT per service population: All daily vehicle trips generated by a project's land uses (post-construction) are counted and divided by the 2021 Project's total service population. This metric is used to estimate total daily VMT per service population for the 2021 Project's combined land uses.

b. Project Characteristics

The 2021 Project would provide the following access locations:

- One of the three major access locations would be at Del Amo Boulevard & Stamps Drive (Intersection No. 9) where the south leg of Stamps Drive would provide vehicular access to and from the Project Site south of Del Amo Boulevard. This intersection would be signalized as part of the 2021 Project.
- The second major access location for the 2021 Project would be provided at the new intersection of Main Street & /Lenardo Drive (Intersection No. 13). This intersection would be signalized as part of the 2021 Project.
- The third major access location would be provided at the intersection of the I-405 Freeway southbound on-/off-ramps and Lenardo Drive (Intersection No. 17). This intersection would provide access to the Project Site from the I-405 Freeway southbound off-ramp and from the intersection of Lenardo Drive & Avalon Boulevard (Intersection No. 18). The existing signal at this intersection would be modified as part of the 2021 Project.
- Two stop-controlled driveways would be provided along Del Amo Boulevard to the west and east of Del Amo Boulevard & Stamps Drive (Intersection No. 8). These driveways would facilitate direct access to PA1 and PA2 and would provide right-turn-in and right-turn-out movements only.

The 2021 Project includes all of the above-listed Project Characteristics in the analysis provided herein. Additional detail on the proposed lane configurations for all access and egress points are illustrated in Figure II-16, Vehicular Circulation Concept, of this 2021 SEIR.

c. Analysis of Project Impacts

(1) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities

The 2021 Project would not conflict with the addition of planned improvements to the City's circulation system as described in applicable City regulatory documents including the 2021 Specific Plan Amendment, the City of Carson General Plan, and the Master Plan of Bikeways. The 2021 Project will not degrade facilities on the existing circulation system. Refer also to Table IV.A-1, 2021 Project Consistency with City of Carson General Plan, of this 2021 Project EIR for a detailed description of the 2021 Project's consistency with the City of Carson General Plan.

The 2021 Project is located adjacent to freeway interchanges and along truck routes to ensure that trucks do not need to travel on local streets not designated as truck routes. As part of the 2021 Specific Plan Amendment, the portion of Avalon Boulevard near the I-405 Freeway interchange will be designated as a truck route to allow direct heavy truck access between the freeway and the Project Site.

(2) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b)

(a) VMT Screening

Per the City of Carson's interim transportation analysis guidance, regional serving mixed-use projects should be assessed for VMT impacts based on the total VMT per service population of the combined uses of a project. The 2021 Project is expected to generate significantly more than 110 daily trips and, therefore, does not qualify for small project screening based on OPR guidance. Also, the 2021 Project is not exclusively a residential or office project and, therefore, does not qualify for the low VMT area screening based on OPR guidance.

Finally, the closest major transit stops to the Project Site are along the LA Metro Silver Line bus rapid transit route. However, the 2021 Project is more than one mile away from the closest Silver Line stop at the I-110 Freeway/Carson Street interchange. Also, there are no HQTCs near the 2021 Project. Therefore, the Project Site is not within a transit priority area and does not qualify for the transit priority area screening.

(b) VMT Impact Analysis

The VMT impact analysis for the 2021 Project was performed using the SCAG 2016 RTP/SCS travel model, described above in Section IV.C.5.a, *Methodology*. The SCAG model's socioeconomic data (SED) was updated to include the population and employment associated

with the 2021 Project. Based on standard SCAG model rates, SED data from the Project Site's TAZ, and site-specific information as provided in Chapter II, *2021 Project Description*, of this 2021 SEIR., population per household and employees per thousand gross leasable square feet (GLKSF) were calculated and applied to the 2021 Project land uses to generate the total service population estimate for the 2021 Project, as summarized below:⁷⁸

- Resident Population: 3,716 (average population per household of 2.97)
- Commercial Employees: 1,754 (average employees per GLKSF of 2.35)
- Fulfillment Center/Distribution Center Employees: 4,589 (average employees per GLKSF of 2.93)⁷⁹
- **Total Service Population: 10,059**

Once the model coding was complete, the model assignment script was run following the SCAG model's standard process. Total VMT per service population was then calculated using the model.

As shown in **Table IV.C-2, Total VMT per Service Population Calculation and Impact Analysis**, the resulting total VMT per service population for the 2021 Project is 39.1. This result exceeds the impact threshold for total VMT per service population and, thus, a significant and unavoidable transportation impact would occur. However, a new mitigation measure, Mitigation Measure C-18, has been identified to reduce VMT impacts through creation and implementation of a Transportation Demand Management (TDM) program for PA1 and PA3 that would be subject to review and approval by the City of Carson Department of Public Works prior to the issuance of building permits. Because the effectiveness of this program cannot be guaranteed, the impact is assumed to remain significant and unavoidable.

In addition, while the analysis of VMT does not include construction trips, Mitigation Measure C-1, which requires preparation of a Construction Traffic Management Plan, was proposed in the 2018 SEIR and would continue to be implemented as part of the 2021 Project to reduce construction-related truck and vehicle trips.

⁷⁸ The default SCAG model was used for the residential population and commercial employees and estimates a different residential population and commercial employee number as compared to the 2021 Project specific assumptions (i.e., SCAG's model assumes a smaller residential population and a larger commercial employee population as compared to the 2021 Project). A lower residential population to commercial employee ratio as estimated by the SCAG model provides for a more conservative VMT scenario as the City of Carson currently has a jobs-to-housing imbalance.

⁷⁹ As the SCAG model for industrial uses estimates a significantly lower employee number, the 2021 Project specific employee assumption for light industrial uses was used for the VMT analysis herein.

Table IV.C-2
Total VMT per Service Population Calculation and Impact Analysis

Project VMT	VMT Impact Threshold	Significant Impact?
39.1	32.5	Yes

SOURCE: Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, October 2021.

(c) VMT Comparison to 2018 Project

VMT impact analysis was not required at the time of preparation for the 2018 SEIR, however, in order to provide for a comprehensive transportation impact analysis, a comparison of VMT between the 2018 Project and this 2021 Project is included in this VMT impact analysis for informational purposes only. Using the same VMT methodology described above for the 2021 Project, the land uses for the 2018 Project were coded into the 2016 RTP/SCS SCAG model to generate VMT results. Based on this model run, the 2018 Project generates total VMT per service population of 47.7. Therefore, although the 2021 Project has a significant and unavoidable VMT impact, it should be noted that the 2021 Project would generate about 18 percent less total VMT per service population than would be generated by the 2018 Project.

IV.C.6 Mitigation Measures

a. 2018 SEIR Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 Mitigation Monitoring and Reporting Program (MMRP). The 2021 Project would implement these mitigation measures, either as they were presented in the 2018 SEIR or revised as indicated below.⁸⁰ As the updated CEQA Guidelines Appendix G, and by extension this 2021 SEIR, does not require an intersection, freeway, or transit LOS analysis, the mitigation measures that were proposed under the 2018 SEIR that would reduce these LOS impacts are no longer applicable. As such, this 2021 SEIR proposes the deletion of Mitigation Measures C-2.1, C-3, C-5, C-6, C-6.1, C-8, C-9, C-10.1, C-11, C-14, and C-16, as described below. Note that the mitigation measures related to reducing a LOS impact would continue to apply to PA2 to the extent that the 2021 Project, and its PDFs and mitigation measures, does not otherwise reduce LOS impacts. PA2, which has been approved and for which an environmental document has been certified (e.g., the 2018 FEIR), has a vested right to development; therefore, the 2018 mitigation measures

⁸⁰ Because PA2 has already been approved for development by the City (following the approval of the 2018 SEIR) and the Applicant of that property (CAM-Carson LLC) has vested rights to its project proposal and construction has already begun for PA2 in compliance with the 2018 SEIR, PA2's compliance requirements for mitigation measures are limited to those mitigation measures that were approved in the 2018 SEIR.

identified in the 2018 FEIR and/or any adopted 2018 conditions of approval would remain in effect. While LOS impacts are no longer applicable to the required transportation analysis under CEQA (and in this 2021 SEIR), the 2021 Specific Plan Amendment contains certain terms for the requirement of a traffic operations assessment based on LOS.

Mitigation Measure C-1: A Construction Traffic Management Plan shall be developed by the contractor and approved by the City of Carson to alleviate construction period impacts, which may include but is not limited to the following measures:

- In the unlikely case that on-site truck staging areas are insufficient, provide off-site truck staging in a legal area (per the local jurisdiction's municipal code) furnished by the construction truck contractor. Anticipated truck access to the Project sSite will be off Street B and Street A.
- Schedule deliveries and pick-ups of construction materials during non-peak commute travel periods (e.g., early morning, midday) to the extent possible and coordinate to reduce the potential of trucks waiting to load or unload for protracted periods.
- As a vehicular travel lane, parking lane, bicycle lane, and/or sidewalk closures are anticipated, worksite traffic control plan(s), approved by the City of Carson, should be implemented to route vehicular traffic, bicyclists, and pedestrians around any such closures.
- Establish requirements for loading/unloading and storage of materials on the Project sSite, including the locations where parking spaces would be affected, the length of time traffic travel lanes would be blocked, and sidewalk closures or pedestrian diversions to ensure the safety of the pedestrian and access to local businesses and residences.
- Ensure that access will remain unobstructed for land uses in proximity to the Project sSite during project construction.
- Coordinate with the City and emergency service providers to ensure adequate access is maintained to the Project sSite and neighboring businesses and residences.

Mitigation Measure C-2: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-2.1: Mitigation Measure C-2.1, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.
~~Main Street and I 405 Southbound On-Ramp (Intersection No. 3). A significant impact would occur at this intersection during the p.m. peak hour under the~~

~~existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping improvement:~~

- ~~•—Conversion of the eastbound left turn lane to a through/left turn lane is proposed.~~

Mitigation Measure C-3: Mitigation Measure C-3, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Vermont Avenue and Del Amo Boulevard (Intersection No. 5). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:

- ~~•—Addition of a second westbound left turn lane; and~~
- ~~•—Conversion of the northbound through/right turn lane to a second northbound through and a dedicated right turn lane. This would require the removal of approximately eight parking spaces.~~

Mitigation Measure C-4: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-5: Mitigation Measure C-5, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Figueroa Street and Del Amo Boulevard (Intersection No. 7). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:

- ~~•—Addition of a second westbound left turn lane;~~
- ~~•—Conversion of the westbound right turn lane to a through/right turn lane;~~
- ~~•—Addition of a second southbound left turn lane;~~
- ~~•—Conversion of the southbound through and southbound right turn lane to a through/right turn lane;~~
- ~~•—Conversion of the eastbound right turn lane to a through/right turn lane; and~~
- ~~•—Addition of a northbound right turn only lane.~~

Mitigation Measure C-6: Mitigation Measure C-6, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Main Street and Del Amo Boulevard (Intersection No. 8). A significant impact would occur at this intersection during the p.m. peak hour under the existing year and

future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:

- Addition of a second westbound left turn lane;
- Addition of a second southbound dedicated through lane;
- Conversion of the eastbound through/right turn lane to a through lane and a right turn lane; and
- Conversion of the northbound through/right turn lane to a through lane and a right turn lane.

Mitigation Measure C-6.1: Mitigation Measure C-6.1, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Avalon Boulevard and Del Amo Boulevard (Intersection No. 10). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:

- Conversion of the southbound through/right turn lane to a through lane and a right turn lane; and
- Addition of a second northbound left turn lane.

Mitigation Measure C-7: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-8: Mitigation Measure C-8, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Figueroa Street and I 110 Northbound Ramps (Intersection No. 12). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:

- Addition of a southbound through/right turn lane;
- Addition of a third southbound receiving lane; and
- Conversion of the eastbound left/right turn lane to a dedicated left turn lane and a dedicated right turn lane.

Mitigation Measure C-9: Mitigation Measure C-9, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. Figueroa Street and Torrance Boulevard (Intersection No. 15). A significant impact would occur at this intersection during the p.m. peak hour under the future

~~year analysis only. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:~~

- ~~• Conversion of the northbound through/right turn lane to a through lane and a right turn lane.~~

Mitigation Measure C-10: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-10.1: Mitigation Measure C-10.1, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~Main Street and 213th Street (Intersection No. 20). A significant impact would occur at this intersection during the p.m. peak hour under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:~~

- ~~• Conversion of the westbound left/right turn lane to a left turn lane and a right turn lane.~~

Mitigation Measure C-11: Mitigation Measure C-11, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~Vermont Avenue and Carson Street (Intersection No. 22). A significant impact would occur at this intersection during the a.m. and p.m. peak hours under the existing year and future year analysis. The Applicant shall pay a fair share contribution for the following intersection striping and geometric improvements:~~

- ~~• Conversion of the westbound right turn lane to a through/right turn lane; and~~
- ~~• Conversion of the eastbound right turn lane to a through/right turn lane.~~

Mitigation Measure C-12: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-13: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-14: Mitigation Measure C-14, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~Avalon Boulevard and Carson Street (Intersection No. 25). A significant impact would occur at this intersection during the p.m. peak hour under the existing year analysis, and during the a.m. and p.m. peak hours under the future year analysis.~~

The Applicant shall pay a fair share contribution for the following intersection striping improvements:

- ~~Convert the southbound through/right turn lane to a dedicated right turn lane; and~~
- ~~Convert the northbound through/right turn lane to a dedicated right turn lane.~~

Mitigation Measure C-15: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure C-16: Mitigation Measure C-16, which reduces an LOS impact, is no longer required pursuant to SB 743. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~In coordination with the Carson Circuit, Metro, Torrance Transit, and LADOT, the Applicant shall:~~

- ~~Request an extension of existing public bus routes into the Project site, which will increase transit capacity by adding service to the area;~~
- ~~Request that additional buses be deployed on extended routes to increase frequency and capacity on key routes serving the Project site; and~~
- ~~Provide transit stops, potentially including benches and shelters, in and adjacent to the Project site, which will improve the quality and increase the network density of transit service.~~

Mitigation Measure C-17: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

b. Mitigation for VMT Impact

The primary means of mitigating the VMT impacts of a project is to implement a Transportation Demand Management (TDM) program. Mitigation Measure C-18, described below, is a new mitigation measure proposed for the 2021 Project to help mitigate the significant VMT impact.

Mitigation Measure C-18: The PA1 and PA3 Applicant(s) shall implement a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The TDM Program shall be subject to review and approval prior to issuance of certificate of occupancies by the City of Carson Department of Public Works subject to the requirements specified below. Mandatory strategies in the TDM Program shall include the TDM strategies summarized below. This TDM program is estimated to reduce total VMT per service population by about 2 percent based on the trip reduction

methodology described in the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* report.

- *Unbundled Parking*—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. (Applicable to PA1.)
- *Rideshare Programs*—Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more commonly provided for Project Site employees but residents could also benefit from a similar program. (Applicable to PA1 and PA3.)
- *Transit Pass Discount Program*—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk and, therefore, at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project Site employees but could also be sold to residents. (Applicable to PA1 and PA3.)
- *Bicycle Parking and Bike Share Program*—The 2021 Project shall include bicycle facilities within the Project Site as well as short-term bicycle parking. The 2021 Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the Project Site. (Applicable to PA1 and PA3.)
- *Car Share Program*—A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. (Applicable to PA1 and PA3.)

IV.C.7 Cumulative Impacts

Based on OPR guidance, a project's cumulative VMT impact assessment aligns with the project-level impact assessment if one of the recommended efficiency metrics (VMT per capita, VMT per employee or VMT per service population) is used as the basis for the analysis. The VMT threshold of significance used in this analysis (i.e., total VMT per service population 15 percent below the existing citywide average) was developed to align with Statewide long-term environmental goals and relevant plans. Therefore, a project-level significant VMT impact also implies a cumulative VMT impact.

IV.C.8 Level of Significance after Mitigation

In order to mitigate the total VMT per service population impact of the 2021 Project, total VMT per service population would need to be reduced by approximately 17 percent. Using Fehr & Peers' proprietary *TDM+* tool (see Appendix C1 for further details) with underlying data from the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* report, this VMT impact analysis has estimated the potential effect of applying the suite of TDM measures described in Mitigation Measure C-18 in the previous section.

With the implementation Mitigation Measure C-18, the 2021 Project can achieve a total VMT per service population reduction of about 2 percent. This small potential reduction is in part due to the number of visitor trips generated by the retail uses proposed by the 2021 Project and the additional heavy truck trips generated by the industrial uses proposed within PA3(a). VMT mitigation measures are primarily focused on resident and employee commute trips and, therefore, VMT mitigation is less effective when a large proportion of project trips are not related to resident or employee commute trips. This reduction estimate would not be enough to mitigate the potential VMT impacts resulting from the 2021 Project. Since the VMT impacts proposed by the 2021 Project cannot be fully mitigated through the implementation of the suite of potential TDM measures identified, the VMT impact for the 2021 Project is still considered significant and unavoidable. Notwithstanding, as discussed further above, although the 2021 Project has a significant and unavoidable VMT impact, it should be noted that the 2021 Project would generate about 18 percent less total VMT per service population than would be generated by the 2018 Project.

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IV.D AIR QUALITY

IV.D.1 Introduction

This section estimates future air quality impacts due to potential changes brought about by the 2021 Project's construction and operation activities with respect to the 2018 Project. Accordingly, this section supplements Section IV.G, *Air Quality*, of the 2018 SEIR to account for the 2021 Project (in conjunction with the uses allowed under the 2021 Specific Plan Amendment). This analysis determines the impacts that would result from construction and operational activities that would take place within the 157 acres (referenced herein as the Project Site) under current environmental and regulatory circumstances and assuming implementation of the mitigation measures identified in the 2018 SEIR or those added with respect to the revised 2021 Project analysis. The significance of these impacts is determined on the basis of established thresholds. To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts previously disclosed in the 2018 SEIR, the analysis compares the significance of these impacts to those identified in the 2018 SEIR. This section relies on the information, data, assumptions, calculation worksheets, and model outputs provided in Appendix D1 of this 2021 SEIR.

The analysis concludes that the 2021 Project would result in similar types of air quality impacts as compared to the 2018 Project, and like the 2018 Project, would result in significant and unavoidable regional operational emissions related to volatile organic compounds (VOCs), also known as reactive organic gas (ROG),⁸¹ nitrogen oxides (NOx), carbon monoxide (CO), and respirable and fine particulate matter (PM10 and PM2.5, respectively). Construction emissions would be mitigated to less-than-significant levels whereas the 2018 Project resulted in significant and unavoidable impacts for VOCs. Like the 2018 Project, the 2021 Project would result in less-than-significant impacts related to localized construction and operational emissions, CO hotspots, exposure to substantial concentrations of toxic air contaminants (TACs), and odors.

IV.D.2 Existing Conditions

a. Regional Context

As discussed in the 2018 SEIR, the 2021 Project is located within the South Coast Air Basin (SCAB). Conditions within the SCAB, such as geographical location, climate, and pollutant dispersion, as described in the 2018 SEIR remain unchanged. Refer to the 2018 SEIR (see 2018

⁸¹ *Reactive organic compounds (ROC) was the term previously (and appropriately) used in the 2006 FEIR and 2018 SEIR. The nomenclature in this 2021 SEIR updates the use of the term ROC to VOC, which is the currently used term.*

Draft SEIR p. VI.G-9 and 2006 FEIR [DEIR p. 365]) for a description of the conditions within the SCAB.

b. Local Area Conditions

(1) Existing Ambient Air Quality in the Surrounding Area

The South Coast Air Quality Management District (SCAQMD) maintains a network of air quality monitoring stations located throughout the SCAB to measure ambient pollutant concentrations. As disclosed in the 2018 SEIR, the Project Site is located in SCAQMD Source Receptor Area (SRA) 4; therefore, the monitoring station most representative of the Project Site is the South Los Angeles County Coastal Monitoring Station 033 in the City of Long Beach. Criteria pollutants monitored at this station include ozone, nitrogen dioxide (NO₂), sulfur dioxide (SO₂), CO, and PM₁₀.

The South Los Angeles County Coastal Monitoring Station 072 in north Long Beach collects data for PM_{2.5} and South Los Angeles County Coastal Monitoring Station 077 in south Long Beach collects data for lead. Where data is not available for Station 033, monitoring data from Station 072 or Station 077 are listed. The most recent data available from SCAQMD for these monitoring stations are from years 2017 to 2019. The pollutant concentration data for these years are summarized in **Table IV.D-1, Pollutant Standards and Ambient Air Quality Data**. SCAQMD data for monitoring years 2011 through 2016 can be found in the 2018 SEIR (see Draft SEIR Table IV.G-3, p. IV.G-13). Ambient concentrations have remained relatively consistent between 2011 and 2019, with PM and lead trending higher in later years and NO_x, and CO showing overall reductions in later years.

**Table IV.D-1
Pollutant Standards and Ambient Air Quality Data**

Pollutant/Standard ^a	2017	2018	2019
Ozone, O₃ (1-hour)			
Maximum Concentration (ppm)	0.082	0.075	0.074
Days > CAAQS (0.09 ppm)	0	0	0
Ozone, O₃ (8-hour)			
Maximum Concentration (ppm)	0.068	0.063	0.064
4th High 8-hour Concentration (ppm)	0.062	0.053	0.055
Days > CAAQS (0.070 ppm)	0	0	0
Days > NAAQS (0.070 ppm)	0	0	0
Nitrogen Dioxide, NO₂ (1-hour)			
Maximum Concentration (ppm)	0.090	0.085	0.072
Days > CAAQS (0.18 ppm)	0	0	0
98th Percentile Concentration (ppm)	0.073	0.063	0.056

**Table IV.D-1
Pollutant Standards and Ambient Air Quality Data**

Pollutant/Standard ^a	2017	2018	2019
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO₂ (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.018	0.017	0.016
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	3.9	4.7	3.0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	2.6	2.1	2.1
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO₂ (1-hour)			
Maximum Concentration (ppm)	0.020	0.011	0.009
Days > CAAQS (0.25 ppm)	0	0	0
99th Percentile Concentration (ppm)	0.014	0.009	0.008
Days > NAAQS (0.075 ppm)	0	0	0
Respirable Particulate Matter, PM₁₀ (24-hour)			
Maximum Concentration (µg/m ³)	57	84	74
Samples > CAAQS (50 µg/m ³)	9	4	3
Samples > NAAQS (150 µg/m ³)	0	0	0
Respirable Particulate Matter, PM₁₀ (Annual)			
Annual Arithmetic Mean (20 µg/m ³)	33.3	32.3	26.9
Fine Particulate Matter, PM_{2.5} (24-hour)			
Maximum Concentration (µg/m ³)	85.4	46.1	36.7
98th Percentile Concentration (µg/m ³)	35.6	31.9	23.0
Samples > NAAQS (35 µg/m ³)	8	4	1
Fine Particulate Matter, PM_{2.5} (Annual)			
Annual Arithmetic Mean (12 µg/m ³)	12.9	12.75	10.99
Lead			
Maximum 30-day average (µg/m ³)	0.010	0.006	0.006
Samples > CAAQS (1.5 µg/m ³)	0	0	0
Maximum 3-month rolling average (µg/m ³)	0.001	0.007	0.005
Days > NAAQS (0.15 µg/m ³)	0	0	0

SOURCE: SCAQMD, Historical Data by Year, <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>.

^a ppm = parts per million; µg/m³ = micrograms per cubic meter

(2) Existing Health Risk in the Surrounding Area

Existing land uses have the potential to combine with risks from new projects to exacerbate risk conditions for common sensitive neighbors to new and existing land uses. The Prologis Carson Town Center is an existing warehouse site located west of South Main Street approximately 2,000 feet south of the 2021 Project entrance on Main street, and about 1,800 feet west of the southern border of the Project Site. The Prologis Carson Town Center truck traffic would use the same streets as the 2021 Project to access freeways thereby increasing risk to residents along those roadways and located east of South Main Street and west of the Project Site. Risk related to operational activities from the Prologis Carson Town Center are considered existing risks and are included in the background risk levels as modeled by the SCAQMD. There are no other existing warehouse/industrial uses within the 1,000-foot study area around the Project Site (refer to Section IV.D.5(4), *Toxic Air Contaminants*).

As identified in the 2018 SEIR, between July 2012 and June 2013, SCAQMD conducted the Multiple Air Toxics Exposure Study (MATES IV), which is a follow-up to previous air toxics studies conducted in the SCAB. SCAQMD recently updated the study, with the final MATES V adopted August 2021. The MATES V study includes a monitoring program, an updated TAC inventory, risk characterization across the SCAB for cancer, as well as chronic non-cancer health risks. In addition to inhalation risk, which was the focus of the previous MATES studies, the MATES V study incorporates multiple exposure pathways. MATES IV found that the average cancer risk in the 2021 Project vicinity from carcinogenic air pollutants is approximately 1,138 in 1 million, with an average regional risk of approximately 1,023 in 1 million.⁸²

The MATES V study shows air toxic cancer risk ranging from 585 to 842 per million and is on average 40 percent lower than reported in the MATES IV study and 84 percent lower than the average in MATES II.⁸³ The MATES series of studies shows that diesel PM is the largest contributor to overall air toxic cancer risk. However, the average levels of diesel particulate matter (DPM) have been reducing over time with the MATES V showing a 53 percent reduction over MATES IV and an 86 percent reduction over MATES II.⁸⁴ Even with the reduction in risk, cancer risk is still estimated to be approximately four to five times the significant risk levels established by AB 2588.⁸⁵

⁸² South Coast Air Quality Management District (SCAQMD), Final Report MATES IV Multiple Air Toxics Exposure Study in the South Coast Air Basin, May 2015, <http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sforsn=7>, accessed June 2021.

⁸³ SCAQMD, MATES V Multiple Air Toxics Exposure Study, 2021, <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>, accessed October 2021.

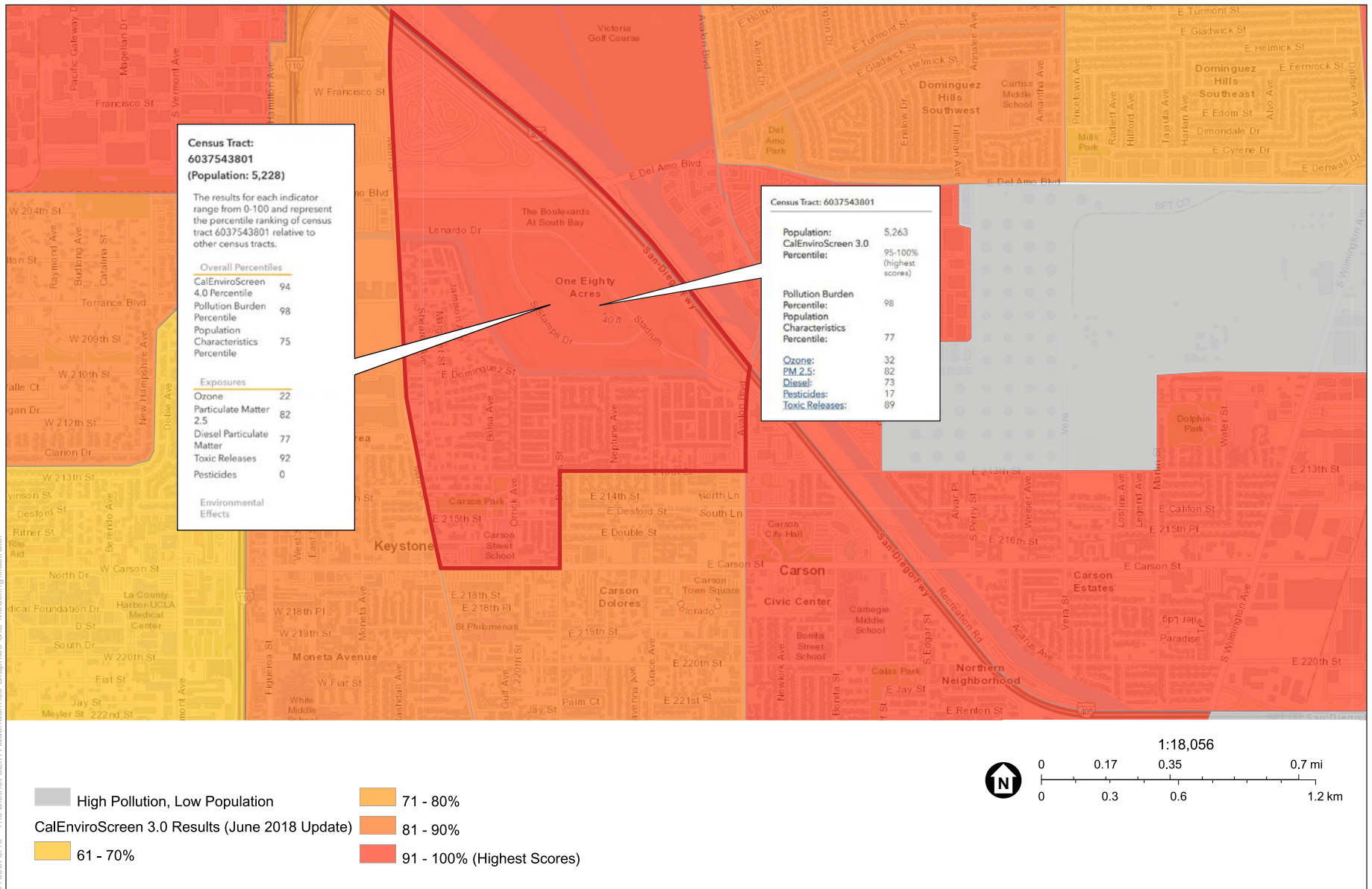
⁸⁴ SCAQMD, MATES V Multiple Air Toxics Exposure Study, 2021, <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>, accessed October 2021.

⁸⁵ SCAQMD, MATES V Multiple Air Toxics Exposure Study, 2021, <http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>, accessed October 2021.

(3) CalEnviroScreen

The California Communities Environmental Health Screening Tool Version 3.0 (CalEnviroScreen 3.0) tool is a mapping tool that is used to help identify California communities most effected by sources of pollution and that have populations that are often more vulnerable to the effects of pollution. The tool uses environmental, health, and socioeconomic data to produce a score for every census tract in the state. Areas with higher scores are experience higher pollution burden than areas with lower scores. CalEnviroScreen uses two categories separated into multiple components including pollution burden (exposures and environmental effects) and population characteristics (sensitive populations and socioeconomic factors) to determine the overall vulnerability of a geographical site on a scale from 1 (least vulnerable) to 100 (most vulnerable). Each of the four components are assessed using census tract data and indicators determined by the California Environmental Protection Agency (CalEPA). Indicators were chosen to represent key demographic and air quality factors known to influence vulnerability and disease. To calculate a vulnerability score, indicators for each component are classified by percentile relative to other locations in the state and the percentile indicators for each component are averaged. The percentile average for each component is then scaled by dividing by the maximum observed value in the state and multiplying by 10. The scaled and weighted category scores (pollution burden and population characteristics) each have a maximum possible value of 10. The pollution burden and population characteristics scores are multiplied to determine the final CalEnviroScreen score. The CalEnviroScreen score for any given census tract can then be categorized by percentile relative to others in the state. **Figure IV.D-1, Project Site CalEnviroScreen Score**, shows the relative vulnerability of the Project Site and surrounding area. The Project Site is located in Census Tract 6037543801 and has a CalEnviroScreen 3.0 score of 59.43, putting it in 98th percentile for pollution burden and the 77th percentile of population characteristics. Overall, the Project Site area is within the 96th percentile of burden and vulnerability relative to other communities in the state.

On October 20, 2021, the Office of Environmental Health Hazard Assessment (OEHHA) recently released an updated version of the model, CalEnviroScreen 4.0, with updated data and maps. CalEnviroScreen 4.0 shows the census tract for the Project Site within the 94th percentile. Additional differences in CalEnviroScreen 4.0, as compared to Figure IV.D-1, include a decrease of exposures to ozone and pesticides, and an increase of exposure to DPM and toxic releases, with no change to PM_{2.5} exposure between version 4.0 and 3.0.



SOURCE: City of Carson, County of Los Angeles, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA | OEHHHA |

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Figure IV.D-1
2021 Project Site CalEnviroScreen Score



(4) Sensitive Receptors and Locations

Some population groups, such as children, the elderly, and acutely and chronically ill persons, especially those with cardio-respiratory diseases, are considered more sensitive to air pollution than others. Sensitive land uses in the 2021 Project vicinity are shown in **Figure IV.D-2, Sensitive Receptors**, and include one- and two-story detached residences and mobile homes that are located to the south and west of the Project Site. The closest existing residences are located adjacent to the Project Site boundary directly to the south and west of the Torrance Lateral Flood Control Channel (Torrance Lateral) (which are separated from the Project Site by approximately 80 feet). As discussed in the 2018 SEIR, residential use for Development District 3 (DD3) was approved and is located across Del Amo Boulevard from the 2021 Project. These residential units are currently occupied and are considered in these analyses as off-site sensitive receptors.

Other potentially sensitive uses include schools, libraries, religious institutions, hospitals, and nursing homes. The closest school to the Project Sites are the Carson Street Elementary School, which is located approximately 1,800 feet to the south of the Project Site and the Golden Wings Academy located approximately 830 feet to the east of the Project Site. Other schools within the study area include the Carson Montessori Academy, the Carnegie Middle School, St Philomena School, the Bonita Street Elementary School, and the Mission Ebenezer Church Child Care, and a second Golden Wings Academy south of the Project Site. The Carson Library is located directly west of the Carson Street Elementary school, approximately 1,800 feet south of the Project Site.

There are several religious institutions within the study area, these include: Mission Ebenezer Family Church, Greater Love Reformed Baptist Church, Peace Apostolic Church, Samoan Congregational Church, Harbor Community Church, Dominion Christian Fellowship and the Good News Bible Church. All of the religious institutions are located greater than 1,900 feet from the Project Site to the west, south, and southwest. Nursing homes/Assisted Living homes within the study area include Carson Senior Assisted Living, St. Anthony's Care Home, Southbay Guest Home, Olivia Isabel Manor, Carson Gardens, and Helping Hands Care Services. These facilities are located more than 2,400 feet to the south and southwest of the Project Site. There are no hospitals within 3,000 feet of the Project Site; therefore, hospitals are not included in this analysis.



SOURCE: Google Earth Pro, basemap, 2021; ESA, 2021

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Figure IV.D-2
Sensitive Receptors

(5) Existing Project Site Emissions

As described in detail in the 2018 SEIR, the 2021 Project includes the closure of the former Cal Compact Landfill in compliance with the Department of Toxic Substances Control (DTSC)-approved Remedial Action Plan (RAP). Implementation of the RAP includes, among other things, the requirement for the installation of a landfill gas collection and control system (LGGCCS) and a groundwater extraction and treatment system (GETS).

The LGCCS system has been designed to collect and deliver landfill gas to a treatment facility that includes a flare system to destroy such landfill gas. Two flares have been installed; however, due to the amount of gas produced by the system currently, only one flare is required to be operational at a time and the second is used for back-up when the first is not operational. Ultimately flare use may be discontinued and landfill gas may be treated by granulated activated carbon (GAC) before discharge to the atmosphere. For purposes of this air quality analysis, it has been assumed that one flare would operate.

The GETS and LGCCS, including the flare stacks associated with the LGCCS, are fully constructed and operational. In addition, a slab for the future LOC has been constructed. However, because there are more wells and piping to install, as well as the LOC building itself, the system itself is considered only partially constructed.⁸⁶

The system has five current SCAQMD Permits to operate associated with it under facility name Cal Compact and Facility ID No. 183607. **Table IV.D-2, Existing Site Emissions (lbs/day)**, shows the existing emissions associated with the operation of the permitted equipment. These permits are as follows:

- Permit No. G43919: Landfill gas control system consisting of: knockout vessel, primary and backup blower, 4 carbon adsorber vessels, primary potassium permanganate vessel and backup, flame arrestor, exhaust stack without rain cap. This equipment is only to be used when landfill gas does not exceed 3 million British thermal units per hour, except when the flares are non-operational for breakdowns or other exception events.
- Permit No. G43920: Up to 43 groundwater extraction wells and piping, 3 storage tanks, particulate filters, air stripper, carbon adsorbers and stand by adsorbers, 3 potassium permanganate media vessels, and two liquid phase carbon adsorbers.
- Permit No. G43921: Landfill gas flaring system consisting of: moisture separator, two centrifugal blowers, optional small flow blower, two flame arrestors, Flare #1 (small flare), and Flare #2 (large flare). Currently only the small flare is operational.
- Permit No. G43922: Landfill Gas Collection System, consisting of: up to 248 vertical and 112 horizontal landfill gas extraction wells and associated laterals.

⁸⁶ In this 2021 SEIR, when the GETS, LGCCS, and/or LOC are mentioned, it is assumed that not all of the wells have been installed nor has the LOC building itself. When constructed, the LOC building would provide offices, system controls, and storage space.

- Permit No. G43923: Landfill condensate collection system consisting of: condensate sumps, storage tank, 2 condensate transfer pumps.

Table IV.D-2
Existing Site Emissions (lbs/day)

	VOC	NOx	CO	SOx	PM10	PM2.5
Maximum Daily Emissions^a						
Landfill Gas Control System ^b	2.28	N/A	N/A	N/A	N/A	N/A
Flare ^a	0.21	0.90	3.67	0.26	0.72	0.65
Condensate Collection System	0.02	N/A	N/A	N/A	N/A	N/A
Total Existing Emissions	2.51	0.90	3.67	0.26	0.72	0.65

SOURCE: ESA 2017 (2018 SEIR); ESA 2021.

NOTES:

Emissions quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values.

^a According to the updated FINDs database there is no longer an active permit for an emergency back-up generator as was identified in the 2018 SEIR. Therefore, the generator emissions have been removed from the emissions quantification (<https://xappprod.aqmd.gov/find/facility/AQMDsearch?facilityID=183607>).

^b Under normal conditions the LGCCS only operates when the Flare is not operational. Therefore, maximum daily emissions added into the totals are the greater of the landfill gas control system or the flare on a pollutant basis.

IV.D.3 Regulatory Framework

A number of statutes, regulations, plans, and policies addressing air quality issues have been adopted by federal, State, and local agencies. A summary of new, modified, or repealed statutes, regulations, plans, and policies potentially applicable to the 2021 Project are presented below.

a. Federal

(1) Federal Clean Air Act

At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementation of the federal Clean Air Act (CAA). Some portions of the CAA (e.g., certain mobile source and other requirements) are implemented directly by USEPA. Other portions of the CAA (e.g., stationary source requirements) are implemented by State and local agencies. Since the 2018 SEIR, there are no new federal regulations relating to air quality. All regulations stated in the 2018 SEIR and the 2006 FEIR are still applicable to the 2021 Project. Refer to 2018 SEIR Section VI.G and 2006 FEIR (DEIR p. 335) for the Regulatory Setting. However, while no new regulations have been promulgated since the certification of the 2018 SEIR with respect to air quality, the National Ambient Air Quality Standards (NAAQS) are included in **Table IV.D-3, Ambient Air Quality Standards**, as these standards are referred to in the subsequent analysis.

Table IV.D-3 shows the NAAQS currently in effect for each criteria pollutant along with its attainment status for the SCAB. As compared to the attainment status as summarized in the 2018 SEIR (see Draft SEIR Table IV.G-2, p. IV.G-5), the SCAB attainment has not changed with respect to the NAAQS.

**Table IV.D-3
Ambient Air Quality Standards**

Pollutant	Averaging Period	Federal Standard ^{a,b}	California Standard ^{a,b}	South Coast Air Basin Attainment Status ^c	
				Federal Standard ^d	California Standard ^d
Ozone (O ₃)	1-hour	—	0.09 ppm (180 µg/m ³)	—	Non-Attainment
	8-hour	0.070 ppm (137 µg/m ³)	0.07 ppm (137 µg/m ³)	Non-Attainment (Extreme)	Non-Attainment
Respirable particulate matter (PM ₁₀)	24-hour	150 µg/m ³	50 µg/m ³	Attainment	Non-Attainment
	Annual	—	20 µg/m ³		
Fine particulate matter (PM _{2.5})	24-hour	35 µg/m ³	—	Non-Attainment (Serious)	Non-Attainment
	Annual	12 µg/m ³	12 µg/m ³		
Carbon monoxide (CO)	1-hour	35 ppm (40 mg/m ³)	20 ppm (23 mg/m ³)	Attainment	Attainment
	8-hour	9 ppm (10 mg/m ³)	9.0 ppm (10 mg/m ³)		
Nitrogen dioxide (NO ₂)	1-hour	0.10 ppm (188 µg/m ³)	0.18 ppm (339 µg/m ³)	Attainment	Attainment
	Annual	0.053 ppm (100 µg/m ³)	0.030 ppm (57 µg/m ³)		
Sulfur dioxide (SO ₂)	1-hour	0.075 ppm (196 µg/m ³)	0.25 ppm (655 µg/m ³)	Attainment	Attainment
	3-hour	0.5 ppm (1,300 µg/m ³)	—		
	24-hour	0.14 ppm (365 µg/m ³)	0.04 ppm (105 µg/m ³)		
	Annual	0.03 ppm (80 µg/m ³)	—		
Lead (Pb)	30-day average	—	1.5 µg/m ³	Partial Non-Attainment ^e	Attainment
	Rolling 3-month average	0.15 µg/m ³	—		

**Table IV.D-3
Ambient Air Quality Standards**

Pollutant	Averaging Period	Federal Standard ^{a,b}	California Standard ^{a,b}	South Coast Air Basin Attainment Status ^c	
				Federal Standard ^d	California Standard ^d
Sulfates	24-hour	—	25 µg/m ³	—	Attainment
Hydrogen sulfide (H ₂ S)	1-hour	—	0.03 ppm (42 µg/m ³)	—	Unclassified
Vinyl chloride ^k	24-Hour	—	0.01 ppm (26 µg/m ³)	—	—
Visibility-reducing particles ^m	8-Hour	—	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07—visibility of 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent.	—	Unclassified

SOURCES: United States Environmental Protection Agency, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>, accessed June 2021; CARB, Ambient Air Quality Standards, May 4, 2016, <https://ww2.arb.ca.gov/sites/default/files/2020-07/aaqs2.pdf>, accessed June 2021.

NOTES:

ppm = parts per million by volume; µg/m³ = micrograms per cubic meter

- ^a An ambient air quality standard is a concentration level expressed in either parts per million or micrograms per cubic meter and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are expressed as a concentration that is not to be equaled or exceeded.
- ^b Ambient Air Quality Standards based on the 2016 AQMP.
- ^c "Attainment" means that the regulatory agency has determined based on established criteria, that the SCAB meets the identified standard. "Non-attainment" means that the regulatory agency has determined that the SCAB does not meet the standard. "Unclassified" means there is insufficient data to designate an area, or designations have yet to be made.
- ^d California and federal standard attainment status based on SCAQMD's 2016 AQMP and 2018 updates from California Air Resources Board (CARB), <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>.
- ^e An attainment re-designation request is pending.

b. State

New state regulations have been implemented since the certification of the 2018 SEIR. The following discusses revisions to existing regulations, new regulations, or identifies regulations that are directly referenced in the impact analysis. Refer to the *State* regulatory setting section of the 2018 SEIR (see Draft SEIR p. IV.G-5 and 2006 FEIR p. 356).

(1) Senate Bill 535

Senate Bill (SB) 535 (De León, Chapter 830, 2012) acknowledges that low-income and disadvantaged communities have potentially increased vulnerability to poor air quality and requires funds to be spent to benefit these disadvantaged communities. CalEPA has identified

disadvantaged communities based on geographic, socioeconomic, public health, and environmental hazard criteria as identified in Health and Safety Code Section 39711, Subsection (a).⁸⁷ CalEPA identifies disadvantaged communities as those that score within the top 25 percent of the census tract when analyzed by CalEnviroScreen Versions 3.0 and 4.0. As discussed in more detail under Section IV.D.2b(3), *CalEnviroScreen*, the Wilmington/West Long Beach/Carson Community meets the definition of a disadvantaged community.

(2) Senate Bill 1000

SB 1000 amended California's Planning and Zoning Law to require local governments to identify disadvantaged communities and incorporate environmental justice into their general plans. The purpose of SB 1000 is to provide transparent public engagement in local government planning and decision making, to reduce pollutants associated with health risk in environmental justice communities, and to promote equitable access to health-inducing benefits such as healthy food options, housing, public facilities, and recreation. The City of Carson will implement this as part of its next Citywide General Plan Update (GPU), which is expected to be completed in early 2022. Further information on SB 1000 can be found in Section IV.A.3.a(1), *Senate Bill 1000*, of this 2021 SEIR.

(3) Assembly Bill 617

Assembly Bill (AB) 617 emphasizes the protection of local communities from the harmful effects of air pollution. As part of AB 617 the California Air Resources Board (CARB) has implemented the Community Air Protection Program (CAPP) to reduce air pollution and improve public health in communities experiencing disproportionate burdens from exposure to air pollution. The City self-identified as a potential participant in the CAPP, joining other south bay communities such as Wilmington and West Long Beach. The SCAQMD submitted its final recommendations including the Wilmington, West Long Beach, and Carson (WWLBC) community on July 31, 2018, and on September 11, 2018, CARB approved the WWLBC community as one of 10 initial communities statewide to be chosen for the development of an air quality monitoring plan or a community emissions reduction program (CERP). This area was chosen for both community air monitoring and the development of a CERP because of the high cumulative exposure burden and the significant number of sensitive populations living within the area in addition to the socioeconomic challenges of the local population. The CERP was approved by CARB on September 10, 2020, and includes several strategies for reducing emissions within the community focusing on the following priority approaches for air quality impact reductions: refineries; ports; neighborhood truck traffic; oil drilling and production; rail yards; school and homes.

⁸⁷ California Office of Environmental Health Hazard Assessment (OEHHA), *CalEnviroScreen 3.0*, June 2018, <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>.

(4) Executive Order N-79-20

Executive Order N-79-20 was signed by Governor Newsom on September 23, 2020. The order directs CARB to develop and propose regulations that would require a ramp up to 100 percent in-state sales of new zero-emissions passenger vehicles (cars and trucks) and drayage trucks by 2035. The Executive Order further directs CARB to promulgate regulations that would require a ramp up to 100 percent in-state sales of medium- and heavy-duty trucks by 2045 “for all operations where feasible.” The Executive Order also instructs CARB to develop and propose “strategies” (as opposed to regulations) to achieve zero emissions from off-road vehicles and equipment operations in the state by 2035. The order also directs State agencies to take a number of actions focused on the oil and gas industry, including, but not limited to, a direction to CARB to strengthen and extend the Low Carbon Fuel Standard program beyond 2030.

(5) California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. Table IV.D-3 shows the CAAQS currently in effect for each criteria pollutant as these are referred to in the analysis. Additionally, the attainment status for SCAB has been included in Table IV.D-3 for consistency with the analysis. As compared to the attainment status as summarized in the 2018 SEIR (see Draft SEIR Table IV.G-2, p. IV.G-4), the SCAB’s attainment status has not changed since the 2018 SEIR.

(6) California Air Resources Board

CARB, a part of CalEPA, is responsible for the coordination and administration of both federal and state air pollution control programs within California. Some of the new regulations and measures that CARB has adopted subsequent to the 2018 SEIR that are relevant to the 2021 Project include the following.

(a) Airborne Toxics Control Measures

The California Air Toxics Program is an established two-step process of risk identification and risk management to address potential health effects from exposure to toxic substances in the air. In the risk identification step, CARB and the OEHHA determine if a substance should be formally identified, or “listed,” as a TAC in California. In the risk management step, CARB reviews emissions sources of an identified TAC to determine whether regulatory action is needed to reduce risk. Based on results of that review, CARB has promulgated a number of Airborne Toxic Control Measures (ATCMs), both for stationary and mobile sources, including On-Road and Off-Road Vehicle Rules. These ATCMs include measures such as limits on heavy-duty diesel motor vehicle idling and emissions standards for off-road diesel construction equipment in order to reduce public exposure to DPM and other TACs. These actions are also supplemented

by the AB 2588 Air Toxics “Hot Spots” program and SB 1731, which require facilities to report their air toxics emissions, assess health risks, notify nearby residents and workers of significant risks if present, and reduce their risk through implementation of a risk management plan. SCAQMD has adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

(b) Advanced Clean Trucks Regulation

In 2020, CARB approved the Advanced Clean Trucks (ACT) regulation (13 CCR, Sections 1963–1963.5 and 2012–2012.3) to accelerate a large-scale transition to zero- and near-zero-emissions medium- and heavy-duty vehicles. The regulation requires manufacturers of medium- and heavy-duty vehicles to sell an increasing percentage of zero-emissions models from 2024 to 2035 with up to 55 percent of Classes 2b–3 trucks, 75 percent of Classes 4–8 trucks, and 40 percent of truck tractor sales. The regulation also includes reporting requirements to provide information that would be used to identify future strategies. The ACT is part of the statewide goal to considerably reduce NO_x and PM emissions in accordance with the NAAQS, reduce greenhouse gas (GHG) emissions by 40 percent, and reduce petroleum use by 50 percent by 2030. By transitioning to zero-emissions trucks, the State would move away from petroleum dependency and emit less air pollutants from heavy-duty mobile sources.

(c) Heavy-Duty Low NO_x Regulation

CARB has proposed the heavy-duty omnibus regulation, which is currently in public review and has not yet been adopted. This regulation would establish heavy-duty engine emissions standards that would reduce NO_x emissions by 90 percent from current standards.

(d) Community Emissions Reduction Program

As discussed under AB 671 above, the WWLBC CERP was finalized and adopted in September 2020. With extensive outreach and input from the stakeholders’ group and the public, the CERP identifies 58 mobile and stationary sources of potential concern and 12 discreet sensitive receptors within the WWLBC community. The Project Site is identified as number 63 on Figure 3a-1 and Table 3a-2.⁸⁸

⁸⁸ California Air Resources Board (CARB), Community Emissions Reduction Plan (CERP) for the WWLBC community, 2019, <https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/communities/wilmington-carson-west-long-beach>, accessed June 2021.

The CERP also sets ambitious goals in the reduction of air pollutants in these local communities, specifically NO_x, sulfur oxides (SO_x), ROG, and DPM of 7 percent, 0 percent, <1 percent, respectively, by 2024, and 35 percent, <1 percent, <1 percent, and 22 percent, respectively by 2030.⁸⁹ The CERP outlines actions and commitments to achieve these air pollutant reduction goals. The CERP identified the following six priority strategies for air quality impact reductions:

- Refineries
- Ports
- Neighborhood truck traffic
- Oil drilling and production
- Rail yards
- School and homes

Of the listed strategies, those related to truck traffic and schools and homes have the potential to influence impacts from the 2021 Project.

c. Regional

(1) South Coast Air Quality Management District

SCAQMD has jurisdiction over air quality planning for all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. SCAB is a subregion within SCAQMD jurisdiction. While air quality in SCAB has improved, SCAB requires continued diligence to meet the air quality standards.

SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. Since certification of the 2018 SEIR, SCAQMD has not adopted a newer version of the AQMP. The 2016 AQMP is the most current adopted version of the AQMP.

SCAQMD has adopted one new rule (Rule 2305) since the 2018 SEIR that is applicable to the 2021 Project. The following includes the newly adopted rule and other rules/regulations that were in effect at the time of the 2018 SEIR and 2006 FEIR but were not specifically identified and have relevance to the 2021 Project.

Regulation IV – Prohibitions: *This regulation sets forth the restrictions for visible emissions, odor nuisance, fugitive dust, various air emissions, fuel contaminants, start-up/shutdown exemptions and breakdown events. The following is a list of rules which apply to the 2021 Project:*

Rule 401 – Visible Emissions: *This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a*

⁸⁹ CARB, CERP, 2019, p. 5a-3.

period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.

Rule 402 – Nuisance: *This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.*

Rule 403 – Fugitive Dust: *This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the property line, restricts the net PM10 emissions to less than 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by USEPA.*

Regulation XI – Source Specific Standards: *Regulation XI sets emissions standards for specific sources. The following is a list of rules which apply to the 2021 Project:*

Rule 1113 – Architectural Coatings: *This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.*

Rule 1138 – Control of Emissions from Restaurant Operations: *This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.*

Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters: *This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NOx emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.*

Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations: *This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).*

Regulation XIII – New Source Review (NSR): *Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the Clean Air Act standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply Best Available Control Technology (BACT). Facilities with a net increase in emissions are required to offset the emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition,*

certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

Regulation XIV – Toxics and Other Non-Criteria Pollutants: *Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants. The following is a list of rules which may apply to the 2021 Project:*

Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air

Contaminants: *This rule sets requirements to minimize the amount of fugitive dust containing toxic air contaminants that is emitted during earth-moving activities, including, excavating, grading, handling, treating, stockpiling, transferring, and removing soil that contains applicable TACs. Rule 1166 is applicable to the transportation of soils with applicable TACs through the SCAB. Applicable requirements include covering the truck loads for soil that contains applicable TACs.*

Regulation XXIII– Facility Based Mobile Source Measures: *In order to obtain the 80 ppb and 75 ppb 8-hour ozone standards by the 2023 and 2031 applicable attainment dates, respectively, and in support of the 2016 AQMP, the SCAQMD formulated Facility Based Mobile Sources Rules to reduce NOx emissions from indirect sources (e.g., mobile sources generated by, or attracted to facilities). The following rule will likely apply to portions of the 2021 Project:*

Rule 2305 – Warehouse Indirect Sources Rule. *Rule 2305 was formally adopted on May 7, 2021.⁹⁰ This rule would reduce emissions associated with sources operating in and out of warehouse and distribution centers, consistent with Control Measures MOB 03 from the 2016 AQMP. Rule 2305 will require warehouses greater than 100,000 square feet to directly reduce NOx and diesel PM, or to facilitate emission and exposure reductions of these pollutants. The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program is a menu-based points system that will require warehouse operators to annually earn a specified number of points by completing actions from a menu. The amount of WAIRE points needed for compliance is calculated based on weighted annual truck trips (WATTs), and an annual variable and stringency rate. WAIRE points earned can be transferred to a different warehouse utilized by the same warehouse operator, to a different compliance year, or between a warehouse owner and a warehouse operator. After each compliance year, warehouse operators will submit an annual WAIRE Report detailing the WAIRE points needed and the points earned for the reporting year. If a warehouse operator fails to earn enough WAIRE points to satisfy the requirement, they are required to pay a mitigation fee per unattained WAIRE point. The Warehouse Indirect Source Rule provides several compliance options that facilities can choose to meet their point requirements including, but not limited to:*

- (1) Ensure truck fleets that serve their facility during operations are cleaner than required by CARB regulations (verified through a voluntary fleet certification program);*
- (2) Directly control the emissions associated with trucks visiting the facility;*
- (3) Installation of charging/fueling infrastructure for cleaner trucks and transportation refrigeration units (TRUs), conversion of cargo handling equipment to zero-emissions technologies, etc.;*

⁹⁰ SCAQMD, Governing Board Meeting Agenda, May 7, 2021. <http://www.aqmd.gov/home/news-events/meeting-agendas-minutes/agenda?title=governing-board-meeting-agenda-may-7-2021>.

- (4) *Utilization of zero-emissions trucks and incorporation of the infrastructure to support them; and/or*
- (5) *Mitigation fees if the facilities emissions exceed cap levels set in the Indirect Source Rule.*

(2) SCAG RTP/SCS

On September 3, 2020, SCAG’s Regional Council adopted the 2020–2045 RTP/SCS. The 2020–2045 RTP/SCS was determined to conform to the federally mandated state implementation plan (SIP), for the attainment and maintenance of NAAQS standards. On October 30, 2020, CARB also accepted SCAG’s determination that the SCS met applicable future state GHG emissions targets. The 2020–2045 RTP/SCS will be incorporated into the forthcoming 2022 AQMP.

d. Local

There are no new adopted local regulations or updates to the City’s General Plan relating to air quality. All regulations and General Plan policies stated in the 2006 FEIR are still applicable to the 2021 Project. The City’s GPU process was initiated in 2017 and is currently expected to conclude following community input and environmental review with adoption of the GPU in early 2022.⁹¹ The following currently adopted City goals, policies, and implementation measures from the current 2004 General Plan are relevant to air quality with respect to the 2021 Project:

Goal AQ-2—Improve air quality which meets state and federal standards

Policy AQ-2.2—Utilize incentives, regulations and implement the Transportation Demand Management requirements in cooperation with other jurisdictions to eliminate vehicle trips which would otherwise be made and to reduce vehicle miles traveled for automobile trips which still need to be made.

Policy AQ-2.3—Cooperate and participate in regional air quality management plans, programs and enforcement measures.

*Implementation Measure AQ-2.2—*Continue to encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing, modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the AQMP for the South Coast Air Basin.

*Implementation Measure AQ-2.3—*Continue City employee work trip reduction programs and use of alternative fuel vehicles.

Policy AQ-2.4—Continue to work to relieve congestion on major arterials and thereby reduce emissions.

*Implementation Measure AQ-2.4—*Encourage those companies that ship or receive high volumes of goods by commercial truck to limit operations to non-peak hours.

⁹¹ City of Carson, Carson2040, <https://www.carson2040.com/>, accessed June 2021.

Policy AQ-2.5—Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new developments.

Implementation Measure AQ-2.6—Require new developments to provide pedestrian and bicycle trails access to nearby shopping and employment centers, thereby encouraging alternate modes of transportation and reducing vehicle miles traveled.

Policy AQ-2.6—Encourage in-fill development near activity centers and along transportation routes.

Implementation Measure AQ-2.7—Encourage infill projects to provide convenience to existing facilities and minimize trip generation.

Goal AQ-3—Increased use of alternate fuel vehicles.

Policy AQ-3.1—Continue to promote the use of alternative clean fueled vehicles for personal and business use. To this end, consider the use of electric, fuel cell or other non-polluting fuels for Carson Circuit buses and other City vehicles.

Policy AQ-3.2—Continue to promote ridership on the Carson Circuit and Los Angeles County Metropolitan Transportation Authority (MTA) bus and metro rail lines.

Implementation Measure AQ-IM-3.3—Develop a cooperative program to further increase transit ridership.

Goal AQ-4—Increased community awareness and participation in efforts to reduce air pollution and enhance air quality.

Policy AQ-4.2—Promote and encourage ride sharing activities within the community, including such programs as preferential parking, park-and-ride lots, alternative work week/flexible working hours and telecommuting, as well as other trip reduction strategies.

Implementation Measure AQ-4.2—Continue to implement City programs and encourage other employers' programs to promote ride sharing, alternative work week schedules, and telecommuting.

Implementation Measure AQ-4.3—Coordinate with transportation agencies to establish additional park-and-ride facilities for work and non-work trip reduction.

IV.D.4 Significance Thresholds

The thresholds of significance have not changed from those used in the 2018 SEIR, and remain the same. Significance thresholds are listed below.

For the purpose of this analysis, impacts with regard to air quality are considered significant if the 2021 Project would:

- Conflict with or obstruct implementation of the applicable air quality plan

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people (evaluated in Chapter VI, *Effects Found Not to Be Significant*)

a. Construction Emissions

The 2021 Project would have a significant impact with regard to construction emissions if any of the following occur:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 75 pounds per day (lbs/day) for VOC, (2) 100 lbs/day for NO_x, (3) 550 lbs/day for CO, (4) 150 lbs/day for PM₁₀ or SO_x, and (5) 55 lbs/day for PM_{2.5}.⁹²
- The 2021 Project-related fugitive dust and construction equipment combustion emissions cause an incremental increase in localized PM₁₀ and PM_{2.5} concentrations of 10.4 µg/m³ or cause a violation of NO₂ or CO ambient air quality standards.⁹³
- The 2021 Project creates objectionable odors affecting a substantial number of people.

b. Operational Emissions

The 2021 Project would have a significant impact with regard to operational emissions if any of the following occur:

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 55 lbs/day for VOC, (2) 55 lbs/day for NO_x, (3) 550 lbs/day for CO, (4) 150 lbs/day for PM₁₀ or SO_x, and (5) 55 lbs/day for PM_{2.5}.⁹⁴

⁹² SCAQMD, CEQA Air Quality Handbook, Chapter 6 (*Determining the Air Quality Significance of a Project*), 1993, revised March 2015, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>, accessed June 2021.

⁹³ While the SCAQMD CEQA Air Quality Handbook (CEQA Handbook, 1993) does not provide any localized thresholds, SCAQMD currently recommends localized significance thresholds (LSTs) for PM₁₀, NO₂, and CO in its draft document SCAQMD Localized Significance Threshold Methodology for CEQA Evaluations (SCAQMD LST Guidelines), June 19, 2003.

⁹⁴ SCAQMD, CEQA Air Quality Handbook, Chapter 6 (*Determining the Air Quality Significance of a Project*), 1993, revised March 2015, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook>, accessed June 2021.

- The 2021 Project results in an exceedance of the California 1-hour or 8-hour CO standards of 20 or 9.0 ppm, respectively, at an intersection or roadway within one-quarter mile of a sensitive receptor.
- The 2021 Project-related stationary source combustion equipment emissions cause an incremental increase in localized PM₁₀ and PM_{2.5} concentrations of 2.5 µg/m³.⁹⁵
- The 2021 Project-related increase in emissions that causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (1-hour average – state), 0.03 ppm (annual mean – state), or 0.0544 ppm (annual mean – federal)
- The 2021 Project creates objectionable odors affecting a substantial number of people. As noted above, discussion of objectionable odors is evaluated in Chapter VI, *Effects Found Not to Be Significant*, and is not discussed further in this 2021 SEIR.
- The 2021 Project is incompatible with SCAQMD and SCAG air quality policies. The 2021 Project would not be compatible with these policies if it:
 - Causes an increase in the frequency or severity of existing air quality violations;
 - Causes or contributes to new air quality violations;
 - Delays timely attainment of air quality standards or the interim emissions reductions specified in the AQMP; or
 - Exceeds the assumptions utilized in SCAQMD’s AQMP.
- The 2021 Project is incompatible with City of Carson air quality policies. The 2021 Project would not be compatible with these policies if it does not substantially comply with the air quality goals and policies set forth within the City’s General Plan.

c. Toxic Air Contaminants

The 2021 Project would have a significant impact with regard to TACs if any of the following occur:

- On-site construction activities and operational sources emit carcinogenic or toxic air contaminants that individually or cumulatively exceed the maximum individual cancer risk of 10 in 1 million or an acute or chronic hazard index (HI) of 1.0.⁹⁶ These thresholds are designed to take into account health preservation for all individuals, including those located in disadvantaged communities.
- Hazardous materials associated with on-site stationary sources result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

⁹⁵ While the SCAQMD CEQA Air Quality Handbook (CEQA Handbook, 1993) does not provide any localized thresholds, SCAQMD currently recommends LSTs for PM₁₀, NO₂, and CO in its draft document SCAQMD LST Guidelines, June 19, 2003.

⁹⁶ SCAQMD, Risk Assessment Procedures for Rules 1401 and 212, November 1998.

- Hazardous materials associated with the landfill that result in an accidental release of air toxic emissions or acutely hazardous materials posing a threat to public health and safety.

IV.D.5 Project Impacts

a. Methodology

The 2018 SEIR evaluated construction and operational impacts, including mobile-source and stationary-source emissions, utilizing the California Emissions Estimator Model[®] software (CalEEMod), Version 2016.3.1, an emissions inventory software program developed for the California Air Pollution Officers Association (CAPCOA) and recommended by SCAQMD. CalEEMod is based on outputs from OFFROAD and EMFAC, which are emissions estimation models developed by CARB. CalEEMod (Version 2016.3.1) incorporates EMFAC2014 emissions standards for mobile emissions quantification. EMFAC2014 has been updated twice (EMFAC2017 and EMFAC2021). Since the 2018 SEIR, CalEEMod has been updated to Version 2016.3.2, which also uses EMFAC2014. CalEEMod is in the process of being updated again to include EMFAC2017, but that version was not approved for use at the time of the NOP and when the 2021 Project emissions were modeled. EMFAC2021 has yet to be approved by USEPA. Given these changes, the current analysis uses CalEEMod (Version 2016.3.2) with updated emissions factors from EMFAC2017, the latest USEPA-approved version of emission factors. Energy efficiency standards for buildings used in the 2018 SEIR were consistent with 2016 Title 24. As of January 2020, the 2019 Title 24 efficiency standards went into effect. Therefore, the analysis contained herein incorporates the use of these standards. The evaluation of potential impacts to local and regional air quality resulting from the construction and long-term operations of the 2021 Project is based on the most recent methodology and the following methodological approach.

(1) Consistency with Air Quality Plan

SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the SCAB is in non-attainment of the NAAQS (e.g., ozone and PM_{2.5}). SCAQMD's 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the five NAAQS related to these pollutants, including transportation control strategies from SCAG's 2016–2040 RTP/SCS designed to reduce vehicle miles traveled (VMT). The 2016 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG through 2040. For this reason, projects whose growth is consistent with the assumptions used in the 2016–2040 RTP/SCS will be deemed to be consistent with the 2016 AQMP because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2016 AQMP. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 AQMP would not jeopardize attainment of the air pollutant reduction goals identified in

the 2016 AQMP even if their emissions exceed SCAQMD thresholds of significance. As noted above, the 2016 AQMP has been adopted by SCAQMD and CARB. Therefore, this analysis considers consistency of the 2021 Project with the 2016 AQMP's growth projections and emissions control strategies.

In addition to consistency with the 2016 AQMP, this analysis considers the 2021 Project's consistency with SB 535, SB 1000, and AB 617. The inclusion of consistency with these plans is for informational purposes only and is not intended to be used to determine project significance.

(2) Construction Impacts

Similar to the 2018 Project, construction of the 2021 Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators, and through vehicle trips generated from workers and haul trucks traveling to and from the Project Site. In addition, fugitive dust emissions would result from various soil-handling activities. Mobile source emissions, primarily NO_x, would result from the use of construction equipment such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions. The assessment of construction air quality impacts considers each of these potential sources.

Since the 2018 SEIR, the recommended emissions estimator model has been updated as well as updates to the mobile emissions models used by CalEEMod. As identified above, the analysis uses CalEEMod (Version 2016.3.2) incorporating increases to energy efficiencies associated with 2019 Title 24 and mobile emissions factors from EMFAC2017. The input values used in this analysis were adjusted to be 2021 Project-specific based on equipment types and the construction schedule. These values were then applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. Detailed construction equipment lists, construction scheduling, and emissions calculations are provided in Appendix D1 of this 2021 SEIR. This 2021 SEIR includes certain project design features (PDFs) are also incorporated into the construction emissions analysis.

Compared to the 2018 Project's construction schedule (as set forth in the 2018 SEIR [see Draft SEIR p. IV.G-18]) of approximately 32 months, construction activities for the 2021 Project are proposed to require approximately 53 months (4.4 years). Construction of the 2021 Project is anticipated to begin as early as December 2021 with completion of all development projects within the three Planning Areas (i.e., PA1, PA2, and PA3) as early as 2026 (refer to Section I.B.2, *Summarized Project Description*, and Figures I-3, I-4, and I-5 for a detailed description of the planning areas). Construction of PA3 is estimated to start as early as late 2021 with construction of PA2 resuming in early 2022 and construction of PA1 beginning in late 2022. Subsequent to the certification of the 2018 SEIR, some remedial and horizontal

construction activities were begun in PA2 in October of 2018 and were subsequently halted in November of 2019. These activities are included as part of the current emissions estimates as they are part of the activities needed to complete PA2 under the 2021 Project. The construction dates are subject to change as there is no Applicant currently established for the development of PA1, and PA2 construction activities have been halted and there is no clear scheduled date to resume construction. The emissions estimates provided in this analysis are designed to take into account the most aggressive schedule for completion and, therefore, represents a conservative estimate of emissions. Should later start dates occur than what is anticipated in this analysis, emissions from on-site construction activities would be decreased due to the overall increased efficiencies of construction fleets as older equipment is replaced by newer, more-efficient models.

Subphases of construction would include remedial construction (i.e., placing of the permanent landfill cap as part of the RAP), horizontal construction (placing of project infrastructure, including the remainder of the landfill gas collection system, and paving), and vertical construction (actual construction of on-site buildings).

The 2006 FEIR and 2018 SEIR considered DDC on all three planning areas of the 157-Acre Site. However, as part of the 2021 Project, DDC is no longer contemplated on PA3; instead, pile driving methods are assumed to be used to support vertical development. Under the 2021 Project, DDC is conservatively assumed to continue to be used as a potential construction method on PA1 and PA2, although there are no current plans to employ DDC on either of these planning areas. In addition, if DDC were to occur on PA1 or PA2, it would not occur where pile installation is required to support building pads.

Soils excavated during grading are anticipated to be balanced on the Project Site. There is the potential to import up to 450,000 cubic yards of fill material to level the site and provide sufficient cover of the landfill cap for stable development. Heavy-duty equipment, vendor supply trucks, and concrete trucks would be used during all phases of construction. Landscaping and architectural coating would occur during the finishing activities. Although the schedule is expanded for the 2021 Project as compared to the 2018 Project, the construction equipment anticipated to be on site during each phase is anticipated to remain the same. The maximum daily regional emissions from these activities are estimated by construction phase and compared to SCAQMD significance thresholds. The maximum daily regional emissions are predicted values for the worst-case day and do not represent the emissions that would occur for every day of 2021 Project construction.

The localized effects from the on-site portion of the construction emissions are evaluated at nearby sensitive receptor locations potentially impacted by the 2021 Project according to SCAQMD's Localized Significance Threshold Methodology, similar to the 2018 Project. The localized significance thresholds are only applicable to NO_x, CO, PM₁₀, and PM_{2.5}. Consistent with the 2018 SEIR, the analysis compares the localized emissions to the LST look up tables for 5 acres as well as uses dispersion modeling to anticipate localized impacts where necessary.

(3) Operational Impacts

Operation of the 2021 Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project Site. In addition, emissions would result from area sources on site such as natural gas combustion, landscaping equipment, use of consumer products, and continued use of the permitted stationary uses such as LGCCS, GETS, and six emergency back-up generators.

The 2021 Project operational air quality impacts were assessed for a build-out year of 2026. As reflected in Table II-10, Construction Schedule, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR, buildout of PA3 is expected to occur in 2024, buildout of PA2 would be expected to occur in 2025, and buildout of PA1 would be expected to occur in 2026. Therefore, the first year all Planning Areas are open and operating concurrently is expected to be 2026 (the opening year). The analysis contained herein provides for a worst case emissions generation for the 2021 Project as a whole, because emissions profiles from tail pipe exhaust and evaporative losses typically decrease year-over-year as older vehicles are driven less and ultimately retired, being replaced with newer vehicles certified to meet the current, more stringent emission standards.

CalEEMod was used to estimate pollutant emissions from on-site natural gas consumption, fireplaces landscaping equipment, stationary sources, facility equipment, and mobile sources. Mobile emissions were estimated based on emissions factors from EMFAC2017 along with VMT data based on *The District at South Bay 2021 Project Transportation Impact Analysis* (TIA) and other project-specific data to estimate on-road mobile source emissions.^{97,98} These documents are provided in Appendix C1 and Appendix C2, respectively, of this 2021 SEIR. The VMT analyzed in the TIA were based on local trip distances to and from the Project Site. The TIA's VMT calculations were used for the residential uses in PA1 and the employee/visitor generating uses in PA2 and PA3. For the purposes of this analysis, the planned development within PA3 is further delineated into sub areas (a) and (b). PA3(a) is the area to the west which includes the light industrial zoned areas, and PA3(b) includes the recreational and commercial uses in the Carson Country Mart (refer to Figures I-4 and I-5 provided in Chapter I, *Summary*, of this 2021 SEIR). The VMT analysis contained herein for worker and consumer trips within PA3 are based on the TIA's VMT calculations. VMT for trucks accessing PA3 are based on origin to destination distances and not strictly the local area as used to determine VMT in the TIA.

⁹⁷ *Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, October 2021.*

⁹⁸ *Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021.*

The 40-mile average trip for distribution centers is based on the typical trip length for industrial source facilities consistent with the SCAQMD's WAIRE rule.⁹⁹ The 32.5 miles per trip used for fulfillment centers proposed within PA3(a) and the Carson Country Mart in PA3(b) was derived from City-specific data for trip lengths originating from similar nearby industrial facilities.¹⁰⁰ As fulfillment centers typically have much shorter average trip lengths than distribution centers, the 32.5 miles per trip for fulfillment centers is conservative.

The emissions calculations for the 2021 Project include credits or reductions for implementation of relevant PDFs set forth in this 2021 SEIR. The analysis of 2021 Project emissions at buildout also takes into account actions and mandates already approved and expected to be in force by 2026, the opening year of the 2021 Project (e.g., Pavley I and II Standards and implementation of California's Statewide Renewables Portfolio Standard beyond current levels of renewable energy).

The 2017 version of the CARB- and USEPA-approved EMFAC model (EMFAC2017) does not account for the effect of the SAFE Vehicles Rules. CARB has provided off-model adjustment factors for criteria pollutant emissions and for GHG emissions (CARB 2019, CARB 2020c). These adjustment factors were accounted for in the 2021 Project's construction and operational mobile emissions calculations. If the SAFE Vehicles Rules are rescinded pending the results of the USEPA and National Highway Traffic Safety Administration evaluations, mobile source emissions beyond 2026 would be slightly less than disclosed in this 2021 SEIR.

The emissions for landscaping equipment are based on the size of the open space anticipated, and parking land uses, the emissions factors for fuel combustion. Emissions from the three point sources that will continue to operate during both construction and the operation of the 2021 Project, the LGCCS, the flares, and the condensate collection system, were modeled based on SCAQMD Permit information.

Operational air quality impacts are assessed based on the incremental increase in emissions compared to baseline conditions. Emissions from operation of the 2021 Project are modeled for opening year 2026, and mid-years 2035 and 2040. The 2035 and 2040 scenarios were included to show how implementation of the 2021 SEIR PDFs will further reduce pollutant emissions through the life of the 2021 Project. Maximum emissions from 2021 Project operations are compared to SCAQMD daily regional significance thresholds. The 2021 Project impacts are also compared to the 2018 SEIR impacts for informational purposes and to determine if there is an increase in impact severity. Detailed operational assumptions and emissions calculations are provided in Appendix D1 of this 2021 SEIR.

⁹⁹ SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, March 14, 2014 http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf?sforsn=2, accessed June 2021.

¹⁰⁰ Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021.

The localized effects from the on-site portion of the operational emissions from the 2021 Project have been evaluated at nearby sensitive receptor locations potentially impacted by the 2021 Project. The 2018 Project analysis was conducted according to SCAQMD's Localized Significance Threshold Methodology, which relies on on-site mass emissions rate screening tables and project-specific dispersion modeling, where appropriate. Similar to construction, SCAQMD LST screening criteria applicable to a 5-acre site in SRA 4 with sensitive receptors located approximately 80 feet (25 meters) was used. Because the Project Site is greater than 5 acres, assuming that all activity would occur within a smaller area would provide a conservative analysis because emissions would be more concentrated. Where emissions exceed the screening table values, or where it was determined prudent for the analysis, a refined dispersion analysis was conducted to determine the potential to result in significant impacts. For consistency, this analysis follows the same methodology. However, as part of the analysis, the 2021 Project related traffic is conservatively included as the emissions from these sources are directly adjacent to the same receptors that are impacted by the on-site emissions.

(4) Toxic Air Contaminants

The 2021 Project will allow for new light industrial uses on PA3(a), which could introduce sources of increased TAC emissions compared to the 2018 Project. Thus, the potential for the 2021 Project to result in impacts to off-site sensitive land uses as a result to increased exposure to TACs was evaluated by conducting a refined health risk assessment (HRA). The HRA consists of reviewing the 2021 Project's site plan and the 2021 Project Description, identifying sources of substantial TAC emissions, quantifying the average annual and maximum hourly emissions, performing dispersion modeling, quantifying exposure, and assessing potential increases in acute, chronic, and carcinogenic health risks.

OEHHA is responsible for developing and revising guidelines for HRAs under California's Air Toxics Hot Spots Program Risk Assessment (AB 2588) regulation. In March 2015, OEHHA adopted revised guidelines that update the previous guidance by incorporating advances in risk assessment with consideration of infants and children using age sensitivity factors (ASF). The construction HRA was performed in accordance with the revised OEHHA Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.¹⁰¹

(a) Construction

The greatest potential for TAC emissions during construction would be DPM emissions associated with heavy-duty equipment during grading and building construction activities. In addition, incidental amounts of toxic substances such as oils, solvents, and paints would be used.

¹⁰¹ OEHHA, Air Toxics Hot Spots Program Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015. <http://oehha.ca.gov/air/crn/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>, accessed June 2021.

These products would comply with all applicable SCAQMD rules for their manufacture and use. The 2021 Project will be subject to several SCAQMD rules designed to limit exposure to TACs during construction activities.

Risk assessment methodology is the same for both construction and operation health risk. As health risk is inherently cumulative, risks from the two phases, whether overlapping or sequential, are combined for the 30-year exposure duration. Risk assessment methodology is discussed in detail below.

Constituents of Concern (COCs) have been identified in the soil, soil-vapor, and groundwater through characterization activities in support of the RAP.¹⁰² The relocation of landfill material as well as the DDC would generate fugitive dust potentially containing COCs. According to the *Final Human Health Risk Evaluation Report* prepared for the Project Site,¹⁰³ the following constituents have been identified in Project Site cover soil and are, therefore, considered in this project-level HRA to represent a worst-case exposure during the remedial phase of construction.

- **Metals**

- | | |
|-------------|-------------|
| – Aluminum | – Lead |
| – Antimony | – Manganese |
| – Arsenic | – Mercury |
| – Barium | – Nickel |
| – Beryllium | – Selenium |
| – Cadmium | – Silver |
| – Chromium | – Vanadium |
| – Cobalt | – Zinc |
| – Copper | |

- **PCBs**

- Arocloro-1260
- Arocloro-1262

- **Pesticides**

- beta-BHC
- Chlordane
- DDD/DDE/DDT
- Endrin aldehyde
- Heptachlor

¹⁰² *Brown & Root Environmental*, Final Remedial Action Plan, Cal Compact Landfill (Upper Operable Unit), October 1995.

¹⁰³ *Tetra Tech Inc.*, Final Human Health Risk Evaluation Report Carson Marketplace Carson, California, August 8, 2006.

- **VOCs**

- Sec-Butylbenzene
- Dibromoform
- Isopropylbenzene
- p-Isoprpyltoluene
- Methylene Chloride
- n-PropylBenzene
- Toluene
- 1,2,4-Trimethylbenzene
- 1,3,5-Trimetnylbenzene

Because construction activities would not reach the depths of groundwater, no exposure to COCs in groundwater is anticipated or assessed. Due to the limited amount of time that trash would be exposed to the atmosphere, if at all, during relocation and the assumption that after 50 years, vapors would no longer be present within the trash layers, exposure to gaseous TACs by off-site sensitive populations is not anticipated or assessed in this project-level HRA.

In addition to the operation of off-road equipment and potential COC release through fugitive dust generation, small amounts of TACs not destroyed in the landfill gas flaring system will be emitted concurrently with construction activities. In addition to the criteria pollutants (CO, SO₂, NO_x, and particulate matter), COCs in the landfill gas, including methane, total non-methane hydrocarbons (as hexane), hydrogen sulfide, benzene, bencylchloride, chlorobenzene, dichlorobenzenes, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, dichloromethane, 1,2-dibromomethane, perchloroethene, carbon tetrachloride, toluene, 1,1,1-trichloroethane, trichloroethene, chloroform, vinyl chloride, m+p-xylenes, and o-xylenes, may be released. However, properly designed and operated flares are expected to achieve approximately 97.7 percent destruction efficiency.¹⁰⁴

(b) Operations

During long-term operations, TACs could be emitted as part of periodic maintenance operations, cleaning, painting, etc., and from routine visits from delivery trucks and service vehicles. However, maintenance operations, cleaning, and painting uses are expected to be occasional and result in minimal exposure to off-site sensitive receptors.

Due to the increase in the number of daily trucks that would access the Project Site during operation of the 2021 Project as compared to the 2018 Project (due to the light industrial uses proposed in PA3(a) by the 2021 Project as compared to commercial uses proposed in PA3 by the 2018 Project), the health risk assessment conducted for the 2018 Project has been updated to determine the potential for DPM exposure to off-site sensitive receptors (for CEQA significance determination) and on-site receptors (for information purposes only, since CEQA does not require the assessment of effects to a project from a project itself). Due to the nature of the on-

¹⁰⁴ USEPA, AP-42, Chapter 2.4 Municipal Solid Waste Landfills, Table 2.4-3, https://www.epa.gov/sites/default/files/2020-10/documents/d02s04_0.pdf, accessed August 4, 2021.

site uses allowed within PA2 under the 2021 Project, it is anticipated that a small number of trucks would require the use of TRUs as TRUs are required for delivery of cold/frozen items and, therefore, are typically associated with restaurant use or grocery stores for retail/commercial developments. However, the light industrial warehouse uses on PA3(a) are anticipated to include up to 10 percent of total square footage for cold storage. CARB has identified TRUs as substantial sources of DPM, and as such, PDFs have been included in this 2021 SEIR that will prohibit the use of diesel TRUs for the PA3(a) uses of the Project Site and will require plug-in capabilities at service bays for PA3(a).¹⁰⁵ **Table IV.D-4, Daily Diesel Delivery Trucks**, shows the expected number of trucks accessing the Project Site daily by land use, both with or without the operation of TRUs. While the number of TRUs is shown for PA3 in Table IV.D-4, these will not be operating diesel and, therefore, do not contribute to the health risk modeling. The number of daily diesel delivery trucks for PA2 and PA3(b) has been estimated based on the freight trip generation rate research under the National Cooperative Freight Research Program (NCFRP).¹⁰⁶ The freight trip generation rate is based on industry sector (land use type) and employment. Daily trucks for PA3(a) were identified and analyzed in the 2021 Project TIA.¹⁰⁷

During operational activities, for PA2, a truck is assumed to idle for 5 minutes per occurrence and location on the Project Site (with idling occurring at different times and locations on a trip with up to 5 minutes upon arrival, 5 minutes during delivery, and 5 minutes at departure).¹⁰⁸ For PA3, a truck is assumed to idle for 2 minutes per occurrence and location on the Project Site (with idling occurring at different times and locations on a trip with up to 2 minutes upon arrival at parking spaces, 2 minutes at the arrival to loading docks, 2 minutes at the departure from loading docks, and 2 minutes at the departure from parking).¹⁰⁹ The assumed idling time is based on the design of the PA3 facilities, the number of trucks accessing each portion of the site, and the CARB (PA2) or 2021 SEIR PDF-O10 (PA3(a)) idling restrictions.

¹⁰⁵ Due to the nature of deliveries for the restaurant uses in PA3(b), the analysis assumes that while diesel truck refrigeration unit (TRU) trucks could access the site, the TRU units would not be running while the deliveries are being made.

¹⁰⁶ Rensselaer Polytechnic Institute University at Albany, NCFRP Project 25 (Jointly Funded as NCHRP Project 08-80): Freight Trip Generation and Land Use Handbook, 2012, <http://transp.rpi.edu/~NCFRP25/NCFRP%2025%20HandBook%20Draft%2011%20Nov%2012.pdf>, accessed June 2021.

¹⁰⁷ Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, October 2021.

¹⁰⁸ Truck trips are counted separately as inbound trips and outbound trips. Thus, for example, the idling times would allow for up to 10 minutes for an inbound trip, with no single idling occurrence of more than 5 minutes per occurrence and location.

¹⁰⁹ Truck trips are counted separately as inbound trips and outbound trips. Thus, for example, the idling times would allow for up to 4 minutes for an inbound trip, with no single idling occurrence of more than 2 minutes per occurrence and location.

**Table IV.D-4
Daily Diesel Delivery Trucks**

	Trucks	TRUs
PA2		
Regional Commercial	74	0
High Turnover Restaurant	5	3
PA3		
Industrial	1,325	32
Neighborhood Serving Commercial	7	0
Restaurants with drive-thru	3	2
Food & Beverage Kiosks	4	2
Total Trucks	1,418	39

SOURCE: ESA 2021.

NOTE: Detailed calculations are presented in Appendix D1 of this 2021 SEIR.

Long term operational activities on the Project Site are assumed to include the operation of the LGCCS (detailed in Section IV.D.2, *Existing Conditions*). According to the Emission Compliance Test Report performed on Landfill Gas Flare FL-150 dated May 26, 2017, the existing flare has a methane destruction efficiency rate of 99 percent.¹¹⁰ As discussed previously, the flare may be discontinued and landfill gas may be treated by GAC before discharge to the atmosphere. As permitted by the SCAQMD, the GAC system would be required to reduce total non-methane organic compounds by a minimum of 98 percent by weight. This requirement would reduce emissions of organic compounds consistent with the operation of the flare. However, operation of the flare will result in more NO_x emissions through combustion of the landfill gas. Therefore, emissions from the GAC system would be less than reported for the use of the flares and the GAC system is not considered further in this analysis. The operation of the flare at build-out has been assumed as a worst-case analysis and is assumed to continue for the duration of the 30-year modeling with continued augmentation by natural gas.

(c) Land Use Compatibility

According to CARB's Air Quality and Land Use Handbook, a site-specific health risk analysis is required if a sensitive receptor is sited within 500 feet of a freeway.¹¹¹ Residential uses anticipated as part of PA1 would be sited at the same distance from existing off-site sources of TACs (i.e., the San Diego Freeway [Interstate 405 (I-405) Freeway]) assessed in the 2018 SEIR

¹¹⁰ Horizon Air Measurement Services Inc., Emission Compliance Test on Landfill Gas Flare FL-150, May 26, 2017.

¹¹¹ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

(a minimum of 1,400 feet from the I-405 Freeway). Therefore, revisions or updates to the site-specific health risk analysis for future sensitive receptors prepared for the 2018 Project is not required. The residential uses in PA1 would be affected by the operation of the individual projects proposed for PA2 and PA3 under the 2021 Project with the most impacts associated with the increase in truck traffic anticipated along Stamps Drive, Leonardo Drive, Del Amo Boulevard, and Main Street. As part of the mitigation measures required for the 2018 Project, the residential development on PA1 would be required to implement filtration systems consistent with the current building standards. At the time of this 2021 SEIR analysis that would be a minimum of MERV 13 which would reduce filter pollution from 0.3 to 1.0 micron by up to 90 percent.¹¹²

The 2021 Project would introduce a new sensitive use to the Project Site not previously studied under the 2018 SEIR, namely an active recreator site pursuant to the Carson Country Mart and its related amenities. Some portion of the future users of the Carson Country Mart are anticipated to originate from the nearby residential uses on the Project Site (i.e., from PA1). Thus, a future on-site resident of PA1 on the Project Site may also be a future user of the on-site Carson Country Mart. Such a receptor could be exposed to operational TAC emissions from the 2021 Project at their on-site residence and at the Carson Country Mart and the associated health risk would be additive for such a receptor (i.e., some exposure may occur while at home while some exposure may occur while at the Carson Country Mart). In order to determine a maximum-case exposure scenario, future Carson Country Mart receptors were analyzed as if they were residential receptors. Because risk assessment methodologies are recognized as health protective of the most sensitive populations, and the most impacted receptor exposure scenario is the 30-year residential scenario already assessed in the 2018 SEIR, the potential impacts to future Carson Country Mart users are conservatively evaluated and are discussed quantitatively and qualitatively below.

The same cumulative exposure scenario associated with the Carson Country Mart receptors are anticipated for the off-site library, church and school receptors. Refer to Section IV.D.2.b(4), *Sensitive Receptors and Locations*, for a full description of sensitive receptors. Therefore, consistent with the analysis of the Carson Country Mart receptors, these off-site sensitive receptor groups were also conservatively analyzed as if they were residential receptors and are not analyzed separately using reduced exposure parameters for non-residential uses.

(d) Health Risk Assessment Methodology

The revised OEHHA Guidance takes into account the sensitivity of children to TAC emissions, different breathing rates, and time spent at home. Children have a higher breathing rate compared

¹¹² Department of Physics and Astronomy, MERV 13 Filter, April 2020, <https://www.depts.ttu.edu/phas/PrototypeMask/MERV13Filter.php>, accessed June 2021.

to adults and would likely spend more time at home resulting in longer exposure durations. On June 5, 2015, SCAQMD incorporated these guidelines into relevant rules designed for permitting of stationary sources. Although construction would be temporary, construction impacts associated with TACs have been addressed quantitatively in a refined health risk assessment (HRA) for the 2021 Project, which HRA was performed in accordance with the OEHHA Guidance.

The process of assessing health risks and impacts includes a degree of uncertainty. The level of uncertainty depends on the availability of data and the extent to which assumptions are relied upon in cases where the data are incomplete or unknown. All health risk assessments rely upon scientific studies to reduce the level of uncertainty; however, it is not possible to completely eliminate uncertainty from the analysis. Where assumptions are used to substitute for incomplete or unknown data, it is standard practice in performing health risk assessments to err on the side of health protection to avoid underestimating or underreporting the risk to the public. In general, sources of uncertainty that may lead to an overestimation or an underestimation of the risk include extrapolation of the toxicity data associated with animal exposure used to estimate exposure effects in humans and uncertainty in the exposure estimates. In addition to uncertainty, there exists “a natural range or variability in measured parameters defining the exposure scenario” and that the “greatest quantitative impact is variation among the human population in such properties as height, weight, food consumption, breathing rates, and susceptibility to chemical toxicants.” As mentioned previously, it is typical to err on the side of health protection by assessing risk on the most sensitive populations, such as children and the elderly, by modeling potential impacts based on high-end breathing rates, by incorporating ASFs, and by not taking into account exposure reduction measures, such as mechanical air filtration building systems.

(i) Dispersion Modeling

Dispersion modeling was performed using the USEPA-approved AERMOD with meteorological data from the representative SCAQMD monitoring station located in South Coastal County LA (Long Beach). SCAQMD specifically recommends that projects use the nearest representative SCAQMD meteorological station for modeling, which is usually the nearest station; however, an interfering terrain feature may dictate the use of an alternate station. Emissions sources were located on the Project Site corresponding to the areas of construction activity. For example, while grading would occur over the whole 157-Acre Site, building construction and architectural coating activities would be isolated to areas of the site where buildings would be located. Multiple volume sources were used to represent the construction emissions sources and truck routes on the Project Site projected by the 2021 Project. TRUs were modeled as individual volume sources for PA2 but, as no diesel TRUs are permitted in PA3, no TRUs were modeled for the light industrial sources. The landfill gas flare system was modeled as a point source. The six new emergency generators anticipated for the light industrial uses proposed by the 2021 Project were also modeled as point sources. Construction emissions would not be generated

during the nighttime hours; therefore, the dispersion modeling allocates the emissions during the active daytime construction hours. Deliveries from PA2 and the Carson Country Mart on PA3(b) are anticipated to occur over 16 hours per day and operation of the light industrial facilities within PA3(a), and the LGCCS flare are conservatively assumed to operate 24 hours a day.

The sensitive receptors analyzed in the dispersion model were identified and included based upon the proximity of the sensitive receptors to the Project Site. The following lists the three sensitive receptor groups that were included in the dispersion model:

- Off-site receptors in DD3;
- Other existing off-site residences within 1,000 feet of the Project Site boundaries; and
- Golden Wings Academy Preschool located approximately 800 feet east of the Project Site.

Risk quantification for on-site receptors (including Carson Country Mart receptors) are for informational purposes only and are not part of the significance determination, as CEQA does not require the analysis of potential impacts caused by the development of a proposed project on itself. The Carson Country Mart visitors and the on-site residents in PA1 have been included as receptors for operational sources (for informational purposes only). As discussed previously, all sensitive receptor groups were modeled as if they were residential receptors, which would result in maximum estimated health risk levels.

There are several non-residential land uses, including both sensitive receptors as described in Section IV.D.2.b(4), *Sensitive Receptors and Locations*, as well as commercial/retail uses located to the south and southwest of the Project Site within the predominantly residential neighborhoods. These non-residential receptors were included in the modeling as residential receptors to provide for a conservative maximum-case exposure scenario as described above. Although non-residential receptors may be in close proximity to the Project Site, their intermittent exposure duration would be less than that of a residence (8 hours compared to 24 hours for workers and schools) and typically adult breathing rates compared to children are lower as well.

(ii) Cancer Risk

Consistent with the methodology in the 2018 SEIR, health risk impacts are assessed using the HARP2 model developed by CARB, which was released March 2015. The health risk calculation methodology is consistent with the 2015 OEHHA Guidance. Health impacts address construction and operational DPM emissions, flare emissions, and the effects on nearby sensitive uses (residential, schools, preschools etc. all modeled as residential receptors) (see 2018 SEIR, Section IV.G.3.a.(4), beginning on p. IV.G-21) for detailed methodology.

Cancer risk was evaluated for sensitive receptors in the surrounding area of the 2021 Project, as described above. Potential 2021 Project impacts to on-site receptors (i.e., the residences to be located in PA1 and Carson Country Mart receptors in PA3(b) of the 2021 Project) were quantified and are included, for informational purposes only, as CEQA does not require the analysis of potential impacts from a proposed project on itself.

Due to the fact that construction started on PA2 in 2018 and was halted in 2019, there are three risk scenarios that have been modeled for off-site receptors. One scenario evaluates risk to sensitive receptors that are assumed to be exposed to TAC emissions starting at the 3rd trimester (i.e., in-utero) at the beginning of construction in 2018. A second scenario evaluates risk to sensitive receptors that are assumed to be exposed to TAC emissions starting at the 3rd trimester at the beginning of construction in late 2021. Risk for the 2018 start date of construction consists of construction exposure over approximately 8 years with approximately 22 years of operational exposure. Risk for 2021 start consists of construction exposure over approximately 4 years with approximately 26 years of operational exposure. A third scenario evaluates risk to sensitive receptors that are assumed to be exposed to TAC emissions starting with a receptor (i.e., a fetus) at the 3rd trimester in-utero at the beginning of operational activities and continued exposure for 30 years of operations (i.e., a 3rd trimester in-utero receptor that moves in after construction is completed).

Because on-site receptors would not be occupied during construction activities, risk from construction activities is not quantified for these receptors. Therefore, for on-site receptors there is only one scenario and that assumes that a woman in her third trimester of pregnancy moves into the location and the fetus/child is exposed to 30 years of operational emissions as it grows up at that location. Only the risk from the maximally exposed receptor for each area (on-site, off-site, off-site DD3) is reported/analyzed herein. Risk for all receptors is included as part of Appendix D1 of this 2021 SEIR.

(iii) Non-Cancer Risk

Consistent with the 2018 SEIR, non-cancer chronic impacts were assessed based on the HI. The evaluation of chronic impacts is based on the maximum annual emissions over a 12-month period of activity, and acute impacts are based on an 8-hour period of activity (see 2018 SEIR Section IV.G.3.a(4)(c), on p. IV.G-31).

(5) CO Hotspot

The potential for the 2021 Project to cause or contribute to CO hotspots is evaluated by comparing 2021 Project TIA intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations. SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue,

(2) Sunset Boulevard and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. This intersection is located near the on- and off-ramps to the I-405 Freeway in West Los Angeles. The evidence provided in the 2003 AQMP (Table 4-10 of Appendix V) shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 (8-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the screening values would be 7.6 ppm (1-hour average) and 5 ppm (8-hour average), which are less than the CAAQS of 20 ppm and 9 ppm respectively for one-hour and eight-hour averages. Therefore, any intersection that operates with less than 100,000 vehicles per day would be anticipated to have less emissions than the intersection at Wilshire Boulevard and Veteran Avenue and, therefore, also would not exceed the NAAQS or CAAQS. Intersections operating at greater than 100,000 vehicles per day would require additional analysis.

b. Project Characteristics and Project Design Features

(1) Project Characteristics

Project Characteristics include development standards, design features, and/or operational characteristics that are incorporated into the 2021 Project through Chapter II, *2021 Project Description*, of this 2021 SEIR, and/or the 2021 Specific Plan Amendment. The Project Characteristics that are highlighted in this section would avoid or reduce potential environmental effects through project design and operational characteristics.

The 2021 Project would promote a reduction in mobile source emissions by providing a supply of housing, employment, retail and dining opportunities within close proximity to one another as well as to existing off-site residential. This makes it possible for an individual to both reside and work/shop/dine within the Project Site.

The location/placement of light industrial and commercial uses in the design of the 2021 Project serves the objective of minimizing mobile source pollutant emissions. Light industrial and commercial uses that would be developed within the 2021 Project would be located in close proximity to the access ramps of the I-405 Freeway and the Harbor Freeway (I-110 Freeway), which provide easy access to and from the ports of Los Angeles and Long Beach. Such concentration and placement are intended to reduce VMT within the region and subregion by reducing commute distances for non-resident workers. The provision of light industrial and commercial space in close proximity to existing and proposed residential uses within the vicinity of the Project Site would increase the probability that such residents may work and recreate nearer to their home, thus reducing VMT.

(2) Project Design Features

For air quality emissions, energy use, and greenhouse gas (GHG) emissions, PDFs are identified in addition to Project Characteristics. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements that are used in the unmitigated modeling scenario for air quality, energy, and GHG.¹¹³ The mitigated modeling scenario then applies any identified 2021 mitigation measures. Because these PDFs must be implemented, in addition to the 2021 mitigation measures, each PDF is provided an alphanumeric designation (e.g., 2021 SEIR PDF-X#), similar to mitigation measures (Mitigation Measure X-#). All PDFs and mitigation measures will be monitored in the 2021 SEIR MMRP.

The 2021 Project would be developed in accordance with the regulations, standards, and guidelines established in the 2021 Specific Plan Amendment, the General Plan, and the City's CAP. The following PDFs have been incorporated within the 2021 Project and this 2021 SEIR to meet regulatory compliance or to provide further benefit to the future tenants and residents within the Project Site as well as the surrounding community. As detailed in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, some of the PDFs replace mitigation measures from the 2018 SEIR due to compliance with current regulatory requirements and that makes them part of the unmitigated modeling scenario.

(a) Construction

Construction of the 2021 Project has been designed to reduce emissions from construction equipment and haul/vendor trucks. Emissions are reduced through the use of newer/more-efficient equipment and vehicle fleets. The following are the key 2021 SEIR PDFs that would reduce air pollutant emissions:

- 2021 SEIR PDF-C1:** Mobile off-road construction equipment (wheeled or tracked) used during construction of the ~~proposed modified Project~~ 2021 Project shall meet the USEPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, then the equipment shall, at a minimum, meet the Tier 3 standard. Zero-emissions construction equipment shall be incorporated when commercially available. This requirement shall be incorporated into applicable bid documents, purchase orders, and contracts with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. (Modified from 2018 SEIR PDF

¹¹³ Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.

Mitigation Measure G-6) (Applicable to PA1, PA2, and PA3; zero-emissions construction equipment use is not required for PA2.)

- **2021 SEIR PDF-C2:** Limiting excavations to avoid exposing landfill contents. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C3:** General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403. Grading in PA1 and PA3 shall be prohibited on days when Air Quality Index Forecast exceed 100 for particulates or ozone. (Modified from 2018 SEIR Mitigation Measure G-1)¹¹⁴
- **2021 SEIR PDF-C4:** ~~Electricity from power poles~~ Electric hook-ups to the power grid shall be used rather than temporary diesel- or gasoline-powered generators shall be used to the extent for electric construction tools whenever feasible. For PA3 and PA1, mobile off-road construction equipment of less than 50 horsepower shall be electric, including: air compressors, concrete/industrial saws, welders and plate compactors. Mobile off-road construction equipment with a power rating of 19 kilowatts or less shall be battery powered. If generators need to be used to reach remote portions of the site, non-diesel generators shall be used. (Modified from 2018 SEIR Mitigation Measure G-4)¹¹⁵ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C5:** All construction vehicles shall be prohibited from idling in excess of 5 minutes per occurrence and location, both on and off Property site. (Applicable to PA2.) All construction vehicles shall be prohibited from idling in excess of 2 minutes per occurrence and location, both on and off site. Individual pieces of diesel-powered off-road diesel equipment shall be prohibited from being in the “on” position for more than 10 hours per day. (Modified from 2018 SEIR Mitigation Measure G-5)¹¹⁶ (Applicable to PA1 and PA3.)
- **2021 SEIR PDF-C6:** All fleet-contracted on-road heavy-duty haul trucks used for remediation and construction hauling activities from PA1 and PA3 shall be model year 2014 or newer if diesel fueled. The requirement for the use of 2014 or newer vehicles does not apply to delivery trucks or other non-contracted fleets. (Applicable to PA1 and PA3.)
- **2021 SEIR PDF-C7:** Contractors shall conduct routine inspections to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts. Inspection reports shall be maintained on site throughout the construction period. (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C8:** 2021 Project contractors shall provide information on transit and ride sharing programs and services to construction employees. As feasible, provide for

¹¹⁴ SCAQMD Rule 403 requirements are regulations that are part of the unmitigated modeling scenario; therefore, this mitigation measure is now 2021 SEIR PDF-C3.

¹¹⁵ Mitigation Measure G-4 was replaced by 2021 SEIR PDF-C4 as it is a quantified part of the unmitigated modeling scenario.

¹¹⁶ Mitigation Measure G-5 was replaced by 2021 SEIR PDF-C5 as it is a quantified part of the unmitigated modeling scenario.

meal options on site, or shuttle buses between the site and nearby meal destinations for use by construction contractors. (Applicable to PA1 and PA3.)

(b) Operation

Design and operational elements of the 2021 Project would reduce air pollutant emissions relative to a project of the same type without implementation of the design and operational elements. The design and operational elements of the 2021 Project implements the policy direction provided by SCAG for land development projects. The 2021 Project has been designed and programmed to reduce the potential number of vehicle trips and VMT. The 2021 Project would also reduce air pollutant emissions through the location and placement of land uses within the Project Site; the Project Site is located in an urban infill location close to a mix of off-site land uses, which would also aid in reducing VMT, as stated in Section IV.C, *Transportation*, of this 2021 SEIR. The following are the key design and operational elements of the 2021 Project that would reduce air pollutant emissions:

- **2021 SEIR PDF-O1:** The ~~proposed modified~~ 2021 Project would include an impervious barrier to control odiferous and air toxic emissions in compliance with the approved RAP. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O2:** All stationary-source emissions sources (e.g., landfill gas flares, emergency generator) would utilize Best Available Control Technology (BACT) to meet SCAQMD requirements, and would maintain appropriate SCAQMD permits. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O3:** Land uses ~~that would be located on the Property would be limited to those that do not emit within the Project Site shall not allow for~~ high levels of potentially (i) toxic contaminants or (ii) odors. All TAC sources shall be permitted through SCAQMD as appropriate. (Modified from 2018 SEIR PDF and 2018 SEIR Mitigation Measure G-14)¹¹⁷ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O4:** All residential and non-residential buildings shall meet or exceed the more stringent of the 2016-2019 California Title 24 Efficiency standards for water, heating, space heating, and cooling, by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means or others adopted by the City. (Modified from 2018 SEIR Mitigation Measure G-15)¹¹⁸ (Applicable to PA1 and PA3; PA2 applicability is limited to the Title 24 efficiency standards effective at the time construction began.)

¹¹⁷ The 2018 PDF and 2021 SEIR Mitigation Measure G-14 were combined here because they have the same requirements and are consistent with the nature of the development. They were combined as a single PDF because many TAC sources that could be included in the light industrial section would be required to be permitted by the SCAQMD, such as additional generators. As it was a PDF for the 2018 SEIR, it would already be part of the 2021 Project design for this 2021 SEIR and, therefore, is more appropriate to include in the 2021 SEIR PDF section.

¹¹⁸ This measure was replaced by 2021 SEIR PDF-O7 as it is a regulatory requirement modeled as part of the unmitigated scenario.

- **2021 SEIR PDF-O5:** The ~~Developer~~ Applicant(s) of each planning area within the Project Site shall implement the following trip demand measures:
 - a) ~~The Applicant shall p~~Provide bicycle racks located at convenient locations throughout The District at South Bay the 2021 Project. (Modified from 2018 SEIR Mitigation Measure G-22)¹¹⁹ (Applicable to PA1, PA2, and PA3.)
 - b) ~~The Applicant shall p~~Provide bicycle paths along the main routes throughout The District at South Bay the Project Site consistent with the 2021 Specific Plan Amendment. (Modified from 2018 SEIR Mitigation Measure G-23)¹²⁰ (Applicable to PA1, PA2, and PA3.)
 - c) ~~The Applicant shall p~~Provide convenient pedestrian access throughout The District at South Bay the Project Site. (Modified from 2018 SEIR Mitigation Measure G-24)¹²¹ (Applicable to PA1, PA2, and PA3.)
 - d) Provide on-site shower facilities for use by all employees bicycling/walking to work. (Applicable to the light industrial uses in PA3(a).)
 - e) Light industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards. (Applicable to the light industrial uses in PA3(a).)
 - f) Each light industrial tenant within PA3(a) shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities. (Applicable to the light industrial uses in PA3(a).)
- **2021 SEIR PDF-O6:** The 2021 Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. (2018 SEIR Mitigation Measure G-28)¹²² (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O7:** Electric vehicle charging stations shall be provided as follows:
 - a) The Applicant of PA1 shall provide passenger vehicle charging stations for a minimum of 6 percent parking spaces (169 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA1.)
 - b) The Applicant of PA3 shall provide passenger vehicle charging stations for a minimum of 10 percent parking spaces (82 spaces). Compliance shall be in

¹¹⁹ 2018 Mitigation Measure G-22 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description; therefore, bicycle parking would be part of the 2021 Project to accommodate bicycle access.

¹²⁰ 2018 Mitigation Measure G-23 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

¹²¹ 2018 Mitigation Measure G-24 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

¹²² This measure is replaced by 2021 SEIR PDF-O9 as it is part of the unmitigated scenario.

- accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA3.)
- c) Each of the Applicant(s) of PA1 and PA3 shall install Level 2 or better electric vehicle charging stations for 325 spaces on site between the beginning of construction and December 2039 (the 325 spaces are in addition to the 169 spaces in PA1 and 82 spaces in PA3). If on-site charging stations cannot be accommodated, charging stations may be distributed throughout the City. The 325 electrovoltaic (EV) supplied spaces will be provided for passenger and light-duty vehicles. Level 4 EV charging for trucks can be substituted at 0.11 truck spaces for every passenger vehicle space in PA3. Passenger and light-duty vehicle and truck charging requirements can be satisfied on or off site; however, on-site charging will be prioritized. (Applicable to PA1 and PA3.)¹²³
- d) Provide infrastructure, as the parking area is developed, to support the energy load for electric truck vehicle charging. Truck charging infrastructure shall be designed to support a minimum of 25 percent of the truck parking spaces for each of the light industrial use in PA3(a). (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O8:** All on-site equipment, such as forklifts and yard trucks shall be electric with the necessary electrical infrastructure and charging stations provided. (Applicable to PA3.)
 - **2021 SEIR PDF-O9:** When not in use all truck engines shall be turned off. Idling will be limited to 2 minutes or less per occurrence and location for PA3. Idling and operation restrictions shall be posted for view from both on-site and off-site personnel. Appropriate signage shall identify idling restrictions and contact information to report violations to CARB and SCAQMD within PA3. Consistent with the 2018 SEIR, idling restrictions of 5 minutes are or less per occurrence and location applicable to PA1 and PA2. (Applicable to PA3.)
 - **2021 SEIR PDF-O10:** All dock doors shall be equipped with electric plugs for electric transportation refrigeration units (TRUs). All TRUs operating on site would be required to be electric (no diesel-powered TRUs permitted at all in PA3(a)) and certification and maintenance records shall be maintained for all TRUs. (Applicable to the light industrial uses in PA3(a).)
 - **2021 SEIR PDF-O11:** To the extent feasible and permitted by local codes and regulations, all emergency-standby generators shall be non-diesel. If diesel generators are required, generators will conform to EPA Tier 4 emissions standards. (Applicable to the light industrial uses in PA3(a).)
 - **2021 SEIR PDF-O12:** Tenants shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. Staff in charge of keeping vehicle records shall be trained in diesel technologies and

¹²³ *At the discretion of the Applicant(s) of PA2, additional EV charging stations may be incorporated beyond those required of PA2 as part of the 2018 SEIR mitigation requirements.*

compliance with CARB regulations by attending CARB-approved courses as well as maintaining on-site records demonstrating compliance. (Applicable to uses in PA3(a).)

- **2021 SEIR PDF-O13:** As applicable, tenants shall be required to enroll in U.S. EPA’s SmartWay program and shall use carriers that are SmartWay carriers. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O14:** Tenants shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O15:** All light industrial buildings shall implement a combination of sky lights and solar photovoltaic (PV) infrastructure such that a minimum of 25 percent of the rooftops will include solar PV arrays at buildout. (Applicable to uses in PA3(a).)
- **2021 SEIR PDF-O16:** For the uses within PA3(a), leasing preference shall be given to prospective tenants with facility-owned and operated fleet that is alternative/zero-emissions. All owned or contracted fleets shall meet or exceed the 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Light Industrial tenants shall ensure that of all trucks of model year 2021 and newer 75 percent will be zero- or near-zero-emissions vehicles by 2035, and 100 percent zero- or near-zero-emissions vehicles by 2040. Facility operators shall maintain records on site demonstrating compliance with this requirement and shall make records available to inspection by local jurisdiction, air districts, and the State upon request. (Applicable to the uses in PA3(a).)

c. Analysis of Project Impacts

(1) Conflict with or obstruct implementation of the applicable air quality plan

(a) AQMP Consistency Analysis

The 2018 SEIR concluded that the 2018 Project would be consistent with the growth projections as contained in the City’s General Plan, and ultimately consistent with the growth projections in the AQMP, since the AQMP is based on RTP/SCS growth forecasts. Discussion of the comparisons of the 2021 Project with the 2018 SEIR and 2006 FEIR are included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

As with the 2018 SEIR, the 2021 Project would have the potential to increase the frequency or severity of existing air quality violations and obstruct implementation of the AQMP because the construction and operational emissions are estimated to exceed SCAQMD’s significance criteria even with the incorporation of mitigation (as discussed in Section IV.D.8, *Level of Significance after Mitigation*). However, as the Carson Marketplace Project was approved in 2006, the

emissions associated with the implementation of the 2006 FEIR would have been incorporated into future iterations of the AQMP, including the current 2016 AQMP. Therefore, even though implementation of the 2021 Project would result in exceedances to the regional thresholds, the emissions anticipated from implementation of the 2021 Project would be less than those identified in the 2006 FEIR for construction, and for VOC, CO, SO_x, and PM₁₀ for operational emissions.¹²⁴

The 2021 Project is also affirmatively consistent with the 2016 AQMP. The 2021 Project would promote the reduction in mobile source emissions by providing housing and commercial within close proximity to one another and by locating it in close proximity to the I-405 and I-110 Freeways, which is intended to reduce VMT within the Project Site as well as within the region. The 2021 Project PDFs, such as the electrovoltaic (EV) infrastructure for future truck charging stations, electrified dock doors, and phase-in of EV trucks, will enable the early adoption of ACT technology. Tenants within the PA3(a) would be subject to SCAQMD Rule 2305 which would reduce NO_x.

During its construction phase, the 2021 Project would comply with CARB requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD's regulations for controlling fugitive dust and other construction emissions. Compliance with these measures and requirements is consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

The 2021 Project would generate short-term construction jobs, but it would not necessarily create new long term construction jobs, since construction workers typically travel amongst construction sites as individual projects are completed within a particular area and are not typically brought from other areas to work on developments such as the 2021 Project. Moreover, these jobs would be temporary in nature. Therefore, construction jobs under the 2021 Project would not conflict with the long-term employment projections upon which the AQMP are based.

The development allowed within PA1 would result in the construction of up to 1,250 residential units, which is the same as allowed under the 2018 SEIR.

As detailed in Chapter VI, *Effects Found Not to Be Significant*, of this 2021 SEIR, overall, total employees would increase from 4,388 employees under the 2018 Project to 5,729 employees under the 2021 Project, resulting in an increase of 1,341 employees due to the provision of the higher employee-generating fulfillment and distribution uses in PA3(a). While implementation of the 2021 Project would provide a total of 5,729 jobs anticipated for the Project Site during

¹²⁴ The 2006 FEIR reported emissions as follows: VOC – 506 lbs/day, NO_x – 719 lbs/day, CO – 4,449 lbs/day, SO_x – 17 lbs/day, and PM₁₀ – 595 lbs/day. Given the 2021 Project emissions as shown in Table IV.D-9, near-term 2021 emissions would result in reductions in pollutant emissions as follows: VOC – (288) lbs/day; NO_x – (211); CO – (3,114) lbs/day; SO_x – (11) lbs/day; and PM₁₀ – (130) lbs/day. The 2006 FEIR did not analyze PM_{2.5}.

operation, future employees are anticipated to come from the existing local and regional labor force for (i) the light industrial uses within PA3(a), which would employ truckers and warehouse employees, and (ii) the commercial and retail uses within PA3(b). These jobs are not anticipated to draw new residents to the City or surrounding area since they do not require a highly specialized workforce. Therefore, even though the 2021 Project would increase the amount of employment opportunities within the City, population growth within the City is not anticipated to significantly increase from the population growth projections disclosed in the 2018 SEIR.

As detailed in Section IV.A, *Land Use and Planning*, of this 2021 SEIR, the 2021 Project would be consistent with applicable 2020–2045 RTP/SCS goals. The 2021 Project would provide a mix of uses, including residential, commercial, and light industrial uses in a prime location visibly noticeable along the I-405 Freeway corridor. The 2021 Specific Plan Amendment will provide site design guidelines and development standards for circulation (i.e., internal circulation, parking, pedestrian and bicycle circulation, and public transportation); open space/recreation; public services and infrastructure; architecture; landscaping; walls and fences; signage; lighting; service, trash, and utility areas; artwork; noise; and energy conservation to ensure a high-quality development that is cohesive and compatible with the surrounding area.

The purpose of the AQMPs is to set a plan by which the SCAB can reach state and federal attainment by reasonable dates. To that end, the SCAQMD has set numerical thresholds under which level a project would not be anticipated to result in emissions that could adversely impact the attainment of the state and federal AAQS. However, these thresholds do not take into account the complex factors and variables, including chemical changes, dispersal, weather variation and the combination with other existing conditions that result in regional ambient air quality and pollutant concentrations which determine basin emissions. Therefore, simply exceeding the regional thresholds does not necessarily mean a project's emissions would result in the SCAB failing to meet its attainment goals. As indicated in the 2016 AQMP, and shown in **Table IV.D-5, 2021 Project Regional and SCAB Emissions Comparison (Unmitigated) (tons/year)**, growth in the SCAB between 2012 and 2031 is anticipated to result in an increase in criteria pollutants of between 2 and 251 tons per year. Total 2021 Project impacts in 2026 would represent between 0.15 percent and 0.83 percent of that increase. This small increase in daily emissions would not jeopardize the SCAB's attainment status. Emissions within the SCAB are dispersed relatively quickly and the 2021 Project-related emissions do not result in any hotspots, or significant localized impacts as demonstrated in the Section IV.D.5c(3)b, *Operation*. Further, with the reduction of NO_x and VOC emissions, the 2021 Project would actually reduce the ability for the creation of ozone. Additionally, the mobile emissions increase from the 2021 Project is anticipated to be, at least in part, emissions that would occur elsewhere in the SCAB but with the new development would be re-located to this site. For example, the relocation of fulfillment centers/distribution centers from locations further from the freeways to the Project

Site. Therefore, the increase in emission of VOC, PM10, and PM2.5 between the 2018 SEIR and the 2021 Project would not be substantial.

The 2021 Project does not propose an increase in population (since the residential allowances will remain the same), and based on the analysis above, is consistent with the 2020–2045 RTP/SCS, and does not result in a substantial change in the emissions estimates from the 2018 SEIR. While there is a change in land use and intensity between the 2018 SEIR and the 2021 Project, the 2021 Project would be consistent with the 2016 AQMP and the 2021 Project would result in **less-than-significant** impacts.

Table IV.D-5
2021 Project Regional and SCAB Emissions Comparison (Unmitigated) (tons/year)

	VOC	NO _x	CO	SO _x	PM10 ^a	PM2.5 ^a
Maximum Daily Emissions						
2031 with growth ^b	345	214	1188	18	NA	65
2031 No growth ^b	297	179	927	16	NA	57
2031 Growth ^b	48	35	251	2	NA	8
Existing 2021 Project (2026 operational year)	0.11	0.25	0.67	0.002	0.23	0.07
% SCAB Growth	0.23%	0.73%	0.27%	0.15%	—	0.83%
Project Change from 2018 SEIR	0.01	-0.03	-0.15	-0.001	0.04	0.01
% SCAB Growth	0.03%	-0.10%	-0.06%	-0.07%	—	0.12%

SOURCES:

^a ESA 2021.

^b SCAQMD, Final 2016 Air Quality Management Plan, March 2017, Table 3-5.

(b) General Plan Consistency Analysis

Development of the 2021 Project offers the opportunity to redevelop an underutilized site with a mixed use development within a highly urbanized area and does so via the use of existing infrastructure, proximity to existing regional and local transit facilities, encourages pedestrian activity, and is located near existing off-site commercial uses that would meet many of the needs of the 2021 Project's future residents within PA1, as well as providing new commercial uses to serve the needs of both on-site and off-site residents.

The 2021 Project, with implementation of PDFs, would comply with regulatory standards for the reduction of particulate matter; relieve congestion on roadways by providing work, recreation, retail and housing within a localized area served by bike lanes, transit, and pedestrian pathways; and increase the use of alternative fueled vehicles by providing EV charging stations as well as implementing a zero-emissions truck fleet and a ban on the operation of diesel TRUs in PA3.

Based on the nature of the 2021 Project, its location, and the implementation of PDFs, the 2021 Project would be consistent with the following City of Carson air quality goals. The 2021 Project would meet Goal AQ-1, *Reduce particulate emissions from paved and unpaved surfaces and during building construction*, by limiting excavations, and complying with SCAQMD Rule 403. By giving preference to those land uses that do not emit high levels of potentially toxic contaminants, installation of EV infrastructure, implementation of trip demand measures, use of electric forklifts and yard trucks, installation of electrified dock doors, and the phase in of EV trucks, the 2021 Project meets Goal AQ-2, *Improve air quality which meets state and federal standards*, and Goal AQ-3, *Increased use of alternate fuel vehicles*. Thus, consistent with the 2018 SEIR, the 2021 Project would result in **less-than-significant** impacts with respect to compatibility with applicable air quality policies as set forth in the City's General Plan Air Quality Element.

(c) Bill Consistency

The following provides a discussion of the 2021 Project's consistency with Senate Bill 535, Senate Bill 1000, and Assembly Bill 617. This section is provided for informational purposes only and is provided to demonstrate how the 2021 Project would comply with such legislation recently passed to reduce pollution in disadvantaged communities.

(i) Senate Bill 535

In accordance with SB 535, the CalEnviroScreen 3.0 tool was used to identify the relative burden and vulnerability of the Project Site and surrounding area. As stated above, the Project area is located in Census Tract 6037543801 with a CalEnviroScreen 3.0 score of 59.43, within the 96th percentile of burden and vulnerability relative to other communities in the state. This means that the Project area experiences higher levels of pollution, has a greater population at higher health risk from exposure to pollutants, and has a population with a socioeconomic status more susceptible to pollution. SB 535 does not provide for specific reductions to be achieved or measures to be implemented to reduce the risk from air pollution to disadvantaged communities, but to assist decision makers in considering the existing pollutant burden when making discretionary land use decisions that may negatively impact disadvantaged communities. In recognition of this, the City has required the 2021 Project implement a number of new design features that would reduce impacts from both construction and operational activities. These include the following:

- Incorporation of electric construction equipment;
- The use of Tier 4/Tier 3 (where Tier 4 equipment is not available) construction equipment;
- Implementation of trip demand measures for both construction and operational activities to reduce single occupancy vehicle travel;
- Provision for non-diesel generators for operational uses where feasible;
- The ban on diesel TRU operation within PA3;

- Inclusion of EV charging stations. EV charging requirements can be achieved on site or off site, with preference being given to on-site installation; and
- The incorporation of a phase-in of zero-emissions vehicles for all trucks associated with the light industrial portion of PA3(a).

These measures will reduce both criteria pollutant and TAC emissions which would reduce the overall pollutant burden of the 2021 Project to that set forth under the 2018 Project.

(ii) Senate Bill 1000

The City's GPU process was initiated in 2017 and is currently expected to conclude following further community input and environmental review with adoption of the updated General Plan in early 2022.¹²⁵ As part of the GPU, the City of Carson will implement SB 1000 requirements, including an Environmental Justice Element that incorporates the goals of SB 1000 to substantially reduce air pollutant impacts to disadvantaged communities. The 2021 Project includes design features such that impacts to communities (including potentially disadvantaged communities) are reduced. Examples of these measures include the early incorporation of ZE and NZE fleets and infrastructure for EV truck charging stations, a ban on diesel TRUs in PA3, and incorporation of EV charging stations beyond those required by regulatory compliance. Therefore, the 2021 Project would not hinder the implementation of SB 1000.

(iii) Assembly Bill 617

Under AB 617, the CERP for the WWLBC Area was approved in September of 2020. Refer to Section IV.D.3b(6)(c), *Community Emissions Reduction Program*, for more details on CERP priorities and requirements.

The CERP identifies two actions to reduce impacts from neighborhood truck traffic. The first is to reduce truck idling and the second is to reduce emissions from heavy-duty trucks within the surrounding neighborhoods. The 2021 Project implements a PDF that requires that all trucks operating within PA3 limit idling to 2 minutes per occurrence and location. This reduces idling emissions by 60 percent over the current CARB regulations allowing up to 5 minutes per occurrence. With respect to reducing emissions from heavy-duty trucks within neighborhoods, the 2021 Project will reduce emissions by (1) implementing a phase-in of zero-emissions vehicles by 2040; (2) increase in EV charging stations beyond existing regulatory obligations and incorporating electrical infrastructure to support potential future truck EV charging stations; (3) banning the use of diesel TRUs within PA3; (4) by locating industrial facilities close to the intersection of two major freeways, it limits the distance along collector streets that the trucks proposed by the 2021 Project will have to travel to access freeways and leave the neighborhoods; and (5) implementing signage on site to direct trucks to appropriate truck routes.

¹²⁵ City of Carson, *Carson2040*, <https://www.carson2040.com/>, accessed June 2021.

The CERP identifies four actions to reduce impacts to schools, childcare centers, and homes including: reducing exposure through public outreach to schools and childcare centers, reduce exposure to harmful air pollutants at schools, reduce exposures to harmful air pollutants at homes; and increase green space in areas where people spend time. The 2021 Project will not directly reduce exposure to schools and childcare centers through outreach programs, however, as the analysis indicates (refer to Section IV.D.5c(3), *Expose sensitive receptors to substantial pollutant concentrations*) the 2021 Project would not result in significant impacts from exposure to site related pollutants. The City had designated specific truck routes that can be used which takes into account the location to schools.¹²⁶ The 2021 Project is located adjacent to freeway interchanges and along truck routes to ensure that trucks do not need to travel on local streets not designated as truck routes. Signage will be contained within PA3(a) that provides direction to trucks to the appropriate routes. As discussed previously, the 2021 Project has implemented a number of PDFs that will reduce exposure to harmful pollutants (criteria pollutants as well as TACs) for the nearby residents and schools/preschools in the vicinity. These include incorporation of electric construction equipment, the use of Tier 4/Tier 3 (where Tier 4 equipment is not available) construction equipment, implementation of trip demand measures for both construction and operational activities to reduce single occupancy vehicle travel, provision for non-diesel generators for operational uses where feasible, the ban on diesel TRUs within PA3, and the incorporation of a phase-in of ZE and NZE vehicles for all trucks associated with the light industrial uses proposed for PA3(a). Therefore, the 2021 Project would be consistent with the CERP and AB 617.

(2) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard

(a) Regional Construction Impacts

The 2006 FEIR concluded that emissions resulting from implementation of the RAP, preparation of the 2006 Project Site, and 2006 Project construction would exceed SCAQMD regional significance thresholds for VOC and CO, and be below regional significance thresholds for NO_x, SO_x, and PM₁₀, as summarized in the 2018 SEIR (see Draft SEIR Table IV.G-7, p. IV.G-36). The 2018 SEIR concluded that construction of the 2018 Project resulted in no new significant impacts for VOC, NO_x, SO_x, CO, or PM₁₀ emissions compared to the 2006 FEIR and a less-than-significant impact for PM_{2.5} (which was not previously analyzed in the 2006 FEIR). A comparison of the 2021 Project and the 2018 SEIR is included herein for informational purposes

¹²⁶ Section 3260.2 Designated Routes of the Carson's Municipal Code identifies the allowable truck routes within the City, including Del Amo Boulevard and Main between Broadway and Torrance.

and to determine if there is an increase in impact severity only; however, significance is determined based on comparison to SCAQMD thresholds.

Implementation of the RAP and construction of PA1 and PA2 under the 2021 Project would involve substantively the same techniques and schedule as previously analyzed; however, overall construction of the 2021 Project is anticipated to occur over an extended duration (approximately 4.4 years). 2021 SEIR PDF-C1 through 2021 SEIR PDF-C8 were incorporated into the construction analysis for the 2021 Project, which would result in reductions in emissions in comparison to the unmitigated scenario.

Table IV.D-6, 2021 Project Regional Construction Emissions (Unmitigated) (lbs/day), shows that construction emissions anticipated from the 2021 Project would result in lower emissions than were anticipated from the 2018 Project. Due to the change in regulatory requirements between the 2018 SEIR analysis and this analysis (such as construction fleet standards and architectural coating VOC content), the peak daily construction emissions of all pollutants studied from the 2021 Project would be less than those expected by the 2018 SEIR.

Therefore, the 2021 Project would not result in any new significant impacts as compared to the 2018 Project. The 2021 Project would result in CO emissions less than those from the 2018 Project, and below SCAQMD regulatory thresholds, whereas the 2018 Project would result in emissions above SCAQMD levels for this pollutant even with mitigation. Emissions of VOC would remain significant and unavoidable without mitigation. Therefore, as with the 2018 Project, the 2021 Project would result in VOC emissions above applicable significance thresholds and impacts would remain **potentially significant without mitigation**.

(b) Regional Operational

The 2018 SEIR calculated regional operational emissions generated by the consumption of electricity and natural gas, area sources, and mobile sources at build out of the 2018 Project. According to the calculations, the 2018 Project was anticipated to exceed regional SCAQMD thresholds for VOC, CO, NO_x, PM₁₀, and PM_{2.5} and significant impacts were identified, as shown in the 2018 SEIR (see Draft SEIR Table IV.G-10, p. IV.G-40). A discussion comparing the 2018 SEIR with this 2021 SEIR is included for informational purposes and to determine if there is an increase in impact severity and significance is determined based on comparison to SCAQMD thresholds.

2021 SEIR PDF-O1 through 2021 SEIR PDF-O16 were incorporated into the construction analysis and result in reductions in emissions associated with the unmitigated scenario.

Table IV.D-7, 2021 Project Regional Operational Emissions (Unmitigated) (lbs/day), shows that maximum daily regional emissions anticipated from operation of the 2021 Project would result in potentially significant regional impacts for VOC, NO_x, CO, PM₁₀, and PM_{2.5}. While the 2021 Project would result in exceedances of SCAQMD's regulatory thresholds, it would ultimately

result in less daily emissions than anticipated under the 2018 SEIR for VOC, NO_x, CO, and SO_x. The 2021 Project would result in increased VOC, PM₁₀, and PM_{2.5} emissions in the opening year (2026); however, with the implementation of the 2021 Project, VOC would decrease below 2018 SEIR levels in 2035 and 2040, whereas PM₁₀ and PM_{2.5} would remain above 2018 SEIR levels.

**Table IV.D-6
2021 Project Regional Construction Emissions (Unmitigated) (lbs/day)**

	VOC	NO _x	CO	SO _x	PM ₁₀ ^a	PM _{2.5} ^a
Maximum Daily Emissions						
PA1	46	23	124	<1	19	5
PA2	64	22	127	<1	7	3
PA3	29	22	99	<1	8	3
Existing Sources	3	1	4	<1	1	1
Maximum Phase Overlaps ^b	110	71	349	1	27	10
Maximum Daily ^c	113	72	352	1	28	11
SCAQMD Daily Significance Threshold	75	100	550	150	150	55
Significant?	Yes	No	No	No	No	No
2018 SEIR	183	99	668	1	57	20
Difference (2021 Project minus 2018 SEIR)	(70)	(27)	(316)	(<1)	(29)	(9)

SOURCE: ESA 2021.

NOTES:

Emissions quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix D1 of this 2021 SEIR.

- ^a PM₁₀ emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the Project Site boundaries.
- ^b The maximum phase overlap reports the maximum emissions for each pollutant based on the potential overlap in construction activities based on the construction schedule. The overlap scenarios are included in detail in Appendix D1 of this 2021 SEIR. The overlap that results in the exceedance in VOC emissions is associated with the overlap in architectural coating associated with both PA1 and PA2.
- ^c Maximum daily represents the total maximum emissions for that pollutant that could occur taking into account the emissions from the individual construction subphases for each PA, their scheduled overlaps, and the inclusion of emissions from the existing on-site sources that will remain operational during construction.

**Table IV.D-7
2021 Project Regional Operational Emissions (Unmitigated) (lbs/day)**

	VOC	NOx	CO	SOx	PM10	PM2.5
Maximum Daily Emissions (Year 2026)						
Area	83	20	112	<1	2	2
Energy	1	7	4	<1	1	1
Mobile	130	476	1,182	5	461	129
Stationary ^a	4	5	37	<1	1	1
Total 2021 Project	218	508	1,335	6	465	132
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	25	(70)	(298)	(3)	81	19
Maximum Daily Emissions (2035)						
Area	83	20	112	<1	2	2
Energy	1	7	4	<1	1	1
Mobile	83	293	892	4	460	127
Stationary ^a	4	5	37	<1	1	1
Total 2021 Project	171	325	1,045	4	463	130
SCAQMD Significance Threshold	55	55	55	150	55	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	(22)	(253)	(588)	(4)	80	18
Maximum Daily Emissions (2040)						
Area	83	20	112	<1	2	2
Energy	1	7	4	<1	1	1
Mobile	67	169	803	3	459	126
Stationary ^a	4	5	37	<1	1	1
Total 2021 Project	155	201	956	4	463	130

**Table IV.D-7
2021 Project Regional Operational Emissions (Unmitigated) (lbs/day)**

	VOC	NOx	CO	SOx	PM10	PM2.5
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	<i>(38)</i>	<i>(377)</i>	<i>(677)</i>	<i>(5)</i>	<i>79</i>	<i>17</i>

SOURCE: ESA 2021.

NOTES:

Emissions quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix D1 of this 2021 SEIR.

^a Emissions due to Stationary Sources are from the operation of the on-site flare system, LGCCS, and Condensate System.

This is due to the change from commercial zoning to light industrial zoning in PA3(a) and the fugitive emissions (such as break and tire wear) from the increased VMT.¹²⁷

There are a number of state and local regulations and requirements that address VOC, NO_x, PM₁₀, and PM_{2.5} emissions. In recognition of the substantial contribution to PM emissions, as discussed above (Section IV.D.3b(6)(b), *Advanced Clean Trucks Regulation*), CARB has adopted a statewide ACT rule, and SCAQMD has adopted Rule 2305 (Warehouse ISR) to encourage the early adoption of ZE and NZE technologies in the logistics and goods movement sector, these rules were designed to reduce NO_x and PM but will also reduce VOC emissions. The City has also required PDFs for PA1 and PA3, such implementation of vehicle charging stations, electrified loading docks, reduction of truck idling to 2 minutes per occurrence and location in PA3 and electrification of on-site equipment, to be implemented to further and expeditiously reduce emissions of VOC and PM from the 2021 Project. As the future warehouses in PA3 introduce ZE and NZE trucks into the fleets (i.e., by 2040, 100 percent of the truck fleets of model year 2021 or newer associated with the light industrial facilities would be zero-emissions vehicles), PM₁₀ and PM_{2.5} will be reduced from what is presented in Table IV.D-7. The PM₁₀ and PM_{2.5} emissions are driven by road dust, break wear and tire wear, which is driven by the number of vehicles and not fuel type; therefore, while exhaust emissions decrease consistently, PM reductions are relatively minimal. Thus, the 2021 Project would exceed the SCAQMD thresholds in the near term. Therefore, as shown in Table IV.D-7, the 2021 Project would not result in any long-term new significant impacts with respect to emissions of NO_x, CO, PM₁₀, or PM_{2.5}. As shown in Table IV.D-7, operational emissions of VOC, NO_x, CO, and SO_x would eventually be reduced to below the levels assumed in the 2018 SEIR; however, under the 2021 Project in 2026, VOC, PM₁₀, and PM_{2.5} would be increased over the levels identified in the 2018 SEIR and, therefore,

¹²⁷ VMT determination is detailed in Section IV.D.5a, Methodology.

would result in an increased severity of previously identified impacts for these pollutants. However, the increase in VOC, PM10, and PM2.5 emissions would not be substantial, as detailed in Section IV.D.5c(1)(a), *AQMP Analysis*. Nonetheless, consistent with the 2018 SEIR findings, the impacts from the 2021 Project remain **significant** for VOC, NO_x, CO, PM10, and PM2.5.

The 2021 Project emissions inventory is based on conservative assumptions regarding the mobile trips estimated on the basis of land use types. The analysis does not account for the improved efficiencies and net reduction of VMT that is likely to be realized through the strategic development of the 2021 Project in the proposed location. The City of Carson and the Project Site is ideally situated to serve the logistics industry. Access to numerous freeways in the region allow for ideal routing to various areas, and proximity to the Ports of Los Angeles and Long Beach will enable efficient goods movement. In this context, the addition of a logistics facility on PA3(a) is likely to create improvements and reductions in future VMT that is not quantified in this inventory. Thus, the 2021 Project emissions shown for opening year 2026 are considered to be conservative. If the analysis more accurately accounted for these aspects of VMT change due to the 2021 Project, the emissions would likely be lower than those shown.

(c) Regional Concurrent Construction and Operational Impacts

As a conservative approach, the 2018 SEIR calculated peak daily emissions that could occur should a nearly built-out project operate while remaining construction activities occur. As shown in the 2018 SEIR (see Draft SEIR Table IV.G-12, p. IV.G-44), concurrent construction and operation emissions were anticipated to exceed SCAQMD thresholds for VOC, NO_x, CO, PM10, and PM2.5 and result in a significant impact for the combined emissions. Discussion of the comparison of the 2021 Project and the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

Consistent with the analysis in the 2018 SEIR, this analysis includes the combined construction and operational emissions in the event that the commercial and light industrial phases are operational while the residential phase is still under construction. In accordance with applicable SCAQMD methodology, the concurrent emissions are compared to the operational thresholds. As shown in **Table IV.D-8, Emissions from 2021 Project Concurrent Construction and Operation (pounds per day)**, the 2021 Project would exceed SCAQMD's significant thresholds for VOC, NO_x, CO, PM10, and PM2.5. As shown in Table IV.D-8, impacts for the 2021 Project could result in an increase in impacts compared to the 2018 SEIR for VOC, PM10 and PM2.5.

**Table IV.D-8
Emissions from 2021 Project Concurrent Construction and Operation (pounds per day)**

Emissions Source	VOC	NOx	CO	SOx	PM10	PM2.5
Combined PA2 and PA3 Operations and PA1 Construction Emissions						
Operation Emissions	162	449	1,031	5	396	111
On-Site Construction Emissions	46	23	124	<1	19	5
Total	209	472	1,154	5	415	117
SCAQMD Construction Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	201	524	1,515	8	348	102
<i>Difference (2021 Project minus 2018 SEIR)</i>	8	(52)	(361)	(3)	67	15

SOURCE: ESA 2021.

(3) Expose sensitive receptors to substantial pollutant concentrations

(a) Construction

(i) Localized Construction Impacts

The 2018 Project analysis under the 2018 SEIR determined that NOx and CO emissions would be less than significant, based on SCAQMD's highly conservative LST look-up tables. PM10 and PM2.5 were above the screening levels and dispersion modeling was conducted to determine that emissions would result in concentrations below the SCAQMD threshold for pollutants within a non-attainment area (2018 Draft SEIR Table IV.G-8, p. IV.G-38). Discussion of the comparison of the 2021 Project and the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

Diesel combustion can be a major source of NOx emissions, which converts to NO₂ (the pollutant upon which the NAAQS is based) at variable rates while traversing the distance to receptors. Thus, dispersion modeling was determined to be more appropriate for the analysis of NOx emissions from the 2021 Project due to the size of the Project Site and the potential for overlapping construction phases. Dispersion modeling was conducted for NOx, PM10, and PM2.5 in addition to comparing the localized on-site emissions to the LST look-up tables. **Table IV.D-9, 2021 Project Localized Construction Emissions (Unmitigated)**, shows that construction emissions anticipated from the 2021 Project would result in less-than-significant impacts for all criteria pollutants studied, similar to impacts from the 2018 Project. Impacts from the 2021 Project would not result in new significant impacts with respect to NOx, CO, PM10, or PM2.5. Therefore, consistent with impacts identified in the 2018 SEIR, the 2021 Project would

not result in exposure of sensitive receptors to substantial localized pollutant concentrations, and impacts would be **less than significant**; therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

**Table IV.D-9
2021 Project Localized Construction Emissions (Unmitigated)**

	NOx	CO	PM10 ^a	PM2.5 ^a
Maximum Daily Emissions (LST Screening Analysis) (lbs/day)^b				
PA1	22	109	5	3
PA2	21	114	6	3
PA3	21	86	5	3
Maximum Daily (with overlapping phases)	52	310	14	7
SCAQMD Daily Screening Threshold	68	1,530	14	8
Potentially Significant?	No	No	Yes^c	No
2018 SEIR	66	627	49	18
<i>Difference (2021 Project minus 2018 SEIR)</i>	<i>(14)</i>	<i>(317)</i>	<i>(35)</i>	<i>(11)</i>
	NO ₂	CO	PM10	PM2.5
Maximum Daily Concentration (Dispersion Modeling) (µg/m³)^d				
Maximum Daily Impact (1-hour Highest)	169	—	—	—
Threshold	339	—	—	—
Maximum Daily Impact (1-hour 8th Highest)	134	—	—	—
Threshold	188	—	—	—
Maximum Daily Impact (24 hour)	—	—	1.98	—
Threshold	—	—	10.4	—
Maximum Daily Impact (Annual)	33	—	0.57	0.8
Threshold	57	—	1	10.4
Significant?	No	—	No	No
2018 SEIR (24 hour)	—	—	5	1.8
<i>Difference (2021 Project minus 2018 SEIR)</i>	<i>—</i>	<i>—</i>	<i>(3)</i>	<i>(1)</i>

SOURCE: ESA 2021.

NOTES:

Emissions quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix D1 of this 2021 SEIR.

^a PM10 emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the Project Site boundaries.

^b LST Screening Analysis and Screening thresholds are based on SCAQMD mass look-up screening levels for SRA 4 and conservatively assuming 5 acres of disturbance daily with sensitive receptors located within 25 meters of the Project Site. Mass look-up screening levels are based on allowable maximum emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, which is developed based on ambient concentrations of that pollutant for each specific SRA.

^c PM10 emissions are potentially significant under the SCAQMD mass lookup table screening analysis; therefore, an air dispersion modeling analysis was necessary to determine if the Project has significant construction emissions impacts.

Table IV.D-9
2021 Project Localized Construction Emissions (Unmitigated)

^d *Maximum Daily (with overlapping phases) takes into account the overall schedule and the overlap of subphases. The maximum planning area reports the maximum for each planning area, regardless of the subphase and in isolation from the other planning areas. Therefore, Maximum Daily emissions do not represent the sum of the individual planning area emissions as the maximum subphases for each may not overlap.*

(ii) Toxic Air Contaminants

The 2018 SEIR evaluated the potential for impacts from exposure to TAC emissions, specifically DPM, from heavy equipment operations during construction. The maximum individual increase in lifetime cancer risk resulting from project-related DPM emissions for an off-site sensitive receptor (a resident) was projected to be 1.2 in a million. Because this increase is below the applicable threshold of 10 in a million, the impact was determined to be less than significant. The 10 in a million threshold was developed by SCAQMD as a level of increased risk that is protective of all sensitive receptors, including those that reside in disadvantaged communities. Hazard Indices for the 2018 SEIR were reported as <0.01 for both chronic and acute. Because these were below the threshold of 1, chronic and acute risk were determined to be less than significant without mitigation. Discussion of the comparison of the 2021 Project and the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity, as the significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

Table IV.D-10, 2021 Project Construction Risk (Unmitigated), presents the cancer and chronic risk estimates for the 2021 Project, compared to values estimated for the 2018 Project. As discussed in Section IV.D.5.a, *Methodology*, health risks are cumulative over their averaging periods; therefore, comparison to numeric indicators for impacts from construction alone are for informational purposes only. Significance determinations for associated risk from the 2021 Project combines construction and operational risk under Section IV.D.4c, *Toxic Air Contaminants*, over the 30-year averaging period. As shown on Table IV.D-10, the increased efficiencies of the construction equipment (meeting Tier 4 emissions standards or Tier 3 emissions standards, at a minimum, if Tier 4 equipment is not commercially available, use of electric equipment) and the efficacy of diesel reduction features (such as prohibition of diesel generators during construction of PA3, haul trucks of MY 2014 or better) demonstrate that the 2021 Project's risk from construction would be less than SCAQMD's numeric threshold. Impacts from the 2021 Project would not result in new significant impacts with respect to TAC emissions from construction.

**Table IV.D-10
2021 Project Construction Risk (Unmitigated)**

	Cancer	Chronic	Acute ^a
Maximum Risk			
2021 Project Maximum Risk (Receptor #664)	3.93	0.001	0.0003
SCAQMD Numeric Indicators	10	1	1
Significant?	No	No	No
2018 SEIR Maximum Risk	1.20	—	—
<i>Difference (2021 Project minus 2018 SEIR)^b</i>	2.73	—	—

SOURCE: ESA 2021.

NOTES:

Risk is rounded. As such, the “total” values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in Appendix D1 of this 2021 SEIR.

^a Particulate Matter does not have an acute risk.

^b Modeling differences between the 2018 and 2021 analyses result in higher relative risk compared to construction activities. Because values for chronic and acute were reported as “<1” and the 2021 values are substantially below regulatory thresholds, the difference between the 2018 and 2021 values is not quantified.

(iii) Health Effects of Criteria Air Pollutants

The California Supreme Court decision on December 24, 2018, *Sierra Club v. County of Fresno* (Friant Ranch) resulted in the need to address criteria air pollutants and the connection to human health effects in environmental documents. The City of Los Angeles Department of Planning published a “white paper” to address the feasibility of directly relating any identified significant adverse air quality impact to likely health consequences for projects analyzed in the City of Los Angeles, which is provided as Appendix D2 of this 2021 SEIR.¹²⁸ The document concludes that “direct correlation of a project’s pollutant emissions and anticipated health effects is currently infeasible, as no expert agency has approved a quantitative method to reliably and meaningfully translate mass emission estimates of criteria air pollutants to specific health effects for the scale of projects typically analyzed in City EIRs.” NO_x and VOC are precursor emissions that form ozone in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources. Breathing ground-level ozone can result health effects that include: reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily ozone concentrations are associated

¹²⁸ *City of Los Angeles, Department of City Planning, Air Quality and Health Effects Sierra Club V. County of Fresno, October 2019. Available in Appendix D2.*

with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that ozone can make asthma symptoms worse and can increase sensitivity to asthma triggers.

The SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the state, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes. It may be infeasible to quantify health risks caused by individual projects due to various factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from individual projects due to photochemistry and regional model limitations. Although it be technically possible to use the data in a methodology designed for regional impact assessments, the results would not be reliable or meaningful at the individual project level.¹²⁹

As stated in the white paper published by the City of Los Angeles Department of Planning, the scientific literature indicates that an increased risk of mortality and morbidity is associated with particulate matter at ambient levels. The evidence for particulate matter effects is mostly derived from population studies with supportive evidence from clinical and animal studies. Although most of the effects are attributable to particulate matter, co-pollutant effects cannot be ruled out on the basis of existing studies. The difficulty of separating the effects may be due to the fact that particulate levels co-vary with other combustion source pollutants. That is, the particle measurements serve as an index of overall exposure to combustion-related pollution, and some component(s) of combustion pollution other than particles might be at least partly responsible for the observed health effects. Therefore, at this time, there is no specific numeric indicator that can reliably indicate specific health effects from particulate matter for a specific project analyzed in City EIRs.¹³⁰

¹²⁹ SCAQMD, Brief of Amicus Curiae in Support of Neither Party, *Sierra Club v. County of Fresno*, Case No. S2197832015 (filed Apr. 13, 2015), <https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf>.

¹³⁰ *City of Los Angeles, Department of City Planning, Air Quality and Health Effects Sierra Club V. County of Fresno, October 2019. Available in Appendix D2. The City of Carson has determined this document provides applicable and relevant information concerning the feasibility of evaluating health impacts from criteria pollutant and ozone precursor emissions given that the City of Los Angeles is a nearby jurisdiction within the same Air Basin as the City of Carson, subject to the same SCAQMD rules and regulations, and experiences similar regional air quality conditions and criteria air pollutant non-attainment designations.*

It would be extremely difficult, if not impossible to quantify health impacts of criteria pollutants for various reasons, including modeling limitations, as well as where in the atmosphere air pollutants interact and form for an individual development project. Furthermore, currently available modeling tools are not equipped to provide a meaningful analysis of the correlation between an individual development project's air emissions and specific human health impacts "... the Air District is simply not equipped to analyze and to what extent the criteria pollutant emissions of an individual CEQA project directly impact human health in a particular area ... even for projects with relatively high levels of emissions of criteria pollutant precursor emissions."¹³¹

Any attempt to quantify the 2021 Project's health effects would be considered unreliable and misleading. This health effect assessment¹³² is a study of the 2021 Project's impacts on local health. As detailed in Table IV.D-9, the modeled emissions and corresponding concentrations are below the NAAQS (with existing ambient background) or below the allowable increase levels for pollutants where background levels exceed NAAQS. Therefore, while there is the potential for additional growth in the SCAB to result in combined exceedances of the NAAQS for criteria pollutants, the impacts from the 2021 Project alone would not result in a significant cumulative contribution; therefore, the 2021 Project would result in a less-than-cumulatively-significant contribution and less-than-cumulatively-considerable health effects to local residents.

(b) Operation

(i) Localized Operational Impacts

With respect to CO hotspots, the 2018 SEIR concluded less-than-significant impacts with respect to mobile emissions of CO. Discussion of the comparison of the 2021 Project and the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity, as the significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds. The 2021 Project would not result in any new significant impacts as compared to the 2018 Project, because CO is primarily emitted in any substantial levels from light-duty gasoline powered automobiles, and the change in zoning will result in a decrease in CO from the 2021 Project, as shown in Table IV.D-7. Based on the methodology used in the 2018 Project analysis and today, any intersection that operates with less than 100,000 vehicles per day would be anticipated to have less emissions than the intersection at Wilshire Boulevard

¹³¹ *SJVAPCD (San Joaquin Valley Air Pollution Control District), Brief of Amicus Curiae in Support of Defendant and Respondent, County of Fresno, and Real Party in Interest and Respondent, Friant Ranch, L.P., Sierra Club v. County of Fresno, Case No. S219783, 2015 (filed Apr. 13, 2015).*
<https://www.courts.ca.gov/documents/7-s219783-ac-san-joaquin-valley-unified-air-pollution-control-dist-041315.pdf>.

¹³² *An HRA analyzes exposure to TACs, such as DPM. A health effect assessment evaluates exposure to criteria air pollutant, such as NOx.*

and Veteran Avenue and, therefore, also would not exceed the NAAQS or CAAQS. Intersections operating at greater than 100,000 vehicles per day would require additional analysis. The intersection with the greatest traffic under the future plus project scenario is the intersection of S. Avalon Street and West Carson Street with average daily vehicles of 55,417 through that intersection. This is below the 100,000 vehicles per day threshold and, therefore, would be less than significant with respect to mobile emissions of CO. The 2021 Project would not result in any new CO significant impacts as compared to the 2018 Project. Therefore, as with the 2018 Project, the 2021 Project would not expose sensitive receptors to substantial CO pollutant concentrations, and impacts would remain **less than significant**. As indicated, impacts would be less than significant, consistent with impacts identified in the 2018 SEIR. Therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

With respect to localized operational impacts, the 2018 SEIR concluded less-than-significant impacts with respect to NO_x, CO, PM₁₀, and PM_{2.5} from on-site emissions after mitigation. Prior to mitigation, PM₁₀ and PM_{2.5} resulted in significant impacts. The 2018 SEIR used the LST look-up tables to determine localized impacts with reliance on dispersion modeling for any pollutant that exceeded the screening thresholds.

The conversion of NO_x to NO₂ is based on distance and, therefore, distance from the source is an integral part of analyzing local emissions. Due to the size of the Project Site, dispersion modeling is more appropriate for the analysis of NO_x as emissions due to the conversion to NO₂ based on distance and there are no LSTs in the look-up tables for sites over 5 acres. Thus, for the 2021 Project, dispersion modeling was conducted for NO_x, PM₁₀, and PM_{2.5} in addition to comparing the localized on-site emissions to the LST look-up tables. **Table IV.D-11, 2021 Project Localized Operational Emissions (Unmitigated) (lbs/day)**, shows that localized operational emissions anticipated from the 2021 Project would result in less-than-significant impacts for all criteria pollutants studied. Impacts from the 2021 Project would result in no new significant impacts with respect to NO_x, CO, or PM₁₀ or PM_{2.5}, and would result in a reduction from the 2018 Project emissions projected under the 2018 SEIR.

Dispersion modeling for CO emissions was not conducted because the CO hotspot analysis as detailed above shows that localized impacts would not exceed the NAAQS or CAAQS; therefore, further analysis was not warranted. As with the 2018 Project, the 2021 Project would not result in exposure of sensitive receptors to substantial localized pollutant concentrations and impacts would be **less than significant**. As indicated, impacts would be less than significant, consistent with impacts identified in the 2018 SEIR. Therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

**Table IV.D-11
2021 Project Localized Operational Emissions (Unmitigated)**

	NO _x	CO	PM10 ^a	PM2.5 ^a
Maximum Daily Emissions (Year 2026; Screening Analysis) (lbs/day)				
PA1	25	115	3	3
PA2	2	6	2	1
PA3	10	17	5	2
Maximum Daily	38	138	10	5
SCAQMD Daily Significance Threshold ^b	68	1,530	4	2
Potentially Significant?	No	No	Yes^c	Yes^c
2018 SEIR	53	164	14	11
Difference (2021 Project minus 2018 SEIR)	(15)	(26)	(4)	(6)
	NO ₂	CO	PM10	PM2.5
Maximum Daily Concentration (Year 2026; Refined Analysis) (µg/m³)				
Maximum Daily Impact (1-hour Highest)	173	—	—	—
Threshold	339	—	—	—
Maximum Daily Impact (1-hour 8th Highest)	134	—	—	—
Threshold	188	—	—	—
Maximum Daily Impact (24 hour)	—	—	2.09	—
Threshold	—	—	2.5	—
Maximum Daily Impact (Annual)	34	—	0.97	0.81
Threshold	57	—	1	2.5
Significant?	No	—	No	No
2018 SEIR (24 hour)	—	—	—	—
Difference (2021 Project minus 2018 SEIR)	—	—	—	—

SOURCE: ESA 2021.

NOTES:

Emissions quantities are rounded to “whole number” values. As such, the “total” values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix D1 of this 2021 SEIR.

^a PM10 emissions estimates are based on compliance with SCAQMD Rule 403 requirements for fugitive dust suppression, which require that no visible dust be present beyond the Project Site boundaries.

^b Significance thresholds are based on SCAQMD mass look-up screening levels for SRA 4 and conservatively assuming 5 acres of disturbance daily with sensitive receptors located within 25 meters of the Project Site. Mass look-up screening levels are based on allowable maximum emissions that would not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, which is developed based on ambient concentrations of that pollutant for each specific SRA.

^c PM10 and PM2.5 emissions are potentially significant under the SCAQMD mass lookup table screening analysis; therefore, an air dispersion modeling analysis was necessary to determine if the Project has significant operations emissions impacts.

(ii) Toxic Air Contaminants

a) On-Site Source Impacts

As discussed in the 2018 SEIR, DTSC has determined that potential health effects due to air emissions relative to on-site commercial activities would be less than significant. On-site activities include TAC emissions from activities occurring on the site only, for example the use of generators and the operation of the flare. Additionally, development of the residential uses would not be allowed until DTSC has concluded that the development would be implemented in a manner that is protective of human health and the environment. The 2018 SEIR concluded less-than-significant impacts with respect to combined construction and operational health risk. Discussion of the comparison of the 2021 Project and the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

The analysis of the impacts from TAC emissions from the construction and the operation of the 2021 Project is assessed based on the same revised methodology as the 2018 SEIR. Construction emissions are detailed in Table IV.D-10. Operation of the 2021 Project is anticipated to begin directly after construction and would represent the remainder of the 30-year risk. Combined construction and operational risk is called out in **Table IV.D-12, 2021 Project Combined Risk (Unmitigated)**. **Figure IV.D-3, Unmitigated Maximum Cancer Risk Locations**, shows the locations of the unmitigated maximum receptors for each area. Maximum chronic and acute HIs are below numeric thresholds for all receptor locations. The total combined risk is below SCAQMD numeric indicators. Therefore, as with the 2018 Project, without mitigation, the calculated combined risk from the construction and operation of the 2021 Project would be **less than significant** and would not result in a new significant impact as compared to the 2018 Project. As indicated, impacts would be less than significant, consistent with impacts identified in the 2018 SEIR. Therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

**Table IV.D-12
2021 Project Combined Risk (Unmitigated)**

	Cancer Risk (per million)				
	Total	Construction	Operational	Chronic	Acute
8-Year Construction Risk Scenario					
Off-Site Receptor #37	1.33	0.97	0.36	0.0005	0.0003
DD3 Receptor #725	0.70	0.52	0.18	0.0008	0.0001
On-Site Receptor 817 ^a	0.36	—	0.36	0.00032	0.00007
Carson Country Mart, Receptor #994 ^b	0.46	—	0.46	0.00041	0.00015
4-Year Construction Risk Scenario					
Off-Site Receptor #37	4.41	3.93	0.48	0.001	0.0003
DD3 Receptor #725	1.72	1.29	0.43	0.002	0.0010
On-Site Receptor 817 ^a	0.48	—	0.48	0.00030	0.00007
Carson Country Mart, Receptor #994 ^b	0.62	—	0.62	0.00041	0.00015
30-Year Operational Risk Scenario					
Off-Site Receptor #37	1.10	—	1.10	0.00033	0.00028
DD3 Receptor #725	0.98	—	0.98	0.00029	0.00006
On-Site Receptor 817 ^a	1.10	—	1.10	0.00033	0.00007
Carson Country Mart, Receptor #994 ^b	1.40	—	1.40	0.00041	0.00015
SCAQMD Numeric Indicators	10			1	1
Significant?	No			No	No
2018 SEIR Reported Values					
Off-Site Receptor ^c	2.7	0	2.7	<0.01	<0.01
DD3 Receptor ^c	2.1	0	2.7	<0.01	<0.01
On-Site Receptor	3.6	N/A	3.6	<0.01	<0.01

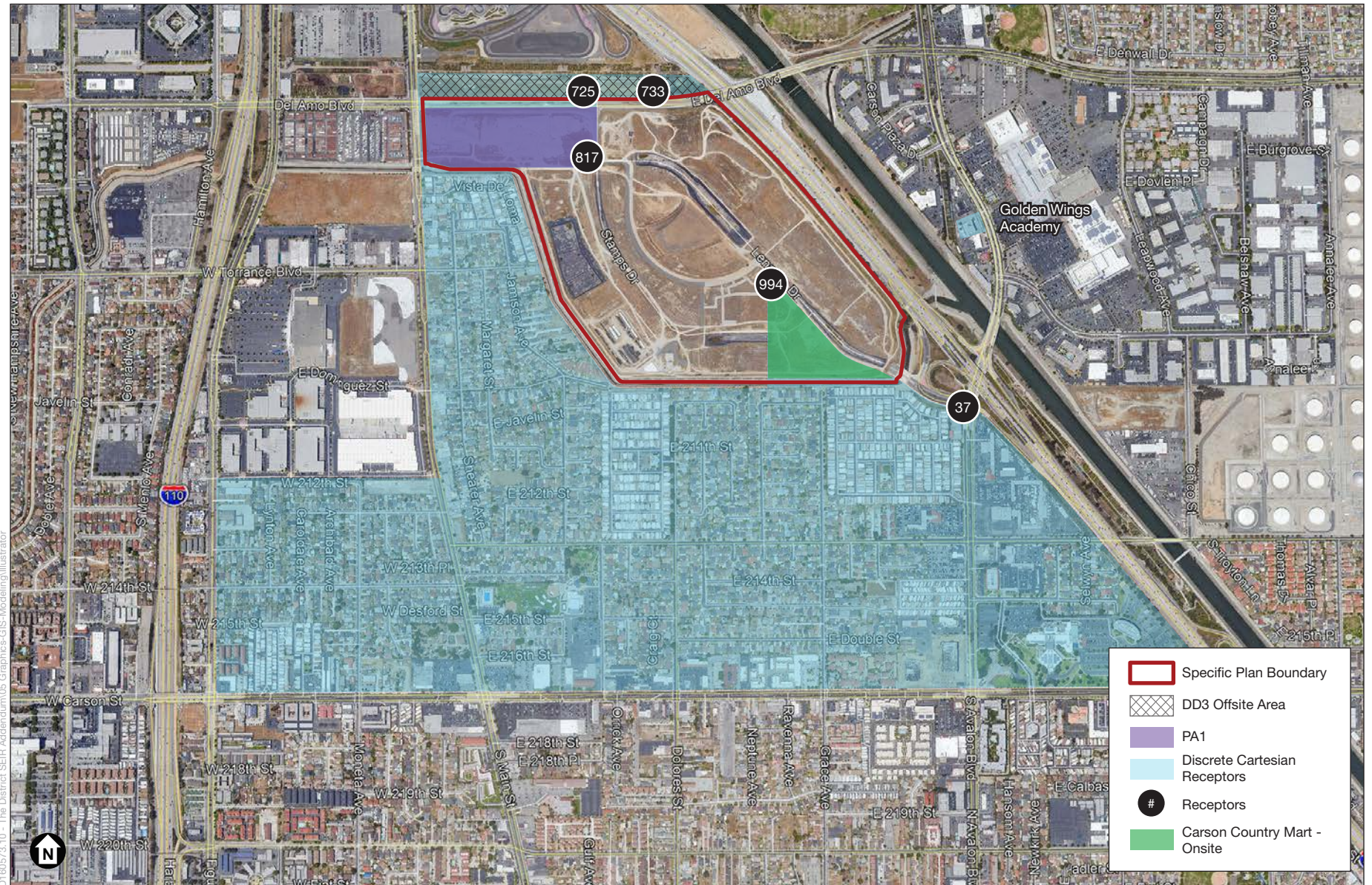
SOURCE: ESA 2021.

NOTES:

Risk is rounded. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in Appendix D1 of this 2021 SEIR.

The 8-year construction scenario includes risk from construction of the 2021 Project beginning with horizontal construction of PA2 in 2018 and ending with 22 years of operational activities after construction of the 2021 Project is completed. The 4-year construction scenario does not include the horizontal construction of PA2 that was completed in 2018 and 2019 and ending with 26 years of operational activities after the 2021 Project is completed. The 30-year scenario only takes into account 30 years of operational activities after construction is completed.

- ^a While the 2021 Project/2018 Project is not required to determine risk to itself, the risk to on-site receptors from operation of the Project Site is provided for informational purposes and is not included as part of the significance finding.
- ^b Carson Country Mart receptors are conservatively estimated as residential receptors as a worst-case risk potential for those in the nearby neighborhoods.
- ^c Construction emissions show 0.0 for all receptors because as on-site truck emissions during operation represent the greatest portion of risk, risk is higher for receptors when the 30-year risk is all operational related. Construction emissions are low (as seen in Table IV.D-7). This analysis represents the worst-case scenario.



DR160573-10 - The District SEIR Addendum 05 Graphics-GIS-Modeling/Illustrator

SOURCE: Google Earth Pro, basemap, 2021; ESA, 2021

The District at South Bay Specific Plan Amendment

Figure IV.D-3
Unmitigated Maximum Cancer Risk Locations



b) Off-Site Source Impacts

The 2018 FEIR concluded that the impacts to on-site residential uses would be less than significant. As the residential portion of this 2021 SEIR will not change location and vehicle traffic along the I-405 Freeway (main off-site pollutant source for the residents of PA1) would be on average more efficient and result in reduced DPM emissions from those that would have occurred had PA1 been built at the certification of the 2018 SEIR, the effects to the residents of PA1 associated with the 2021 Project would be the same or less than those identified in the 2018 SEIR.

(iii) Health Effects of Criteria Air Pollutants

As detailed in Table IV.D-11, the modeled emissions and corresponding concentrations are below the NAAQS (with existing ambient background) or below the allowable increase levels for pollutants where background levels exceed NAAQS. Therefore, while there is the potential for additional growth in the SCAB to result in combined exceedances of the NAAQS for criteria pollutants, the impacts from the 2021 Project alone would not result in a significant cumulative contribution; therefore, the 2021 Project would result in a less than cumulatively significant contribution and less than cumulatively considerable health effects to local residents.

IV.D.6 Mitigation Measures

Mitigation measures are proposed to reduce the air quality emissions resulting from the unmitigated scenario for the 2021 Project. These measures include relevant 2018 SEIR mitigation measures and new 2021 SEIR mitigation measures.¹³³ In some cases, the 2018 SEIR mitigation measures have been revised to address the potential impacts that may result from the 2021 Project. Edits to the 2018 mitigation measures are provided as strike-out for removed text and underline for added text. All of the mitigation measures described below will be included in the MMRP for this 2021 SEIR. The numbering system reflects the mitigation measures as identified in the 2018 SEIR for ease of comparison. New mitigation will continue numbering from the last mitigation measures number identified in the 2018 SEIR. As detailed in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, some of the PDFs replace mitigation measures from the 2018 SEIR due to compliance with current regulatory requirements and that makes them part of the unmitigated modeling scenario. The following prior 2018 mitigation measures have been incorporated into PDF measures for the 2021 analysis: Mitigation Measures G-1, G-4, G-5, G-6, G-14, G-15, G-22, G-23, G-24, and G-28.

¹³³ *As noted in Chapter III, Introduction to the Analysis, of this 2021 SEIR, mitigation measures identified in this 2021 SEIR include relevant 2018 SEIR mitigation measures. As such, the mitigation measure numbering system from the 2018 SEIR was maintained in this 2021 SEIR, even if the section numbering for the 2021 SEIR section is different. In this case, this section number is "D," but mitigation measures are numbered "G."*

PA2 has already been approved for development by the City (following the approval of the 2018 SEIR by the City Council in April 2018); the Applicant for that property (CAM-Carson LLC) has vested rights to its project proposal; and construction has already begun for PA2 in compliance with the 2018 SEIR. Therefore, compliance requirements for PA2 are limited to those mitigation measures that were applied in the 2018 SEIR.

a. Construction

Mitigation Measure G-1: ~~General contractors shall implement a fugitive dust control program pursuant to the provisions of SCAQMD Rule 403. SCAQMD Rule 403 requirements are regulations that are part of the unmitigated modeling scenario; therefore, this mitigation measure is now 2021 SEIR PDF-C3. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-2: All construction equipment shall be properly tuned and maintained in accordance with manufacturer's specifications. Maintenance records and data sheets, including design specifications and emissions control tier classification shall be maintained on site and furnished to the lead agency or regulatory agencies upon request. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-3: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-4: ~~Electricity from power poles rather than temporary diesel or gasoline powered generators shall be used to the extent feasible. This measure was replaced by 2021 SEIR PDF-C4 as it is a quantified part of the unmitigated modeling scenario. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-5: ~~All construction vehicles shall be prohibited from idling in excess of 5 minutes, both on and off Property. This measure was replaced by 2021 SEIR PDF-C5 as it is a quantified part of the unmitigated modeling scenario. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-6: ~~Project heavy duty construction equipment shall use alternative clean fuels, such as low sulfur diesel or compressed natural gas with oxidation catalysts or particulate traps, to the extent feasible. This measure was replaced by 2021 SEIR PDF-C1 requiring some Tier 4 and zero-emissions~~

construction equipment. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure G-7: ~~The Applicant shall utilize coatings and solvents that are consistent with applicable SCAQMD rules and regulations. Should sub-phasing within any of the Planning Areas result in the overlap of construction and operation, construction shall be coordinated and managed to ensure that Property-wide coating activities would not result in the exceedance of maximum operational ROC emissions as shown in Table IV.G-14. Construction ROC emissions can be limited through the use of pre-fabricated and pre-coated materials, limiting the amount of daily coating activities, and tenant coordination. To reduce VOC emissions associated with construction activities, the contractor for PA1 shall ensure that VOC emissions from architectural coating activities have low/no VOC content, or that architectural coating activities for PA1 do not occur at the same time as architectural coating activities for PA2. (Applicable to PA1.)~~

Mitigation Measure G-9: All construction vehicle tires shall be washed at the time these vehicles exit the ~~Property Project Site~~, or use vehicle tracking pad per approved SWPPP. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-10: All fill material carried by haul trucks shall be covered by a tarp or other means. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-11: Any intensive dust-generating activity such as grinding concrete ~~for existing roads~~ shall be controlled to the greatest extent feasible. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-26: ~~Project construction shall be phased to extend the architectural coating phase to the greatest extent feasible to meet construction schedule. Further, architectural coating shall be required to meet the lowest VOC content available for the type of coating being applied. Mitigation Measure G-26 is removed as the revisions to Mitigation Measure G-7 incorporates schedule changes and low-VOC content coating use. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

b. Operations

Mitigation Measure G-12: ~~The Each Applicant shall provide documentation to the City indicating both on- and off-Property site air-borne risks associated with Remedial Action Plan construction have been evaluated to the satisfaction of DTSC (in accordance with all DTSC requirements/regulations), and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs). (Applicable to PA1, PA2, and PA3.)~~

Mitigation Measure G-13: All point source facilities shall obtain all required permits from SCAQMD. The issuance of these permits by SCAQMD shall require the operators of these facilities to implement Best Available Control Technology and other required measures that reduce emissions of criteria air pollutants. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-14: ~~Land uses on the Property shall be limited to those that do not emit high levels of potentially toxic contaminants or odors. This measure was combined with a 2018 SEIR PDF; refer to 2021 SEIR PDF-O3. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-15: ~~All residential and non-residential buildings shall exceed the 2016 California Title 24 Energy Efficiency standards for water heating, space heating, and cooling by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means. This measure was replaced by 2021 SEIR PDF-O7 as it is an updated regulatory requirement modeled as part of the unmitigated scenario. PA1 and PA3 would be required to comply with the 2019 Title 24 Energy Efficiency Standards whereas PA2 would still be held to the CALGreen standards at the time of the issuance of the building permit. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-16: All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-17: Building materials shall comply with all applicable SCAQMD rules and regulations. ~~The use of low-VOC cleaning products shall be required in all hotels.~~ The 2021 Project shall incorporate the use of low-VOC architectural coating for repainting and maintenance/touch-up of the non-residential buildings and residential buildings for all common/non-living space/outdoor areas. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-18: ~~The~~ Each Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-19: ~~The~~ Each Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-20: During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-21: ~~The Each~~ Applicant shall pay a fair-share contribution for a low-emissions shuttle service between the ~~Property~~ Project Site and other major activity centers within the 2021 Project vicinity (i.e., the Metro Rail Blue Line station at Del Amo Boulevard and Santa Fe Avenue and the Carson Transfer Station at the South-Bay Pavilion). (Applicable to PA1 and PA2. Not applicable to PA3 as it is an industrial land use.)

Mitigation Measure G-22: ~~The Applicant shall provide bicycle racks located at convenient locations throughout The District at South Bay. This measure is included as part of 2021 SEIR PDF-O5. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-23: ~~The Applicant shall provide bicycle paths along the main routes throughout The District at South Bay consistent with the Specific Plan. This measure is included as part of 2021 SEIR PDF-O5. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-24: ~~The Applicant shall provide convenient pedestrian access throughout The District at South Bay. This measure is included as part of 2021 SEIR PDF-O5. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-25: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure G-27: The on-~~Property~~ site residential units shall not contain any hearths, either wood burning, natural gas, or propane. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-28: ~~The Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. This measure is replaced by 2021 SEIR PDF-O6 as it is part of the unmitigated scenario. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure G-29: The 2021 Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean

air vehicles and comply with California Green Building Standards Code (CALGreen). (Applicable to PA2.)¹³⁴

Mitigation Measure C-18: The PA1 and PA3 Applicant(s) shall implement a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The TDM Program shall be subject to review and approval prior to issuance of certificate of occupancies by the City of Carson Department of Public Works subject to the requirements specified below. Mandatory strategies in the TDM Program shall include the TDM strategies summarized below. This TDM program is estimated to reduce total VMT per service population by about 2 percent based on the trip reduction methodology described in the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* report.

- *Unbundled Parking*—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. (Applicable to PA1.)
- *Rideshare Programs*—Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more commonly provided for Project Site employees but residents could also benefit from a similar program. (Applicable to PA1 and PA3.)
- *Transit Pass Discount Program*—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk and, therefore, at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project Site employees but could also be sold to residents. (Applicable to PA1 and PA3.)
- *Bicycle Parking and Bike Share Program*—The 2021 Project shall include bicycle facilities within the Project Site as well as short-term bicycle parking. The 2021 Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the Project Site. (Applicable to PA1 and PA3.)

¹³⁴ This mitigation is limited only to PA2 as new 2021 SEIR PDFs replace this mitigation measure for PA1 and PA3.

- Car Share Program—A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. (Applicable to PA1 and PA3.)

IV.D.7 Cumulative Impacts

SCAQMD’s methodology to assess a project’s cumulative impact differs from the cumulative impact methodologies employed elsewhere in this 2021 SEIR. For the purposes of evaluating cumulative air quality impacts, the SCAQMD recommends using two different methodologies: (1) that a project’s consistency with the current AQMP be used to determine its potential cumulative impacts, or (2) that project-specific air quality impacts be used to determine the project’s potential cumulative impacts to regional air quality.¹³⁵ The SCAQMD CEQA Air Quality Handbook states that “[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District.”¹³⁶ The SCAQMD guidance on an acceptable approach to addressing the cumulative impacts issue for air quality is discussed below.¹³⁷

“As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR ... Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”

Of the cumulative projects that have been identified within the vicinity of the Project Site, there are 44 cumulative projects that have not yet been built or are currently under construction (see Section III.E, *Cumulative Projects*, of this 2021 SEIR). The timing or sequencing of the cumulative projects, and the construction equipment that will be used for these projects is unknown as the CEQA process has not been completed for all of these projects. Therefore, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be entirely speculative.

¹³⁵ SCAQMD, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, *Appendix D*, 1993, p. D-3.

¹³⁶ SCAQMD, CEQA Air Quality Handbook, *April 1993*, p. 6-1.

¹³⁷ SCAQMD, Cumulative Impacts White Paper, *Appendix D*.

a. Construction

SCAQMD has developed strategies to reduce criteria pollutant emissions from construction activities, which are outlined in the AQMP. The 2021 Project would comply with applicable, adopted AQMP emissions control measures such as SCAQMD Rule 403 and would implement mitigation to further reduce construction emissions. Per SCAQMD rules and mandates as well as the CEQA requirement, any cumulative projects that would exceed regulatory thresholds would be mitigated to the extent feasible. Therefore, the same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on construction projects within the SCAB, which would include each of the cumulative projects.

Similar to the 2018 Project, the 2021 Project would result in significant impacts for VOCs without mitigation. With incorporation of Mitigation Measure G-7, VOC emissions would be reduced to below 75 lbs per day (as detailed in Section IV.D.8a, *Construction*), and the potential project impact would be reduced to less than significant. While the 2018 Project resulted in a cumulatively considerable impact with regards to construction VOC, the 2021 Project would be less than significant and, therefore, would not result in a new, not previously analyzed, cumulative impact. The 2021 Project results in less-than-significant impacts for CO, NO_x, PM₁₀, and PM_{2.5}; thus, they are not cumulatively considerable and, per SCAQMD's methodology, would not be cumulatively significant.

b. Operation

The SCAQMD's AQMP forecast takes into account SCAG's forecasted future regional growth. As such, the analysis of cumulative impacts focuses on determining whether the 2021 Project is consistent with forecasted future regional growth. Therefore, if all cumulative projects are individually consistent with the growth assumptions upon which SCAQMD's AQMP is based, then future development would not impede the attainment of ambient air quality standards and a significant cumulative air quality impact would not occur. As discussed in detail under Section IV.D.5, *Project Impacts*, the 2021 Project would be consistent with the assumptions and forecasts in the most recent AQMP. Despite these conclusions, the 2021 Project would contribute to a significant cumulative regional air quality impact as the SCAB is in non-attainment for ozone, PM₁₀, and PM_{2.5}, and 2021 Project would exceed SCAQMD daily significance thresholds for VOC and NO_x emissions (i.e., ozone precursors), CO, PM₁₀, and PM_{2.5}. Therefore, the 2021 Project, like the 2018 Project, would result in a cumulatively considerable impact with regards to VOC, NO_x, CO, PM₁₀, and PM_{2.5}. The 2021 Project would not result in a new, not previously analyzed, cumulative impact. The 2021 Project would increase the severity of the cumulative impact identified in the 2018 SEIR for VOCs, PM₁₀, and PM_{2.5}; however, the increase would not be substantial as discussed in the Section IV.D.5c, *Analysis of Project Impacts*.

c. Health Risk

Similar to the 2018 Project, the 2021 Project would emit TACs through the construction and operation of the 2021 Project. As shown in Table IV.D-12, the 2021 Project would result in less than significant health risk impacts. The SCAQMD guidance on an acceptable approach to addressing the cumulative impacts issue for air quality states that cumulative health risk impacts uses “the same significance thresholds... for project specific and cumulative impacts.”¹³⁸ The SCAQMD has not adopted a separate quantitative risk threshold applicable to cumulative health risk assessments. As discussed in the regulatory section above, the MATES V study documents the existing health risk (including risks from the Prologis Carson Town Center located identified in the *Existing Risk* section above) in the SCAB. However, there is no established threshold to assess the findings of the MATES V results in the context of cumulative health risk. Because the 2021 Project would result in incremental increases in health risk indices below project-level significance thresholds, the proposed project would not be cumulatively considerable, consistent with SCAQMD recommended methodology for assessing cumulative impacts.

The MATES V study documents the decrease in health risk within the SCAB as regulatory measures have been implemented and DPM emissions have decreased. With the full implementation of recently adopted rules and regulations, such as SCAQMD’s WAIRE rule and pending CARB rules on heavy-duty trucks, DPM emissions from haul trucks, and the resultant regional health risk due to airborne TACs is expected to decrease further. As detailed in Section IV.D.5c(3)(b)(ii), *Toxic Air Contaminants*, the 2021 Project, with implementation of 2021 SEIR PDF-C1 (requiring Tier 4 equipment), 2021 SEIR PDF-O19 (requiring Tier 4 and/or non-diesel generators), and 2021 SEIR PDF-O24 (requiring the implementation of zero-emissions fleets), has incorporated numerous PDFs to minimize potential health risk impacts from the 2021 Project.

An additional quantitative analysis of potential cumulative TAC emissions has been prepared for informational purposes only. As discussed above, health risk is calculated based on emissions (concentrations and toxicity), exposure duration, and sensitivity of the exposed population. The potential for multiple projects’ impacts to result in a cumulative impact is largely dependent on the emissions being contemporaneous (within the 30-year project operational lifetime) and in proximity so as to expose the same sensitive receptors. The timing of construction and operation for each of the cumulative projects is speculative, and subject to change. However, for the

¹³⁸ SCAQMD, *Cumulative Impacts White Paper, Appendix D*. The White Paper states that the “only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The Project specific (project increment) significance threshold is $HI > 1.0$ while the cumulative (facility-wide) is $HI > 3.0$.” However, this is in reference to the HI from the total combined (i.e., cumulative) sources at a stationary source facility and is not directly applicable to the 2021 Project. The 2021 Project uses an HI of 1.0, which is a lower threshold.

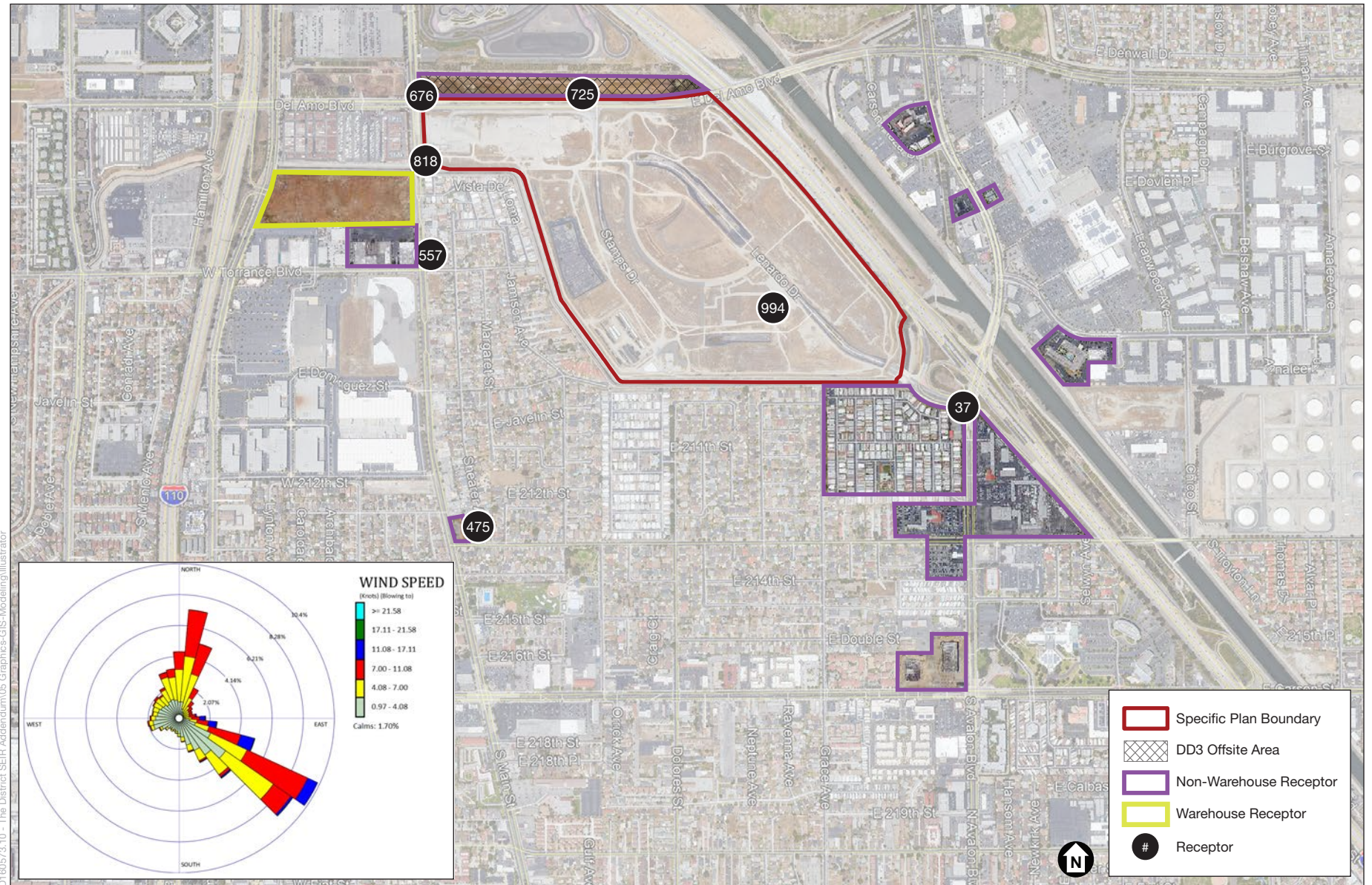
illustrative purpose of discussing the potential for cumulative health risks, this analysis conservatively assumes all projects are to be constructed and operated generally on schedules similar to the 2021 Project.

As shown in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, the City has identified 44 cumulative projects (CPs), 11 of which would be located within 0.5 miles of the Project Site.¹³⁹ The other 33 CPs are located at distances greater than 0.5 miles from the Project Site, beyond which, based on OEHHA guidance, TAC emissions are not expected to contribute substantially to risks at sensitive receptor locations.¹⁴⁰ The 33 CPs greater than 0.5 miles from the Project Site include 14 warehouse/industrial use projects, which could contribute to truck use (and DPM emissions) in the vicinity of the Project Site. Refer to Table III-1, Cumulative Projects, and Figure III-1, Cumulative Project Locations, in Chapter III, *Introduction to the Analysis*, in this 2021 SEIR for the projects that are warehouses and their locations relative to the Project Site. Only one of these 14 warehouse/industrial use projects (CP 35, which is discussed in detail below), would result in potential truck routes that would pass by the receptors within approximately one quarter mile of the 2021 Project. The other 13 industrial CPs would have access to a freeway on- and off-ramp prior to passing by the 2021 Project receptors and, therefore, would likely not have a substantial contribution to risk to the 2021 Project receptors.

Of the 11 CPs in proximity to the Project Site, as shown in **Figure IV.D-4, Cumulative Health Risk Project Locations**, only four are located upwind (generally west and north) of the 2021 Project receptors. The seven down-wind CPs would be expected to contribute minimal exposure to the receptor locations in between the Project Site and the seven CP sites given the predominant wind directions (refer to Figure IV.D-3 for annual wind rose) and, therefore, were eliminated from further consideration in this discussion. The three nearby, upwind residential CPs (CP 2, CP 27, and CP 31; residential developments), and the one upwind industrial CP (CP 35; a 265,000 sf warehouse) represent the CPs with the highest potential for combined effects with the 2021 Project. The potential for substantial TAC emissions from the residential developments would be expected only from construction activities, assuming the projects would rely on diesel-fueled heavy-duty construction equipment and include some relatively intensive

¹³⁹ 0.5 miles was used to determine CP projects that would be considered for modeling based on the CARB's *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005. The 0.5 miles is slightly greater than the maximum siting distance of 0.32 miles identified in the Handbook.

¹⁴⁰ OEHHA, *Guidance for School Site Risk Assessment Pursuant to Health and Safety Code Section 901(f): Guidance for Assessing Exposures and Health Risks at Existing and Proposed School Sites*, Final Report, February 2004, <https://oehha.ca.gov/media/downloads/crnr/schoolscreenfinal.pdf>. The Guidance establishes the rationale for including "Atmospheric emission sources within 0.5 miles of the site that have the potential to contaminate on-site air may be important in estimating overall toxic exposures."



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SOURCE: Google Earth Pro, basemap, 2021; ESA, 2021

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Figure IV.D-4
Cumulative Health Risk Project Locations



construction activities such as subterranean excavation, and not from operational activities. CP 35 would result in operational TAC emissions from truck trips. However, as the 2021 Project's operational 30-year TAC emissions would result in a risk of 1.10 per million (refer to Table IV.D-12) with 1.5 million sf of warehouse space, the added risk from CP 35 (a 265,000 sf warehouse) is expected to be substantially less than the 2021 Project.

Additionally, CP 27 has already been constructed, thereby reducing the cumulative risk of this project combined with the 2021 Project and other cumulative projects. Because risk is greatest for childhood age receptors (i.e., third trimester fetus through 2 years of age), the cumulative risk analysis assumes exposure for the modeled residential receptors starting in the 3rd trimester in order to capture the maximum-case exposure scenario associated with the 2021 Project. The cumulative risk analysis also assumes exposure for the modeled residential receptors starting in the 3rd trimester. Given that CP 27 is a residential development that would have no long-term risk exposure and that construction has already been completed, CP 27 would not contribute to the maximum cumulative risk and is eliminated from further discussion in this analysis.

The cancer risk for CP 2, CP 31 and CP 35 were quantified using the methodology as identified in Section IV.D.5a(4)(d)(ii), *Cancer Risk*. As shown in **Table IV.D-13, Cumulative Cancer Risk**, the estimated maximum cumulative cancer risk would be 4.45 per million (residential receptor 37), and 4.54 per million (non-residential receptor 209), with the point of maximum risk located at the same location as the maximum cancer risk for the 2021 Project. The cumulative risk is approximately 0.04 per million greater than the 2021 Project values for both receptor locations. There is no quantitative cumulative health risk threshold; therefore, there is no significance conclusion relative to this analysis, and this analysis is provided for information disclosure purposes only.

IV.D.8 Level of Significance after Mitigation

In summary, the 2021 Project would result in significant and unavoidable impacts after mitigation for Regional operational emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5}. However, as compared to the 2018 SEIR, the 2021 Project would not result in new significant and unavoidable impacts. The 2021 Project will incorporate mitigation measures provided in the 2018 SEIR to the potential increased emissions of the 2021 Project. As detailed in Section IV.D.6, *Mitigation Measures*, portions of the mitigation measures have been revised from the measures included in the 2018 SEIR based on new regulatory or 2021 Project requirements. Regardless, the 2021 Project would increase the severity of the operational impacts identified in the 2018 SEIR for VOCs, PM₁₀, and PM_{2.5}; however, as discussed in Section IV.D.5c(1)(a), *AQMP Consistency Analysis*, the increase would not be substantial. With respect to construction emissions, revisions to the 2018 SEIR mitigation measures incorporated into the 2021 Project will reduce construction impacts from VOCs to a less-than-significant impact; therefore, reducing regional construction related VOC impacts identified in 2018 SEIR. In this section, discussion of comparison with the 2018 SEIR are included for informational

**Table IV.D-13
Cumulative Cancer Risk**

Scenario	Cancer Risk (per million)				
	Total	2021 Project	CP-35	CP-2	CP-31
Maximum risk from the 2021 Project to off-site residential receptors (#37)	4.45	4.41	0.03	0.01	<0.01
Maximum risk from the 2021 Project to off-site non-residential receptor (#209)	4.54	4.50	0.02	0.01	<0.01
Maximum risk from the 2021 Project to DD3 receptors (#725)	1.83	1.72	0.07	0.03	<0.01
Maximum risk from CP 2 and CP 35 to off-site receptors (#557)	2.90	0.32	0.52	2.05	<0.01
Maximum risk from CP 2 and CP 35 to DD3 receptors (#676)	1.81	0.68	0.94	0.20	<0.01
Maximum risk from CP 2 and CP 35 to on-site receptors (#818)	1.74	0.47	0.88	0.38	<0.01
Maximum risk from CP 31 to off-site receptors (#475)	1.41	0.17	0.03	0.03	1.18
Maximum risk to on-site receptors (operation of CP-35 and 2021 Project only) (#994) ^{a,b}	1.42	1.40	0.02	—	—
Maximum risk to on-site receptors (operation 2021 Project only, construction of 3 CPs) (#994) ^{a,b}	1.47	1.40	0.04	0.02	<0.01

SOURCE: ESA 2021.

NOTES:

Risk is rounded. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in Appendix D1 of this 2021 SEIR.

^a While the 2021 Project is not required to determine risk to itself, the risk to on-site receptors from operation of the Project Site is provided for informational purposes and is not included as part of the significance finding.

^b Carson Country Mart receptors are conservatively estimated as residential receptors as a worst case risk potential for those in the nearby neighborhoods.

purposes and to determine if there is an increase in impact severity and significance is determined based on comparison to SCAQMD thresholds.

a. Construction

As shown in Table IV.D-6, without implementation of Mitigation Measure G-7, impacts from construction activities would be significant consistent with the findings in the 2018 SEIR.

Implementation of Mitigation Measure G-7 would reduce VOC emissions from 113 lbs per day as identified in Table IV.D-6 to between 64 and 74.9 lbs per day depending on if construction phasing is staggered such that there is no overlap between the architectural coating of PA1 and PA2 or low/no VOCs coatings are used. As emissions would be reduced to below 75 lbs per day, the potential impact would be reduced to **less than significant with mitigation**.

Implementation of Mitigation Measures G-2, G-3, G-7, G-9, G-10, and G-11 would further reduce regional construction emissions for the 2021 Project; however, due to the nature of the

measures their reductions are not quantifiable. Therefore, the construction of the 2021 Project would not result in any new significant impacts as compared to the 2018 Project with respect to regional emissions of VOC, NO_x, CO, PM₁₀, or PM_{2.5}.

Implementation of Mitigation Measures G-2, G-3, G-7, G-9, G-10, and G-11 would also reduce localized construction emissions for the 2021 Project; however, due to the nature of the measures, their reductions are not quantifiable. Therefore, the 2021 Project would not result in any new significant impacts as compared to the 2018 Project with respect to localized emissions of NO_x, CO, PM₁₀, and PM_{2.5}, and are considered **less than significant with mitigation**.

Mitigation is not required with respect to health risk as the unmitigated risk would be below the significance thresholds. Implementation of the identified reduction measures (including mitigation measures and PDFs), as adopted by the 2018 SEIR, and revised in this 2021 SEIR or added as part of this analysis would further reduce construction health risk levels. Included for informational purposes and to determine if there is an increase in impact severity, as shown in Table IV.D-12, the combined construction and operational health risk would not result in a substantial increase in health risk beyond what was identified in the 2018 SEIR. Maximum cancer risk to off-site receptors would increase from 2.7 per million to 4.5 per million due to the longer timeframe for the 2021 Project's expected construction schedule compared to the 2018 SEIR's anticipated construction schedule. However, maximum risk would be less than 50 percent of the SCAQMD's significance threshold of 10 per million. In addition, the long-term, 30-year operational cancer risk would be reduced from 2.7 per million for off-site receptors as identified in the 2018 SEIR to 1.10 per million for the 2021 Project. For on-site receptors, the risk would be reduced from 3.6 per million in the 2018 SEIR to 1.40 per million for the 2021 Project. Therefore, with incorporation of the above mitigation measures the 2021 Project impacts would remain **less than significant**. As indicated, impacts would be less than significant, consistent with in the analysis under the 2018 SEIR; therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

b. Operation

The 2018 SEIR concluded that even with implementation of the adopted mitigation measures, operation of the 2018 Project would remain significant and unavoidable for regional emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5}; would be less than significant with mitigation for localized emissions, and would be less than significant with respect to operational and cumulative operational health risk.

Implementation of 2021 Mitigation Measures G-12 and G-13 would reduce emissions through meeting at least minimum regulatory requirements. Implementation of 2021 SEIR Mitigation Measures G-16, G-17, G-18, G-19, G-20, G-21, and G-27, and G-29 would reduce operational emissions of criteria pollutants through the implementation of measures to reduce single

occupancy vehicle use at the Project Site, thereby reducing emissions from mobile sources other than the trucks associated with PA3. Implementation of new Mitigation Measure C-18 would reduce emissions from VMT which would reduce criteria pollutant emissions. Like the 2018 Project, regional operational emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5} for the 2021 Project would not be reduced to below regulatory thresholds as shown in **Table IV.D-14, 2021 Regional Operational Emissions (Mitigated) (lbs/day)**, even with implementation of mitigation.

The following discussion of the comparison between the 2018 SEIR and the 2021 Project is included for informational purposes and to determine if there is an increase in impact severity. Although emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5} resulting from the 2021 Project would exceed the significance thresholds, emissions of VOC, NO_x, and CO would not exceed those emission levels anticipated in the 2018 SEIR for 2035 and 2040. Emissions of PM₁₀ and PM_{2.5} are driven by fugitive sources (which are directly proportional to VMT, dominated by long-haul trucking from PA3(a)) rather than from exhaust emissions which can be controlled/reduced through the implementation of the PDFs. The 2021 Project would not result in any new significant impacts as compared to the 2018 Project with respect to VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}, although, the 2021 Project would result in an increase in severity of impacts for VOC, PM₁₀, and PM_{2.5}. Consistent with the 2018 SEIR, the 2021 Project would remain **significant and unavoidable** with respect to regional operational emissions and the mid- to long-term impacts from the 2021 Project would not substantially increase the impacts over the 2018 Project as the increase in emissions would be less than 21 percent for any pollutant over the 2018 SEIR, as detailed in Section IV.D.5.c(1)(a), *AQMP Consistency Analysis*.

The 2021 Project inventory is a conservative estimate of potential operational emissions. The Applicants do not have control over the vehicles used by residents, workers, guests, visitors, and customers. The PDFs and mitigation measures include strategies that have the potential to reduce these emissions through education and incentives for reducing single occupancy vehicle trips. Additionally, the PDFs will implement a phase-in of zero-emissions truck fleets for the light industrial sources which will also reduce these emissions. Additionally, SCAQMD has implemented Rule 2305, which will reduce emissions from warehouse activities. Implementation of 2018 SEIR prior Mitigation Measures G-16, G-17, G-18, G-19, G-20, G-21, and G-27, and G-29 would reduce operational emissions of criteria pollutants through the implementation of measures to reduce single occupancy vehicle use at the Project Site. However, due to the nature of these measures the level of implementation is currently unknown; therefore, the amount of reductions cannot be determined. Implementation of the WAIRE rule includes a number of reduction options that will determine emissions reductions. The exact implementation of the WAIRE rule that will be incorporated by the 2021 Project is unknown; therefore, quantifying a potential reduction is considered speculative. While reductions associated with Rule 2305 compliance are ultimately anticipated, those reductions have conservatively not been quantified to further reduce the 2021 Project emissions disclosed in this 2021 SEIR.

**Table IV.D-14
2021 Regional Operational Emissions (Mitigated) (lbs/day)**

	VOC	NOx	CO	SOx	PM10	PM2.5
Maximum Daily Emissions (Year 2026)						
Area	80	1	104	0	1	1
Energy	1	7	4	0	1	1
Mobile	130	476	1,182	5	461	129
Stationary ^a	4	5	37	0	1	1
Total 2021 Project	216	490	1,327	6	463	131
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	23	(89)	(306)	(3)	80	18
Maximum Daily Emissions (Year 2035)						
Area	80	1	104	0	1	1
Energy	1	7	4	0	1	1
Mobile	83	293	892	4	460	127
Stationary ^a	4	5	37	0	1	1
Total 2021 Project	169	306	1,037	4	462	129
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	(24)	(272)	(596)	(4)	78	16
Maximum Daily Emissions (Year 2040)						
Area	80	1	104	0	1	1
Energy	1	7	4	0	1	1
Mobile	67	169	803	3	459	126
Stationary ^a	4	5	37	0	1	1
Total 2021 Project	153	183	948	4	461	128
SCAQMD Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	193	578	1,633	9	384	113
<i>Difference (2021 Project minus 2018 SEIR)</i>	(40)	(396)	(685)	(5)	78	15

SOURCE: ESA 2021.

NOTES:

Emissions quantities are rounded to "whole number" values. As such, the "total" values presented herein may be one unit more or less than actual values. Exact values (i.e., non-rounded) are provided in the CalEEMod model printout sheets and/or calculation worksheets that are presented in Appendix D1 of this 2021 SEIR.

^a Emissions due to stationary sources are from the operation of the on-site flare system.

As shown in Table IV.D-11, localized operational impacts would be less than significant without the incorporation of mitigation. With incorporation of the above mitigation, localized emissions would be further reduced. Consistent with the 2018 SEIR, the 2021 Project would result in **less-than-significant** impacts with respect to localized emissions. As indicated, impacts would be less than significant, consistent with impacts identified in the 2018 SEIR; therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

With respect to TAC impacts to off-site receptors and CO hot spots impacts at vicinity intersections, the 2021 Project would result in less-than-significant impacts, and no mitigation is needed. As indicated, impacts would be **less than significant**, consistent with impacts identified in the 2018 SEIR; therefore, 2021 Project emissions would not result in a substantial change from the 2018 SEIR.

c. Regional Concurrent Construction and Operation Impacts

As shown in Table IV.D-15, **2021 Project Concurrent Construction and Operational Regional Emissions (pounds per day)**, the combined mitigated construction and operational emissions for the 2021 Project would exceed SCAQMD's significant thresholds for VOC, NO_x, CO, PM₁₀, and PM_{2.5}. However, the 2021 Project would not result in new significant impacts or a substantial increase in impacts compared to the 2018 SEIR with mitigation incorporated. As discussed above, aside from mitigation listed, no other feasible or enforceable mitigation that would reduce construction and operational emissions to less-than-significant levels are available. Therefore, similar to the 2018 Project, impacts would remain **significant and unavoidable**. However, while the 2021 Project results in an increase in emissions of less than 21 percent over the 2018 SEIR emissions for any pollutant, the increase would not be substantial. Discussion of the comparison of the 2021 Project with the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

With implementation of the identified reduction measures (including mitigation measures and PDFs), as adopted by the 2018 SEIR, revised in this 2021 SEIR, or added as part of this analysis, all impacts related to localized air quality impacts for criteria pollutants, and health risk, as well as consistency with the AQMP, would remain **less than significant** for the 2021 Project, which are the same conclusions reached for the 2006 FEIR and 2018 SEIR. Consistent with the findings in the 2018 SEIR, even with implementation of all feasible mitigation, impacts for regional operational emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5} would exceed SCAQMD regulatory thresholds for the 2021 Project, and impacts would remain **significant and unavoidable**. As indicated in Table IV.D-15, even though impacts would be significant and unavoidable, the emissions of VOC, NO_x, CO, and SO_x would be less than those identified in the 2018 SEIR; therefore, 2021 Project emissions of these pollutants would not result in a substantial change

Table IV.D-15
2021 Project Concurrent Construction and Operational Regional Emissions (Mitigated)
(pounds per day)

Emissions Source	VOC	NOx	CO	SOx	PM10	PM2.5
Combined PA2 and PA3 Operations and PA1 Construction Emissions						
Operation Emissions	129	448	1,029	5	395	111
On-Site Construction Emissions	46	23	124	0	19	5
Total	175	471	1,153	5	414	116
SCAQMD Construction Significance Threshold	55	55	550	150	150	55
Significant?	Yes	Yes	Yes	No	Yes	Yes
2018 SEIR	201	524	1,515	8	348	102
Difference (2021 Project minus 2018 SEIR)	(26)	(53)	(362)	(3)	66	(14)

SOURCE: ESA 2021.

from those expected under the 2018 SEIR. Emissions of PM10 and PM2.5 do not decrease substantially due to the fact these emissions are dominated by fugitive mobile sources such as break and tire wear. However, as detailed in Section IV.D.5.C.(1)(a), *AQMP Consistency Analysis*, the emissions of PM10 and PM2.5, although greater than the 2018 SEIR, do not represent a substantial increase. Discussion of the comparison of the 2021 Project with the 2018 SEIR is included for informational purposes and to determine if there is an increase in impact severity. The significance of air quality impacts for the 2021 Project is determined based on comparison to SCAQMD thresholds.

With respect to air quality impacts, construction and operation of the 2021 Project would not give rise to new significant environmental impacts or result in a long-term substantial increase in the severity of previously identified significant impacts. Short-term impacts for regional operational and concurrent emissions would result in short-term substantial increases in emissions over the 2018 SEIR. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

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IV.E NOISE

IV.E.1 Introduction

The following analysis estimates future noise levels at surrounding land uses due to potential changes brought about by the 2021 Project's operation compared to the 2018 Project and, accordingly, supplements Section IV.H, *Noise*, of the 2018 SEIR to account for the 2021 Project. To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts previously disclosed in the 2018 SEIR, this analysis considers the noise and vibration impacts that would result from operational activities associated with proposed land use revisions to Planning Area 3 (PA3) that would take place within the Project Site. As further discussed below in Section 3.a, *Methodology*, the construction methodology, impacts, mitigation measures, and conclusions are assumed to be substantially the same as those disclosed in the 2018 SEIR for the 2018 Project and, therefore, are not discussed in detail in this 2021 SEIR. Detailed discussions of methodology and assumptions are included in **Appendix E, Noise Methodology and Assumptions**, of this 2021 SEIR.

The analysis concludes that the 2021 Project would result in similar types of noise impacts as compared to the 2018 Project and, like the 2018 Project, would result in significant and unavoidable impacts related to construction noise, operational off-site roadway noise, and operational on-site stationary point-source noise. The 2021 Project would result in similar types of groundborne vibration impacts as compared to the 2018 Project, and like the 2018 Project, would result in less-than-significant groundborne vibration impacts related to construction groundborne vibration and operational groundborne vibration.

IV.E.2 Existing Conditions

As identified within the 2018 SEIR and consistent with the Project Site's existing setting, the predominant noise source within the Project Site is roadway noise from the San Diego Freeway (Interstate 405 [I-405] Freeway) and local roadways such as Main Street, which are located east and west of the Project Site, respectively. Del Amo Boulevard is also a predominant noise source. Traffic on the Harbor Freeway (I-110 Freeway) and Avalon Boulevard also contribute to existing noise levels at the Project Site, although to a lesser degree due to the effect of distance and intervening buildings and topography. Other community noise sources include incidental noise from nearby existing commercial uses, and landscaping maintenance activities at nearby residential and commercial uses.

IV.E.3 Regulatory Framework

Many government agencies have established noise standards and guidelines to protect people from potential hearing damage and various other adverse physiological and social effects associated with noise and groundborne vibration. There are no new federal, state, or local regulations relating to noise and vibration in addition to those already discussed in the 2006 FEIR and 2018 SEIR, and there is no substantive change in circumstances or information regarding this item.

(1) Noise-Sensitive Receptors

Some land uses are considered more sensitive to intrusive noise than others, due to the types of activities typically involved at the receptor location. Specifically, the City of Carson has identified residences, public and private school classrooms, libraries, hospitals, and elderly care facilities as noise-sensitive receptors. As identified in the 2018 SEIR, the nearest sensitive residential receptors that may be affected by the 2021 Project are the one- and two-story detached residences and mobile homes that are located across the Torrance Lateral Flood Control Channel (Torrance Lateral) to the south and west of the Project Site and multifamily residential uses across Del Amo Boulevard. Planning Area 1 (PA1) of the 2021 Project, located at the northeast corner of the Project Site, would include residential uses, and the 2021 Project includes outdoor recreational components at the southeast corner of the Project Site. Although these uses considered on-site receptors, the analysis of environmental impacts to on-site uses is not required by CEQA. The revised noise analysis provided by this 2021 SEIR includes an analysis of impacts at the same representative sensitive receptors as the 2018 SEIR. However, due to land use changes proposed by the 2021 Project to PA3, additional receptor points have been added in locations that would be most affected by the proposed 2021 Project land use plan. All of the additional receptor points are within areas that were accounted for and represented by the receptors analyzed in the 2018 SEIR. The noise-sensitive land uses in the Project area are depicted in **Figure IV.E-1, Noise-Sensitive Receptors and Measurement Locations**.

(2) Ambient Noise Levels

(a) 2017 Ambient Noise Levels

Ambient sound measurements were conducted in 2017 around the perimeter of the Project Site. Substantial increases in traffic activity in the immediate Project vicinity have not occurred since the sound measurements were taken in 2017. In addition, current traffic volumes have been much lower due to the COVID-19 pandemic and thus any measurements taken during the last year (or recently) regarding existing ambient noise levels would not be an accurate representative of ambient sound in the Project vicinity. Therefore, the 2017 ambient sound measurements should



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SOURCE: ESA, 2021

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Figure IV.E-1
Noise-Sensitive Receptors and Measurement Locations



be representative of the existing noise environment in the Project vicinity (once conditions revert back to pre-pandemic activity levels) and should still be considered as valid. Details have been included herein. A combination of short- and long-term ambient sound measurements were conducted between August 3 and August 4, 2017. Ambient sound measurements were conducted at the locations shown in Figure IV.E-1.

Sound measurement data are summarized in **Table IV.E-1, Summary of Ambient Noise Measurement Data (dBA)—2021 Project Supplement (2017)**. The 2018 SEIR evaluated noise impacts at three locations determined to be representative of the nearby off-site sensitive receptors, listed as noise measurement location M1 (residential uses north of Del Amo Boulevard), M3 (residential uses south and southeast of the Torrance Lateral), and M4 (residential uses south of the Torrance Lateral and east of Main Street). These three groups of receptors remain the basis of the evaluation herein. However, due to the proposed land use changes proposed by the 2021 Project to PA3, additional receptor points to the west and south of the Torrance Lateral, which were all represented by 2018 Project receptors, have been included at locations that would be most impacted by the 2021 Project design. Sensitive receptor locations R1 through R9 are shown in Figure IV.E-1. Measurement location M2 is located adjacent to the I-405 Freeway and does not represent a sensitive receptor.

**Table IV.E-1
Summary of Ambient Noise Measurement Data (dBA)—2021 Project Supplement (2017)**

Location Number ^a	Measurement Location ^a	Representative Receptor ^b	Monitoring Data			
			Distance of Receptor to Property ^b	Daytime Hourly L_{eq}	Nighttime 10 p.m. – 11 p.m. L_{eq}	Nighttime 11 p.m.– 7 a.m. L_{eq}
M1	South of Del Amo Blvd	R9	125	72.7	71.2	68.7
M2	Northeast, west of I-405 Freeway	No sensitive receptor	N/A	74.3	76.6	75.1
M3	Southeast portion of Property north of Channel	R2–R8	175	55.2	53.3	48.8
M4	Northwest portion of Property north of Channel	R1	150	58.9	57.4	54.9

SOURCE: ESA 2021.

NOTES:

Based on ambient sound measurements conducted from August 3 through August 4, 2017. Noise measurement data is provided in **Appendix E, Noise Methodology and Assumptions**, of this 2021 SEIR. Short-term daytime measurements were taken at M1 and M4. Therefore, nighttime data is not available for M1 and M4. However, the nighttime to daytime trends recorded at M2 and M3 were used to calculate the nighttime ambient noise levels for locations M1 and M4, which are presumed to be representative.

^a Noise measurement locations and representative sensitive receptor locations are shown on Figure IV.E-1.

^b Although noise measurements were taken at limited locations on the Project Site boundary, measured noise levels are representative of the ambient noise level at nearby receptors in the general location of the measurement location.

Neither the 2006 Project nor the 2018 Project anticipated substantial nighttime activity at the Project Site. As such, nighttime ambient noise levels were not required to conduct noise analyses in terms of Project-related increases in noise over ambient levels. The 2021 Project, however, includes nighttime operations within PA3. Therefore, ambient noise data during nighttime hours are required to perform the operational noise analysis. Long-term, 24-hour, noise measurements were taken at measurement locations M2 and M3. Daytime noise measurements were taken at locations M1 and M4. However, because nighttime ambient noise levels were not required to conduct noise analyses in the 2018 SEIR, nighttime noise measurements were not recorded and are not available for locations M1 and M4. Measurement locations M1 and M2 are both located along Del Amo Boulevard where the main contributor of ambient noise consists of on-road vehicular travel and similar fluctuations in daytime to nighttime noise levels can be expected. Measurement locations M3 and M4 are both located along the Torrance Lateral, generally separated from major roadways and representative of daytime to nighttime noise within a residential neighborhood. Therefore, it is appropriate and reasonable to interpolate nighttime measurement data to derive nighttime ambient noise levels at measurement locations M1 and M4. Based on the fluctuations in hourly noise levels collected at measurement locations M2 and M3, the nighttime to daytime trends recorded at M2 and M3 were used to calculate the nighttime ambient noise levels for locations M1 and M4, which are presumed to be representative.

To further characterize the existing noise environment in the Project area, the noise level from traffic on local roadways was forecasted using the 2017 traffic data included within the 2018 Project's transportation impact analysis and carried forward to *The District at South Bay 2021 Project Transportation Impact Analysis* (TIA) prepared for the 2021 Project, as provided in Appendix C1 of this 2021 SEIR.¹⁴¹ Consistent with the 2018 SEIR, roadway noise impacts for the 2021 Project were evaluated using the Caltrans Technical Noise Supplement (TeNS) method based on the roadway traffic volume data provided in the TIA prepared for the 2021 Project. **Table IV.E-2, Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, summarizes the traffic noise modeling results for existing conditions and identifies the land uses adjacent to each roadway segment as well as the compatibility of existing traffic noise with the land use based on the City's community noise/land use compatibility criteria.¹⁴²

¹⁴¹ Fehr & Peers, *The District at South Bay 2021 Project Transportation Impact Analysis*, October 2021.

¹⁴² *City of Carson, Carson General Plan, Chapter 7, Noise Element, 2004, Table N-2, Noise and Land Use Compatibility Matrix.*

**Table IV.E-2
Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	Existing Land Uses Located along Roadway Segment	CNEL at 50 Feet from Centerline (dBA)	Land Use Compatibility ^a
Vermont Avenue			
North of Del Amo Blvd	Industrial, Hotel, Place of Worship, School	68.1	NU
Del Amo Blvd and Carson St	Residential, Care Facility, Commercial	68.6	NU
South of Carson St	Commercial, Wellness Center, Residential	68.1	NU
Hamilton Avenue			
Del Amo Blvd and US-101 Freeway SB Ramps	Industrial	63.8	NA
I-110 Freeway SB Ramps and Torrance Blvd	Industrial, Commercial	64.4	NA
Figueroa Street			
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	N/A	69.4	NA
I-405 Freeway SB On Ramp and Del Amo Blvd	Industrial	70.5	NA
Del Amo Blvd and I-110 Freeway NB Ramps	Industrial, Commercial	69.6	CA
I-110 Freeway NB Ramps and Torrance Blvd	Commercial	70.3	CA
Torrance Blvd and Carson St	Commercial, Place of Worship, Residential	66.9	NU
South of Carson St	Residential, Place of Worship, School	66.8	NU
Main Street			
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	N/A	69.2	NA
I-405 Freeway SB Ramp and Del Amo Blvd	Industrial	70.3	NA
Del Amo Blvd and Lenardo Dr	Commercial	68.8	CA
Lenardo Dr and Torrance Blvd	Residential, Commercial	67.9	NU
Torrance Blvd and 213th St	Residential, Commercial, Industrial, Place of Worship	71.0	NU
213th St and Carson St	Residential, Commercial, Recreation	70.2	NU
South of Carson St	Industrial, Commercial, School, Residential	68.9	NU

**Table IV.E-2
Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	Existing Land Uses Located along Roadway Segment	CNEL at 50 Feet from Centerline (dBA)	Land Use Compatibility^a
Avalon Boulevard			
North of Del Amo Blvd	Residential, Commercial	68.4	NU
Del Amo Blvd and I-405 Freeway NB Ramp	Commercial, School	68.7	NU
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	N/A	68.1	NA
I-405 Freeway SB Ramp and 213th St	Residential, Commercial	67.8	NU
213th St and Carson St	Residential, Commercial	67.5	NU
South of Carson St	Commercial, Hotel, Residential	66.9	NU
Del Amo Boulevard			
West of Vermont Ave	Residential	66.9	NU
Vermont Ave and Hamilton Ave	Residential, Industrial	69.2	NU
Hamilton Ave and Figueroa St	Industrial	72.3	NA
Figueroa St and Main St	Industrial, Commercial	72.6	NA
Main St and Stamps Dr	Residential	69.9	NU
Stamps Dr and Avalon Blvd	Residential	69.7	NU
Torrance Boulevard			
West of Hamilton Ave	Residential, Commercial	69.4	NU
Hamilton Ave and Figueroa St	Residential	70.2	NU
Figueroa St and Main St	Commercial, Place of Worship, Industrial	68.3	NU
East of Main St	Residential	60.2	NA
213th Street			
Main St and Avalon Blvd	Residential	61.5	CA
East of Avalon Blvd	Commercial, Residential	60.0	CA
Carson Street			
West of Vermont Ave	Commercial, Hotel, Medical Office	67.6	CA
Vermont Ave and Figueroa St	Commercial	67.5	NA
Figueroa St and Main St	Commercial, Place of Worship, Residential	66.8	NU
Main St and Avalon Blvd	Commercial, School, Residential	66.9	NU
Avalon Blvd and I-405 Freeway SB Ramp	Residential, Commercial, Hotel	68.0	NU
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	N/A	67.6	NA

**Table IV.E-2
Existing Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	Existing Land Uses Located along Roadway Segment	CNEL at 50 Feet from Centerline (dBA)	Land Use Compatibility ^a
Lenardo Drive			
I-405 Freeway SB Ramp and Avalon Blvd	Residential	54.8	NA

SOURCE: ESA 2021; City of Carson, Carson General Plan, Chapter 7, Noise Element, 2004, Table N-2, Noise and Land Use Compatibility Matrix.

NOTES:
Exterior 24-hour CNEL noise levels.

^a *Land use compatibility:*
NA = Normally Acceptable: Specified land use is satisfactory, based upon the assumption buildings involved are conventional construction, without any special noise insulation.
CA = Conditionally Acceptable: New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will suffice.
NU = Normally Unacceptable: New construction or development generally should be discouraged. A detailed analysis of the noise reduction requirements must be made and noise insulation features included in the design of a project.
CU = Clearly Unacceptable: New construction or development should generally not be undertaken.

As shown in Table IV.E-2, the calculated Community Noise Equivalent Level (CNEL) for the analyzed roadway segments as a result of existing traffic volumes ranged from 61.6 A-weighted decibels (dBA) to 72.3 dBA at 50 feet from the roadway centerline. The roadway traffic noise levels, shown in Table IV.E-2, indicate that all land uses located near the Project Site, with the exception of residents along 213th Street between Main Street and Avalon Boulevard, are currently exposed to community noise levels above 65 CNEL. As such, these noise levels exceed the City of Carson’s exterior noise standard limits for sensitive receptors (see 2006 FEIR Table 47 p. 426) and are considered “conditionally acceptable” based on the City’s community noise/land use compatibility criteria.¹⁴³

IV.E.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to noise are considered significant if the 2021 Project would:

- Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Generate excessive groundborne vibration or groundborne noise levels

¹⁴³ *City of Carson, Carson General Plan, Chapter 7, Noise Element, 2004, Table N-2, Noise and Land Use Compatibility Matrix.*

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels (Evaluated in Chapter VI, *Effects Found Not to Be Significant.*)

IV.E.5 Project Impacts

a. Methodology

As discussed in greater detail in Chapter II, *2021 Project Description*, of this 2021 SEIR, the purpose of this 2021 SEIR is to evaluate the changes considered by the 2021 Project to the 2018 Project, and to determine whether changes in circumstances surrounding the Project Site and the 2018 Project (if any), and new information (if any), require further analysis under CEQA. In doing so, the underlying methodology of impacts regarding noise and vibration has been carried forward from the 2018 SEIR as appropriate, described below.

On-site operational activity associated with the proposed project development for PA1 and Planning Area 2 (PA2) under this 2021 SEIR will remain unchanged from that contemplated in the 2018 SEIR. Therefore, the methodology used for the analysis of on-site operational noise sources associated with PA1 and PA2 remain unchanged. The 2021 Project includes modifications to the land uses proposed for PA3. The proposed zoning for the 2021 Project includes a range of allowable uses for PA3. However, the most noise-insensitive uses including Fulfillment Center, Parcel Hub/Distribution Center uses, amplified sound (including drive-through speakers, the performance pavilion, and ambient speakers), and outdoor recreational and gathering spaces, have been assumed for this analysis to allow for a conservative analysis. All other allowable uses for PA3 would be less noise-intensive and impacts would be covered by the analysis herein. This 2021 SEIR is using the same type of methodology for the analysis of operational traffic noise, stationary mechanical equipment, and vibration as was used in the 2018 SEIR (see 2006 FEIR pp. 431–433 for expanded discussion of methodology). Due to the level of activity and number of operational noise sources associated with the land uses proposed for PA3, potential impacts from on-site operational noise sources associated with the uses proposed for PA3 have been analyzed utilizing the Computer Aided Noise Abatement (CadnaA) noise program (Version 2019). CadnaA is a Windows-based software program that predicts and assesses noise levels in the vicinity of noise sources based on International Organization for Standardization 9613-2 algorithms for noise propagation calculations. The calculations account for classical sound wave divergence plus attenuation factors resulting from air absorption, basic ground effects (elevation), and barrier/shielding. The anticipated configuration of proposed buildings and shielding, worst-case location of noise sources, and elevation have been accounted for in CadnaA (see Appendix E for detailed discussion of modeling assumptions).

b. Project Characteristics

Project Characteristics proposed under the 2021 Project that would also serve to reduce noise and vibration generation include:

- All industrial loading dock areas will include concrete block walls and gated access for security purposes as shown in **Figure IV.E-2, Preliminary Industrial Wall Plan**. The standard height of such security walls is 12 feet, as provided for Buildings B, C, and E. However, due to the proximity of Buildings A, D, and F to noise-sensitive uses, the height of the walls associated with these buildings has been increased as described below:
 - Building A would include a 16-foot-high concrete block wall that encloses the northern (with a 10-foot-high truck access gate made of solid material such as steel) and western sides of the loading dock area. In addition, the western wall extends from the beginning of the truck drive aisle at the north to the parking area associated with Building D.
 - Building D would include a 14-foot-high concrete block wall enclosing the southeastern side of the loading dock with a 10-foot-high solid truck access gate.
 - Building F would include a 16-foot-high concrete block wall enclosing the south and southwestern sides of the loading dock area, a 10-foot-high solid truck access gate, and a 14-foot-high concrete block wall enclosing the northwestern and northern sides of the loading dock area.
 - A 16-foot-high concrete block wall extending from the Building F loading dock area wall to the edge of the utility lot would be provided for added noise attenuation.
- Emergency generators for Buildings A and D would be located at the eastern side of their respective buildings.

The Carson Country Mart includes vegetation and 4- to 5-foot-high vegetated berms along the western and southern boundaries to provide a natural noise barrier, shielding the residents to the south.

Figure IV.E-2
Preliminary Industrial Wall Plan

The District at South Bay Specific Plan Amendment



c. Analysis of Project Impacts

(1) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies

(a) Construction

The construction noise analysis evaluates the worst case day of construction activity. While the construction dates and amount of overlap have changed for the 2021 Project as compared to the 2018 Project, it is assumed that the single worst-case day of construction would remain the same because construction techniques and equipment required for the 2021 Project would be similar to what was analyzed in the 2018 SEIR. Therefore, the construction noise analysis included in the 2018 FEIR (see 2018 SEIR pp. IV.H-11 to IV.H-17 [Unmitigated] and IV.H-35 to IV.H-37 [Level of Significance after Mitigation] for the construction noise analysis) remains applicable.

Similar to the 2018 Project, the 2021 Project would result in a significant construction-related noise impacts if construction activities would exceed the existing ambient exterior noise levels by 5 dBA Leq or more at a noise-sensitive use. As shown by **Table IV.E-3, Mitigated Construction Noise Impacts from the 2018 Project**, Section (d), the 2021 Project would result in significant and unavoidable construction-related noise impacts during deep dynamic compaction (DDC) activities (3 rigs), pile driving, and concurrent pile driving and DDC because the noise levels would exceed the significance threshold of 5 dBA over the ambient noise levels.

In addition, in recognition of the City of Carson Municipal Code Noise Ordinance in Article V, Chapter 5, Section 5502, and to provide a comparative analysis to the 2018 SEIR construction noise analysis, the 2021 Project was also evaluated where construction activities lasting 20 days or less would exceed a maximum noise level of 75 dBA at single-family residential uses and 80 dBA at multifamily residential uses between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, or 60 dBA at single-family residential uses and 64 dBA at multifamily residential uses between the hours of 8:00 p.m. and 7:00 a.m. on Sunday or a national holiday. The 2021 Project would result in a significant impact on noise levels during construction if construction activities lasting more than 20 days would exceed a maximum noise level of 65 dBA at single-family residential uses and 70 dBA at multifamily residential uses between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, or 55 dBA at single-family residential uses and 60 dBA at multifamily residential uses between the hours of 8:00 p.m. and 7:00 a.m. Monday through Saturday or any time on Sunday or a national holiday. Refer to **Table IV.E-3, Mitigated Construction Noise Impacts from the 2018 Project**, for a summary of mitigated construction noise impacts as shown in the 2018 SEIR.

As shown, even with implementation of Mitigation Measures H-1, H-3, and H-4, significant and unavoidable construction-related noise impacts would result. Deep dynamic compaction (DDC)

would result in significant and unavoidable impacts at all representative receptors, except for R1 and R9. Pile driving alone and concurrent pile driving and DDC activities would result in significant and unavoidable impacts at all representative receptors, except for R9.

**Table IV.E-3
Mitigated Construction Noise Impacts from the 2018 Project**

On-Site Construction Noise Sources	Noise Levels, dBA Leq ^a		
	2018 Receptor R1 ^b	2018 Receptor R3 ^c	2018 Receptor R4 ^d
(a) Existing			
Ambient Noise Level	72.7	55.2	58.9
(b) Mitigated Construction Noise			
Deep Dynamic Compaction (1 Rig)	59.0	57.0	57.0
Deep Dynamic Compaction (3 Rigs)	61.0	60.0	60.0
Pile Driving	66.0	65.0	65.0
Pile Driving (3 Rigs) & DDC (3 Rigs)	67.0	65.0	65.0
General Construction	53.0	51.0	51.0
(c) Existing + Mitigated Construction Noise			
Deep Dynamic Compaction (1 Rig)	72.9	59.2	61.1
Deep Dynamic Compaction (3 Rigs)	73.0	61.2	62.5
Pile Driving	73.5	65.4	66.0
Pile Driving (3 Rigs) & DDC (3 Rigs)	73.7	65.4	66.0
General Construction	72.7	56.6	59.6
(d) Difference from Existing Noise Level (c-a)			
Deep Dynamic Compaction (1 Rig)	0.2	4.0	2.2
Deep Dynamic Compaction (3 Rigs)	0.3	6.0	3.6
Pile Driving	0.8	10.2	7.1
Pile Driving (3 Rigs) & DDC (3 Rigs)	1.0	10.2	7.1
General Construction	0.0	1.4	0.7

SOURCE: 2018 SEIR, Table IV.H-8.

NOTES:

^a Construction noise levels exceeding the significance threshold of 5 dBA over the ambient noise level are in bold. According to the Caltrans TeNS to the Traffic Noise Analysis Protocol (Section 2.2.1.1, September 2013), a change of 5 dBA in ambient noise levels is considered to be a readily perceivable difference.

^b This sensitive receptor location is shown in Figure IV.E-1 as R9 for the 2021 Project:

^c This sensitive receptor location is shown in Figure IV.E-1 as R2 through R8 for the 2021 Project:

^d This sensitive receptor location is shown in Figure IV.E-1 as R1 for the 2021 Project:

Although the worst-case day of construction activity as analyzed for the 2018 Project would remain relevant for 2021 Project construction, it should be noted that DDC would not be

conducted within PA3. As a result, construction noise levels associated with DDC and concurrent pile driving and DDC activities would be reduced for receptors that are adjacent to PA3. Therefore, although construction noise related to DDC and concurrent pile driving and DDC would be reduced for representative receptors R2 through R7 (receptors R1 and R8 are located in close enough proximity to PA1 and PA2, respectively, for DDC impacts to remain), noise levels associated with DDC and pile driving would continue to result in **significant and unavoidable** impacts, even with the implementation of the identified and feasible mitigation measures, as concluded in the 2018 SEIR.

(b) Operation

The following analyses address potential noise impacts to neighboring noise-sensitive receiver locations, as well as the proposed on-site residential and recreational uses within the Project Site, related to the long-term operations of the 2021 Project, following completion of construction. Specific noise sources addressed in this analysis include roadway noise, mechanical equipment, emergency generators, loading dock, parking facilities, amplified sound, and outdoor open spaces.

As discussed in Chapter II, *2021 Project Description*, of this 2021 SEIR, the light-industrial uses provided in PA3(a) would operate 24 hours per day, 7 days per week. Operational activities associated with loading and forklift usage would occur within the light-industrial buildings. In addition, trucks accessing the Project Site for PA3 would each have an idling time limit of 2 minutes per occurrence and location. The only outdoor activities, beyond the arrival and departure of trucks and/or other automobiles, would be landscaping activities and the removal of trash.

The commercial/retail and restaurant uses provided in PA3(b) would operate from 7:00 a.m. until 11:00 p.m., 7 days per week.

(i) Off-Site Roadway Noise

The approved 2018 Project was forecasted to generate a maximum of 57,218 additional daily trips. Project-related traffic noise under existing conditions, existing with the development of the 2018 Project, future (2023) without development of the 2018 Project, and future (2023) with development of the 2018 Project was analyzed in the 2018 SEIR. Project-related traffic was not anticipated to increase traffic noise levels equal to or greater than applicable significance threshold(s).

According to the 2021 Project's TIA, included as Appendix C1 of this 2021 SEIR, and summarized in Section IV.C, *Transportation*, the 2021 Project is forecasted to generate a maximum of 42,791 additional daily trips over existing at full buildout, which is a 33 percent reduction compared to the 2018 Project. Like the approved 2018 Project, traffic volumes associated with these 2021 Project trips would have the potential to increase roadway noise levels on local roadways in and around the Project Site. Operations would be phased based on buildout of each planning area. PA3 would be operational in 2024, PA2 and PA3 would be operational in 2025, and full 2021 Project operations

would occur in 2026. **Table IV.E-4, Future (2024) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, provides the calculated CNEL for analyzed roadway segments for future (2024) without the 2021 Project and future (2024) with the 2021 Project (PA3 only). As shown in Table IV.E-4, the greatest 2021 Project-related traffic noise impact under future 2024 conditions is anticipated to occur along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard with an increase of 4.3 dBA CNEL. Based on the thresholds used in the 2006 FEIR and 2018 SEIR, the 2021 Project would have a significant impact if the 2021 Project causes the ambient noise level to increase by 5 dBA CNEL measured at the Project Site boundary of affected uses within the “normally acceptable” or “conditionally acceptable” category, or by 3 dBA CNEL at the Project Site boundary of affected uses within the “normally unacceptable” or “clearly unacceptable” category (see 2018 SEIR Table 45 [DEIR p. 422]). However, noise level increases above ambient for the 2021 Project would be less than the 5 dBA and 3 dBA significance thresholds. Thus, the 2021 Project would not result in any new significant impacts for off-Property roadway noise under future 2024 conditions as compared to the 2006 Project and the 2018 Project. No mitigation is required.

Table IV.E-4, Future (2024) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations, provides the calculated CNEL for analyzed roadway segments for future (2025) without the 2021 Project and future (2025) with the 2021 Project (PA2 and PA3 only). As shown in Table IV.E-4, the greatest 2021 Project-related traffic noise impact under future 2025 conditions is anticipated to occur along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard with an increase of 4.4 dBA CNEL. Based on the thresholds used in the 2006 FEIR and 2018 SEIR, the 2021 Project would not result in any new significant impacts for off-Property roadway noise under future 2025 conditions as compared to the 2006 Project and the 2018 Project. No mitigation is required.

**Table IV.E-4
Future (2024) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2024	Future 2024 With Project (PA3 only)			
Vermont Avenue					
North of Del Amo Blvd	68.3	68.4	0.1	3.0	No
Del Amo Blvd and Carson St	68.8	69.0	0.2	3.0	No
South of Carson St	68.2	68.2	0.0	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	65.7	67.2	1.5	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.6	65.0	0.4	5.0	No

**Table IV.E-4
Future (2024) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2024	Future 2024 With Project (PA3 only)			
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	70.8	70.9	0.1	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	71.5	71.6	0.1	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	70.3	71.0	0.7	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	69.9	70.1	0.2	5.0	No
Torrance Blvd and Carson St	66.6	66.8	0.2	3.0	No
South of Carson St	67.1	67.3	0.2	3.0	No
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	70.6	70.9	0.3	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.0	70.3	0.3	5.0	No
Del Amo Blvd and Lenardo Dr	70.9	71.3	0.4	5.0	No
Lenardo Dr and Torrance Blvd	70.9	71.5	0.6	3.0	No
Torrance Blvd and 213th St	71.1	71.3	0.2	3.0	No
213th St and Carson St	70.4	70.6	0.2	3.0	No
South of Carson St	69.1	69.3	0.2	3.0	No
Avalon Boulevard					
North of Del Amo Blvd	68.4	68.5	0.1	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	69.0	69.0	0.0	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.0	70.0	1.0	5.0	No
I-405 Freeway SB Ramp and 213th St	69.0	69.4	0.4	3.0	No
213th St and Carson St	68.3	68.7	0.4	3.0	No
South of Carson St	67.4	67.5	0.1	3.0	No

**Table IV.E-4
Future (2024) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2024	Future 2024 With Project (PA3 only)			
Del Amo Boulevard					
West of Vermont Ave	67.0	67.4	0.4	3.0	No
Vermont Ave and Hamilton Ave	69.3	69.8	0.5	3.0	No
Hamilton Ave and Figueroa St	72.7	73.5	0.8	5.0	No
Figueroa St and Main St	71.9	73.4	1.5	5.0	No
Main St and Stamps Dr	71.7	73.4	1.7	3.0	No
Stamps Dr and Avalon Blvd	71.7	72.1	0.4	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.6	69.7	0.1	3.0	No
Hamilton Ave and Figueroa St	70.1	70.3	0.2	3.0	No
Figueroa St and Main St	68.1	68.7	0.6	3.0	No
East of Main St	59.5	60.4	0.9	5.0	No
213th Street					
Main St and Avalon Blvd	61.7	61.7	0.0	5.0	No
East of Avalon Blvd	60.2	60.4	0.2	5.0	No
Carson Street					
West of Vermont Ave	68.1	68.3	0.2	5.0	No
Vermont Ave and Figueroa St	67.9	68.0	0.1	5.0	No
Figueroa St and Main St	67.2	67.3	0.1	3.0	No
Main St and Avalon Blvd	67.4	67.5	0.1	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.3	68.5	0.2	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.9	68.1	0.2	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	61.3	65.6	4.3	5.0	No

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing future (2024) conditions to future (2024) conditions with operation of PA3 of the 2021 Project.

**Table IV.E-5
Future (2025) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2025	Future 2025 With Project (PA2 & PA3)			
Vermont Avenue					
North of Del Amo Blvd	68.3	68.4	0.1	3.0	No
Del Amo Blvd and Carson St	68.8	69.0	0.2	3.0	No
South of Carson St	68.2	68.2	0.0	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	65.7	67.3	1.6	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.7	65.1	0.4	5.0	No
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	70.8	70.9	0.1	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	71.5	71.6	0.1	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	70.3	71.1	0.8	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	69.9	70.2	0.3	5.0	No
Torrance Blvd and Carson St	66.6	66.8	0.2	3.0	No
South of Carson St	67.1	67.3	0.2	3.0	No
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	70.7	70.9	0.2	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.0	70.4	0.4	5.0	No
Del Amo Blvd and Lenardo Dr	70.9	71.4	0.5	5.0	No
Lenardo Dr and Torrance Blvd	70.9	71.7	0.8	3.0	No
Torrance Blvd and 213th St	71.1	71.4	0.3	3.0	No
213th St and Carson St	70.4	70.7	0.3	3.0	No
South of Carson St	69.1	69.4	0.3	3.0	No

**Table IV.E-5
Future (2025) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2025	Future 2025 With Project (PA2 & PA3)			
Avalon Boulevard					
North of Del Amo Blvd	68.4	68.5	0.1	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	69.0	69.0	0.0	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.1	70.1	1.0	5.0	No
I-405 Freeway SB Ramp and 213th St	69.0	69.5	0.5	3.0	No
213th St and Carson St	68.3	68.8	0.5	3.0	No
South of Carson St	67.4	67.5	0.1	3.0	No
Del Amo Boulevard					
West of Vermont Ave	67.0	67.4	0.4	3.0	No
Vermont Ave and Hamilton Ave	69.3	69.9	0.6	3.0	No
Hamilton Ave and Figueroa St	72.7	73.6	0.9	5.0	No
Figueroa St and Main St	71.9	73.7	1.8	5.0	No
Main St and Stamps Dr	71.8	73.7	1.9	3.0	No
Stamps Dr and Avalon Blvd	71.7	72.3	0.6	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.6	69.7	0.1	3.0	No
Hamilton Ave and Figueroa St	70.2	70.4	0.2	3.0	No
Figueroa St and Main St	68.1	68.8	0.7	3.0	No
East of Main St	59.6	60.5	0.9	5.0	No
213th Street					
Main St and Avalon Blvd	61.7	61.7	0.0	5.0	No
East of Avalon Blvd	60.2	60.5	0.3	5.0	No

**Table IV.E-5
Future (2025) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2025	Future 2025 With Project (PA2 & PA3)			
Carson Street					
West of Vermont Ave	68.1	68.4	0.3	5.0	No
Vermont Ave and Figueroa St	67.9	68.1	0.2	5.0	No
Figueroa St and Main St	67.2	67.4	0.2	3.0	No
Main St and Avalon Blvd	67.4	67.5	0.1	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.3	68.6	0.3	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.9	68.1	0.2	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	61.4	65.8	4.4	5.0	No

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing future (2025) conditions to future (2025) conditions with operation of PA2 & PA3 of the 2021 Project.

Table IV.E-6, Future (2026) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations, provides the calculated CNEL for analyzed roadway segments for future (2026) without the 2021 Project and future (2026) with the 2021 Project. As shown in Table IV.E-6, the greatest 2021 Project-related traffic noise impact under future 2026 conditions is anticipated to occur along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard with an increase of 4.5 dBA CNEL. Based on the thresholds used in the 2006 FEIR and 2018 SEIR, the 2021 Project would not result in any new significant impacts for off-Property roadway noise under future 2026 conditions as compared to the 2006 Project and the 2018 Project. No mitigation is required.

**Table IV.E-6
Future (2026) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2026	Future 2026 With Project			
Vermont Avenue					
North of Del Amo Blvd	68.3	68.4	0.1	3.0	No
Del Amo Blvd and Carson St	68.8	69.1	0.3	3.0	No
South of Carson St	68.2	68.2	0.0	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	65.7	67.5	1.8	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.7	65.1	0.4	5.0	No
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	70.8	70.9	0.1	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	71.6	71.6	0.0	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	70.3	71.3	1.0	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	69.9	70.2	0.3	5.0	No
Torrance Blvd and Carson St	66.6	66.8	0.2	3.0	No
South of Carson St	67.2	67.3	0.1	3.0	No
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	70.7	71.0	0.3	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.0	70.5	0.5	5.0	No
Del Amo Blvd and Lenardo Dr	70.9	71.7	0.8	5.0	No
Lenardo Dr and Torrance Blvd	70.9	71.8	0.9	3.0	No
Torrance Blvd and 213th St	71.1	71.5	0.4	3.0	No
213th St and Carson St	70.4	70.9	0.5	3.0	No
South of Carson St	69.1	69.5	0.4	3.0	No

**Table IV.E-6
Future (2026) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2026	Future 2026 With Project			
Avalon Boulevard					
North of Del Amo Blvd	68.5	68.5	0.0	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	69.0	69.1	0.1	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.1	70.2	1.1	5.0	No
I-405 Freeway SB Ramp and 213th St	69.0	69.6	0.6	3.0	No
213th St and Carson St	68.4	68.9	0.5	3.0	No
South of Carson St	67.4	67.6	0.2	3.0	No
Del Amo Boulevard					
West of Vermont Ave	67.0	67.5	0.5	3.0	No
Vermont Ave and Hamilton Ave	69.3	70.0	0.7	3.0	No
Hamilton Ave and Figueroa St	72.7	73.7	1.0	5.0	No
Figueroa St and Main St	71.9	73.9	2.0	5.0	No
Main St and Stamps Dr	71.8	73.8	2.0	3.0	No
Stamps Dr and Avalon Blvd	71.7	72.4	0.7	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.6	69.8	0.2	3.0	No
Hamilton Ave and Figueroa St	70.2	70.5	0.3	3.0	No
Figueroa St and Main St	68.1	68.9	0.7	3.0	No
East of Main St	59.6	60.6	1.0	5.0	No
213th Street					
Main St and Avalon Blvd	61.7	61.7	0.0	5.0	No
East of Avalon Blvd	60.3	60.5	0.2	5.0	No

**Table IV.E-6
Future (2026) Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Project Increment ^a	Significance Threshold (dBA)	Exceeds Threshold?
	Future 2026	Future 2026 With Project			
Carson Street					
West of Vermont Ave	68.1	68.4	0.3	5.0	No
Vermont Ave and Figueroa St	68.0	68.2	0.2	5.0	No
Figueroa St and Main St	67.2	67.5	0.3	3.0	No
Main St and Avalon Blvd	67.4	67.6	0.2	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.4	68.6	0.2	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.9	68.2	0.3	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	61.4	65.9	4.5	5.0	No

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing future (2026) conditions to future (2026) conditions with operation of the 2021 Project.

(ii) Stationary Point-Source Noise

This section considers potential noise impacts to neighboring noise-sensitive properties related to specific noise sources associated with the operation of the 2021 Project. As described in Chapter II, *2021 Project Description*, of this 2021 SEIR the 2021 Project includes the operation of logistics facilities within PA3(a). Like the 2018 Project, such potential noise sources include:

- Mechanical equipment (e.g., heating, ventilation, and air conditioning (HVAC) systems and emergency generators);
- Loading dock and trash/recycling areas;
- Parking facilities, including voices, car alarms, car doors closing etc.; and

In addition to logistics facilities, the 2021 Project includes operation of publicly accessible open space and commercial/community-use and amenity areas, described as the Carson Country Mart, within PA3(b). Noise-generating sources within the Carson Country Mart includes:

- Outdoor gathering spaces (e.g., dog park, botanic garden, children's play area, flexible event/social lawn, performance pavilion, beer garden, games terrace, outdoor food and beverage areas, etc.)

- Amplified sound (including drive-through speakers, the performance pavilion, and ambient speakers)
- Parking facilities
- Mechanical equipment
- Commercial Drive-Throughs

a) Mechanical Equipment

Like the 2006 Project and the 2018 Project, 2021 Project development would include mechanical equipment including heating, ventilation, and air conditioning (HVAC) systems, rooftop ventilation systems, and emergency generators. Mechanical equipment could generate noise levels that are audible at both on- and off-site noise-sensitive locations. As discussed in the 2006 FEIR (see 2006 FEIR [DEIR pp. 444–445]), this mechanical equipment would include noise control measures and shielding that would ensure that noise levels would not exceed 50 dBA during daytime hours and 45 dBA during nighttime hours at the nearest sensitive receptors. Based on the thresholds established by the 2006 FEIR, the operation of on-site mechanical equipment would have a significant impact on noise levels if equipment would increase ambient noise levels by 5 dBA.

As shown in **Table IV.E-7, Mechanical Equipment Noise Levels**, combined site-wide mechanical equipment noise would not increase daytime or nighttime ambient noise by 5 dBA or more at off-site sensitive receptors. Therefore, the 2021 Project would result in substantially the same impact (less than significant) as identified for the 2006 FEIR and the 2018 SEIR, and would not result any new significant impacts related to mechanical equipment noise as compared to the 2006 Project or the 2018 Project.

b) Loading Dock and Waste Collection/Recycling Areas

Like the 2018 Project, the various operations-related activities within PA2 and PA3 (e.g., loading, waste collection, cardboard compaction, etc.) would occur at several different locations within the Project Site. As discussed in the 2018 SEIR (see 2018 SEIR pp. IV.H-24), commercial loading dock noise is assumed to generate levels of approximately 70 dBA Equivalent Continuous Sound Pressure (L_{eq}) at a reference distances of 50 feet. All loading dock areas associated with PA2 is assumed to be fully or partially enclosed or screened with portions of the building, architectural wing walls, and freestanding walls that block the line-of-sight between these noise sources and noise-sensitive receptors. Assuming that commercial loading activities would generate levels of 70 dBA L_{eq} at a reference distance of 50 feet, accounting for barrier-insertion loss by screening (minimum 10 dBA insertion loss), and distance attenuation (minimum 6 dBA loss per doubling of distance), commercial loading dock noise associated with PA2 has been calculated at representative receptor locations included in this analysis.

**Table IV.E-7
Mechanical Equipment Noise Levels**

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq}) ^a	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^b						
R1	58.9	50.4	59.5	0.6	5.0	No
R2	55.2	50.4	56.4	1.2	5.0	No
R3	55.2	50.4	56.4	1.2	5.0	No
R4	55.2	50.4	56.4	1.2	5.0	No
R5	55.2	50.5	56.5	1.3	5.0	No
R6	55.2	50.6	56.5	1.3	5.0	No
R7	55.2	50.6	56.5	1.3	5.0	No
R8	55.2	50.7	56.5	1.3	5.0	No
R9	72.7	53.0	72.7	0.0	5.0	No
Nighttime Hours (10:00 P.M.–11:00 p.m.)^c						
R1	57.4	45.0	57.6	0.2	5.0	No
R2	53.3	45.0	53.9	0.6	5.0	No
R3	53.3	45.0	53.9	0.6	5.0	No
R4	53.3	45.0	53.9	0.6	5.0	No
R5	53.3	45.0	53.9	0.6	5.0	No
R6	53.3	45.0	53.9	0.6	5.0	No
R7	53.3	45.7	54.0	0.7	5.0	No
R8	53.3	45.8	54.0	0.7	5.0	No
R9	71.2	45.0	71.2	0.0	5.0	No
Nighttime Hours (11:00 p.m.–7:00 a.m.)^c						
R1	54.9	45.0	55.3	0.4	5.0	No
R2	48.8	45.0	50.3	1.5	5.0	No
R3	48.8	45.0	50.3	1.5	5.0	No
R4	48.8	45.0	50.3	1.5	5.0	No
R5	48.8	45.0	50.3	1.5	5.0	No
R6	48.8	45.0	50.3	1.5	5.0	No
R7	48.8	45.7	50.5	1.7	5.0	No
R8	48.8	45.8	50.6	1.8	5.0	No
R9	68.7	45.0	68.7	0.0	5.0	No

SOURCE: ESA 2021.

^a Noise levels are added logarithmically.

^b Daytime operation of mechanical equipment includes PA2 mechanical equipment, PA3 ventilation, HVAC, testing of emergency generators, Carson Country Mart HVAC.

^c It is assumed the mechanical equipment within PA2 would not be operational and emergency generators would not be tested during nighttime hours.

Potential impacts associated with loading activities for the proposed PA3 uses utilizes the CadnaA noise program. The proposed locations and configurations of proposed logistics buildings and docking bays were programmed into the CadnaA model in addition to basic elevation characteristics of the anticipated finished grade of PA3 and the off-site residential uses to the west and south of the Project Site (the anticipated finished grade of PA3 is approximately 13 feet higher than the residential uses across the Torrance Lateral).

With respect to the proposed logistics uses, the number of medium- and heavy-duty trucks assumed for each proposed logistics building is based on Institute of Traffic Engineers (ITE) trip generation rates for fulfillment center and parcel hub uses (see Appendix E for detailed assumptions). Main sources of loading activity noise include truck idling, backup alarms, and maneuvering of trucks within the truck parking and loading areas. Based on representative data, heavy-duty trucks would generate noise levels of approximately 71.5 dBA L_{eq} at a reference distance of 50 feet per truck¹⁴⁴ and that medium-duty trucks would generate noise levels of approximately 67 dBA L_{eq} at a reference distance of 50 feet per truck when carrying out loading activities.¹⁴⁵

The Carson Country Mart includes food services uses are anticipated to receive daily supply deliveries. As a worst case assumption, it is assumed that across the entire Carson Country Mart, deliveries would be fulfilled by an average of four heavy-duty trucks per hour and that the trucks would idle on site, generating noise levels of approximately 69 dBA L_{eq} per truck at a reference distance of 50 feet.¹⁴⁶

Table IV.E-8, Loading Noise Levels, shows noise levels associated with site-wide loading activities and increases in ambient noise at each representative sensitive receptor. The greatest increases in ambient noise would occur at receptor R6 with increases of approximately 0.6 dBA L_{eq} during daytime hours (7:00 p.m.–10:00 p.m.), 0.9 dBA L_{eq} between 10:00 p.m. and 11:00 p.m., and 2.2 dBA L_{eq} between 11:00 p.m. and 7:00 a.m. The combined site-wide loading activity would not increase daytime or nighttime ambient noise by 5 dBA L_{eq} or more at off-site sensitive receptors. Therefore, the 2021 Project would result in substantially the same impact (less than significant) as identified for the 2006 FEIR and the 2018 SEIR, and would not result any new significant impacts related to loading noise as compared to the 2006 Project or the 2018 Project.

¹⁴⁴ Based on field noise measurements conducted by ESA in July 2020 at a representative logistics facility, loading dock activity would generate noise levels of approximately 71.5 dBA L_{eq} per heavy-duty truck at a reference distance of 50 feet from the dock.

¹⁴⁵ David Evans and Associates Inc., Noise Impact Analysis, Wal-Mart Supercenter, City of Ontario California, March 2007.

¹⁴⁶ Based on field noise measurements conducted by ESA in July 2020 at a representative logistics facility, idling would generate noise levels of approximately 69.0 dBA L_{eq} per heavy-duty truck at a reference distance of 50 feet from the dock.

**Table IV.E-8
Loading Noise Levels**

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq})	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^a						
R1	58.9	36.0	58.9	0.0	5.0	No
R2	55.2	44.9	55.6	0.4	5.0	No
R3	55.2	43.5	55.5	0.3	5.0	No
R4	55.2	40.8	55.4	0.2	5.0	No
R5	55.2	41.8	55.4	0.2	5.0	No
R6	55.2	47.1	55.8	0.6	5.0	No
R7	55.2	45.2	55.6	0.4	5.0	No
R8	55.2	49.4	56.2	1.0	5.0	No
R9	72.7	54.1	72.8	0.1	5.0	No
Nighttime Hours (10:00 p.m.–11:00 p.m.)^b						
R1	57.4	36.0	57.4	0.0	5.0	No
R2	53.3	44.9	53.9	0.6	5.0	No
R3	53.3	43.5	53.7	0.4	5.0	No
R4	53.3	40.8	53.5	0.2	5.0	No
R5	53.3	41.6	53.6	0.3	5.0	No
R6	53.3	46.9	54.2	0.9	5.0	No
R7	53.3	41.4	53.6	0.3	5.0	No
R8	53.3	43.6	53.7	0.4	5.0	No
R9	71.2	54.1	71.3	0.1	5.0	No
Nighttime Hours (11:00 p.m.–7:00 a.m.)^b						
R1	54.9	36.0	55.0	0.1	5.0	No
R2	48.8	44.9	50.3	1.5	5.0	No
R3	48.8	43.5	49.9	1.1	5.0	No
R4	48.8	40.8	49.4	0.6	5.0	No
R5	48.8	41.6	49.6	0.8	5.0	No
R6	48.8	46.9	51.0	2.2	5.0	No
R7	48.8	41.1	49.5	0.7	5.0	No
R8	48.8	43.6	49.9	1.1	5.0	No
R9	68.7	54.1	68.8	0.1	5.0	No

SOURCE: ESA 2021.

^a Daytime loading includes PA2 loading, PA3 industrial loading docks, and Carson Country Mart deliveries.

^b Nighttime loading includes PA2 loading and PA3 industrial loading docks. It is assumed that no nighttime deliveries (after 10:00 p.m.) within the Carson Country Mart would occur.

c) **Parking Facility Noise Levels**

Like the 2006 Project and the 2018 Project, various noise events would occur within the on-site surface parking lots as well as any covered parking that may be constructed within PA1 and PA2. Within these parking facilities, the activation of car alarms, sounding of car horns, slamming of car doors, engine revs, and tire squeals would occur periodically. A summary of maximum noise levels contained in the 2006 FEIR Table 58 (see 2006 FEIR [DEIR p. 447]) remains fully relevant as related to typical parking facility noise events. As summarized in the 2006 FEIR Table 58, a composite noise level of 60 dBA L_{eq} (1-hour) at a reference distance of 50 feet would be typical of a parking facility. The distance of potential parking areas for PA1 and PA2 were measured, assuming that the minimum distance of 150 feet to residential uses west and south of the Torrance Lateral pursuant to Mitigation Measure H-6. Assuming that PA1 and PA2 parking areas would generate levels of 60 dBA L_{eq} at a reference distance of 50 feet, accounting for barrier-insertion loss by screening (minimum 10 dBA insertion loss), and distance attenuation (minimum 6 dBA loss per doubling of distance), parking noise associated with PA1 and PA2 has been calculated at revised representative receptor locations included in this analysis.

Potential impacts associated with automobile parking for the proposed PA3 uses utilizes the CadnaA noise program. The proposed locations and configurations of proposed buildings and parking facilities were programmed into the CadnaA model. To ensure a worst-case analysis, the number of cars contributing to parking facility noise is equivalent to the total automobile parking spaces identified in the 2021 Project design for PA3. Parking noise levels were estimated utilizing the methodology recommended by the Federal Transit Administration (FTA) for the general assessment of stationary transit noise sources.¹⁴⁷

Table IV.E-9, Parking Noise Levels, shows noise levels associated with site-wide parking activity and increases in ambient noise at each representative sensitive receptor. The greatest increase in ambient noise would occur at receptor R1 with an increases of approximately 0.6 dBA L_{eq} during daytime hours (7:00 a.m.–10:00 p.m.). No increases in ambient noise are anticipated during nighttime hours. The combined site-wide parking activity would not increase daytime or nighttime ambient noise by 5 dBA L_{eq} or more at off-site sensitive receptors. Therefore, the 2021 Project would result in substantially the same impact (less than significant) as identified for the 2006 FEIR and the 2018 SEIR, and would not result any new significant impacts related to parking noise as compared to the 2006 Project or the 2018 Project.

¹⁴⁷ *Federal Transit Administration, Transit Noise and Vibration Impact Assessment Manual, September 2018.*

**Table IV.E-9
Parking Noise Levels**

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq})	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^a						
R1	58.9	50.5	59.5	0.6	5.0	No
R2	55.2	46.1	55.7	0.5	5.0	No
R3	55.2	39.4	55.3	0.1	5.0	No
R4	55.2	32.1	55.2	0.0	5.0	No
R5	55.2	30.7	55.2	0.0	5.0	No
R6	55.2	32.2	55.2	0.0	5.0	No
R7	55.2	40.5	55.3	0.1	5.0	No
R8	55.2	44.1	55.5	0.3	5.0	No
R9	72.7	53.5	72.8	0.1	5.0	No
Nighttime Hours (10:00 p.m.–11:00 p.m.)^b						
R1	57.4	12.8	57.4	0.0	5.0	No
R2	53.3	10.7	53.3	0.0	5.0	No
R3	53.3	14.1	53.3	0.0	5.0	No
R4	53.3	5.7	53.3	0.0	5.0	No
R5	53.3	14.9	53.3	0.0	5.0	No
R6	53.3	11.8	53.3	0.0	5.0	No
R7	53.3	16.8	53.3	0.0	5.0	No
R8	53.3	19.5	53.3	0.0	5.0	No
R9	71.2	16.7	71.2	0.0	5.0	No
Nighttime Hours (11:00 p.m.–7:00 a.m.)^c						
R1	54.9	12.5	54.9	0.0	5.0	No
R2	48.8	10.3	48.8	0.0	5.0	No
R3	48.8	14.0	48.8	0.0	5.0	No
R4	48.8	4.3	48.8	0.0	5.0	No
R5	48.8	14.7	48.8	0.0	5.0	No
R6	48.8	10.5	48.8	0.0	5.0	No
R7	48.8	5.7	48.8	0.0	5.0	No
R8	48.8	6.1	48.8	0.0	5.0	No
R9	68.7	16.4	68.7	0.0	5.0	No

SOURCE: ESA 2021.

^a Daytime parking activity includes PA1 parking, PA2 parking, PA3 industrial parking, and Carson Country Mart parking.

^b Parking activity between the hours of 10:00 p.m. and 11:00 p.m. includes PA3 industrial parking and Carson Country Mart Parking.

^c Parking activity between the hours of 11:00 p.m. and 7:00 a.m. include PA3 industrial parking.

d) Circulation

Like the 2006 Project and the 2018 Project, internal circulation consists of Lenardo Drive from Main Street to the I-405 Freeway ramps and Stamps Drive from Del Amo Boulevard to Lenardo Drive. The 2021 Project does not propose the realignment of either Stamps Drive or Lenardo Drive. Utilizing the traffic noise model methodology and traffic volumes included in the TIA, on-site and off-site (from adjacent segments along Del Amo Boulevard, Main Street, and Lenardo Drive) circulation noise has been estimated for daytime and nighttime hours. Peak hour traffic volumes have been assumed for daytime hours to account for worst-case daytime conditions and average hourly traffic volumes have been assumed for nighttime hour uses (see Appendix E for detailed assumptions). **Table IV.E-10, Circulation Noise Levels**, shows noise levels associated with circulation and increases in ambient noise at each representative sensitive receptor. The greatest increases in ambient noise would occur at receptor R8 with increases of approximately 0.6 dBA L_{eq} during daytime hours (7:00 p.m.–10:00 p.m.), 0.5 dBA L_{eq} between 10:00 p.m. and 11:00 p.m., and 1.2 dBA L_{eq} between 11:00 p.m. and 7:00 a.m. Circulation would not increase daytime or nighttime ambient noise by 5 dBA L_{eq} or more at off-site sensitive receptors. Therefore, the 2021 Project would not result any new significant impacts related to circulation noise as compared to the 2006 Project or the 2018 Project.

e) Outdoor Open Space

Outdoor open spaces were not anticipated as part of the 2006 Project or the 2018 Project. The 2021 Project includes the operation of publicly accessible open space and commercial/community-use and amenity areas. The main contributors of outdoor open space noise within the Carson Country Mart would include a dog park, botanic garden, children’s play area, flexible event/social lawn, performance pavilion with associated amplified sound, and beer garden, and the games terrace. With the exception of the performance pavilion, it is assumed that all outdoor spaces would operate during daytime hours (between 7:00 a.m. and 10:00 p.m.). It is assumed that occasional events held at the performance pavilion and flexible event/social lawn area could extend until 11:00 p.m.

Based on occupancy assumptions provided by the Applicant, the dog park has an occupancy load of approximately 57 people. As a conservative analysis, it is assumed that the space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children. Half of the occupants are assumed to be speaking loudly. In addition, it is assumed that there would be 15 dogs barking within the dog park.

The children’s play area has an occupancy load of approximately 254 people. As a conservative analysis, it is assumed that the space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children. Due to this space being a play area, it is assumed that all 90 children would be speaking loudly and one-quarter of the adults (half male and half female) would be speaking loudly.

**Table IV.E-10
Circulation Noise Levels**

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq})	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^a						
R1	58.9	42.7	59.0	0.1	5.0	No
R2	55.2	30.3	55.2	0.0	5.0	No
R3	55.2	23.9	55.2	0.0	5.0	No
R4	55.2	20.9	55.2	0.0	5.0	No
R5	55.2	28.6	55.2	0.0	5.0	No
R6	55.2	31.5	55.2	0.0	5.0	No
R7	55.2	36.5	55.3	0.1	5.0	No
R8	55.2	46.5	55.8	0.6	5.0	No
R9	72.7	48.6	72.7	0.0	5.0	No
Nighttime Hour (10:00 p.m.–11:00 p.m.)^b						
R1	57.4	40.5	57.5	0.1	5.0	No
R2	53.3	28.3	53.3	0.0	5.0	No
R3	53.3	21.6	53.3	0.0	5.0	No
R4	53.3	18.2	53.3	0.0	5.0	No
R5	53.3	26.0	53.3	0.0	5.0	No
R6	53.3	28.9	53.3	0.0	5.0	No
R7	53.3	33.9	53.3	0.0	5.0	No
R8	53.3	43.7	53.8	0.5	5.0	No
R9	71.2	45.0	71.2	0.0	5.0	No
Nighttime Hours (11:00 p.m.–7:00 a.m.)^b						
R1	54.9	40.5	55.1	0.2	5.0	No
R2	48.8	28.3	48.8	0.0	5.0	No
R3	48.8	21.6	48.8	0.0	5.0	No
R4	48.8	18.2	48.8	0.0	5.0	No
R5	48.8	26.0	48.8	0.0	5.0	No
R6	48.8	28.9	48.8	0.0	5.0	No
R7	48.8	33.9	48.9	0.1	5.0	No
R8	48.8	43.7	50.0	1.2	5.0	No
R9	68.7	45.0	68.7	0.0	5.0	No

SOURCE: ESA 2021.

^a Daytime circulation based on AM peak hour turning movement volumes included in the TIA (see Appendix E of this 2021 SEIR).

^b Nighttime circulation based on average daily turning movement volumes.

The performance pavilion and social lawn has an occupancy load of approximately 978 people. As a conservative analysis, it is assumed that the space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children. Half of the occupants are assumed to be speaking loudly. Included in this area is a performance pavilion which includes an outdoor stage. It is assumed that the sound system for this performance pavilion would generate noise levels of 80 dBA L_{eq} at a reference distance of 25 feet.

The games terrace has an occupancy of approximately 83 people. It is assumed that this space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children speaking loudly.

The botanic garden has an occupancy load of approximately 39 people. It is assumed that this space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children speaking loudly. Speakers playing ambient music would be located throughout the outdoor spaces within the Carson Country Mart. Ambient speakers are assumed to generate noise levels of 58 dBA L_{eq} at 3.3 feet.

The beer garden has an occupancy of approximately 58 people. It is assumed that this space would be at full capacity consisting of one-half male adults and one-half female adults speaking at shouting levels. Several other outdoor dining spaces would be interspersed amongst the retail buildings within PA3(b). All of these spaces, with a total capacity of 1,006 people, have been programmed into the CadnaA model assuming that each space would be at full capacity consisting of one-third male adults, one-third female adults, and one-third children speaking loudly. **Table IV.E-11, Outdoor Open Space Noise Levels**, shows noise levels associated with open spaces and increases in ambient noise at each representative sensitive receptor. The greatest increases in ambient noise would occur at receptor R7 with increases of approximately 3.2 dBA L_{eq} during daytime hours (7:00 p.m.–10:00 p.m.) and 3.1 dBA L_{eq} between 10:00 p.m. and 11:00 p.m. Combined site-wide open spaces would not increase daytime or nighttime ambient noise by 5 dBA L_{eq} or more at off-site sensitive receptors. Therefore, the 2021 Project would not result any new significant impacts related to outdoor open space noise as compared to the 2006 Project or the 2018 Project.

**Table IV.E-11
Outdoor Open Space Noise Levels**

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq})	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^a						
R1	58.9	16.4	58.9	0.0	5.0	No
R2	55.2	18.3	55.2	0.0	5.0	No
R3	55.2	19.6	55.2	0.0	5.0	No
R4	55.2	22.2	55.2	0.0	5.0	No
R5	55.2	33.8	55.2	0.0	5.0	No
R6	55.2	40.9	55.4	0.2	5.0	No
R7	55.2	55.5	58.4	3.2	5.0	No
R8	55.2	49.5	56.2	1.9	5.0	No
R9	72.7	29.8	72.7	0.0	5.0	No
Nighttime Hour (10:00 p.m.–11:00 p.m.)^b						
R1	57.4	11.6	57.4	0.0	5.0	No
R2	53.3	13.5	53.3	0.0	5.0	No
R3	53.3	14.9	53.3	0.0	5.0	No
R4	53.3	17.8	53.3	0.0	5.0	No
R5	53.3	26.0	53.3	0.0	5.0	No
R6	53.3	36.2	53.4	0.1	5.0	No
R7	53.3	53.5	56.4	3.1	5.0	No
R8	53.3	45.6	54.0	0.7	5.0	No
R9	71.2	25.0	71.2	0.0	5.0	No

SOURCE: ESA 2021.

^a Daytime open space noise contributors all open spaces and amplified sound.

^b It is assumed that the event lawn and performance pavilion would be operational until 11:00 p.m. It is assumed that ambient speakers would not be operational during nighttime hours and that all open spaces would be non-operational after 11:00 p.m.

f) Restaurant Drive-Through/Pick-Up and Delivery

The Carson Country Mart includes commercial/retail and restaurant uses, including four restaurants with drive-through capability. The primary noise sources at a typical drive-through consists of the customer order display/speaker and idling vehicles. A composite noise level of 54.8 dBA L_{eq} at a reference distance of 50 feet has been assumed for each drive-through location.¹⁴⁸ It is assumed that the hours of operation for each drive-through would be from 7:00 a.m.

¹⁴⁸ Noise Expert LLC, Noise Analysis for the Proposed McDonald's Restaurant, November 2014.

to 11:00 p.m. **Table IV.E-12, Drive-Through Noise Levels**, shows noise levels associated with drive-through uses and increases in ambient noise at each representative sensitive receptor. Increases in ambient noise are not anticipated during daytime or nighttime hours. Combined site-wide drive-through uses would not increase daytime or nighttime ambient noise by 5 dBA or more at off-site sensitive receptors. Therefore, the 2021 Project would not result any new significant impacts related to restaurant drive-through noise as compared to the 2006 Project or the 2018 Project.

Table IV.E-12
Drive-Through Noise Levels

Receptor	Ambient Noise Level (dBA L _{eq})	Combined Project Noise Level (dBA L _{eq})	Ambient + Project Noise Level (dBA L _{eq})	Increase in Ambient (dBA L _{eq})	Significance Threshold (dBA)	Exceeds Threshold?
Daytime hours (7:00 a.m.–10:00 p.m.)^a						
R1	58.9	0.0 ^b	58.9	0.0	5.0	No
R2	55.2	0.0	55.2	0.0	5.0	No
R3	55.2	0.0	55.2	0.0	5.0	No
R4	55.2	0.0	55.2	0.0	5.0	No
R5	55.2	13.6	55.2	0.0	5.0	No
R6	55.2	17.5	55.2	0.0	5.0	No
R7	55.2	24.2	55.2	0.0	5.0	No
R8	55.2	27.5	55.2	0.0	5.0	No
R9	72.7	13.9	72.7	0.0	5.0	No
Nighttime Hour (10:00 p.m.–11:00 p.m.)^b						
R1	57.4	0.0	57.4	0.0	5.0	No
R2	53.3	0.0	53.3	0.0	5.0	No
R3	53.3	0.0	53.3	0.0	5.0	No
R4	53.3	0.0	53.3	0.0	5.0	No
R5	53.3	13.6	53.3	0.0	5.0	No
R6	53.3	17.5	53.3	0.0	5.0	No
R7	53.3	24.2	53.3	0.0	5.0	No
R8	53.3	27.5	53.3	0.0	5.0	No
R9	71.2	13.9	71.2	0.0	5.0	No

SOURCE: ESA 2021.

^a It is assumed that drive-through locations would be operational between the hours of 7:00 a.m. and 11:00 p.m.

^b Receptors are located at sufficient distance and adequately screened such that drive-through noise would dissipate.

g) Noise Intensive Land Uses

As discussed in the 2018 SEIR, a landfill gas treatment flare station has been constructed and is operational. No additions or alterations to the operations of the treatment flare are proposed and no increases in noise levels generated by the treatment flare are anticipated. Therefore, there is no new significant impact related to the treatment flare. Continued operation of the landfill gas treatment flare station would continue to result in a less than significant impact, and the 2021 Project would not result in any new significant impacts as compared to the 2006 Project or the 2018 Project.

(iii) Composite Noise Level Impacts from 2021 Project Operations

An evaluation of noise from all 2021 Project-related sources (i.e., composite noise level) was conducted to conservatively ascertain the potential maximum Project-related noise level increase that may occur at the noise-sensitive receptor locations included in this analysis. Noise sources considered in the analysis of composite noise include parking-related noise events, mechanical equipment, loading dock/waste collection area noise events, on-site and adjacent roadway automobile and truck travel, and open space-related noise sources.

Table IV.E-13, Operational Noise Impact Summary, shows combined operational noise levels and increases in ambient noise at each representative sensitive receptor. The greatest increases in ambient noise would occur at receptor R7 with increases of approximately 4.1 dBA L_{eq} during daytime hours (7:00 p.m.–10:00 p.m.) and 3.6 dBA L_{eq} between 10:00 p.m. and 11:00 p.m. The greatest increase between 11:00 p.m. and 7:00 a.m. would occur at receptors R6 and R8 with an increase of 3.2 dBA L_{eq} . The composite noise analysis in the 2018 SEIR included only on-site sources. For purposes of a conservative analysis, off-site roadway noise levels for adjacent roadway segments have been included in the composite analysis for the 2021 Project.

Therefore, as with the 2018 Project, composite Project noise levels would not increase daytime or nighttime ambient noise by 5 dBA or more at off-site sensitive receptors, and impacts would remain **less than significant**. The 2021 Project would not result any new significant impacts related to composite on-site operational noise as compared to the 2006 Project or the 2018 Project.

**Table IV.E-13
Operational Noise Impact Summary**

Operation	Noise Levels, dBA L _{eq}								
	R1	R2	R3	R4	R5	R6	R7	R8	R9
Daytime Hours (7:00 a.m.–10:00 p.m.)									
(A) Existing (Ambient) Noise Level^a	58.9	55.2	55.2	55.2	55.2	55.2	55.2	55.2	72.7
<i>Project On-Site Composite Noise Sources</i>									
Mechanical Equipment	50.4	50.4	50.4	50.4	50.5	50.6	50.6	50.7	53.0
Loading Activity	36.0	44.9	43.5	40.8	41.8	47.1	45.2	49.4	54.1
Parking	50.5	46.1	39.4	32.1	30.7	32.2	40.4	44.1	53.5
Circulation	42.7	30.3	23.9	20.9	28.6	31.5	36.5	46.5	48.6
Open Space	16.4	18.3	19.6	22.2	33.8	40.9	55.5	49.5	29.8
Drive-Through	0.0	0.0	0.0	0.0	13.6	17.5	24.2	27.5	13.9
(B) Project Composite Noise Level^b	53.9	52.6	51.5	50.9	51.2	52.6	57.2	55.6	58.8
(C) Ambient Plus Project Composite	60.1	57.1	56.8	56.6	56.6	57.1	59.3	58.4	72.9
Project Increment (C-A)	1.2	1.9	1.6	1.4	1.4	1.9	4.1	3.2	0.2
Significance Threshold	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Exceeds Threshold?	No	No	No	No	No	No	No	No	No
Nighttime Hours (10:00 p.m.–11:00 p.m.)									
(A) Existing (Ambient) Noise Level^a	57.4	53.3	53.3	53.3	53.3	53.3	53.3	53.3	71.2
<i>Project On-Site Composite Noise Sources</i>									
Mechanical Equipment	45.0	45.0	45.0	45.0	45.0	45.0	45.7	45.8	45.0
Loading Activity	36.0	44.9	43.5	40.8	41.6	46.9	41.4	43.6	54.1
Parking	12.8	10.7	14.1	5.7	14.9	11.8	14.1	19.5	16.7
Circulation	40.5	28.3	21.6	18.2	26.0	28.9	33.9	43.7	45.0
Open Space	11.6	13.5	14.9	17.8	26.0	36.2	53.5	45.6	25.0
Drive-Through	0.0	0.0	0.0	0.0	13.6	17.5	24.2	27.5	13.9
(B) Project Composite Noise Level^b	46.7	48.0	47.4	46.4	46.7	49.4	54.4	50.9	55.0
(C) Ambient Plus Project Composite	57.8	54.4	54.3	54.1	54.2	54.8	56.9	55.3	71.3
Project Increment (C-A)	0.4	1.1	1.0	0.8	0.9	1.5	3.6	2.0	0.1
Significance Threshold	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Exceeds Threshold?	No	No	No	No	No	No	No	No	No

**Table IV.E-13
Operational Noise Impact Summary**

Operation	Noise Levels, dBA L _{eq}								
	R1	R2	R3	R4	R5	R6	R7	R8	R9
Nighttime Hours (11:00 p.m.–7:00 a.m.)									
(A) Existing (Ambient) Noise Level^a	54.9	48.8	48.8	48.8	48.8	48.8	48.8	48.8	68.7
<i>Project On-Site Composite Noise Sources</i>									
Mechanical Equipment	45.0	45.0	45.0	45.0	45.0	45.0	45.7	45.8	45.0
Loading Activity	36.0	44.9	43.5	40.8	41.6	46.9	41.4	43.6	54.1
Parking	12.5	10.3	14.0	4.3	14.7	10.5	7.1	6.1	16.4
Circulation	40.5	28.3	21.6	18.2	26.0	28.9	33.9	43.7	45.0
Open Space	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drive-Through	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(B) Project Composite Noise Level^b	46.7	48.0	47.3	46.4	46.7	49.2	47.3	49.3	55.0
(C) Ambient Plus Project Composite	55.5	51.4	51.1	50.8	50.9	52.0	51.1	52.0	68.9
Project Increment (C-A)	0.6	2.6	2.3	2.0	2.1	3.2	2.3	3.2	0.2
Significance Threshold	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Exceeds Threshold?	No	No	No	No	No	No	No	No	No

SOURCE: ESA 2021.

^a Based on ambient noise measurements listed in Table IV.E-1.

^b Noise levels are added logarithmically.

a) Sleep Disturbance

There are several factors to consider with regard to potential sleep disturbance, such as each individual's sensitivity of nighttime noise exposure, an individual's age, and the number of noise events. Non-acoustic factors such as temperature, humidity, and sleep disorders could also affect the quality of an individual's sleep.¹⁴⁹ According to the World Health Organization (WHO), an individual's ability to adapt to a new noise or new sleeping environment is rapid and awakenings are a relatively rare occurrence.¹⁵⁰ The USEPA's *Noise Effects Handbook* states that "continuous or very frequent noise throughout the night, even as high as 95 dB (A-weighted), appears to cause little change in the average duration of sleep stages, since such stages are disturbed more by peaks that vary widely from the background ambient level than by high continuous levels

¹⁴⁹ Basner, M., and S. McGuire, *WHO Environmental Noise Guidelines for the European Region: A Systematic Review on Environmental Noise and Effects on Sleep*, International Journal of Environmental Research and Public Health, 15(519), 2018.
<https://pubmed.ncbi.nlm.nih.gov/29538344/>, accessed June 2021.

¹⁵⁰ World Health Organization, *Night Noise Guidelines for Europe, Executive Summary*, 2009, p. 55.

alone.”¹⁵¹ Single event noise consists of a single acoustic event or instantaneous peaks in noise level such as an aircraft flyover or a sudden release of high pressure. Furthermore, the 2021 Project is located in an urban area and truck travel would occur within an urban region such that the existing traffic, even during nighttime and early morning hours, includes noise from vehicles unrelated to the 2021 Project including urban buses, garbage trucks, delivery trucks, passenger vehicles, and other vehicles. Therefore, the 2021 Project would not generate the type of noise that vary widely from the type of noise generated under existing conditions. Therefore, for the above reasons, it is unlikely that nighttime or early morning noise from 2021 Project operations would cause a substantial sleep disturbance and no significant impacts with respect to sleep disturbance are expected to occur.

(iv) Concurrent Construction and Operation

The development of the 2021 Project would be phase according to planning area. As a result, there is the potential for overlap of construction and operations to occur. According to the 2021 Project construction schedule as shown in Chapter II, *2021 Project Description*, PA3 would complete construction and begin operations in 2024 while PA1 and PA2 are undergoing vertical construction (consisting of building construction, paving, and architectural coating). The operation of PA2 would begin in 2025, while PA1 is undergoing vertical construction. Noise levels associated with vertical construction was analyzed and included in the 2018 SEIR and have been used herein. Because construction is not anticipated during nighttime hours, concurrent construction and operation noise would only occur during daytime hours. Operational noise sources associated with PA3 and PA2 operations have been isolated and summarized in **Table IV.E-14, Concurrent Construction and Operation Noise Levels.**

Concurrent construction and operation noise levels would not increase daytime ambient noise by 5 dBA or more at off-site sensitive receptors. Concurrent construction and operation noise was not analyzed in the 2018 SEIR. However, the 2021 Project would not result any new significant impacts related concurrent construction and operational noise. Impacts would be **less than significant.**

¹⁵¹ U.S. Environmental Protection Agency, *Noise Effects Handbook*, 6. *Sleep Disturbance*, 1981, <http://www.nonoise.org/library/handbook/handbook.htm>, accessed May 2021.

**Table IV.E-14
Concurrent Construction and Operation Noise Levels**

Operation	Noise Levels, dBA L _{eq}								
	R1	R2	R3	R4	R5	R6	R7	R8	R9
PA3 Operational									
(A) Existing (Ambient) Noise Level^a	58.9	55.2	55.2	55.2	55.2	55.2	55.2	55.2	72.7
<i>Project On-Site Noise Sources</i>									
PA1 Vertical Construction ^b	45.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	47.0
PA2 Vertical Construction ^b	30.0	38.0	38.0	38.0	38.0	38.0	38.0	38.0	41.0
PA3 Operations	50.8	51.2	50.9	50.5	50.7	52.3	56.9	54.8	53.3
(B) Concurrent Construction and Operation^c	51.8	51.4	51.1	50.7	51.0	52.5	57.0	54.9	53.3
(C) Ambient Plus Project	59.7	56.7	56.6	56.5	56.6	57.1	59.2	58.1	72.7
Project Increment (C–A)	0.8	1.5	1.4	1.3	1.4	1.9	4.0	2.9	0.0
Significance Threshold	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Exceeds Threshold?	No	No	No	No	No	No	No	No	No
PA2 and PA3 Operational									
(A) Existing (Ambient) Noise Level^a	58.9	55.2	55.2	55.2	55.2	55.2	55.2	55.2	72.7
<i>Project On-Site Noise Sources</i>									
PA1 Vertical Construction ^b	45.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	47.0
PA2 Operations	41.5	41.7	41.2	40.6	40.7	41.2	45.0	47.6	56.8
PA3 Operations	50.8	51.2	50.9	50.5	50.7	52.3	56.9	54.8	51.8
(B) Concurrent Construction and Operation^c	52.2	51.6	51.3	50.9	51.2	52.6	57.2	55.6	58.3
(C) Ambient Plus Project	59.7	56.8	56.7	56.6	56.6	57.1	59.3	58.4	72.9
Project Increment (C–A)	0.8	1.6	1.5	1.4	1.4	1.9	4.1	3.2	0.2
Significance Threshold	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Exceeds Threshold?	No	No	No	No	No	No	No	No	No

SOURCE: ESA 2021.

^a Based on ambient noise measurements listed in Table IV.E-1.

^b 30 dBA reduction taken pursuant to MM E-1 part 1 (reduce all equipment noise levels by 10 dBA) and part 3 (sound barrier achieving a minimum 20 dBA reduction).

^c Noise levels are added logarithmically.

(2) Generate excessive groundborne vibration or groundborne noise levels

(a) Construction

The construction noise analysis evaluates the worst case day of construction activity. While the construction dates and amount of overlap have changed for the 2021 Project as compared to the 2018 Project, it is assumed that the single worst-case day of construction would remain the same because construction techniques and equipment required for the 2021 Project would be similar to what was analyzed in the 2018 SEIR. Therefore, the construction noise and vibration analysis included in the 2018 FEIR (see 2018 SEIR pp. IV.H-17 to IV.H-20 [Unmitigated] and IV.H-37 [Level of Significance after Mitigation] for the construction vibration analysis) remains applicable.

Although the worst-case day of construction activity as analyzed for the 2018 Project would remain relevant for 2021 Project construction, it should be noted that DDC would not be conducted within PA3. As a result, construction vibration levels associated with DDC and concurrent pile driving and DDC activities would be reduced for receptors that are adjacent to PA3. With implementation of Mitigation Measure H-3, vibration velocities associated with DDC and pile driving would continue to result in **less-than-significant** impacts, as concluded in the 2018 SEIR.

(b) Operation

Groundborne vibration in the vicinity of the Project Site would continue to be generated by vehicular travel on the local roadways. The 2021 Project's operations would include an increased number of medium- and heavy-duty trucks as previously contemplated in the 2006 FEIR and the 2018 SEIR. According to the FTA's *Transit Noise and Vibration Impact Assessment*, on-road rubber-tired trucks rarely create vibration levels that exceed 70 vibration decibels (VdB), which is equivalent to 0.003 root-mean-square (RMS).¹⁵² Operation of the 2021 Project upon completion of its construction would not exceed the 0.01 RMS human perceptibility threshold for groundborne vibration during long-term activities established by the Los Angeles County Noise Regulation (LACC Section 12.08.350) at the neighboring sensitive receptors. The level at which vibration results in human perceptibility is lower than the vibration velocities needed to cause structural damage. Therefore, as with the 2018 Project, operational vibration would not be perceptible and would not result in structural damage, and impacts would remain **less than significant**. The 2021 Project would not result any new significant impacts as compared to the 2006 Project and the 2018 Project.

IV.E.6 Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 Mitigation Monitoring and Reporting Program (MMRP). The 2021 Project would implement

¹⁵² FTA, *Transit Noise and Vibration Impact Assessment*, May 2021.

these mitigation measures, either as they were presented in the 2018 SEIR or revised as indicated below.¹⁵³ In addition, this 2021 SEIR proposes the deletion of Mitigation Measures H-2, H-5, and H-7, as described below.

Mitigation Measure H-1: Prior to the issuance of any grading, excavation, haul route, foundation, or building permits, ~~the each~~ Applicant shall provide proof satisfactory to the Building and Safety and ~~Planning Divisions~~ of the Community Development Department that all construction documents require contractors to comply with City of Carson Municipal Code Sections 4101(i) and (j), ~~as may be modified by variance~~, which requires all construction and demolition activities, including pile driving, to occur between 7:00 a.m. and 8:00 p.m. Monday through Saturday and that a noise management plan for compliance and verification has been prepared by a monitor retained by the Applicant. At a minimum, the plan shall include the following requirements:

1. Noise-generating equipment operated at the ~~Property Project Site~~ shall achieve a minimum noise level reduction of 10 dBA lower than the reference noise levels used in this analysis, as listed below, to be verified by submittal of manufacturer specifications, evidence of retrofit (i.e., mufflers, intake silencers, lagging, and/or engine enclosures), or monitoring data. All equipment shall be properly maintained to ensure that no additional noise, due to worn or improperly maintained parts, would be generated.

Equipment Type	Reference Noise Level at 50 Feet (dBA L _{max})	Mitigated Noise Level at 50 Feet (dBA L _{max})
Welder	74	64
Forklift	75	65
Tractor Trailer	76	66
Paver	77	67
Air Compressor	78	68
Loader	79	69
Concrete Mixer Trucks		
Water Trucks	80	70
Rollers		
Trencher		

¹⁵³ As noted in Chapter III, Introduction to the Analysis, of this 2021 SEIR, mitigation measures identified in this 2021 SEIR include relevant 2018 SEIR mitigation measures. As such, the mitigation measure numbering system from the 2018 SEIR was maintained in this 2021 SEIR, even if the section numbering for the 2021 SEIR section is different. In this case, this section number is "E," but mitigation measures are numbered "H."

Equipment Type	Reference Noise Level at 50 Feet (dBA L _{max})	Mitigated Noise Level at 50 Feet (dBA L _{max})
Excavators	81	71
Cranes		
Dozer	82	72
Compactor	83	73
Scraper	84	74
Grader	85	75
Concrete Saw		
Pavement Scarifier	90	80

2. Pile drivers used within 1,500 feet of sensitive receptors shall be equipped with noise control techniques (e.g., use of noise attenuation shields or shrouds) having a minimum quieting factor of 10 dBA, or equivalent measures shall be used to result in a minimum reduction of 10 dBA at the source.
3. Effective continuous temporary sound barriers (at least 8-foot-tall as measured from the grade upon which the noise-producing equipment are operating) equipped with noise blankets rated to achieve sound level reductions of at least 20 dBA shall enclose the active construction work area to block line-of-site between the construction equipment and occupied noise-sensitive receptors. In the alternative, equivalent measures may be used that will achieve sound level reductions of at least 20 dBA, or such lesser fraction thereof required to reach 65 dBA, at the boundary of occupied residential uses.
4. Loading and staging areas must be located on site and away from the most noise-sensitive uses surrounding the site as determined by the Building and Safety and ~~Planning Divisions~~ of the Community Development Department.
5. An approved haul route authorization that avoids noise-sensitive land uses to the maximum extent feasible.
6. A construction relations officer shall be designated to serve as a liaison with residents, and a contact telephone number shall be provided to residents.

Mitigation Measure H-2: A deep dynamic compaction (DDC) Pilot Program was performed in April 2008 by Tetra Tech to observe and review vibration impacts of DDC activities (2018 SEIR p. IV.H-17). Therefore, this mitigation measure has been implemented, and it is removed from this 2021 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. The Applicant, prior to initiating additional DDC activities on a site-wide basis, shall conduct a DDC Pilot Program (Pilot Program). The Pilot Program shall be implemented via the following guidelines:

- ~~Prior to the initiation of the Pilot Program, the Applicant shall locate vibration monitors at the following locations: (1) along the Project's fence line opposite~~

~~the off-site residential uses located to the north (if Development District 3 [DD3] is under vertical construction or constructed at the time DDC activities are initiated), south, and southwest of the Property (i.e., within the Property), and (2) along the far side of the Torrance Lateral Channel and along the north side of Del Amo Boulevard (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) in line with the monitors placed within the Property itself.~~

- ~~• Continuous monitoring shall be conducted on an ongoing basis during the Pilot Program. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City.~~
- ~~• Initial DDC drops shall be limited in weight, height, and/or location dictated by calculations that demonstrate that the potential vibration levels are below the 0.2 inches per second (in/s) PPV threshold limit at the residential side of the Torrance Lateral Channel or the 2.0 in/s PPV threshold limit at DD3 (if DD3 is under vertical construction or constructed at the time DDC activities are initiated).~~
- ~~• Increases in DDC weight, height, and/or location shall occur in small increments, with continuous monitoring to ensure compliance with the 0.2 in/s PPV (residential side of Torrance Lateral Channel) and 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold limits.~~
- ~~• If vibration levels at any time during the Pilot Program exceed the 0.2 in/s PPV (residential side of Torrance Lateral Channel) or 2.0 in/s PPV (if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC activity shall immediately stop, until new drop parameters are established that would reduce the vibration levels to less than the 0.2 in/s PPV or 2.0 in/s PPV threshold levels.~~

Mitigation Measure H-3: Continuous vibration monitoring shall be conducted on an ongoing basis during DDC and pile driving activities. All vibration levels measured by the monitors shall be logged with documentation of the measurements provided to the City. If DDC and/or pile driving vibration levels at any time exceed the 0.2 inch per second (in/s) PPV (at the residential side of Torrance Lateral Channel) or 2.0 in/s PPV (at Development District 3 [DD3] if DD3 is under vertical construction or constructed at the time DDC activities are initiated) threshold levels, DDC and/or pile driving activity shall immediately stop, until modified construction methods are established that would reduce the vibration levels to less than the applicable threshold levels, as defined above.

Mitigation Measure H-4: A construction and construction-related monitor satisfactory to the Community Development Director (or ~~his/her~~ a designee) shall be retained by ~~the each~~ Applicant to document compliance with the mitigation measures. Said Monitor's qualifications, identification, address, and telephone number shall be listed in the contracts and shall be placed in the pertinent files of the Community

Development Department. The Monitor will be required to monitor all construction and construction-related activities on the ~~Property~~ Project Site on a periodic basis; keep all written records, which shall be open for public inspection; and to file monthly reports with the City and appropriate permit granting authorities. In addition:

1. Information shall be provided on a weekly basis regarding construction activities and their duration. A Construction Relations Officer shall be established and funded by the Applicant, and approved by the Community Development Director (or ~~his/her~~ a designee), to act as a liaison with neighbors and residents concerning on-site construction activity. As part of this mitigation measure, the Applicant shall establish a 24-hour telephone construction hotline, which will be staffed between the hours of 8:00 a.m. and 5:00 p.m. on a Monday through Saturday basis throughout the 2021 Project's entire construction period for the purposes of answering questions and resolving disputes with adjacent property owners. The hotline number shall be posted on the ~~Property~~ Project Site.
2. The Applicant shall require in all construction and construction-related contracts and subcontracts, provisions requiring compliance with special environmental conditions included in all relevant entitlement approval actions of the City of Carson. Such provisions shall also include retention of the power to effect prompt corrective action by the Applicant, its representative, or prime contractor, subcontractor, or operator to correct noticed noncompliance.
3. During construction, loading and staging areas must be located on site and away from occupied noise-sensitive uses surrounding the ~~Property~~ Project Site as determined by the ~~Planning Manager~~ Community Development Director.

Mitigation Measure H-5: Mitigation Measure H-5 is no longer required as daytime and nighttime impacts associated with parking lot noise have been analyzed in this 2021 SEIR, and impacts have been found to be less than significant without the incorporation of mitigation. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~All commercial parking lots shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral Channel) unless a minimum 8-foot high wall is provided along the property boundary to limit noise levels associated with parking lot activities.~~

Mitigation Measure H-6: All parking structures shall be located a minimum of 150 feet from an off-site residential structure use located to the south and west (across the Torrance Lateral ~~Channel~~) unless the exterior wall of the parking structure that faces the off-site residential use is a solid wall or provides acoustical louvers (or equivalent noise reduction measures).

Mitigation Measure H-7: Mitigation Measure H-7 is not required as the daytime and nighttime operation, even with the inclusion of trucks on the Project Site, have

been studied in this 2021 SEIR, and impacts have been found to be less than significant without the incorporation of mitigation. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures. ~~During operation of a building (following construction), truck delivery within 250 feet of an off-Property residential use shall not occur between 10:00 p.m. and 7:00 a.m.~~¹⁵⁴

Mitigation Measure H-8: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure H-9: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure H-10: This measure was removed in the 2018 SEIR. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

IV.E.7 Cumulative Project Impacts

All of the cumulative projects identified in Table III-1, *Cumulative Projects*, of this 2021 SEIR have been considered for the purposes of assessing cumulative noise impacts. The potential for noise impacts to occur are specific to the location of each cumulative project, as well as the cumulative traffic on the surrounding roadway network.

(a) Construction Noise

Of the 44 cumulative projects that have been identified within the 2021 Project's study area, there are a number of projects that have not already been built or are currently under construction. Construction of Evolve South Bay (Cumulative Project No. 27) located to the north of Del Amo Boulevard (also referred to as DD3) has been completed. Therefore, it is not possible that Cumulative Project No. 27 would be under construction concurrent with the 2021 Project. Therefore, no cumulative construction impact associated with concurrent construction of Cumulative Project No. 27 and the 2021 Project would occur.

¹⁵⁴ *Mitigation Measures H-2, H-5, and H-7 would not apply to the 2021 Project and have been removed. Mitigation Measure H-2 was previously implemented in April 2008 and is no longer required. Mitigation Measure H-5 is not relevant as daytime and nighttime impacts associated with parking lot noise have been analyzed in this 2021 SEIR and impacts have been found to be less than significant without the incorporation of mitigation; and Mitigation Measure H-7 is not relevant as the daytime and nighttime operation of trucks on the Project Site have been studied in this 2021 SEIR, and impacts have been found to be less than significant without the incorporation of mitigation.*

Cumulative Project No. 35, located at 20601 South Main Street, consists of warehouse and retail uses to the west of sensitive receptors R1 and R2. Cumulative Project No. 5 (also noise-sensitive receptors R7 and R8, identified above), located at 21207 Avalon Boulevard, is adjacent to noise-sensitive receptor R6. Based on the proximity of these cumulative projects to identified noise-sensitive receptors for this 2021 SEIR, sensitive receptors R1 and R2 could be affected by concurrent construction of Cumulative Project No. 35 with the 2021 Project and sensitive receptor R6 could be affected by concurrent construction of Cumulative Project No. 5 with the 2021 Project. As the construction programming (including construction schedule, activities, and equipment) for the cumulative projects are not known, it would be speculative to determine what levels of noise would be associated with cumulative project construction. Noise impacts of construction activities for the 2021 Project and each cumulative project (that has not already been built) would be short-term, limited to the duration of construction and would be localized. In addition, it is anticipated that each of the cumulative projects would have to comply with the local noise ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible, as was also anticipated for the 2018 Project. However, since noise impacts due to construction of the 2021 Project would be significant on its own, as was the case for the 2018 Project, noise impacts due to construction of the 2021 Project in combination with any of the cumulative projects would also be significant and unavoidable even with the implementation of the identified and feasible mitigation measures.

Due to rapid attenuation characteristics of ground-borne vibration, only cumulative projects located adjacent to the same sensitive receptors as the 2021 Project would result in cumulatively considerable vibration impacts. Cumulative Project No. 35, located at 20601 South Main Street, consists of warehouse and retail uses to the west of sensitive receptors R1 and R2. Cumulative Project No. 5 (also noise-sensitive receptors R7 and R8, identified above), located at 21207 Avalon Boulevard, is adjacent to noise-sensitive receptor R6. Receptors R1, R2, and R6 are located across the Torrance Lateral from the Project Site and at sufficient distance for Project vibration to attenuate to less than significant levels (as summarized above). Therefore, concurrent construction of the 2021 Project and cumulative projects would not combine to generate cumulative vibration velocities that would result in human annoyance or building damage.

(b) Long-Term Operations

Each of the 44 cumulative projects that have been identified within the general project vicinity would generate stationary-source and mobile-source noise due to ongoing day-to-day operations. The cumulative projects are of a residential, retail, commercial, or institutional nature and these uses are not typically associated with excessive exterior noise generation. However, each cumulative project would produce traffic volumes that are capable of generating a roadway noise impact. Cumulative traffic volumes from the 2021 Project and the 44 cumulative projects are analyzed by comparing existing traffic conditions to future 2024, 2025, and 2026 plus Project

conditions. Based on the thresholds used in the 2006 FEIR and 2018 SEIR, the 2021 Project would have a significant impact if it causes the ambient noise level to increase by 5 dBA CNEL measured at the Project Site boundary of affected uses within the “normally acceptable” or “conditionally acceptable” category, or by 3 dBA CNEL at the Project Site boundary of affected uses within the “normally unacceptable” or “clearly unacceptable” category (2018 SEIR Table 45 [DEIR p. 422]).

As shown in **Table IV.E-15, Cumulative 2024 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, cumulative traffic noise impacts would occur along Main Street between Lenardo Drive and Torrance Boulevard, with an anticipated increase of 3.6 dBA CNEL; along Del Amo Boulevard between Main Street and Stamps Drive, with an anticipated increase of 3.5 dBA CNEL; and along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard, with an anticipated increase of 10.8 dBA CNEL. These cumulative increases in traffic noise would exceed the threshold of a 5 dBA CNEL increase for affected uses within the “normally acceptable” or “conditionally acceptable” land use compatibility category (Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard) or the 3 dBA CNEL increase for affected uses within the “normally unacceptable” or “clearly unacceptable” land use compatibility category. Therefore, the cumulative impact would be significant.

As shown in Table IV.E-4, the 2021 Project’s contribution to future (2024) traffic noise increase are anticipated to be 0.6 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard; 1.7 dBA CNEL along Del Amo Boulevard between Main Street and Stamps Drive; and 4.3 dBA CNEL along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard. While the incremental project-related increase would be below the thresholds of 5 dBA CNEL for Lenardo Drive between I-405 Freeway southbound ramp and Avalon and 3 dBA CNEL for Main Street between Lenardo Drive and Stamps Drive and Del Amo Boulevard between main Street and Stamps Drive, and on its own would be barely perceptible, under the most conservative approach to determining cumulative noise impacts, any project that contributes to the cumulatively significant impact would be considered cumulatively considerable. Therefore, the 2021 Project would conservatively result in a cumulatively considerable contribution to the significant cumulative impact associated with roadway noise. The 2021 Project’s cumulative impact to roadway noise would be **significant and unavoidable** under future 2024 conditions, and there are no feasible mitigation measures that would reduce this cumulative impact.

**Table IV.E-15
Cumulative 2024 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2024) With Project (PA3 Only)			
Vermont Avenue					
North of Del Amo Blvd	68.1	68.4	0.3	3.0	No
Del Amo Blvd and Carson St	68.6	69.0	0.4	3.0	No
South of Carson St	68.1	68.2	0.1	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	63.8	67.2	3.4	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.4	65.0	0.6	5.0	No
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	69.4	70.9	1.5	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	70.5	71.6	1.1	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	69.6	71.0	1.4	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	70.3	70.1	0.0	5.0	No
Torrance Blvd and Carson St	66.9	66.8	0.0	3.0	No
South of Carson St	66.8	67.3	0.5	3.0	No
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.2	70.9	1.7	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.3	70.3	0.0	5.0	No
Del Amo Blvd and Lenardo Dr	68.8	71.3	2.5	5.0	No
Lenardo Dr and Torrance Blvd	67.9	71.5	3.6	3.0	Yes
Torrance Blvd and 213th St	71.0	71.3	0.3	3.0	No
213th St and Carson St	70.2	70.6	0.4	3.0	No
South of Carson St	68.9	69.3	0.4	3.0	No

**Table IV.E-15
Cumulative 2024 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2024) With Project (PA3 Only)			
Avalon Boulevard					
North of Del Amo Blvd	68.4	68.5	0.1	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	68.7	69.0	0.3	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	68.1	70.0	1.9	5.0	No
I-405 Freeway SB Ramp and 213th St	67.8	69.4	1.6	3.0	No
213th St and Carson St	67.5	68.7	1.2	3.0	No
South of Carson St	66.9	67.5	0.6	3.0	No
Del Amo Boulevard					
West of Vermont Ave	66.9	67.4	0.5	3.0	No
Vermont Ave and Hamilton Ave	69.2	69.8	0.6	3.0	No
Hamilton Ave and Figueroa St	72.3	73.5	1.2	5.0	No
Figueroa St and Main St	72.6	73.4	0.8	5.0	No
Main St and Stamps Dr	69.9	73.4	3.5	3.0	Yes
Stamps Dr and Avalon Blvd	69.7	72.1	2.4	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.4	69.7	0.3	3.0	No
Hamilton Ave and Figueroa St	70.2	70.3	0.1	3.0	No
Figueroa St and Main St	68.3	68.7	0.4	3.0	No
East of Main St	60.2	60.4	0.2	5.0	No
213th Street					
Main St and Avalon Blvd	61.5	61.7	0.2	5.0	No
East of Avalon Blvd	60.0	60.4	0.4	5.0	No

**Table IV.E-15
Cumulative 2024 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2024) With Project (PA3 Only)			
Carson Street					
West of Vermont Ave	67.6	68.3	0.7	5.0	No
Vermont Ave and Figueroa St	67.5	68.0	0.5	5.0	No
Figueroa St and Main St	66.8	67.3	0.5	3.0	No
Main St and Avalon Blvd	66.9	67.5	0.6	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.0	68.5	0.5	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.6	68.1	0.5	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	54.8	65.6	10.8	5.0	Yes

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing existing conditions to future 2024 conditions with development of the 2021 Project (PA3 only).

As shown in **Table IV.E-16, Cumulative 2025 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, cumulative traffic noise impacts would occur along Main Street between Lenardo Drive and Torrance Boulevard, with an anticipated increase of 3.8 dBA CNEL; along Del Amo Boulevard between Main Street and Stamps Drive, with an anticipated increase of 3.8 dBA CNEL; and along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard, with an anticipated increase of 11.0 dBA CNEL. These cumulative increases in traffic noise would exceed the threshold of a 5 dBA CNEL increase for affected uses within the “normally acceptable” or “conditionally acceptable” land use compatibility category (Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard) or the 3 dBA CNEL increase for affected uses within the “normally unacceptable” or “clearly unacceptable” land use compatibility category. Therefore, the cumulative impact would be significant.

**Table IV.E-16
Cumulative 2025 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2025) With Project (PA2 & PA3)			
Vermont Avenue					
North of Del Amo Blvd	68.1	68.4	0.3	3.0	No
Del Amo Blvd and Carson St	68.6	69.0	0.4	3.0	No
South of Carson St	68.1	68.2	0.1	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	63.8	67.3	3.5	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.4	65.1	0.7	5.0	No
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	69.4	70.9	1.5	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	70.5	71.6	1.1	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	69.6	71.1	1.5	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	70.3	70.2	0.0	5.0	No
Torrance Blvd and Carson St	66.9	66.8	0.0	3.0	No
South of Carson St	66.8	67.3	0.5	3.0	No
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.2	70.9	1.7	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.3	70.4	0.1	5.0	No
Del Amo Blvd and Lenardo Dr	68.8	71.4	2.6	5.0	No
Lenardo Dr and Torrance Blvd	67.9	71.7	3.8	3.0	Yes
Torrance Blvd and 213th St	71.0	71.4	0.4	3.0	No
213th St and Carson St	70.2	70.7	0.5	3.0	No
South of Carson St	68.9	69.4	0.5	3.0	No

**Table IV.E-16
Cumulative 2025 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2025) With Project (PA2 & PA3)			
Avalon Boulevard					
North of Del Amo Blvd	68.4	68.5	0.1	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	68.7	69.0	0.3	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	68.1	70.1	2.0	5.0	No
I-405 Freeway SB Ramp and 213th St	67.8	69.5	1.7	3.0	No
213th St and Carson St	67.5	68.8	1.3	3.0	No
South of Carson St	66.9	67.5	0.6	3.0	No
Del Amo Boulevard					
West of Vermont Ave	66.9	67.4	0.5	3.0	No
Vermont Ave and Hamilton Ave	69.2	69.9	0.7	3.0	No
Hamilton Ave and Figueroa St	72.3	73.6	1.3	5.0	No
Figueroa St and Main St	72.6	73.7	1.1	5.0	No
Main St and Stamps Dr	69.9	73.7	3.8	3.0	Yes
Stamps Dr and Avalon Blvd	69.7	72.3	2.6	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.4	69.7	0.3	3.0	No
Hamilton Ave and Figueroa St	70.2	70.4	0.2	3.0	No
Figueroa St and Main St	68.3	68.8	0.5	3.0	No
East of Main St	60.2	60.5	0.3	5.0	No
213th Street					
Main St and Avalon Blvd	61.5	61.7	0.2	5.0	No
East of Avalon Blvd	60.0	60.5	0.5	5.0	No

**Table IV.E-16
Cumulative 2025 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2025) With Project (PA2 & PA3)			
Carson Street					
West of Vermont Ave	67.6	68.4	0.8	5.0	No
Vermont Ave and Figueroa St	67.5	68.1	0.6	5.0	No
Figueroa St and Main St	66.8	67.4	0.6	3.0	No
Main St and Avalon Blvd	66.9	67.5	0.6	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.0	68.6	0.6	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.6	68.1	0.5	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	54.8	65.8	11.0	5.0	Yes

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing existing conditions to future 2025 conditions with development of the 2021 Project (PA2 & PA3).

As shown in Table IV.E-16, the 2021 Project's contribution to future (2025) traffic noise increase are anticipated to be 0.8 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard; 1.9 dBA CNEL along Del Amo Boulevard between Main Street and Stamps Drive; and 4.4 dBA CNEL along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard. While the incremental project-related increase would be below the thresholds of 5 dBA CNEL for Lenardo Drive between I-405 Freeway southbound ramp and Avalon and 3 dBA CNEL for Main Street between Lenardo Drive and Stamps Drive and Del Amo Boulevard between main Street and Stamps Drive, and on its own would be barely perceptible, under the most conservative approach to determining cumulative noise impacts, any project that contributes to the cumulatively significant impact would be considered cumulatively considerable. Therefore, the 2021 Project would conservatively result in a cumulatively considerable contribution to the significant cumulative impact associated with roadway noise. The 2021 Project's cumulative impact to roadway noise would be **significant and unavoidable** under future 2025 conditions, and there are no feasible mitigation measures that would reduce this cumulative impact.

As shown in **Table IV.E-17, Cumulative 2026 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**, cumulative traffic noise impacts would occur along Main Street between Lenardo Drive and Torrance Boulevard, with an anticipated increase of 3.9 dBA CNEL; along Del Amo Boulevard between Main Street and Stamps Drive, with an anticipated increase of 3.9 dBA CNEL; and along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard, with an anticipated increase of 11.1 dBA CNEL. These cumulative increases in traffic noise would exceed the threshold of a 3 dBA CNEL increase for affected uses within the “normally unacceptable” or “clearly unacceptable” land use compatibility. Therefore, the cumulative impact would be significant.

**Table IV.E-17
Cumulative 2026 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2026) With Project			
Vermont Avenue					
North of Del Amo Blvd	68.1	68.4	0.3	3.0	No
Del Amo Blvd and Carson St	68.6	69.1	0.5	3.0	No
South of Carson St	68.1	68.2	0.1	3.0	No
Hamilton Avenue					
Del Amo Blvd and US-101 Freeway SB Ramps	63.8	67.5	3.7	5.0	No
I-110 Freeway SB Ramps and Torrance Blvd	64.4	65.1	0.7	5.0	No
Figueroa Street					
I-405 Freeway NB Off Ramp and I-405 Freeway SB On Ramp	69.4	70.9	1.5	5.0	No
I-405 Freeway SB On Ramp and Del Amo Blvd	70.5	71.6	1.1	5.0	No
Del Amo Blvd and I-110 Freeway NB Ramps	69.6	71.3	1.7	5.0	No
I-110 Freeway NB Ramps and Torrance Blvd	70.3	70.2	0.0	5.0	No
Torrance Blvd and Carson St	66.9	66.8	0.0	3.0	No
South of Carson St	66.8	67.3	0.5	3.0	No

**Table IV.E-17
Cumulative 2026 Roadway Traffic Noise Impacts at Representative Noise-Sensitive
Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2026) With Project			
Main Street					
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	69.2	71.0	1.8	5.0	No
I-405 Freeway SB Ramp and Del Amo Blvd	70.3	70.5	0.2	5.0	No
Del Amo Blvd and Lenardo Dr	68.8	71.7	2.9	5.0	No
Lenardo Dr and Torrance Blvd	67.9	71.8	3.9	3.0	Yes
Torrance Blvd and 213th St	71.0	71.5	0.5	3.0	No
213th St and Carson St	70.2	70.9	0.7	3.0	No
South of Carson St	68.9	69.5	0.6	3.0	No
Avalon Boulevard					
North of Del Amo Blvd	68.4	68.5	0.1	3.0	No
Del Amo Blvd and I-405 Freeway NB Ramp	68.7	69.1	0.4	3.0	No
I-405 Freeway NB Ramp and I-405 Freeway SB Ramp	68.1	70.2	2.1	5.0	No
I-405 Freeway SB Ramp and 213th St	67.8	69.6	1.8	3.0	No
213th St and Carson St	67.5	68.9	1.4	3.0	No
South of Carson St	66.9	67.6	0.7	3.0	No
Del Amo Boulevard					
West of Vermont Ave	66.9	67.5	0.6	3.0	No
Vermont Ave and Hamilton Ave	69.2	70.0	0.8	3.0	No
Hamilton Ave and Figueroa St	72.3	73.7	1.4	5.0	No
Figueroa St and Main St	72.6	73.9	1.3	5.0	No
Main St and Stamps Dr	69.9	73.8	3.9	3.0	Yes
Stamps Dr and Avalon Blvd	69.7	72.4	2.7	3.0	No
Torrance Boulevard					
West of Hamilton Ave	69.4	69.8	0.4	3.0	No
Hamilton Ave and Figueroa St	70.2	70.5	0.3	3.0	No
Figueroa St and Main St	68.3	68.9	0.6	3.0	No
East of Main St	60.2	60.6	0.4	5.0	No

**Table IV.E-17
Cumulative 2026 Roadway Traffic Noise Impacts at Representative Noise-Sensitive Locations**

Roadway Segment	CNEL at 50 Feet from Roadway Right-of-Way (dBA)		Cumulative Increase ^a	Significance Threshold	Exceeds Threshold?
	Existing	Future (2026) With Project			
213th Street					
Main St and Avalon Blvd	61.5	61.7	0.2	5.0	No
East of Avalon Blvd	60.0	60.5	0.5	5.0	No
Carson Street					
West of Vermont Ave	67.6	68.4	0.8	5.0	No
Vermont Ave and Figueroa St	67.5	68.2	0.7	5.0	No
Figueroa St and Main St	66.8	67.5	0.7	3.0	No
Main St and Avalon Blvd	66.9	67.6	0.7	3.0	No
Avalon Blvd and I-405 Freeway SB Ramp	68.0	68.6	0.6	3.0	No
I-405 Freeway SB Ramp and I-405 Freeway NB Ramp	67.6	68.2	0.6	5.0	No
Lenardo Drive					
I-405 Freeway SB Ramp and Avalon Blvd	54.8	65.9	11.1	5.0	Yes

SOURCE: ESA 2021.

NOTES:

Exterior 24-hour CNEL noise levels.

^a Increase relative to traffic noise levels comparing existing conditions to future 2026 conditions with development of the 2021 Project.

As shown in Table IV.E-17, the 2021 Project's contribution to future (2026) traffic noise increase are anticipated to be 0.9 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard; 2.0 dBA CNEL along Del Amo Boulevard between Main Street and Stamps Drive; and 4.5 dBA CNEL along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard. While the incremental project-related increase would be below the thresholds of 5 dBA CNEL for Lenardo Drive between I-405 Freeway southbound ramp and Avalon and 3 dBA CNEL for Main Street between Lenardo Drive and Stamps Drive and Del Amo Boulevard between main Street and Stamps Drive, and on its own would be barely perceptible, under the most conservative approach to determining cumulative noise impacts, any project that contributes to the cumulatively significant impact would be considered cumulatively considerable. Therefore, the 2021 Project would conservatively result in a cumulatively considerable contribution to the significant cumulative impact associated with roadway noise. The 2021 Project's cumulative impact to roadway noise would be **significant and unavoidable** under future 2026 conditions, and there are no feasible mitigation measures that would reduce this cumulative impact.

Noise from stationary sources such as roof-top mechanical equipment and emergency generators would be limited due to Carson Municipal Code provisions. Cumulative Project No. 35 is located across South Main Street from the Project Site and at a sufficient distance from 2021 Project sensitive receptors for any on-site operational noise to attenuate to levels that would not be additive to Project-related noise levels. Cumulative Project No. 5 (also noise-sensitive receptors R7 and R8) is adjacent to the Project Site as well as sensitive receptor R6. However, Cumulative Project No. 5 is a residential use. Other than parking-related noise and HVAC equipment, residential uses are not large generators of on-site operational noise sources. Additionally, on-site operational impacts resulting from operation of the 2021 Project would be less than significant. For the reasons stated, on-site noise produced by any cumulative project would not be additive to Project-related noise levels. As such, stationary-source noise impacts attributable to cumulative development would remain less than significant for the 2021 Project.

Due to rapid attenuation characteristics of ground-borne vibration, only cumulative projects located adjacent to the same sensitive receptors would result in cumulatively considerable vibration impacts. Cumulative Project No. 35, located at 20601 South Main Street, consists of warehouse and retail uses to the west of sensitive receptors R1 and R2. Cumulative Project No. 5 (also noise-sensitive receptors R7 and R8, identified above), located at 21207 Avalon Boulevard, is adjacent to noise-sensitive receptor R6. Receptors R1, R2, and R6 are located across the Torrance Lateral from the Project Site and at sufficient distance for Project vibration to attenuate to less than significant levels (as summarized above). As discussed above, Project operations would not result in human annoyance or building damage impacts. Although operation of Cumulative Project No. 35 would involve heavy truck travel on the same roadways as the 2021 Project, the frequency of truck events would not result on increased vibration velocities along the travel route. Cumulative Project No. 5 consists of residential uses and is not anticipated to generate vibration during operations. Therefore, concurrent operation of the 2021 Project and cumulative projects would not combine to generate cumulative vibration velocities that would result in human annoyance or building damage.

IV.E.8 Level of Significance after Mitigation

With respect to noise, construction, concurrent construction and operations, and composite operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as revised in this 2021 SEIR, all impacts related to construction noise would either remain less than significant or would remain significant and unavoidable for noise impacts related to construction-related deep DDC and pile driving, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

There is no feasible mitigation to mitigate or avoid the project-related significant and unavoidable construction noise impacts identified in the 2006 FEIR and 2018 SEIR. With regard to construction vibration impacts, all impacts would remain less than significant with implementation of identified mitigation measures. No new construction-related noise impacts that have not been disclosed in the 2006 FEIR and 2018 SEIR would result from construction of the 2021 Project.

With implementation of the identified mitigation measures, as revised in this 2021 SEIR, all impacts related to composite operational noise would be less than significant, as concluded in the 2006 FEIR and 2018 SEIR. Project operational traffic would result in less than significant impacts in traffic noise levels along all studied roadway segments, as concluded in the 2018 SEIR. No new operational impacts that have not been disclosed in the 2006 FEIR and 2018 SEIR would result from operation of the 2021 Project. There would be significant and unavoidable cumulative traffic noise increases along three roadway segments. Therefore, the 2021 Project would result in new significant noise impacts related to traffic noise.

IV.F BIOLOGICAL RESOURCES

IV.F.1 Introduction

This section addresses the potential impacts of the proposed project on biological resources. The section includes a description of the environmental setting to establish baseline conditions for biological resources; a summary of the regulations related to biological resources; and an evaluation of the 2021 Project's potential effects on biological resources.

Biological Resources were scoped out in the 2005 Initial Study, which preceded and informed the 2006 FEIR and 2018 SEIR. However, since the Notice of Preparation (NOP) was issued for the 2018 SEIR, there has been a change in conditions on the Project Site, as described further in Chapter II, *2021 Project Description*, of this 2021 SEIR. Of concern to biological resources include the creation of detention and retention basins and grading that occurred as a result of ongoing remediation activities; as a result, the lead agency determined to include a comprehensive analysis of potential impacts to biological resources under this 2021 SEIR.

This section also presents the results of further review and evaluation of particular biological resources in response to comments received from the California Department of Fish and Wildlife (CDFW) on the NOP. CDFW emphasized the need to consider various biological resources (e.g., jurisdictional waters, nesting birds, and use of non-native plants in landscaping) and reiterated guidance regarding appropriate content and details related to biological evaluations under CEQA. In particular, CDFW identified references to occurrences of burrowing owl in the Project vicinity and requested careful consideration of potential impacts of the 2021 Project to such species.

IV.F.2 Existing Conditions

a. Biological Data Sources

The Project Site was evaluated for its potential to support special-status species that may occur or are expected to occur in the region. ESA conducted a review of pertinent literature and online database searches for special-status species information and reviewed topographic mapping and recent aerial photography. The desktop review of databases, performed prior to field studies, included the National Wetlands Inventory, the California Natural Diversity Database (CNDDDB), and the California Native Plant Society Online Inventory of Rare and Endangered Plants, to determine if any aquatic resources, special-status plants, or special-status wildlife species have been reported on the Project Site or in the immediate project vicinity. The database reviews informed subsequent field surveys. Based on comments received from CDFW in its May 12,

2021, comment letter on the NOP, records of relevant avian sightings reported on eBird¹⁵⁵ within the last 10 years in the local vicinity were also reviewed.

ESA conducted biological reconnaissance surveys in July 2020 and April 2021 for the 2021 Project. The surveys consisted of conducting a general assessment, on foot and by vehicle, to determine if the Project Site and immediately adjacent areas have the potential to support any special-status plant or wildlife species, sensitive natural communities as defined by CDFW, or contain any jurisdictional features. The biologists documented general conditions, the vegetation present, and any wildlife observed during the survey, as well as the presence of any aquatic features. Biological resources observations were mapped directly in the field using Collector for ArcGIS and representative photographs were taken. In addition to general surveys, focused surveys for burrowing owl (*Athene cunicularia*), including three full sweeps of the Project Site, were completed on July 14, 2021, and were conducted in accordance with the standard CDFW protocols as described in the Staff Report on Burrowing Owl Mitigation.¹⁵⁶ The survey protocols require three survey visits, at least three weeks apart. The first complete sweep of the site was conducted on May 26 and June 2, 2021; the second sweep was conducted on June 18 and June 22, 2021; and the third sweep was conducted on July 13 and July 14, 2021.

The Biological Resources Technical Memorandum, included as Appendix F1, provides the results of the database review and biological surveys and includes a compendium of wildlife observed and a set of representative photographs. The results of the focused surveys as they relate to the burrowing owl are provided in Appendix F2.

b. Regional Environmental Setting

The Project Site is surrounded by a variety of land uses, as illustrated by Figure II-2, Existing On-Site and Off-Site Land Uses, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR. East of the San Diego (Interstate 405 [I-405] Freeway, land uses include neighborhood and regional retail, including the SouthBay Pavilion at Carson. To the north and east of the 157-Acre Site are the Porsche Experience Center, the Evolve South Bay residential development, and the Victoria Golf Course, respectively. To the south and west of the 2021 Project are residential areas, consisting of one-story and two-story detached residences, mobile homes, and townhomes are located to the south, west, and north. The residences are separated from the 157-Acre Site by the Torrance Lateral Flood Control Channel (Torrance Lateral), a concrete-lined drainage channel that parallels the southern and western borders of the 157-Acre Site, which is approximately 75 feet in width. To the west of the 157-Acre Site, extending away from the 157-Acre Site on Torrance and Del Amo Boulevards, are commercial and light industrial uses.

¹⁵⁵ eBird is an online database of bird observations by researchers, amateur naturalists, and citizen scientists: eBird.org.

¹⁵⁶ California Department of Fish and Wildlife, Staff Report on Burrowing Owl Mitigation, March 7, 2012.

Further north, on the west side of Main Street, are light industrial uses. Dignity Health Sports Park and California State University, Dominguez Hills are located northeast of the 157-Acre Site.

c. Project Site Environmental Setting

The 157-Acre Site is located in a highly urbanized area and has been subjected to intensive past land uses and recent disturbance. The Project Site was used as a landfill site between 1959 and 1965, prior to the incorporation of the City of Carson, for the deposition of waste/refuse from areas throughout Los Angeles County. Waste received at the landfill included organic wastes, such as solvents, oils, and sludges, as well as heavy metals, paint sludges, and inorganic salts. As a result of the deposition of these materials, hazardous substances detected in subsurface soil and groundwater on the 157-Acre Site consist of volatile organic compounds (VOCs), heavy metals, and petroleum hydrocarbons, and therefore, the 157-Acre Site is listed by the Department of Toxic Substances Control (DTSC) as a hazardous substances release site. Subsequent to use of the site as a landfill, there have been remediation activities and grading and contouring that occurred in approximately 2009 in preparation for the previously approved 2006 development proposal pursuant to the Remedial Action Plan (RAP), which resulted in large amounts of dirt and landfill cap materials that have been stockpiled on site. As a result, the Project Site is highly disturbed and does not exhibit any naturally occurring habitat or any areas dominated by native vegetation, or support special status biological resources. The Project Site presently contains bare ground, with a number of piles of crushed concrete debris, stockpiled landfill waste, several detention and retention ponds, a landfill gas collection and control system, and a groundwater extraction and treatment facility.

There are no natural plant communities remaining on the Project Site, and where vegetation occurs, it consists of non-native common weeds and annual grasses in areas that have not been more recently graded. Dominant grass species noted on site include slender wild oat (*Avena fatua*), canary grass (*Phalaris* sp.), and red brome (*Bromus madritensis rubens*) along with various common ruderal (weedy) herbs such as Russian thistle (*Salsola tragus*), cheeseweed (*Malva parviflora*), bristly ox-tongue (*Helminthotheca echioides*), prickly lettuce (*Lactuca serriola*), and spotted spurge (*Euphorbia maculata*).

In addition, as a result of ongoing remediation activities, the Project Site contains several artificial detention/retention basins and roadside drainage ditches. The largest of the basins occupy several acres in area. These features frequently hold water, but are periodically maintained in compliance with the National Pollutant Discharges Elimination System (NPDES) Construction General Permit and lack any permanent vegetation that provides biological resource value. Two of the three basins have a geomembrane liner, which prevents the establishment of any vegetation, and the third basin occasionally contains low-growing, non-

native vegetation. A description of the remediation activities that have occurred on the 157-Acre Site is described in Section II.F, *Remediation Activities*, of this 2021 SEIR.

The northeast side of the Project Site lies adjacent to I-405 Freeway, and the concrete-lined Dominguez Channel flows along the other side of that freeway from the Project Site. The concrete-lined Torrance Lateral flows along the southwestern and south sides of the Project Site into the Dominguez Channel under the I-405 Freeway. The basins hold some ponded water although some were dry or nearly dry during surveys. There are no trees on the Project Site. A few mature eucalyptus trees (*Eucalyptus* sp.) and laurel sumac bushes (*Malosma laurina*) exist between I-405 Freeway and the eastern boundary of the Project Site.

The presence of standing water in the retention basins on site attracts a variety of wading birds, several ducks, and some shorebirds (see below), some of which may visit these areas during migration. The artificial basins on the Project Site are not natural features and are not categorized as waters, wetlands, streams, or lakes, and, as such, they do not fall under the regulatory jurisdiction of any state or federal agencies regulating “waters” (as such term is defined in the Clean Water Act [CWA]), such as waters of the United States, pursuant to CWA Section 404, or streams and lakes, pursuant to California Fish and Game Code Section 1600 et al.

(1) Common Wildlife

The Project Site is entirely ruderal (weedy) and disturbed and contains no natural plant communities. However, the presence of water in the basins and the large unused areas that are not occupied by structures or pavement offer some habitat for urban-adapted common wildlife. Observations of particular species during surveys are indicated on **Figure IV.F-1, Biological Observations on the Project Site**. Some avian species, such as red-tailed hawk (*Buteo jamaicensis*), northern rough-winged swallow (*Stelgidopteryx serripennis*), American crow (*Corvus brachyrhynchos*), and non-native European starling (*Sturnus vulgaris*), were observed foraging over the Project Site. Some other observed avian species are attracted to the surface water and wet soil conditions associated with the basins on site, including mallard (*Anas platyrhynchos*), ruddy duck (*Oxyura jamaicensis*), American avocet (*Recurvirostra americana*), and black necked stilt (*Himantopus mexicanus*). Several other common birds were noted, such as Anna’s hummingbird (*Calypte anna*), killdeer (*Charadrius vociferus*), northern mockingbird (*Mimus polyglottos*), black phoebe (*Sayornis nigricans*), and house finch (*Haemorhous mexicanus*). During surveys conducted in both 2020 and 2021, a family group of coyote (*Canis latrans*) was observed and at least one den was noted near the north end of the Project Site.

The Biological Resources Technical Memorandum, provided in Appendix F1, of this 2021 SEIR, includes a compendium listing all wildlife observed during surveys, as well as a set of representative photographs of the Project Site.



SOURCE: Nearmap, 2020; ESA, 2020.

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Figure IV.F-1
Biological Observations on the Project Site



(2) Special-Status Biological Resources

Special-status biological resources include vegetation communities that are unique, of relatively limited distribution, or of particular value to wildlife, as well as plant and wildlife species that have been given special recognition by federal or state agencies or are included in regional conservation plans due to limited, declining, or threatened populations. The determination of biological resources as special-status is based on listing status and/or rankings provided by federal, state, and local agencies (e.g., State or federally listed as Endangered or Threatened, or designation as a species of special concern).

Historic records of special-status plants in the general area pre-date modern site uses or occur at some distance from the subject property. The Project Site, which was a former landfill, was completely graded and denuded of all vegetation in 2009. Existing vegetation is entirely ruderal (weedy) and disturbed. Thus, there is no reasonable potential for special-status plants to occur at the Project Site.

ESA also considered the potential for 79 special-status wildlife species to occur on site and/or be subject to adverse impacts associated with project implementation. The Project Site's urban location and isolation from natural habitat areas in the region, as well as the prior and current level of activity and disturbance and the lack of native vegetation or otherwise suitable habitats, lead to the determination that only very few of the species considered may have even a low or moderate potential to occur. Among these few species that may have some potential to occur are only avian species that may occasionally or rarely forage over or flyover the Project Site during migration. None of the special-status avian or bat species considered were determined to have a moderate to high potential to nest or breed on site.

However, it is difficult to eliminate the possibility that any of the bird species considered might rarely attempt to nest somewhere on site. Among the few species that it is more difficult to rule out entirely, burrowing owl (*Athene cunicularia*) or northern harrier (*Circus hudsonius*), both of which are California Species of Special Concern, could have a low to very low potential to nest on the property. No individual harriers or burrowing owl were observed during general surveys, and the potential for either species to occur in this disturbed urban setting is very low as these species prefer more open spaces and less urban areas with low levels of human and equipment activity. However, in a letter responding to the NOP for this 2021 SEIR, dated May 12, 2021, CDFW noted that burrowing owl sightings were reported in eBird¹⁵⁷ at the Dominguez Hills campus of California State University, located less than 2 miles northeast from the Project Site on the opposite side of the I-405 Freeway. Several observers reported this species presence on the campus in an unspecified location, but only during the winter months in 2017, 2018, and

¹⁵⁷ eBird is an online database of bird observations by researchers, amateur naturalists, and citizen scientists: eBird.org.

2019, which strongly suggests that this species may not have been breeding at the campus, but only overwintering. The nearest reported nesting sites for burrowing owl are at the wetlands at the Seal Beach National Wildlife Refuge (12 miles to the southeast) and at Ballona Wetlands State Ecological Reserve south of Marina Del Rey (12 miles to the northwest). In recognition of CDFW's interest in confirming presence or absence of burrowing owl, focused surveys were conducted in 2021 that included three full survey sweeps of the Project Site at least three weeks apart, per standard CDFW protocol. The results of the focused surveys are provided in Appendix F2 of this 2021 SEIR. All surveys were negative, and no individual burrowing owls or evidence of nesting were observed. Thus, while it may be possible that special-status birds could nest on site, the likelihood of such occurrence is considered low because the site is isolated and surrounded by urban development and because of the level of historic and ongoing disturbance. Also, the documented presence of a family group of coyotes makes the Project Site particularly dangerous for burrowing owl to reside.

(3) Jurisdictional Waters and Wetlands

Jurisdictional wetlands and waters are subject to the regulatory authority of the U.S. Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), and CDFW. Jurisdictional waters include rivers, streams, creeks, ponds, and lakes. Jurisdictional wetlands are typically areas that are inundated or saturated either periodically or permanently, and often include features such as marshes, mudflats, swamps, and vernal pools.

There are no jurisdictional waters or wetlands on the Project Site. The detention and retention basins and ditches on the Project Site are not jurisdictional features as defined by either state or federal regulations (CWA Section 404 or California Fish and Game Code Section 1600 et seq., both of which are described below).

The Torrance Lateral is a concrete-lined channel that conveys runoff from off-site residential, commercial, and public roadways to the west and south of the Project Site. This channelized flood-control feature also receives storm runoff from the Project Site via existing connecting drains. As a Section 303(d) impaired water body, the Torrance Lateral meets state regulatory jurisdictional criteria as "Waters of the State" and federal criteria for "Waters of the U.S." This feature is located outside of the Project Site and is separated from the Project Site by chain-link fencing. In 2009, the City of Carson and the County of Los Angeles approved a Hydrology Report and Standard Urban Stormwater Mitigation Plan (SUSMP) drafted for the 2006 Project. Based on that approved plan, a portion of the backbone storm drain and the hydrodynamic separators specified in the plan were constructed. The 2006 Project was then delayed for several years. The 2021 Project is maintaining the initial intent of the 2006 Project, and the vertical Developer intends to fully implement the approved SUSMP, which would protect the water quality of the Torrance Lateral. The approved plan specifies the use of Vortechs units (hydrodynamic separators) at the discharge points, Filterra units along the backbone street, and

Bioclean filter inserts in catch basins or discharge pipes. Implementation of the SUSMP along, with installation and maintenance of best management practices (BMPs) as required by the current Stormwater Pollution Prevention Plan (SWPPP) and any future SWPPP or amendments needed during the construction phase (in compliance with Construction Stormwater General Permits 2009-0009-DWQ issued by the State Water Board), will avoid or minimize deleterious discharge of materials to the Torrance Lateral from the Project Site. The 2021 Project will also comply with the MS4 permit requirements through implementation of the 2009 SUSMP.

(4) Wildlife Movement Corridors

Effective wildlife movement is essential for dispersal, genetic exchange, migration, foraging, and breeding. Wildlife movement corridors or habitat linkages are linear habitat features that connect blocks of habitat that are otherwise disconnected. Wildlife movement corridors are generally used by terrestrial animals, although they may also be important for aquatic species, avian dispersal, and as avenues for genetic exchange in plants. On a regional scale, movement corridors can include bird flyways, such as wetland areas that provide essential habitat to be used as stopovers during migration. Terrestrial movement corridors are typically associated with ridgelines, valleys, rivers, and creeks.

The Project Site is surrounded by urban development and does not constitute part of any movement corridor for terrestrial wildlife. The detention/retention basins present on the Project Site are likely to be used occasionally by some migrating birds, but these basins do not represent an important or high-quality resource along the Pacific Flyway for migratory birds. Migrating birds are more likely to stop briefly during migration to forage and rest at natural areas in the region where food resources are more plentiful. There are other waterways and natural and semi-natural wetlands and ponds in the region that provide much better resources for migratory birds, such as open space areas at Whittier Narrows, the Ballona wetlands, Los Alamitos and Bolsa Chica wetlands, or any number of parks, ponds, or reservoirs with natural vegetation and water bodies. Therefore, the Project Site is not considered to provide for an important resource for migratory birds.

IV.F.3 Regulatory Framework

a. Federal

(1) Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) generally prohibits the killing, possessing, or trading of migratory birds, bird parts, eggs, and nests, except as provided by the statute. The MBTA authorizes the Secretary of the Interior to regulate the taking of migratory birds. It further

provides that it is unlawful, except as permitted by regulations, “to pursue, take, or kill any migratory bird, or any part, nest or egg of any such bird”¹⁵⁸

The MBTA, first enacted in 1916, prohibits any person, unless permitted by regulations, to “pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry, or cause to be carried by any means whatever, receive for shipment, transportation or carriage, or export, at any time, or in any manner, any migratory bird, included in the terms of this Convention . . . for the protection of migratory birds . . . or any part, nest, or egg of any such bird”.¹⁵⁹

(2) Fish and Wildlife Conservation Act

The Fish and Wildlife Conservation Act declares that fish and wildlife are of ecological, educational, aesthetic, cultural, recreational, economic, and scientific value to the United States. The purposes of this Act are to encourage all federal departments and agencies to use their statutory and administrative authority to the maximum extent practicable and consistent with each agency’s statutory responsibilities and to conserve, and to promote conservation of, nongame fish and wildlife and their habitats. Another purpose of the Fish and Wildlife Conservation Act is to provide financial and technical assistance to the states for the development and implementation of conservation plans and programs for nongame fish and wildlife.

(3) Clean Water Act

(a) Section 404 and Wetlands

In accordance with federal CWA Section 404, USACE regulates discharge of dredged or fill material into waters of the United States. Waters of the United States and their lateral limits are defined in CFR Title 33, Part 328.3(a), to include navigable waters of the United States, interstate waters, all other waters subject to the ebb and flow of the tide, and all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Waters of the United States are often categorized as “jurisdictional wetlands” (i.e., wetlands over which USACE exercises jurisdiction under Section 404) and “other waters of the United States” when habitat values and characteristics are being described. Fill is defined as any material that replaces any portion of a water of the United States with dry land or that changes the bottom elevation of any portion of a water of the United States. Any activity resulting in the placement of dredged or fill material within waters of the United States requires a permit from USACE.

¹⁵⁸ United States Code (USC), Title 16, Chapter 7, Subchapter II (Migratory Bird Treaty), Section 703.

¹⁵⁹ 16 USC 703.

Wetlands are a subset of “waters of the United States” and receive protection under CWA Section 404. Wetlands are defined by the federal government as those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.¹⁶⁰

b. State

(1) Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. Under the Porter-Cologne Water Quality Control Act, RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of RWQCB, which may be issued in addition to a water quality certification or waiver under CWA Section 401. RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. RWQCB typically requires compensatory mitigation for impacts to wetlands and/or waters of the state.

(2) California Fish and Game Code Section 1600 et seq.

CDFW regulates activities that would interfere with the natural flow of, or substantially alter, a channel, bed, or bank of a lake, river, or stream. These activities are regulated under California Fish and Game Code Sections 1600–1616. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do the following without first notifying CDFW: substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Requirements to protect the integrity of biological resources and water quality are often conditions of streambed alteration agreements. Requirements may include avoidance or minimization of the use of heavy equipment, limitations on work periods to avoid impacts on wildlife and fisheries resources, and measures to restore degraded areas or compensate for permanent habitat losses. A Streambed Alteration Agreement may be required by CDFW for construction activities that could result in an accidental release into a jurisdictional area.

A stream is defined as a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes

¹⁶⁰ Code of Federal Regulations, Title 33, Chapter II, Part 328 (Definitions of Waters of the United States), Section 328.3(c)(16) (Wetlands).

watercourses with a surface or subsurface flow that supports or has supported riparian vegetation. CDFW's jurisdiction within altered or artificial waterways is based on the value of those waterways to fish and wildlife. A CDFW streambed alteration agreement must be obtained for any project that would result in an impact on a river, stream, or lake.

Both state and federal wetland laws require that the biological and hydrological functions, which are lost when a wetland or water is altered or filled, be replaced as part of the respective permit processes for a proposed project. Compensatory actions that may be taken by a project proponent/agency include replacement of lost wetland acreage, usually in amounts substantially greater than the amount lost.

(3) California Fish and Game Code Section 3503

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird species. Section 3503.5 specifically states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders Falconiformes and Strigiformes), including their nests or eggs. Typical violations of these codes include destruction of active nests resulting from removal of vegetation in which the nests are located. Violation of Section 3503.5 could also include failure of active raptor nests resulting from disturbance of nesting pairs by nearby project construction. This statute does not provide for the issuance of any type of incidental take permit.

(4) California Environmental Quality Act Guidelines, Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the federal Endangered Species Act and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the CEQA Guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either the United States Fish and Wildlife Service (USFWS) or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed by the CNDDDB as sensitive are considered by CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts. The Carson General Plan (2004) identifies no natural

communities or other significant habitat resources associated with the Project Site in the Open Space and Conservation Element.

c. Local

The City of Carson tree ordinance is intended to, among other things, preserve and protect the parkway trees of the City that are of aesthetic importance and provide for the replacement of trees in order to maintain the community's natural environment. Trees are an important natural resource, and it is essential to the public peace, health, and welfare that such trees be protected from random removal, trimming, or damage.¹⁶¹

IV.F.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to biological resources are considered significant if the 2021 Project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

¹⁶¹ *City of Carson, Carson Municipal Code Article III (Public Safety), Chapter 9 (City Tree Preservation and Protection), Section 3900 (Purpose), Ord. 07-1397, § 1; Ord. 12-1487, § 1.*

IV.F.5 Project Impacts

a. Methodology

The analysis below¹⁶² examines the potential impacts to plant and wildlife resources that may occur as a result of implementation of the 2021 Project. The database search results, literature review, and survey results identifying biological resources provide sufficient information to evaluate potential impacts to regulated and/or significant biological resources that may result from implementing the 2021 Project; these results provide the basis for recommending measures to avoid, minimize, or mitigate potential effects.

b. Project Characteristics and Project Design Features

The 2021 Project does not include any project characteristics or propose any project design features that would serve to reduce impacts to biological resources.

c. Analysis of Project Impacts

(1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

The 2021 Project will change the Project Site from its current state to a developed, urban land use. Most wildlife species that use the Project Site are adapted to living in an urban/suburban environment. Given the ambient noise and existing uses on and off site, wildlife on the Project Site or in the vicinity are likely habituated to high levels of disturbance. Project Site uses would be limited during construction; however, the common wildlife species could find refuge in the surrounding urban/suburban during construction. The post-project conditions would be similar to the surrounding and established urban/suburban setting. The planting of ornamental trees throughout the Project Site would improve the habitat for some common wildlife by providing nest sites and food sources.

(a) Special-Status Plants

No special-status plants and no native plant communities were observed on site. Although various special-status plants have been historically recorded in the region, none are considered to have the potential to occur on the Project Site due to the Project Site's history for landfill and remediation uses, including evidence that the Project Site was completely graded a little more than 10 years ago. The study area is not within any USWFS-designated Critical Habitat for any

¹⁶² Analyses performed by S. Holbrook, Principal Ecologist of ESA.

special-status plant or wildlife species. **No impact** related to a substantial adverse effect on any plant species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations by CDFW or USFWS would occur.

(b) Special-Status Wildlife

No special-status wildlife species were observed during surveys and none have been reported in recent years. Due to recent and historic disturbance and the lack of natural plant communities or trees, only a few special-status wildlife species were determined to have even a low potential to occur, and most of these are avian species would only occasionally or rarely forage over or fly over the Project Site during migration. Only two special-status bird species, northern harrier and burrowing owl, were deemed to have a low to very low potential to forage or breed on the Project Site. No individual harriers or burrowing owl were observed during general surveys in April 2020 and April 2021, or during the May 26, June 2, June 18, June 22, July 13, or July 14, 2021, focused burrowing owl surveys. The potential for either species to occur in this disturbed urban setting, other than as occasional foragers or flyovers, is considered to be very low as these species prefer ample open spaces and less urban areas with low levels of human and equipment activity. As noted previously, the Project Site, historically used as a landfill, has been highly disturbed in the past and is currently subject to ongoing disturbance by vehicles, equipment, and personnel engaged in various activities on the Project Site. It is also completely surrounded by urban development. While it may be possible that special-status birds could nest on site, the likelihood of such occurrence is considered low because the Project Site is isolated and surrounded by urban development and because of the level of historic and ongoing disturbance. Also, the documented presence of a family group of coyotes makes the site particularly dangerous for burrowing owl to reside and very unlikely that any would stay for any substantial length of time.

Therefore, a **less-than-significant impact** related to a substantial adverse effect on any wildlife species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations by CDFW or USFWS would occur.

With respect to the burrowing owl, while no mitigation is required given the negative results of the protocol-level surveys, which included six separate site visits, rather than three, as well as the poor condition and low suitability of the habitat, Mitigation Measure K-1 would further ensure a less-than-significant impact by conducting preconstruction surveys for sensitive nesting birds (i.e., the burrowing owl).

(2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

No riparian habitat or sensitive natural communities are present on the Project Site, and no features on the Project Site are subject to State or federal regulatory jurisdiction. Also, the 2021 Project would not require any modification to storm drains or other structures that would affect the Torrance Lateral, which occurs outside the Project Site boundary but which will continue to receive runoff from the site as it currently does. Furthermore, the 2021 Project would continue to be subject to the SUSMP that was approved by the City of Carson and the County of Los Angeles in 2009. The 2009 SUSMP specified the use of Vortechs units (hydrodynamic separators) at the discharge points, Filterra units along the backbone street, and Bioclean filter inserts in catch basins or discharge pipes. Thus, the 2021 Project would not result in any additional discharge of material or pollutants to the Torrance Lateral as compared to the 2018 Project. Therefore, **no impact** would occur on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS.

(3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means

No wetlands or “waters” subject to state or federal regulatory jurisdiction, such as waters of the United States, pursuant to CWA Section 404, or streams or lakes, pursuant to California Fish and Game Code Section 1600 et al., occur on the Project Site. The retention and detention basins within the Project Site are not regulated resources and there are no marshes, vernal pools, or coastal habitats present. The Project Site does not contain any resources that would be regulated under the CWA or California Fish and Game Code Section 1600 et al., and there are no potential off-site impacts that could be regulated under the CWA or California Fish and Game Code Section 1600 et al. Therefore, **no impact** would occur with respect to a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool coastal) through direct removal, filling, hydrological interruption, or other means for on-site resources.

The Torrance Lateral is located outside of the Project Site, to the west and south, and is separated from the Project Site by chain-link fencing; however, as a Section 303(d) impaired water body¹⁶³, the Torrance Lateral meets State regulatory jurisdictional criteria as “Waters of the State” and federal criteria for “Waters of the U.S.” As previously discussed, stormwater runoff from the Project Site to the Torrance Lateral would be regulated during construction and post-

¹⁶³ *State Water Resources Control Board, 2014 and 2016 California Integrated Report (Clean Water Act Section 303(d) List And 305(b) Report), https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml, accessed August 4, 2021.*

construction activities through various regulatory controls, including the preparation of an SWPPP as required for the Carson General Plan for construction activities and BMPs provided in the SUSMP for post-construction activities. Therefore, a **less-than-significant impact** would occur with respect to a substantial adverse effect on state or federally protected wetlands (including but not limited to marsh, vernal pool coastal) through direct removal, filling, hydrological interruption, or other means for on-site resources for off-site resources.

(4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites

The detention/retention basins present on the Project Site are likely to be used occasionally by some migrating birds, but these basins do not represent an important or high-quality resource along the Pacific Flyway for migratory birds and also do not offer potential nursery sites for any native wildlife (e.g., rookeries). However, as noted previously, although the Project Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, such areas may be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. Some bird species may also nest on existing structures or in construction material and equipment. As discussed above with regard to legal protection for nesting birds, even common native and migratory species and their nests and eggs are protected from unnecessary destruction during breeding.

The detention/retention basins do not support any fish. They offer no natural habitat and very limited food resources. As such, although the presence of water may attract birds, migrating birds are more likely to stop briefly during migration to forage and rest at natural areas in the region where food resources are more plentiful. There are other waterways and natural and semi-natural wetlands and ponds in the region that provide much better resources for migratory birds, such as open space areas at Whittier Narrows, the Ballona wetlands, Los Alamitos and Bolsa Chica wetlands, or any number of parks, ponds or reservoirs with natural vegetation and water bodies. Therefore, the Project Site is not considered to provide an important resource for migratory birds. In addition, as it is surrounded by urban development with no link to natural open space areas, the Project Site is not a part of a movement corridor or landscape linkage for terrestrial wildlife.

However, California Fish and Game Code Section 3503 protects the active nests and eggs of all native bird species, except certain game birds, and the federal Migratory Bird Treaty Act (16 USC 703–711) makes it unlawful to take or kill individuals of most native and migratory bird species found in the United States. Therefore, Mitigation Measure K-1 would further ensure a less-than-significant impact by conducting preconstruction surveys for common nesting birds, which are not anticipated to be present based on the many site visits conducted as part of general

biological surveys and focused surveys for the burrowing owl. Impacts would be **less than significant with implementation of the identified mitigation measure**.

(5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance

There is a local tree ordinance adopted by the City that regulates removal of trees; however, there are no trees on the Project Site. The 2021 Project would not conflict with any local policies or ordinances protecting biological resources, including the tree ordinance. Therefore, **no impact** would occur.

(6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan

There is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan applicable to the Project Site or the present biological resources; therefore, there would be no project conflicts, and **no impact** would occur.

IV.F.6 Mitigation Measures

This 2021 SEIR proposes the following new and voluntary mitigation measure to ensure that there are no impacts to common or sensitive avian species, although the analysis does not indicate there is a likelihood that nesting birds would occur on site; therefore, impacts would be less than significant before mitigation.¹⁶⁴

Mitigation Measure K-1. Impacts to nesting birds would be avoided by conducting all construction activities outside of the bird nesting season (i.e., from September 1 to February 14 for most birds, from July 1 to January 14 for raptors). However, if construction activities must occur during the nesting season, the following measures shall apply:

A. Prior to work during the bird nesting season (February 15 to August 31 for most birds, January 15 to June 31 for raptors), a qualified biologist shall conduct a pre-construction survey of all suitable habitat for the presence of nesting birds no more than 7 days prior to construction activities. The results of the pre-construction survey shall be valid for 7 days; if vegetation removal activities do not commence within 7 days following the survey or if activities

¹⁶⁴ As noted in Chapter III, Introduction to the Analysis, of this 2021 SEIR, the mitigation measure numbering system from the 2018 SEIR was maintained in this 2021 SEIR, even if the section numbering for the 2021 SEIR section is different. In this case, this section number is "F," but mitigation measures are numbered "K" as this is new mitigation being included in the 2021 SEIR.

cease for more than 7 consecutive days, a new pre-construction nesting bird survey shall be conducted before construction resumes.

- B. If any active nests are found during a pre-construction nesting bird survey, a buffer of up to 300 feet for most bird species and 500 feet for raptors, or as determined appropriate by the qualified biologist (based on species-specific tolerances and site-specific conditions), shall be delineated, flagged, and avoided until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). The qualified biologist may also recommend other measures to minimize disturbances to active nests that may include but are not limited to limiting the duration of certain activities, placing sound barriers (e.g., noise blankets), or visual barriers (e.g., straw bales), and/or providing full-time monitoring by a qualified biologist.
- C. As a provisional additional mitigation element, in case surveys identify burrowing owl as present on site, such occurrence shall be documented and CDFW shall be notified. Although it is considered highly unlikely that a pair of burrowing owls might attempt to nest on the site (due to disturbance, limited food resources, and presence of coyotes), if an active burrowing owl nest is encountered, a minimum buffer of 500 feet shall be delineated, flagged, and avoided by construction activity until the nesting cycle is complete (i.e., the qualified biologist determines that the young have fledged or the nest has failed). A qualified biologist may recommend other measures as noted in Item B, above. However, CDFW will be consulted prior to any reduction of avoidance buffers or implementation of other measures, such as passive relocation.

IV.F.7 Cumulative Impacts

The geographic context for the analysis of cumulative impacts associated with biological resources is the area within which the cumulative projects occur (refer to Figure III-1, Cumulative Project Locations), which includes 36 projects in the City of Carson, seven projects in the County of Los Angeles, and one project in the City of Los Angeles.

The Project Site is primarily surrounded by extensive urban/suburban development, with the I-405 Freeway located adjacent to the eastern edge of the Project Site. There are no sensitive natural areas within the cumulative projects area reflected by Figure III-1, Cumulative Projects Area; however, there are open spaces provided by The Links at Victoria Golf Course and California State University, Dominguez Hills, which could be used by migratory birds and common native avian species. Due to the lack of sensitive biological resources in the Project vicinity, cumulative impacts to biological resources as a result of development of the cumulative projects identified in Table III-1, Cumulative Projects, of this 2021 SEIR, would not be cumulatively significant. Further, all of the cumulative projects are either urban infill projects or are located on highly disturbed sites. While the Project Site provides open areas, they are highly

disturbed; it is located adjacent to the I-405 Freeway; and it does not contain high-quality habitat for sensitive species, as evidenced by the results of the various general and protocol-level biological resource surveys conducted on the Project Site. Therefore, given the disturbed nature of the Project Site and the limited impacts to biological resources associated with implementation of the 2021 Project that would be mitigated by compliance with existing laws and regulations, implementation of the 2021 Project would not have a cumulatively considerable contribution to cumulative effects on biological resources. Therefore, cumulative impacts to biological resources as a result of implementation of the 2021 Project would be less than significant, and cumulative impacts would be further reduced with implementation of Mitigation Measure K-1, which prescribes actions to ensure avoidance of impacts to nesting birds, which are not anticipated to be present, based on numerous general and protocol-level surveys.

IV.F.8 Level of Significance after Mitigation

With respect to biological resources, implementation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. All impacts related to biological resources would remain less than significant without mitigation; however, Mitigation Measure K-1 is proposed to further reduce an already less-than-significant impact by avoiding unlikely impacts to on-site nesting birds in compliance with state and federal laws that protect nesting birds.

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IV.G ENERGY

IV.G.1 Introduction

This section analyzes the energy implications due to the potential changes brought about by the 2021 Project activities with respect to the 2018 Project. Accordingly, this section supplements the 2018 SEIR energy analysis in Section VII, *Other Environmental Considerations*. This analysis determines the impacts that would result from construction and operational activities that would take place within the 157 acres (referenced herein as the Project Site) under current environmental and regulatory circumstances. The 2021 Project analysis focuses on the following three energy resources: electricity, natural gas, and transportation-related energy (petroleum-based fuels). This section includes a summary of the 2021 Project's anticipated energy needs (detailed calculations of which can be found in Appendix D1 of this 2021 SEIR), and conservation measures that are included as part of the 2021 Project. The information included herein, as well as other aspects of the 2021 Project's environmental-related energy impacts, are discussed in greater detail elsewhere in this 2021 SEIR, including in Chapter II, *2021 Project Description*, and Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR.

The analysis concludes that the 2021 Project would result in similar types of energy consumption as compared to the 2018 Project, and like the 2018 Project, would result in less than significant for all energy issues areas without mitigation. To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts previously disclosed in the 2018 SEIR, the analysis compares the significance of these impacts to those identified in the 2018 SEIR.

IV.G.2 Existing Conditions

a. Project Site

The 2021 Project constitutes a modification to the permitted land uses and development standards for the 157-Acre Site that is currently subject to the 2018 Specific Plan. The Project Site is generally located at 20400 South Main Street in the City of Carson. The 2021 Project does not change the residential or regional commercial uses previously approved under the 2018 Specific Plan for 61 acres of the 157-Acre Site (PA1 and PA2), but replaces the general mixed-use commercial and hotel uses that were previously approved Planning Area 3 (PA3) with light industrial uses, commercial uses, and privately maintained, publicly accessible open space and community commercial use and amenity area described as the Carson Country Mart.

b. Electricity

Electricity, a consumptive utility, is a man-made resource. The production of electricity requires the consumption or conversion of energy resources, including water, wind, oil, gas, coal, solar, geothermal, and nuclear resources, into energy. The delivery of electricity involves a number of

system components, for distribution and use. The electricity generated is distributed through a network of transmission and distribution lines commonly called a power grid.

Energy capacity, or electrical power, is generally measured in watts (W) while energy use is measured in watt-hours (Wh). For example, if a light bulb has a capacity rating of 100 W, the energy required to keep the bulb on for 1 hour would be 100 Wh. If ten 100 W bulbs were on for 1 hour, the energy required would be 1,000 Wh or 1 kilowatt-hour (kWh). On a utility scale, a generator's capacity is typically rated in megawatts (MW), which is 1 million W, while energy usage is measured in megawatt-hours (MWh) or gigawatt-hours (GWh), which is 1 billion Wh.

Southern California Edison (SCE) provides electrical services to approximately 15 million people, 15 counties, 180 incorporated cities (including the City of Carson and the Project Site), 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area, across central, coastal and southern California, an area bounded by Mono County to the north, Ventura County to the west, San Bernardino County to the east, and Orange County to the south.¹⁶⁵ SCE produces and purchases energy from a mix of conventional and renewable generating sources.

SCE generates power from a variety of energy sources, including large hydropower (greater than 30 MW), coal, gas, nuclear sources, and renewable resources, such as wind, solar, small hydropower (less than 30 MW), and geothermal sources. In 2019, the SCE power system experienced a peak demand of 22,009 MW (the most recent year for which data are available).^{166,167} Approximately 35 percent of the SCE 2019 electricity purchases were from renewable sources, which is higher than the 32 percent statewide percentage of electricity purchases from renewable sources.¹⁶⁸ The annual electricity sale to customers in 2019 was approximately 84,654,000 MWh.¹⁶⁹ Detailed calculations are provided in Appendix D1 of this 2021 SEIR.

c. Natural Gas

Natural gas is a combustible mixture of simple hydrocarbon compounds (primarily methane) that is used as a fuel source. Natural gas consumed in California is obtained from naturally occurring reservoirs but relies upon out-of-state imports for nearly 90 percent of its natural gas supply.¹⁷⁰ A

¹⁶⁵ Southern California Edison, *About Us >Who We Are*, <https://www.sce.com/about-us/who-we-are>, accessed June 2021.

¹⁶⁶ Southern California Edison, *2019 Annual Report, 2019*, p. 2.

¹⁶⁷ California Energy Commission (CEC), *Hydroelectric Power in California*, https://ww2.energy.ca.gov/almanac/renewables_data/hydro/index_cms.php, accessed June 2021.

¹⁶⁸ CEC, *Utility Annual Power Content Labels for 2019, Southern California Edison, October 2020*.

¹⁶⁹ Southern California Edison, *2019 Annual Report, 2019*, p. 2.

¹⁷⁰ CEC, *Supply and Demand of Natural Gas in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, accessed June 2021.

majority of natural gas consumed in California is for electricity generation, along with the industrial, residential, and commercial sections.¹⁷¹ Among energy commodities consumed in California, natural gas accounts for one-third of total primary energy consumption in terms of British thermal units (BTU).¹⁷² Natural gas is typically measured in terms of cubic feet (cf) or BTU.

Natural gas is provided to the City, including the 2021 Project vicinity, by Southern California Gas (SoCalGas). SoCalGas is the principal distributor of natural gas in Southern California, serving residential, commercial, and industrial markets. SoCalGas serves approximately 21.6 million customers in more than 500 communities encompassing approximately 20,000 square miles throughout Central and Southern California, from the City of Visalia to the Mexican border.¹⁷³

SoCalGas receives gas supplies from several sedimentary basins in the western U.S. and Canada, including supply basins located in New Mexico (San Juan Basin), West Texas (Permian Basin), the Rocky Mountains, and Western Canada as well as local California supplies.¹⁷⁴ The traditional, southwestern U.S. sources of natural gas will continue to supply most of SoCalGas' natural gas demand. The Rocky Mountain supply is available but is used as an alternative supplementary supply source, and the use of Canadian sources provide only a small share of SoCalGas supplies due to the high cost of transport.¹⁷⁵ Gas supply available to SoCalGas from California sources averaged 97 million cubic feet (cf) per day in 2019 (the most recent year for which data are available).¹⁷⁶ Also, the annual natural gas sale to customers in 2019 was approximately 879,285 million cf.¹⁷⁷ Detailed calculations are provided in Appendix D1 of this 2021 SEIR.

d. Transportation Energy

According to the California Energy Commission (CEC), transportation accounted for about 41 percent of California's total energy consumption in 2017 based on a carbon dioxide equivalent basis.¹⁷⁸ In 2019 (the most recent year for which data are available), California

¹⁷¹ CEC, *Supply and Demand of Natural Gas in California*, <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>, accessed June 2021.

¹⁷² CEC, *California Natural Gas Industry*, https://www.energy.ca.gov/almanac/naturalgas_data/, accessed June 2021.

¹⁷³ SoCalGas, *Company Profile*, <http://www.socalgas.com/about-us/company-info.shtml>, accessed June 2021.

¹⁷⁴ *California Gas and Electric Utilities*, 2020 California Gas Report, 2020, p. 111.

¹⁷⁵ *California Gas and Electric Utilities*, 2020 California Gas Report, 2020, p. 111.

¹⁷⁶ *California Gas and Electric Utilities*, 2020 California Gas Report, 2020, p. 111.

¹⁷⁷ *California Gas and Electric Utilities*, 2020 California Gas Report, 2020, p. 143. *Daily natural gas usage in 2019 was 2,409 million cf, annual value derived by multiplying daily values by 365 days.*

¹⁷⁸ CEC, *Final 2019 Integrated Energy Policy Report*, February 2020, p. 4.

consumed 15.4 billion gallons of gasoline and 3.7 billion gallons of diesel fuel.¹⁷⁹ Petroleum-based fuels currently account for more than 90 percent of California’s transportation fuel use.¹⁸⁰ However, the State is now working on developing flexible strategies to reduce petroleum use. California has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and GHGs from the transportation sector, and reduce vehicle miles traveled (VMT). The CEC predicts that the demand for gasoline and transportation fossil fuels in general will continue to decline over the next 10 years primarily due to improvements in fuel efficiency and increased electrification.¹⁸¹ According to fuel sales data from the CEC, fuel consumption in Los Angeles County (County) was approximately 3.64 billion gallons of gasoline and 0.53 billion gallons of diesel fuel in 2018.¹⁸² Detailed calculations are provided in Appendix D1 of this 2021 SEIR.

IV.G.3 Regulatory Framework

a. Federal

Established by the U.S. Congress in 1975, the Corporate Average Fuel Economy (CAFE) standards reduce energy consumption by increasing the fuel economy of passenger cars and light trucks. The National Highway Traffic Safety Administration (NHTSA) and United States Environmental Protection Agency (USEPA) jointly administer the CAFE standards. The U.S. Congress has specified that CAFE standards must be set at the “maximum feasible level” with consideration given for: (1) technological feasibility; (2) economic practicality; (3) effect of other standards on fuel economy; and (4) need for the nation to conserve energy.¹⁸³ On April 1, 2010, federal CAFE standards were adopted for passenger cars and light-duty trucks for model years 2012 through 2016 and in August 2012, CAFE standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. The standards surpass the prior CAFE standards.

¹⁷⁹ CEC, *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2020*, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed June 2021. Diesel is adjusted to account for retail (48 percent) and non-retail (52 percent) diesel sales.

¹⁸⁰ CEC, 2016–2017 Investment Plan Update for the Alternative and Renewable Fuel and Vehicle Technology Program, May 2016.

¹⁸¹ CEC, Final 2019 Integrated Energy Policy Report, February 2020, p. 228.

¹⁸² CEC, *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2020*, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed June 2021. Diesel is adjusted to account for retail (47.2 percent) and non-retail (52.8 percent) diesel sales.

¹⁸³ National Highway Traffic Safety Administration, *Corporate Average Fuel Economy*, <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>, accessed June 2021.

In March 2020, USEPA and NHTSA issued the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE standards applicable in model year 2020 for model years 2021 through 2026. The estimated CAFE standards for model year 2020 are 43.7 miles per gallon (mpg) for passenger cars and 31.3 mpg for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. However, consistent with President Biden’s executive order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.¹⁸⁴

Fuel-efficiency standards for medium- and heavy-duty trucks have been jointly developed by USEPA and NHTSA. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018, and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.¹⁸⁵ USEPA and NHTSA have also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.¹⁸⁶

b. State

(1) Senate Bill 1389

Senate Bill (SB) 1389 (Public Resources Code Sections 25300–25323; SB 1389) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state’s electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state’s economy; and protect public health and safety (Public Resources Code Section 25301(a)). The 2019 Integrated Energy Policy Report, the latest published report from CEC, provides the results of the CEC’s assessments related to energy sector trends, building decarbonization and energy efficiency, zero-emissions vehicles, energy equity, climate change adaptation, electricity reliability in the Southern California region, natural gas assessment, and electricity, natural gas, and transportation energy demand forecasts.

¹⁸⁴ *United States District Court for the District Court of Columbia, Union of Concerned Scientists, et al., Petitioners v. National Highway Traffic Safety Administration, Respondent, USCA Case #19-1230, 2021.*

¹⁸⁵ *United States Environmental Protection Agency (USEPA), Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August 2011.*

¹⁸⁶ *USEPA, Vol. 81, No. 206, Greenhouse Gas Emissions and Fuel-Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, Tuesday, October 25, 2016.*

(2) California's Renewables Portfolio Standard

The State of California has adopted standards to increase the percentage that retail sellers of electricity, including investor-owned utilities and community choice aggregators, must provide from renewable sources. The standards are referred to as the Renewables Portfolio Standards (RPS) and require retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent by 2020.¹⁸⁷ As of 2019, SCE's renewable portfolio was at 38 percent.¹⁸⁸

On September 10, 2018, Governor Brown signed SB 100, which requires retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030, and that the California Air Resources Board (CARB) should plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC's responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility's renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.¹⁸⁹ Refer to Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR for additional details regarding this regulation. With SCE exceeding the 33 percent by 2020 goal, and current new renewable development, SCE is on track to meet the 2030 goal of 60 percent.

(3) California Building Standards Code (Title 24)

(a) California Building Energy Efficiency Standards (Title 24, Part 6)

The California Building Energy Efficiency Standards for Residential and Nonresidential Buildings (California Code of Regulations, Title 24, Part 6) were adopted to ensure that building construction and system design and installation achieve energy efficiency and preserve outdoor and indoor environmental quality. The current California Building Energy Efficiency Standards (Title 24 standards) are the 2019 Title 24 standards, which became effective on January 1,

¹⁸⁷ *Center for Climate Strategies, Executive Order S-14-08.*

¹⁸⁸ *CPUC, 2020 California Renewables Portfolio Standard Annual Report, November 2020.*

¹⁸⁹ *California Public Utilities Commission (CPUC), RPS Program Overview, 2018, http://www.cpuc.ca.gov/RPS_Overview/, accessed June 2021.*

2020.¹⁹⁰ The 2019 Title 24 standards include efficiency improvements to the residential and non-residential standards.¹⁹¹

(b) California Green Building Standards (Title 24, Part 11)

The California Green Building Standards Code (California Code of Regulations, Title 24, Part 11), commonly referred to as the California Green Building Standards (CALGreen) Code, includes mandatory measures for residential and non-residential development related to site development; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; and environmental quality. When compared to the previously applicable 2016 CALGreen Code, changes were related to solar photo-voltaic system requirements, new requirements for newly constructed healthcare facilities, encouraging demand responsive technologies (residential developments), updating indoor and outdoor lighting (non-residential developments), and the use of highly efficient air filters (both residential and non-residential developments).¹⁹² Refer to Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR for additional details regarding these standards.

(4) California Assembly Bill 1493 (AB 1493, Pavley)

In response to the transportation sector's large share of California's CO₂ emissions, Assembly Bill (AB) 1493 (commonly referred to as the Pavley regulations), enacted on July 22, 2002, requires CARB to set greenhouse gas (GHG) emission standards for new passenger vehicles, light-duty trucks, and other vehicles manufactured in and after 2009 whose primary use is non-commercial personal transportation. Phase I of the legislation established standards for model years 2009–2016 and Phase II established standards for model years 2017–2025.^{193,194} As discussed above, in September 2019, USEPA published the SAFE Vehicles Rule in the federal register¹⁹⁵ that maintains the vehicle miles per gallon standards applicable in model year 2020 for

¹⁹⁰ CEC, *2019 Building Energy Efficiency Standards*, https://ww2.energy.ca.gov/publications/displayOneReport_cms.php?pubNum=CEC-400-2018-020-CMF, accessed June 2021.

¹⁹¹ CEC, *2019 Building Energy Efficiency Standards*, https://ww2.energy.ca.gov/publications/displayOneReport_cms.php?pubNum=CEC-400-2018-020-CMF, accessed June 2021.

¹⁹² *CALGreen Energy Services, A Comprehensive List of All Changes to the 2019 California CALGreen Code, 2019.*

¹⁹³ *California Air Resources Board (CARB), Clean Car Standards—Pavley, Assembly Bill 1493*, <http://www.arb.ca.gov/cc/ccms/ccms.htm>, accessed June 2021.

¹⁹⁴ *USEPA, EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks, 2012.*

¹⁹⁵ *USEPA, Federal Register, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019.*

model years 2021 through 2026. California and 23 other states and environmental groups in November 2019 in U.S. District Court in Washington, filed a petition for USEPA to reconsider the published rule. The Court has not yet ruled on these lawsuits. Refer to Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR for additional details regarding this regulation.

(5) California Health and Safety Code (HSC), Division 25.5/California Global Warming Solutions Act of 2006

In 2006, the California Legislature adopted AB 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focused on reducing GHG emissions in California to 1990 levels by 2020. Under HSC Division 25.5, CARB had the primary responsibility for reducing the state’s GHG emissions; however, AB 32 also tasked the CEC and the CPUC with providing information, analysis, and recommendations to CARB regarding strategies to reduce GHG emissions in the energy sector.

In 2016, the California Legislature adopted SB 32 and its companion bill AB 197; both were signed by Governor Jerry Brown. SB 32 and AB 197 amend HSC Division 25.5 and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030 and include provisions to ensure that the benefits of state climate policies reach into disadvantaged communities. Refer to Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR for additional details regarding these regulations.

(6) Senate Bill 350

SB 350, signed on October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable sources from 33 percent to 50 percent and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.¹⁹⁶

¹⁹⁶ As mentioned under Section 2.a(2)(b), California’s Renewables Portfolio Standard, on September 10, 2018, Governor Jerry Brown signed SB 100, which further increased California’s Renewables Portfolio Standard to achieve 50 percent renewable resources by December 31, 2026, and achieve a 60 percent target by December 31, 2030. Refer to Section 2.a(2)(b), California’s Renewables Portfolio Standard, for additional details.

(7) California Air Resources Board

(a) CARB's Advanced Clean Car Program

The Advanced Clean Cars emissions-control program was approved by CARB in 2012 and is closely associated with the Pavley regulations.¹⁹⁷ The program requires an increase in the number of zero-emissions vehicle models for years 2015 through 2025 to control smog, soot and GHG emissions. By 2025, zero-emissions vehicles (ZEVs) must be 22 percent of large volume manufacturers overall production.¹⁹⁸ This program includes the Low-Emissions Vehicle (LEV) regulations to reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles; and ZEV regulations to require manufacturers to produce an increasing number of pure ZEVs (meaning battery and fuel cell electric vehicles) with the provision to produce plug-in hybrid electric vehicles (PHEV) between 2018 and 2025.

(b) CARB's Advanced Clean Trucks Program

The Advanced Clean Trucks (ACT) regulations were approved on June 25, 2020, and require that manufacturers sell zero-emissions or near-zero-emissions trucks as an increasing percentage of their annual California sales beginning in 2024. The goal of this proposed strategy is to achieve nitrogen oxide (NOx) and GHG emission reductions through advanced clean technology, and to increase the penetration of the first wave of zero-emissions heavy-duty technology into applications that are well suited to its use. According to CARB, “Promoting the development and use of advanced clean trucks will help CARB achieve its emission reduction strategies as outlined in the State Implementation Plan (SIP), Sustainable Freight Action Plan, SB 350, and AB 32.”¹⁹⁹

The percentage of zero-emissions truck sales is required to increase every year until 2035 when sales would need to be 55 percent of Classes 2b–3 (light/medium- and medium-duty trucks) truck sales, 75 percent of Classes 4–8 (medium- to heavy-duty trucks) straight truck sales, and 40 percent of truck tractor (heavy-duty trucks weighing 33,001 pounds or greater) sales. Additionally, large fleet operators (of 50 or more trucks) would be required to report information about shipments and services and their existing fleet operations.

¹⁹⁷ CARB, *Clean Car Standards – Pavley, Assembly Bill 1493*, <https://www.arb.ca.gov/cc/ccms/ccms.htm>, last reviewed January 11, 2017, accessed June 2021.

¹⁹⁸ CARB, *Current Zero-Emissions Vehicle Regulation*, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/zev-program/current-zero-emission-vehicle-regulation>, June 2021.

¹⁹⁹ CARB, *Advanced Clean Trucks Program*, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>, June 2021.

(c) Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

In 2004, CARB adopted an Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling in order to reduce public exposure to diesel particulate matter emissions (Title 13 California Code of Regulations [CCR] Section 2485 and Title 17 CCR Section 93115). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location. While the goal of this measure is primarily to reduce public health impacts from diesel emissions, compliance with the regulation also results in energy savings in the form of reduced fuel consumption from unnecessary idling.

(d) Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles.

The goals of regulations to reduce emissions from in-use heavy-duty diesel-fueled vehicles are primarily to reduce public health impacts from diesel emissions; however, compliance with such regulations has shown an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines.²⁰⁰

In 2008, CARB approved the Truck and Bus regulation to reduce NO_x, respirable particulate matter (PM₁₀), and fine particulate matter (PM_{2.5}) emissions from existing diesel vehicles operating in California.²⁰¹ The phased regulation aims to reduce emissions by requiring installation of diesel soot filters and encouraging the retirement, replacement, or retrofit of older engines with newer emission-controlled models, which would make the vehicles more fuel efficient than vehicles older engines. The phasing of this regulation has full implementation by 2023.

CARB also promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The In-Use Off-Road Diesel-Fueled Fleets regulation adopted by CARB on July 26, 2007, aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models.²⁰² The compliance schedule requires full implementation by 2023 in all equipment for large and medium fleets and by 2028 for small fleets.

²⁰⁰ For Construction Pros, Cummins Tier-4-Final Field Test Showed 10 percent Lower Fuel Consumption, March 5, 2014, <https://www.forconstructionpros.com/equipment/fleet-maintenance/diesel-engines/press-release/11323000/cummins-inc-cummins-tier4final-field-test-showed-10-lower-fuel-consumption>, accessed June 2021.

²⁰¹ 13 CCR, Section 2025.

²⁰² 13 CCR Section 2449.

(8) Sustainable Communities Strategy

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG, was adopted by the State on September 30, 2008. Under SB 375, CARB is required, in consultation with the state's metropolitan planning organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for the Southern California Association of Governments (SCAG), which is the Metropolitan Planning Organization for the region in which the City is located.²⁰³ Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

Under SB 375, the reduction target must be incorporated within each region's Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plans and zoning codes) are not required to be consistent with either the RTP or SCS. Refer to the detailed discussion of SCAG's latest RTP/SCS below.

(9) Sustainable Freight Action Plan.

Executive Order B-32-15 directed the State to establish targets to improve freight efficiency, transition to zero-emissions technologies, and increase the competitiveness of California's freight transport system. The targets are not mandates, but rather aspirational measures of progress towards sustainability for the state to meet and try to exceed. The targets include:

1. System Efficiency Target: Improve freight system efficiency by 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030.
2. Transition to Zero-Emissions Technology Target: Deploy over 100,000 freight vehicles and equipment capable of zero-emissions operation and maximize near-zero-emissions freight vehicles and equipment powered by renewable energy by 2030.
3. Increased Competitiveness and Economic Growth Targets: Establish a target or targets for increased state competitiveness and future economic growth within the freight and goods movement industry based on a suite of common-sense economic competitiveness and growth metrics and models developed by a working group comprised of economists, experts, and industry. These targets and tools will support flexibility, efficiency, investment, and best business practices through state policies and programs that create a

²⁰³ SCAG, *Greenhouse Gases*, <http://www.scag.ca.gov/programs/Pages/GreenhouseGases.aspx>, accessed June 2021.

positive environment for growing freight volumes and jobs, while working with industry to mitigate potential negative economic impacts. The targets and tools will also help evaluate the strategies proposed under the Action Plan to ensure consideration of the impacts of actions on economic growth and competitiveness throughout the development and implementation process.

(10) California Environmental Quality Act

In accordance with CEQA and CEQA Guidelines Appendix F, Energy Conservation, and to assure that energy implications are considered in project analysis and decisions, SEIRs are required to include a discussion of the potential significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. CEQA Guidelines Appendix F provides a list of energy-related topics that should be analyzed in an SEIR. In addition, while not described or required as significance thresholds for determining the significance of impacts related to energy, Appendix F provides the following topics for consideration in the discussion of energy use in an EIR, to the extent the topics are applicable or relevant to the 2021 Project:

- “The project’s energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance, and/or removal. If appropriate, the energy intensiveness of materials may be discussed;
- The effects of the project on local and regional energy supplies and on requirements for additional capacity;
- The effects of the project on peak and base period demands for electricity and other forms of energy;
- The degree to which the project complies with existing energy standards;
- The effects of the project on energy resources; and
- The project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.”²⁰⁴

c. Regional

(1) Southern California Association of Governments

The Project Site is located within the planning jurisdiction of SCAG, as is all of the City of Carson. Pursuant to SB 375, SCAG prepared its first-ever SCS that was included in the 2012–2035 RTP/SCS, which was adopted by SCAG in April 2012. The goals and policies of that SCS demonstrated a reduction in per capita VMT (and a corresponding decrease in per capita transportation-related fuel consumption) and focused on transportation and land use planning

²⁰⁴ 2021 CEQA California Environmental Quality Act Statutes and Guidelines Appendix F: Energy Conservation.

strategies that included encouraging infill projects, locating residents closer to where they work and play, and designing communities with access to high quality transit services. In April 2016, SCAG adopted the 2016–2040 RTP/SCS, which furthered the goals of the 2012–2035 RTP/SCS.

On September 3, 2020, the SCAG’s Regional Council formally adopted the *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS)* also known as “Connect SoCal”, which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS.²⁰⁵ The 2020–2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and 19 percent reduction in per capita transportation GHG emissions by 2035 compared to the 2005 level on a per capita basis.²⁰⁶ Compliance with and implementation of the 2020–2045 RTP/SCS policies and strategies would have co-benefits of reducing per capita criteria air pollutant emissions (e.g., nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita VMT. Compliance with and implementation of the 2020–2045 RTP/SCS policies and strategies would have the co-benefits of reducing per capita VMT and corresponding decreases in per capita transportation-related fuel consumption. Information regarding the applicable RTP/SCS for the region in which this 2021 Project is located is provided below. In addition, refer to Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR for additional details regarding these requirements.

(2) SCAQMD

(a) Rule 2305 – Warehouse Indirect Source Rule

The SCAQMD recently adopted Rule 2305, which establishes the Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and applies to existing and future owners and operators of warehouses (including logistic, ecommerce, fulfillment and distribution facilities) located in the SCAB. The purpose of the rule is to reduce NOx and particulate matter emissions and would have the co-benefit of reducing GHG emissions by way of clean energy and zero-emissions technologies.

Rule 2305 will require warehouses greater than 100,000 square feet (sf) in a single building to directly reduce NOx and diesel PM emissions, or to facilitate emission and exposure reductions of these pollutants. The Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program is a menu-based points system that will require warehouse operators to annually earn a specified number of points by completing actions from a menu. The amount of WAIRE points needed for compliance is based on annual truck trips, and an annual variable and stringency rate. Annual reporting will track the WAIRE points needed and the points earned, and should a short

²⁰⁵ SCAG, 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS), *September 2020*.

²⁰⁶ SCAG, 2020–2045 RTP/SCS, *September 2020*.

fall occur, a warehouse operator will be required to pay a mitigation fee. WAIRE points can be banked for an up to three-year period or transferred to warehouses operated by the same owner. The Warehouse Indirect Source Rule provides several compliance options that facilities can choose to meet their point requirements including, but not limited to:

- (1) Ensure truck fleets that serve their facility during operations are cleaner than required by CARB regulations (verified through a voluntary fleet certification program);
- (2) Directly control the emissions associated with trucks visiting the facility;
- (3) Installation of charging/fueling infrastructure for cleaner trucks and transportation refrigeration units (TRUs), conversion of cargo handling equipment to zero-emissions technologies, etc.;
- (4) Utilization of zero-emissions trucks and incorporation of the infrastructure to support them; and/or
- (5) Mitigation fees if the facilities emissions exceed cap levels set in the Indirect Source Rule.

d. Local

(1) Carson General Plan

The City of Carson General Plan (adopted in 2004) was prepared in response to California state law requiring that each city and county adopt a long-term comprehensive general plan. The City's General Plan must be integrated, internally consistent, and present goals, objectives, policies, and incorporate implementation guidelines, which the City's General Plan has included. The City's General Plan Update (GPU) process was initiated in 2017 and is currently expected to conclude following further community input and environmental review with adoption of the updated General Plan in early 2022.²⁰⁷ However, since the GPU is not yet adopted, the analysis must compare the 2021 Project to the current (2004) General Plan. The following City goals, policies, and implementation measures under the City's existing General Plan are relevant to energy with respect to the 2021 Project:

Goal AQ-2—*Improve air quality which meets State and Federal standards*

Policy AQ-2.2—*Utilize incentives, regulations and implement the Transportation Demand Management requirements in cooperation with other jurisdictions to eliminate vehicle trips which would otherwise be made and to reduce vehicle miles traveled for automobile trips which still need to be made.*

Policy AQ-2.3—*Cooperate and participate in regional air quality management plans, programs and enforcement measures.*

Implementation Measure AQ-2.2—*Continue to encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing,*

²⁰⁷ City of Carson, Carson2040, <https://www.carson2040.com/>, accessed June 2021.

modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the AQMP for the South Coast Air Basin.

Implementation Measure AQ-2.3—Continue City employee work trip reduction programs and use of alternative fuel vehicles.

Policy AQ-2.4—*Continue to work to relieve congestion on major arterials and thereby reduce emissions.*

Implementation Measure AQ-2.4—Encourage those companies that ship or receive high volumes of goods by commercial truck to limit operations to non-peak hours.

Policy AQ-2.5—*Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new developments.*

Implementation Measure AQ-2.6—Require new developments to provide pedestrian and bicycle trails access to nearby shopping and employment centers, thereby encouraging alternate modes of transportation and reducing vehicle miles traveled.

Policy AQ-2.6—*Encourage in-fill development near activity centers and along transportation routes.*

Implementation Measure AQ-2.7—Encourage infill projects to provide convenience to existing facilities and minimize trip generation.

Goal AQ-3—*Increased use of alternate fuel vehicles.*

Policy AQ-3.1—*Continue to promote the use of alternative clean fueled vehicles for personal and business use. To this end, consider the use of electric, fuel cell or other non-polluting fuels for Carson Circuit buses and other City vehicles.*

Policy AQ-3.2—*Continue to promote ridership on the Carson Circuit and Los Angeles County Metropolitan Transportation Authority (MTA) bus and metro rail lines.*

Implementation Measure AQ-IM-3.3—Develop a cooperative program to further increase transit ridership.

Goal AQ-4—*Increased community awareness and participation in efforts to reduce air pollution and enhance air quality.*

Policy AQ-4.2—*Promote and encourage ride sharing activities within the community, including such programs as preferential parking, park-and-ride lots, alternative work week/flexible working hours and telecommuting, as well as other trip reduction strategies.*

Implementation Measure AQ-4.2—Continue to implement City programs and encourage other employers' programs to promote ride sharing, alternative work week schedules, and telecommuting.

Implementation Measure AQ-4.3—Coordinate with transportation agencies to establish additional park-and-ride facilities for work and non-work trip reduction.

(2) Climate Action Plan

The City of Carson has adopted a Climate Action Plan developed through the South Bay Cities Council of Governments (SBCCOG) that identifies community-wide strategies to lower energy use and resultant GHG emissions. Energy reductions within the CAP are from transportation, land use, energy generation and consumption, water consumption and waste generation. The following Climate Action Plan goals, policies, are relevant to energy with respect to the 2021 Project:

Goal LUT: A—Accelerate the Market for EV Vehicles

Measure LUT: A3—EV Charging Policies: *EV charging policies incentivize EV adoption by making it easier to charge EVs.*

Goal LUT: B—Encourage Ride-Sharing

Measure LUT: B1—Facilitate Private and Public Mobility Services: *This strategy encourages public and private mobility services. It includes supporting private vendors in search of funds and not adopting positions that limit or exclude vendors. The measure considers service inter-operability as well as optimizing the customer experience for local residents.*

Goal LUT: C—Encourage Transit Usage

Measure LUT: C1—Expand Transit Network: *This strategy focuses on expanding the local transit network by adding or modifying existing transit service; additionally, it includes transit strategies that address first/last mile connections which can encourage more people to travel via transit.*

Goal LUT: D—Adopt Active Transportation Initiatives

Measure LUT: D2—Improve Design Development: *This measure provides improved design elements to enhance slow speed multi-modalism such as walking and bicycling. This strategy may complement the concepts found in the Sustainable South Bay Strategies to increase connectivity within new or proposed developments and improves street network characteristics within a neighborhood. These concepts could include slow speed multi-modal networks.*

Goal LUT: F—Organizational Strategies

Measure LUT: F1—Encourage Telecommuting and Alternative Schedules: *Alternative work schedules take the form of staggered starting times, flexible schedules, or compressed work weeks. Alternative workplace programs are: 1) working at home-offices which eliminate a work trip entirely or 2) working at an office closer to the home which reduces part of the work trip. Cities can offer workplace programs at neighborhood centers, available space in government offices, public shared-work facilities, or commercial executive suites.*

Measure LUT: F2—Implement Commute Trip Reduction Programs: *This measure establishes a Commute Trip Reduction Ordinance.*

Goal LUT: G—Land Use Strategies

Measure LUT: G1—Increase Density: *These strategies seek to increase destination accessibility by encouraging combined uses such as office, commercial, institutional, and residential within areas and developments.*

Measure LUT: G2—Increase Diversity: *These strategies encourage projects to mix uses such as office, commercial, institutional, and residential within the same development.*

Measure LUT: G3—Increase Transit Accessibility: *Transit accessibility strategies involve measures that encourage transit services through general plans, zoning codes, and ordinances as well as filling in gaps within the transit network.*

Goal EE: B—Increase Energy Efficiency in New Residential Developments

Measure EE: B1—As part of the 2010 California Green Building Standards (CALGreen), a two-tiered system was designed to allow local jurisdictions to adopt codes that go beyond state standards. The two tiers contain measures that are more stringent and achieve an increased reduction in energy usage by 15 percent (Tier 1) or 30 percent (Tier 2) beyond Title 24. It is also important that Title 24 Standards are updated so that the full GHG reduction benefit of the title can be realized. City staff that are well-informed can implement updates quickly and effectively.

Goal EE: D—Increase Energy Efficiency in New Commercial Developments

Measure EE: D1—Encourage or Require EE Standards Exceeding Title 24: *This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that are required by current Title 24 Standards for commercial development. In addition, this measure helps ensure that Title 24 Standards are updated.*

Goal EE: E—Increase Energy Efficiency Through Water Efficiency

Measure EE: E1—Promote or Require Water Efficiency through SB X7-7: *The Water Conservation Act of 2009 (SB X7-7), requires all water suppliers to increase water use efficiency. The legislation set an overall goal of reducing per capita urban water consumption by 20 percent from a baseline level by 2020. The goal of Water Conservation Act can be met by taking a variety of actions, including targeted public outreach and promoting water efficiency measures such as low-irrigation landscaping. Additional water conservation information, resource materials, education, and incentives are available through the West Basin Water District (WBMWD).*

Goal EE: F—Decrease Energy Demand through Reducing Urban Heat Island Effect.

Measure EE: F1—Promote Tree Planting for Shading and Energy Efficiency: *Trees and plants naturally help cool an environment by providing shade and evapotranspiration (the movement of water from the soil and plants to the air), making vegetation a simple and effective way to reduce urban heat islands. Urban heat islands are urban areas that are significantly warmer than their surrounding rural areas due to human activities. Shaded surfaces may be 20–45°F cooler than the peak temperatures of un-shaded materials. In addition, evapotranspiration, alone or in combination with shading, can help reduce peak summer temperatures by 2–9°F. Furthermore, trees and plants that directly shade buildings can reduce energy use by decreasing demand for air conditioning.*

Measure EE: F2—*Incentivize or Require Light-Reflecting Surfaces: Replacing surface areas with light-reflecting materials can decrease heat absorption and lower outside air temperature. Both roofs and pavements are ideal surfaces for taking advantage of this advanced technology.*

Goal SW: C—*Increase Diversion and Reduction of Overall Community Waste*

Measure SW: C1—*Set a Community Goal to Divert Waste from Landfills: Setting a goal to divert a specified percentage of waste will show the City's commitment to reducing the GHG gases emitted from the landfill.*

Goal UG: A—*Increase and Maintain Urban Greening in the Community*

Measure UG: A2—*Increase Rooftop Gardens: Supporting the community in creating rooftop gardens will reduce the underlying building's temperature by shading and evapotranspiration, resulting in a decrease of energy used for cooling the building and reduction of GHG emissions. The gardens can also sequester CO2 emissions from the atmosphere, reduce storm water runoff, and improve air quality by reducing temperatures and capturing air pollutants.*

Measure UG: A3—*Support Local Farms: Local farmers markets reduce GHG emissions by providing the community with a more local source of food, potentially resulting in a reduction in the number of trips and vehicle miles traveled by both the food delivery service and the consumers traveling to grocery stores. If the food sold at the local farmers' market is produced organically, it can also contribute to GHG reductions by displacing carbon-intensive food production practices.*

Goal EGS: A—*Support Energy Generation and Storage in the Community*

Measure EGS: A2—*Siting and Permitting: To accelerate the implementation of renewable energy technologies, regulatory barriers, need to be addressed to help ensure smooth deployment. Streamlining the siting and permitting process and reducing administrative burden to developers will help speed up the process of bringing these projects to reality.*

(3) Energy Efficiency Climate Action Plan

The City of Carson has adopted an Energy Efficiency Climate Action Plan (EECAP) developed through the SBCCOG that identifies community-wide strategies to lower energy use and resultant GHG emissions. Energy reductions within the CAP are from transportation, land use, energy generation and consumption, water consumption and waste generation. The following CAP goals, policies, are relevant to energy with respect to the 2021 Project:

Goal 2—*Increase Energy Efficiency in New Residential Developments*

Measure 2.1—*Encourage or Require EE Standards Exceeding Title 24*

Goal 4—*Increase Energy Efficiency in New Commercial Development*

Measure 4.1—*Encourage or Require EE Standards Exceeding Title 24*

Goal 5—*Increase Energy Efficiency through Water Efficiency*

Measure 5.1—*Promote or Require water efficiency through SBX7-7*

Measure 5.2—*Promote water efficiency standards exceeding SBX7-7*

Goal 6—*Decrease Energy Demand through Reducing Urban Heat Island Effect.*

Measure 6.1—*Promote Tree Planting for Shading and Energy Efficiency*

Measure 6.2—*Incentivize or Require Light-Reflecting Surfaces*

IV.G.4 Significance Thresholds

For the purpose of this analysis, impacts with regard to energy are considered significant if the 2021 Project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

IV.G.5 Project Impacts

a. Methodology

This analysis addresses the 2021 Project’s potential energy usage, including electricity, natural gas, and transportation fuel. Energy consumption during both construction and operation is assessed. Specific analysis methodologies are discussed below. Energy calculations are provided in Appendix D1 of this 2021 SEIR, and are based on the same assumptions as are used in Section IV.D, *Air Quality*, and Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR.

The analysis herein includes both the determination of consistency with applicable plans and policies, consistent with the 2018 SEIR; the quantification of energy use from the 2021 Project and comparison to applicable thresholds; and comparison of project demand with existing utility supplies and infrastructure.

(1) Construction

The energy use associated with construction of the 2021 Project was calculated for each year of construction activity using CalEEMod and EMFAC2017, which is a State-approved model for estimating emissions on-road vehicles and trucks, in conjunction with the Air Quality and Greenhouse Gas analyses. Construction emissions have been forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date). 2021 Project construction began on the Project Site within PA2 in 2018 and was suspended in 2019. 2021 Project construction (commencing with remedial activities and horizontal site work) is projected to restart in December 2021 (as set forth in the construction schedule set forth in Table II-10, Construction Schedule, p. II-40 of this 2021 SEIR), but may commence at a later date. If, for various site planning, financial, or other reasons, the onset of construction is delayed to a later date than assumed in the modeling analysis, construction

impacts would be similar to or less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is because state regulations require construction equipment fleet operators to phase-in less polluting heavy-duty equipment and trucks over time. Construction energy consumption would result primarily from transportation fuels (e.g., diesel and gasoline) used for haul trucks, heavy-duty construction equipment, and construction workers traveling to and from the Project Site. Construction activities can vary substantially from day to day, depending on the specific type of construction activity and the number of workers and vendors traveling to the Project Site. This analysis considers these factors and provides the estimated maximum construction energy consumption for the purposes of evaluating the associated impacts on energy resources to ensure a conservative analysis. This analysis is based on estimated maximum construction activities, meaning that for each phase of construction it was assumed that all of the vehicles and equipment that could be used for that phase are in simultaneous use for all day and every day of the applicable phase of construction. Construction energy impacts were assessed based on the increase in energy demand compared to the 2018 Project.

(a) Electricity

Construction electricity was estimated for that portion consumed on-site for a temporary construction offices and for the energy consumed off-site related to treatment and conveyance of water to the site for dust control and personal (office) use during construction of the 2021 Project. Construction offices to be used were assumed to consist of three 1,000 sf trailers, one for each Planning Area, and were modeled using CalEEMod.²⁰⁸ In addition, electricity from water conveyance for dust control was also calculated based on the estimated exposed area and water needs to cover the area during construction activity. Default CalEEMod water electricity intensity factors were used to convert the volume of water needed to electricity demand from water conveyance.

(b) Natural Gas

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Water and space heating would be electric.

²⁰⁸ California Air Pollution Control Officers Association, *California Emissions Estimator Model, 2017*, <http://caleemod.com/>, accessed June 2021.

Accordingly, natural gas is not expected to be consumed during 2021 Project construction. Therefore, natural gas associated with construction activities was not calculated.²⁰⁹

(c) Transportation Fuels

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix D1 of this 2021 SEIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour from CARB's off-road vehicle (OFFROAD) model. Fuel consumption from construction on-road worker, vendor, and delivery/haul trucks was calculated using the trip rates and distances provided in the emissions modeling worksheets and CalEEMod construction output files. Total VMT for these on-road vehicles were then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using CARB's EMFAC2017 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. CalEEMod default trip lengths were used for worker commutes while vendor, management visits, concrete, and haul truck trips were taken from emissions modeling worksheets that used EMFAC2017 emission factors. Consistent with CalEEMod, construction worker trips for the 2021 Project were assumed to include a mix of light-duty gasoline automobiles and light-duty gasoline trucks. Construction vendor trucks were assumed to be a mix of medium-heavy-duty and heavy-duty diesel trucks and concrete and haul trucks were assumed to be heavy-duty diesel trucks. Refer to Appendix D1 of this 2021 SEIR for detailed energy calculations.

The energy usage required for 2021 Project construction has been estimated based on the number and type of construction equipment that would be used during 2021 Project construction by assuming a conservative estimate of construction activities (i.e., maximum daily equipment usage levels) during the relevant timeframe for such construction activities (i.e., late 2022 to 2026). Energy for construction worker commuting trips has been estimated based on the predicted number of workers for the various phases of construction and the estimated VMT based on the conservative values in the CalEEMod and EMFAC2017 models. The assessment also includes a discussion of the 2021 Project's compliance with relevant energy-related regulatory requirements that would minimize the amount of energy usage during construction. These measures are also discussed in Chapter II, *2021 Project Description*, Section IV.D, *Air Quality*, and Section IV.H, *Greenhouse Gas Emissions*, of this 2021 SEIR.

²⁰⁹ *In general, natural gas would not be expected to be used and this energy analysis assumes heavy-duty construction equipment is diesel-fueled, as is typically the case. However, natural gas-fueled heavy-duty construction equipment could be used to replace some diesel-fueled heavy-duty construction equipment. If this does occur, diesel fuel demand would be slightly reduced and replaced by a small amount of temporary natural gas demand. This would not substantially affect the energy analysis or conclusions provided herein.*

The construction equipment and haul trucks would likely be diesel-fueled, while the construction worker commute vehicles would primarily be gasoline-fueled. For the purposes of this assessment, it is conservatively assumed that all heavy-duty construction equipment and haul trucks would be diesel-fueled. The estimated fuel economy for heavy-duty construction equipment is based on fuel consumption factors from the CARB OFFROAD emissions model, which is a State-approved model for estimating emissions from off-road heavy-duty equipment. The estimated fuel economy for haul trucks and worker commute vehicles is based on fuel consumption factors from the CARB EMFAC emissions model. Both OFFROAD and EMFAC are incorporated into CalEEMod. However, emissions for worker, vendor, and concrete/haul trucks were calculated outside of CalEEMod using emission factors from EMFAC2017 to provide a more detailed and accurate account of truck emissions.

(2) Operation

Operation of the 2021 Project would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, vehicle charging, and other energy needs, and transportation fuels for vehicles traveling to and from the Project Site. Operational energy impacts were assessed based on the increase in energy demand compared to the 2018 Project. Within the CalEEMod software, building electricity and natural gas usage rates were adjusted to account for prior Title 24 Building Energy Efficiency Standards for the existing uses.²¹⁰ Project energy use is assumed to be all new use since it is not replacing any existing land use.

For consistency with the emissions modeling provided in Section IV.D, *Air Quality*, and IV.H, *Greenhouse Gas Emissions*, the 2021 Project's energy use was calculated assuming final buildout of the Project Site in 2026. The analysis herein assumes final buildout of the Project Site in 2026 as detailed in Table II-10, Construction Schedule, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR. Buildout of PA3 is expected to occur in 2024, while buildout of PA2 would be expected to occur in 2026, and PA1 would be expected to be built out in 2026. Operational emissions are typically modeled based on the first full year of operation, which for PA3 would be 2025, for PA2 would be 2026, and for PA1 would be 2027. Therefore, the first full operational year is 2027. However, because PA3 is the main focus of this analysis and all three Planning Areas would have different Applicant(s) and tenants/owners, the analysis contained herein conservatively uses 2026 as the opening year, which provides for a worst case energy consumption for the 2021 Project as a whole. Energy efficiency of vehicle fleets increase as older vehicles are driven less and ultimately retired, being replaced with newer vehicles certified to meet the current, more stringent, efficiency requirements.

²¹⁰ CARB, *CalEEMod User's Guide, Appendix E, Section 5, September 2016. Factors for the prior Title 24 standard are extrapolated based on the technical source documentation.*

(a) Electricity

The 2021 Project's estimated electricity demand was analyzed relative to SCE's existing energy supplies available to serve the Project Site in 2019 (i.e., the most recent data available)²¹¹ to determine if the utilities would be able to meet the 2021 Project's energy demands. Annual consumption of electricity (including electricity usage associated with the supply and conveyance of water) from project operations was calculated using demand factors provided in CalEEMod based on the 2019 Title 24 standards, which went into effect on January 1, 2020. Energy usage from water demand (e.g., electricity used to supply, convey, treat, and distribute) are estimated herein based on the new buildings and facilities proposed by the 2021 Project in comparison to the 2018 Project. Electricity from electric vehicle charging and TRUs were also calculated. On or before the opening year for each Planning Area developed on the Project Site, charging stations for automobiles and plug-ins for electric TRUs will be active on site in accordance with Title 24 requirements for PA2. For PA1, a minimum of 10 percent of parking spaces shall be equipped with vehicle charging stations for passenger vehicles. For PA3(a), all dock doors will be equipped with on-site electrical as non-electric TRUs are not permitted to operate within PA3. In addition, 169 passenger vehicle spaces will be equipped with charging stations for PA1, 82 spaces for PA3, and an additional 325 spaces throughout the Project Site (or incorporated off site). Electric infrastructure shall be provided for up to 25 percent of truck parking spaces within the light industrial uses in PA3(a) to support the future installation of charging stations for truck fleets to meet the needs of individual tenants. The light industrial portion of PA3(a) has committed to implementing a zero-emissions truck fleet by 2040 for all light-, medium-, and heavy-duty trucks that are model year 2021 or newer. Refer to Appendix D1 in this 2021 SEIR for detailed assumptions and calculations. The 2021 Project electrical consumption is compared to both SCE's supply and infrastructure availability as well as consumption in the 2018 SEIR.

(b) Natural Gas

The 2021 Project's estimated natural gas demand was analyzed relative to SoCalGas' existing and planned energy supplies in 2026 (i.e., the 2021 Project buildout year)²¹² to determine if the existing utilities would be able to meet the 2021 Project's energy demands. Natural gas demand for the 2021 Project would be generated mainly by building heating and appliances. The 2021 Project consumption is compared to both supply and infrastructure availability as well as consumption in the 2018 SEIR.

²¹¹ SCE, 2019 Annual Report,

<https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A1908013/2880/342189211.pdf>, accessed June 2021.

²¹² California Gas and Electric Utilities, 2020 California Gas Report, 2020, p. 145.

(c) Transportation Fuels

Energy for transportation from visitors and employees traveling to and from the entire 157-Acre-Site is estimated based on the predicted number of trips to and from the site.

Mobile emissions were estimated based on emissions factors from EMFAC along with VMT values based on *The District at South Bay 2021 Project Transportation Impact Analysis* (TIA) to estimate on-road mobile source emissions.²¹³ The VMT associated with the TIA are based on local trip distances to and from the Project Site. The TIA's VMT calculations were calculated for the residential uses in PA1 and the employee/visitor generating uses in PA2 and PA3. The 40-mile average trip for distribution centers is based on the typical trip length for industrial source facilities consistent with the SCAQMD's WAIRE rule.²¹⁴ The 32.5 miles per trip used for fulfillment centers proposed within PA3(a) and the Carson Country Mart in PA3(b) is derived from city-specific data for trip lengths originating from similar nearby industrial facilities. As fulfillment centers typically have much shorter average trip lengths than distribution centers, the 32.5 miles per trip for fulfillment centers provides for a conservative analysis.²¹⁵

Diesel fuel consumption accounts for fuel reduction from the incorporation of electrical vehicles under the Advanced Clean Truck Program prior to 2035 and the implementation of the project design features (PDFs) that introduces zero-emissions and near-zero-emissions truck fleets for the industrial uses in PA3(a) starting in 2035. Refer to VMT data in Appendix C1 of this 2021 SEIR and energy calculations in Appendix D1 of this 2021 SEIR. The 2021 Project consumption is compared to both supply and infrastructure availability as well as consumption in the 2018 SEIR.

b. Project Characteristics and Project Design Features

(1) Project Characteristics

Project Characteristics include development standards, design features, and/or operational characteristics that are incorporated into the 2021 Project through Chapter II, *2021 Project Description*, of this 2021 SEIR, and/or the 2021 Specific Plan Amendment. The Project Characteristics that are highlighted in this section would avoid or reduce potential environmental effects through project design and operational characteristics.

The 2021 Project would promote a reduction in mobile source emissions by providing a supply of housing, employment, retail and dining opportunities within close proximity to one another as

²¹³ Fehr & Peers, *The District at South Bay 2021 Project Transportation Impact Analysis*, October 2021.

²¹⁴ SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, March 14, http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf?sfvrsn=2, accessed June 2021.

²¹⁵ Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021.

well as to existing off-site residential. This makes it possible for an individual to both reside and work/shop/dine within the Project Site.

The location/placement of light industrial and commercial uses in the design of the 2021 Project serves the objective of minimizing mobile source pollutant emissions. Light industrial and commercial uses that would be developed within the 2021 Project would be located in close proximity to the access ramps of the San Diego Freeway (Interstate 405 [I-405] Freeway) and the Harbor Freeway (I-110 Freeway), which provide easy access to and from the ports of Los Angeles and Long Beach. Such concentration and placement are intended to reduce VMT within the region and subregion by reducing commute distances for non-resident workers. The provision of light industrial and commercial space in close proximity to existing and proposed residential uses within the vicinity of the Project Site would increase the probability that such residents may work and recreate nearer to their home, thus reducing VMT.

(2) Project Design Features

For air quality emissions, energy use, and GHG emissions, PDFs are identified in addition to Project Characteristics. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements that are used in the unmitigated modeling scenario for air quality, energy, and GHG.²¹⁶ The mitigated modeling scenario then applies any identified 2021 mitigation measures. Because these PDFs must be implemented, in addition to the 2021 mitigation measures, each PDF is provided an alphanumeric designation (e.g., 2021 SEIR PDF-X#), similar to mitigation measures (Mitigation Measure X-#). All PDFs and mitigation measures will be monitored in the 2021 SEIR MMRP.

The 2021 Project would be developed in accordance with the regulations, standards, and guidelines established in the 2021 Specific Plan Amendment, the General Plan, and the City's CAP. The following PDFs have been incorporated within the 2021 Project and this 2021 SEIR to meet regulatory compliance or to provide further benefit to the future tenants and residents within the Project Site as well as the surrounding community. As detailed in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, some of the PDFs replace mitigation measures from the 2018 SEIR due to compliance with current regulatory requirements and that makes them part of the unmitigated modeling scenario.

²¹⁶ Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.

(a) Construction

Construction of the 2021 Project has been designed to reduce emissions from construction equipment and haul/vendor trucks. Emissions are reduced through the use of newer/more efficient equipment and vehicle fleets. The following are the key PDFs that would reduce energy impacts:

- **2021 SEIR PDF-C1:** Mobile off-road construction equipment (wheeled or tracked) used during construction of the ~~proposed modified Project~~ 2021 Project shall meet the USEPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, then the equipment shall, at a minimum, meet the Tier 3 standard. Zero-emissions construction equipment shall be incorporated when commercially available. This requirement shall be incorporated into applicable bid documents, purchase orders, and contracts with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. (Modified from 2018 SEIR PDF Mitigation Measure G-6) (Applicable to PA1, PA2, and PA3; zero-emissions construction equipment use is not required for PA2.)
- **2021 SEIR PDF-C2:** Limiting excavations to avoid exposing landfill contents. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C4:** ~~Electricity from power poles~~ Electric hook-ups to the power grid shall be used rather than temporary diesel- or gasoline-powered generators shall be used to the extent for electric construction tools whenever feasible. For PA3 and PA1, mobile off-road construction equipment of less than 50 horsepower shall be electric, including: air compressors, concrete/industrial saws, welders and plate compactors. Mobile off-road construction equipment with a power rating of 19 kilowatts or less shall be battery powered. If generators need to be used to reach remote portions of the site, non-diesel generators shall be used. (Modified from 2018 SEIR Mitigation Measure G-4)²¹⁷ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C5:** All construction vehicles shall be prohibited from idling in excess of 5 minutes per occurrence and location, both on and off Property site. (Applicable to PA2.) All construction vehicles shall be prohibited from idling in excess of 2 minutes per occurrence and location, both on and off site. Individual pieces of diesel-powered off-road diesel equipment shall be prohibited from being in the "on" position for more than 10 hours per day. (Modified from 2018 SEIR Mitigation Measure G-5)²¹⁸ (Applicable to PA1 and PA3.)

²¹⁷ Mitigation Measure G-4 was replaced by 2021 SEIR PDF-C4 as it is a quantified part of the unmitigated modeling scenario.

²¹⁸ Mitigation Measure G-5 was replaced by 2021 SEIR PDF-C5 as it is a quantified part of the unmitigated modeling scenario.

- **2021 SEIR PDF-C6:** All fleet-contracted on-road heavy-duty haul trucks used for remediation and construction hauling activities from PA1 and PA3 shall be model year 2014 or newer if diesel fueled. The requirement for the use of 2014 or newer vehicles does not apply to delivery trucks or other non-contracted fleets. (Applicable to PA1 and PA3.)
- **2021 SEIR PDF-C8:** 2021 Project contractors shall provide information on transit and ride sharing programs and services to construction employees. As feasible, provide for meal options on site, or shuttle buses between the site and nearby meal destinations for use by construction contractors. (Applicable to PA1 and PA3.)

(b) Operation

Design and operational elements of the 2021 Project would minimize air pollutant emissions, which implements the policy direction provided by SCAG for land development projects, including the 2021 Project. The 2021 Project has been designed and programmed to reduce the potential number of vehicle trips and VMT. The 2021 Project would also minimize pollutant emissions through the location and placement of land uses within the Project Site. The following are the key design and operational elements of the 2021 Project that would reduce energy impacts:

- **2021 SEIR PDF-O4:** All residential and non-residential buildings shall meet or exceed the more stringent of the 2016-2019 California Title 24 Efficiency standards for water, heating, space heating, and cooling, by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means or others adopted by the City. (Modified from 2018 SEIR Mitigation Measure G-15)²¹⁹ (Applicable to PA1 and PA3; PA2 applicability is limited to the Title 24 efficiency standards effective at the time construction began.)
- **2021 SEIR PDF-O5:** The Developer/Applicant(s) of each planning area within the Project Site shall implement the following trip demand measures:
 - a) The Applicant shall provide bicycle racks located at convenient locations throughout The District at South Bay the 2021 Project. (Modified from 2018 SEIR Mitigation Measure G-22)²²⁰ (Applicable to PA1, PA2, and PA3.)
 - b) The Applicant shall provide bicycle paths along the main routes throughout The District at South Bay the Project Site consistent with the 2021 Specific Plan Amendment. (Modified from 2018 SEIR Mitigation Measure G-23)²²¹ (Applicable to PA1, PA2, and PA3.)

²¹⁹ This measure was replaced by 2021 SEIR PDF-O7 as it is a regulatory requirement modeled as part of the unmitigated scenario.

²²⁰ 2018 Mitigation Measure G-22 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description; therefore, bicycle parking would be part of the 2021 Project to accommodate bicycle access.

²²¹ 2018 Mitigation Measure G-23 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

- c) ~~The Applicant shall provide~~ Provide convenient pedestrian access throughout ~~The District at South Bay~~ the Project Site. (Modified from 2018 SEIR Mitigation Measure G-24)²²² (Applicable to PA1, PA2, and PA3.)
- d) Provide on-site shower facilities for use by all employees bicycling/walking to work. (Applicable to the light industrial uses in PA3(a).)
- e) Light industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards. (Applicable to the light industrial uses in PA3(a).)
- f) Each light industrial tenant within PA3(a) shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities. (Applicable to the light industrial uses in PA3(a).)
- **2021 SEIR PDF-O6:** The 2021 Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. (2018 SEIR Mitigation Measure G-28)²²³ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O7:** Electric vehicle charging stations shall be provided as follows:
 - a) The Applicant of PA1 shall provide passenger vehicle charging stations for a minimum of 6 percent parking spaces (169 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA1.)
 - b) The Applicant of PA3 shall provide passenger vehicle charging stations for a minimum of 10 percent parking spaces (82 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA3.)
 - c) Each of the Applicant(s) of PA1 and PA3 shall install Level 2 or better electric vehicle charging stations for 325 spaces on site between the beginning of construction and December 2039 (the 325 spaces are in addition to the 169 spaces in PA1 and 82 spaces in PA3). If on-site charging stations cannot be accommodated, charging stations may be distributed throughout the City. The 325 electrovoltaic (EV) supplied spaces will be provided for passenger and light-duty vehicles. Level 4 EV charging for trucks can be substituted at 0.11 truck spaces for every passenger vehicle space in PA3. Passenger and light-duty vehicle and truck charging requirements can be satisfied on or off site; however, on-site charging will be prioritized. (Applicable to PA1 and PA3.)²²⁴

²²² 2018 Mitigation Measure G-24 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

²²³ This measure is replaced by 2021 SEIR PDF-O9 as it is part of the unmitigated scenario.

²²⁴ At the discretion of the Applicant(s) of PA2, additional EV charging stations may be incorporated beyond those required of PA2 as part of the 2018 SEIR mitigation requirements.

d) Provide infrastructure, as the parking area is developed, to support the energy load for electric truck vehicle charging. Truck charging infrastructure shall be designed to support a minimum of 25 percent of the truck parking spaces for each of the light industrial use in PA3(a). (Applicable to the uses in PA3(a).)

- **2021 SEIR PDF-O8:** All on-site equipment, such as forklifts and yard trucks shall be electric with the necessary electrical infrastructure and charging stations provided. (Applicable to PA3.)
- **2021 SEIR PDF-O9:** When not in use all truck engines shall be turned off. Idling will be limited to 2 minutes or less per occurrence and location for PA3. Idling and operation restrictions shall be posted for view from both on-site and off-site personnel. Appropriate signage shall identify idling restrictions and contact information to report violations to CARB and SCAQMD within PA3. Consistent with the 2018 SEIR, idling restrictions of 5 minutes are or less per occurrence and location applicable to PA1 and PA2. (Applicable to PA3.)
- **2021 SEIR PDF-O10:** All dock doors shall be equipped with electric plugs for electric transportation refrigeration units (TRUs). All TRUs operating on site would be required to be electric (no diesel-powered TRUs permitted at all in PA3(a)) and certification and maintenance records shall be maintained for all TRUs. (Applicable to the light industrial uses in PA3(a).)
- **2021 SEIR PDF-O11:** To the extent feasible and permitted by local codes and regulations, all emergency-standby generators shall be non-diesel. If diesel generators are required, generators will conform to EPA Tier 4 emissions standards. (Applicable to the light industrial uses in PA3(a).)
- **2021 SEIR PDF-O12:** Tenants shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. Staff in charge of keeping vehicle records shall be trained in diesel technologies and compliance with CARB regulations by attending CARB-approved courses as well as maintaining on-site records demonstrating compliance. (Applicable to uses in PA3(a).)
- **2021 SEIR PDF-O13:** As applicable, tenants shall be required to enroll in U.S. EPA's SmartWay program and shall use carriers that are SmartWay carriers. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O14:** Tenants shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O15:** All light industrial buildings shall implement a combination of sky lights and solar photovoltaic (PV) infrastructure such that a minimum of 25 percent of the rooftops will include solar PV arrays at buildout. (Applicable to uses in PA3(a).)
- **2021 SEIR PDF-O16:** For the uses within PA3(a), leasing preference shall be given to prospective tenants with facility-owned and operated fleet that is alternative/zero-emissions. All owned or contracted fleets shall meet or exceed the 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Light Industrial

tenants shall ensure that of all trucks of model year 2021 and newer 75 percent will be zero- or near-zero-emissions vehicles by 2035, and 100 percent zero- or near-zero-emissions vehicles by 2040. Facility operators shall maintain records on site demonstrating compliance with this requirement and shall make records available to inspection by local jurisdiction, air districts, and the State upon request. (Applicable to the uses in PA3(a).)

c. Analysis of Project Impacts

(1) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation

(a) Construction

During construction of the 2021 Project, energy would be consumed in the form of electricity for powering the construction trailers (lights, electronic equipment, and heating and cooling) and exterior uses, such as lights, water conveyance for dust control, and other construction activities. Natural gas would not be for construction purposes. Project construction would also consume energy in the form of petroleum-based fuels associated with the use of off-road construction vehicles and equipment on the Project Site, construction workers travel to and from the Project Site, and delivery and haul truck trips (e.g., hauling of demolition material to off-site reuse and disposal facilities). **Table IV.G-1, Annual Energy Use during Project Construction**, provides a summary of the annual average electricity, gasoline fuel, and diesel fuel estimated to be consumed during construction of the 2021 Project.

(i) Electricity

During construction of the 2021 Project, electricity would be consumed to power lighting, heating, and cooling in the construction trailers, and to supply and convey water for dust control. Electricity would be supplied to the Project Site by SCE and would be obtained from the existing electrical lines that connect to the Project Site.

As shown in Table IV.G-1, annual average construction electricity usage would be approximately 66 MWh. Although there is a temporary increase in electricity consumption at the site during construction, the electrical consumption would be 0.08 percent of SCE's energy supply (84,654 GWh net energy for 2019).²²⁵ The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. Electricity use from construction would be

²²⁵ *Southern California Edison, 2019. 2019 Annual Report, p. 2. 2019.*

short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the 2021 Project net annual operational electricity.

**Table IV.G-1
Annual Energy Use during Project Construction**

Energy Type	2021 Project ^b	2018 SEIR
Electricity		
Construction Office	39 MWh	N/A
Electricity from Water (Dust Control)	27 MWh	N/A
Total Electricity	66 MWh	N/A
Gasoline		
On-Road Construction Equipment	139,685 gallons	
Off-Road Construction Equipment	0 gallons	
Total Gasoline	139,685 gallons	35,611 gallons
Diesel		
On-Road Construction Equipment	25,393 gallons	
Off-Road Construction Equipment	318,182 gallons	
Total Diesel	343,575 gallons	441,526 gallons

SOURCES: ESA 2021; CalEEMod 2019; EMFAC 2017

NOTES:

kWh = kilowatt-hours; N/A = not applicable

Detailed calculations are provided in Appendix D1 of this 2021 SEIR.

^a Totals may not add up due to rounding of decimals.

^b Negative values are denoted using parentheses.

As shown in Table IV.G-1, the 2018 SEIR did not address electrical use from on-site construction trailers or construction water use for dust suppression, however it would be similar to the electricity consumption associated with the construction trailers for the 2021 Project. Regardless, as shown above, the electricity consumption would result in less than significant impacts. Therefore, as with the 2018 Project, the 2021 Project would not result in a wasteful, inefficient, and unnecessary consumption of energy associated with electricity used for construction, and impacts would remain **less than significant**.

(ii) Natural Gas

As stated above, construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would not be supplied to support 2021 Project construction activities; thus, there would be no expected demand generated by construction of the 2021 Project. If natural gas is used during

construction, it would be in limited amounts and on a temporary basis and would specifically be used to replace or offset diesel-fueled equipment and as such would not result in substantial on-going demand. Therefore, as with the 2018 Project, the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy associated with natural gas used for construction and impacts would remain **less than significant**.

(iii) Transportation Energy

Table IV.G-1 reports the amount of petroleum-based transportation energy that could potentially be consumed during 2021 Project construction based on the conservative set of assumptions provided in Appendix D1 of this 2021 SEIR. During 2021 Project construction, on- and off-road vehicles would consume an estimated annual average of approximately 139,685 gallons of gasoline and 343,575 gallons of diesel. For informational purposes only, and not for the purpose of determining significance, the fuel usage during 2021 Project construction would represent approximately 0.004 percent of the 2019 annual on-road gasoline-related energy consumption and 0.06 percent of the 2019 annual diesel fuel-related energy consumption in Los Angeles County,²²⁶ as shown in Appendix D1 of this 2021 SEIR.

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.²²⁷ The 2021 Project would comply with CAFE fuel economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley and Low-Carbon Fuel Standards, which are designed to reduce vehicle GHG emissions but would also result in fuel savings in addition to compliance with CAFE standards.

Construction of the 2021 Project would utilize fuel-efficient equipment consistent with state and federal regulations, such as fuel-efficiency regulations in accordance with the CARB Pavley Phase II standards, the anti-idling regulation in accordance with section 2485 in CCR Title 13 (for PA2), a 2-minute maximum idling restriction (per occurrence and location) as part of operational requirements for PA1 and PA3, and fuel requirements for stationary equipment in accordance with CCR Title 17, Section 93115 (concerning Airborne Toxic Control Measures), and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions

²²⁶ CEC, 2019 California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2020, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed June 2021.

²²⁷ BP Global, Oil reserves, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil.html>, accessed June 2021.

regulations discussed above would also result in fuel savings from the use of more-fuel-efficient engines.

Based on the analysis above, construction would utilize transportation fuels only for necessary on-site activities, construction worker travel to and from the Project Site, and to transport construction materials and demolition debris to and from the Project Site. As discussed above, additional idling restrictions for PA1 and PA3 and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption than would occur if the 2021 Project strictly complied with applicable regulations and thus minimize the 2021 Project construction-related energy use.

As included for informational purposes and to determine if the 2021 Project would result in an increase in the severity of an impact, Table IV.G-1 also includes estimated gasoline fuel and diesel fuel consumptions amounts for construction of the 2018 Project. As shown, energy consumption during construction of the 2021 Project would differ from what was analyzed in the 2018 SEIR. Total gasoline consumption would increase usage by 104,074 gallons annually beyond what was reported for the 2018 Project. This increase is due to the increase in construction schedule from approximately 2 years to approximately 5 years. Diesel consumption would decrease by 97,951 gallons from what was reported for the 2018 Project. Regardless, as the discussed above, the transportation fuels consumption would result in less than significant impacts as the 2021 Project complies with or exceeds regulatory requirements for the reduction of fuel consumption. Therefore, as with the 2018 Project, the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts associated with transportation fuels for construction would remain **less than significant**.

(b) Operation

During operation of the 2021 Project, energy would be consumed for multiple purposes, including, but not limited to on road mobile sources, area sources (landscape maintenance equipment and natural gas heating), energy (i.e., electricity, natural gas), water conveyance and wastewater treatment, and solid waste, which were calculated for the 2021 Project buildout year (2026). **Table IV.G-2** summarizes the 2021 Project's annual operational energy demand for electricity, natural gas, and gasoline and diesel transportation fuels in the opening year of 2026 and horizon year of 2040.

**Table IV.G-2
Summary of Annual Energy Use during Project Operation**

Energy Type	2021 Project – 2026 ^a	2021 Project – 2040	2018 SEIR
Electricity			
Building Energy	29,518 MWh	29,518 MWh	—
Water Conveyance	2,099 MWh	2,099 MWh	—
EV Charging	403 MWh	403 MWh	—
Transport Refrigeration Unit Hookups	577 MWh	577 MWh	—
Mobile Sources ^b	1,350 MWh	94,331 MWh	—
Total Electricity	33,947 MWh	126,928 MWh	39,710 MWh
Natural Gas			
Building Energy	28 million cf	28 million cf	—
Total Natural Gas	28 million cf	28 million cf	52 million cf
Transportation			
Total Gasoline	6,194,164 gallons	6,118,904 gallons	7,126,969 gallons
Total Diesel^c	3,770,603 gallons	527,643 gallons	848,755 gallons

SOURCE: ESA 2021.

NOTES:

kWh = kilowatt-hours; cf = cubic feet

Detailed calculations are provided in Appendix D1 of this 2021 SEIR.

Project electricity and natural gas estimates assume compliance with applicable 2019 Title 24 and CALGreen requirements.

^a Totals may not add up due to rounding of decimals.

^b Mobile electric sources include electricity used to power heavy-duty zero-emissions (see Section IV.G.5a, Methodology).

^c Diesel consumption includes reductions in fuel use as a result of the Advanced Clean Trucks Program (see Section IV.G.5a, Methodology).

(i) Electricity

With compliance to the minimum requirements of 2019 Title 24 with respect to energy performance standards and applicable 2019 CALGreen requirements, at buildout, the 2021 Project would result in a projected annual demand for electricity totaling approximately 33,947 MWh, as shown in Table IV.G-2. The 2021 Project would include energy saving measures that would meet or exceed 2019 California Title 24 Efficiency standards or such other standards otherwise adopted by the City. In addition to compliance with CALGreen requirements, the 2021 Project also incorporates PDFs including electric vehicle infrastructure for a minimum of 25 percent of truck parking spaces in PA3(a), incorporating photovoltaic systems on the Project Site on 25 percent of the available roof space for the light industrial uses, and incorporating outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. Refer to Section IV.G.5b(2), *Natural Gas*, below, for a detailed list of PDFs.

By 2020 SCE is required to procure at least 33 percent of its energy portfolio from renewable sources. The current sources for SCE include wind, solar, and geothermal sources. These sources accounted for 32 percent of the SCE overall energy mix in 2017, the most recent year for which data are available, and represent the available off-site renewable sources of energy that would meet the 2021 Project energy demand.

Based on data collected by SCE in its 2019 Annual Report, SCE total system sales for 2018–2019 fiscal year (the latest data available) was 84,654,000 MWh of electricity.²²⁸ As such, the 2021 Project-related annual electricity consumption of 33,947 MWh represents approximately 0.040 percent of SCE supplied electricity. Furthermore, SCE projected energy demand for 2026 (the 2021 Project opening year) is estimated at 108,000,000 MWh.²²⁹ The 2021 Project energy use would represent about 0.031 percent of total SCE sales, and would be within the SCE projected electricity supplies. As previously described, the 2021 Project incorporates a variety of energy conservation measures and PDFs to reduce energy usage and minimize energy demand below what would otherwise be required by existing regulations, as evidenced by the reduced contribution of the 2021 Project to overall sales between 2018 and 2024. The 2021 Project would implement a phase-in of zero-emissions (ZE) or near-zero-emissions (NZE) trucks for the light industrial portion of PA3(a). For trucks of model year 2021 or newer, 75 percent of trucks shall be ZE or NZE by 2035 and 100 percent of trucks shall be required to be ZE or NZE by 2040. The increase in electric vehicle use and electricity needed to power the electric truck increases the electrical consumption of the 2021 Project to 126,928 MWh annually, which represents approximately 0.15 percent of SCE’s 2019 supplied electricity. SCE projected electricity demand for 2030 is 110,000,000 MWh. The 2021 Project would represent approximately 0.115 percent of the total SCE sales.²³⁰

As included for informational purposes and to determine if the 2021 Project would result in an increase in the severity of an impact, Table IV.G-2 also includes estimated electricity demand from operation of the 2018 Project. As shown, electrical consumption during operation of the 2021 Project in 2026 would decrease from what was quantified in the 2018 SEIR. This decrease is due to more energy efficient buildings and equipment operations required under the 2019 Title 24 regulations, which are more stringent than the 2016 Title 24 regulation that was used for the 2018 SEIR analysis. Also, as shown in Table IV.G-2, the 2040 electrical consumption during operation of the 2021 Project would be less than both the 2026 consumption as well as the consumption reported in the 2018 SEIR. Therefore, as with the 2018 Project, the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy and impacts associated with operational electricity would remain **less than significant**.

²²⁸ *Southern California Edison, 2019 Annual Report, 2019, p. 2.*

²²⁹ *CEC, California Energy Demand 2018–2030 Revised Forecast, May 2021, p. 101.*

²³⁰ *CEC, California Energy Demand 2018–2030 Revised Forecast, May 2021, p. 101. Note that 2030 is the furthest year forecasted to date.*

(ii) Natural Gas

The 2021 Project would increase the demand for natural gas resources. With compliance with 2019 Title 24 standards and applicable 2019 CALGreen requirements (for PA1 and PA3; development of PA2 is currently bound by the PDFs/mitigation measures of the 2018 SEIR [pursuant to the vested rights CAM-Carson LLC is entitled to for its project], which require an efficiency of 5 percent more than the 2016 Title 24 standards), at buildout in 2026, the 2021 Project is projected to generate an increase in the on-site annual demand for natural gas totaling approximately 28 million cf, as shown in Table IV.G-2.

SoCalGas accounts for anticipated regional demand based on various factors including growth in employment by economic sector, growth in housing and population, and increasingly demanding state goals for reducing GHG emissions. SoCalGas accounts for an increase in employment and housing between 2018 to 2035. Furthermore, the 2020 California Gas Report, estimates natural gas supplies within SoCalGas' planning area will be approximately 854,830 million cf in 2026 (the 2021 Project's full buildout year).²³¹ As stated above, the 2021 Project's annual demand for natural gas is estimated to be approximately 28 million cf. The 2021 Project would account for approximately 0.003 percent of the 2026 forecasted annual consumption in SoCalGas' planning area and would fall within SoCalGas' projected consumption for the area and would be consistent with SoCalGas' anticipated regional demand from population or economic growth. Natural gas consumption is not assumed to change between 2026 and 2040. However, 2021 Project would account for approximately 0.004 percent of the 2035 forecasted annual consumption (767,595 cf).²³²

As would be the case with electricity, the 2021 Project would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand (for PA1 and PA3; PA2 is bound by the PDFs/mitigation measures of the 2018 SEIR, which require an efficiency of 5 percent more than the 2016 Title 24 standards). As such, the 2021 Project would minimize energy demand.

As included for informational purposes and to determine if the 2021 Project would result in an increase in the severity of an impact, Table IV.G-2 also includes estimated natural gas consumption from operation of the 2018 Project. As shown, natural gas consumption during operation of the 2021 Project would decrease from what was quantified in the 2018 SEIR. This decrease is due to a difference in land use. The 2018 SEIR did not include industrial land uses. The 2021 Project includes approximately 1.5 million sf of industrial uses that use less natural gas than other types of land uses such as residential or commercial. Therefore, as with the 2018 Project, the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy associated with operational natural gas and impacts would remain **less than significant**.

²³¹ *California Gas and Electric Utilities, 2020 California Gas Report, 2018, p. 145.*

²³² *California Gas and Electric Utilities, 2020 California Gas Report, 2018, p. 145.*

(iii) Transportation Energy

During operation, project-related traffic would result in the consumption of petroleum-based fuels related to vehicular travel to and from the Project Site. A majority of the vehicle fleet that would be used by visitors and employees would consist of light-duty automobiles and light-duty trucks, which are subject to fuel-efficiency standards. However, the 2021 Project does include a higher percentage of truck trips relative to other land uses given that the 2021 Project includes a fulfillment and distribution center (light industrial uses). Mobile emissions were estimated based on emission factors from EMFAC along with VMT values based on the Traffic Study, and an origin-destination analysis was used to estimate on-road mobile source GHG emissions.²³³ The traffic analysis's VMT calculations were used for PA1, and the employee/visitor portions of PA2 and PA3. For trucks associated with PA2 and PA3, an origin to destination approach was used to determine total vehicle miles for the truck trips, as discussed in more detail in Section IV.G.5a, *Methodology*, above.

As shown in Table IV.G-2, the 2021 Project's estimated annual petroleum-based fuel usage would be approximately 6,194,164 gallons of gasoline and approximately 3,770,603 gallons of diesel for the 2021 Project. Based on the CEC's *California Annual Retail Fuel Outlet Report*, Los Angeles County (County) consumed 3,559,000,000 gallons of gasoline and 584,745,763 gallons of diesel fuel in 2019.²³⁴ The 2021 Project would account for approximately 0.2 percent of County gasoline consumption and approximately 0.6 percent of County diesel consumption based on the available County fuel sales data for the year 2019.²³⁵ The 2021 Project would prohibit diesel TRUs, implement the use of lower polluting trucks, and provide electric charging infrastructure for TRUs and trucks. As outlined in 2021 SEIR PDF-O16, tenants will be required to use lower emitting trucks, specifically, 75 percent of model year 2021 or newer trucks must be ZE or NZE by 2035 and 100 percent shall be ZE or NZE by 2040. This conversion to electric trucks would reduce diesel consumption to 527,643 gallons per year. In

²³³ Fehr & Peers, *The District at South Bay 2021 Project Transportation Impact Analysis*, October 2021.

²³⁴ CEC, *California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, 2020*, <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed June 2021.

²³⁵ *Fuel use for the 2021 Project uses the origin-destination accounting method and includes trips from vendors and haul trucks from various in- and out-of-state regions. For comparison, fuel use for truck trips from only the South Coast Air Basin region would total 5,239,199 gallons of diesel, or 0.9 percent of Los Angeles County's total fuel use in 2019. The origin-destination accounting method is a conservative estimate of truck trips given that the exact origin of truck trips to the Project Site is unknown.*

2040, the 2021 Project would account for approximately 0.1 percent of County diesel consumption based on the available County fuel sales data for the year 2019.²³⁶

Transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world. Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.²³⁷ The 2021 Project would comply with Corporate Average Fuel Economy standards, which would result in more efficient use of transportation fuels (lower consumption). Project-related vehicle trips would also comply with Pavley Standards, which are designed to reduce vehicle GHG emissions by mandating increasingly stringent emissions standards on new vehicles, but would also result in fuel savings from more efficient engines in addition to compliance with Corporate Average Fuel Economy standards.

Further, the 2021 Project would be subject to the Advanced Clean Trucks Program, which mandates that retailers of heavy-duty trucks include an increasing percentage of zero-emissions trucks in their annual sales. The Advanced Clean Trucks Program goes into effect in 2024 and would affect mobile source energy consumption at the Project Site. Overall, the Advanced Clean Trucks Program would result in a fuel savings of 84,656 gallons of gasoline and 40,486 gallons of diesel in the 2021 Project's first operational year. However, the decrease in fuel would result in approximately 1,753 MWh of electricity needed to power the zero-emissions vehicles. As the mandated percentage of zero-emissions vehicles increases over the years, the diesel fuel savings would increase between 2026 and 2035, and the savings increase would increase subsequent to 2035 based on the implementation of the 2021 Project-mandated incorporation of zero-emissions trucks as discussed above.

The 2021 Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles for the reasons provided below. As discussed in detail in Section IV.H, *Greenhouse Gas Emissions*, the 2021 Project would not conflict with the 2020–2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better “placemaking,” provide more transportation choices, and reduce vehicular demand and associated emissions. The 2021 Project supports the development of complete communities by co-locating complementary commercial/restaurant, residential, and hotel land uses in close proximity to existing off-site residential uses, being located within 0.25 miles of off-site residential uses. The increases in land

²³⁶ *Fuel use analysis for the 2021 Project uses the origin-destination accounting method and includes trips from vendors and haul trucks from the anticipated origin to destination of the trip. For comparison, fuel use for truck trips from only the South Coast Air Basin region would total 5,239,199 gallons of diesel, or 0.9 percent of Los Angeles County's total fuel use in 2019. The origin-destination accounting method is a conservative estimate of truck trips given that the exact origin of truck trips to the Project Site is unknown.*

²³⁷ *BP Global, Oil reserves, 2018, <https://www.bp.com/en/global/corporate/energy-economics/statistical-review-of-world-energy/oil.html>, accessed June 2021.*

use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions. The 2021 Project would also promote walking and bicycling paths within its boundaries. It would connect to the surrounding commercial and recreational areas. The 2021 Project would locate industrial uses, along with retail, residential, and restaurant uses, within an area that has accessible public transit options, and the potential to generate significant employment opportunities, all within walking distance. Further, the 2021 Project would promote the use of electric vehicles by providing electric vehicle charging stations. Compliance with 2021 SEIR PDF-O7 would result in the installation of charging stations to support 169 spaces in PA1, 82 spaces in PA3, and an additional 325 spaces on site, or off site. The 2021 Project's proposed location within an area that has existing public transit (with access to existing regional bus service), and the 2021 Project's mixed use nature locates employment opportunities, restaurants and entertainment, all within walking distance of the on-site and off-site residential receptors would reduce vehicle trips and VMT. The inclusion of PDFs that support and encourage pedestrian activity and other non-vehicular transportation increases the 2021 Project's potential to reduce vehicle trips and VMT. Additionally, the 2021 Project design would provide for the installation of the conduit and panel capacity to accommodate electric vehicle charging stations for a minimum of 6 percent of the passenger vehicle parking spaces pursuant to the CALGreen Code for PA1 and 10 percent of passenger vehicle parking spaces for PA3. PA3(a) will also incorporate electrical infrastructure for a minimum of 25 percent of truck parking for the light industrial uses.

Based on the above, the 2021 Project would minimize operational transportation fuel demand beyond state, regional, and City goals. Therefore, operation of the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy.

As included for informational purposes and to determine if the 2021 Project would result in an increase in the severity of an impact Table IV.G-2 also includes estimated fuel consumption from operation of the 2018 Project. As shown, fuel consumption during operation of the 2021 Project would change from what was quantified in the 2018 SEIR. Gasoline consumption from operation of the 2021 Project would decrease compared to the 2018 Project, whereas diesel consumption would increase. The reduction in gasoline consumption would be due to the change in land use. While the 2021 Project would have more employees associated with the new light industrial land uses proposed within PA3(a) as opposed to the retail/restaurant/hotel land uses analyzed in the 2018 SEIR, the reduced number of visitors to the commercial uses is substantial enough to offset the increase in employees. The increase in diesel consumption for the 2021 Project would be due to the increase in diesel trucks associated with industrial uses. The previous 2018 Project assumed daily truck trips 158 trucks for the commercial uses in PA3 and 79 trucks for PA2. The 2021 Project assumes 1,325 trucks for the industrial uses in PA3(a), 14 trucks for PA3(b), and 79 trucks for PA2. Additionally, the previous 2018 Project did not use an origin to

destination model to determine VMT used in the analysis whereas the 2021 Project used an origin to destination model to determine VMT, which analyzes not only the VMT within the study area, but also accounts for the VMT for the trips outside of the respective air basin. Regardless, as discussed above, the impacts would be less than significant. Therefore, as with the 2018 Project, the 2021 Project would not result in the wasteful, inefficient, and unnecessary consumption of energy associated with operational transportation fuels and impacts would remain **less than significant**.

(2) Project Consistency with Applicable Plans and Policies

(a) Construction

The 2021 Project would utilize construction contractors who must demonstrate compliance with applicable regulations. Construction equipment would be required to comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, USEPA and NHTSA have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type.²³⁸ USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type.²³⁹ The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes per occurrence and location for PA2 (with idling occurring at different times and locations on a trip with up to 5 minutes upon arrival, 5 minutes during delivery, and 5 minutes at departure). However, construction activities in PA1 and PA3 will be subject to idling times to a maximum of 2 minutes per occurrence and location (with idling occurring at different times and locations on a trip with up to 2 minutes upon arrival at parking spaces, 2 minutes at the arrival to loading docks, 2 minutes at the departure from loading docks, and 2 minutes at the departure from parking). Additionally, off-road emissions standards

²³⁸ USEPA, Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, *August 2011*.

²³⁹ USEPA, Vol. 81, No. 206, *Greenhouse Gas Emissions and Fuel-Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2*, Tuesday, October 25, 2016.

will increase equipment efficiencies as they are phased-in over time and less-efficient equipment is phased out of construction fleets. These limitations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, based on the information above, construction and operation of the 2021 Project would comply with existing energy standards.

Similar to the 2018 Project, this 2021 SEIR states that construction equipment used would be consistent with the energy standards applicable to construction equipment including limiting idling fuel consumption and using contractors that comply with applicable CARB regulatory standards that affect energy efficiency. Therefore, as with the 2018 Project, the 2021 Project would comply with existing energy standards and impacts would remain **less than significant**.

(b) Operation

Electricity and natural gas usage during project operations, as reported in Table IV.G-2, would be minimized through incorporation of applicable 2019 Title 24 standards, applicable 2019 CALGreen requirements. Furthermore, the 2021 Project incorporates energy-conservation measures beyond regulatory requirements as specified in the PDFs detailed in Section IV.H, *Greenhouse Gas Emissions*; that is, the light industrial portion of the 2021 Project would be designed to include electric vehicle infrastructure for a minimum of 25 percent of truck parking spaces, and would incorporate photovoltaic systems on the Project Site for a minimum of 25 percent of rooftop coverage. All of the 2021 Project would incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered.

Through the City's EECAP, the City of Carson has established goals and strategies that would reduce energy use. As outlined in the EECAP, the City plans on focusing on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to EECAP energy efficiency goals, utility providers (such as SCE) are required to provide 50 percent of their electricity supply from renewable sources by the year 2030, further reducing the GHG intensity of supplied electricity. As discussed above, the 2021 Project would comply with CALGreen energy efficiency requirements, which would be consistent with EECAP goals for increasing energy and water use efficiency in new residential and commercial developments.

With respect to operational transportation-related fuel usage, the 2021 Project would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. The 2021 Project would comply with CAFE fuel economy standards and the Pavley Standards, which are designed to result in more efficient use of transportation fuels. As discussed in detail in Section IV.H, *Greenhouse Gas Emissions*, the 2021 Project's design and its location on an infill site within close proximity to public transit options, the 2021 Project's proximity to existing off-site retail, restaurant, entertainment,

commercial, and job destinations, and its walkable environment would achieve a reduction in VMT that would not conflict with the 2020–2040 RTP/SCS.

The 2018 SEIR demonstrated consistency with applicable energy plans and policies such as CALGreen Code and Title 24 Standards. Similarly, the 2021 Project demonstrates consistency with CALGreen Code, Title 24 Standards, SCAG’s 2020–2045 RTP/SCS, and the City’s CAP (see Section VI.H.3.d(2), *Climate Action Plan*, for further discussion of the City’s CAP. Therefore, as with the 2018 Project, the 2021 Project would comply with existing energy standards and impacts would remain **less than significant**.

IV.G.6 Mitigation Measures

As with the 2018 SEIR, no mitigation measures related to energy are necessary. The 2006 FEIR was not required to analyze energy impacts. Nonetheless, several of the mitigation measures that were included within the 2018 SEIR have been incorporated as part of the 2021 Project’s mitigation measures within in Section IV.D, *Air Quality*, of this 2021 SEIR and would further reduce energy consumption. The following mitigation measures were either included in the 2018 SEIR and its associated 2018 Mitigation Monitoring and Reporting Program (MMRP) and/or modified as indicated below to clarify how the measures in the 2018 SEIR would apply to the 2021 Project based on current regulatory standards. In addition, a mitigation measure requiring implementation of a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation was included in Section IV.C, *Transportation*, of this 2021 SEIR, and has been incorporated into the mitigation discussion since it would also aid in the reduction of VMT and fuel energy consumption. All of the mitigation measures described below will be included in the MMRP for this 2021 SEIR. The number system reflects the mitigation measures as identified in the 2018 SEIR for ease of comparison.

(1) Construction

Mitigation Measure G-3: General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts. (Applicable to PA1, PA2, and PA3.)

(2) Operations

Mitigation Measure G-16: All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-19: ~~The Each~~ Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-20: During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-21: ~~The Each~~ Applicant shall pay a fair-share contribution for a low-emissions shuttle service between the ~~Property-Project Site~~ and other major activity centers within the 2021 Project vicinity (i.e., the Metro Rail Blue Line station at Del Amo Boulevard and Santa Fe Avenue and the Carson Transfer Station at the South-Bay Pavilion). (Applicable to PA1 and PA2. Not Applicable to PA3 as it is an industrial land use.)

Mitigation Measure G-29: The 2021 Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean air vehicles and comply with California Green Building Standards Code (CALGreen). (Applicable to PA2.)²⁴⁰

Mitigation Measure C-18: The PA1 and PA3 Applicant(s) shall implement a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The TDM Program shall be subject to review and approval prior to issuance of certificate of occupancies by the City of Carson Department of Public Works subject to the requirements specified below. Mandatory strategies in the TDM Program shall include the TDM strategies summarized below. This TDM program is estimated to reduce total VMT per service population by about 2 percent based on the trip reduction methodology described in the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* report.

- *Unbundled Parking*—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. (Applicable to PA1.)
- *Rideshare Programs*—Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more

²⁴⁰ This mitigation is limited only to PA2 as new PDFs replace this mitigation measure for PA1 and PA3.

commonly provided for Project Site employees but residents could also benefit from a similar program. (Applicable to PA1 and PA3.)

- *Transit Pass Discount Program*—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk and, therefore, at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project Site employees but could also be sold to residents. (Applicable to PA1 and PA3.)
- *Bicycle Parking and Bike Share Program*—The 2021 Project shall include bicycle facilities within the Project Site as well as short-term bicycle parking. The 2021 Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the Project Site. (Applicable to PA1 and PA3.)
- *Car Share Program*—A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. (Applicable to PA1 and PA3.)

IV.G.7 Cumulative Project Impacts

(1) Result in potentially significant cumulative impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project operation

(a) Electricity

The geographic context for the cumulative analysis of electricity is the SCE service area. Growth within this service area is anticipated to increase the demand for electricity and the need for infrastructure, such as new or expanded facilities.

Future development, including the 2021 Project, would result in the increased use of electricity resources. However, SCE has determined that the use of such resources would be minor compared to existing supply and infrastructure within the SCE service area and would be consistent with growth expectations.²⁴¹ Furthermore, like the 2021 Project, other cumulative developments would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen Code, state energy standards under Title 24, and incorporate mitigation measures, as necessary. As such, the 2021 Project's

²⁴¹ CEC, California Energy Demand 2018–2030 Revised Forecast, January 2018.

contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy would not be cumulatively considerable.

(b) Natural Gas

The geographic context for the cumulative analysis of natural gas is the SoCalGas service area. Growth within this service area is anticipated to increase the demand for natural gas and the need for infrastructure, such as new or expanded facilities.

Cumulative development projects, including the 2021 Project, in the SoCalGas service area would result in the use of natural gas resources, however the use of such resources would be consistent with regional and local growth expectations for the SoCalGas service area, as discussed above. Further, like the 2021 Project, other future development projects would be required to incorporate energy conservation features in order to comply with applicable mandatory regulations including CALGreen and state energy standards in Title 24. As such, the 2021 Project's contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy would not be cumulatively considerable.

(c) Transportation Energy

The geographic context for the cumulative analysis of transportation energy is the SCAG region. Growth within this region is anticipated to increase the demand for transportation and the need for infrastructure, such as new or expanded facilities.

Buildout of the 2021 Project and cumulative projects in the SCAG region would be expected to increase overall VMT; however, the effect on transportation fuel demand would be reduced by future improvements to vehicle fuel economy pursuant to federal and state regulations. By 2026, vehicles are required to achieve 54.5 mpg (based on USEPA measurements), which is a 54 percent increase from the 35.5 mpg standard in the 2012–2016 standards. Siting land use development projects at infill sites is consistent with the overall goals of the state to reduce VMT pursuant to SB 375. Cumulative development projects would need to demonstrate consistency with these goals and incorporate any mitigation measures required under CEQA, which would also ensure cumulative development projects contribute to transportation energy efficiency. As such, the 2021 Project's contribution to cumulative impacts due to wasteful, inefficient, and unnecessary consumption of energy would not be cumulatively considerable.

(2) Project Consistency with Applicable Plans and Policies

(a) Electricity

Buildout of the 2021 Project, cumulative projects, and additional forecasted growth in SCE's service area would cumulatively increase the demand for electricity supplies and on infrastructure capacity. It is expected that SCE would continue to expand delivery capacity as necessary to meet

demand increases within its service area. Development projects within the SCE service area would also be anticipated to incorporate site-specific infrastructure improvements, as necessary. Each cumulative project would be reviewed by SCE to identify necessary power facilities and service connections to meet individual project needs. In addition, as with the 2021 Project, cumulative projects would need to analyze potential environmental effects of infrastructure extensions, adhere to any applicable ground-disturbing design features, and implement necessary mitigation measures, which would also serve to reduce potential impacts from any infrastructure removal or relocation activities. Project Applicants would be required to provide for the needs of their individual projects, thereby contributing to the electrical infrastructure in the surrounding area.

Moreover, the 2021 Project would also incorporate energy and water efficiency measures outlined in PDFs (refer to Section IV.H, *Greenhouse Gas Emissions*) that go beyond applicable required City and state energy plans and standards. Cumulative projects, as with the 2021 Project, would be required to evaluate electricity conservation features and compliance with applicable electricity efficiency plans and standards including the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Cumulative projects, as with the 2021 Project, would also be required to evaluate potential impacts related to consistency with the City's CAP and EECAP goals, and local and regional supplies or capacity based on regional growth plans, such as the SoCalGas energy supply projections for long-term planning.

As such, the 2021 Project's contribution to cumulative impacts due to conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable.

(b) Natural Gas

Buildout of the 2021 Project, cumulative projects, and additional forecasted growth in SoCalGas' service area would cumulatively increase the demand for natural gas supplies and on infrastructure capacity. However, as discussed above, SoCalGas forecasts take into account projected population growth and development based on local and regional plans, and the 2021 Project's growth and development in the vicinity pursuant to the cumulative projects would not conflict with those projections.

Cumulative projects, as with the 2021 Project, would be required to evaluate natural gas conservation features and compliance with applicable regulations including the Title 24 standards and CALGreen Code, and incorporate mitigation measures, as necessary under CEQA. Cumulative projects, as with the 2021 Project, would also be required to evaluate potential impacts related to consistency with the City's CAP and ECAP goals and policies, and local and regional supplies or capacity based on regional growth plans, such as the SoCalGas energy supply projections for long-term planning.

As such, the 2021 Project's contribution to cumulative impacts due to conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency would not be cumulatively considerable.

(c) *Transportation Energy*

Buildout of the 2021 Project, cumulative projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel in the state and region. However, as discussed above, the 2021 Project would not conflict with the energy efficiency policies emphasized by the 2020–2045 RTP/SCS. As discussed previously, the 2021 Project would be consistent with and not conflict with SCAG's land use type for the area and would encourage alternative transportation and achieve a reduction in VMT compared to a standard non-infill project, in part, based on its location efficiency.

The 2020–2045 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects and is applicable to the 2021 Project, and cumulative projects with respect to transportation energy efficiency. Cumulative projects would be required under CEQA to evaluate if their respective developments would conflict with the energy efficiency policies emphasized by the 2020–2045 RTP/SCS, such as the per capita VMT targets, promotion of alternative forms of transportation, proximity to public transportation options, provisions for encouraging multi-modal and energy efficient transit such as by accommodating bicycle parking and electrovoltaic (EV) chargers at or above regulatory requirements. Furthermore, cumulative projects would be required to implement mitigation measures, as needed, if found to be in conflict with applicable provisions of the SCAG 2020–2045 RTP/SCS for the land use type.

Since the 2021 Project would not conflict with the 2020–2045 RTP/SCS, the 2021 Project's contribution to cumulative impacts with respect to potentially significant environmental impacts due to conflicts with or obstruction of a state or local plan for transportation energy efficiency would not be would not be cumulatively considerable.

IV.G.8 Level of Significance after Mitigation

As discussed previously, mitigation is not necessary for the reduction of energy consumption as the proposed 2021 Project with implementation of the PDFs demonstrate the 2021 Project is less than significant for all energy issues areas. Implementation of the above listed mitigation measures that were included as part of the previous 2018 Project or included as part of the 2021 Project analysis, would further reduce energy consumption. Mitigation Measure C-18 would reduce VMT by 7,866 passenger cars and approximately 278 gallons of gasoline annually. The exact amount of reduction for Mitigation Measures G-3, G-16, G-19 through G-21, and G-29 cannot be quantified due to the nature of the mitigation measures and the currently unknown level of implementation by the 2021 Project. Therefore, with implementation of mitigation measures, the 2021 Project would further reduce energy consumption. Therefore, as with the 2018 Project, the 2021 Project would comply

with existing energy standards and would not result in the wasteful, inefficient, and unnecessary consumption of energy. Impacts would remain **less than significant**.

IV.H GREENHOUSE GAS EMISSIONS

IV.H.1 Introduction

This section provides for estimates and analysis of the greenhouse gas (GHG) impacts due to the changes proposed by the 2021 Project's construction and operation activities in comparison to the 2018 Project. Accordingly, this section supplements the greenhouse gas analysis provide in Section VII, *Other Environmental Considerations*, of the 2018 SEIR. The analysis contained herein analyzes and determines the impacts that would result from construction and operational activities that would take place within the Project Site (referenced herein as the Project Site) under current environmental and regulatory circumstances and assuming implementation of the mitigation measures identified in the 2018 SEIR or as modified in this 2021 SEIR with respect to the revised 2021 Project analysis. To determine whether the 2021 Project would result in any new impacts or increases in the severity of impacts previously disclosed in the 2018 SEIR, the analysis compares the significance of these impacts to those identified in the 2018 SEIR. This section relies on the information, data, assumptions, calculation worksheets, and model outputs provided in Appendix D1 of this 2021 SEIR.

As detailed in the 2018 SEIR, the CEQA Guidelines did not require analysis of GHG emissions for the 2006 FEIR. Although not required by CEQA at the time of the 2006 FEIR, GHG-related emissions were analyzed in the 2018 SEIR by determining consistency of the 2018 Project with the applicable regulations and policies to reduce GHG emissions. Emissions were not quantified as a part of the 2018 SEIR analysis.

This analysis concludes that the 2021 Project would result in similar types of greenhouse gas impacts as compared to the 2018 Project. Like the 2018 Project, the 2021 Project would result in less-than-significant impacts with respect to consistency with applicable regulations, plans, and policies set forth by the regulations imposed by the State of California (State), the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG) and the City of Carson (City) to reduce GHG emissions.

IV.H.2 Existing Conditions

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation and storms. Historical records indicate that global climate changes have occurred in the past due to natural phenomena; however, current data increasingly indicate that the current global conditions differ from past climate changes in rate and magnitude. Global climate change attributable to anthropogenic (human) GHG emissions is currently one of the most important and widely debated scientific, economic and political issues in the United States and the world as a whole. The extent to which increased concentrations of GHGs have caused or will cause climate change and the appropriate

actions to limit and/or respond to climate change are the subject of significant and rapidly evolving regulatory efforts at the federal and state levels of government.

GHGs are those compounds in the Earth's atmosphere that play a critical role in determining temperature near the Earth's surface. More specifically, these gases allow high-frequency shortwave solar radiation to enter the Earth's atmosphere, but retain some of the low frequency infrared energy, which is radiated back from the Earth towards space, resulting in a warming of the atmosphere. Not all GHGs possess the same ability to induce climate change; as a result, GHG contributions are commonly quantified in the units of equivalent mass of carbon dioxide (CO₂e). Mass emissions are calculated by converting pollutant specific emissions to CO₂e emissions by applying the proper global warming potential (GWP) value. These GWP ratios are available from the Intergovernmental Panel on Climate Change (IPCC). Historically, GHG emission inventories have been calculated using the GWPs from the IPCC's Second Assessment Report (SAR). The IPCC updated the GWP values based on the science in its Fourth Assessment Report (AR4).^{242,243} The California Air Resources Board (CARB) has begun reporting GHG emission inventories for California using the GWP values from the IPCC AR4. Although the IPCC has released its Fifth Assessment Report (AR5) with updated GWPs, CARB reports the statewide GHG inventory using the AR4 GWPs, which is consistent with international reporting standards. Therefore, the analysis in this 2021 SEIR reflects the GWP values from IPCC AR4. Compounds that are regulated as GHGs are discussed below.²⁴⁴

Carbon Dioxide (CO₂): CO₂ is the most abundant GHG in the atmosphere and is primarily generated from fossil fuel combustion from stationary and mobile sources. CO₂ is the reference gas (GWP of 1) for determining the GWPs of other GHGs.²⁴⁵

Methane (CH₄): CH₄ is emitted from biogenic sources (i.e., resulting from the activity of living organisms), incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. The GWP of CH₄ is 21 in the IPCC SAR and 25 in the IPCC AR4.²⁴⁶

Nitrous Oxide (N₂O): N₂O produced by human-related sources including agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The GWP of N₂O is 310 in the IPCC SAR and 298 in the IPCC AR4.²⁴⁷

²⁴² *Intergovernmental Panel on Climate Change (IPCC), Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.*

²⁴³ *IPCC, Second Assessment Report, Working Group I: The Science of Climate Change, 1995.*

²⁴⁴ *IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.*

²⁴⁵ *IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.*

²⁴⁶ *IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.*

²⁴⁷ *IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.*

Hydrofluorocarbons (HFCs): HFCs are fluorinated compounds consisting of hydrogen, carbon, and fluorine. They are typically used as refrigerants in both stationary refrigeration and mobile air conditioning systems. The GWP of HFCs ranges from 140 for HFC-152a to 11,700 for HFC-23 in the IPCC SAR and 124 for HFC-152a to 14,800 for HFC-23 in the IPCC AR4.²⁴⁸

Perfluorocarbons (PFCs): PFCs are fluorinated compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. The GWPs of PFCs range from 6,500 to 9,200 in the IPCC SAR and 7,390 to 17,700 in the IPCC AR4.²⁴⁹

Sulfur Hexafluoride (SF₆): SF₆ is a fluorinated compound consisting of sulfur and fluoride. It is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. SF₆ has a GWP of 23,900 in the IPCC SAR and 22,800 in the IPCC AR4.²⁵⁰

a. Existing Statewide Greenhouse Gas Emissions

CARB compiles GHG inventories for California. Based on the year 2019 GHG inventory data (the latest year for which data are available), California emitted 418.2 million metric tons of CO₂e (MMTCO₂e) which includes emissions resulting from imported electrical power.²⁵¹ Between 1990 and 2019, the population of California grew by approximately 33 percent.²⁵² In addition, the California economy, measured as gross state product, grew from \$773 billion in 1990 to \$3.1 trillion in 2019, representing an increase of approximately four times the 1990 gross state product.²⁵³ Despite the population and economic growth, California's net GHG emissions were reduced to below 1990 levels in 2016. According to CARB, the declining trend coupled with the state's GHG reduction programs (such as the Renewables Portfolio Standard, LCFS, vehicle efficiency standards, and declining caps under the Cap and Trade Program) demonstrate that California is on track to meet the 2020 and the future 2030 GHG reduction target codified in

²⁴⁸ IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.

²⁴⁹ IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.

²⁵⁰ IPCC, Fourth Assessment Report, Working Group I Report: The Physical Science Basis, 2007.

²⁵¹ California Air Resources Board (CARB), *Current California GHG Emission Inventory Data – 2000–2019 GHG Inventory (2021 Edition)*, 2021, <https://ww2.arb.ca.gov/ghg-inventory-data>.

²⁵² California Department of Finance (CDOF), *E-5 Population and Housing Estimates for Cities, Counties, and the State, 2011–2021 with 2010 Census Benchmark*.

https://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-5/documents/E-5_2021_InternetVersion.xlsx, accessed August 27,

2021. https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.

²⁵³ CDOF, *California State Gross Domestic Product*, https://www.dof.ca.gov/Forecasting/Economics/Indicators/Gross_State_Product/documents/CA_GDP.xlsx, accessed August 27, 2021. Amounts are based on current dollars as of the date of the report (April 2020).

Executive Order B-30-15. **Table IV.H-1, State of California Greenhouse Gas Emissions**, identifies and quantifies statewide anthropogenic GHG emissions and sinks (e.g., carbon sequestration due to forest growth) in 1990 and 2019 (i.e., the most recent year in which data are available from CARB). As shown in Table IV.H-1, the transportation sector is the largest contributor to statewide GHG emissions at approximately 40 percent in 2019.

Table IV.H-1
State of California Greenhouse Gas Emissions

Category	Total 1990 Emissions using IPCC SAR (MMTCO ₂ e)	Percent of Total 1990 Emissions	Total 2019 Emissions using IPCC AR4 (MMTCO ₂ e)	Percent of Total 2019 Emissions
Transportation	150.7	35%	166.1	39.7%
Electric Power	110.6	26%	58.8	14.1%
Commercial	14.4	3%	28.0	3.8%
Residential	29.7	7%	15.9	6.7%
Industrial	103.0	24%	88.2	21.1%
Recycling and Waste ^a	—	—	8.9	2.1%
High GWP/Non-Specified ^b	1.3	<1%	20.6	4.9%
Agriculture/Forestry	23.6	6%	31.8	7.6%
Forestry Sinks	-6.7	—	— ^c	—
Net Total (IPCC SAR)	426.6	100%	—	—
Net Total (IPCC AR4)^d	431	100%	418.2	100%

SOURCES: CARB, California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators, July 28, 2021.
https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf.

NOTES:

Totals may not add up exactly due to rounding.

^a Included in other categories for the 1990 emissions inventory.

^b High GWP gases are not specifically called out in the 1990 emissions inventory.

^c Revised methodology under development (not reported for 2019).

^d CARB revised the state's 1990 level GHG emissions using GWPs from the IPCC AR4.

b. Urban Heat Island

According to the CalEPA, the urban heat island effect refers to large urbanized areas that experience higher temperatures, greater pollution and more negative health impacts during hot summer months when compared to more rural communities.²⁵⁴ Heat islands are created by a combination of heat-absorptive surfaces (such as dark pavement and roofing), heat-generating activities (such as engines and generators) and the absence of vegetation (which provides

²⁵⁴ California Environmental Protection Agency (CalEPA), *Understanding the Urban Heat Island Index*, 2021, <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>, accessed June 2021.

evaporative cooling). Daytime temperatures in urban areas are on average 1 to 6 degrees Fahrenheit (F) higher than in rural areas, while nighttime temperatures can be as much as 22 degrees F higher as the heat is gradually released from buildings and pavement.²⁵⁵ Assembly Bill (AB) 296 (Chapter 667, Statutes of 2012) required that CalEPA develop an Urban Heat Island Index (UHII) to quantify the extent and severity of an urban heat island for individual cities to map where and how intensely they manifest at a local scale.²⁵⁶ In 2015, CalEPA released maps that show the scientifically assigned UHII scores based on atmospheric modeling for each census tract in and around most urban areas throughout the state. The urban area in which the Project Site is located has a UHII score of 10.91 degree-hours per day (Celsius scale).²⁵⁷ The UHII is equivalent to an average temperature difference between rural and urban area of approximately 0.81 degrees F.²⁵⁸ The UHII does not measure the temperatures of an area, but rather it measures the average temperature difference between rural and urban within an applicable area.

c. Effects of Global Climate Change

The scientific community's understanding of the fundamental processes responsible for global climate change has improved over the past decade, and its predictive capabilities are advancing. However, there remain significant scientific uncertainties, for example, in predictions of local effects of climate change, occurrence, frequency, and magnitude of extreme weather events, effects of aerosols, changes in clouds, shifts in the intensity and distribution of precipitation, and changes in oceanic circulation. Due to the complexity of the Earth's climate system and inability to accurately model it, the uncertainty surrounding climate change may never be completely eliminated. Nonetheless, the IPCC's *Fifth Assessment Report: Summary for Policy Makers* (dated 2013) states that, "it is *extremely likely* that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forces [sic] together."²⁵⁹ In addition, a report from the National Academy of Sciences published in 2010 concluded that 97 to 98 percent of the

²⁵⁵ CalEPA, *Understanding the Urban Heat Island Index*, <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>, accessed June 2021.

²⁵⁶ CalEPA, *Understanding the Urban Heat Island Index*, <https://calepa.ca.gov/climate/urban-heat-island-index-for-california/understanding-the-urban-heat-island-index/>, accessed June 2021.

²⁵⁷ According to CalEPA, the degree-hour combines both the intensity of the heat and the duration of the heat into a single numerical measure.

²⁵⁸ According to CalEPA, to perform an approximate conversion to a total number of degrees Fahrenheit per day, divide the Index by 24 hours and multiply the result by 1.8 degrees. For example, if the Index is 120 degree-hours per day, then the approximate average temperature difference between rural and urban in that area is 9 degrees F (i.e., $120 / 24 * 1.8 = 9$).

²⁵⁹ IPCC, *Fifth Assessment Report, Summary for Policy Makers, 2013, page 5.*

climate researchers most actively publishing in the field support the tenets of the IPCC in that climate change is very likely caused by human (i.e., anthropogenic) activity.²⁶⁰

According to the California EPA, the potential impacts in California due to global climate change may include: loss in snow pack; sea level rise; more extreme heat days per year; more high ozone days; more frequent and a greater spatial extent of forest fires; more drought years; increased erosion of California's coastlines and sea water intrusion into the Sacramento and San Joaquin Deltas and associated levee systems; and increased pest infestation.²⁶¹ The California Energy Commission (CEC) has a geospatial data tool (Cal-Adapt) that provides a view of how the state could be impacted by climate change. Below is a summary of some of the potential climate change effects and relevant Cal-Adapt data, reported by an array of studies that could be experienced in California as a result of global warming and climate change.

(1) Air Quality

Higher temperatures have been determined to be conducive to air pollution formation and, therefore, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone; however, the magnitude of the effect is uncertain. If higher temperatures resulting from climate change are accompanied by drier conditions, the potential for large wildfires could increase within the Los Angeles region, which, in turn, would further worsen air quality. However, if higher temperatures resulting from climate change are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating some of the pollution associated with wildfires, although it would not eliminate all effects of increased temperatures. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state.²⁶² In 2018, the California Natural Resources Agency (CNRA) published the Safeguarding California Plan: 2018 Update, as a continuation of the policy vision Governor's Executive Order S-13-2008 and the 2009 CNRA California Climate Adaptation Strategy.²⁶³ The CNRA plan lists specific actions and recommendations for State and local agencies to best adapt to the anticipated risks posed by a changing climate. In accordance with the 2009 CNRA California Climate Adaptation Strategy, the CEC developed the Cal-Adapt website, which became operational in 2011, that synthesizes

²⁶⁰ *Anderegg, William R. L., J.W. Prall, J. Harold, S.H. Schneider, Expert Credibility in Climate Change, Proceedings of the National Academy of Sciences of the United States of America, 2010, 107:12107–12109.*

²⁶¹ *CalEPA, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2006.*

²⁶² *California Energy Commission (CEC), Scenarios of Climate Change in California: An Overview, February 2006.*

²⁶³ *California Natural Resources Agency (CNRA), 2018 Safeguarding California Plan: 2018 Update, California's Climate Adaptation Strategy, January 2018.*

climate change scenarios and impacts to benefit local decision makers.^{264,265} As stated in the CNRA Safeguarding California Plan: 2018 Update, “the Cal-Adapt.org web portal is at the forefront of resources for specific communities to understand how climate change will raise temperatures and exacerbate extreme heat events, drought, snowpack loss, wildfire, and coastal flooding.” The information provided on the Cal-Adapt website represents a projection of potential future climate scenarios. The data are comprised of the average values (i.e., temperature, sea-level rise, snowpack) from a variety of scenarios and models and are meant to illustrate how the climate may change based on a variety of different potential social and economic factors.

(2) Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. Studies have found that, “Considerable uncertainty about precise impacts of climate change on California hydrology and water resources will remain until we have more precise and consistent information about how precipitation patterns, timing, and intensity will change.”²⁶⁶ For example, some studies identify little change in total annual precipitation in projections for California while others show significantly more precipitation.²⁶⁷ Warmer, wetter winters would increase the amount of runoff available for groundwater recharge; however, this additional runoff would occur at a time when some basins are either being recharged at their maximum capacity or are already full.²⁶⁸ Conversely, reductions in spring runoff and higher evapotranspiration because of higher temperatures could reduce the amount of water available for recharge.²⁶⁹

The California Department of Water Resources (CDWR) report dated 2006 on climate change and effects on the State Water Project (SWP), the Central Valley Project, and the Sacramento-San Joaquin Delta, concluded that “climate change will likely have a significant effect on California’s future water resources...[and] future water demand.” It also reported that “much uncertainty about future water demand [remains], especially [for] those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected

²⁶⁴ CNRA, *Climate Action Team*, 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008, 2009.

²⁶⁵ *The Cal-Adapt website address is: <http://cal-adapt.org>.*

²⁶⁶ *Pacific Institute for Studies in Development, Environment and Security*, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003.

²⁶⁷ *Pacific Institute for Studies in Development, Environment and Security*, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003.

²⁶⁸ *Pacific Institute for Studies in Development, Environment and Security*, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003.

²⁶⁹ *Pacific Institute for Studies in Development, Environment and Security*, Climate Change and California Water Resources: A Survey and Summary of the Literature, July 2003.

to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain.” It also reported that the relationship between climate change and its potential effect on water demand is not well understood, but “[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future.” Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows.²⁷⁰ In its Fifth Assessment Report, the IPCC states “Changes in the global water cycle in response to the warming over the 21st century will not be uniform. The contrast in precipitation between wet and dry regions and between wet and dry seasons will increase, although there may be regional exceptions.”²⁷¹

(3) Hydrology and Sea Level Rise

As discussed above, climate changes could potentially affect the amount of snowfall, rainfall and snow pack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for salt water intrusion. Sea level rise can be a product of global warming through two main processes: expansion of seawater as the oceans warm, and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could jeopardize California’s water supply, and increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

(4) Agriculture

California has a \$30 billion agricultural industry that produces one half of the country’s fruits and vegetables. Higher CO₂ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase. Crop-yield could be threatened by a less reliable water supply. Also, greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year crops are harvested, and thus affect their quality.²⁷²

(5) Ecosystems and Wildlife

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists expect that the average global surface

²⁷⁰ *California Department of Water Resources, Climate Change Report: Progress on Incorporating Climate Change into Planning and Management of California’s Water Resources, 2006, p. 2-75.*

²⁷¹ *IPCC, Fifth Assessment Report, Summary for Policy Makers, 2013.*

²⁷² *California Climate Change Center, Our Changing Climate: Assessing the Risks to California, 2006.*

temperature could rise by 2 to 11.5°F (1.1 to 6.4°C) by 2100, with significant regional variation.²⁷³ With increases in global temperatures, soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Sea level could rise as much as 2 feet along most of the U.S. coastline. Rising temperatures could have four major impacts on plants and animals: (1) timing of ecological events; (2) geographic range; (3) species' composition within communities; and (4) ecosystem processes such as carbon cycling and storage.^{274,275}

d. Existing Project Site Greenhouse Gas Emissions

The Project Site remains an undeveloped property located within an urbanized area. The only current emissions sources associated with the Project Site are the active landfill gas recovery system and flares. Currently there are two flares located on site; however, current landfill gas production requires only the operation of one flare. Given the current parameters of operation, the operating flare results in the annual release of 0.8 MTCO₂e and the second flare is non-operational/stand-by as back-up when the first flare is offline. Therefore, based on flare operation requirements approximately 0.8 MTCO₂e is released annually from current on-site remediation operations. These remediation operations will continue throughout the construction and operation of the proposed 2021 Project. Details regarding the calculation of the existing Project Site remediation operation emissions are provided in Appendix D1 of this 2021 SEIR.

IV.H.3 Regulatory Framework

a. Federal

(1) Federal Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. The federal government administers a wide array of public-private partnerships to reduce the GHG intensity generated in the United States. These programs focus on energy efficiency, renewable energy, methane and other non-CO₂ gases, agricultural practices, and implementation of technologies to achieve GHG reductions. The USEPA implements numerous voluntary programs that contribute to the reduction of GHG emissions. These programs (e.g., the Energy Star labeling system for energy-efficient products) play a significant role in encouraging voluntary reductions from large corporations, consumers, industrial and commercial buildings, and many major industrial sectors.

²⁷³ *National Research Council, Advancing the Science of Climate Change, 2010.*

²⁷⁴ *Parmesan, C., Ecological and Evolutionary Response to Recent Climate Change, 2004.*

²⁷⁵ *Parmesan, C., and H. Galbraith, Observed Ecological Impacts of Climate Change in North America. Arlington, VA: Pew. Cent. Glob. Clim. Change, 2004.*

(2) Clean Air Act

In *Massachusetts v. Environmental Protection Agency* (Docket No. 05–1120), the United States Supreme Court held in April of 2007 that the USEPA has statutory authority under Clean Air Act (CAA) Section 202 to regulate GHGs. The Court did not hold that the USEPA was required to regulate GHG emissions; however, it indicated that the agency must decide whether GHGs cause or contribute to air pollution that is reasonably anticipated to endanger public health or welfare. On December 7, 2009, the USEPA Administrator signed two distinct findings regarding GHGs under CAA Section 202(a). The USEPA adopted a Final Endangerment Finding for the six defined GHGs (CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆) on December 7, 2009. The Endangerment Finding is required before USEPA can regulate GHG emissions under CAA Section 202(a)(1) consistently with the United States Supreme Court decision. The USEPA also adopted a Cause or Contribute Finding in which the USEPA Administrator found that GHG emissions from new motor vehicle and motor vehicle engines are contributing to air pollution, which is endangering public health and welfare. These findings do not, by themselves, impose any requirements on industry or other entities. However, these actions were a prerequisite for implementing GHG emissions standards for vehicles.

(3) Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA) facilitates the reduction of national GHG emissions by requiring the following:

- Increasing the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) that requires fuel producers to use at least 36 billion gallons of biofuel in 2022;
- Prescribing or revising standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances;
- Requiring approximately 25 percent greater efficiency for light bulbs by phasing out incandescent light bulbs between 2012 and 2014; requiring approximately 200 percent greater efficiency for light bulbs, or similar energy savings, by 2020; and
- While superseded by the USEPA and NHTSA actions described below in Section 2.a(1)(d), (i) establishing miles per gallon targets for cars and light trucks and (ii) directing the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for trucks.

Additional provisions of EISA address energy savings in government and public institutions, promote research for alternative energy, additional research in carbon capture, international energy programs, and the creation of green jobs.²⁷⁶

(4) Executive Order 13432

In response to the *Massachusetts v. Environmental Protection Agency* ruling, President Bush signed Executive Order 13432 on May 14, 2007, directing the USEPA, along with the Departments of Transportation, Energy, and Agriculture, to initiate a regulatory process that responds to the Supreme Court's decision. Executive Order 13432 was codified into law by the 2009 Omnibus Appropriations Law signed on February 17, 2009. The order sets goals in the areas of energy efficiency, acquisition, renewable energy, toxics reductions, recycling, sustainable buildings, electronics stewardship, fleets, and water conservation.

(5) Light-Duty Vehicle Greenhouse Gas and Corporate Average Fuel Economy Standards

On May 19, 2009, President Obama announced a national policy for fuel efficiency and emissions standards in the United States auto industry. The adopted federal standard applies to passenger cars and light-duty trucks for model years 2012 through 2016. The rule surpasses the prior Corporate Average Fuel Economy standards (CAFE)²⁷⁷ and requires an average fuel economy standard of 35.5 miles per gallon (mpg) and 250 grams of CO₂ per mile by model year 2016, based on USEPA calculation methods. These standards were formally adopted on April 1, 2010. In August 2012, standards were adopted for model year 2017 through 2025 for passenger cars and light-duty trucks. By 2025, vehicles are required to achieve 54.5 mpg (if GHG reductions are achieved exclusively through fuel economy improvements) and 163 grams of CO₂ per mile. According to the USEPA, a model year 2025 vehicle would emit one-half of the GHG emissions from a model year 2010 vehicle.²⁷⁸ In 2017, the USEPA recommended no change to the GHG standards for light-duty vehicles for model years 2022–2025.

In August 2018, the USEPA and NHTSA proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule that would maintain the CAFE and CO₂ standards applicable in model year 2020

²⁷⁶ A green job, as defined by the United States Department of Labor, is a job in business that produces goods or provides services that benefit the environment or conserve natural resources.

²⁷⁷ The Corporate Average Fuel Economy standards are regulations in the United States, first enacted by Congress in 1975, to improve the average fuel economy of cars and light trucks. The U.S. Department of Transportation has delegated the National Highway Traffic Safety Administration as the regulatory agency for the Corporate Average Fuel Economy standards.

²⁷⁸ United States Environmental Protection Agency (USEPA), EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017–2025 Cars and Light Trucks, August 2012.

for model years 2021 through 2026. The estimated CAFE and CO₂ standards for model year 2020 are 43.7 mpg and 204 grams of CO₂ per mile for passenger cars and 31.3 mpg and 284 grams of CO₂ per mile for light trucks, projecting an overall industry average of 37 mpg, as compared to 46.7 mpg under the standards issued in 2012. On September 27, 2019, the USEPA withdrew the waiver it had previously provided to California for the state's GHG and zero-emissions vehicle programs under CAA Section 209.²⁷⁹ The withdrawal of the waiver became effective November 26, 2019. The USEPA also published the final rule for the One National Program on Federal Preemption of State Fuel Economy Standards that finalizes critical parts of the SAFE Vehicles Rule and makes clear that federal law preempts state and local tailpipe GHG emissions standards as well as zero-emissions vehicle mandates. In November 2019, California and 23 other states, environmental groups, and the cities of Los Angeles and New York, filed a petition with the U.S. Court of Appeals for the District of Columbia Circuit, for the USEPA to reconsider the published rule.²⁸⁰ In April 2020, the final USEPA and NHTSA SAFE Vehicles Rule was published in the Federal Register, setting fuel economy and carbon dioxide standards that increase 1.5 percent in stringency each year from model years 2021 through 2026.²⁸¹ On February 8, 2021, the United States Court of Appeals for the District of Columbia Circuit issued an order granting the Biden Administration's motion to stay litigation over Part 1 of SAFE Rule. Consistent with President Biden's executive order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.²⁸²

b. State

California has promulgated a series of executive orders, laws, and regulations aimed at reducing both the level of GHGs in the atmosphere and emissions of GHGs from commercial and private activities within the state.

²⁷⁹ USEPA, Federal Register, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019.

²⁸⁰ United States District Court for the District Court of Columbia, State of California vs. Chao, Case 1:19-cv-02826, 2019.

²⁸¹ USEPA, Federal Register, Vol. 84, No. 188, Rules and Regulations, Sections 51310–51363, Friday, September 27, 2019.

²⁸² United States District Court for the District Court of Columbia, Union of Concerned Scientists, et al., Petitioners v. National Highway Traffic Safety Administration, Respondent, USCA Case #19-1230, 2021.

(1) California Greenhouse Gas Reduction Targets

(a) **Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32 (Emissions Limit)**

In 2006, the California Legislature adopted Assembly Bill (AB) 32 (codified in the California Health and Safety Code [HSC], Division 25.5 – California Global Warming Solutions Act of 2006), which focuses on reducing GHG emissions in California to 1990 levels by 2020. AB 32 defines GHGs as CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ and represents the first enforceable statewide program to limit emissions of these GHGs from all major industries with penalties for noncompliance. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. AB 32 required CARB to adopt rules and regulations directing state actions that would achieve GHG emissions reductions equivalent to 1990 statewide levels by 2020.

In 2016, the California Legislature adopted Senate Bill (SB) 32 and its companion bill AB 197, and both were signed by Governor Brown to update AB 32 and include an emissions reductions goal for the year 2030. SB 32 and AB 197 amend AB 32, and establish a new climate pollution reduction target of 40 percent below 1990 levels by 2030, and include provisions to ensure the benefits of state climate policies reach into disadvantaged communities.

(i) **Climate Change Scoping Plan (2008)**

A specific requirement of AB 32 was to prepare a climate change scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reduction by 2020 (Health and Safety Code Section 38561(h)). CARB developed an AB 32 Climate Change Scoping Plan (2008 Scoping Plan) that contained strategies to achieve the 2020 emissions cap.²⁸³ The 2008 Scoping Plan was approved in 2008, and contains a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives.²⁸⁴

As required by AB 32, CARB approved the 1990 GHG emissions inventory, thereby establishing the emissions limit for 2020. The 2020 emissions limit was originally set at 427 million metric tons of carbon dioxide equivalents (MMTCO_{2e}) using the GWP values from the IPCC SAR. CARB also projected the state's 2020 GHG emissions under No-Action-Taken (NAT) conditions – that is, emissions that would occur without any plans, policies, or regulations to reduce GHG emissions. CARB originally used an average of the state's GHG emissions from 2002 through 2004 and projected the 2020 levels at approximately 596 MMTCO_{2e} (using GWP values from

²⁸³ CARB, Climate Change Scoping Plan, December 2008.

²⁸⁴ CARB, Climate Change Scoping Plan, December 2008.

the IPCC SAR). Therefore, under the original projections, the state must reduce its 2020 NAT emissions by 28.4 percent in order to meet the 1990 target of 427 MMTCO_{2e}.

(ii) First Update to the Climate Change Scoping Plan (2014)

The First Update to the Climate Change Scoping Plan (2014 Scoping Plan) was approved by CARB in May 2014 and built upon the 2008 Scoping Plan with new strategies and recommendations.²⁸⁵ In 2014, CARB revised the target using the GWP values from the IPCC AR4 and determined that the 1990 GHG emissions inventory and 2020 GHG emissions limit is 431 MMTCO_{2e}. CARB also updated the state's 2020 NAT emissions estimate to account for the effect of the 2007–2009 economic recession, new estimates for future fuel and energy demand, and the reductions required by regulation that were adopted for motor vehicles and renewable energy. CARB's projected statewide 2020 emissions estimate using the GWP values from the IPCC AR4 is 509.4 MMTCO_{2e}.

Therefore, under the 2014 Scoping Plan, the emission reductions necessary to achieve the 2020 emissions target of 431 MMTCO_{2e} would be 78.4 MMTCO_{2e}, or a reduction of GHG emissions by approximately 15.4 percent.

(iii) 2017 Climate Change Scoping Plan

In response to the 2030 GHG reduction target, CARB adopted the 2017 Climate Change Scoping Plan (2017 Scoping Plan) at a public meeting held in December 2017.²⁸⁶ The 2017 Scoping Plan outlines the strategies the State will implement to achieve the 2030 GHG reduction target, which build on the Cap-and-Trade Regulation,²⁸⁷ the Low Carbon Fuel Standard (LCFS),²⁸⁸ improved vehicle, truck and freight movement emissions standards, increasing renewable energy, and strategies to reduce methane emissions from agricultural and other wastes by using it to meet California's energy needs. CARB's projected statewide 2030 emissions take into account 2020 GHG reduction policies and programs. The 2017 Scoping Plan also comprehensively addresses GHG emissions from natural and working lands of California, including the agriculture and forestry sectors. The adopted 2017 Scoping Plan includes ongoing and statutorily required programs and continuing the Cap-and-Trade Program. This "Scoping Plan Scenario" was

²⁸⁵ CARB, First Update to the AB 32 Scoping Plan, *May 2014*.

²⁸⁶ CARB, California's 2017 Climate Change Scoping Plan, *November 2017*.

²⁸⁷ Refer to Section IV.H.2.a.2f, *Cap-and-Trade Program*, for a detailed description of the Cap-and-Trade Program.

²⁸⁸ Refer to Section IV.H.2.a.2e, *Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)*, for a detailed discussion of the LCFS.

modified from the January 2017 Proposed Scoping Plan to reflect AB 398,²⁸⁹ including removal of the 20 percent refinery measure.

CARB states that the Scoping Plan Scenario “is the best choice to achieve the state’s climate and clean air goals.”²⁹⁰ Under the Scoping Plan Scenario, the majority of the reductions would result from the continuation of the Cap-and-Trade regulation. Additional reductions are achieved from electricity sector standards (i.e., utility providers to supply at least 50 percent renewable electricity by 2030), doubling the energy efficiency savings at end uses, additional reductions from the LCFS, implementing the short-lived GHG strategy (e.g., hydrofluorocarbons), and implementing the mobile source strategy and sustainable freight action plan. The alternatives were designed to consider various combinations of these programs, as well as consideration of a carbon tax in the event the Cap-and-Trade regulation is not continued. However, in July 2017, the California Legislature voted to extend the Cap-and-Trade regulation to 2030.

The 2017 Scoping Plan discusses the role of local governments in meeting the state’s GHG reductions goals because local governments have jurisdiction and land use authority related to: community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations.²⁹¹ Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures.²⁹² A summary of the GHG emissions reductions required under AB 32 is provided in **Table IV.H-2, Estimated Statewide Greenhouse Gas Emissions Reductions Required by AB 32 and SB 32.**

Under the Scoping Plan Scenario, continuation of the Cap-and-Trade regulation is expected to cover approximately 34 to 79 MMTCO₂ of the 2030 reduction obligation.²⁹³ The short-lived GHG strategy is expected to cover approximately 17 to 35 MMTCO_{2e}. The Renewables Portfolio Standard with 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO₂. The mobile source strategy and sustainable freight action plan includes maintaining the existing vehicle GHG emissions standards, increasing the number of zero-emissions vehicles, and improving the freight system efficiency, and is expected to cover approximately 11 to 13 MMTCO₂. Under the Scoping Plan Scenario, CARB expects that the doubling of the energy efficiency savings by 2030 would cover approximately 7 to 9 MMTCO₂ of the 2030 reduction obligation. The other strategies would be expected to cover the remaining 2030 reduction obligations.

²⁸⁹ AB 398 was enacted in 2017 to extend and clarify the role of the state’s Cap-and-Trade Program through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions.

²⁹⁰ CARB, California’s 2017 Climate Change Scoping Plan, November 2017.

²⁹¹ CARB, California’s 2017 Climate Change Scoping Plan, November 2017.

²⁹² CARB, California’s 2017 Climate Change Scoping Plan, November 2017.

²⁹³ CARB, California’s 2017 Climate Change Scoping Plan, November 2017.

**Table IV.H-2
Estimated Statewide Greenhouse Gas Emissions Reductions Required by AB 32 and SB 32**

Emissions Scenario	GHG Emissions (MMTCO _{2e})
2008 Scoping Plan (IPCC SAR)	
2020 NAT Forecast (CARB 2008 Scoping Plan Estimate)	596
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	427
Reduction below NAT necessary to achieve 1990 levels by 2020	169 (28.4%) ^a
2014 Scoping Plan (GHG Estimates Updated in 2014 to Reflect IPCC AR4)	
2020 NAT Forecast (CARB 2014 Scoping Plan Estimate)	509.4
2020 Emissions Target Set by AB 32 (i.e., 1990 level)	431
Reduction below NAT necessary to achieve 1990 levels by 2020	78.4 (15.4%) ^b
2017 Scoping Plan Update	
2030 NAT Forecast ("Reference Scenario" which includes 2020 GHG reduction policies and programs)	389
2030 Emissions Target Set by AB 32 (i.e., 40% below 1990 Level)	260
Reduction below NAT Necessary to Achieve 40% below 1990 Level by 2030	129 (33.2%) ^c
<p><i>SOURCES: CARB, Final Supplement to the AB 32 Scoping Plan Functional Equivalent Document (FED), Attachment D, August 19, 2011; CARB, GHG 2020 Business-as-Usual (BAU) Emissions Projection, 2014 Edition, 2017, https://ww2.arb.ca.gov/ghg-bau, accessed June 2021; CARB, California's 2017 Climate Change Scoping Plan, November 2017.</i></p>	
<p><i>NOTES:</i></p> <p><i>MMTCO_{2e} = million metric tons of carbon dioxide equivalents</i></p> <p>^a $596 - 427 = 169 / 596 = 28.4\%$</p> <p>^b $509.4 - 431 = 78.4 / 509.4 = 15.4\%$</p> <p>^c $389 - 260 = 129 / 389 = 33.2\%$</p>	

(b) Executive Order S-3-05

Governor Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05,²⁹⁴ the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels;
- By 2020, California shall reduce GHG emissions to 1990 levels;²⁹⁵ and
- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels.

In accordance with Executive Order S-3-05, the Secretary of California Environmental Protection Agency (CalEPA) is required to coordinate efforts of various agencies, which comprise the California Climate Action Team (CAT), in order to collectively and efficiently

²⁹⁴ Center for Climate Strategies, Executive Order S-3-05.

²⁹⁵ CARB, Climate Pollutants Fall Below 1990 Levels for First Time, 2018, <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>, accessed June 2021.

reduce GHGs. These agencies include CARB, the Secretary of the Business, Transportation and Housing Agency, Department of Food and Agriculture, the Resources Agency, the California Energy Commission, and the Public Utilities Commission. The CAT provides periodic reports to the Governor and Legislature on the state of GHG reductions in the state as well as strategies for mitigating and adapting to climate change. The first CAT Report to the Governor and the Legislature, in 2006, contained recommendations and strategies to help meet the targets in Executive Order S-3-05. The 2010 CAT Report, finalized in December 2010, expands on the policies in the 2006 assessment.²⁹⁶

(c) Executive Order B-30-15

On April 29, 2015, Governor Brown issued Executive Order B-30-15, which involved the following:

- Established a new interim statewide reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030.
- Ordered all State agencies with jurisdiction over sources of GHG emissions to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 reduction targets.
- Directed CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.

(d) Executive Order B-55-18

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality, which CARB defines as meaning "... that all GHG emissions emitted into the atmosphere are balanced in equal measure by GHGs that are removed from the atmosphere, either through carbon sinks or carbon capture and storage,"²⁹⁷ by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant State agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure that future climate change scoping plans identify and recommend measures to achieve the carbon neutrality goal. California is making progress towards the 2045 goal, however the pathway to carbon neutrality is still under development. According to CARB, the framework will include a strong reliance on energy efficiency, electrification, low carbon fuels (including low-carbon electricity),

²⁹⁶ CalEPA, *Climate Action Team*, Climate Action Team Report to Governor Schwarzenegger and the Legislature, 2010.

²⁹⁷ E3, *Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board*, October 2020, https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf, accessed August 7, 2021

and CO₂ removal in future policies and strategies for reaching the ambitious goal.²⁹⁸ The path to carbon neutrality lies in striving for zero emissions from all new sources and maximum sequestration to offset existing sources.

(e) Executive Order N-79-20

Executive Order N-79-20 was signed by Governor Newsom on September 23, 2020. The order directs CARB to develop and propose regulations that would require a ramp up to 100 percent in-state sales of new zero-emissions passenger vehicles (cars and trucks) and drayage trucks by 2035. The Executive Order further directs CARB to promulgate regulations that would require a ramp up to 100 percent in-state sales of medium- and heavy-duty trucks by 2045 “for all operations where feasible.” The Executive Order also instructs CARB to develop and propose “strategies” (as opposed to regulations) to achieve zero emissions from off-road vehicles and equipment operations in the state by 2035. The order also directs State agencies to take a number of actions focused on the oil and gas industry, including, but not limited to, a direction to CARB to strengthen and extend the Low Carbon Fuel Standard program beyond 2030.

(2) Land Use and Transportation Planning

SB 375 (Chapter 728, Statutes of 2008), which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG, was adopted by the State on September 30, 2008. Under SB 375, CARB is required, in consultation with the state’s metropolitan planning organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. In February 2011, CARB adopted the GHG emissions reduction targets of 8 percent by 2020 and 13 percent by 2035 relative to 2005 GHG emissions for SCAG, which is the metropolitan planning organization for the region in which the City is located.²⁹⁹ Of note, the proposed reduction targets explicitly exclude emission reductions expected from the AB 1493 and the LCFS regulations.

Under SB 375, the reduction target must be incorporated within that region’s Regional Transportation Plan (RTP), which is used for long-term transportation planning, in a Sustainable Communities Strategy (SCS). Certain transportation planning and programming activities would then need to be consistent with the SCS; however, SB 375 expressly provides that the SCS does not regulate the use of land, and further provides that local land use plans and policies (e.g., general plan) are not required to be consistent with either the RTP or SCS.

²⁹⁸ E3, *Achieving Carbon Neutrality in California, PATHWAYS Scenarios Developed for the California Air Resources Board*, October 2020, https://ww2.arb.ca.gov/sites/default/files/2020-10/e3_cn_final_report_oct2020_0.pdf, accessed August 7, 2021

²⁹⁹ *Southern California Association of Governments (SCAG), Greenhouse Gases*, <http://www.scag.ca.gov/programs/Pages/GreenhouseGases.aspx>, accessed June 2021.

On September 3, 2020, SCAG adopted the 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS), which is an update to the previous 2016–2040 RTP/SCS. Using growth forecasts and economic trends, the 2020–2045 RTP/SCS provides a vision for transportation throughout the region for the next 25 years. The 2020–2045 RTP/SCS successfully achieves and exceeds the GHG emission-reduction targets set by CARB.

The 2020–2045 RTP/SCS includes the CARB updated SB 375 targets from March 2018 to require 8 percent reduction by 2020 and a 19 percent reduction by 2035 in per capita passenger vehicle GHG emissions.³⁰⁰

(3) Transportation Fuel

AB 1493 (HSC Sections 42823 and 43018.5) (also referred to as the Pavley standards) was signed into law by Governor Davis on July 22, 2002, which requires CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles whose primary use is non-commercial personal transportation manufactured during and after 2009. In setting these standards, CARB must consider cost effectiveness, technological feasibility, economic impacts, and provide maximum flexibility to manufacturers. The federal CAA ordinarily preempts State regulation of motor vehicle emission standards; however, California is allowed to set its own standards with a federal CAA waiver from the USEPA. In June 2009, the USEPA granted California the waiver.

However, as discussed previously, the USEPA and United States Department of Transportation (USDOT) adopted federal standards for model year 2012 through 2016 light-duty vehicles, which corresponds to the vehicle model years regulated under the state’s Pavley Phase I standards. In August 2012, the USEPA and USDOT adopted GHG emission standards for model year 2017 through 2025 vehicles; however, these standards were rescinded and replaced under the SAFE Vehicles Rule as discussed above under *Federal*, in Section IV.H.3, *Regulatory Framework*. Prior to the SAFE Vehicles Rule, the standards corresponded to the vehicle model years regulated under the state’s Pavley Phase II standards and were determined to be stringent enough to meet state GHG emission reduction goals. As mentioned above, the USEPA and NHTSA are now evaluating whether and how to replace the SAFE Rule.

In January 2007, Governor Brown enacted Executive Order S-01-07, which mandates the following: (1) establish a statewide goal to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020; and (2) adopt an LCFS for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. The LCFS regulations were approved by CARB in 2009 and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 with

³⁰⁰ CARB, *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*, <https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets>, accessed June 2021.

implementation beginning on January 1, 2011. In September 2015, CARB approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In April 2017, the LCFS was brought before the Court of Appeal challenging the analysis of potential nitrogen dioxide impacts from biodiesel fuels. The Court directed CARB to conduct an analysis of nitrogen dioxide impacts from biodiesel fuels and froze the carbon intensity targets for diesel and biodiesel fuel provisions at 2017 levels until CARB has completed this analysis. On March 6, 2018 CARB issued its Draft Supplemental Disclosure Discussion of Oxides of Nitrogen Potentially Caused by the Low Carbon Fuel Standard Regulation.³⁰¹ CARB posted modifications to the amendments on August 13, 2018, with a public comment period through August 30, 2018. Final approval of regulatory changes from CARB's analysis of nitrogen dioxide impacts from biodiesel fuels was made on January 4, 2019.³⁰² the LCFS was amended in September 2018 to require a reduction of at least 7.5 percent in the carbon intensity (CI) of California's transportation fuels by 2020 and a 20 percent reduction in CI from a 2010 baseline by 2030.³⁰³ The 2017 Scoping Plan also calls for increasing the mandatory reduction in carbon intensity of transportation fuels from 10 percent to 18 percent by 2030.

(4) Energy

The California Energy Commission (CEC) first adopted Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR, Title 24, Part 6) in 1978 in response to a legislative mandate to reduce energy consumption in the state. Although not originally intended to reduce GHG emissions, increased energy efficiency and reduced consumption of electricity, natural gas, and other fuels would result in fewer GHG emissions from residential and nonresidential buildings subject to the standard. The standards are updated periodically (typically every three years) to allow for the consideration and inclusion of new energy efficiency technologies and methods. The Energy Efficiency Standards for Residential and Nonresidential Buildings focuses on several key areas to improve the energy efficiency of renovations and addition to existing buildings as well as newly constructed buildings and renovations and additions to existing buildings. The major efficiency improvements to the residential Standards involve improvements for attics, walls, water heating, and lighting, whereas the major efficiency improvements to the nonresidential Standards include alignment with the American Society of

³⁰¹ CARB, *Low-Carbon Fuel Standards and alternative diesel fuels regulation*, <https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018>, accessed June 2021.

³⁰² CARB, *Low-Carbon Fuel Standards and alternative diesel fuels regulation*, <https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018>, accessed June 2021.

³⁰³ CARB, *LCFS Rulemaking Documents*, <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation>, accessed June 2021.

Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 90.1-2017 national standards. Furthermore, the standards require that enforcement agencies determine compliance with CCR, Title 24, Part 6 before issuing building permits for any construction.³⁰⁴

Part 11 of the Title 24 Building Energy Efficiency Standards is referred to as the California Green Building Standards (CALGreen) Code. The purpose of the CALGreen Code is to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”³⁰⁵ The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission. The CALGreen Code establishes mandatory measures for new residential and non-residential buildings. Such mandatory measures include energy efficiency, water conservation, material conservation, planning and design and overall environmental quality.³⁰⁶ The CALGreen Code was most recently updated in 2019 to include new mandatory measures for residential as well as nonresidential uses; the new measures took effect on January 1, 2020.

The State has adopted regulations to increase the proportion of electricity from renewable sources. On September 10, 2018, Governor Brown signed SB 100, which increased California’s Renewables Portfolio Standard from 33 percent by 2020 renewable resources to 50 percent by December 31, 2026, and 60 percent by December 31, 2030, while requiring retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by December 31, 2024, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. In addition, SB 100 requires that CARB plan for 100 percent eligible renewable energy resources and zero-carbon resources by December 31, 2045. Electricity providers, including the provider for the Project Site, the Los Angeles Department of Water and Power (LADWP), is required to update future plans to meet applicable SB 100 requirements.

(5) Senate Bill 97 (SB 97, Dutton) (Chapter 185, Statutes of 2007)

SB 97 (Chapter 185, Statutes of 2007), enacted in 2007, directed the California Office of Planning and Research (OPR) to develop CEQA Guidelines “for the mitigation of GHG emissions or the effects of GHG emissions.” In December 2009, OPR adopted amendments to

³⁰⁴ CEC, 2019 Building Energy Efficiency Standards, June 2015, <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2019-building-energy-efficiency>, accessed June 2021.

³⁰⁵ California Building Standards Commission, 2010 California Green Building Standards Code, 2010.

³⁰⁶ California Building Standards Commission, 2010 California Green Building Standards Code, 2010.

the CEQA Guidelines (Guidelines Amendments), Appendix G, Environmental Checklist, which created a new resource section for GHG emissions and indicated criteria that may be used to establish significance of GHG emissions (California Code of Regulations [CCR] Title 14, Section 15064.4).

However, neither a threshold of significance nor any specific mitigation measures are included or provided in the Guidelines Amendments. The Guidelines Amendments require a lead agency to make a good-faith effort, based on scientific and factual data to the extent possible, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The Guidelines Amendments give discretion to the lead agency, and allow the lead agency to choose whether to: (1) quantify GHG emissions resulting from a project; and/or (2) rely on a qualitative analysis or performance-based standards. Furthermore, the Guidelines Amendments identify three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The administrative record for the Guidelines Amendments also clarifies “that the effects of GHG emissions are cumulative, and should be analyzed in the context of California Environmental Quality Act’s requirements for cumulative impact analysis.”³⁰⁷

(6) Cap-and-Trade Program

The Climate Change Scoping Plan identifies a Cap-and-Trade Program as a key strategy CARB employed to help California meet its GHG reduction targets for 2020 and will continue to assist in the efforts to achieve the GHG reduction goals in 2030, and potentially beyond. Pursuant to its authority under AB 32, CARB has designed and adopted a California Cap-and-Trade Program to reduce GHG emissions from major sources (deemed “covered entities”) by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32’s emission-reduction mandate of returning to 1990 levels of emissions by 2020 (17 CCR Sections 95800 to 96023). Under the Cap-and-Trade Program, an overall limit is established for GHG emissions from capped sectors (e.g., electricity generation, petroleum refining, cement production, and large industrial facilities that emit more than 25,000 metric tons CO₂e per year) and declines over time, and facilities subject to the cap may trade permits to emit GHGs. The statewide cap for

³⁰⁷ Cynthia Bryant, *Letter from Director of the Office of Planning and Research to Mike Chrisman, Secretary for Natural Resources, dated April 13, 2009.*

GHG emissions from the capped sectors commenced in 2013 and declines over time, achieving GHG emission reductions throughout the Program's duration (17 CCR Sections 95811, 95812). On July 17, 2017 the California legislature passed Assembly Bill 398, extending the Cap-and-Trade Program through 2030.

The Cap-and-Trade Program provides a firm cap, ensuring that the 2020 and 2030 statewide emission limits will not be exceeded. An inherent feature of the Cap-and-Trade Program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. In other words, as climate change is a global occurrence and the effects of GHG emissions are considered cumulative in nature, a focus on aggregate GHG emissions reductions, rather than source-specific reductions, is warranted.

If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In sum, the Cap-and-Trade Program will achieve aggregate, rather than site-specific or project-level, GHG emissions reductions. Also, due to the regulatory framework adopted by CARB, the reductions attributed to the Cap-and-Trade Program can change over time depending on the state's emissions forecasts and the effectiveness of direct regulatory measures.

(7) California Air Resources Board

CARB, a part of the CalEPA, is responsible for the coordination and administration of both federal and state air pollution control programs within California. Some of the regulations and measures that CARB has adopted to reduce particulate matter, nitrogen oxides, and other emissions have co-benefits of reducing GHG emissions. Regulations and measures include:

- In 2004, CARB adopted an Airborne Toxic Control Measure (ACTM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other toxic air contaminants (Title 13 CCR Section 2485). This measure generally does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given location with certain exemptions for equipment in which idling is a necessary function such as concrete trucks.
- In 2007, CARB promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation aims to reduce emissions by installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models.

- In 2008, CARB approved the Truck and Bus regulation to reduce particulate matter and nitrogen oxide emissions from existing diesel vehicles operating in California (13 CCR Section 2025, Section (h)).
- In 2020, CARB approved the Advanced Clean Trucks (ACT) regulation (13 CCR, Sections 1963–1963.5 and 2012–2012.3) to accelerate a large-scale transition to zero-emissions medium- and heavy-duty vehicles. The regulation requires manufacturers of medium- and heavy-duty vehicles to sell an increasing percentage of zero-emissions models from 2024 to 2035 with up to 55 percent of Classes 2b–3 trucks, 75 percent of Class 4–8 trucks, and 40 percent of truck tractor sales. The regulation also includes reporting requirements to provide information that would be used to identify future strategies. The ACT is part of the statewide goal to reduce GHG emissions by 40 percent and reduce petroleum by 50 percent by 2030. By transitioning to zero-emissions trucks, the state would move away from petroleum dependency and emit less GHGs from heavy-duty mobile sources.

c. Regional

(1) South Coast Air Quality Management District

The Project Site is located in the South Coast Air Basin (SCAB), which consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside Counties, in addition to the San Geronio Pass area in Riverside County. SCAQMD is responsible for air quality planning in the Air Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

SCAQMD adopted a “Policy on Global Warming and Stratospheric Ozone Depletion” on April 6, 1990.³⁰⁸ The policy commits SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:³⁰⁹

- Phase out the use and corresponding emissions of chlorofluorocarbons, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;

³⁰⁸ *South Coast Air Quality Management District (SCAQMD), SCAQMD’s Historical Activity on Climate Change, 2014, <http://www.aqmd.gov/nav/about/initiatives/climate-change>, accessed June 2021.*

³⁰⁹ *SCAQMD, Policy on Global Warming and Stratospheric Ozone Depletion, April 6, 1990.*

- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons by the year 2000;
- Develop recycling regulations for hydrochlorofluorocarbons (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

(a) Rule 2305 – Warehouse Indirect Source Rule

In May 2021, SCAQMD adopted Rule 2305, which establishes the Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and applies to existing and future owners and operators of warehouses (including logistic, ecommerce, fulfillment and distribution facilities) located in the SCAB. The purpose of the rule is to reduce NO_x and particulate matter emissions and would have the co-benefit of reducing GHG emissions by way of clean energy and zero-emissions technologies.

Rule 2305 requires warehouses greater than 100,000 square feet in a single building to directly reduce NO_x and diesel particulate matter emissions, or to facilitate emission and exposure reductions of these pollutants. The WAIRE Program is a menu-based points system that will require warehouse operators to annually earn a specified number of points by completing actions from a menu. The amount of WAIRE points needed for compliance is based on annual truck trips, and an annual variable and stringency rate. Annual reporting will track the WAIRE points needed and the points earned, and should a short fall occur, a warehouse operator will be required to pay a mitigation fee. WAIRE points can be banked for an up to three-year period or transferred to warehouses operated by the same owner. The Warehouse Indirect Source Rule provides several compliance options that facilities can choose to meet their point requirements including, but not limited to:

- (1) Ensure truck fleets that serve their facility during operations are cleaner than required by CARB regulations (verified through a voluntary fleet certification program);
- (2) Directly control the emissions associated with trucks visiting the facility;
- (3) Installation of charging/fueling infrastructure for cleaner trucks and transportation refrigeration units (TRUs), conversion of cargo handling equipment to zero-emissions technologies, etc.;
- (4) Utilization of zero-emissions trucks and incorporation of the infrastructure to support them; and/or
- (5) Mitigation fees if the facilities emissions exceed cap levels set in the Indirect Source Rule.

(b) GHG Working Group

A GHG Significance Threshold Working Group was formed by the SCAQMD to evaluate potential GHG significance thresholds.³¹⁰ In 2008, the Working Group released draft guidance regarding interim CEQA GHG significance thresholds.^{311,312,313} Within its October 2008 document, the Working Group proposed the use of a percent emission reduction target compared to business as usual to determine significance for commercial/residential projects that emit greater than 3,000 MTCO_{2e} per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO_{2e} per year would be assumed to have a less-than-significant impact on climate change. In addition, on December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO_{2e} for stationary source/industrial projects where the SCAQMD is the Lead Agency. However, the SCAQMD has not adopted a GHG significance threshold for land use development projects. The aforementioned Working Group has been inactive since 2011 and the SCAQMD has not formally adopted any GHG significance threshold for land use development projects.

(2) Southern California Association of Governments

As discussed above, in 2020 SCAG adopted the SCAG 2020–2045 RTP/SCS, also known as “Connect SoCal,” which is an update to the previous 2012–2035 RTP/SCS and 2016–2040 RTP/SCS (SCAG 2020a). Using growth forecasts and economic trends, the 2020–2045 RTP/SCS provides a vision for transportation throughout the region for the next several decades by considering the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2020–2045 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in per capita transportation GHG emissions by 2020 and a 19 percent reduction in per capita transportation GHG emissions by 2035 compared to the 2005 level on a per capita basis.³¹⁴ Compliance with and implementation of the 2020–2045 RTP/SCS policies and strategies would have co-benefits

³¹⁰ SCAQMD, *Greenhouse Gases CEQA Significance Thresholds*, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>, accessed June 2021.

³¹¹ SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, Attachment E, October 2008*.

³¹² SCAQMD, *Board Meeting Agenda No. 31, December 5, 2008*, <http://www3.aqmd.gov/hb/2008/December/0812ag.html>, accessed June 2021.

³¹³ SCAQMD, *Greenhouse Gases, CEQA Significance Thresholds, Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008*.

³¹⁴ SCAG, *2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS)*, *September 2020*.

of reducing per capita criteria air pollutant emissions (e.g., nitrogen dioxide, carbon monoxide, etc.) associated with reduced per capita vehicle miles traveled (VMT).

The 2020–2045 RTP/SCS states that the SCAG region was home to approximately 18.8 million people in 2016 and included approximately 6.0 million homes and 8.4 million jobs.³¹⁵ By 2045, the integrated growth forecast projects that these figures will increase by 3.7 million people, with approximately 1.6 million more homes and 1.7 million more jobs. SCAG’s 2020–2045 RTP/SCS provides specific strategies for implementation. These strategies include supporting projects that encourage diverse job opportunities for a variety of skills and education, recreation and cultures and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a “Complete Streets” policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians, users of public transportation, and seniors; and supporting alternative fueled vehicles.³¹⁶

In addition, the 2020–2045 RTP/SCS includes strategies to promote active transportation; support local planning and projects that serve short trips; promote transportation investments, investments in active transportation, more walkable and bikeable communities that will result in improved air quality and public health and reduced GHG emissions; and support building physical infrastructure such as local and regional bikeways, sidewalk and safe routes to schools pedestrian improvements, regional greenways and first-last mile connections to transit, including to light rail and bus stations. The 2020–2045 RTP/SCS aligns active transportation investments with land use and transportation strategies, increases competitiveness of local agencies for federal and state funding, and expands the potential for all people to use active transportation. CARB has accepted the SCAG GHG quantification determination in the 2020–2045 RTP/SCS for future GHG emission reduction targets.³¹⁷

Although there are GHG emission reduction targets for passenger vehicles set by CARB for 2045, the 2020–2045 RTP/SCS GHG emission reduction trajectory shows that more aggressive GHG emission reductions are needed for 2045. By meeting and exceeding the SB 375 targets for 2035, as well as achieving an additional 4.1 percent reduction in GHG from transportation-related sources in the ten years between 2035 and 2045, the 2020–2045 RTP/SCS is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the state’s future GHG emission reduction goals.³¹⁸

³¹⁵ SCAG, 2020–2045 RTP/SCS Demographics and Growth Forecast Technical Report, *May 2020*.

³¹⁶ SCAG, 2020–2045 RTP/SCS, *September 2020*.

³¹⁷ CARB, *Frequently Asked Questions for the 2016 Edition California Greenhouse Gas Emission Inventory*.

³¹⁸ SCAG, 2020–2045 RTP/SCS, *September 2020*.

d. Local

(1) Carson General Plan

The City of Carson General Plan was prepared in response to California state law requiring that each city and county adopt a long-term comprehensive general plan. This plan must be integrated, internally consistent, and present goals, objectives, policies, and implementation guidelines for decision makers to use. The City of Carson General Plan does not identify specific GHG or climate change policies or goals, however goals from other areas of the General Plan will aid in the reduction of GHG emissions. The following City goals, policies, and implementation measures are relevant to GHGs with respect to the 2021 Project:

Goal AQ-2—Improve air quality which meets State and Federal standards

Policy AQ-2.2—Utilize incentives, regulations and implement the Transportation Demand Management requirements in cooperation with other jurisdictions to eliminate vehicle trips which would otherwise be made and to reduce vehicle miles traveled for automobile trips which still need to be made.

Policy AQ-2.3—Cooperate and participate in regional air quality management plans, programs and enforcement measures.

Implementation Measure AQ-2.2—Continue to encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing, modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the AQMP for the South Coast Air Basin.

Implementation Measure AQ-2.3—Continue City employee work trip reduction programs and use of alternative fuel vehicles.

Policy AQ-2.4—Continue to work to relieve congestion on major arterials and thereby reduce emissions.

Implementation Measure AQ-2.4—Encourage those companies that ship or receive high volumes of goods by commercial truck to limit operations to non-peak hours.

Policy AQ-2.5—Continue to improve existing sidewalks, bicycle trails, and parkways, and require sidewalk and bicycle trail improvements and parkways for new developments.

Implementation Measure AQ-2.6—Require new developments to provide pedestrian and bicycle trails access to nearby shopping and employment centers, thereby encouraging alternate modes of transportation and reducing vehicle miles traveled.

Policy AQ-2.6—Encourage in-fill development near activity centers and along transportation routes.

Implementation Measure AQ-2.7—Encourage infill projects to provide convenience to existing facilities and minimize trip generation.

Goal AQ-3—Increased use of alternate fuel vehicles.

Policy AQ-3.1—Continue to promote the use of alternative clean fueled vehicles for personal and business use. To this end, consider the use of electric, fuel cell or other non-polluting fuels for Carson Circuit buses and other City vehicles.

Policy AQ-3.2—Continue to promote ridership on the Carson Circuit and Los Angeles County Metropolitan Transportation Authority (MTA) bus and metro rail lines.

Implementation Measure AQ-IM-3.3—Develop a cooperative program to further increase transit ridership.

Goal AQ-4—Increased community awareness and participation in efforts to reduce air pollution and enhance air quality.

Policy AQ-4.2—Promote and encourage ride sharing activities within the community, including such programs as preferential parking, park-and-ride lots, alternative work week/flexible working hours and telecommuting, as well as other trip reduction strategies.

Implementation Measure AQ-4.2—Continue to implement City programs and encourage other employers' programs to promote ride sharing, alternative work week schedules, and telecommuting.

Implementation Measure AQ-4.3—Coordinate with transportation agencies to establish additional park-and-ride facilities for work and non-work trip reduction.

(2) Climate Action Plan

The City of Carson has adopted a Climate Action Plan (CAP) developed through the South Bay Cities Council of Governments (SBCCOG) that identifies community-wide strategies to lower GHG emissions. Emissions reductions within the CAP are from transportation, land use, energy generation and consumption, water consumption and waste generation. The following CAP goals, policies, are relevant to GHGs with respect to the 2021 Project:

Goal LUT: A—Accelerate the Market for EV Vehicles

Measure LUT: A3—EV Charging Policies: EV charging policies incentivize EV adoption by making it easier to charge EVs.

Goal LUT: B—Encourage Ride-Sharing

Measure LUT: B1—Facilitate Private and Public Mobility Services: This strategy encourages public and private mobility services. It includes supporting private vendors in search of funds and not adopting positions that limit or exclude vendors. The measure considers service inter-operability as well as optimizing the customer experience for local residents.

Goal LUT: C—Encourage Transit Usage

Measure LUT: C1—Expand Transit Network: This strategy focuses on expanding the local transit network by adding or modifying existing transit service; additionally, it includes transit strategies that address first/last mile connections which can encourage more people to travel via transit.

Goal LUT: D—Adopt Active Transportation Initiatives

Measure LUT: D2—Improve Design Development: This measure provides improved design elements to enhance slow speed multi-modalism such as walking and bicycling. This strategy may complement the concepts found in the SSBS to increase connectivity within new or proposed developments and improves street network characteristics within a neighborhood. These concepts could include slowspeed multi-modal networks.

Measure LUT: F2—Implement Commute Trip Reduction Programs: This measure establishes a Commute Trip Reduction Ordinance.

Goal LUT: G—Land Use Strategies

Measure LUT: G1—Increase Density: These strategies seek to increase destination accessibility by encouraging combined uses such as office, commercial, institutional, and residential within areas and developments.

Measure LUT: G2—Increase Diversity: These strategies encourage projects to mix uses such as office, commercial, institutional, and residential within the same development.

Measure LUT: G3—Increase Transit Accessibility: Transit accessibility strategies involve measures that encourage transit services through general plans, zoning codes, and ordinances as well as filling in gaps within the transit network.

Goal EE: B—Increase Energy Efficiency in New Residential Developments

Measure EE: B1—As part of the 2010 California Green Building Standards (CALGreen), a two-tiered system was designed to allow local jurisdictions to adopt codes that go beyond state standards. The two tiers contain measures that are more stringent and achieve an increased reduction in energy usage by 15 percent (Tier 1) or 30 percent (Tier 2) beyond Title 24. It is also important that Title 24 Standards are updated so that the full GHG reduction benefit of the title can be realized. City staff that are well-informed can implement updates quickly and effectively.

Goal EE: D—Increase Energy Efficiency in New Commercial Developments

Measure EE: D1—Encourage or Require EE Standards Exceeding Title 24: This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that are required by current Title 24 Standards for commercial development. In addition, this measure helps ensure that Title 24 Standards are updated.

Goal EE: E—Increase Energy Efficiency through Water Efficiency

Measure EE: E1—Promote or Require Water Efficiency through SB X7-7: The Water Conservation Act of 2009 (SB X7-7), requires all water suppliers to increase water use efficiency. The legislation set an overall goal of reducing per capita urban water consumption by 20 percent from a baseline level by 2020. The goal of Water Conservation Act can be met by taking a variety of actions, including targeted public outreach and promoting water efficiency measures such as low-irrigation landscaping. Additional water conservation information, resource materials, education, and incentives are available through the West Basin Water District.

Goal EE: F—Decrease Energy Demand through Reducing Urban Heat Island Effect.

Measure EE: F1—Promote Tree Planting for Shading and Energy Efficiency: Trees and plants naturally help cool an environment by providing shade and evapotranspiration (the movement of water from the soil and plants to the air), making vegetation a simple and effective way to reduce urban heat islands. Urban heat islands are urban areas that are significantly warmer than their surrounding rural areas due to human activities. Shaded surfaces may be 20–45°F cooler than the peak temperatures of un-shaded materials. In addition, evapotranspiration, alone or in combination with shading, can help reduce peak summer temperatures by 2–9°F. Furthermore, trees and plants that directly shade buildings can reduce energy use by decreasing demand for air conditioning.

Measure EE: F2—Incentivize or Require Light-Reflecting Surfaces: Replacing surface areas with light-reflecting materials can decrease heat absorption and lower outside air temperature. Both roofs and pavements are ideal surfaces for taking advantage of this advanced technology.

Goal SW: C—Increase Diversion and Reduction of Overall Community Waste

Measure SW: C1—Set a Community Goal to Divert Waste from Landfills: Setting a goal to divert a specified percentage of waste will show the City’s commitment to reducing the GHG gases emitted from the landfill.

Goal UG: A—Increase and Maintain Urban Greening in the Community

Measure UG: A3—Support Local Farms: Local farmers’ markets reduce GHG emissions by providing the community with a more local source of food, potentially resulting in a reduction in the number of trips and vehicle miles traveled by both the food delivery service and the consumers traveling to grocery stores. If the food sold at the local farmers' market is produced organically, it can also contribute to GHG reductions by displacing carbon-intensive food production practices.

Goal EGS: A—Support Energy Generation and Storage in the Community

Measure EGS: A2—Siting and Permitting: To accelerate the implementation of renewable energy technologies, regulatory barriers need to be addressed to help ensure smooth deployment. Streamlining the siting and permitting process and reducing administrative burden to Developers will help speed up the process of bringing these projects to reality.

IV.H.4 Significance Thresholds

Until the passage of AB 32, now codified in HSC Division 25.5, CEQA documents generally did not assess the impacts of GHG emissions. Rather, the primary focus of air pollutant analysis in CEQA documents was the emission of criteria pollutants, or those identified in the California and federal Clean Air Acts as being of most concern to the public and government agencies (e.g., toxic air contaminants). With the passage of AB 32 and SB 97, CEQA documents are now required to contain an analysis of GHG emissions. However, the analysis of GHG emission impacts is different from the analysis of criteria pollutant impacts. Since the half-life of CO₂ is approximately 100 years, the effects of GHG emissions last a relatively long period of time. Conversely, the effects of criteria pollutant impacts last a shorter period of time, and significance thresholds and impacts are based on daily emissions; and the determination of attainment or non-attainment is based on the daily exceedance of applicable ambient air quality standards (e.g., 1-hour and 8-hour exposures). Also, the scope of the impact of criteria pollutants is local and regional, while the scope of the impacts of GHG emissions is global.

Pursuant to SB 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions on December 30, 2009. For the purpose of this analysis, impacts with regard to GHG emissions are considered significant if the 2021 Project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Information about the potential environmental impact of GHG emissions was known or could have been known at the time the 2006 FEIR was certified. Since the potential environmental impact of GHG emissions does not constitute new information within the meaning of Public Resources Code Section 21166(c), the City was not required to analyze GHG emissions in the 2018 SEIR (see CAAP, *supra*, 227 Cal.App.4th at p. 807;³¹⁹ CREED, *supra*, at p. 532 [use of addendum upheld; SEIR was not required because information on the effect of GHG emissions was known before approval of the 1994 FEIR];³²⁰ see also Concerned Citizens, *supra*, 214 Cal.App.4th at p. 1320 [new guidelines on GHG emissions did not require a SEIR where potential effects of GHGs could have been addressed when EIR certified in 2002]).³²¹ Although

³¹⁹ *Court of Appeals of California, Sixth District, Citizens Against Airport Pollution v. City of San Jose*, Case No. H038781. 2014.

³²⁰ *Court of Appeals of California, Fourth District, Division One, Creed-21 v. City of San Diego*, Case No. D064186. 2015.

³²¹ *Court of Appeals of California, First District, Division Three, Concerned Dublin Citizens v. City of Dublin*, Case No. A135790. 2013.

not required by CEQA, the 2018 SEIR analyzed project-related GHG impacts by qualitatively determining the consistency of the proposed 2018 Project with applicable regulations, plans, and policies to reduce GHG emissions.

CEQA Guidelines section 15064.4 gives lead agencies the discretion to determine whether to assess the significance of GHG emissions quantitatively or qualitatively. Section 15064.4 recommends considering certain factors, among others, when determining the significance of a project's GHG emissions, including the extent to which the proposed project may increase or reduce GHG emissions as compared to the existing environment; whether a proposed project exceeds an applicable significance threshold that the lead agency determines applies to a proposed project; and extent to which a proposed project complies with regulations or requirements adopted to implement a reduction or mitigation of GHGs. None of the Guidelines Amendments establish a threshold of significance; rather, so long as any threshold selected is supported by substantial evidence (see section 15064.7(c)), lead agencies are granted discretion to establish significance thresholds for their respective jurisdictions, including by looking to thresholds developed by other public agencies, such as air districts, or suggested by experts, such as the California Air Pollution Control Officers Association (CAPCOA).

The CNRA's *Final Statement of Reasons for Regulatory Action* from December 2009 similarly provides that project-level quantification of emissions should be conducted where it would assist in determining the significance of emissions, even where no numeric threshold applies. In such cases, CNRA's guidance provides that qualitative thresholds can be utilized to determine the ultimate significance of project-level impacts based on a project's consistency with plans, which can include applicable regional transportation plans. Even when using a qualitative threshold, quantification can inform "the qualitative factors" and indicate "whether emissions reductions are possible, and, if so, from which sources."³²²

Neither CARB nor the City has adopted quantitative significance thresholds for assessing project-level impacts related to GHG emissions. CEQA Guidelines section 15183.5 states that a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted mitigation program, or plan for the reduction of GHG emissions that includes the following elements:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;

³²² CNRA, *Final Statement of Reasons for Regulatory Action*, December 2009, pp. 20–26.

- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review.

The City of Carson’s 2017 CAP has never been formally adopted through the CEQA process. Therefore, the City’s CAP is not a qualified action plan from which documents can tier as a means to determine significance findings.

The 2018 SEIR qualitatively determined a less-than-significant impact based on consistency with applicable GHG emission reduction plans, policies, and regulations and did not quantify GHG emissions. The same significance threshold will be applied to the 2021 Project. In accordance with CEQA Guidelines Appendix G, the City has assessed whether the 2021 Project’s GHG emissions would be inconsistent with applicable GHG emission reduction plans, policies, or regulations.

For disclosure purposes and to determine if there is an increase in impact severity, the GHG emissions that would have been anticipated from the development of the 2018 Project and would be anticipated from the 2021 Project, and the difference in emissions between the 2021 Project and the 2018 Project, have been quantified.

IV.H.5 Project Impacts

a. Methodology

The analysis herein includes the determination of consistency with applicable plans and policies, consistent with the 2018 SEIR. Although there is no applicable quantitative GHG significance threshold, this analysis also includes the quantification of GHG emissions from the 2018 SEIR and the 2021 Project.

(1) Project Consistency with Applicable Plans and Policies

The potential impact of the 2021 Project’s GHG emissions are evaluated by assessing consistency with applicable GHG reduction strategies and local actions approved or adopted by CARB, SCAG, and the City to reduce GHG emissions. The 2021 Project would not have a significant effect on the environment if the 2021 Project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including the emissions reduction measures discussed within CARB’s Climate Change Scoping Plan, CALGreen Code,

SCAG’s 2020–2045 RTP/SCS, and City of Carson’s CAP energy efficiency goals and strategies. The Carson City Council approved the Energy Efficiency Chapter of the City’s CAP (City Council Resolution No. 15-111) on October 7, 2015. Therefore, the CAP is an applicable plan with specific requirements that will avoid or substantially lessen GHG emissions.

(2) Quantification of Greenhouse Gas Emissions

In addition to the evaluation of the 2021 Project’s consistency with plans adopted for the purpose of reducing and/or mitigating GHG emissions, the analysis herein also calculates the amount of GHG emissions that would be attributable to the 2021 Project using recommended air quality models, as described below. The primary purpose of quantifying the 2021 Project’s GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which requires a good-faith effort by the lead agency to describe and calculate emissions. The estimated emissions inventory is also used to determine if there would be a reduction in the 2021 Project’s incremental contribution of GHG emissions as a result of compliance with regulations and requirements adopted to implement plans for the reduction or mitigation of GHG emissions.

The California Climate Action Registry (Climate Registry) has prepared the General Reporting Protocol for calculating and reporting GHG emissions from a number of general and industry-specific activities.³²³ The GHG emissions provided in this report are consistent with the General Reporting Protocol framework. The General Reporting Protocol recommends separating GHG emissions into three categories that reflect different aspects of ownership or control over emissions. They include the following:

- Scope 1: Direct, on-site combustion of fossil fuels (e.g., natural gas, propane, gasoline, and diesel).
- Scope 2: Indirect, off-site emissions associated with purchased electricity or purchased steam.
- Scope 3: Indirect emissions associated with other emissions sources, such as third-party vehicles and embodied energy.³²⁴

CARB recommends consideration of indirect emissions to provide a more complete picture of the GHG footprint of a facility: “As facilities consider changes that would affect their emissions – addition of a cogeneration unit to boost overall efficiency even as it increases direct emissions, for example – the relative impact on total (direct plus indirect) emissions by the facility should be monitored. Annually reported indirect energy usage also aids the conservation awareness of the facility and provides information” to CARB to be considered for future strategies by the

³²³ *The Climate Registry, General Reporting Protocol Version 2.1, 2016.*

³²⁴ *The Climate Registry, General Reporting Protocol Version 2.1, 2016.*

industrial sector.³²⁵ For these reasons, CARB has proposed requiring the calculation of direct and indirect GHG emissions as part of the AB 32 reporting requirements. Additionally, the Office of Planning and Research directs lead agencies to “make a good-faith effort, based on available information, to calculate, model, or estimate...GHG emissions from a project, including the emissions associated with vehicular traffic, energy consumption, water usage and construction activities.”³²⁶ Therefore, direct and indirect emissions have been calculated for the 2021 Project.

A fundamental challenge in the analysis of GHG emissions is the global nature of the existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular project because a project may cause a shift in the locale for some type of GHG emissions, rather than simply causing “new” GHG emissions. As a result, there is a lack of clarity as to whether a project’s GHG emissions represent a net global increase, reduction, or no change in GHGs that would exist if a project were not implemented. Therefore, the analysis of the 2021 Project’s GHG emissions is conservative in that it assumes all of the GHG emissions are new additions to the atmosphere.

It is considered reasonable and consistent with criteria pollutant calculations to consider those GHG emissions resulting from project-related incremental increases from emissions sources mentioned in the scope categories above such as emissions from the use of on-road mobile vehicles, electricity, and natural gas compared to existing conditions. This includes project construction activities such as demolition, hauling, and construction worker trips. This analysis also considers indirect GHG emissions from water conveyance, wastewater generation, and solid waste handling. Since potential impacts resulting from GHG emissions are long-term rather than acute, GHG emissions are calculated on an annual basis.

GHG emissions are estimated using the California Emissions Estimator Model[®] (CalEEMod, version 2016.3.2), which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts

³²⁵ CARB, Staff Report: Initial Statement of Reasons for Rulemaking, Revisions to the Regulation for Mandatory Reporting of Greenhouse Gas Emissions Pursuant to the California Global Warming Solutions Act of 2006 (AB 32), 2010, page 27.

³²⁶ Governor’s Office of Planning and Research (OPR), Technical Advisory – CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act (CEQA) Review, 2008, p. 5.

from land use projects throughout California.³²⁷ In addition to CalEEMod, EMFAC2017 was also used to quantify emissions from on-road construction and truck-related operational emissions.³²⁸

(a) Construction Emissions

The emissions of GHGs associated with construction of the 2021 Project were calculated for each year of construction activity using CalEEMod and EMFAC. Construction emissions are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date). The 2021 Project’s remediation-related construction activities and site development work began in PA2 in 2018 but was suspended in 2019. Construction of the 2021 Project’s PA3 is estimated to start in December 2021 with construction of PA2 resuming in 2022 and construction of PA1 beginning in 2022. However, the 2021 Project may commence at a later date. If the onset of construction for any of the Planning Areas is delayed to a later date than assumed in the modeling analysis herein, construction impacts would be similar to or less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future. This is because state regulations require construction equipment fleet operators to phase-in less polluting heavy-duty equipment and trucks over time. As a result, should the 2021 Project commence construction on a later date than modeled in this GHG impact analysis, GHG impacts would be less than the impacts disclosed herein.

The output values used in this analysis were adjusted to be project-specific based on equipment types and the construction schedule. These values were then applied to the same construction phasing assumptions used in the criteria pollutant analysis (see Section IV.D, *Air Quality*, of this 2021 SEIR) to generate GHG emissions values for each construction year. The SCAQMD guidance, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold*, recognizes that construction-related GHG emissions from projects “occur over a relatively short-term period of time” and that “they contribute a relatively small portion of the overall lifetime project GHG emissions.”³²⁹

In accordance with SCAQMD guidance, GHG emissions from construction have been amortized (i.e., averaged annually) over the lifetime of the 2021 Project. The SCAQMD defines the lifetime

³²⁷ <http://www.aqmd.gov/caleemod>.

³²⁸ EMFAC2021 was released in January 2021. While approved by CARB for use, it has not yet been approved by the USEPA. Additionally, when the analysis was started, EMFAC2021 had not yet been approved by CARB. Subsequent to the release in January of 2021 an additional update was released in April of 2021. Because the analysis had begun before the release of EMFAC2021, the use of EMFAC2017 in the Project analysis is appropriate.

³²⁹ SCAQMD, *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, Attachment E, October 2008*.

of a project as 30 years.³³⁰ A more detailed discussion of the methodology for projecting the 2021 Project's construction emissions and descriptions of the 2021 Project's construction subphasing and equipment list are provided in Appendix D1 of this 2021 SEIR.

(b) Operational Emissions

CalEEMod was used to estimate operational GHG emissions from electricity, natural gas, solid waste, water and wastewater, fireplaces, and gas and electric landscaping equipment. Mobile emissions were estimated based on emissions factors from EMFAC2017 along with VMT data based on *The District at South Bay 2021 Project Transportation Impact Analysis* (TIA) and other project-specific data to estimate on-road mobile source emissions.^{331,332} The VMT analyzed in the TIA were based on local trip distances to and from the Project Site. The TIA's VMT calculations were used for the residential uses in PA1 and the employee/visitor generating uses in PA2 and PA3. For the purposes of this analysis, the planned development within PA3 is further delineated into sub areas (a) and (b). PA3(a) is the area to the west which includes the light industrial zoned areas, and PA3(b) includes the recreational and commercial uses in the Carson Country Mart (refer to Figures I-4 and I-5 provided in Chapter I, *Summary*, of this 2021 SEIR). The VMT analysis contained herein for worker and consumer trips within PA3 are based on the TIA's VMT calculations. VMT for trucks accessing PA3 are based on origin to destination distances and not strictly the local area as used to determine VMT in the TIA.

The 40-mile average trip for distribution centers is based on the typical trip length for industrial source facilities consistent with the SCAQMD's WAIRE rule.³³³ The 32.5 miles per trip used for fulfillment centers proposed within PA3(a) and the Carson Country Mart in PA3(b) was derived from City-specific data for trip lengths originating from similar nearby industrial facilities.³³⁴ As fulfillment centers typically have much shorter average trip lengths than distribution centers, the 32.5 miles per trip for fulfillment centers is conservative.

The GHG emissions calculations for the 2021 Project include credits or reductions for implementation of relevant project design features (PDFs) set forth in this 2021 SEIR. The analysis of 2021 Project GHG emissions at buildout also takes into account actions and mandates

³³⁰ SCAQMD, Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, *Attachment E, October 2008*.

³³¹ *Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, October 2021*.

³³² *Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021*.

³³³ SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, March 14, http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf?sfvrsn=2, accessed June 2021.

³³⁴ *Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021*.

already approved and expected to be in force by the time of expected buildout of the 2021 Project (e.g., Pavley I and II Standards and implementation of California's Statewide Renewables Portfolio Standard beyond current levels of renewable energy). Emissions reductions regarding Cap-and-Trade were not included in this analysis, as Cap-and-Trade is not applicable to warehousing uses contemplated by the 2021 Project.

Operational GHG emissions were calculated for the 2021 Project with incorporation of the GHG reduction characteristics, PDFs, and mitigation measures in the assumed first operational year of 2026. In addition, emissions were quantified for years 2035, 2040, and 2045 to correspond with regulatory goal years, as well as when the 2021 Project would fully implement the use of zero-emissions (ZE) and near-zero-emissions (NZE) vehicles on site. The analysis herein assumes final buildout of the Project Site in 2026 as detailed in Table II-10, Construction Schedule, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR. Buildout of PA3 is expected to occur in 2024, while buildout of PA2 would be expected to occur in 2025, and PA1 would be expected to be built out in 2026. Operational emissions are typically modeled based on the first full year of operation, which for PA3 would be 2025, for PA2 would be 2026, and for PA1 would be 2027. Therefore, the first full operational year is expected to be 2027. However, because PA3 is the main focus of this updated analysis and all three Planning Areas would have different Applicants and tenants/owners, the analysis contained herein conservatively uses 2026 as the opening year. The analysis contained herein provides for a worst case emissions generation for the 2021 Project as a whole, because GHG emissions from the 2021 Project are dominated by mobile sources, and emissions profiles from tail pipe exhaust and evaporative losses typically decrease year-over-year as older vehicles are driven less and ultimately retired, being replaced with newer vehicles certified to meet the current, more stringent emission standards.

The 2017 version of the CARB and USEPA-approved EMFAC model (EMFAC2017) does not account for the effect of the SAFE Vehicles Rules. CARB has provided off-model adjustment factors for criteria pollutant emissions and for GHG emissions.^{335,336} These adjustment factors were accounted for in the 2021 Project's construction and operational mobile emissions calculations. If the SAFE Vehicles Rules are rescinded pending the results of the USEPA and NHTSA evaluations, mobile source GHG emissions beyond 2026 would be slightly less than disclosed in this 2021 SEIR.

With regard to energy demand, the consumption of fossil fuels to generate electricity and to provide heating and hot water generates GHG emissions. Emissions of GHGs associated with energy usage under the 2021 Project's proposed land uses are calculated using the CalEEMod

³³⁵ CARB, EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One, November 20, 2019.

³³⁶ CARB, EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO₂) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule, June 26, 2020.

tool. Future fuel consumption rates are estimated based on specific square footage of the 2021 Project.

Emissions of GHGs associated with solid waste disposal under the 2021 Project's proposed land uses are calculated using the CalEEMod tool. The emissions are based on the size of the 2021 Project components and with values consistent with the utilities section (refer to Section VI.N, *Utilities and Service Systems*, of this 2021 SEIR for estimated solid waste disposal and diversion rates from the 2021 Project).

The emissions of GHGs associated with water demand and wastewater generation from the 2021 Project are calculated using CalEEMod. The emissions are based on the size of a project land uses, the water demand factors, the electrical intensity factors for water supply, treatment, and distribution for wastewater treatment, the GHG emission factors for the electricity utility provider, and the GWP values for the GHGs emitted.³³⁷ Refer to Section VI.N, *Utilities and Service Systems*, of this 2021 SEIR for the estimated water usage rate for the 2021 Project.

The emissions of GHGs associated with operational area sources under the 2021 Project are calculated using the CalEEMod tool. The emissions for landscaping equipment are based on the size of the open space anticipated, and parking land uses, the GHG emission factors for fuel combustion, and the GWP values for the GHGs emitted.

The GHG emissions calculations for the 2021 Project include credits or reductions for implementation of relevant PDFs as described below in Section IV.H.5.b, *Project Characteristics and Project Design Features*. A detailed discussion of the methodology used to estimate the GHG emissions from the 2021 Project, and PDFs are provided in Appendix D1 of this 2021 SEIR.

Operational GHG emissions are assessed based on the project-related incremental increase in GHG emissions compared to baseline conditions. Under CEQA, the baseline environmental setting is established as the time the Notice of Preparation for this 2021 SEIR circulated on April 16, 2021. GHG emissions from the 2021 Project are modeled for opening year 2026, mid-years 2035 and 2040, and future year 2045. The 2035, 2040, and 2045 scenarios were included to show how implementation of the PDFs will further reduce pollutant emissions through the life of the 2021 Project. The 2021 Project impacts are also compared to the 2018 SEIR impacts for informational purposes and to determine if there is an increase in impact severity.

There are challenges in determining consumption-based GHG emissions for embodied GHG emissions such as the production of construction materials and consumer goods and services as they many require elongated supply chains. Therefore, the data necessary to accurately quantify

³³⁷ *California Air Pollution Control Officers Association (CAPCOA), California Emissions Estimator Model User's Guide, Version 2016.3.2, November 2017, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf, accessed June 2021.*

embodied emissions may not be readily available due to the fact that other jurisdictions (particularly outside California or outside the United States) may not track GHG emissions in sufficient detail. Furthermore, as discussed in the Draft Association of Environmental Professionals (AEP) White Paper: Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans, “CEQA admonishes lead agencies to avoid speculation in completing their analyses and making conclusions. Furthermore, CEQA does not require a lead agency to complete every study possible, but rather to fully disclose impacts based on reasonably available data. Developing project-specific estimates of embedded GHG emissions for all construction materials, or future consumed goods and services that are related to complex supply chains, would require extensive research and may not be able to accurately identify GHG emissions for many consumed items without substantial uncertainty.”³³⁸

In addition, the State addressed embodied (lifecycle) GHG emissions in the Final Statement of Reasons for Regulatory Action, prepared for the amendment to Appendix F of the CEQA Guidelines pursuant to SB 97:

The amendments to Appendix F remove the term —lifecycle. No existing regulatory definition of —lifecycle exists. In fact, comments received during OPR’s public workshop process indicate a wide variety of interpretations of that term.^{339,340} Thus, retention of the term *lifecycle* in Appendix F could create confusion among lead agencies regarding what Appendix F requires. Moreover, even if a standard definition of the term *lifecycle* existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered indirect effects of a project as that term is defined in CEQA Guidelines Section 15358. Depending on the circumstances of a particular project, an example of such emissions could be those resulting from the manufacture of building materials.³⁴¹ CEQA only requires analysis of impacts that are directly or indirectly attributable to the project under consideration (CEQA Guidelines Section 15064(d)). In some instances, materials may be manufactured for many different projects as a result of general market demand, regardless of whether one particular project proceeds. Thus, such emissions may not be caused by the project under consideration. Similarly, in this scenario, a lead agency may not be able to require mitigation for emissions that result from the manufacturing process. Mitigation can only be required for emissions that are actually caused by the project (CEQA Guidelines Section 15126.4(a)(4)).³⁴²

³³⁸ *Association of Environmental Professionals, Draft AEP White Paper – Production, Consumption and Lifecycle Greenhouse Gas Inventories: Implications for CEQA and Climate Action Plans, 2017, p. 1-7.*

³³⁹ *Rivasplata, Terry, et al., Letter to OPR, February 2, 2009, at pp. 5, 12 and Attachment.*

³⁴⁰ *Center for Biological Diversity et al., Letter to OPR, February 2, 2009, at p. 17.*

³⁴¹ *CAPCOA, CEQA & Climate Change, January 2012, pp. 50–51.*

³⁴² *CNRA, Climate Action Team, 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008, 2009.*

Therefore, embodied GHG emissions were not considered in this analysis as they are not consistent with generally recommended GHG emissions analysis methodology under CEQA.

(c) Cumulative Emissions

As shown in Chapter III, *Introduction to the Analysis*, the City has identified 44 cumulative projects (CPs) that may be constructed concurrently with and be operational at the same time as the 2021 Project. Table III-9, Cumulative Projects, in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, lists the 44 CPs. To provide a cumulative analysis, GHG emissions the 44 CPs were estimated using existing environmental documentation and modeling default data from the CalEEMod. As of July 9, 2021, 15 CPs (CP numbers 2, 4, 8, 9, 13, 14, 18, 20, 29, 34, 37, 41, 42, 43, and 44) have published environmental documentation with estimated project emissions, which were used for the purposes of this cumulative analysis.

The GHG emissions for the remaining 29 CPs that do not have published environmental documents with estimated project emissions were estimated using CalEEMod. CalEEMod default values for construction equipment, duration, and vehicles trips were used based on a given project's land use and size and a construction start year of 2022. Similarly, operational emissions were estimated for the projects using land use, size, and CalEEMod defaults for vehicle trips, fleet mix, energy use, water use, and solid waste for an operational year of 2026. Operational GHG intensity rates were modified from the CalEEMod default assumptions to an updated rate assuming operations in year 2026 and assuming Southern California Edison's adherence to State Renewable Portfolio Standards requiring 60 percent of total electricity generation be renewable energy by 2030. Additionally, trip rates and fleet mixes for warehouses were modified from CalEEMod default assumptions to account for a larger population of trucks than assumed in CalEEMod defaults. Vehicle fleet mix and trip rates are based on the Institute of Transportation Engineers' (ITE) analysis of high-cube warehouses and trip lengths are based on the SCAG 2016 RTP modeling analysis.³⁴³

b. Project Characteristics and Project Design Features

(1) Project Characteristics

Project Characteristics include development standards, design features, and/or operational characteristics proposed by the 2021 Developer that are incorporated into the 2021 Project through Chapter II, *2021 Project Description*, of this 2021 SEIR, and/or the 2021 Specific Plan Amendment. The Project Characteristics that are highlighted in this section would avoid or reduce potential environmental effects through project design and operational characteristics.

³⁴³ *Institute of Transportation Engineers (ITE), High-Cube Warehouse Vehicle Trip Generation Analysis, October 2016.*

The 2021 Project would promote a reduction in mobile source emissions by providing a supply of housing, employment, retail and dining opportunities within close proximity to one another as well as to existing off-site residential uses. This makes it possible for an individual to both reside and work/shop/dine within close proximity to the Project Site.

The location/placement of light industrial and commercial uses in the design of the 2021 Project serves the objective of minimizing mobile source pollutant emissions. Light industrial and commercial uses that would be developed within the 2021 Project would be located in close proximity to the access ramps of the San Diego Freeway (Interstate 405 [I-405] Freeway) and the Harbor Freeway (I-110 Freeway), which provide easy access to and from the ports of Los Angeles and Long Beach. Such concentration and placement are intended to reduce VMT within the region and subregion by reducing commute distances for non-resident workers. The provision of light industrial and commercial space in close proximity to existing and proposed residential uses increases the probability that residents may work and recreate nearer to their home, thus reducing VMT.

(2) Project Design Features

For air quality emissions, energy use, and greenhouse gas (GHG) emissions, PDFs are identified in addition to Project Characteristics. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements that are used in the unmitigated modeling scenario for air quality, energy, and GHG.³⁴⁴ The mitigated modeling scenario then applies any identified 2021 mitigation measures. Because these PDFs must be implemented, in addition to the 2021 mitigation measures prior to the implementation of mitigation measures to ensure the documented impact conclusions, each PDF is provided an alphanumeric designation (e.g., 2021 SEIR PDF-X#), similar to mitigation measures (Mitigation Measure X-#). All PDFs and mitigation measures will be monitored in the 2021 SEIR MMRP.

The 2021 Project would be developed in accordance with the regulations, standards, and guidelines established in the 2021 Specific Plan Amendment, the General Plan, and the City's CAP. The following PDFs have been incorporated within the 2021 Project and this 2021 SEIR to meet regulatory compliance or to provide further benefit to the future tenants and residents as well as the surrounding community. As detailed in Chapter III, *Introduction to the Analysis*, of this 2021 SEIR, some of the PDFs replace mitigation measures from the 2018 SEIR due to compliance with current regulatory requirements and that makes them part of the unmitigated modeling scenario.

³⁴⁴ *Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.*

(a) Construction

Construction of the 2021 Project has been designed to reduce emissions from construction equipment and haul/vendor trucks. Emissions are reduced through the use of newer/more-efficient equipment and vehicle fleets. The following are the key PDFs that would reduce GHG emissions:

- **2021 SEIR PDF-C1:** Mobile off-road construction equipment (wheeled or tracked) used during construction of the ~~proposed modified Project~~ 2021 Project shall meet the USEPA Tier 4 final standards, either as original equipment or equipment retrofitted to meet the Tier 4 final standards. In the event of specialized equipment use where Tier 4 equipment is not commercially available at the time of construction, then the equipment shall, at a minimum, meet the Tier 3 standard. Zero-emissions construction equipment shall be incorporated when commercially available. This requirement shall be incorporated into applicable bid documents, purchase orders, and contracts with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities. A copy of each unit's certified tier specification or model year specification shall be available upon request at the time of mobilization of each applicable unit of equipment. (Modified from 2018 SEIR PDF Mitigation Measure G-6) (Applicable to PA1, PA2, and PA3; zero-emissions construction equipment use is not required for PA2.)
- **2021 SEIR PDF-C2:** Limiting excavations to avoid exposing landfill contents. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C4:** ~~Electricity from power poles~~ Electric hook-ups to the power grid shall be used rather than temporary diesel- or gasoline-powered generators shall be used to the extent for electric construction tools whenever feasible. For PA3 and PA1, mobile off-road construction equipment of less than 50 horsepower shall be electric, including: air compressors, concrete/industrial saws, welders and plate compactors. Mobile off-road construction equipment with a power rating of 19 kilowatts or less shall be battery powered. If generators need to be used to reach remote portions of the site, non-diesel generators shall be used. (Modified from 2018 SEIR Mitigation Measure G-4)³⁴⁵ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C5:** All construction vehicles shall be prohibited from idling in excess of 5 minutes per occurrence and location, both on and off Property site. (Applicable to PA2.) All construction vehicles shall be prohibited from idling in excess of 2 minutes per occurrence and location, both on and off site. Individual pieces of diesel-powered off-road diesel equipment shall be prohibited from being in the "on" position for more than 10 hours per day. (Modified from 2018 SEIR Mitigation Measure G-5)³⁴⁶ (Applicable to PA1 and PA3.)

³⁴⁵ Mitigation Measure G-4 was replaced by 2021 SEIR PDF-C4 as it is a quantified part of the unmitigated modeling scenario.

³⁴⁶ Mitigation Measure G-5 was replaced by 2021 SEIR PDF-C5 as it is a quantified part of the unmitigated modeling scenario.

- **2021 SEIR PDF-C6:** All fleet-contracted on-road heavy-duty haul trucks used for remediation and construction hauling activities from PA1 and PA3 shall be model year 2014 or newer if diesel fueled. The requirement for the use of 2014 or newer vehicles does not apply to delivery trucks or other non-contracted fleets. (Applicable to PA1 and PA3.)
- **2021 SEIR PDF-C7:** Contractors shall conduct routine inspections to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts. Inspection reports shall be maintained on site throughout the construction period. (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-C8:** 2021 Project contractors shall provide information on transit and ride sharing programs and services to construction employees. As feasible, provide for meal options on site, or shuttle buses between the site and nearby meal destinations for use by construction contractors. (Applicable to PA1 and PA3.)

(b) Operation

Design and operational elements of the 2021 Project would minimize air pollutant emissions, which implements the policy direction provided by SCAG for land development projects, including the 2021 Project. The 2021 Project has been designed and programmed to reduce the potential number of vehicle trips and VMT. The 2021 Project would also minimize pollutant emissions through the location and placement of land uses within the Project Site. The following are the key design and operational elements of the 2021 Project that would reduce GHG emissions:

- **2021 SEIR PDF-O2:** All stationary-source emissions sources (e.g., landfill gas flares, emergency generator) would utilize Best Available Control Technology (BACT) to meet SCAQMD requirements, and would maintain appropriate SCAQMD permits. (2018 SEIR PDF) (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O4:** All residential and non-residential buildings shall meet or exceed the more stringent of the 2016-2019 California Title 24 Efficiency standards for water, heating, space heating, and cooling, by a minimum of 5 percent or achieve equivalent energy efficiency savings by other means or others adopted by the City. (Modified from 2018 SEIR Mitigation Measure G-15)³⁴⁷ (Applicable to PA1 and PA3; PA2 applicability is limited to the Title 24 efficiency standards effective at the time construction began.)

³⁴⁷ This measure was replaced by 2021 SEIR PDF-O7 as it is a regulatory requirement modeled as part of the unmitigated scenario.

- **2021 SEIR PDF-O5:** ~~The Developer Applicant(s)~~ of each planning area within the Project Site shall implement the following trip demand measures:
 - a) ~~The Applicant shall p~~Provide bicycle racks located at convenient locations throughout ~~The District at South Bay~~ the 2021 Project. (Modified from 2018 SEIR Mitigation Measure G-22)³⁴⁸ (Applicable to PA1, PA2, and PA3.)
 - b) ~~The Applicant shall p~~Provide bicycle paths along the main routes throughout ~~The District at South Bay~~ the Project Site consistent with the 2021 Specific Plan Amendment. (Modified from 2018 SEIR Mitigation Measure G-23)³⁴⁹ (Applicable to PA1, PA2, and PA3.)
 - c) ~~The Applicant shall p~~Provide convenient pedestrian access throughout ~~The District at South Bay~~ the Project Site. (Modified from 2018 SEIR Mitigation Measure G-24)³⁵⁰ (Applicable to PA1, PA2, and PA3.)
 - d) Provide on-site shower facilities for use by all employees bicycling/walking to work. (Applicable to the light industrial uses in PA3(a).)
 - e) Light industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards. (Applicable to the light industrial uses in PA3(a).)
 - f) Each light industrial tenant within PA3(a) shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities. (Applicable to the light industrial uses in PA3(a).)
- **2021 SEIR PDF-O6:** The 2021 Project shall incorporate outdoor electrical outlets such that 10 percent of outdoor landscaping equipment can be electrically powered. (2018 SEIR Mitigation Measure G-28)³⁵¹ (Applicable to PA1, PA2, and PA3.)
- **2021 SEIR PDF-O7:** Electric vehicle charging stations shall be provided as follows:
 - a) The Applicant of PA1 shall provide passenger vehicle charging stations for a minimum of 6 percent parking spaces (169 spaces). Compliance shall be in accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA1.)
 - b) The Applicant of PA3 shall provide passenger vehicle charging stations for a minimum of 10 percent parking spaces (82 spaces). Compliance shall be in

³⁴⁸ 2018 Mitigation Measure G-22 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description; therefore, bicycle parking would be part of the 2021 Project to accommodate bicycle access.

³⁴⁹ 2018 Mitigation Measure G-23 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

³⁵⁰ 2018 Mitigation Measure G-24 was moved to the 2021 SEIR PDF section because bicycle and pedestrian pathways are part of the 2021 Project Description.

³⁵¹ This measure is replaced by 2021 SEIR PDF-O9 as it is part of the unmitigated scenario.

accordance with CALGreen Code applicable at the time building permits are issued. (Applicable to PA3.)

- c) Each of the Applicant(s) of PA1 and PA3 shall install Level 2 or better electric vehicle charging stations for 325 spaces on site between the beginning of construction and December 2039 (the 325 spaces are in addition to the 169 spaces in PA1 and 82 spaces in PA3). If on-site charging stations cannot be accommodated, charging stations may be distributed throughout the City. The 325 electrovoltaic (EV) supplied spaces will be provided for passenger and light-duty vehicles. Level 4 EV charging for trucks can be substituted at 0.11 truck spaces for every passenger vehicle space in PA3. Passenger and light-duty vehicle and truck charging requirements can be satisfied on or off site; however, on-site charging will be prioritized. (Applicable to PA1 and PA3.)³⁵²
- d) Provide infrastructure, as the parking area is developed, to support the energy load for electric truck vehicle charging. Truck charging infrastructure shall be designed to support a minimum of 25 percent of the truck parking spaces for each of the light industrial use in PA3(a). (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O8:** All on-site equipment, such as forklifts and yard trucks shall be electric with the necessary electrical infrastructure and charging stations provided. (Applicable to PA3.)
 - **2021 SEIR PDF-O9:** When not in use all truck engines shall be turned off. Idling will be limited to 2 minutes or less per occurrence and location for PA3. Idling and operation restrictions shall be posted for view from both on-site and off-site personnel. Appropriate signage shall identify idling restrictions and contact information to report violations to CARB and SCAQMD within PA3. Consistent with the 2018 SEIR, idling restrictions of 5 minutes are or less per occurrence and location applicable to PA1 and PA2. (Applicable to PA3.)
 - **2021 SEIR PDF-O10:** All dock doors shall be equipped with electric plugs for electric transportation refrigeration units (TRUs). All TRUs operating on site would be required to be electric (no diesel-powered TRUs permitted at all in PA3(a)) and certification and maintenance records shall be maintained for all TRUs. (Applicable to the light industrial uses in PA3(a).)
 - **2021 SEIR PDF-O11:** To the extent feasible and permitted by local codes and regulations, all emergency-standby generators shall be non-diesel. If diesel generators are required, generators will conform to EPA Tier 4 emissions standards. (Applicable to the light industrial uses in PA3(a).)
 - **2021 SEIR PDF-O12:** Tenants shall train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks. Staff in charge of keeping vehicle records shall be trained in diesel technologies and

³⁵² *At the discretion of the Applicant(s) of PA2, additional EV charging stations may be incorporated beyond those required of PA2 as part of the 2018 SEIR mitigation requirements.*

compliance with CARB regulations by attending CARB-approved courses as well as maintaining on-site records demonstrating compliance. (Applicable to uses in PA3(a).)

- **2021 SEIR PDF-O13:** As applicable, tenants shall be required to enroll in U.S. EPA’s SmartWay program and shall use carriers that are SmartWay carriers. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O14:** Tenants shall be provided with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets. (Applicable to the uses in PA3(a).)
- **2021 SEIR PDF-O15:** All light industrial buildings shall implement a combination of sky lights and solar photovoltaic (PV) infrastructure such that a minimum of 25 percent of the rooftops will include solar PV arrays at buildout. (Applicable to uses in PA3(a).)
- **2021 SEIR PDF-O16:** For the uses within PA3(a), leasing preference shall be given to prospective tenants with facility-owned and operated fleet that is alternative/zero-emissions. All owned or contracted fleets shall meet or exceed the 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Light Industrial tenants shall ensure that of all trucks of model year 2021 and newer 75 percent will be zero- or near-zero-emissions vehicles by 2035, and 100 percent zero- or near-zero-emissions vehicles by 2040. Facility operators shall maintain records on site demonstrating compliance with this requirement and shall make records available to inspection by local jurisdiction, air districts, and the State upon request. (Applicable to the uses in PA3(a).)

c. Analysis of Project Impacts

(1) Project Consistency with Applicable Plans and Policies, and

(2) Quantification and Comparison of GHG Emissions Calculation of Greenhouse Gas Emissions

The California Energy Commission adopted CALGreen (Part 11 of Title 24, Building Energy Efficiency Standards) to “improve public health, safety and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in the following categories: (1) Planning and design; (2) Energy efficiency; (3) Water efficiency and conservation; (4) Material conservation and resource efficiency; and (5) Environmental air quality.”³⁵³ CALGreen was most recently updated in 2019, taking effect on January 1, 2020.³⁵⁴ The 2021 Project would comply with CALGreen requirements, which could include but are not limited to installation of ENERGY STAR® compliant appliances to the greatest extent feasible,

³⁵³ *California Building Standards Commission, 2010 California Green Building Standards Code, 2010.*

³⁵⁴ *California Building Standards Commission, 2019 California Green Building Standard Code, July 2019.*

installation of solar, electric or lower-nitrogen oxides gas-fired water heaters, and installation of water-efficient irrigation systems. Additionally, CALGreen requires designated parking spaces for carpool or alternative fueled vehicles, long- and short-term bike parking, and installation of electrical conduit for electric vehicle charging parking spaces.

Transportation-related GHG emissions would be the largest source of emissions from the 2021 Project. This finding is consistent with the findings in regional plans, including the 2020–2045 RTP/SCS, which recognizes that the transportation sector is the largest contributor to the state’s GHG emissions. At the regional level, the 2020–2045 RTP/SCS is an applicable plan adopted for the purpose of reducing GHGs.

The purpose of the 2020–2045 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. SCAG’s Program EIR for the 2020–2045 RTP/SCS, certified on May 7, 2020, states that “[e]ach [metropolitan planning organization] is required to prepare an SCS as part of their RTP in order to meet these GHG emissions reduction targets by aligning transportation, land use, and housing strategies with respect to [Senate Bill] 375.” The 2020–2045 RTP/SCS seeks improved mobility and accessibility, which is defined as “the ability to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices.”³⁵⁵ The 2020–2045 RTP/SCS seeks to implement strategies that “alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation.”³⁵⁶ Furthermore, the 2020–2045 RTP/SCS includes “more compact, infill, walkable and mixed-use development strategies to accommodate new region’s growth would be encouraged to accommodate increases in population, households, employment, and travel demand.”³⁵⁷ Moreover, the 2020–2045 RTP/SCS states that while “[t]ransportation emissions are most prevalent relative to all other sectors in California and specifically in the SCAG region,” the RTP/SCS would focus “growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions.”³⁵⁸

In order to assess the 2021 Project’s potential to conflict with the 2020–2045 RTP/SCS, this section analyzes the 2021 Project’s land use characteristics for consistency with the strategies and policies set forth in the 2020–2045 RTP/SCS to meet GHG emission-reduction targets set by CARB. Generally, projects are considered to not conflict with applicable City and regional land

³⁵⁵ SCAG, 2020–2045 RTP/SCS, *September 2020*.

³⁵⁶ SCAG, 2020–2045 RTP/SCS, *September 2020*.

³⁵⁷ SCAG, 2020–2045 RTP/SCS, *September 2020*.

³⁵⁸ SCAG, 2020–2045 RTP/SCS, *September 2020*.

use plans and regulations, such as SCAG’s 2020–2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The 2021 Project would not conflict with the 2020–2045 RTP/SCS goals as detailed in Table IV.H-3 and would result in benefits intended to improve mobility such as access to diverse destinations, providing better “placemaking”, providing more transportation choices through addition of on-site bus stops and bicycle paths and facilities, reducing vehicular demand and associated emissions (through placing employment, commercial and recreational uses near existing residential land uses), and reducing VMT by placing facilities adjacent to the freeway and nearer to the ports.

Table IV.H-3, Consistency with Applicable 2020–2045 SCAG RTP/SCS Actions and Strategies, outlines the 2021 Project’s consistency with applicable actions and goals of the 2020–2045 SCAG RTP/SCS.

**Table IV.H-3
Consistency with Applicable 2020–2045 SCAG RTP/SCS Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
Sustainable Development		
Focus on a regional jobs/housing balance to reduce commute times and distances and expand job opportunities near transit and along center-focused main streets	Local Jurisdictions, SCAG	Consistent. The 2021 Project would support this action/strategy by creating a mixed-use infill development comprising complementary uses that offer housing, employment, commercial retail and other community-serving opportunities with bus transit facilities located directly on site. The 2021 Project supports the development of complete communities by co-locating complementary light industrial (employment), commercial/restaurant, and residential land uses in close proximity to existing off-site residential uses. Additionally, the 2021 Project increases employment opportunities within the region reducing the need to travel outside the local area for employment.
Prioritize infill and redevelopment of underutilized land to accommodate new growth, increase amenities and connectivity in existing neighborhoods	Local Jurisdictions, SCAG	Consistent. The 2021 Project supports the development of complete communities by co-locating complementary commercial/restaurant and residential land uses in close proximity to existing off-site residential uses, being located within 0.25 mile of off-site residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions. The 2021 Project, specifically the light industrial PA3 portion of the 2021 Project, serves as a catalyst for the remediation of the landfill and results in a productive use of this underutilized property.

**Table IV.H-3
Consistency with Applicable 2020–2045 SCAG RTP/SCS Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
Encourage design and transportation options that reduce the reliance on and number of solo car trips (this could include mixed uses or locating and orienting close to existing destinations)	Local Jurisdictions, SCAG	Consistent. The 2021 Project would allow for the development of an unimproved landfill property that has remained vacant for over 55 years with a new mixed-use development that includes residential, commercial, and light industrial land uses to support the local community, and that would provide for a development that would encourage a live, work, and play environment to reduce solo car trips outside of the Project Site.
Promote low emission technologies such as neighborhood electric vehicles, shared rides hailing, car sharing, bike sharing and scooters by providing supportive and safe infrastructure such as dedicated lanes, charging and parking/drop-off space	Local Jurisdictions, SCAG	Consistent. The 2021 Project would provide walking and bicycling paths within its boundaries. It would also connect to the surrounding commercial and recreational areas, through pedestrian paths (sidewalks, etc.) and bicycle paths. The 2021 Project would locate light industrial (employment), retail, residential, and restaurant uses within an area that has direct access to public transit, and employment opportunities, restaurants and entertainment all within walking distance. Further, the 2021 Project would promote the use of electric vehicles by providing electric vehicle charging stations. The 2021 Project incorporates the phase-in use of zero-emissions trucks between 2035 and 2040 as detailed in 2021 SEIR PDF-O16. The phase-in of zero-emissions trucks by 2040 was set to be consistent with the RTP/SCS reduction requirements within the 2040 horizon year for the RTP/SCS.
Identify ways to incorporate “micro-power grids” in communities, for example solar energy, hydrogen fuel cell power storage and power generation	Local Jurisdictions, SCAG	Consistent. All buildings in PA3(a) shall exceed the Mandatory Solar Ready Requirements of 2019 Title 24. This includes designating roof space for solar panels with the solar zone equaling a minimum of 25 percent of the building’s total roof area minus any skylights and installing solar arrays. PA1 will meet the Title 24 solar requirements in effect at the time that portion of the 2021 Project begins construction (at a minimum the 2019 Title 24 solar requirements). PA2 will meet the requirements of 2016 Title 24.
Support local policies for renewable energy production, reduction of urban heat islands and carbon sequestration	Local Jurisdictions, SCAG	Consistent. All buildings in PA3(a) shall exceed the Mandatory Solar Ready Requirements of 2019 Title 24. This includes designating roof space for solar panels with the solar zone equaling a minimum of 25 percent of the building’s total roof area minus any skylights and installing solar arrays.
Identify ways to improve access to public park space	Local Jurisdictions	Consistent. The 2021 Project includes approximately six acres of public park and open space and amenity areas as part of the Carson Country Mart located within PA3(b).
Transportation Demand Management (TDM) Strategic Plan provide an objectives-driven, performance-based process to identify and promote TDM strategies and programs across the region. SCAG will pursue implementation of these strategies	Local Jurisdictions	Consistent. The 2021 Project will implement the following trip demand measures to increase ride-sharing and carpooling opportunities applicable to PA3 only: <ul style="list-style-type: none"> Light Industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards.

**Table IV.H-3
Consistency with Applicable 2020–2045 SCAG RTP/SCS Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Consistency Analysis
in coordination with regional and local partners.		<ul style="list-style-type: none"> Each light industrial tenant shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities.
<i>SOURCE: ESA 2021.</i>		

Through the City’s CAP, the City of Carson has established goals and strategies that would reduce GHG emissions. The CAP reduction measures primarily focus on ways to reduce energy as energy usage accounted for 70 percent of all City GHG emissions in 2012. As outlined in the CAP, the City is focusing on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to CAP energy efficiency goals, utility providers (such as Southern California Edison [SCE]) are required to provide 60 percent of their electricity supply from renewable sources by the year 2030, further reducing the demand on nonrenewable sources. As discussed in Table IV.H-5, 2021 Project Consistency with Applicable Greenhouse Gas Reduction Strategies, below, the 2021 Project would comply with CALGreen energy-efficiency requirements, which would be consistent with CAP goals for increasing energy and water use efficiency in new residential and commercial developments. **Table IV.H-4, Consistency with Applicable CAP Measures**, outlines the 2021 Project’s consistency with applicable actions and goals of the CAP.

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure LUT: A1—EV Parking Policies. EV parking policies, such as free or reduced parking for EVs, can provide incentives to EV adoption. EV parking policies include changes to current parking policies, incentives in future parking agreements, granting new businesses lower parking minimums in exchange for EV or NEV preferential parking, and requiring smaller parking dimensions.</p> <p>Measure LUT: A2—EV Charging Policies. EV charging policies incentivize EV adoption by making it easier to charge EVs. City strategies to support these policies can range from on-the-ground implementation of charging stations (level 1, 2, and DC 3) to adopting new development standards relating to EVs.</p>	<p>Consistent. The 2021 Project would support these actions/strategies by exceeding electrovoltaic (EV) charging stations into the available resident/worker/truck parking for PA1 and PA3(a) (2021 SEIR PDF-07). Specifically, the 2021 Project would include the following as PDFs: (1) all truck loading docks will be electrified (2021 SEIR PDF-O10); (2) all truck parking spaces will be EV ready with conduits (2021 SEIR PDF-07); (3) A minimum of 251 car parking spaces within PA3 and PA1 will have EV chargers and up to 325 additional EV chargers throughout the site, which is above the City of Carson Municipal Code requirement of 5 percent(2021 SEIR PDF-07); (4) Phase in of zero-emissions trucks between 2035 and 2040 (2021 SEIR PDF-O16), and (5) infrastructure included to support future installation of truck charging stations in PA3(a) (2021 SEIR PDF-07). With implementation of these PDFs, implementation of the 2021 Project would increase EV charging availability</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure LUT: B1—Facilitate Private and Public Mobility Services (Ride-Hailing, Ride-Sharing, Car-Sharing, Bike-Sharing).</p> <p>This strategy encourages public and private mobility services. It includes supporting private vendors in search of funds and not adopting positions that limit or exclude vendors. The measure considers service inter-operability as well as optimizing the customer experience for local residents.</p>	<p>within the Project Site or help to develop EV facilities within the City, which in turn would help to promote greater widespread use of EVs within the City and region. In addition, the dedication of up to 576 car parking spaces with EV chargers would incentivize the use of EVs on site as those spaces would be reserved only for such use. Furthermore, an infrastructure to support EV truck parking spaces would allow those space to be ready to be converted for EVs use once the EV technology has become more sophisticated. Therefore, implementation of the 2021 Project would be consistent with these goals and measures.</p> <p>Consistent. The 2021 Project would support this action/strategy by incorporating bicycle routes within the Project Site and incorporating showers into the PA3(a) light industrial land uses for employee benefit (2021 SEIR PDF-O5). Ridesharing would be promoted during construction and operation of the 2021 Project through the incorporation of PDFs and trip demand measures (2021 SEIR PDF-O5). As required by the incorporated PDFs, 2021 Project contractors shall provide information on transit and ride sharing programs and services to construction employees and provide for meal options on site, or shuttle buses between the site and nearby meal destinations for use by construction workers, as feasible (Applicable to PA1 and PA3). In addition, implementation of the trip demand measures required to reduce VMT would require each light industrial tenant to be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the light industrial/distribution facility. To the extent feasible, the ridesharing programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities (Applicable to PA3). Therefore, implementation of the 2021 Project would promote the use of ridesharing as a means to discourage the use of individual vehicle trips to /from the Project Site during construction and operation of the 2021 Project.</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure LUT: C1—Expand Transit Network. This strategy focuses on expanding the local transit network by adding or modifying existing transit service; additionally, it includes transit strategies that address first/last-mile connections, which can encourage more people to travel via transit.</p>	<p>Consistent. The 2021 Project would support this action/strategy by incorporating four bus stops within the Project Site. The 2021 Project would include pedestrian and bicycle transit routes both through and surrounding the Project Site and would be linked to nearby public transit routes through the new bus stops proposed to be located on the Project Site under the 2021 Specific Plan Amendment. In addition, as part of the mitigation measures required to reduce VMT impacts for PA1 and PA3(a), a range of trip demand measures were considered for the 2021 Project, including various transit-oriented measures. Through use of these trip demand measures, connection with existing transit systems, and the inclusion of new bus stops on site, the use of transit services would increase with implementation of the 2021 Project and in turn, would reduce the use of individual employee cars on site and decrease GHG emissions generated by the 2021 Project.</p>
<p>Measure LUT: D1—Provide Traffic Calming Measures. Traffic calming measures create streets that are friendly to active modes such as walking and biking and users of public transit. These measures have the potential to encourage greater adoption of active transportation due to increased safety and attractiveness. Examples include: marked crosswalks, curb extensions, planter strips with trees, and roundabouts.</p> <p>Measure LUT: D2—Improve Design Development. This measure provides improved design elements to enhance slow speed multi-modalism such as walking and bicycling. This strategy may complement the concepts found in the SSBS to increase connectivity within new or proposed developments and improves street network characteristics within a neighborhood. These concepts could include slow speed multi-modal networks.</p>	<p>Consistent. The 2021 Project would support these actions/strategies by incorporating bicycle routes within the Project Site and incorporating showers into the PA3 light industrial land uses for employee benefit. Dedicated bicycle lanes would provide external and internal bicycle circulation while sidewalks and pathways around and throughout the Project Site would allow for pedestrian travel. In addition, multipurpose paths (pedestrian and bicycle traffic) are proposed throughout the Project Site and would provide for concurrent, side-by-side use by both bicyclists and pedestrians. Furthermore, the 2021 Project would locate light industrial (employment), retail, residential, and restaurant uses within the Project Site, which also has direct access to public transit, and employment opportunities, restaurants and entertainment all within walking distance. With development of these multi-modal and pedestrian facilities within the Project Site and connecting to the surrounding area, implementation of the 2021 Project would promote the use of alternative transportation to travel to/from and within the Project Site, which in turn would help to reduce GHG emissions generated by vehicles.</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure LUT: E1—Limit Parking Supply. This strategy reduces parking supply through the creation of parking maximums, minimums, and parking benefit districts.</p>	<p>Consistent. The 2021 Project would provide on-site parking consistent with the Development Standards section of the 2021 Specific Plan Amendment, where truck, car, and bicycle parking spaces have been calculated based on the square footage of the various uses proposed on site. A Parking Demand Analysis has been prepared in connection with the 2021 Specific Plan Amendment to establish the amount of parking to be provided, including possible sharing of parking between uses based on differing days and hours of peak demand. This shared parking strategy would encourage residents, employees, and visitors to use alternative means of transportation to the Project Site due to limited parking supply. In addition, as stated above, up to 576 car parking spaces would be reserved for EVs only. Through the use of a shared parking strategy and the promotion of EVs, the 2021 Project would encourage the use of alternative transportation by limiting the parking supply on site.</p>
<p>Measure LUT: F1—Encourage Telecommuting and Alternative Schedules. Alternative work schedules take the form of staggered starting times, flexible schedules, or compressed work weeks. Alternative workplace programs are: (1) working at home-offices, which eliminate a work trip entirely, or (2) working at an office closer to the home, which reduces part of the work trip. Cities can offer workplace programs at neighborhood centers, available space in government offices, public shared-work facilities, or commercial executive suites.</p>	<p>Consistent. The 2021 Project would utilize various strategies to help reduce VMT from residents and employees, such as promoting ridesharing programs, incentivizing and/or subsidizing transit passes and programs, and establishing a shared parking strategy on site to discourage individual car trips to the Project Site. In addition, the 2021 Project supports the development of complete communities by co-locating complementary commercial/restaurant and residential land uses in proximity to existing off-site residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions.</p>
<p>Measure LUT: F2—Implement Commute Trip Reduction Programs. This measure establishes a Commute Trip Reduction Ordinance.</p>	<p>Furthermore, the 2021 Project would promote walking and bicycling paths within its boundaries (2021 SEIR PDF-05). It would also connect to the surrounding commercial and recreational areas. The 2021 Project would locate light industrial (employment), retail, residential, and restaurant uses within an area that has direct access to public transit, and employment opportunities, restaurants and entertainment all within walking distance. In addition, as part of the mitigation measures required to reduce VMT impacts for PA3(a), a range of trip demand measures were considered for the 2021 Project, including various trip demand measures (2021 SEIR PDF-05). Therefore, implementation of the 2021 Project would utilize different strategies to promote alternative transportation to decrease VMT and GHG emissions associated with individual car trips during construction and operation of the 2021 Project.</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure LUT: G1—Increase Density: These strategies seek to increase destination accessibility by encouraging combined uses such as office, commercial, institutional, and residential within areas and developments.</p> <p>Measure LUT: G2—Increase Diversity: These strategies encourage projects to mix uses such as office, commercial, institutional, and residential within the same development.</p> <p>Measure LUT: G3—Increase Transit Accessibility: Transit accessibility strategies involve measures that encourage transit services through general plans, zoning codes, and ordinances as well as filling in gaps within the transit network.</p>	<p>Consistent. The 2021 Project would support these actions/strategies because the 2021 Project is a mixed-use project that incorporates industrial, commercial, retail, and residential land uses within the Project Site, which would provide housing, employment opportunities, and commercial / recreational / leisure activities all in one development. While it is not anticipated that all residents of PA1 would work on site or that all employees would live on site, the mix of uses would encourage a portion of residents and/or employees to capitalize on the range of other uses provided on site. By being a mixed-use development, the 2021 Project would be a destination location within the City for a range of activities, where visitors, residents, and employees alike could work and play. Furthermore, since the 2021 Project is considered an infill project, existing transit and alternative transportation routes already serve the Project Site and surrounding area. Implementation of the 2021 Project would also include additional bicycle and pedestrian lanes and facilities to allow for multi-modal travel to/from and throughout the Project Site (2021 SEIR PDF-O5). The 2021 Project would incorporate four bus stops within the Project Site to provide transit accessibility. The 2021 Project would also include pedestrian and bicycle transit routes both through and surrounding the Project Site and would be linked to nearby public transit routes through the new bus stops proposed to be located on the Project Site under the 2021 Specific Plan Amendment (2021 SEIR PDF-O5).</p>
<p>Measure EE: B1—As part of the 2010 California Green Building Standards (CALGreen), a two-tiered system was designed to allow local jurisdictions to adopt codes that go beyond state standards. The two tiers contain measures that are more stringent and achieve an increased reduction in energy usage by 15 percent (Tier 1) or 30 percent (Tier 2) beyond Title 24. It is also important that Title 24 Standards are updated so that the full GHG reduction benefit of the title can be realized.</p>	<p>Consistent. The residential component of the 2021 Project would be consistent with all applicable energy efficiency laws, regulations, and standards, including but not limited to Title 24, the California Building Code, California Energy Code, California Electrical Code, and CALGreen Standards. Energy efficient appliances and features would be installed throughout the residential uses on site to increase energy savings and decrease the amount of GHG emissions generated from the use of electricity. The 2021 Project would also provide up to 576 EV charging stations in, as well as incorporating electrical infrastructure to support the incorporation of electrical trucks into the light industrial land uses (2021 SEIR PDF-O7). It also provides for electrification of the dock doors within PA3(a) to eliminate the use diesel TRUs in PA3 (2021 SEIR PDF-O10). The 2021 Project will also incorporate sky lights as well as solar PV panels on the roof of the industrial buildings in PA3(a) (2021 SEIR PDF-O15).</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure EE: D1—Encourage or Require EE Standards Exceeding Title 24: This measure will develop City staff to be resources in encouraging and implementing energy efficiency beyond that are required by current Title 24 Standards for commercial development. In addition, this measure helps ensure that Title 24 Standards are updated.</p>	<p>Consistent. The 2021 Project would be consistent with all applicable energy efficiency laws, regulations, and standards, including but not limited to Title 24, the California Building Code, California Energy Code, California Electrical Code, and CALGreen Standards. All buildings in PA3(a) would be required to exceed the Mandatory Solar Ready Requirements of 2019 Title 24 by including 25 percent roof coverage with PV solar as detailed in 2021-SEIR PDF- O15. This includes designating roof space for solar panels with the solar zone equaling a minimum of 25 percent of the building’s total roof area minus any skylights. In addition, energy efficient appliances and features would be installed throughout the commercial and light industrial/distribution uses to further increase energy savings (2021 SEIR PDF-O4).</p>
<p>Measure EE: E1—Promote or Require Water Efficiency through SB X7-7: The Water Conservation Act of 2009 (SB X7-7), requires all water suppliers to increase water use efficiency. The legislation set an overall goal of reducing per capita urban water consumption by 20 percent from a baseline level by 2020. The goal of Water Conservation Act can be met by taking a variety of actions, including targeted public outreach and promoting water efficiency measures such as low-irrigation landscaping. Additional water conservation information, resource materials, education, and incentives are available through the West Basin Water District (WBMWD).</p>	<p>Consistent. The 2021 Project would support this action/strategy by compliance with CALGreen and SB X7-7 requirements of reducing water use by 20 percent for indoor and outdoor water consumption. Specifically, the 2021 Project would incorporate water conservation methods such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The 2021 Specific Plan Amendment will also include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features to further improve water efficiency. Specifically, the 2021 Project would connect the on-site water system to the West Basin Recycling Facility to decrease the potable water demand and enhance the water conservation efforts for the development. In addition, recycled water would be used to irrigate parks, open spaces, and landscaping within the Project Site. Furthermore, implementation of Mitigation Measures J.1-1 through J.1-7 would ensure that maximum water efficiency is obtained through construction and operation of the 2021 Project. Therefore, with incorporation and implementation of the water efficiency methods stated above, the 2021 Project would be consistent with these goals and measures to increase water efficiency.</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure EE: F1—Promote Tree Planting for Shading and Energy Efficiency: Trees and plants naturally help cool an environment by providing shade and evapotranspiration (the movement of water from the soil and plants to the air), making vegetation a simple and effective way to reduce urban heat islands. Urban heat islands are urban areas that are significantly warmer than their surrounding rural areas due to human activities. Shaded surfaces may be 20–45°F cooler than the peak temperatures of un-shaded materials. In addition, evapotranspiration, alone or in combination with shading, can help reduce peak summer temperatures by 2–9°F. Furthermore, trees and plants that directly shade buildings can reduce energy use by decreasing demand for air conditioning.</p> <p>Measure EE: F2—Incentivize or Require Light-Reflecting Surfaces: Replacing surface areas with light-reflecting materials can decrease heat absorption and lower outside air temperature. Both roofs and pavements are ideal surfaces for taking advantage of this advanced technology.</p> <p>Measure SW: C1—Set a Community Goal to Divert Waste from Landfills: Setting a goal to divert a specified percentage of waste will show the City’s commitment to reducing the GHG gases emitted from the landfill.</p>	<p>Consistent. The 2021 Project would support this action/strategy by compliance with CALGreen requirements. Additionally, the incorporation of solar PV panels on the industrial building roofs would further reduce heat adsorption for the buildings. The 2021 Project includes a dedicated park and open space areas, referred to as the Carson Country Mart, in PA3(b) as well as landscaping throughout the Project Site. Landscaping of the Project Site, including the Carson Country Mart, would include various types of trees, shrubs, and plants to not only beautify the Project Site but to also aid in reducing urban heat island effects from the impervious surfaces on site. The types of vegetation used for the different areas of the Project Site would be directed by the 2021 Specific Plan Amendment and approval by the City. In addition, since the Project Site is currently vacant with no substantial vegetation, landscaping the Project Site under the 2021 Project would increase the amount of vegetation on site as well as within the surrounding area, which would help to combat heating effects from the urban environment and increase energy efficiency on site.</p> <p>Consistent. The 2021 Project would support this action/strategy by compliance with City ordinances for waste disposal. The 2021 Project would be required to comply with all applicable laws and regulations related to the disposal of operational waste, including recycling requirements. In addition to adherence of these laws and regulations, implementation of Mitigation Measures J.3-1 through J.3-6 would ensure the maximum amount of recycling is incorporated throughout the lifetime of the 2021 Project to further reduce impacts to the solid waste system. As recycling initiatives increase, the 2021 Project would recycle solid waste to the greatest extent feasible available at the time of construction of the 2021 Project, which would help to decrease the amount of solid waste directed into the regional landfills. By diverting solid waste out of the regional landfills through recycling programs, the 2021 Project would reduce the amount of GHG emissions generated from the landfills as well as provide usable materials to be repurposed through the recycling programs.</p>

**Table IV.H-4
Consistency with Applicable CAP Measures**

Actions and Strategies	Consistency Analysis
<p>Measure UG: A2—Increase Rooftop Gardens</p> <p>Supporting the community in creating rooftop gardens will reduce the underlying building’s temperature by shading and evapotranspiration, resulting in a decrease of energy used for cooling the building and reduction of GHG emissions. The gardens can also sequester CO₂ emissions from the atmosphere, reduce storm water runoff, and improve air quality by reducing temperatures and capturing air pollutants.</p> <p>Measure UG: A3—Support Local Farms: Local farmers’ markets reduce GHG emissions by providing the community with a more local source of food, potentially resulting in a reduction in the number of trips and vehicle miles traveled by both the food delivery service and the consumers traveling to grocery stores. If the food sold at the local farmers’ market is produced organically, it can also contribute to GHG reductions by displacing carbon-intensive food production practices.</p>	<p>Consistent. As stated above, the 2021 Project includes a dedicated park and open space areas, called the Carson Country Mart, in PA3(b) as well as landscaping throughout the Project Site. Landscaping of the Project Site, including the Carson Country Mart, would include various types of trees, shrubs, and plants to not only beautify the Project Site but to also reduce CO₂ emissions and energy use on site. The types of vegetation used for the different areas of the Project Site would be directed by the 2021 Specific Plan Amendment and approval by the City. In addition, since the Project Site is currently vacant with no substantial vegetation, landscaping the Project Site under the 2021 Project would increase the amount of vegetation on site as well as within the surrounding area, which would help to combat heating effects from the urban environment and increase energy efficiency on site.</p> <p>While the 2021 Project does not specifically include rooftop gardens, the same benefits would be provided by the on-site vegetated areas as the mix of trees and plants would provide shade and would help to cool the Project Site. In addition, the vegetated areas, including the retention basins, would also help to reduce and filter stormwater runoff and improve local air quality by sequestering CO₂ and capturing air pollutants. Also, while it is unknown at this time if farmers’ markets would operate at the Project Site, the 2021 Project includes open space areas that would be capable of hosting such uses. In addition, while it is unknown as to what restaurant(s) would occupy the Project Site, it is reasonable to assume that the restaurant uses could utilize locally sourced ingredients, especially at the direction of the City, which would help to reduce VMT and ultimately GHG emissions. Thus, the 2021 Project would not conflict or obstruct with the implementation of this measure.</p>

SOURCE: ESA 2021.

According to the 2017 Scoping Plan Update, reductions needed to achieve the 2030 goal is expected to be achieved by targeting specific emission sectors, including those sectors that are not directly controlled or influenced by the 2021 Project, but nonetheless contribute to project-related GHG emissions. **Table IV.H-5, 2021 Project Consistency with Applicable Greenhouse Gas Reduction Strategies**, contains a list of statewide GHG emission reduction strategies and describes the 2021 Project’s consistency. **Table IV.H-6, 2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**, contains a list of GHG emission reduction actions and strategies from the 2017 Scoping Plan and describes the 2021 Project’s consistency.

**Table IV.H-5
2021 Project Consistency with Applicable Greenhouse Gas Reduction Strategies**

Source	Category/Description	Consistency Analysis
AB 1493 (Pavley Regulations)	Reduces greenhouse gas emissions in new passenger vehicles from model year 2012–2016 (Phase I) and model year 2017–2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	Consistent. The 2021 Project would be consistent with this regulation and would not conflict with implementation of the vehicle emissions standards.
SB 1368	Establishes an emissions performance standard for power plants within the state of California.	Consistent. The 2021 Project would be consistent with this regulation and would not conflict with implementation of the emissions standards for power plants.
Low Carbon Fuel Standard	Establishes protocols for measuring life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	Consistent. The 2021 Project would be consistent with this regulation and would not conflict with implementation of the transportation fuel standards.
California Green Building Standards Code Requirements	All bathroom exhaust fans shall be ENERGY STAR compliant.	Consistent. The 2021 Project would meet or exceed the energy standards in the Title 24 Building Energy Efficiency Standards (2021 SEIR PDF-O4).
	HVAC Systems will be designed to meet ASHRAE standards.	Consistent. The 2021 Project would utilize energy efficient equipment and would meet or exceed the energy standards in ASHRAE 90.1-2013, Appendix G and the Title 24 Building Energy Efficiency Standards (2021 SEIR PDF-O4).
	Energy commissioning shall be performed for buildings larger than 10,000 square feet.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code.
	Refrigerants used in newly installed HVAC systems shall not contain any CFCs.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code.
	Parking spaces shall be designed for carpool or alternative fueled vehicles. Up to 8 percent of total parking spaces will be designed for such vehicles.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code. PA2 is required to comply with the 2016 CALGreen Code, which requires only 6 percent of total parking spaces. Additionally the light industrial portion of PA3(a) will provide designated parking for EV charging stations in PA1 and PA3 as well as the incorporation of electrical infrastructure to accommodate the future installation of electric charging stations within truck parking for PA3's industrial use (2021 SEIR PDF-O7).
Long-term and short-term bike parking shall be provided for up to 5 percent of vehicle trips.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code.	

**Table IV.H-5
2021 Project Consistency with Applicable Greenhouse Gas Reduction Strategies**

Source	Category/Description	Consistency Analysis
Executive Order N-79-20	Indoor water usage must be reduced by 20 percent compared to current California Building Code Standards for maximum flow.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code by using low-flow water fixtures.
	All irrigation controllers must be installed with weather sensing or soil moisture sensors.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code and would use water efficient techniques, such as drip irrigation.
	Wastewater generation shall be reduced by 20 percent compared to current California Building Standards.	Consistent. The 2021 Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Requires a minimum of 65 percent recycle or reuse of nonhazardous construction and demolition debris.	Consistent. The 2021 Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Requires documentation of types of waste recycled, diverted or reused.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires use of low VOC coatings consistent with AQMD Rule 1168.	Consistent. The 2021 Project would be consistent with this regulation and would meet or exceed the low-VOC coating requirements.
	100 percent of vegetation, rocks, soils from land clearing shall be reused or recycled.	Consistent. The 2021 Project would meet this requirement as part of its compliance with the CALGreen Code.
	Requires installation of electrical conduit for future uses of electric vehicle charging parking spaces up to 6 percent of total parking spaces.	Consistent. The 2021 Project would meet or exceed this requirement as part of its compliance with the CALGreen Code.
	Establishes a State goal for in-state sales of zero-emissions on-road and off-road vehicles.	Consistent. The 2021 Project would be consistent with this Executive Order, like with the implementation of PDF-O16, and would not conflict with implementation of this goal.
	Establishes a goal to identify actions and investment strategies to improve clean transportation and sustainable freight and transit options.	Consistent. The 2021 Project would be consistent with this Executive Order, like with the implementation of PDF-O16, and would not conflict with implementation of this goal.
Establishes the use of existing authorities for the e State Air Resources Board, the Energy Commission, Public Utilities Commission and other relevant State agencies to accelerate deployment of affordable fueling and charging options for zero-emissions vehicles.	Consistent. The 2021 Project would be consistent with this Executive Order and support the development of charging station infrastructure under PDF-O7.	

SOURCE: ESA 2021.

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
<p>Senate Bill 350 (SB 350): The Clean Energy and Pollution Reduction Act of 2015 requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources be increased to 50 percent by 2030.^a Required measures include:</p> <ul style="list-style-type: none"> ● Increase renewable energy goal to 50 percent of retail sales by 2030. ● Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy-efficiency savings in electricity and natural gas end uses by 2030. ● Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in IRPs to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs. 	<p>CPUC, CEC, CARB</p>	<p>Consistent. The 2021 Project would use electricity provided by SCE, which is required to meet the energy performance standard of 50 percent renewable energy by 2030. The legislation also included interim targets of 40 percent by 2024 and 45 percent by 2027. In 2019, SCE provided 35.1 percent from renewable sources, exceeding the required target 33 percent by 2020 established under previous legislation.^b</p> <p>As required under SB 350, doubling of the energy efficiency savings from final end uses of retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under California Code of Regulations Title 24, Part 6, and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. The 2021 Project would meet or exceed the applicable requirements of Title 24, Part 6, as well as the California Green Building Standards Code in Title 24, Part 11 (2021 SEIR PDF-O4). The 2021 Project would further support this action and strategy by incorporating energy-efficiency measures as outlined in Section IV.G.5.b(2), <i>Project Design Features</i>, of this 2021 SEIR, as well as the inclusion of solar panels on 25 percent of the roof space for the industrial development within PA3(a).</p>
<p>Implement Mobile Source Strategy (Cleaner Technology and Fuels):</p> <ul style="list-style-type: none"> ● At least 1.5 million zero-emissions and plug-in-hybrid light-duty electric vehicles by 2025. ● At least 4.2 million zero-emissions and plug-in-hybrid light-duty electric vehicles by 2030. ● Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Cars regulations. ● Implementation of federal phase 2 standards for medium- and heavy-duty vehicles. ● Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero-emissions buses with the penetration of zero-emissions technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_x standard. 	<p>CARB, CalSTA, SGC, Caltrans, CEC, OPR, Local Agencies</p>	<p>Consistent. CARB approved the Advanced Clean Cars Program, which includes low-emission vehicle regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the zero-emissions vehicle regulation, which requires manufacturers to produce an increasing number of pure zero-emissions vehicles (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles in the 2018 through 2025 model years. While this action does not directly apply to individual land development projects such as the 2021 Project, the standards would apply to all vehicles purchased or used by students, staff, faculty, and visitors to the 2021 Project. Through the implementation of the operational PDFs, the 2021 Project would comply with CALGreen requirements exceeding the number of electric-vehicle-ready and electric-vehicle-capable parking spaces to support zero-emissions vehicles and plug-in hybrid electric vehicles (2021 SEIR PDF-O7). As such, the 2021 Project would support compliance with this regulation.</p>

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
<ul style="list-style-type: none"> ● Last Mile Delivery: New regulations that would result in the use of low NO_x or cleaner engines and the deployment of increasing numbers of zero-emissions trucks primarily for class 3–7 last-mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030. ● Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document “Potential VMT Reduction Strategies for Discussion.” 		<p>The Advanced Clean Truck Regulation has two components, a manufacturer sales requirement and a reporting requirement. The manufacturer component of the regulation requires manufacturers that certify Classes 2b–8 chassis or complete vehicles with combustion engines would be required to sell zero-emissions trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emissions truck/chassis sales would need to be 55 percent of Classes 2b–3 truck sales, 75 percent of Classes 4–8 straight truck sales, and 40 percent of truck tractor sales. The reporting component of the regulation requires large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations.^c Because deliveries to the 2021 Project would be made by trucks subject to this regulation, the 2021 Project would benefit from these measures. In addition, 2021 SEIR PDF-O16 requires the early adoption of zero-emissions and near-zero-emissions trucks throughout PA3(a). This would further the implementation of the 2017 Scoping Plan.</p> <p>CARB is also developing the Innovative Clean Transit measure to encourage purchase of advanced technology buses such as alternative fueled or battery powered buses. This would allow fleets to phase in cleaner technology in the near future. CARB is also in the process of developing proposals for new approaches and strategies to achieve zero-emissions trucks under the Advanced Clean Local Trucks (Last Mile Delivery) Program.^d GHG emissions generated by transit trips by Project users, including visitors and employees, would be reduced under this regulation.</p> <p>GHG emissions generated by project-related passenger, truck, and bus vehicular travel would benefit from the above regulations and programs, and mobile source emissions generated by the 2021 Project would be reduced with implementation of standards under the Advanced Clean Cars Program, Advanced Clean Truck Regulation, and Innovative Clean Transit measure consistent with reduction of GHG emissions under SB 32.</p> <p>SB 375 requires SCAG to direct the development of the RTP/SCS for the region. The 2021 Project would</p>

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
<p>Increase Stringency of SB 375 Sustainable Communities Strategy (2035 Targets).</p>	<p>CARB</p>	<p>not conflict with the RTP/SCS goal to adapt to a changing climate and to support an integrated regional development pattern. The 2021 Project would support this action/strategy by creating a mixed-use infill development comprising complementary uses that offer employment and other community-serving opportunities. The 2021 Project supports the development of complete communities by co-locating complementary commercial/restaurant and residential land uses in close proximity to existing off-site residential uses. The increases in land use diversity and mix of uses on the Project Site would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related emissions (2021 SEIR PDF-05). Therefore, the 2021 Project would be consistent with the 2020–2045 RTP/SCS goal of reducing daily VMT per capita. As such, the 2021 Project would not conflict with the VMT reduction standards of the 2020–2045 RTP/SCS. Thus, the 2021 Project would be compliant with, and would not conflict with, applicable 2020–2045 RTP/SCS actions and strategies to reduce GHG emissions.</p> <p>Consistent. Under SB 375, CARB sets regional targets for GHG emission reductions from passenger vehicle use. In 2010, the CARB established targets for 2020 and 2035 for each region. As required under SB 375, the CARB is required to update regional GHG emissions targets every 8 years, which have been updated in 2018. As part of the 2018 updates, the CARB adopted a passenger-vehicle-related GHG reduction of 19 percent per capita for 2035 for the SCAG region. The 2021 Project would be consistent with SB 375 as it would promote walking and bicycling paths within its boundaries (2021 SEIR PDF-05). It would also connect to the surrounding commercial and recreational areas. The 2021 Project would locate industrial (employment), retail, residential, and restaurant uses within an area that has public transit, and employment opportunities, restaurants and entertainment all within walking distance. As such, the 2021 Project would not conflict with the 2020–2045 RTP/SCS goal of reducing daily VMT per capita and providing local community serving uses in infill locations.</p>

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
<p>By 2019, adjust performance measures used to select and design transportation facilities.</p> <ul style="list-style-type: none"> Harmonize project performance with emissions reductions, and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.). 	<p>CalSTA and SGC, OPR, CARB, GoBiz, IBank, DOF, CTC, Caltrans</p>	<p>Consistent. The 2021 Project will implement the following trip demand measures to increase ride-sharing and carpooling opportunities (2021 SEIR PDF-05):</p> <ul style="list-style-type: none"> Industrial tenants shall provide preferential parking for employees using clean air vehicles. Percentage of parking to be allotted by facility shall be governed by City or CALGreen standards. (Applicable to PA3) Each industrial tenant shall be responsible for having a designated coordinator to oversee a carpool match or other ride-share program for the facility. To the extent feasible, the programs for all tenants shall be interlinked to provide expanded resources for ride-share/carpool opportunities. (Applicable to PA3) <p>Further, the 2021 Project would provide bicycle paths and racks located at convenient locations throughout the Project Site. EV charging stations would also be provided for a minimum of 6 percent of parking spaces pursuant to CALGreen Code. As such, the 2021 Project would support compliance with this regulation.</p>
<p>By 2019, develop pricing policies to support low-GHG transportation (e.g., low-emissions-vehicle zones for heavy duty, road user, parking pricing, transit discounts).</p>	<p>CalSTA, Caltrans, CTC, OPR/SGC, CARB</p>	<p>Compliant. The 2021 Project would support this policy through the implementation of operational PDFs, requiring compliance with CALGreen requirements regarding the number of EV Ready and EV Capable parking spaces (2021 SEIR PDF-07). As such, the 2021 Project would support compliance with this regulation.</p>
<p>Implement California Sustainable Freight Action Plan:</p> <ul style="list-style-type: none"> Improve freight system efficiency. Deploy over 100,000 freight vehicles and equipment capable of zero-emissions operation and maximize both zero and near-zero-emissions freight vehicles and equipment powered by renewable energy by 2030. 	<p>CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GoBiz</p>	<p>Consistent. The 2021 Project does not involve the manufacture of vehicles or production of vehicle fuels. However, vehicles that are purchased and used within the Project Site would comply with any vehicle and fuel standards that the CARB adopts or has adopted. In addition, the 2021 Project would comply with SCAQMD Rule 2305 and support the Scoping Plan’s efforts to transition to zero-emissions vehicles by incorporating a phase-in of zero-emissions vehicles by 2040 as detailed in 2021 SEIR PDF-O16. Additionally, the 2021 Project would incorporate infrastructure to support the installation of truck charging stations (2021 SEIR PDF-O7).</p>

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
<p>Adopt a Low Carbon Fuel Standard with a CI reduction of 18 percent.</p>	<p>CARB</p>	<p>Consistent. This regulatory program applies to fuel suppliers, not directly to land use development. GHG emissions related to vehicular travel associated with the 2021 Project would benefit from this regulation because fuel used by project-related vehicles would be required to comply with LCFS.</p> <p>On September 27, 2018, CARB approved an amendment to the LCFS regulation to require a 20 percent reduction in carbon intensity from a 2010 baseline by 2030. Reductions in carbon intensity are phased in starting in 2019 with a reduction of 6.25 percent and increases by 1.25 percent each year. Thus, in 2021, LCFS emissions reductions are 8.75 percent reduced carbon intensity relative to the 2010 baseline. Project-related mobile source GHG emissions would be reduced accordingly, and would increase as LCFS compliance increases to 20 percent reduce carbon intensity by 2030 relative to the 2010 baseline year.</p>
<p>Implement the Short-Lived Climate Pollutant Strategy by 2030:</p> <ul style="list-style-type: none"> ● 40 percent reduction in methane and hydrofluorocarbon emissions below 2013 levels. ● 50 percent reduction in black carbon emissions below 2013 levels. 	<p>CARB, CalRecycle, CDFA, SWRCB, Local air districts</p>	<p>Consistent. Senate Bill 605 (SB 605), adopted in 2014, directs CARB to develop a comprehensive Short-Lived Climate Pollutant (SLCP) strategy. Senate Bill 1383 was later adopted in 2016 to require CARB to set statewide 2030 emission reduction targets of 40 percent for methane and hydrofluorocarbons and 50 percent black carbon emissions below 2013 levels.^e</p> <p>SB 1383 requires various agencies including CARB, California Department of Food and Agriculture (CDFA), the State Water Resources Board (SWRCB) to be responsible for adopting regulations to reduce GHG emissions. These regulations would be applicable to the 2021 Project. Therefore, the 2021 Project would comply with the CARB SLCP Reduction Strategy, which limits the use of hydrofluorocarbons for refrigeration uses.</p>
<p>By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.</p>	<p>CARB, CalRecycle, CDFA, SWRCB, Local air districts</p>	<p>Consistent. Under SB 1383, the California Department of Resources Recycling and Recovery (CalRecycle) is responsible for achieving a 50 percent reduction in the level of statewide disposal of organic waste from the 2014 level by 2020 and 75 percent reduction by 2025. The 2021 Project would be consistent with AB 341, which requires no less than 75 percent of solid waste generated to be source reduced through recycling, composting, or diversion. This reduction in solid waste generated by the 2021 Project would reduce</p>

**Table IV.H-6
2021 Project Compliance with Applicable 2017 Scoping Plan Actions and Strategies**

Actions and Strategies	Responsible Party(ies)	Compliance Analysis
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	<p>overall GHG emissions. Compliance with AB 341 would also help achieve the goals of SB 1383.</p> <p>Consistent. Assembly Bill 398 (AB 398) was enacted in 2017 to extend and clarify the role of the state’s Cap-and-Trade Program from January 1, 2021, through December 31, 2030. As part of AB 398, refinements were made to the Cap-and-Trade program to establish updated protocols and allocation of proceeds to reduce GHG emissions. Under the Cap-and-Trade program, entities such as power generation companies and natural gas processing plants would be required to limit or reduce GHG emissions. While the 2021 Project itself is not a regulated entity under the Cap-and-Trade Program, it would result in a reduction of GHG emissions associated with the 2021 Project’s energy usage, since energy supplied to the 2021 Project would be from a regulated entity. As the 2021 Project would not impede the Program’s progress, the 2021 Project is considered compliant.</p>
Implement Forest Carbon Plan.	CNRA, CAL FIRE, CalEPA and departments within	Not Applicable. This regulatory program applies to state and federal forest land, not directly related to development of the 2021 Project. However, the 2021 Project would not interfere or impede implementation of the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State agencies and local agencies	Not Applicable. Funding and financing mechanisms are the responsibility of the State and local agencies. The 2021 Project would not conflict with funding and financing mechanisms to support GHG reductions.

SOURCE: ESA 2021.

NOTES:

- ^a Senate Bill 350 (2015–2016 Regular Session) Stats. 2015, Ch. 547. Note, while SB 350 requires 50 percent renewable energy by 2030, the Renewable Portfolio Standard requires meeting a 60 percent renewable energy goal by the same date.
- ^b SCE, 2019 Power Content Label, Version October 2020.
- ^c CARB, Advance Clean Cars, 2017 Midterm Review, <https://ww2.arb.ca.gov/resources/documents/2017-midterm-review-report>, accessed June 2021.
- ^d CARB, Advanced Clean Local Trucks, <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks>, accessed June 2021.
- ^e CARB, Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions, <https://www.calrecycle.ca.gov/climate/slcp/>, accessed June 2021.

The 2021 Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the 2021 Project is provided below. As discussed in the thresholds section, significance of the 2021 Project is based on consistency with plans and

policies as discussed under the first significance criteria above. Current CEQA guidelines require the quantification of GHG emissions, therefore GHG emissions are quantified as part of this analysis. However, there is no quantitative CEQA thresholds, as detailed in Section IV.H.4, *Significance Threshold*, so the quantified GHG emissions are used to inform the qualitative significance threshold of Plan Compliance.

SCAQMD's Rule 2305 establishes the WAIRE Program, a menu-based point system that requires warehouse operators to earn points by completing specific actions, that applies to existing and future owners and operators of warehouses (including logistic, ecommerce, fulfillment and distribution facilities) located in the SCAB. While the analysis does not quantify the number of points that the 2021 Project would earn, due to the uncertain nature of the tenants and tenant operations, it is anticipated that with the implementation of the PDFs, the 2021 Project would be consistent with the requirements of Rule 2305. As discussed in Section IV.H.3c(1)(a), *Rule 2305 – Warehouse Indirect Source Rule*, above, Rule 2305 provides several compliance options including, but not limited to, some of the provisions of the PDFs including the incorporation of zero-emissions trucks, incorporation of infrastructure to support zero-emissions trucks, installation of charging stations/electrification of the dock doors to eliminate the use of diesel TRUs, and the conversion of on-site handling equipment to zero-emissions equipment. Through the incorporation of project specific PDFs, additional measures added as part of the 2305 point's earning process with the SCAQMD, or the payment of mitigation fees, the 2021 Project would comply with SCAQMD Rule 2305.

(a) Construction

The emissions of GHGs associated with construction of the 2021 Project were calculated for each construction phase and for each Planning Area using CalEEMod and EMFAC. As discussed previously, remediation-related construction on PA2 began in 2018 and was halted in 2019. Construction is anticipated to begin again in 2022 with completion of all three Planning Areas in 2026. This may not occur since there is no Applicant for PA1 as of yet. However, as discussed under the methodology section, the emissions would be reduced from what was modeled with a later start date due to the increase in use of more efficient construction equipment. Results of the GHG emissions calculations are presented in **Table IV.H-7, Estimated 2021 Project Construction GHG Emissions (all years)**. Detailed assumptions and calculations are included in Appendix D1 of this 2021 SEIR. 2021 SEIR PDF-C1, C2, and C4 through C8 were incorporated into the construction analysis and result in reductions in emissions associated with the unmitigated scenario.

Although GHGs are generated during construction and are accordingly considered one-time emissions, it is important to include them when assessing all of the long-term GHG emissions associated with a project. As recommended by the SCAQMD, construction-related GHG emissions were amortized over a 30-year project lifetime in order to include these emissions as

part of a project's annualized lifetime total emissions. In accordance with this methodology, the estimated 2021 Project's construction GHG emissions have been amortized over a 30-year period and are added to the annualized operational GHG emissions.

**Table IV.H-7
Estimated 2021 Project Construction GHG Emissions (all years)**

Emission Source	MTCO _{2e} (by phase)	MTCO _{2e} (by planning area) ^{a,b}
PA1		
Remedial	814	
Horizontal	2,361	
Vertical	4,408	
	<i>Subtotal</i>	<u>7,583</u>
PA2		
Remedial (2018)	1,749	
Remedial	1,716	
Horizontal	2,800	
Vertical	1,003	
	<i>Subtotal</i>	<u>7,268</u>
PA3		
Remedial	2,086	
Horizontal	1,559	
Vertical	2,825	
	<i>Subtotal</i>	<u>6,470</u>
Ancillary Construction Offices		180
Water Conveyance for Dust Control		31
	2021 Project Total	<u>21,531</u>
	Amortized Over 30 Years	718

SOURCE: ESA 2021.

NOTES:

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix D1 of this 2021 SEIR.

^b CO_{2e} emissions are calculated using the global warming potential values from the IPCC AR4.

(b) Operation

The 2021 Project's annual GHG emissions include emissions from operations and construction calculated by CalEEMod and EMFAC for mobile source emissions. As previously described, construction GHG emissions for the entire construction period are amortized over 30 years in

accordance with SCAQMD Methodology.³⁵⁹ The 2021 Project must comply with the portions of the City's CAP and state's CALGreen Code/California Title 24 Building Energy Efficiency requirements applicable to the 2021 Project, and meeting these requirements are assumed in the quantitative analysis below. The 2021 Project would implement energy-saving measures as listed in PDFs, 2021 SEIR PDF-O2, and PDF-O4 through PDF-O16, which include the mixed-use nature of the site, idling of 5 minutes or less per occurrence and location for truck operations in PA1 and PA2 and idling of 2 minutes or less per occurrence and location for truck operations in PA3, and electric TRU mandate for PA3, as well as the incorporation of a zero-emissions fleet of 100 percent of trucks of model year 2021 by 2040, which have been incorporated into the modeling. Other PDF measures will reduce energy consumption and promote the reduction of GHG emissions; however, these were not quantified due to the unknown extent of application within the 2021 Project. As explained in the methodology section above, the 2021 Project's mobile source emission calculations associated with the 2021 Project are calculated based on the VMT from the TIA or the origin-to-destination trip length for operational haul trucks.

Maximum unmitigated, annual net GHG emissions resulting from on-road mobile sources, area sources (landscape maintenance equipment and natural gas heaters), energy (i.e., electricity, natural gas), water conveyance, wastewater treatment, and solid waste were calculated for the final buildout year expected for the 2021 Project (2026). The 2021 Project's total and net GHG emissions from operation of the uses proposed for the 2021 Project are shown in **Table IV.H-8, Estimated Annual 2021 Project Operational Greenhouse Gas Emissions**.

As discussed above, GHG emissions were not specifically quantified in the 2018 SEIR; however, the emissions associated with the 2018 Project have been quantified as part of this 2021 SEIR analysis for comparison purposes and to determine if there is an increase in impact severity. 2018 Project emissions for the whole Project Site (based on the 2018 District at South Bay Specific Plan proposes uses) would equal 69,444 MT CO₂e annually in 2026. As shown in Table IV.H-8, the buildout of the entire Project Site would occur in 2026, and GHG emissions from the 2021 Project would exceed those estimated for the 2018 Project by 32,667 MTCO₂e annually.

As discussed above, the 2021 Project would be consistent with emissions reduction strategies and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions. The incorporation of the 2021 Project's PDFs, specifically with respect to the introduction of the zero-emissions truck fleets and incorporation of EV charging stations and infrastructure substantially in excess of regulatory obligations, and increases in regulatory efficiency/reduction requirements, would reduce the 2021 Project GHG emissions below 2018 Project levels by 2040, further supporting the 2021 Project's compliance with applicable

³⁵⁹ SCAQMD, *Greenhouse Gases, CEQA Significance Thresholds, Board Letter – Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 5, 2008*.

reduction plans. Therefore, consistent with the 2018 SEIR, the 2021 Project would result in **less-than-significant** impacts without the implementation of mitigation.

**Table IV.H-8
Estimated Annual 2021 Project Operational Greenhouse Gas Emissions**

Emissions Sources	MT CO ₂ e per year			
	2026	2035	2040	2045
PA1				
Area	292	292	292	292
Energy	3,023	2,063	1,583	1,103
Mobile	11,019	9,599	9,368	9,291
EV Charging (Cars) (2021 SEIR PDF-07a)	47	47	47	47
Waste	251	251	521	251
Water	255	151	99	48
<i>PA1 Subtotal</i>	<i>14,887</i>	<i>12,403</i>	<i>11,910</i>	<i>11,032</i>
PA2				
Area	<1	<1	<1	<1
Energy	1,886	1,099	661	224
Mobile	21,603	19,204	18,740	18,586
Waste	635	635	635	635
Water	92	58	38	19
<i>PA2 Subtotal</i>	<i>24,216</i>	<i>20,995</i>	<i>20,074</i>	<i>19,464</i>
PA3				
Area	<1	<1	<1	<1
Energy	1,849	1,083	657	232
Mobile:				
Cars	22,897	20,204	19,667	19,450
EV Charging (Cars) (2021 SEIR PDF-07b)	23	23	23	23
Trucks (industrial)	35,074	15,650	5,007	2,090
Tucks (Carson Country Mart)	162	136	129	126
From Zero-Emissions Fleet	155	3,536	2,852	0
eTRUs	100	52	26	0
Stationary Source	307	307	307	307
Waste	1,628	1,628	1,628	1,628
Water	95	60	40	20
<i>PA3 Subtotal</i>	<i>62,290</i>	<i>42,680</i>	<i>30,338</i>	<i>23,877</i>

**Table IV.H-8
Estimated Annual 2021 Project Operational Greenhouse Gas Emissions**

Emissions Sources	MT CO ₂ e per year			
	2026	2035	2040	2045
Landfill Gas Flares	1	1	1	1
Amortized Construction	718	718	718	718
2021 SEIR PDF-O7d	0	0	(5,793)	(6,054)
Total 2021 Project	102,111	76,796	57,248	49,038
SPA Totals for 2018 Project	69,444	60,270	57,340	55,184
Difference	32,667	16,522	(92)	(6,146)

SOURCE: ESA 2021.

NOTES:

Totals may not add up exactly due to rounding in the modeling calculations.

Parenthesis represent a negative value.

IV.H.6 Mitigation Measures

Mitigation is not required for the 2021 Project as it would not conflict with applicable GHG reduction plans, policies, and regulations, as analyzed above. Nonetheless, several of the mitigation measures that were adopted for the 2018 Project have been incorporated as part of the 2021 Project's mitigation measures within in Section IV.D, *Air Quality*, of this 2021 SEIR and would further reduce GHG emissions. The following mitigation measures were either included in the 2018 SEIR and its associated 2018 Mitigation Monitoring and Reporting Program (MMRP) and/or modified as indicated below to clarify how the measures in the 2018 SEIR would apply to the 2021 Project based on current regulatory standards. In addition, a mitigation measure requiring implementation of a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation was included in Section IV.C, *Transportation*, of this 2021 SEIR, and has been incorporated into the mitigation discussion since it would also aid in the reduction of GHG emissions. All of the mitigation measures described below will be included in the MMRP for this 2021 SEIR. The number system reflects the mitigation measures as identified in the 2018 SEIR for ease of comparison.

(1) Construction

Mitigation Measure G-3: Construction contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues would turn their engines off, when not in use, to reduce vehicle emissions. Construction emissions should be

phased and scheduled to avoid emissions peaks and discontinued during second-stage smog alerts. (Applicable to PA1, PA2, and PA3.)

(2) Operations

Mitigation Measure G-16: All fixtures used for lighting of exterior common areas shall be regulated by automatic devices to turn off lights when they are not needed, but a minimum level of lighting should be provided for safety. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-18: ~~The Each~~ Applicant shall, to the extent feasible, schedule deliveries during off-peak traffic periods to encourage the reduction of trips during the most congested periods. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-19: ~~The Each~~ Applicant shall coordinate with the MTA and the City of Carson and Los Angeles Department of Transportation to provide information with regard to local bus and rail services. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-20: During site plan review, consideration shall be given regarding the provision of safe and convenient access to bus stops and public transportation facilities. (Applicable to PA1, PA2, and PA3.)

Mitigation Measure G-21: ~~The Each~~ Applicant shall pay a fair-share contribution for a low-emissions shuttle service between the ~~Property Project Site~~ and other major activity centers within the 2021 Project vicinity (i.e., the Metro Rail Blue Line station at Del Amo Boulevard and Santa Fe Avenue and the Carson Transfer Station at the South-Bay Pavilion. (Applicable to PA1 and PA2. Not Applicable to PA3 as it is an industrial land use.)

Mitigation Measure G-27: The on-~~Property~~site residential units shall not contain any hearths, either wood burning, natural gas, or propane. (Applicable to PA1.)

Mitigation Measure G-29: The 2021 Project shall designate at least 8 percent of all commercial parking spaces for priority parking for carpool/vanpool and/or clean air vehicles and comply with California Green Building Standards Code (CALGreen). (Applicable to PA2.)³⁶⁰

Mitigation Measure C-18: The PA1 and PA3 Applicant(s) shall implement a Transportation Demand Management (TDM) Program aimed at discouraging single-occupancy vehicle trips and encouraging alternative modes of transportation, such as carpooling, taking transit, walking, and biking. The TDM Program shall be subject to review and approval prior to issuance of certificate of occupancies by the City of Carson Department of Public Works subject to the requirements

³⁶⁰ This mitigation is limited only to PA2 as new PDFs replace this mitigation measure for PA1 and PA3.

specified below. Mandatory strategies in the TDM Program shall include the TDM strategies summarized below. This TDM program is estimated to reduce total VMT per service population by about 2 percent based on the trip reduction methodology described in the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* report.

- *Unbundled Parking*—Unbundling parking typically separates the cost of purchasing or renting parking spaces from the cost of the purchasing or renting a dwelling unit. Saving money on a dwelling unit by forgoing a parking space acts as an incentive that minimizes auto ownership. Similarly, paying for parking (by purchasing or leasing a space) acts as a disincentive that discourages auto ownership and trip-making. (Applicable to PA1.)
- *Rideshare Programs*—Rideshare programs typically include the provision of an on-site transit and rideshare information center that provides assistance to help people form carpools or access transit alternatives. Rideshare programs often also include priority parking for carpools. Rideshare programs are more commonly provided for Project Site employees but residents could also benefit from a similar program. (Applicable to PA1 and PA3.)
- *Transit Pass Discount Program*—Transit pass discount programs are typically negotiated with transit service providers to purchase transit passes in bulk and, therefore, at a discounted rate. Discounted passes are then sold to interested residents or employees, helping them to obtain price discounts through the economies of scale of bulk purchasing. Transit pass discount programs are generally provided to Project Site employees but could also be sold to residents. (Applicable to PA1 and PA3.)
- *Bicycle Parking and Bike Share Program*—The 2021 Project shall include bicycle facilities within the Project Site as well as short-term bicycle parking. The 2021 Project could provide additional complementary amenities such as long-term bicycle parking, self-service bike repair area, and potentially a bike share service among residents, employees and visitors of the Project Site. (Applicable to PA1 and PA3.)
- *Car Share Program*—A car share program is a model of car rental where people rent cars for short periods of time, often by the hour. The programs are attractive to customers who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day. (Applicable to PA1 and PA3.)

IV.H.7 Cumulative Project Impacts

Analysis of GHG emissions is cumulative in nature because impacts are caused by cumulative global emissions and additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as a project is located. Although the 2021 Project is expected to emit GHGs, the emission of GHGs by a single project into the atmosphere is not itself necessarily an adverse environmental effect. Rather, it is the increased accumulation of GHGs

from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change. Given that the 2021 Project would generate GHG emissions that would not conflict with applicable reduction plans and policies, and given that GHG emission impacts are cumulative in nature, the 2021 Project's contribution to cumulatively significant GHG emissions would be less than significant. This is discussed further below.

The State has mandated a GHG emissions target of reducing statewide emissions to 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050 even while statewide population and commerce are predicted to continue to expand. In order to achieve this goal, CARB has established and is implementing regulations to reduce statewide GHG emissions. Currently, there are no adopted CARB, SCAQMD, or City significance thresholds or specific numeric reduction targets applicable to the 2021 Project, and no approved policy or guidance to assist in determining significance at the cumulative level. Additionally, there is currently no generally accepted methodology to determine whether GHG emissions associated with a specific project represent new emissions or existing, displaced emissions. Therefore, consistent with CEQA Guidelines Section 15064h(3),³⁶¹ the City, as lead agency, has determined that the 2021 Project's contribution to cumulative GHG emissions and global climate change would be less than significant if the 2021 Project is consistent with the applicable regulatory plans and policies to reduce GHG emissions: Climate Change Scoping Plan, SCAG's 2020–2045 RTP/SCS, and CAP.

Section IV.G.3.d(1)(a)(i), *CARB's Climate Change Scoping Plan*, illustrates that implementation of the 2021 Project's regulatory requirements, PDFs (including State mandates), and implemented mitigation measures, would contribute to GHG reductions. The methods used to establish this relative reduction are consistent with the approach used in CARB's Climate Change Scoping Plan for the implementation of AB 32.

³⁶¹ *As indicated above, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction program renders a cumulative impact insignificant. Per CEQA Guidelines Section 15064(h)(3), a proposed project's incremental contribution to a cumulative impact can be found not cumulatively considerable if a proposed project will comply with an approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area of a project. To qualify, such a plan or program must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plan, [and] plans or regulations for the reduction of greenhouse gas emissions."*

The 2021 Project is consistent with the approach outlined in CARB’s Climate Change Scoping Plan, particularly its emphasis on the identification of emission reduction opportunities that promote economic growth while achieving greater energy efficiency and accelerating the transition to a low-carbon economy. In addition, as recommended by CARB’s Climate Change Scoping Plan, the 2021 Project would use “green building” features and clean technology strategies (such as implementation of electric construction equipment, and electrification of the industrial trucking fleet) as a framework for achieving GHG emissions reductions. New buildings within the Project Site would be designed to comply with the City’s requirements and the CALGreen Code.

As part of SCAG’s 2020–2045 RTP/SCS, a reduction in VMT within the region is a key component to achieving the 2035 GHG emission reduction targets established by CARB. As discussed previously, the Project Site’s land use characteristics demonstrate that the 2021 Project’s VMT would be reduced compared to a standard non-infill project and based on its location efficiency.

Through the City’s CAP, the City of Carson has established goals and strategies that would reduce GHG emissions. The 2021 Project would be consistent with the City’s CAP through consistency with or exceedance of CALGreen requirements, implementation of electric truck phase in for the industrial land uses, extensive EV charging stations commitment, added electrical infrastructure for future EV charging stations, and through the design, diversity and location of the Project Site itself.

The 2017 Scoping Plan demonstrates that the state’s existing and proposed regulatory framework will allow the state to reduce its GHG emissions level to 40 percent below 1990 levels by 2030. Executive Orders B-30-15 and S-3-05 identify additional reduction goals including a 2050 goal of 80 percent below 1990 levels. Even though the 2017 Scoping Plan and supporting documentation do not provide an exact regulatory and technological roadmap to achieve the 2050 goal, they demonstrated that various combinations of policies could allow the statewide emissions level to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the studies could allow the state to meet the 2050 target.

SB 32 was passed on September 8, 2016, which would require CARB to ensure that statewide GHG are reduced to 40 percent below the 1990 emissions level by 2030. As discussed above, the new plan, outlined in SB 32, involves increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Thus, based on the above, the 2021 Project would not conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Consistent with the significance threshold for the 2021 Project analysis as provided for under CEQA

Guidelines section 15064.4, the 2021 Project would, as demonstrated, not conflict with the applicable plans and policies to reduce GHG emissions. Therefore, the 2021 Project's impacts would not be cumulatively considerable, and the 2021 Project's cumulative impacts to GHG emissions would be less than significant.

The quantification of cumulative GHG emissions for the 2021 Project and the cumulative projects within the study area is provided for disclosure and informational purposes and to determine if there is an increase in impact severity only. There are 44 cumulative projects within the study area, as described in Section III.D, *Cumulative Analysis*. A number of these projects have not yet been built or are currently under construction (see Section III.E, *Cumulative Projects*, of this 2021 SEIR for further discussion on the cumulative projects). As discussed in the Significance Thresholds section (Section IV.H.4), significance of the 2021 Project is based on whether it would conflict with applicable GHG reduction plans, policies, and regulations. There are no adopted numeric significance thresholds for evaluating cumulative GHG emissions from the 2021 Project and the CPs within the study area.

Table IV.H-9, Estimated Cumulative Greenhouse Gas Emissions, identifies the estimated annual GHG emissions associated with the 44 cumulative projects identified in conjunction with the 2021 Project that would result in cumulative GHG emissions. As shown, annual cumulative GHG emissions, without the 2021 Project, results approximately 189,511 MTCO_{2e} annually. Adding the 2021 Project emissions from 2026 results in total cumulative emissions of 291,621 MTCO_{2e} annually. Cumulative emissions calculations are included in Appendix D1 of this 2021 SEIR. There is currently no established or adopted significance threshold to assess if the cumulative projects are considerable. Although it is reasonably foreseeable that the CPs are likely to be substantively consistent with applicable plans, policies and regulations for GHG, there is not enough information to reasonably assess this for all CPs.

Table IV.H-9
Estimated Cumulative Greenhouse Gas Emissions

Emissions Sources		MT CO _{2e} per year		
No.	Location	Amortized Construction	Operational Emissions	Total Estimated Emissions
1	19200 South Main Street	5	0	5
2	225 West Torrance Boulevard	64	7,534	7,598
3	21521 South Avalon Boulevard	64	7,534	7,598
4	2112 East 223rd Street	27	1,895	1,922
5	21207 Avalon Boulevard	108	12,514	12,622
6	888 East Dominguez Street	16	1,206	1,223
7	2254 East 223rd Street	17	1,072	1,089
8	333 West Gardena Boulevard	13	1,830	1,843

**Table IV.H-9
Estimated Cumulative Greenhouse Gas Emissions**

Emissions Sources		MT CO ₂ e per year		
No.	Location	Amortized Construction	Operational Emissions	Total Estimated Emissions
9	345 & 349 East 220th Street	20	571	591
10	20707 Avalon Boulevard	2	652	654
11	21915 South Dolores Street	2	53	55
12	17706 South Main Street	15	958	973
13	1007 East Victoria Street	25	609	635
14	Northeast Corner of Central Avenue and Victoria Street	33	2,367	2,400
15	123 West 223rd Street	2	95	98
16	21000 South Normandie Avenue	18	1,187	1,205
17	19210 South Vermont Avenue	9	720	729
18	2315 East Dominguez Street	2	390	392
19	20501 Avalon Boulevard	2	967	969
20	1054 West 204th Street	33	106	139
21	22410 South Vermont Avenue	9	315	324
22	20416 Kenwood Avenue	2	28	30
23	20814 Normandie Avenue	26	892	918
24	19606 Normandie Avenue	3	75	77
25	22003 Meyler Street	2	14	16
26	939 West 223rd Street	3	33	35
27	Carson Marketplace Apartments	25	2,305	2,330
28	439 West Gardena Boulevard	2	7	8
29	1055 Sandhill Avenue	17	2,223	2,240
30	2277 East 220th Street	12	659	671
31	21240 -50 Main Street	3	146	149
32	16627 South Avalon Boulevard	17	1,031	1,048
33	18501 South Figueroa Street	9	326	335
34	20700 Avalon Boulevard	10	1,401	1,412
35	20601 South Main Street	36	2,489	2,525
36	21212 Avalon Boulevard	124	7,446	7,570
37	CSUDH-Campus Master Plan	639	53,813	54,452
38	20700 Belshaw Avenue	3	28	30
39	20950 Brant Avenue	3	110	112
40	17706 South Main Street	0	0	0
41	20850 Normandie Avenue	13	2,237	2,249

**Table IV.H-9
Estimated Cumulative Greenhouse Gas Emissions**

Emissions Sources		MT CO ₂ e per year		
No.	Location	Amortized Construction	Operational Emissions	Total Estimated Emissions
42	Carol Kimmelman Campus ^a	55	7,173	7,227
43	Creek Dominguez Hills 340 Martin Luther King Jr. Street	678	19,122	19,800
44	Harbor - UCLA Medical Center	1,481	41,730	43,211
	Cumulative Project Total:^b	3,650	185,861	189,511
	2021 Project	718	101,393	102,111
	Total Cumulative Emissions:^b			291,621

SOURCE: ESA 2021.

NOTES:

^a Related Project No. 42 is withdrawn; therefore, inclusion of the GHG emissions for this related project contributes to an overestimation of the cumulative GHG emissions.

^b Totals may not add up exactly due to rounding in the modeling calculations.

IV.H.8 Level of Significance after Mitigation

As discussed previously, mitigation is not necessary for the reduction of GHG emissions as the proposed 2021 Project with implementation of the PDFs (which reduce emissions to below the 2018 SEIR GHG levels by 2040) demonstrate the 2021 Project’s consistency with reduction plans and policies, including those of the RTP/SCS to reduce VMT emissions. Implementation of the above listed mitigation measures that were included as part of the previous 2018 Project or included as part of the 2021 Project analysis, would further reduce GHG emissions. Mitigation Measure G-27 would reduce emissions by 270 MTCO₂e annually. Mitigation Measure C-18 would reduce emissions by 2 MTCO₂e annually. The exact amount of reduction for mitigation measures G-3, G-16, G-18 through G-21, and G-29 cannot be quantified due to the nature of the mitigation measures and the currently unknown level of implementation by the 2021 Project. Therefore, with implementation of mitigation measures, the 2021 Project would further reduce GHG emissions thereby furthering the 2021 Project’s consistency with applicable GHG reduction plans and policies.

Table IV.H-10, Estimated Mitigated Annual 2021 Project Operational Greenhouse Gas Emissions, shows the 2021 Project emissions with the implementation of all quantifiable mitigation measures. As shown, 2021 Project emissions are reduced by 270 MTCO₂e annually. Therefore, as with the 2018 Project, the 2021 Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts would remain **less than significant**.

**Table IV.H-10
Estimated Mitigated Annual 2021 Project Operational Greenhouse Gas Emissions**

Emissions Sources	MT CO ₂ e per year			
	2026	2035	2040	2045
PA1				
Area	292	292	292	292
Energy	3,023	2,063	1,583	1,103
Mobile	11,019	9,599	9,368	9,291
EV Charging (Cars) (2021 SEIR PDF-07a)	47	47	47	47
Waste	251	251	521	251
Water	255	151	99	48
<i>PA1 Subtotal</i>	<u>14,887</u>	<u>12,403</u>	<u>11,910</u>	<u>11,032</u>
PA2				
Area	<1	<1	<1	<1
Energy	1,886	1,099	661	224
Mobile	21,603	19,204	18,740	18,586
Waste	635	635	635	635
Water	92	58	38	19
<i>PA2 Subtotal</i>	<u>24,216</u>	<u>20,995</u>	<u>20,074</u>	<u>19,464</u>
PA3				
Area	<1	<1	<1	<1
Energy	1,849	1,083	657	232
Mobile:				
Cars	22,897	20,204	19,667	19,450
EV Charging (Cars) (2021 SEIR PDF-07b)	23	23	23	23
Trucks (industrial)	35,074	15,650	5,007	2,090
Tucks (Carson Country Mart)	162	136	129	126
From Zero-Emissions Fleet	155	3,536	2,852	0
eTRUs	100	52	26	0
Stationary Source	307	307	307	307
Waste	1,628	1,628	1,628	1,628
Water	95	60	40	20
<i>PA3 Subtotal</i>	<u>62,290</u>	<u>42,680</u>	<u>30,338</u>	<u>23,877</u>

**Table IV.H-10
Estimated Mitigated Annual 2021 Project Operational Greenhouse Gas Emissions**

Emissions Sources	MT CO ₂ e per year			
	2026	2035	2040	2045
Landfill Gas Flares	1	1	1	1
Amortized Construction	718	718	718	718
Additional EV Charging Stations (2021 SEIR PDF-07d)	0	0	(5,793)	(6,054)
Total 2021 Project	102,111	76,796	57,248	49,038
Mitigation				
MM G-27	(270)	(270)	(270)	(270)
MM C-18	(2)	(2)	(2)	(2)
Total Mitigated 2021 Project	101,839	75,524	56,976	48,766
SPA Totals for 2018 Project	69,444	60,270	57,340	55,184
Difference	32,394	16,255	(364)	(6,418)

SOURCE: ESA 2021.

NOTES:

Totals may not add up exactly due to rounding in the modeling calculations.

Parenthesis represent a negative value.

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V. ALTERNATIVES

V.A INTRODUCTION

This alternatives chapter provides (1) compliance with the CEQA Guidelines governing alternatives analyses, as described in Sections V.A.1 through V.A.4; (2) a summary of the 2021 Project's basic objectives as provided in Section V.B; (3) a summary of the proposed 2021 Project Alternatives, which proposes five alternatives, including Alternatives 1A, 1B, 2, 3, and 4, as further described below under Section V.C; (4) a summary and analysis of the alternatives considered but rejected, including an alternative off-site location and reduced vehicular trips alternative as provided below under Section V.D; (5) a description of the analysis methodology as provided in Section V.E, (6) an evaluation of the 2021 Project's five alternatives as provided in Section V.F; and (7) an analysis of the environmentally superior alternative as provided in Section V.G.

V.A.1 Project Alternatives

In accordance with CEQA Guidelines Section 15126.6(a), an EIR must describe and compare a range of reasonable alternatives to a project, or alternative locations for a project, that could feasibly attain most of the basic project objectives, but avoid or substantially lessen any significant environmental impacts associated with a project and evaluate the comparative merits of such alternatives. An EIR must consider a reasonable range of feasible alternatives to facilitate informed decision making and public participation. An EIR need not consider every conceivable alternative to a project and is not required to consider alternatives that are infeasible. The lead agency shall select a range of project alternatives and disclose its reasoning for selecting those alternatives. The selection of such alternatives is governed by the rule of reason, which requires that an EIR set forth only those alternatives necessary to permit a reasoned choice.

V.A.2 No Project Alternatives

CEQA Guidelines Section 15126.6(e)(1) requires an analysis of the No Project Alternative, which can either be the continuation of an existing land use or regulatory plan or the circumstance under which a project does not proceed. The purpose of describing and analyzing the No Project Alternative is to allow decision-makers to compare the impacts of approving a proposed project with the impacts of not approving a proposed project.

Where a proposed project is the revision of an existing land use or regulatory plan, policy or ongoing operation, the No Project Alternative will be the continuation of the existing plan, policy or operation into the future (CEQA Guidelines Section 15126.6(e)(3)(A)). Where the No Project Alternative evaluates the circumstance under which a proposed project does not proceed, CEQA

Guidelines Section 15126.6(e)(3)(b) requires the evaluation of the environmental effects of the property remaining in its existing state against environmental effects which would occur if a proposed project is approved, as described in CEQA Guidelines Section 15126.6(e)(3)(B). However, if disapproval of a proposed project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed.

The No Project Alternatives in this chapter include both no project options: (1) future conditions on the Project Site if current planning controls continued in the future, as allowed by the 2018 Specific Plan, and (2) the circumstance under which no development proceeds within the Project Site. Sections V.F.1 and V.F.2 of this alternatives analysis describe the No Project Alternatives and compare their impacts to the 2021 Project.

V.A.3 Alternatives Considered but Rejected as Infeasible

CEQA Guidelines Section 15126.6(c) requires that an EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination. CEQA Guidelines Section 15126.6(f)(2) also requires the evaluation of an alternative location if it would avoid or substantially lessen any of the significant effects of a proposed project. If the lead agency concludes that no feasible alternative locations exist, it must disclose the reasons for this conclusion, and should include the reasons in the EIR.

Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to offer substantial environmental advantages over a project proposal (CEQA Guidelines Section 15126.6(c)). CEQA Guidelines Section 15126.6(f)(1) states that the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). Section V.D of this alternatives analysis evaluates several alternatives considered, but rejected as infeasible, including an alternative location.

V.A.4 2018 Project Alternatives

This 2021 SEIR is a supplemental EIR to the certified 2018 SEIR. As allowed by CEQA Guidelines Section 15126.6(f)(2)(C), where a previous document has sufficiently analyzed a range of reasonable alternative locations and environmental impacts for projects with the same basic purpose, the lead agency should review the previous document. The EIR may rely on the previous document to help it assess the feasibility of potential project alternatives to the extent

the circumstances remain substantially the same as they relate to the alternative. Section V.C of this alternatives analysis describes the applicability and/or relevance of the 2018 Project alternatives to the 2021 Project alternatives.

The 2018 SEIR described a reasonable range of alternatives to the 2018 Project and evaluated the environmental impacts associated with each alternative (see 2018 SEIR [Draft SEIR pp. V-3 to V-5]). The 2018 SEIR evaluated three alternatives, including the No Project – No Development Alternative (Alternative 1A), No Project – Development under Approved Project Alternative (Alternative 1B), and Reduced Modified Project (25 Percent Reduction) Alternative (Alternative 2).

This 2021 SEIR modifies the alternatives considered under the 2018 SEIR (i.e., Alternatives 1A, 1B, and 2) to be applicable to the 2021 Project to determine what, if any, significant unavoidable impacts posed by the 2021 Project (i.e., with respect to aesthetics, transportation, air quality, and noise impacts) would be reduced with implementation of the alternatives. The 2018 SEIR Alternative 1A is covered by Alternative 1A of this chapter; the 2018 SEIR Alternative 1B is covered by Alternative 1B of this chapter, but modified to compare the 2021 Project to the 2018 Specific Plan; and 2018 SEIR Alternative 2 is covered by Alternative 2 of this chapter, but considers the 2021 Project reduced by 25 percent within PA3 only.

V.B BASIC OBJECTIVES OF THE 2021 PROJECT

Table V-1, 2021 Project Objectives (reproduced from Table II-11, 2021 Project Objectives), provides the 2021 Project’s objectives in compliance with CEQA Guidelines Section 15124(b). The basic and fundamental 2021 Project Objectives are restated below for reference:

**Table V-1
2021 Project Objectives**

1. Provide a diversity of both short-term and long-term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term light industrial and commercial jobs.
2. Improve the housing stock by approving a project that includes a substantial residential component.
3. Provide a project that contributes to the creation of a vibrant urban core for the City and takes advantage of the Project Site’s proximity to the San Diego Freeway.
4. Develop the Project Site in a manner that enhances the attractiveness of the City’s freeway corridor and the major arterials that adjoin the Project Site.
5. Provide a project that includes a variety of residential, commercial, and retail uses with the potential to generate increased sales and property tax revenue.
6. Develop a project with a balanced mix of land uses that stimulate economic activity, commerce, and new development opportunities in and around the Project Site.
7. Promote an economically viable development at the Project Site that will enable the Developer/Applicant(s) to pay for the substantial costs associated with environmental remediation, and development of a former landfill as well as construction and maintenance of required infrastructure improvements.
8. Provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site.
9. Develop a project that is consistent with a live, work, and play environment through uses that provide for residential occupancy, substantial job opportunities, and attractive recreational/retail amenities.

V.C SUMMARY OF PROJECT ALTERNATIVES

This chapter provides a summary and analysis of the No Project Alternatives and three other alternatives that the City has identified that could feasibly attain most of the basic 2021 Project Objectives but would avoid or substantially lessen the significant environmental impacts associated with the 2021 Project. In addition, this alternatives analysis evaluates the environmental impacts associated with each alternative and compares the relative impacts of these alternatives to the impacts of the 2021 Project. Sections V.F.3, V.F.4, and V.F.5 of this alternatives analysis compares the impacts of the alternatives to the 2021 Project. The analysis of alternatives evaluated in detail in this chapter include the two No Project Alternatives (Alternative 1A, *No Project – No Development*, and Alternative 1B, *No Project – Development under 2018 Project/ Existing 2018 Specific Plan and Zoning*) and the three project alternatives [Alternative 2, *Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)*; Alternative 3, *Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/ Fulfillment Only) Uses in PA3*; and Alternative 4, *Commercial/Industrial PA3 Hybrid*].

As with the 2021 Project, Alternatives 2, 3, and 4 would require a specific plan amendment for implementation. This alternatives analysis assumes that the development standards, design guidelines, and/or general assumptions for Alternatives 2, 3, and 4 would be similar to the 2021 Specific Plan Amendment. Under Alternatives 1A and 1B, it is assumed that the approved 2018 Specific Plan that currently governs development at the Project Site would be in effect. While the 2018 Specific Plan would govern the Project Site under Alternative 1A, as discussed further below, Alternative 1A would not allow for any development pursuant to the 2018 Specific Plan.

V.D ALTERNATIVES CONSIDERED BUT REJECTED

As discussed above, CEQA Guidelines Section 15126.6(c) requires that an EIR or SEIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. the alternative considered but rejected in this 2021 SEIR is discussed below.

V.D.1 Alternative Off-Site Location

Both the 2006 FEIR and 2018 SEIR identified the approximately 100-acre Shell Refinery Site as the selected alternative project site. Given the size of the Shell Refinery Site, which is smaller than the 157-Acre Site, the proposed uses under the 2021 Project could not be built at the same intensity as proposed and would therefore have a reduction in total square footage. In addition, the Shell Refinery Site is not in a viable location as the Shell Refinery Site would not provide ease of freeway access, which would help to create a regional draw. As such, Objectives 1 through 9 would not be met in comparison to the 2021 Project. Overall, the Shell Refinery Site would not reduce or avoid Project impacts associated with construction (e.g., air quality,

greenhouse gases (GHG), energy, and noise) or operation (e.g., traffic, air quality, GHG, and noise). Further, the City does not own the Shell Refinery Site and does not currently have the right to develop this site. Development on the Shell Refinery Site would also not achieve any of the City's goals and policies related to development and remediation of the 157-Acre Site, which is fundamental to the City's and the CRA's objectives and obligations for the 157-Acre Site. For these reasons, similar to the 2006 FEIR and 2018 SEIR, the Alternative Off-Site Location Alternative (Shell Refinery Site) is considered and rejected for the 2021 Project.

V.E ANALYSIS METHODOLOGY

This alternatives analysis is consistent with the requirements of CEQA Guidelines Section 15126.6. CEQA Guidelines Section 1526.6(f) states that the alternatives evaluated in an EIR/SEIR shall be limited to those that would avoid or substantially lessen any of the significant effects of a proposed project. The range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making. In addition, CEQA Guidelines Section 15126.6(d) states that an EIR/SEIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. If an alternative would cause one or more significant effects in addition to those that would be caused by a project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of a project as proposed. Therefore, each of the alternatives is analyzed in less detail than the 2021 Project, but in sufficient detail to provide a meaningful comparison to the 2021 Project and to determine whether environmental impacts of the alternatives after mitigation would be greater, similar, or less than the corresponding impacts of the 2021 Project. In addition, this analysis determines whether the alternatives would feasibly attain most of the 2021 Project Objectives.

V.F EVALUATION OF THE ALTERNATIVES

The analysis of alternatives to the 2021 Project begins with the two no project alternatives (Alternative 1A and Alternative 1B) and continues with two reduced project alternatives (Alternatives 2 and 3) and one alternative that evaluates a different mix of land uses (Alternative 4). A comparison of the land use program of Alternatives 1A, 1B, 2, 3, and 4 as compared to the 2021 Project is provided in **Table V-2, Alternatives Land Use Comparison**. In addition, the alternatives analysis determines whether the environmental impacts of each alternative would be more, less, or the same as compared to the impacts of the 2021 Project and whether each alternative would attain the basic 2021 Project Objectives and/or the extent to which such 2021 Project Objectives would not be met.

**Table V-2
Alternatives Land Use Comparison**

Type of Development	2021 Project	Alternative 1A: No Project – No Development	Alternative 1B: No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning	Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)	Alternative 3: Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/Fulfillment Only) Uses in PA3	Alternative 4: Commercial/Industrial PA3 Hybrid
Planning Area 1						
Residential	1,250 units	0 units	1,250 units	1,250 units	1,250 units	1,250 units
Planning Area 2						
Regional Commercial	696,500 sf	0 sf	696,500 sf	696,500 sf	696,500 sf	696,500 sf
Restaurant	15,000 sf	0 sf	15,000 sf	15,000 sf	15,000 sf	15,000 sf
Planning Area 3						
Regional Retail Center	N/A	0 sf	585,000 sf	N/A	N/A	N/A
Hotel	N/A	0 sf	233,333 sf (350 rooms)	N/A	N/A	N/A
Commercial Recreation/Entertainment	N/A	0 sf	130,000 sf	N/A	N/A	N/A
Neighborhood-Serving Commercial	10,000 sf	0 sf	90,000 sf	7,500 sf	0	100,000 sf ^a
Restaurant	23,800 sf	0 sf	85,000 sf	17,850 sf	0	50,000 sf
Studio	N/A	N/A	N/A	N/A	N/A	520,445 sf
Self-Storage	N/A	N/A	N/A	N/A	N/A	130,000 sf
Light Industrial	1,567,090 sf	0 sf	N/A	1,175,318 sf	1,000,000 sf	800,445 sf
Park/Open Space	6.29 acres	0 acres	N/A	6.29 acres	0	0
Enhanced Parkway	0.62 acres	0 acres	N/A	0.62 acres	0	0
Total Floor Area	2,312,390 sf	0 sf	1,834,833 sf	1,912,168 sf	1,711,500 sf	2,312,390 sf
	Up to 1,250 residential units		Up to 1,250 residential units	Up to 1,250 residential units	Up to 1,250 residential units	Up to 1,250 residential units

SOURCE: ESA 2021.

ABBREVIATIONS:

sf = square feet; N/A = not applicable

NOTES:

^a The Neighborhood-Serving Commercial uses under Alternative 4 include 40,000 sf of grocery uses and 20,000 sf of gym uses.

V.F.1 Alternative 1A: No Project – No Development

a. Introduction

The No Project – No Development Alternative (Alternative 1A) assumes that the 2021 Project would not be developed and that no vertical development would occur. However, the Project Site would require remediation as set forth by the Department of Toxic Substances (DTSC) requirements/regulations, including the Remedial Action Plan (RAP). Since the 2018 SEIR, the Project Site has undergone, and continues to undergo, remediation, capping, and maintenance of the former landfill consistent the RAP. This alternative would involve completion of the remediation required for the 157-Acre Site, including the capping of existing waste materials at the former Cal Compact Landfill site, as required under the RAP and other DTSC-imposed regulatory requirements applicable to the Project Site. This alternative would also require the Carson Reclamation Authority (CRA) to find an alternate means of funding to complete the required remediation for the Project Site, including long-term operation and maintenance (O&M) costs associated with the Project Site (based upon applicable regulatory requirements imposed on the site given the fact that it is a former landfill site). The CRA currently does not have sufficient funds available to cap off and remediate the 157-Acre Site and/or fund the ongoing O&M costs associated with the 157-Acre Site indefinitely. The evaluation of Alternative 1A addresses the requirements of CEQA Guidelines Section 15126.6(e)(3)(B).

b. Analysis of Alternative 1A: No Project – No Development

(1) Land Use and Planning

(a) Physically Divide an Established Community

Since implementation of this alternative would maintain existing conditions on the Project Site, Alternative 1A would have no impact on existing land use relationships in the vicinity of the Project Site. Alternative 1A, as is the case with the 2021 Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Thus, impacts related to physically dividing an established community would be less than significant under Alternative 1A and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Consistency with Applicable Land Use Plans, Policies, and Regulations

Under Alternative 1A, the remediation activities related to the approved RAP would continue until the RAP is completely implemented; however, no development would occur on the Project Site other than structures necessary for the implementation of the RAP (i.e., O&M buildings, groundwater extraction and treatment system [GETS], etc.). Since no development would occur under this alternative, Alternative 1A would have no direct effect on the City's land use or zoning framework. However, Alternative 1A would not help to achieve several of the City's

policies provided in the General Plan, including: (1) enhancement of the City's economic base (Policy H-1.3), (2) increase new employment opportunities and additional housing units within the City, and (3) provide the development of a project that would maximize the advantages of the site's location and provide an enhanced urban center within the central portion of the City (Policy LU-11.1). Alternative 1A would also not implement Goal LU-1, which is to put brownfield site(s) to a productive reuse, since under this alternative no development would occur on the Project Site. In addition, Alternative 1A would not provide any funding for the ongoing and future O&M costs associated with the Project Site (including the remedial systems necessary to prevent the release of hazardous materials/substances into the air surrounding the Project Site and/or into the groundwater), which has long been the goal of the City and the CRA (as the owner of the Project Site). Based on the above, while Alternative 1A would not support the City's applicable land use plans and policies, no physical environmental impacts would occur as a result of development of the Project Site. However, given that the Project Site would not be developed, which would conflict with Goal LU-1 of the General Plan to redevelop a brownfield site, impacts under Alternative 1A would be greater than the less-than-significant impacts identified for the 2021 Project.

(2) Aesthetics

(a) Regulations Governing Scenic Quality

(i) Construction

Since there would be no development proposed under Alternative 1A, no construction activities would occur on the Project Site except for the ongoing activities associated with the remediation under the approved RAP. However, the activities associated with the approved RAP are consistent with existing conditions and with the analysis in this 2021 SEIR. Due to the nature of the remedial efforts being more maintenance efforts than construction, the presence of equipment on the Project Site would be intermittent and would not significantly alter near and long range views of the Project Site. Furthermore, remedial activities associated with the approved RAP would have a less-than-significant impact due to the limited views of such activities from off-site locations the lack of contrast of construction activities with any off-site valued resources, and the fact that ongoing remedial activities are part of the existing conditions on the Project Site. Therefore, under Alternative 1A, impacts to aesthetic character during remediation efforts under the approved RAP would be less than significant and Alternative 1A would avoid the 2021 Project's significant and unavoidable impact. Impacts under Alternative 1A would be less than the impacts identified for the 2021 Project.

(ii) Operation

a) Valued Resources

Since no development other than the ongoing remedial activities associated with the approved RAP would occur on the Project Site under this alternative, the overall visual character of the Project Site would remain the same as under existing conditions. The Project Site would remain primarily undeveloped, vacant land with small areas used for facilities associated with the RAP and views of the Project Site would continue to provide the feeling of spaciousness of the former landfill/brownfield site within an urban environment. Therefore, while Alternative 1A would continue the development of facilities on the Project Site associated with the RAP, including operations and maintenance buildings, the overall aesthetic character of the Project Site would remain similar to existing conditions. Therefore, under Alternative 1A, impacts to aesthetic character would be less than significant. Impacts under Alternative 1A would be less than the less-than-significant impacts identified for the 2021 Project.

b) Contrast with Existing Development

Under Alternative 1A the Project Site would remain primarily undeveloped, but would allow ongoing remediation and the development of facilities on the Project Site associated with the RAP. Thus, the overall aesthetic character of the Project Site would remain similar to existing conditions. Thus, Alternative 1A would not contrast with existing conditions or development beyond what already exists. Impacts relative to compatibility with existing development would be less than the less-than-significant impacts identified for the 2021 Project.

c) Comparison with Existing Regulations

Potential impacts to visual character and visual quality are controlled by the development standards in the zoning code and/or other applicable regulations. Under Alternative 1A no development, would occur. As such, Alternative 1A would not conflict with policies and regulations regarding design. Impacts under Alternative 1A would be similar to the less-than-significant impacts identified for the 2021 Project.

d) View Resources

As stated in Section IV.B, *Aesthetics*, the Project Site itself is not considered a view resource within the City and the Project vicinity does not contain notable features that would typically fall under the heading of view resource. Furthermore, views over the Project Site are limited due to intervening development, the flat terrain in the areas surrounding the Project Site, and that the Project Site itself sits atop a berm that slopes down to surrounding areas. Therefore, while some activities would occur with the ongoing remediation, Alternative 1A would result in an overall significant reduction of construction and development compared to the 2021 Project. Thus, Alternative 1A would not affect any view resources on or within the vicinity of the Project Site.

Impacts to view resources would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

e) *Shade/Shadow*

Since under Alternative 1A the Project Site would remain primarily undeveloped, the only potential for facilities to cast shade and/or shadow on surrounding sun-sensitive uses would be the existing operations and maintenance buildings and future Landfill Operation Center (LOC), all of which are located on the southwest corner of the Project Site in the utility lot (within PA3). While these facilities could be developed on site under the RAP, such structures would be small in scale and would not cast shade/shadows on adjacent residential uses. As Alternative 1A would remain similar to existing conditions, impacts related to shade/shadow would be less than significant under Alternative 1A and less than the less-than-significant impacts identified for the 2021 Project.

f) *Conclusion*

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, Alternative 1A, as with the 2021 Project, would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts would be the less than the less-than-significant impacts identified for the 2021 Project.

(b) *Light/Glare*

Alternative 1A would continue remedial activities associated with the RAP, as described in this 2021 SEIR. Under Alternative 1A, the Project Site would remain primarily undeveloped, vacant land with facilities associated with the RAP and light conditions at the Project Site would remain generally unchanged from existing conditions. Since there would be generally no changes to the on-site lighting conditions, no lighting impacts would occur under this alternative. Impacts would be less than the less-than-significant impacts identified for the 2021 Project.

(3) *Transportation*

(a) *Conflict with a Program, Plan, Ordinance or Policy*

Alternative 1A would not involve any new development, aside from the remediation, capping, and maintenance of the former landfill as per the approved RAP and, as such, would not serve to fulfill the goals and objectives of any programs, plans, ordinances or policies addressing the circulation system, transit, roadways, bicycle and pedestrian facilities, including those of the 2018 Specific Plan governing the Project Site, the City of Carson General Plan, and the Master Plan of Bikeways. Thus, while Alternative 1A would not conflict with any such programs, plans, ordinances, or policies, Alternative 1A would not meet the City's plans, ordinances, and polices. However, under Alternative 1A, no impacts would occur. Impacts under Alternative 1A would be less than the less-than-significant impacts identified for the 2021 Project.

(b) VMT

Alternative 1A would continue to undergo remediation, capping, and maintenance of the former landfill associated with the approved RAP and would not result in an increase in the intensity of on-site development. Thus, Alternative 1A would result in no additional vehicle miles traveled (VMT) over existing conditions. Accordingly, because Alternative 1A would not result in any new VMT over existing conditions, it would have no impact with respect to consistency with CEQA Guidelines Section 15064.3(b). As such, Alternative 1A would avoid the 2021 Project's significant and unavoidable impact related to total VMT per service population. Impacts under Alternative 1A would be less than the impacts identified for the 2021 Project.

(4) Air Quality

While the Project Site would remain undeveloped under Alternative 1A, ongoing remedial activities associated with the approved RAP would continue on site. Since no development is proposed under this alternative, no new emissions would be generated on the Project Site. Thus, air quality impacts under Alternative 1A would be less than significant and less than the impacts identified for the 2021 Project.

(5) Noise

While Alternative 1A would result in no development on the Project Site, construction activities associated with the ongoing remediation program under the approved RAP would continue on site. Since no development of the 2021 Project would occur, no other construction noise would be generated other than the noise associated with the ongoing remedial activities. As such, Alternative 1A would avoid the significant and unavoidable construction noise impacts that are possible by the 2021 Project. Furthermore, since no development would occur within the Project Site under Alternative 1A, no operational noise would be generated on the Project Site, and significant and unavoidable cumulative noise impacts would be eliminated. Therefore, noise impacts under Alternative 1A would be less than significant and less than the impacts identified for the 2021 Project with respect to noise.

(6) Biological Resources

Currently, the Project Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, where such areas have the potential to be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. Since no development is proposed under Alternative 1A, no changes to the landscape of the Project Site would occur, with the exception of the ongoing remediation efforts associated with the approved RAP. Since no new development is proposed under this alternative, no new impacts to biological resources would occur as the Project Site and would remain the same as in

existing conditions for the foreseeable future. Therefore, no impacts to biological resources would occur under Alternative 1A.

(7) Energy

While the Project Site would remain undeveloped under Alternative 1A, ongoing remediation activities associated with the approved RAP would continue on site, which results in energy consumption. Since no new development is proposed under this alternative, energy usage on the Project Site would remain the same as in existing conditions for the foreseeable future.

Therefore, energy impacts would be less than significant under Alternative 1A and less than the less-than-significant impacts identified for the 2021 Project.

(8) Greenhouse Gas Emissions

While the Project Site would remain undeveloped under Alternative 1A, ongoing remediation activities associated with the approved RAP would continue on site. With the exception of the ongoing remediation program occurring on site (which would generate the same amount of remedial construction emissions as the remedial portion of the 2021 Project, or 6,365 MTCO_{2e} (212 MTCO_{2e}/year amortized over 30 years), new construction and operational activities would not occur under Alternative 1A and, therefore, would not generate GHG emissions. Therefore, impacts related to GHG emissions would be less than significant under Alternative 1A.

c. Relationship of Alternative 1A to the 2021 Project Objectives and Impacts

The No Project – No Development Alternative (Alternative 1A) would continue to implement the approved RAP and would partially meet only one of the nine 2021 Project Objectives (i.e., Objective 7, promote an economically viable development at the Project Site that will enable the Developer to pay for the substantial cost of associated with environmental remediation and development of a former landfill). While Alternative 1A might possibly achieve the most basic objectives of the City and the CRA of remediating the environmental conditions afflicting the Project Site, the CRA would be required to find an alternate means of funding to complete the required remediation for the Project Site, which is entirely speculative, since the CRA does not currently have available funds to ensure such remediation in accordance with DTSC requirements. Thus, while Alternative 1A would potentially allow for the remediation the Cal-Compact landfill, this alternative would not meet the rest of the 2021 Project Objectives (Objectives 1 through 6 and 8 through 9).

Alternative 1A would have less impacts as compared to the 2021 Project and would avoid the 2021 Project's significant and unavoidable impacts associated with aesthetics, transportation, air quality, and noise. However, less-than-significant land use and planning impacts related to physically dividing an established community and aesthetic impacts related to view resources

would be similar under Alternative 1A. In addition, less-than-significant land use and planning impacts related to consistency with applicable land use plan, policies, and regulations impacts, would be greater under Alternative 1A.

While Alternative 1A would avoid the 2021 Project's significant and unavoidable impacts associated with aesthetics, transportation, air quality, and noise, Alternative 1A does not meet the majority of the 2021 Project Objectives, and may prevent the City and CRA from fulfilling the basic objective it has for the Project Site in ensuring the full and final remediation of the 157-Acre Site in accordance with DTSC requirements. For the reasons stated above, while Alternative 1A would substantially lessen significant environmental impacts associated with the 2021 Project, it does not feasibly attain most (or any) of the basic 2021 Project Objectives.

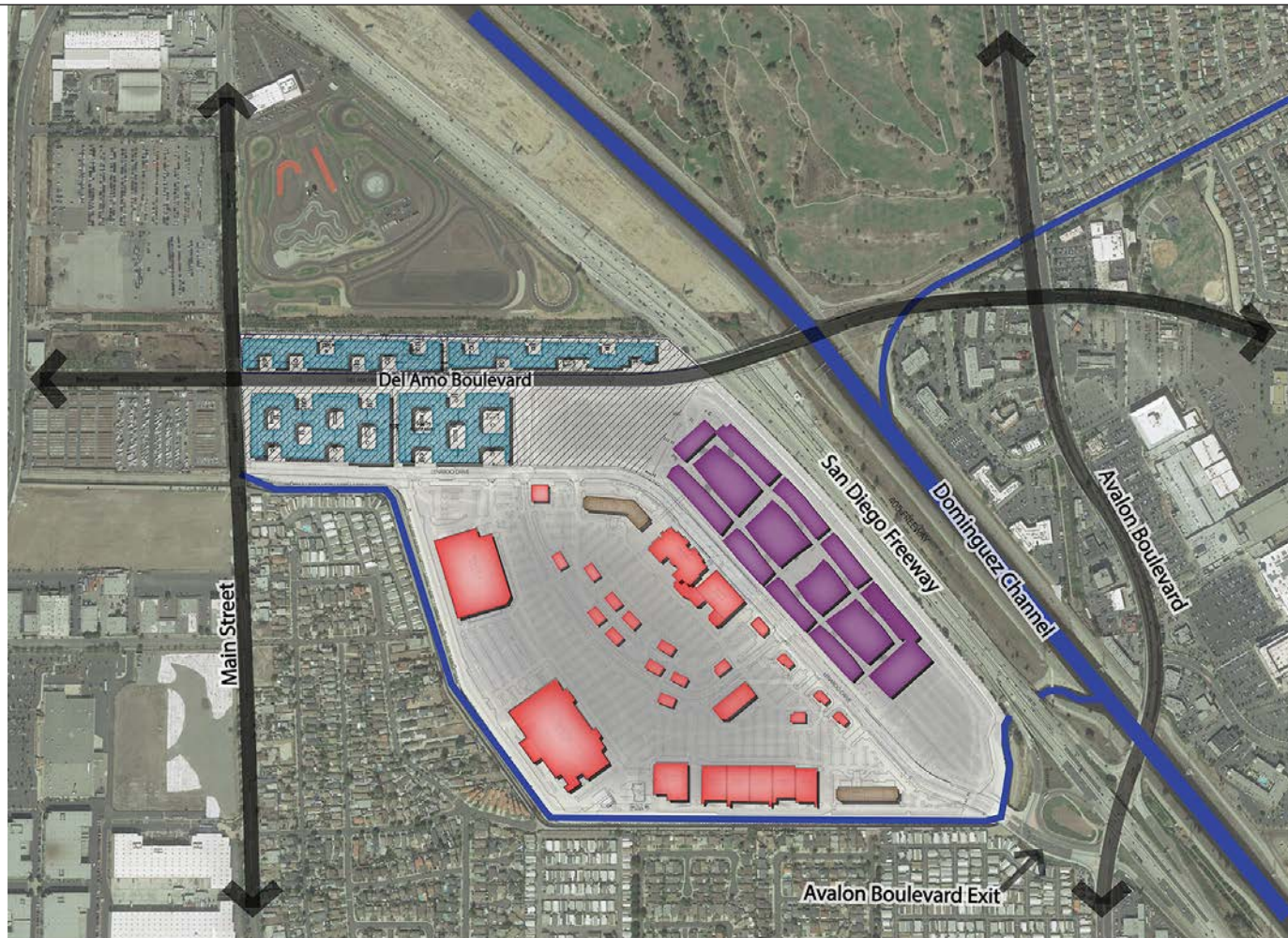
V.F.2 Alternative 1B: No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning

a. Introduction

The No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning Alternative (Alternative 1B) assumes that the 2018 Project analyzed in the 2018 SEIR would be developed on the 157-Acre Site pursuant to the 2018 Specific Plan. Maximum development on the Project Site, would consist of a total of 1,834,833 sf of commercial uses and up to 1,250 residential units. Specifically, under the 2018 Specific Plan, PA1 included the provision for up to 1,250 residential units and/or commercial uses pursuant to Mixed-Use Marketplace (MU-M) zoning. PA2 included the allowance for up to 696,500 sf of regional commercial uses and up to 15,000 sf of restaurant uses within a Commercial Marketplace (CM) zone. PA3 included 1,123,333 sf of regional retail, neighborhood-serving retail, restaurant, entertainment, and hospitality uses (e.g., theater, gym, hotel, etc.) within a CM zone. Under Alternative 1B, the Project Site would continue to undergo remediation, capping, and maintenance and operation as required under the RAP and the other applicable regulatory requirements set forth under 2018 SEIR. A figure illustrating the conceptual site plan of Alternative 1B is provided in **Figure V-1, Alternative 1B – Conceptual Site Plan**.

A comparison between the Alternative 1B mix of land uses and the 2021 Project is provided above in Table V-2.

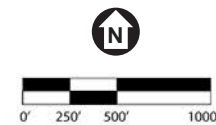
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LEGEND

- Commercial
- Regional Commercial
- Hotel
- Residential
- Residential Permitted
(By Right or with Administrative Permit)

Note: this is a graphic representation of a planning concept. All graphics in this document are conceptual and should not be interpreted literally. Other solutions, locations and/or concepts may be proposed and reviewed during site plan review and other permit and mapping processes



SOURCE: ESA, 2016

The District at South Bay Specific Plan Amendment

Figure V-1
Alternative 1B – Conceptual Site Plan



b. Analysis of Alternative 1B: No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning

(1) Land Use and Planning

(a) Physically Divide an Established Community

The Alternative 1B would result in a mixed-use development with residential and regional and neighborhood-serving commercial uses consistent with the development standards contained in the 2018 Specific Plan. The uses allowed by the 2018 Specific Plan would result in a development that would be compatible with the surrounding areas. Development under Alternative 1B would not result in the division, disruption, or isolation of the Project Site (2018 SEIR p. IV.A-30). Development under Alternative 1B would be consistent with the Carson General Plan and the 2018 Specific Plan and would not physically divide an established community. Impacts under Alternative 1B with respect to physically dividing an established community, which are based on the analysis provided in the 2018 SEIR, would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Consistency with Applicable Land Use Plans, Policies, and Regulations

Under Alternative 1B, development on the Project Site would occur in accordance with the 2018 Specific Plan, which provided for certain development standards for the Project Site. In addition, Alternative 1B would be compatible with all applicable land use plans, policies, and regulations in effect at the time of adoption of the 2018 Specific Plan (2018 SEIR p. IV.A-29). This is in contrast to the 2021 Project, which requires a General Plan Amendment to PA3(a) to allow for light industrial uses. Alternative 1B would not result in any change to the existing land use and zoning designations for the Project Site. Impacts related to land use compatibility under Alternative 1B, which are based on the analysis provided in the 2018 SEIR, would be less than significant and less than the less-than-significant impacts of the 2021 Project.

(2) Aesthetics

(a) Regulations Governing Scenic Quality

(i) Construction

Construction of Alternative 1B would cause visual changes to the landscape of the Project Site (2018 SEIR p. IV.B-24). While construction of Alternative 1B would increase the amount of construction equipment and activities on the Project Site compared to existing conditions, the Project Site would appear like a typical urban construction site. As with the 2021 Project, Alternative 1B would incrementally alter the Project Site as buildings are constructed resulting in the loss of undeveloped area and a feeling of spaciousness. Construction of Alternative 1B would

result in a fully developed Project Site, which would result in a significant and unavoidable impact regarding the loss of a valued visual resource due to the loss of the feeling of spaciousness within the City, as analyzed in the 2018 SEIR. Impacts under Alternative 1B would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(ii) Operation

a) Valued Resources

Operation of the Alternative 1B would change the visual resources on the Project Site from a vacant, undeveloped site to an urban setting with buildings of various sizes and heights and associated landscaping. Operation of Alternative 1B would consist of residential, commercial, retail, and hotel uses, which would attract a substantial amount of visitors and vehicles to the visual landscape of the Project Site. As development would occur under the 2018 Specific Plan that would result in a cohesive and integrated development, impacts under Alternative 1B would be less than significant, as analyzed in the 2018 SEIR. Impacts under Alternative 1B would be similar to the less-than-significant impacts identified for the 2021 Project.

b) Contrast with Existing Development

Should the proposed commercial buildings under Alternative 1B be constructed close to existing residential uses, it could result in a substantial contrast with the existing off-site residential development (2018 SEIR p. IV.B-22). In addition, should signage along the eastern/San Diego (Interstate 405 [I-405] Freeway) Project Site edge be provided in a manner that is not consistent with that shown in the conceptual sign requirements in the 2018 Specific Plan, the overall thematic scheme that minimizes contrast within the Project Site may not occur. However, with the application of mitigation measures required for the 2018 SEIR, which are substantially similar to mitigation measures as required for the 2021 Project, these potential impacts would be reduced to less-than-significant levels. As such, impacts under Alternative 1B would be less than significant with mitigation, as analyzed in the 2018 SEIR, and similar to the impacts identified for the 2021 Project, which would also be less than significant with implementation of mitigation.

c) Comparison with Existing Regulations

The visual character and visual quality are established by the development standards in the zoning code and other applicable regulations. The 2018 Specific Plan, which provides site-specific development standards, would be the governing regulations for the Project Site in accordance with the City's Zoning Ordinance. As with the 2021 Project, Alternative 1B would be subject to the detailed regulations established by the 2018 Specific Plan, which would restrict the potential for adverse effects of development on the visual quality of the area by regulating the

development on the Project Site, including but not limited to permitted uses, setbacks, maximum permitted building heights, landscaping, signage, and lighting. In addition, as with the 2021 Project, Alternative 1B would not conflict with General Plan policies related to design. Alternative 1B, as with the 2021 Project, would implement mitigation measures, as set forth in the 2018 Specific Plan, that would reduce the potential significant impacts relative to building height and sign lighting impacts to less than significant. Therefore, Alternative 1B would not conflict with regulations regarding design, as analyzed in the 2018 SEIR. Impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

d) View Resources

The Project Site itself is not considered a view resource within the City and the Project vicinity does not contain notable features that would typically be categorized as view resources (2018 SEIR p. IV.B-25). Furthermore, views over the Project Site are limited due to intervening development and the flat terrain in the areas surrounding the Project Site. In addition, the Project Site sits atop a berm that slopes down to surrounding areas. Therefore, Alternative 1B would not substantially diminish any views, and impacts on views of unique, valued scenic resources would be less than significant, as analyzed in the 2018 SEIR, and similar to the less-than-significant impacts identified for the 2021 Project.

e) Shade/Shadow

As with the 2021 Project, Alternative 1B has the potential to cast shade and/or shadow on surrounding sun-sensitive uses to the south and southwest (2018 SEIR p. IV.B-26). Given the heights, locations and setbacks of the Alternative 1B along the south and southwest boundaries of the Project Site, no shade/shadow impacts would occur. Impacts under Alternative 1B would be less than significant, as analyzed in the 2018 SEIR, and similar to the less-than-significant impacts identified for the 2021 Project.

f) Conclusion

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, Alternative 1B, as with the 2021 Project, would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

(b) Light/Glare

Alternative 1B would include site lighting and signage internally and along the I-405 Freeway. Compliance with the lighting standards included in the 2018 Specific Plan and implementation of Mitigation Measures B-3a and B-3b of the 2018 SEIR would limit any potential off-site light effects from the Project Site, including illuminated signs, under Alternative 1B (2018 SEIR p. IV.B-29). With implementation of these mitigation measures, lighting associated with

Alternative 1B would not substantially alter the character of off-site areas surrounding the Project Site and would also not interfere with off-site activities. Therefore, impacts related to artificial light would be less than significant with implementation of mitigation measures, as analyzed in the 2018 SEIR, and similar to impacts identified for the 2021 Project, which would also be less than significant with mitigation.

(3) Transportation

(a) Conflict with a Program, Plan, Ordinance or Policy

Under Alternative 1B, the uses proposed under the 2018 Specific Plan would be developed. A comparison of vehicle trip generation between the Alternative 1B and the 2021 Project is provided in Appendix C1 of this 2021 SEIR. Compared to the 2021 Project, Alternative 1B would result in approximately 34 percent more daily vehicle trips in comparison to the 2021 Project's proposed trip generation (Alternative 1B would result in 2 percent fewer AM peak hour vehicle trips, but 11 percent more PM peak hour vehicle trips). Under Alternative 1B, access points connecting the Project Site to the regional roadway network would remain unchanged from the 2021 Project, as would bicycle, pedestrian, and transit facilities. Alternative 1B would not conflict with any programs, plans, ordinances or policies addressing the circulation system, transit, roadways, bicycle and pedestrian facilities, including those of the 2018 Specific Plan, the City of Carson General Plan, and the city's Master Plan of Bikeways. Therefore, impacts under Alternative 1B would be less than significant but greater than the less-than-significant impacts identified for the 2021 Project due to this alternative's increased vehicle trip generation during the PM peak hour.

(b) VMT

A VMT impact analysis was not required at the time of preparation for the 2018 SEIR; however, as part of transportation evaluation conducted for the 2021 Project, a comparison of VMT results between the 2018 Project (Alternative 1B) and the 2021 Project was conducted. Using the same VMT methodology used to evaluate the 2021 Project, the land uses for Alternative 1B were coded into the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Southern California Association of Governments (SCAG) model to generate VMT results. Based on this model run, Alternative 1B would generate total VMT per service population of 47.7, which is about 22 percent higher than the 39.1 miles identified for the 2021 Project, and above the City's significance threshold of 32.5. Accordingly, because Alternative 1B would result in VMT per service population that exceeds the City's impact threshold, it would result in a significant and unavoidable impact with respect to consistency with CEQA Guidelines Section 15064.3(b). Impacts under Alternative 1B would be greater than those identified for the 2021 Project, which would also be significant and unavoidable.

(4) Air Quality

(a) Construction

Similar to the 2021 Project, Alternative 1B would require construction of the Project Site. Alternative 1B would result in significant and unavoidable regional impacts associated with volatile organic compounds (VOCs) and carbon monoxide (CO) emissions during construction, even with implementation of the identified mitigation measures, as emissions levels cannot be guaranteed to be reduced below the South Coast Air Quality Management District (SCAQMD) daily thresholds (2018 SEIR p. IV.G-36). Regional impacts associated with nitrogen oxides (NO_x), fine particulate matter (PM₁₀), and ultrafine PM (PM_{2.5}) would be less than significant during construction, as analyzed in the 2018 SEIR, as emission levels would not exceed the SCAQMD's daily thresholds during construction of Alternative 1B. However, as the development would occur later than the timeframe identified in the 2018 SEIR, impacts related to construction would be reduced from what was identified in the 2018 SEIR due to cleaner construction equipment and vehicle fleets. Given these reductions, impacts related to regional construction emissions under Alternative 1B would be similar to, or may remain greater than, the impacts identified for the 2021 Project. Regional construction impacts under the 2021 Project resulted in less-than-significant mitigated impacts (i.e., VOC, NO_x, CO, PM₁₀, and PM_{2.5}) whereas Alternative 1B could still result in significant and unavoidable regional impacts associated with VOC and CO emissions during construction as were identified in the 2018 SEIR.

Under Alternative 1B, localized NO_x and CO emissions would be less than significant, based on SCAQMD's localized screening thresholds (LST) look-up tables. PM₁₀ and PM_{2.5} emissions under Alternative 1B were found to be above the screening levels and dispersion modeling was conducted to determine that emissions would result in concentrations below the SCAQMD threshold for pollutants within a non-attainment area (2018 SEIR p. IV.G-38). Impacts related to localized construction emissions under Alternative 1B, as analyzed in the 2018 SEIR, would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

Alternative 1B evaluated the potential for TAC emissions related to diesel particulate matter (DPM) emissions associated with heavy equipment operations during construction activities (2018 SEIR p. IV.G-44). Impacts under Alternative 1B were determined to be less than significant, as analyzed in the 2018 SEIR, and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Operation

Regional operation of Alternative 1B would result in the generation of VOC, NO_x, CO, PM₁₀, and PM_{2.5} emissions, which would exceed the SCAQMD's daily thresholds. Even with implementation of the identified mitigation measures, regional operational impacts would remain

significant and unavoidable as emission levels would not be able to be reduced under the applicable thresholds (2018 SEIR p. IV.G-55). In addition, in the scenario that construction and operational phases overlap, the 2018 SEIR concluded that significant and unavoidable concurrent regional construction and operation impacts associated with PM_{2.5} emissions would occur, even with implementation of the identified mitigation measures (2018 SEIR p. IV.G-57). Impacts related to regional emissions during operation and regional emissions during concurrent construction and operational under Alternative 1B would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable. While Alternative 1B would result in significant and unavoidable impacts with respect to this issue, as identified in the 2018 SEIR, with newer operational requirements (i.e., 2019 Title 24, and more efficient vehicles), it is likely that emissions would be reduced from what was presented in the 2018 SEIR. However, with the nature and size of the Alternative 1B, it would not be reduced to below significant levels, even with mitigation.

Alternative 1B concluded less-than-significant impacts with respect to mobile emissions of CO hotspots, less-than-significant localized impacts with respect to NO_x, CO, PM₁₀, and PM_{2.5} from on-site emissions after mitigation, and less-than-significant TAC impacts (2018 SEIR pp. IV.G-55 to IV.G-56). Given that Alternative 1B would generate 34 percent more daily vehicle trips and 11 percent more PM peak hour vehicle trips than the 2021 Project, impacts related to CO hotspots under Alternative 1B would be less than significant and greater than the less-than-significant impacts identified for the 2021 Project. Localized emissions and TACs during operation under Alternative 1B would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(5) Noise

(a) Construction

Construction of Alternative 1B would generate noise from construction equipment and activities, including pile driving, and construction trucks and vehicles throughout the Project Site. Noise levels generated from pile driving would exceed the allowable noise thresholds, which would result in a significant and unavoidable construction noise impact, even with implementation of the identified mitigation measures (2018 SEIR p. IV.H-14). Impacts related to construction noise under Alternative 1B would be significant and unavoidable, as analyzed in the 2018 SEIR, and similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

In addition to noise, construction activities and equipment under Alternative 1B would generate vibration throughout the Project Site. Implementation of the 2018 SEIR mitigation measures would reduce vibration impacts to a less-than-significant level during construction Alternative 1B as the mitigation would reduce vibration levels below the allowable thresholds

(2018 SEIR p. IV.H-19). Impacts related to construction vibration under Alternative 1B would be less than significant with mitigation, as analyzed in the 2018 SEIR, and similar to the impacts identified for the 2021 Project, which would also be less than significant with mitigation.

(b) Operation

Operational noise generated by Alternative 1B would be reduced to a less-than-significant level with implementation of mitigation measures (2018 SEIR pp. IV.H-20 to IV.H-26). Impacts related to on-site operational noise and off-site traffic noise would be less than significant at residential uses to the south and west of the Torrance Lateral Flood Control Channel (Torrance Lateral) and to the existing and under construction residential units within DD3. There are no sensitive uses that would be impacted by on-site operational noise from Alternative 1B. Residential uses south of the Torrance Lateral (south of the intersection of Del Amo Boulevard and South Main Street) would be shielded from operational noise from DD3 by intervening structures within PA1. In addition, Project Site features such as the berm and buildings would provide noise-attenuation/shielding from I-405 Freeway traffic noise to the area, particularly for residential uses located south and west of the Project Site. Therefore, operational noise impacts under Alternative 1B would be less than significant with implementation of mitigation, as analyzed in the 2018 SEIR, and impacts would be similar to the impacts identified for the 2021 Project, which would also be less than significant with mitigation.

The 2021 Project would contribute to a significant increase in cumulative traffic noise along three roadway segments: (1) Main Street between Lenardo Drive and Torrance Boulevard; (2) Del Amo Boulevard between Main Street and Stamps Drive; and (3) Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard. As discussed in Section IV.E, *Noise*, of this 2021 SEIR, cumulative increases in traffic noise would reach 3.9 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive, where the threshold is a 3.0 dBA CNEL increase (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). The cumulative increase in traffic noise would reach up to 11.1 dBA CNEL along Lenardo Drive between I-405 Freeway southbound Ramp and Avalon Boulevard, where the threshold is a 5.0 dBA CNEL increase (see Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). Alternative 1B would not result in significant increases in cumulative traffic noise and would eliminate the significant impact along all three segments. Therefore, cumulative operational traffic noise impacts under Alternative 1B would be less than significant, as analyzed in the 2018 SEIR, and would avoid the 2021 Project's significant and unavoidable cumulative operational traffic noise impacts.

(6) Biological Resources

The Project Site is located in an urbanized setting and is completely disturbed with no vegetation or habitat present to support candidate, sensitive, or special-status species on site. The Project

Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, where such areas may be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. The Project Site does not contain natural hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404, does not function as a wildlife corridor, and does not contain any notable natural features or protected biological resources. For these reasons, implementation of Alternative 1B would result in less-than-significant impacts to biological resources (2018 SEIR p. VI-4). Impacts under Alternative 1B would be similar to less-than-significant impacts identified for the 2021 Project.

(7) Energy

(a) Construction

Construction of Alternative 1B would utilize fuel efficient equipment consistent with state and federal regulations, and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy (2018 SEIR pp. VII-30 to VII-32). In addition, Alternative 1B would also implement a recycling and waste management plan during construction, as outlined in the 2018 Specific Plan, to recycle mixed construction debris in a practical, accessible manner, to the greatest extent feasible. Implementation of the construction waste management plan would reduce truck trips to landfills, which are typically located some distance away from City centers, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. Based on the available data, construction would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the site. Idling restrictions and the use of cleaner, energy-efficient equipment would result in less fuel combustion and energy consumption and thus minimize Alternative 1B's construction-related energy use. However, it should be noted that the 2021 Project imposes stricter idling requirements for PA1 and PA3 as well as includes on-site solar and the installation of electric vehicle (EV) charging stations and EV infrastructure beyond those that would be required under the 2018 SEIR. Regardless, construction of Alternative 1B would not result in the wasteful, inefficient, and unnecessary consumption of energy. Impacts related to energy during construction of Alternative 1B would be less than significant, as analyzed in the 2018 SEIR, and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Operation

Operation of Alternative 1B would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the site. The energy usage required for operations and routine and

incidental maintenance activities is estimated based on the increase in energy demand from the new buildings. Alternative 1B would comply with or exceed the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance. Examples of energy measures in the Title 24 standards and the CALGreen Code include energy efficiency metrics and performance standards for appliances, space-conditioning equipment (i.e., heating, ventilation and air conditioning [HVAC]), water heating systems, windows and doors, insulation, lighting, and roofing materials; indoor and outdoor water use efficiency and conservation performance metrics; and requirements to provide solar-ready buildings with a minimum solar zone area (solar zone is defined as a section of the roof designated and reserved for the future installation of a solar electric or solar thermal system). Alternative 1B's electricity and natural gas usage is expected to represent a small fraction of Southern California Edison's (SCE) and SoCalGas' energy use and would therefore not constitute a discernible increase in the utilities' energy demands. For this reason, these utilities would be expected to meet the operational demand of Alternative 1B on electricity and natural gas services (2018 SEIR pp. VII-34 to VII-36). Operational impacts to electricity and natural gas supply and infrastructure would be less than significant under Alternative 1B, as analyzed in the 2018 SEIR.

With respect to operational transportation-related fuel usage, Alternative 1B would support statewide efforts to improve transportation energy efficiency (2018 SEIR pp. VII-36 to VII-37). This alternative itself would co-locate complementary hotel, retail, restaurant, entertainment, outlets, and residential land uses on the Project Site. Alternative 1B would also be located near major transit facilities and would incorporate at least four bus pull-outs that would connect to the existing bus routes. The proximity to transit and existing off-site uses would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related fuel demand. Alternative 1B would also include the installation of electrical vehicle supply equipment (EVSE) in three locations on the Project Site, pursuant to the CALGreen Code. Alternative-fueled, electric, and hybrid vehicles, to the extent these types of vehicles would be utilized by passengers, would reduce the consumption of gasoline and diesel on the Project Site. Furthermore, according to the United States Energy Information Administration's (USEIA) International Energy Outlook 2016, the global supply of crude oil, other liquid hydrocarbons, and biofuels is expected to be adequate to meet the world's demand for liquid fuels through 2040.³⁶² As Alternative 1B would incorporate characteristics and measures that would reduce transportation fuel usage, energy impacts on transportation fuel supplies and infrastructure associated with this alternative would be less than significant, as analyzed in the 2018 SEIR. While Alternative 1B would result in less-than-significant impacts and would reduce diesel fuel in the near term compared to the 2021 Project, the 2021 Project would result in less gasoline consumption from the initial operational year, and by 2040 diesel fuel

³⁶² *United States Energy Information Administration (USEIA), International Energy Outlook 2016, May 2016, [https://www.eia.gov/outlooks/archive/ieo16/pdf/0484\(2016\).pdf](https://www.eia.gov/outlooks/archive/ieo16/pdf/0484(2016).pdf), accessed June 2021.*

consumption would be reduced to below Alternative 1B consumption due to the implementation of similar project design features (PDFs) as proposed under the 2021 Project which require incorporation of near- and zero-emissions trucks into the fleet and the installation of EV charging stations beyond what is required under Alternative 1B.

Based on the above, operational energy impacts under Alternative 1B would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(8) Greenhouse Gas Emissions

Alternative 1B would be consistent with emissions reduction strategies and would not conflict with plans, policies, regulations or recommendation to reduce GHG emissions applicable to the 2018 Project (2018 SEIR pp. VII-13 to VII-27). Therefore, through implementation of GHG emissions reduction strategies, this alternative would be consistent with and would not hinder the ability of the state or the City to achieve emissions reduction targets. However, while Alternative 1B's GHG impact would be less than significant, the incorporation of PDFs as outlined in the 2018 SEIR, which are similar to the PDFs as proposed under the 2021 Project, would result in compliance with plans and policies in excess of regulatory requirements and would therefore provide additional support to the City and state in meeting the State-mandated GHG reduction goals. For example, the 2021 Project incorporates EV for 325 parking spaces more than is required by the CALGreen Code, as well as implementing a phase in for near zero- and zero-emissions trucks by 2040.

GHG emissions associated with the 2021 Project would exceed GHG emissions from Alternative 1B in 2026; however, with the implementation of the PDFs and Mitigation Measures, 2021 Project GHG emissions would be less than Alternative 1B by 2040. Therefore, impacts related to GHG emissions associated with the construction and operation of Alternative 1B would be less than significant, as analyzed in the 2018 SEIR, and similar to the less-than-significant impacts identified for the 2021 Project.

c. Relationship of Alternative 1B to the 2021 Project Objectives and Impacts

The No Project – Development under 2018 Project/Existing 2018 Specific Plan and Zoning would continue to implement the RAP and develop the Project Site as described in the 2018 SEIR. Implementation of Alternative 1B would fully satisfy all but two of the 2021 Project Objectives. Specifically, while Alternative 1B could include outdoor community amenities, reactional spaces and, gathering areas, it is unknown at this time to what scale such uses would be provided in this Alternative. In comparison, the 2021 Project includes the development of 6.29 acres of vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site. As such, Alternative 1B would be assumed to only partially

meet Objective 8 (i.e., “provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site”). Alternative 1B would also only partially meet Objective 1 (i.e., “provide a diversity of both short-term and long-term employment opportunities for local residents by approving a project that will generate substantial construction work opportunities and long-term light industrial and commercial jobs”), as Alternative 1B would provide fewer operational employment opportunities. Thus, Alternative 1B would meet all 2021 Project Objectives, with the exception of Objectives 1 and 8, which would be met to a lesser degree than the 2021 Project.

Alternative 1B would have similar impacts as compared to the 2021 Project, with a few exceptions. For land use impacts related to consistency with applicable land use plans, policies, and regulations, impacts under Alternative 1B would be less than the impacts of the 2021 Project. Alternative 1B would also avoid the 2021 Project’s cumulative operational traffic noise impacts for all impacted roadway segments. However, transportation impacts as it relates to consistency with programs, plans, ordinances, or policy impacts, VMT impacts; and regional air quality impacts during construction of Alternative 1B would result in greater impacts as compared to the 2021 Project.

For the reasons stated above, while Alternative 1B would attain most of the basic 2021 Project Objectives. Alternative 1B would also eliminate one significant and unavoidable impact (cumulative operational traffic noise) as compared to the 2021 Project. However, while Alternative 1B reduces impacts (regarding cumulative operational traffic noise) in 2026, the 2021 Project’s PDFs would reduce long term impacts (by 2040) to below the levels projected for Alternative 1B in 2026. In addition, Alternative 1B would result in greater impacts for two significant and unavoidable impacts (VMT and regional air quality impacts during construction). Therefore, Alternative 1B would not substantially lessen significant environmental impacts associated with the 2021 Project.

V.F.3 Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)

a. Introduction

The Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Light Industrial Uses in PA3) Alternative (Alternative 2) assumes that the square footage the 2021 Project would be reduced by 25 percent reduction within PA3 only. The land uses in PA1 and PA2 would remain the same (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

The proportionate mix of neighborhood serving commercial, restaurant, and light industrial uses proposed within PA3 would be the same under the 2021 Project; however, maximum development would be reduced by 25 percent and thus, would consist of 7,500 sf of neighborhood serving commercial uses; 17,850 sf of restaurant use; and 1,175,218 sf of light industrial uses for a total floor area of 1,200,668 sf in PA3. Light industrial uses, as with the 2021 Project, would be approximately 50 percent e-commerce and fulfillment center uses and 50 percent traditional distribution center and parcel hub type uses similar to the 2021 Project. The Carson Country Mart would still occupy the same acreage as the 2021 Project (11.12 acres), but commercial development within the Carson Country Mart would be reduced by 25 percent. The park/open space provided under Alternative 2 would be similar to the 2021 Project's proposed 6.29 acres of park/open space. This alternative would also include the 0.62 acres of Enhanced Parkway located northwest of the proposed light industrial uses along Lenardo Drive. The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the RAP and applicable regulatory requirements. It is assumed that similar heights and the number of light industrial and commercial buildings proposed would be similar under Alternative 2 as with the 2021 Project; however, given the smaller building square footages, it is assumed that building setbacks would be greater. A figure illustrating the conceptual site plan of Alternative 2 is provided in **Figure V-2, Alternative 2 – Conceptual Site Plan**.

Maximum development on the Project Site under Alternative 2 would consist of a total of 1,912,168 sf of commercial, retail, and industrial uses in PA2 and PA3 and up to 1,250 residential units in PA1. A comparison between the Alternative 2 mix of land uses and the 2021 Project is provided in Table V-2.



SOURCE: RGA, 2021; ESA, 2021

The District at South Bay Specific Plan Amendment

Figure V-2
Alternative 2 - Conceptual Site Plan



b. Analysis of Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)

(1) Land Use and Planning

(a) Physically Divide an Established Community

Since implementation of Alternative 2 would maintain the same mix of land uses as proposed for the 2021 Project, impacts to existing land use patterns under this alternative would be the same as the 2021 Project. Both the 2021 Project and Alternative 2 would be considered infill developments within an existing urban setting, which would provide a continuation of existing and intended development patterns within the City. Similar to the 2021 Project, Alternative 2 would provide a system of roads and sidewalks that would physically connect the Project Site, both internally (between PA1, PA2, and PA3(b)) and externally (with the community). Therefore, Alternative 2, as is the case with the 2021 Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Thus, impacts related to the land use patterns would be less than significant under Alternative 2 and similar to the less-than significant impacts identified for the 2021 Project.

(b) Consistency with Applicable Land Use Plans, Policies, and Regulations

Under Alternative 2, the Project Site would be developed the same as proposed for the 2021 Project, with the exception that the maximum development of the industrial, commercial and retail land uses proposed for PA3 would be reduced by 25 percent. PA1 and PA2 would remain the same as proposed under the 2021 Project and remediation of the Project Site would continue as required under the RAP and applicable regulatory requirements. As with the 2021 Project, Alternative 2 would require a General Plan Amendment to allow for the development of light industrial uses in PA3(a). While this alternative would reduce the total square footage in PA3 by 25 percent, this reduction would not change the land use mix proposed for the Project Site. Similar to the 2021 Project, implementation of Alternative 2 would not change any existing land use relationships with surrounding properties within the City. Alternative 2 would be consistent with Goal LU-1, which is to put brownfield site(s) to a productive reuse, since under this alternative development would occur on the Project Site, although not to the same degree as the 2021 Project. In addition, Alternative 2 would provide funding, although less than the 2021 Project, for the ongoing and future O&M costs associated with the Project Site (including the remedial systems necessary to prevent the release of hazardous materials/substances into the air surrounding the Project Site and/or into the groundwater), which has long been the goal of the City and the CRA (as the owner of the Project Site). As with the 2021 Project, Alternative 2 would help to achieve several of the City's policies provided in the General Plan, including: (1) enhancement of the City's economic base (Policy H-1.3), (2) increase new employment opportunities and additional housing units within the City, and (3) provide the development of a

project that would maximize the advantages of the site's location and provide an enhanced urban center within the central portion of the City (Policy LU-11.1). Alternative 2 would reduce the amount of light industrial uses within proximity of the I-405 Freeway and Harbor Freeway (I-110 Freeway), the ports, and the end users. As such, with regard to SCAGs RTP/SCS, since Alternative 2 would include less light industrial and commercial development in PA3, this alternative would not provide for the same density of such uses within an area with a circulation system designed to provide quick and easy access to and from the regional transportation system to the same extent as the 2021 Project. In addition, although Alternative 2 would include the development of the Carson Country Mart, the reduction in commercial square footage would reduce the opportunities for residents within the Project Site and residents of the surrounding neighborhoods to have access to such uses. Based on the above, as with the 2021 Project, Alternative 2 would not conflict with applicable plans, policies, and regulations. Impacts related to land and planning would be less than significant under Alternative 2 and similar to the less-than-significant impacts identified for the 2021 Project.

(2) Aesthetics

(a) Regulations Governing Scenic Quality

(i) Construction

Construction under Alternative 2 would involve the same construction activities but would require 25 percent less construction in PA3 compared to the 2021 Project. Even with the reduction in square footage in PA3, construction of Alternative 2 would require construction equipment and activities on the Project Site which would change the visual landscape from existing conditions. As with the 2021 Project, as buildings are erected on the Project Site, the loss of undeveloped area and a feeling of spaciousness would continue to be incrementally altered. Even with the reduction in square footage in PA3, construction of Alternative 2 would result in a fully developed Project Site, which would result in a significant and unavoidable impact regarding the loss of a valued visual resource due to the loss of feeling of spaciousness within the City. Impacts under Alternative 2 would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(ii) Operation

a) Valued Resources

The development of Alternative 2 would result in a mix of residential, commercial, and light industrial uses with open space and community amenity areas. As with the 2021 Project, Alternative 2 would develop the Project Site with a mix of buildings of various sizes and heights and associated landscaping. In addition, the mix of uses would attract a substantial amount of

visitors and vehicles to the Project Site. Impacts under Alternative 2 would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

b) Contrast with Existing Development

Under Alternative 2, the Project Site would be developed the same as proposed for the 2021 Project, with the exception that the maximum development of the commercial, industrial and retail land uses proposed for PA3 would be reduced by 25 percent. As with the 2021 Project, potentially significant impacts on aesthetic character could occur along the south and southwestern Project Site edges. Alternative 2 would be assumed to be required to implement similar mitigation measures as the 2021 Project. With the implementation of the mitigation measure to ensure a minimum 70-foot setback from the Torrance Lateral for buildings in PA3 at the western boundary of the Project Site (Buildings A and D), Alternative 2, as with the 2021 Project, would not result in a substantial contrast with the existing off-site residential development. As such, impacts under Alternative 2 would be less than significant with implementation of the mitigation measures required under the 2021 Project, and similar to the less-than-significant impacts identified for the 2021 Project.

c) Comparison with Existing Regulations

As with the 2021 Project and as discussed above, Alternative 2 would not conflict with the City's existing General Plan, including policies related to design. In addition, Alternative 2, as with the 2021 Project, would comply with site-specific development standards set forth in a Specific Plan that would restrict the potential for adverse effects of development on the visual quality of the area by regulating the development on the Project Site, including but not limited to permitted uses, setbacks, maximum permitted building heights, landscaping, signage, and lighting. Therefore, Alternative 2 would not conflict with regulations regarding design and impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

d) View Resources

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site is not considered a view resource given the history of use as a landfill and the ongoing remediation activities and does not contain any features that would typically fall under the heading of view resource (2021 SEIR p. IV.B-23). Views of the two notable features that might catch the eye of travelers through the area, the Goodyear Wingfoot Two and the Big Man statue on the south of the I-405 Freeway would not be lost due to development of Alternative 2, similar to the 2021 Project. Views over the Project Site are limited due to intervening development, the flat terrain in the area surrounding the Project Site, and the fact that the Project Site sits atop a berm that slopes down to surrounding areas. Therefore, similar to the 2021 Project, development of Alternative 2 would not substantially diminish views. Impacts on views of unique, valued scenic resources would be

less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

e) Shade/Shadow

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the maximum off-site shading that could occur on sun-sensitive uses is limited, with the greatest shading potential occurring during the spring/autumn equinox, with the longest shadows extending to the west across the Project Site boundary by Building D in the southwestern portion of PA3. Since the land uses and building footprints would be the same in PA1 and PA2 under Alternative 2 as with the 2021 Project, the potential for shade and shadow in those areas of the Project Site would be the same between Alternative 2 and the 2021 Project. However, Alternative 2 would differ from the 2021 Project in PA3, where building footprints would be reduced by 25 percent but would retain the same building heights as proposed under the 2021 Project. Similar to the 2021 Project, Alternative 2 would implement the required minimum setbacks from the Project Site boundaries to limit the extent of off-site shading. Furthermore, due to the reduction in square footage under Alternative 2, the overall development footprint in PA3 would be significantly reduced (25 percent reduction) compared to the 2021 Project, where it would be reasonable to assume that greater setbacks from the Project Site boundaries would be achieved compared to the 2021 Project. Due to the reduction in building sizes and greater setbacks, the extent of the off-site shading would be reduced compared to the shadows created by the 2021 Project. Therefore, similar to the 2021 Project, impacts related to shade/shadow with implementation of Alternative 2 would be less than significant. Impacts under Alternative 2 would be less than the less-than-significant impacts identified for the 2021 Project due to the reduction in building square footage under Alternative 2.

f) Conclusion

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, Alternative 2, as with the 2021 Project, would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

(b) Light/Glare

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site is located within an urban area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. Similar to the 2021 Project, Alternative 2 would also be required to comply with the lighting and signage design features included in the 2021 Specific Plan Amendment as well as the CALGreen lighting standards, which would limit off-site light spill by controlling light intensity and by shielding on-site light sources. Alternative 2 would be assumed to be required to implement the standards contained in the 2021 Specific Plan as well as similar

mitigation measures as are applied to the 2021 Project under this 2021 SEIR to ensure that lighting from signage would result in a less than significant impact. In addition, the reduction in building size and amount of required parking under Alternative 2 would also reduce the amount of on-site lighting required in PA3, which would slightly reduce the overall amount of artificial light across the Project Site. Therefore, impacts associated with artificial lighting with implementation of Alternative 2 would be less than significant and less than the less-than-significant impacts identified for the 2021 Project, due to the reduction in building size under Alternative 2.

(3) Transportation

(a) Conflict with a Program, Plan, Ordinance or Policy

Under Alternative 2, the light industrial and commercial uses proposed by the 2021 Project upon PA3 would be reduced by approximately 25 percent. This reduction in intensity as compared with the 2021 Project would result in approximately 25 percent fewer vehicle trips being generated from the land uses within PA3. Under Alternative 2, access points connecting the Project Site to the regional roadway network would remain unchanged from the 2021 Project, as would bicycle, pedestrian, and transit facilities. Alternative 2 would not conflict with any programs, plans, ordinances or policies addressing the circulation system, transit, roadways, bicycle and pedestrian facilities, including those of the 2021 Specific Plan Amendment (which would need to be modified to accommodate the proposed reduction under this alternative), the City of Carson General Plan, and the Master Plan of Bikeways. Accordingly, Alternative 2 would not conflict with any such programs, plans, ordinances, or policies, and, as such, less-than-significant impacts would occur. Impacts under Alternative 2 would be similar to the less-than-significant impacts identified for the 2021 Project.

(b) VMT

As noted above, vehicle trips generated by Alternative 2 would be reduced by approximately 25 percent for the land uses in PA3 as compared to the 2021 Project due to the reduction in intensity of proposed land uses in PA3. As such, the service population would also decrease proportionally within PA3; however, the trip generation characteristics for the overall Project Site (i.e., trip lengths, number of vehicle trips generated per square foot of use) would be similar to the 2021 Project. Furthermore, the location of the proposed land uses under Alternative 2 would be similar as proposed for the 2021 Project, meaning that travel to/from the Project Site would remain car-centric considering its location adjacent to a major regional freeway (i.e., I-405/I-110 Freeways) and arterial roadways, the size and scale of the proposed land uses, and the lack of high capacity transit in the vicinity. Therefore, the VMT per service population generated by Alternative 2 would be similar to the VMT per service population generated by the 2021 Project (39.1 miles), which is above the City's significance threshold of 32.5 miles. Accordingly, because Alternative 2 would result in VMT per service population that exceeds the City's impact

threshold, it would result in an impact with respect to consistency with CEQA Guidelines Section 15064.3(b). As with the 2021 Project, Alternative 2 would be assumed to be required to implement mitigation measures requiring the implementation of a TDM Program. However, even with implementation of mitigation measures, impacts related to VMT under Alternative 2 would remain significant and unavoidable. Impacts under this alternative would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(4) Air Quality

(a) Construction

Under Alternative 2, regional and localized construction emissions would be similar to the 2021 Project with a reduction in construction emissions associated with architectural coatings, and a potential for the reduction in daily on-site equipment use due to the reduction in the size of the buildings to be constructed in PA3. Because the types of buildings and construction techniques needed to implement Alternative 2 would be the same as the 2021 Project, maximum daily emissions from use of similar construction equipment would be relatively the same as the 2021 Project leading to a similar level of impact. Alternative 2 would be assumed to be required to implement similar mitigation measures as the 2021 Project. As such, with incorporation of the similar mitigation measures as the 2021 Project, impacts would be expected to be reduced to less-than-significant levels for regional construction emissions and localized construction emissions. Impacts during construction of Alternative 2 would be less than the impacts identified for the 2021 Project, which would also be less than significant with implementation of mitigation, as Alternative 2 would include a reduction in building size in PA3, thus reducing VOC emissions.

Under Alternative 2, TAC emissions would be emitted from on-site construction activities, but for fewer weeks than needed for the larger 2021 Project. Impacts related to construction TACs would be less than significant and less than the impacts identified for the 2021 Project as the vertical building portion of PA3 would be take less time to construct, resulting in a lower lifetime exposure potential.

(b) Operation

Under Alternative 2, regional operational emissions impacts from PA1 and PA2 development would remain the same as the 2021 Project. It is anticipated that the 25 percent reduction in PA3 development proposed by Alternative 2 would result in a concomitant 25 percent reduction in operational emissions associated with PA3. This, however would not reduce total operational emission impacts proposed by Alternative 2 to less than significant on a regional level as emissions of VOC, NO_x, CO, PM₁₀, and PM_{2.5} would still exceed SCAQMD thresholds. Therefore, even with implementation of the identified mitigation measures under this 2021 SEIR (as applied to Alternative 2), due to the size of the development, regional operational impacts

under Alternative 2, when combined with concurrent project construction on the 157 Acre Site would remain significant and unavoidable. While operational emission impacts under Alternative 2 would be less than the impacts identified for the 2021 Project due to the reduction in building square footage proposed by Alternative 2, both would be significant and unavoidable.

CO hotspot and localized emissions under Alternative 2 would be less than significant (like the 2021 Project). Under Alternative 2, operational TAC emissions for Alternative 2 would be less than those identified for the 2021 Project due to the lower number of trucks traveling to and from PA3. Therefore, while TAC emissions would be reduced in comparison to the 2021 Project due to the reduction in operational activities, the reduction in total risk would be small because the contribution of operational activities to the combined risk from Project construction and operations is small. Overall, impacts related to CO hotspots, localized emissions, and TAC emissions during operation under Alternative 2 would be less than the less-than-significant impacts identified for the 2021 Project, due to the reduction in building square footage in PA3 under Alternative 2.

(5) Noise

(a) Construction

Since the construction activities associated with Alternative 2 would be similar to the 2021 Project, maximum daily construction-related noise levels experienced both within the Project Site and the immediate vicinity would be similar to the 2021 Project. Thus, as with the 2021 Project, impacts under Alternative 2 would be significant and unavoidable, even with the implementation of similar mitigation measures as with the 2021 Project. Impacts related to Alternative 2 would be less than the impacts identified for the 2021 Project, which would also be significant and unavoidable, as the overall intensity of general construction activities would be reduced since Alternative 2 reduces the amount of developed uses by 25 percent in PA3.

In addition to noise, construction activities and equipment under Alternative 2 would generate vibration throughout the Project Site. Alternative 2 would be assumed to be required to implement similar mitigation measures as the 2021 Project, and with implementation of such mitigation measures, vibration impacts would be reduced to a less-than-significant level during construction of Alternative 2. Impacts related to construction vibration under Alternative 2 would be similar to the impacts identified for the 2021 Project, which would also be less than significant with mitigation.

(b) Operation

The reduction in land use intensity proposed by Alternative 2, would result in a slight reduction in on-site noise sources in PA3 such as mechanical equipment (generators, and heating, ventilation, and air conditioning [HVAC] systems), parking lot activity, loading activity, heavy-

duty truck travel, open space recreational and social gathering activity, and amplified sound. Noise levels associated with operational on-site equipment and activity for Alternative 2 would be similar to the 2021 Project since the same uses and similar proximity to sensitive noise receptors would occur. The on-site equipment and activity noise levels associated with the development proposed by Alternative 2 would not be considered significant and would be similar to the 2021 Project (which, under this 2021 SEIR concluded a less than significant impact). An expected reduction of 25 percent in daily traffic volumes associated with land uses in PA3 would yield a slight reduction in traffic noise in comparison with the 2021 Project. Similar to the 2021 Project, Alternative 2 would result in a less than significant roadway noise impact due to the reduction in daily traffic volumes under Alternative 2. Overall, operational noise impacts under Alternative 2 would be assumed to be less than significant with the implementation of the mitigation measures as those included for the 2021 Project, and overall, noise impacts would be expected to be less than the impacts identified for the 2021 Project, due to the reduction in building square footage for land uses in PA3 under Alternative 2.

The 2021 Project would contribute to a significant increase in cumulative traffic noise along three roadway segments: (1) Main Street between Lenardo Drive and Torrance Boulevard; (2) Del Amo Boulevard between Main Street and Stamps Drive; and (3) Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard. As discussed in Section IV.E, *Noise*, of this 2021 SEIR, cumulative increases in traffic noise would reach 3.9 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive, which is less than 1 dBA over than the significance threshold of an increase of 3.0 dBA CNEL applicable to these roadway segments (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). The cumulative increase in traffic noise would reach up to 11.1 dBA CNEL along Lenardo Drive between I-405 Freeway southbound Ramp and Avalon Boulevard, which is just over 6 dBA more than the significance threshold of an increase of 5.0 dBA CNEL applicable to this roadway segment (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). Alternative 2 would reduce traffic volumes by approximately 25 percent compared to the 2021 Project. Given that the decibel scale is measured logarithmically, noise levels are reduced by 3 dBA when sound energy is reduced by 50 percent. A 25 percent reduction in traffic volumes means a 25 percent reduction in sound energy, which is equivalent to an approximately 1.25 dBA reduction in noise. Therefore, Alternative 2 would likely reduce Project-related traffic volumes and/or truck volumes such that significant impacts along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive would be eliminated. However, as the 2021 Project's increase in cumulative traffic noise along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard would up to 11.1 dBA CNEL (in other words, more than 6 dBA CNEL over the significance threshold), Alternative 2's 25 percent reduction in PA3 uses would be insufficient to reduce Project-related cumulative traffic noise impacts to below the threshold of 5.0 dBA CNEL. This segment serves as one of three access points to the Project

Site. As the Project Site is currently vacant (resulting in no contribution to the existing noise environment), existing trips along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard are limited to those utilizing the I-405 Freeway southbound exit ramp. Therefore, it is likely that any development on the Project Site would result in significant contributions to cumulative traffic noise increases along Lenardo Drive between the I-405 Freeway southbound ramp and Avalon Boulevard.

Under Alternative 2, cumulative operational traffic noise impacts would be significant and unavoidable along one studied street segment and, therefore, less than the impacts identified for the 2021 Project, which would cause significant and unavoidable impacts along three street segments.

(6) Biological Resources

As described in Section IV.F, *Biological Resources*, of this 2021 SEIR, the Project Site is located in an urbanized setting and is completely disturbed with no vegetation or habitat present to support candidate, sensitive, or special-status species on site. Rather, the Project Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, where such areas may be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. The Project Site does not contain any natural hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404, does not function as a wildlife corridor, and does not contain any notable natural features or protected biological resources. For these reasons, implementation of Alternative 2 would result in less-than-significant impacts to biological resources. Impacts under Alternative 2 would be similar to less-than-significant impacts identified for the 2021 Project.

(7) Energy

(a) Construction

Alternative 2, similar to the 2021 Project, would be required utilize fuel efficient equipment consistent with state and federal regulations, and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. Implementation of the construction waste management plan (which Alternative 2 would be expected to comply with) would increase the amount of waste sent to material recovery facilities but would reduce the amount of waste that would otherwise be sent to landfills, thus reducing the number of truck trips to landfills. Landfills are typically located further away from City centers as compared to material recovery facilities. As a result, implementation and compliance with the construction waste management plan would further reduce transportation fuel consumption. Similar to the 2021 Project, construction of Alternative 2 would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the site. Incorporation

of the enhanced idling restrictions and the use of cleaner, energy-efficient equipment similar to the PDFs as proposed under the 2021 Project would result in less fuel combustion and energy consumption and thus minimize Alternative 2's construction-related energy use. Therefore, construction of this alternative would not result in the wasteful, inefficient, and unnecessary consumption of energy. Impacts would be less than significant and less than the less-than-significant impacts identified for the 2021 Project, due to reduction in overall construction duration under Alternative 2.

(b) Operation

Operation of Alternative 2 would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the site. The energy usage required for operations and routine and incidental maintenance activities is based on the increase in energy demand from the new buildings. Alternative 2 would comply with or exceed the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance.

Alternative 2's electricity and natural gas usage is expected to represent a small fraction of SCE and SoCalGas' energy use and would therefore not constitute a discernible increase in the utilities' energy demands. For these reasons, these utilities would be expected to meet the operational demand of Alternative 2 with respect to electricity and natural gas services. Due to the reduction in the size of the development within PA3 in comparison with the 2021 Project, energy usage for PA3 would be reduced by 25 percent. Therefore, less than significant operational impacts to electricity and natural gas supply and infrastructure associated with Alternative 2 would occur.

With respect to operational transportation-related fuel usage, Alternative 2, similar to the 2021 Project, would support statewide efforts to improve transportation energy efficiency. This alternative would co-locate complementary employment, retail, restaurant, entertainment, and residential land uses on the Project Site. Alternative 2 would also be located near major transit facilities, which would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related fuel demand. Additionally, VMT for PA3 under Alternative 2 would be reduced due to the reduction in the size of the light industrial, commercial, and retail land uses. However, similar to the 2021 Project, Alternative 2 would include the installation of EVSE in excess of what is required by the CALGreen Code. Alternative 2 would incorporate the same PDFs as the 2021 Project which includes the incorporation of electrical vehicle truck fleets. Similar to the 2021 Project, alternative-fueled, electric, and hybrid vehicles utilized by passengers would reduce the consumption of gasoline and diesel fuel associated with Alternative 2. As Alternative 2 would incorporate characteristics and measures that would reduce transportation fuel usage, energy

impacts on transportation fuel supplies and infrastructure associated with this alternative would be less than significant.

Based on the above, operational energy impacts under Alternative 2 would be less than the less-than-significant impacts identified for the 2021 Project, due to reduction in building square footage under Alternative 2.

(8) Greenhouse Gas Emissions

Under Alternative 2, construction and operational GHG emissions would be reduced for PA3, but would remain the same for PA1 and PA2. As Alternative 2 would incorporate the same PDFs as the 2021 Project, Alternative 2 would be consistent with emissions reduction strategies and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions. Therefore, through implementation of required GHG emissions reduction strategies, this alternative would be consistent with and would not hinder the ability of the state or the City to achieve emissions reduction targets. Impacts would be less than significant under Alternative 2, and less than the less-than-significant impacts identified for the 2021 Project, due to reduction in building square footage for land uses in PA3 under Alternative 2.

c. Relationship of Alternative 2 to the 2021 Project Objectives and Impacts

Alternative 2 would continue to implement the RAP and assumes that the scale of the 2021 Project would be reduced through a 25 percent reduction to the industrial, commercial and retail land uses within PA3. Alternative 2 would meet the 2021 Project's Objectives, but to a lesser extent as compared to the 2021 Project due to the reduction in total building square footage provided under Alternative 2. The 25 percent reduction of the land uses in PA3 proposed by Alternative 2 would reduce the economic viability of the Project Site as the reduction in the square footage would reduce the amount of revenue and/or property tax that could be generated on site as well as the number of employment opportunities offered on the Project Site. Specifically, the 25 percent reduction in square footage within PA3 would not achieve the same level of productive reuse of a large brownfield site as the 2021 Project.

Implementation of Alternative 2 would result in a reduction of impacts regarding shade/shadow, light/glare, air quality (during construction), noise during operation, energy, and GHG emissions impacts, in comparison to the 2021 Project. Alternative 2 would also serve to reduce the significant and unavoidable operational air quality impacts proposed by the 2021 Project due to the reduction in building square footage under Alternative 2. In addition, Alternative 2 would reduce significant and unavoidable cumulative roadway noise impacts for two of the three intersections that would otherwise occur as part of the 2021 Project, resulting in fewer significant and unavoidable cumulative impacts (although one significant and unavoidable impact would remain at Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard). All

other impacts would be similar as those anticipated under the 2021 Project. No significant and unavoidable impacts posed by the 2021 Project would be eliminated under Alternative 2. For the reasons stated above, Alternative 2 would not substantially lessen significant environmental impacts associated with the 2021 Project and while it would feasibly attain most of the basic 2021 Project Objectives, they would not be attained to the same degree as the 2021 Project.

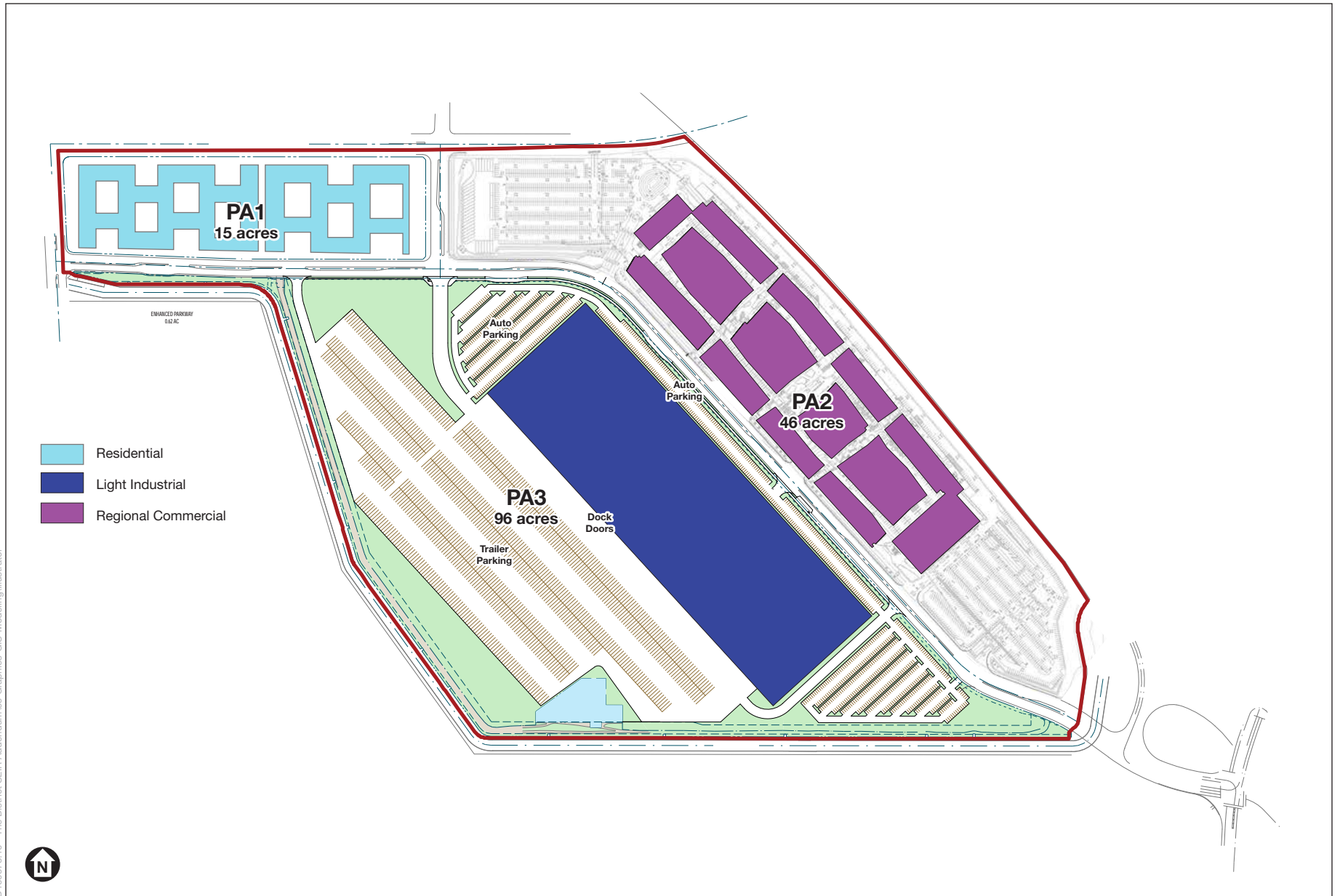
V.F.4 Alternative 3: Reduced 2021 Project with Reduction of Light-Industrial (E-Commerce/Fulfillment Only) Uses in PA3

a. Introduction

The Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/Fulfillment Only) Uses in PA3 Alternative (Alternative 3) assumes that PA3 would exclusively include light industrial uses, but with a reduction in square footage as compared to the 2021 Project light industrial uses. This alternative would not include the Carson Country Mart or any associated neighborhood serving commercial, restaurant, or park uses within PA3(b) or the Enhanced Parkway in PA3(a). The entire developable acreage of PA3 would be used for light industrial uses. The land uses in PA1 and PA2 would remain the same as the 2021 Project (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

Specifically, this alternative would include up to 1,000,000 sf of light industrial uses, with the light industrial uses consisting of exclusively e-commerce and/or fulfillment center uses (and no distribution center/parcel hub uses). The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the RAP and applicable regulatory requirements. It is assumed that one light industrial building would be developed under this alternative. The building height of the proposed light industrial building is assumed to be similar to the heights proposed under the 2021 Project (i.e., maximum of 55 feet); however, given the reduction in building square footage, the building setbacks would be greater from the western boundary of the Project Site. Vehicular parking spaces would be provided adjacent to the northern, northwestern and southeastern portion of the proposed light industrial building. Loading docks provided on the southwestern portion of the proposed light industrial building and trailer parking spaces located adjacent to the loading dock area, between the proposed light industrial building and the Torrance Lateral. A screen wall of 12 feet will be provided for the trailer parking area. A figure illustrating the conceptual site plan of Alternative 3 is provided in **Figure V-3, Alternative 3 – Conceptual Site Plan**.

The reduction in light industrial uses and elimination of the Carson Country Mart under this alternative would result in a 38 percent reduction in development square footage in PA3. Maximum development on the Project Site under Alternative 3 (for PA1, PA2, and PA3) would consist of a total of 1,711,500 sf of floor area and up to 1,250 residential units. A comparison between Alternative 3 mix of land uses and the 2021 Project is provided in Table V-2.



SOURCE: RGA, 2021; ESA, 2021

The District at South Bay Specific Plan Amendment

Figure V-3
Alternative 3 - Conceptual Site Plan



b. Analysis of Alternative 3: Reduced 2021 Project with Reduction of Light-Industrial (E-Commerce/Fulfillment Only) Uses in PA3

(1) Land Use and Planning

(a) Physically Divide an Established Community

Since implementation of Alternative 3 would maintain a similar but more restricted mix of land uses on the Project Site as proposed for the 2021 Project, impacts to existing land use patterns under this alternative would be expected to remain similar to the 2021 Project. Both the 2021 Project and Alternative 3 would be considered infill developments within an existing urban setting, which would provide a continuation of existing and intended development patterns within the City. Similar to the 2021 Project, Alternative 3 would also provide a system of roads and sidewalks that would physically connect the Project Site both internally and externally. Therefore, Alternative 3, as with the 2021 Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Impacts related to the land use patterns would be less than significant under Alternative 3 and similar to the less-than significant impacts identified for the 2021 Project.

(b) Consistency with Applicable Land Use Plans, Policies, and Regulations

Under Alternative 3, the Project Site would be developed with only one light industrial building totaling up to 1,000,000 sf of e-commerce and fulfillment center uses. PA1 and PA2 would remain the same as proposed under the 2021 Project and remediation of the Project Site would continue in accordance with the approved RAP. Alternative 3 would limit the allowable land uses within PA3 solely to light industrial uses, which as with the 2021 Project, would require a General Plan Amendment to allow for the land use mix proposed under Alternative 3. However, Alternative 3 would not include the development of the Carson Country Mart, which would provide neighborhood commercial uses, a variety of passive and active spaces, and programmed activities within a green environment, that would serve the local community and visitors to the Project Site. Thus, Alternative 3 would reduce the mix of uses compared with the 2021 Project since the neighborhood commercial uses and publicly accessible open space and amenity area would not be developed. The reduction in commercial square footage would reduce the opportunities for residents within the Project Site and residents of the surrounding neighborhoods to have easy access to neighborhood commercial uses in comparison to the 2021 Project. In addition, Alternative 3 would not provide green space and a place to gather to the same extent as the 2021 Project. Thus, Alternative 3 would not be expected to create a center focus within the community combining commercial, civic, cultural and recreational uses as with the 2021 Project (Policy LU 15.4) or be as helpful as the 2021 Project in helping to establish a City identity (Policy ED 1.4) as would occur under the 2021 Project.

As previously mentioned, Alternative 3 would reduce the amount of light industrial uses on the Project Site (from 1,567,090 sf to 1,000,000 sf) and would not provide any commercial square footage within PA3. As such, with regard to SCAGs RTP/SCS goal of improving mobility, regional economic prosperity, and global competitiveness, Alternative 3 would not fulfill the SCAG RTP/SCS goals to the same extent as the 2021 Project due to the reduction in square footage. However, Alternative 3 would not conflict with applicable land use plans, policies, and regulations, and impacts related to land use and planning would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(2) Aesthetics

(i) Construction

Construction under Alternative 3 would involve the same construction activities as the 2021 Project, but would result in less construction in PA3 compared to the 2021 Project. Even with the reduction in square footage in PA3, construction of Alternative 3 would still require construction equipment and activity on the Project Site which would change the visual landscape from existing conditions, similar to the 2021 Project. As with the 2021 Project, as buildings are erected on the Project Site, the loss of undeveloped area and a feeling of spaciousness would continue to be incrementally altered as Alternative 3 is constructed. Even with the reduction in square footage in PA3, construction of Alternative 3 would still result in a fully developed Project Site, which would result in a significant and unavoidable impact regarding the loss of a valued visual resource due to the loss of the feeling of spaciousness within the City. Impacts under Alternative 3 would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(ii) Operation

a) Valued Resources

Alternative 3 would result in a mix of residential, commercial, and light industrial uses. As with the 2021 Project, Alternative 3 would develop the Project Site with a mix of buildings of various sizes and heights and associated landscaping. As with the 2021 Project, the mix of uses would attract visitors and vehicles to the visual landscape of the Project Site. Although Alternative 3 would not result in the development of the Carson Country Mart, impacts under Alternative 3 would be less than significant, as development would occur under a Specific Plan that would result in a cohesive and integrated development. Impacts under Alternative 3 would be similar to the less-than-significant impacts identified for the 2021 Project.

b) Contrast with Existing Development

Under Alternative 3, PA1 and PA2 would remain the same as proposed under the 2021 Project and remediation of the Project Site would continue in accordance with the approved RAP. PA3 under Alternative 3 would be developed with only one light industrial building, totaling up to 1,000,000 sf of e-commerce and fulfillment center uses (eliminating the Carson Country Mart uses), which would result in a 38 percent reduction in square feet of development on PA3. Although overall square footage would be reduced under Alternative 3 compared with the 2021 Project, the light industrial uses would be located within one expansive structure. As such, the mass of the building would be greater since the square footage would not be broken up in to multiple buildings as it would be under the 2021 Project. As such, the proposed building under Alternative 3 would not provide the same visual interest and space between the structures that would occur under the 2021 Project. The large expanse of building would be in contrast with development within the Project Site as well as development in the surrounding area. While the building would be setback from the Project Site boundary, the expanse of building would be in conflict with the surrounding on- and off-site development pattern. In addition, the truck parking would be located adjacent to the southwestern and western property line. Although a 12-foot screening wall would be located along the property line, the expansive parking adjacent to the property line with be in contrast with the surrounding residential development. Alternative 3 would implement similar mitigation measures as the 2021 Project to ensure that buildings adjacent to surrounding residential uses maintain sufficient setback relative to height so as to be compatible with surrounding development. However, in light of the expansive stretch of structure and truck parking, while impacts under Alternative 3 would be less than significant with implementation of mitigation, impacts would be greater than the impacts identified for the 2021 Project.

c) Comparison with Existing Regulations

The visual character and visual quality are established by the development standards in the zoning code and other applicable regulations. A Specific Plan, which provides site-specific development standards, would be the governing regulations for the Project Site pursuant to the city's Zoning Ordinance. Like the 2021 Project, Alternative 3 would be subject to the regulations established in a Specific Plan prepared to restrict the potential for adverse effects of development on the visual quality of the area. Visual character and quality would be achieved through screening rather than through design techniques used to provide visual interest and break up the mass of development. Alternative 3 would not conflict with regulations regarding design and impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

d) View Resources

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site is not considered a view resource given the history of use as a landfill and the ongoing remediation activities and does not contain any features that would typically fall under the heading of view resource. Views of the

two notable features that might catch the eye of travelers through the area, the Goodyear Wingfoot Two and the Big Man statue on the south of the I-405 Freeway would not be lost due to development of Alternative 3, similar to the 2021 Project. Views over the Project Site are limited due to intervening development, the flat terrain in the area surrounding the Project Site, and the fact that the Project Site sits atop a berm that slopes down to surrounding areas. In addition, since Alternative 3 would reduce the total square footage in PA3 by 38 percent, there would be less development in that area of the Project Site which would allow for better views within and across the Project Site. Therefore, similar to the 2021 Project, development of Alternative 3 would not substantially diminish views. Impacts on views of unique, valued scenic resources would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

e) *Shade/Shadow*

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the maximum off-site shading that could occur on sun-sensitive uses is limited, with the greatest shading potential occurring during the spring/autumn equinox, with the longest shadows extending to the west across the Project Site boundary by Building D in the southwestern portion of PA3. Since the land uses and building footprints would be the same in PA1 and PA2 under Alternative 3 as with the 2021 Project, the potential for shade and shadow in those areas of the Project Site would be the same between Alternative 3 and the 2021 Project. However, Alternative 3 would differ from the 2021 Project in PA3, where only one building associated with the light industrial uses would be developed and no Carson Country Mart and associated commercial buildings would be developed, resulting in a total square footage reduction of approximately 38 percent on PA3. While the building height would remain the same under Alternative 3 as with the 2021 Project, due to the reduction in square footage and associated parking as well as the greater setbacks under Alternative 3, the overall development footprint in PA3 would be substantially reduced compared to the 2021 Project. Due to the reduction in square footage and greater setbacks, the extent of the off-site shading would be substantially reduced compared to the shadows created by the 2021 Project. Therefore, impacts related to shade/shadow with implementation of Alternative 3 would be less than significant. Impacts under Alternative 3 would be less than the less-than-significant impacts identified for the 2021 Project due to the greater setbacks and reduction in building square footage under Alternative 3.

f) *Conclusion*

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, Alternative 3, as with the 2021 Project, would not conflict with applicable zoning and other regulations governing scenic quality; however, as noted above, in light of the expansive stretch of structure and truck parking proposed under Alternative 3, impacts related to zoning and other

regulations governing scenic quality would be the greater than the less-than-significant impacts identified for the 2021 Project.

(b) Light/Glare

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site would be located within an urban area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. Similar to the 2021 Project, Alternative 3 would also be required to comply with the lighting and signage design features included in the 2021 Specific Plan Amendment (as the same may be modified to incorporate the Alternative 3 project development proposal) as well as the CALGreen lighting standards, which would limit off-site light spill by controlling light intensity and by shielding on-site light sources. Alternative 3 would be assumed to be required to implement similar mitigation measures as the 2021 Project, which would ensure that the presentation of signs along the I-405 Freeway and the use of signage and lighting are in compliance with the conceptual sign requirements set forth in the 2021 Specific Plan Amendment, to avoid a significant impact. In addition, the reduction in total buildings, footprints, size, and amount of required parking under Alternative 3 would also reduce the amount of on-site lighting required in PA3, which would reduce the overall amount of artificial light across the Project Site. Therefore, impacts associated with artificial lighting with implementation of Alternative 3 would be less than significant and less than the less-than-significant impacts identified for the 2021 Project, due to the reduction in building size under Alternative 3.

(3) Transportation

(a) Conflict with a Program, Plan, Ordinance or Policy

Under Alternative 3, the light industrial land uses would be reduced as compared to the 2021 Project and the commercial and recreational uses associated with the Carson Country Mart would no longer be present, resulting in a reduction of square footage of 38 percent in PA3. This reduction in intensity and removal of land uses as compared with the 2021 Project would result in fewer vehicle trips being generated. Under Alternative 3, access points connecting the Project Site to the regional roadway network would remain unchanged from the 2021 Project, as would bicycle, pedestrian, and transit facilities. Alternative 3 would not conflict with any programs, plans, ordinances or policies addressing the circulation system, transit, roadways, bicycle and pedestrian facilities, including those of the 2021 Specific Plan Amendment, which would be modified to accommodate the proposed reduction under this alternative, the City of Carson General Plan, and the Master Plan of Bikeways. Accordingly, Alternative 3 would neither implement nor conflict with any such programs, plans, ordinances, or policies, and, as such, less-than-significant impacts would occur. Impacts under Alternative 3 would be similar to the less-than-significant impacts identified for the 2021 Project.

(b) VMT

As noted above, vehicle trips generated by Alternative 3 can be expected to be less than the number generated by the 2021 Project due to the reduction in intensity and removal of land uses as compared with the 2021 Project. As such, the service population would also decrease proportionally; however, the trip generation characteristics for the overall Project Site (i.e., trip lengths, number of vehicle trips generated per square foot of use) would be similar to the 2021 Project. Furthermore, the location of the proposed land uses under Alternative 3 would be similar as proposed for the 2021 Project, meaning that travel to/from the Project Site would remain somewhat car-centric considering its location adjacent to a major regional freeway (i.e., I-405/I-110 Freeways) and arterial roadways, the size and scale of the proposed land uses, and the lack of high capacity transit in the vicinity. Therefore, the VMT per service population generated by Alternative 3 would be similar to the VMT per service population generated by the 2021 Project (39.1 miles), which is above the City's significance threshold of 32.5 miles. Accordingly, because Alternative 3 would result in VMT per service population that exceeds the City's impact threshold, it would result in an impact with respect to consistency with CEQA Guidelines Section 15064.3(b). As with the 2021 Project, Alternative 3 would need to implement mitigation measures to address such impacts, including the implementation of a TDM Program. However, even with implementation of mitigation measures, impacts related to VMT under Alternative 3 would remain significant and unavoidable. Impacts under this alternative would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(4) Air Quality**(a) Construction**

Under Alternative 3, regional and localized construction emissions would be similar to the 2021 Project with a reduction in construction emissions associated with architectural coatings and the potential reduction in on-site equipment to be used due to the reduction in the size of the buildings to be constructed in PA3. Because the types of buildings and construction techniques needed to implement Alternative 3 would be the same as the 2021 Project, maximum daily emissions from use of similar construction equipment would be relatively the same as the 2021 Project leading to a similar level of impact. Alternative 3 would be assumed to be required to implement similar mitigation measures as the 2021 Project. As such, with incorporation of the same mitigation as the 2021 Project, impacts would be expected to be reduced to less-than-significant levels for regional construction emissions and localized construction emissions. Impacts during construction Alternative 3 would be less than the impacts identified for the 2021 Project, which would also be less than significant with implementation of mitigation, as Alternative 3 would include a reduction in building size in PA3, thus reducing VOC emissions.

Under Alternative 3, TAC emissions would be emitted from on-site construction activities, but for fewer weeks than needed for the larger the 2021 Project. Impacts related to construction TACs would be less than significant and less than the less-than-significant impacts identified for the 2021 Project as the vertical building portion of PA3 would be less intensive and therefore would take less time to construct, resulting in a lower lifetime exposure potential.

(b) Operation

Under Alternative 3, regional operational emissions impacts would remain relatively the same as the 2021 Project. While overall vehicle trips generated by Alternative 3 can be expected to be less than the number generated by the 2021 Project due to the reduction in intensity and removal of land uses as compared with the 2021 Project, the change in vehicle trips under Alternative 3 would not occur equally across all vehicle types. Alternative 3 would result in fewer heavy-duty truck trips, but would result in greater passenger vehicle trips compared to the 2021 Project. It is anticipated that mobile source NOx and DPM emissions would be reduced under this alternative. This is because trucks have higher emission rates of NOx and DPM than passenger cars and because parcel hub/distribution center trips included in the 2021 Project result in approximately four times the number of truck trips as e-commerce/fulfillment centers. As a result, the overall reduction in square footage of buildings associated with Alternative 3 would reduce operational trips for these reduced buildings as trip generation is determined by building square footage. Furthermore, and the removal of the Carson Country Mart under Alternative 3 would reduce passenger vehicle trips to and from the site.^{363,364} Even with the additional employees associated with Alternative 3's e-commerce/fulfillment center land use compared to a parcel hub/distribution facility, the overall NOx and DPM emissions would be reduced under this

³⁶³ For the Project Site, it is estimated that fulfillment center trips would result in an average trip length of 32.5 miles whereas traditional warehouse/distribution center trips would have an average trip length of 40 miles. This is documented in detail in Section IV.D, Air Quality, of this 2021 SEIR. Information in the Air Quality section is taken from: Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021; and SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, March 14, 2014, http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf?sforsn=2, accessed June 2021.

³⁶⁴ Trip rates for fulfillment centers are 7.463 trips per ksf for cars and 0.717 trips per ksf for trucks. Distribution centers are 4.831 trips per ksf for cars and 2.919 trips per ksf for trucks. This results in fulfillment centers generating 1.54x more car trips/employees than distribution centers and distribution centers generating 4.07x more truck trips than fulfillment centers. Fehr & Peers, Fulfillment Center vs. Distribution center Trip Generation e-mail, 2021.

alternative.³⁶⁵ However, emissions of CO and non-diesel PM10 and PM2.5 could potentially increase due to overall increased passenger vehicle trips from the greater number of employees associated with the e-commerce/fulfillment center land use relative to a distribution center. The increased passenger vehicle trips correlate to higher emission rates of CO relative to truck trips. The emission rates of PM10 and PM2.5 from brakewear and tirewear are similar for trucks and passenger vehicles, thus the increase in the number of passenger vehicle trips and passenger trip VMT would be expected to generate an increase in non-diesel PM10 and PM2.5 emissions.

Therefore, operational emissions would not be expected to change substantially enough from the 2021 Project to result in less than significant regional emissions. Alternative 3 is anticipated to still result in significant and unavoidable regional air quality impacts with respect to VOC, NOx, CO, PM10, and PM2.5. In addition, even with implementation of the identified mitigation measures, regional operational impacts and concurrent construction and operational impacts (i.e., the combined emissions from when construction occurs on part of the site while operations are occurring on the remainder of the site) under Alternative 3 would remain significant and unavoidable despite the expected reductions to some air pollutant emissions, like NOx. Impacts related to regional emissions during operation and regional emissions during concurrent construction and operational under Alternative 3 would be similar to the impacts identified for the 2021 Project.

CO hotspot and localized emissions under Alternative 3 would be similar to the 2021 Project as the magnitude of potential congestion at roadway intersections and on-site emissions would remain predominantly the same or similar. Therefore, as with the 2021 Project, Alternative 3 would result in less-than-significant impacts for localized criteria pollutants and CO hotspots. Under Alternative 3, TAC emissions would be emitted from operational activities. Operational TAC impacts would be slightly less than those identified for the 2021 Project as there would be a reduction in diesel trucks accessing the site.

As health impact risks from emissions are primarily driven by construction activities, the overall construction-related risk would be slightly less than the risks identified for the 2021 Project. Alternative 3 would have reduced diesel truck trips and a potentially shortened construction schedule associated with a reduction in building square footage in PA3. Therefore, Alternative 3's construction and operational risks would be slightly reduced compared to the 2021 Project.

³⁶⁵ *Operational emissions from the 2021 Project result in approximately 361 lbs/day of mobile source emissions (336 lbs/day of NOx emissions from Trucks and 26 lbs/day of NOx emissions from cars). Given that trucks would be reduced by approximately 60 percent (574 from currently planned fulfillment centers and 25 percent of the 2,071 distribution center trucks that would be changed to fulfillment centers) and cars would be increased by approximately 18 percent (5,995 from currently planned fulfillment centers and 1.5 times the 3,419 distribution center trucks that would be changed to fulfillment centers), the resulting NOx emissions would be reduced by approximately 46 percent.*

Overall, impacts related to CO hotspots, localized emissions, and TACs during operation under Alternative 3 would be similar to the less-than-significant impacts identified for the 2021 Project.

(5) Noise

(a) Construction

Because the type of construction associated with Alternative 3 would be similar to the 2021 Project, maximum daily construction-related noise levels experienced both within the Project Site and the immediate vicinity would be similar to the 2021 Project. As such, impacts under Alternative 3 would be significant and unavoidable, even with implementation of similar mitigations as with the 2021 Project. The construction techniques required to construct Alternative 3 and maximum daily construction equipment would be relatively the same as the 2021 Project. Thus, Alternative 3 would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

In addition to noise, construction activities and equipment under Alternative 3 would generate vibration throughout the Project Site. Alternative 3 would be assumed to be required to implement similar mitigation as the 2021 Project, and with implementation of mitigation measures, vibration impacts would be reduced to a less-than-significant level during construction of Alternative 3. Impacts related to construction vibration under Alternative 3 would be similar to the impacts identified for the 2021 Project, which would also be less than significant with mitigation.

(b) Operation

The reduction in light industrial land use intensity for PA3, and the distance of the loading dock from noise-sensitive receptors relative to the 2021 Project under this alternative would also result in a slight reduction in on-site noise sources such as mechanical equipment, parking lot activity, loading activity, on-site equipment and activity, and heavy-duty truck travel. The elimination of the Carson Country Mart would eliminate on-site noise sources including outdoor recreational and social gathering space noise and amplified sound. A reduction of daily traffic volumes and heavy-duty trucks associated with Alternative 3 would yield a slight reduction in comparison to traffic noise associated with the 2021 Project. As with the 2021 Project, Alternative 3 would result in a less than significant roadway noise impact. Overall, operational noise impacts under Alternative 3 would be expected to be less than significant with implementation of the same mitigation measures required for the 2021 Project. Impacts under Alternative 3 would be less than the impacts identified for the 2021 Project, which would also be less than significant with mitigation, due to the reduction in building square footage and removal of land uses under Alternative 3.

As described above, the 2021 Project would contribute to a significant increase in cumulative traffic noise along three roadway segments. As discussed in Section IV.E, *Noise*, of this 2021 SEIR, cumulative increases in traffic noise would reach 3.9 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive, which is less than 1 dBA over than the significance threshold of an increase of 3.0 dBA CNEL applicable to these roadway segments (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). The cumulative increase in traffic noise would reach up to 11.1 dBA CNEL along Lenardo Drive between I-405 Freeway southbound Ramp and Avalon Boulevard, which is just over 6 dBA more than the significance threshold of an increase of 5.0 dBA CNEL applicable to this roadway segment (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). While overall vehicle trips generated by Alternative 3 are expected to be less than the number of trips generated by the 2021 Project due to the reduction in intensity and removal of land uses as compared with the 2021 Project, the change in vehicle trips under Alternative 3 would not occur equally across all vehicle types. Alternative 3 would result in fewer heavy-duty truck trips, but would result in greater passenger vehicle trips as compared to the 2021 Project, with trucks generating a greater noise level than a passenger vehicle.

Alternative 3 would likely reduce Project-related truck volumes along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive. However, Alternative 3's reduction in truck volumes would still likely result in a noise level increase along these two roadway segments, but the increase is anticipated to be less than 3.0 dBA CNEL threshold applicable to these roadway segments, which would eliminate the significant impact. However, given the level of exceedance of the threshold along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard under the 2021 Project, it is not expected that Alternative 3 would result in sufficient reductions in Project-related traffic to eliminate the significant cumulative impact (despite the reduction in square footage proposed by the Alternative 3 land uses). Alternative 3 would likely still result in an increase in traffic noise along Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard of more than the 5.0 dBA CNEL significance threshold applicable to this roadway segment. Thus, under Alternative 3, cumulative operational traffic noise impacts would be significant and unavoidable along one studied street segment and, therefore, less than the impacts identified for the 2021 Project, which would be significant and unavoidable along three street segments.

(6) Biological Resources

As described in Section IV.F, *Biological Resources*, of this 2021 SEIR, the Project Site is located in an urbanized setting and is completely disturbed with no vegetation or habitat present to support candidate, sensitive, or special-status species on site. The Project Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, where such areas may be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. The Project Site does not contain any natural

hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404, does not function as a wildlife corridor, and does not contain any notable natural features or protected biological resources. For these reasons, implementation of Alternative 3 would result in less-than-significant impacts to biological resources. Impacts under Alternative 3 would be similar to less-than-significant impacts identified for the 2021 Project.

(7) Energy

(a) Construction

Alternative 3, consistent with the 2021 Project would utilize fuel efficient equipment consistent with state and federal regulations, and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. Implementation of the construction waste management plan would reduce truck trips to landfills, which are typically located some distance away from city centers, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. Based on the available data, construction would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the site. Incorporation of the enhanced idling restrictions and the use of cleaner, energy-efficient equipment similar to the PDFs proposed under the 2021 Project, would result in less fuel combustion and energy consumption and thus minimize Alternative 3's construction-related energy use. Therefore, construction of this alternative would not result in the wasteful, inefficient, and unnecessary consumption of energy. Impacts would be less than significant and less than the less-than-significant impacts identified for the 2021 Project, due to reduction in overall construction duration under Alternative 3.

(b) Operation

Operation of Alternative 3 would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the site. The energy usage required for operations and routine and incidental maintenance activities is based on the increase in energy demand from the new buildings. Alternative 3 would comply with or exceed the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance. Alternative 3's electricity and natural gas usage is expected to represent a small fraction of SCE and SoCalGas' energy use and would therefore not constitute a discernible increase in the utilities' energy demands. Energy usage for PA3 would be reduced compared to the 2021 Project given the reduction in square footage of development under this alternative. For these reasons, these service providers would be expected to meet the operational demand of Alternative 3 on electricity and natural gas services, consistent to the 2021 Project. Due to the reduction in the

size of development within PA3 from the 2021 Project, building energy usage for PA3 would be reduced by 38 percent based on the total square footage reduction on PA3. Therefore, less than significant operational impacts to electricity and natural gas supply and infrastructure associated with Alternative 3 would occur.

With respect to operational transportation-related fuel usage, Alternative 3, similar to the 2021 Project, would be required to support statewide efforts to improve transportation energy efficiency. This alternative would co-locate complementary employment, retail, restaurant, entertainment, and residential land uses on the Project Site. Alternative 3 would also be located near major transit facilities, including the MTA bus Routes 446, 447, and 205. The proximity to transit and existing off-site uses would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related fuel demand. Additionally, while the reduction in truck trips associated with fulfillment center land use is offset by the increase in employee trips, total VMT for PA3 would be reduced compared to the 2021 Project Alternative due to a reduction in daily truck trips.³⁶⁶ Alternative 3 would be assumed to include the installation of EVSE in excess of what is required by the CALGreen Code, consistent with the 2021 Project. Alternative 3 would still incorporate the same PDFs as the 2021 Project which includes the incorporation of electrical vehicle truck fleets. Alternative-fueled, electric, and hybrid vehicles, to the extent these types of vehicles would be utilized by passengers, would reduce the consumption of gasoline and diesel on the Project Site. As Alternative 3 would incorporate characteristics and measures that would reduce transportation fuel usage, energy impacts on transportation fuel supplies and infrastructure associated with this alternative would be less than significant, consistent with the 2021 Project.

Based on the above, operational energy impacts under Alternative 3 would be less than the less-than-significant impacts identified for the 2021 Project, due to reduction in building square footage under Alternative 3.

(8) Greenhouse Gas Emissions

Under Alternative 3, it is anticipated that GHG emissions would be reduced under this alternative because parcel hub/distribution center truck trips are approximately four times greater than those for an e-commerce/fulfillment center. Moreover, the reduction in square footage of buildings within PA3 under this alternative in comparison to the 2021 Project would reduce

³⁶⁶ *Daily truck trips are based on the size and type of warehouse.*

overall operational trips (employee and truck trips) for PA3.³⁶⁷ GHG emissions would be less than with what was analyzed for the 2021 Project due to the reduction in overall trips (particularly the reduction in truck trips) and energy use. Assuming Alternative 3 incorporates the same PDF measures as with the 2021 Project, Alternative 3 would be consistent with emissions reduction strategies and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions consistent with the 2021 Project analysis. Therefore, through implementation of required GHG emissions reduction strategies, this alternative would be consistent with and would not hinder the ability of the state or the City to achieve emissions reduction targets. Impacts would be less than significant under Alternative 3 and less than the less-than-significant impacts identified for the 2021 Project.

c. Relationship of Alternative 3 to the 2021 Project Objectives and Impacts

Alternative 3 would continue to implement the RAP consistent with the requirements for the 2021 Project. Alternative 3 would include the same uses as the 2021 Project for PA1 and PA2 but would restrict the proposed land uses in PA3 to solely light industrial uses (e-commerce) and would reduce PA3's total square footage by 38 percent. While this alternative would achieve most of the 2021 Project Objectives, it would not achieve Objective 8 (i.e., "provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site") as it would not provide vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site as the Carson Country Mart would not be developed under this alternative. In addition, the restriction to light industrial and associated 38 percent reduction of the square footage in PA3 would reduce the economic viability of the Project Site as the reduction in the land uses would reduce the amount of revenue and/or property tax that could be generated on site. Specifically, the 38 percent reduction in square footage within PA3 would not achieve the same level of productive reuse of a large brownfield site as the 2021 Project.

³⁶⁷ For the Project Site, it is estimated that fulfillment center trips would result in an average trip length of 32.5 miles whereas traditional warehouse/distribution center trips would have an average trip length of 40 miles. This is documented in detail in Section IV.D, Air Quality, of this 2021 SEIR. Information in the Air Quality section is taken from: Fehr & Peers, Memorandum Carson District Project – Truck Trip Length Estimates, September 30, 2021; and SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, March 14, 2014, http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf?sforsn=2, accessed June 2021.

Implementation of Alternative 3 would result in reduced less than significant shade/shadow, light/glare, air quality during construction, noise during operation, energy, and GHG impacts. Alternative 3 would also reduce significant and unavoidable VMT impacts due to the reduction in building square footage as compared to the 2021 Project. In addition, Alternative 3 would reduce significant and unavoidable cumulative roadway noise impacts for two of the three intersections that would otherwise occur as part of the 2021 Project, resulting in fewer significant and unavoidable cumulative impacts (although one significant and unavoidable impact would remain at Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard). Alternative 3 would have a greater impact as it relates to regulations governing scenic quality during operation of the alternative due to the proposed expansive stretch of the single proposed light industrial building and truck parking proposed under Alternative 3. All other impacts would be similar as those anticipated under the 2021 Project. While overall air quality impacts during construction of Alternative 3 would be similar to those for the 2021 Project, it should be noted that Alternative 3 would be assumed to reduce health risks due to the reductions in diesel truck use and the potentially shortened construction schedule associated with a reduction in building square footage in PA3. However, no significant and unavoidable impacts posed by the 2021 Project would be eliminated under Alternative 3. For the reasons stated above, Alternative 3 would not substantially lessen significant environmental impacts associated with the 2021 Project. While it would be expected to attain most of the basic 2021 Project Objectives, it would not be expected to achieve Objective 8 of the 2021 Project.

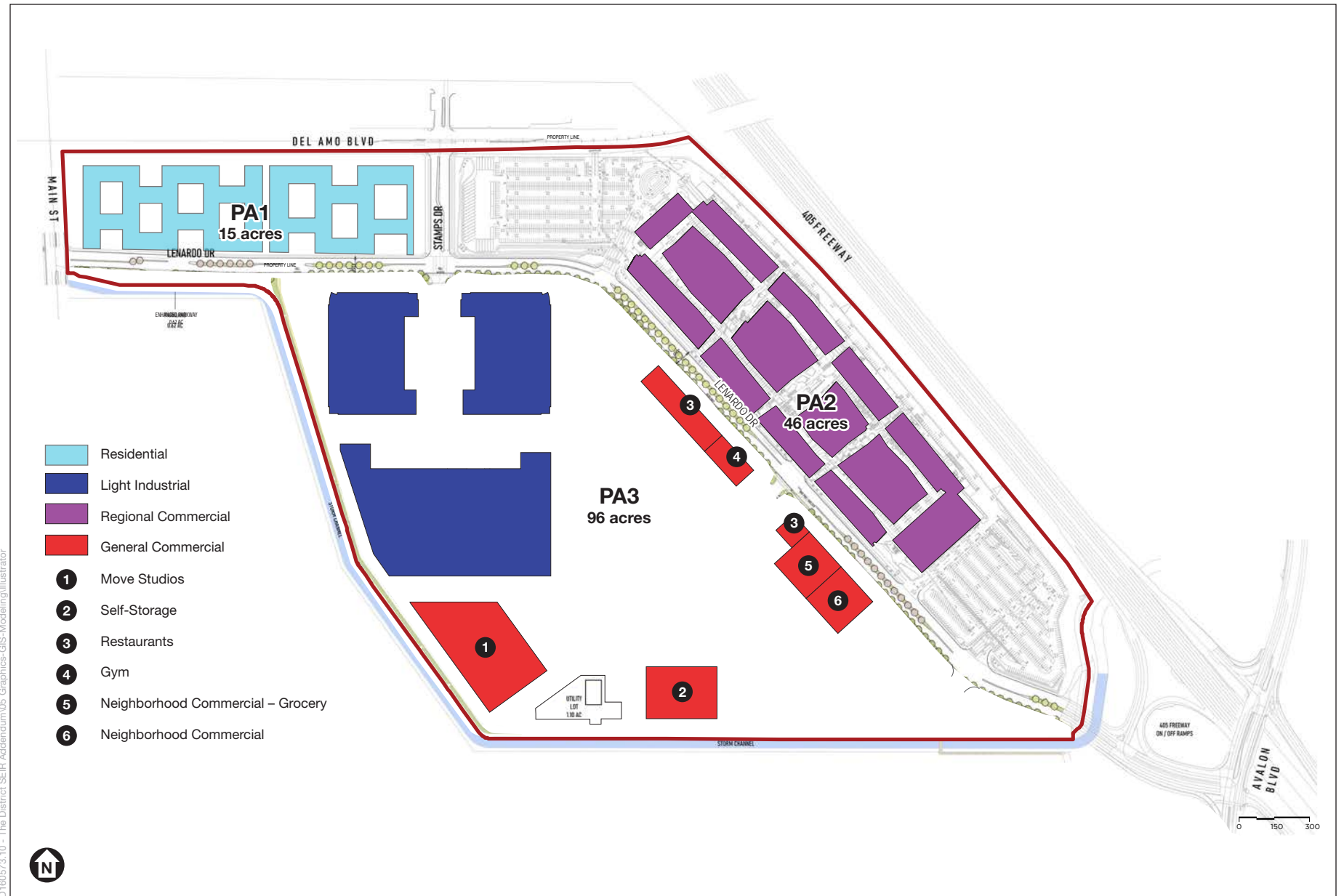
V.F.5 Alternative 4: Commercial/Industrial PA3 Hybrid

a. Introduction

The Commercial/Industrial PA3 Hybrid Alternative (Alternative 4) assumes that the total square footage under PA3 would be the same as proposed under the 2021 Project (i.e., 1,600,890 sf), but the uses would be 50 percent light industrial pursuant to a new light industrial land use designation under the General Plan, and 50 percent commercial uses pursuant to the CM uses allowed under the 2018 Specific Plan. The land uses in PA1 and PA2 would remain the same (i.e., up to 1,250 residential units in PA1 and 696,500 sf of regional commercial and 15,000 sf of restaurant uses in PA2).

Light industrial uses in PA3 would total 800,445 sf under this alternative and would consist of approximately 50 percent e-commerce and fulfillment center uses (approximately 400,223 sf) and 50 percent traditional distribution center and parcel hub type uses (approximately 400,222 sf), as with the 2021 Project. The commercial uses in PA3 would consist of neighborhood serving commercial, restaurant, studio, and self-storage uses. Specifically, Alternative 4 includes: 100,000 sf of neighborhood serving commercial, including 40,000 sf of grocery uses and 20,000 sf of gym uses, 50,000 sf of restaurant uses, 520,000 sf of studio uses, and 130,000 sf of self-storage uses. While the Carson Country Mart and Enhanced Parkway would both not be developed as part of this alternative, Alternative 4 does assume some outdoor recreational amenities would be provided; however, no lawn and amphitheater spaces are assumed to be proposed as part of this alternative. The 157-Acre Site would continue to undergo remediation, capping, and maintenance as required under the RAP and applicable regulatory requirements. It is assumed that similar heights and building setbacks would be similar under Alternative 4 as with the 2021 Project. A figure illustrating the conceptual site plan of Alternative 4 is provided in **Figure V-4, Alternative 4 – Conceptual Site Plan**.

Maximum development on the Project Site under Alternative 4 would consist of a total of 2,312,390 sf of floor area and up to 1,250 residential units. A comparison between Alternative 4 mix of land uses and the 2021 Project is provided above in Table V-2.



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SOURCE: RGA, 2021; ESA, 2021

The District at South Bay Specific Plan Amendment

Figure V-4
Alternative 4 - Conceptual Site Plan



b. Analysis of Alternative 4

(1) Land Use and Planning

(a) Physically Divide an Established Community

Implementation of Alternative 4 would allow for the addition of light industrial uses within PA3 and thus, as with the 2021 Project, Alternative 4 would require a General Plan Amendment to allow for such use in combination with existing land use and zoning designations currently allowed for the Project Site under the 2018 Specific Plan. Similar to the 2021 Project, Alternative 4 would be considered an infill development within an existing urban setting, which would provide a continuation of existing and intended development patterns within the City. Similar to the 2021 Project, Alternative 4 would also provide a system of roads and sidewalks that would physically connect the Project Site both internally and externally. Therefore, Alternative 4, same as with the 2021 Project, would not result in the division, disruption or isolation of an existing established community or neighborhood. Thus, impacts related to the land use patterns would be less than significant under Alternative 4 and similar to the less-than significant impacts identified for the 2021 Project.

(b) Consistency with Applicable Land Use Plans, Policies, and Regulations

Under Alternative 4, the Project Site would be developed the same as proposed for the 2021 Project, with the exception that PA3 would be developed with a hybrid of uses, combining those proposed by the 2021 Project and the commercial uses allowed under the 2018 Specific Plan. Specifically, the total square footage under PA3 would be the same as proposed under the 2021 Project (i.e., 1,600,890 sf), but the uses would be 50 percent light industrial and 50 percent commercial uses approved under the 2018 Specific Plan for PA3. PA1 and PA2 would remain the same as proposed under the 2021 Project and remediation of the Project Site would continue in accordance with the approved RAP. Alternative 4 would change the allowable land uses within PA3 to include light industrial along with the already allowed commercial uses. As with the 2021 Project a new light industrial land use designation for the light industrial uses would be needed under the General Plan. However, while Alternative 4 would provide neighborhood service commercial uses within PA3 including grocery, gym, and restaurant uses as well as studio uses and self-storage, the Carson Country Mart and Enhanced Parkway would both not be developed as part of this alternative. Although some outdoor recreational amenities would be provided, the gathering places and activities that would occur in PA3(b) under the 2021 Project, would not be developed under Alternative 4 thereby reducing the focal point and gathering places for residents within the Project Site and residents of the surrounding neighborhoods. In addition, Alternative 4 would not provide green space and a place to gather to the same extent as the 2021 Project; thus Alternative 4 would not be as effective in meeting the City's policies regarding the creation of a center focus within the community combining commercial, civic,

cultural and recreational uses (Policy LU 15.4) or helping to establish a City identity (Policy ED 1.4).

With regard to SCAGs RTP/SCS, Alternative 4 would locate a mix of uses within proximity of the I-405 and I-110 Freeways. Although light industrial uses would be less than under the 2021 Project, the mix of uses would still result in a cluster of uses within an area with a circulation system designed to provide quick, safe and easy access to and from the regional transportation system, similar to the 2021 Project.

While, Alternative 4 would not include the development of the Carson Country Mart, Alternative 4 would provide a mix of commercial and recreation/entertainment (including neighborhood-serving) uses, thereby providing regional and neighborhood commercial opportunities. As with the 2021 Project, with the General Plan Amendment, this alternative would not conflict with applicable land use plans, policies, and regulations. Impacts to land use and planning would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(2) Aesthetics

(a) Regulations Governing Scenic Quality

(i) Construction

Construction under Alternative 4 would involve the same general construction activities as the 2021 Project as total square footage would be the same across the Project Site under Alternative 4 as the 2021 Project. Construction of Alternative 4 would consist of construction equipment and activity on the Project Site, which would change the visual landscape from existing conditions, similar to the 2021 Project. As with the 2021 Project, as buildings are erected on the Project Site pursuant to this alternative, the loss of undeveloped area and a feeling of spaciousness would continue to be incrementally altered. Construction of Alternative 4 would result in a fully developed Project Site, which would result in a significant and unavoidable impact regarding the loss of a valued visual resource due to the loss of a feeling of spaciousness within the City. Impacts under Alternative 4 would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

(ii) Operation

a) Valued Resources

Alternative 4 would result in a mix of residential, commercial, and light industrial uses. As with the 2021 Project, Alternative 4 would develop the Project Site with a mix of buildings of various sizes and heights and associated landscaping to accommodate the mix of uses. As with the 2021 Project, the mix of uses would attract visitors and vehicles to the visual landscape of the Project

Site. As with the 2021 Project, development under Alternative 4 would occur through a Specific Plan that would result in a cohesive and integrated development. Impacts under Alternative 4 would be similar to the less-than-significant impacts identified for the 2021 Project.

b) Contrast with Existing Development

Under Alternative 4, the Project Site would be developed the same as proposed for the 2021 Project, with the exception that PA3 would be developed with a hybrid of uses, combining the light industrial uses proposed by the 2021 Project and the commercial uses allowed under the 2018 Specific Plan. Specifically, the total square footage under PA3 would be the same as proposed under the 2021 Project (i.e., 1,600,890 sf), but the uses would be 50 percent light industrial and 50 percent commercial uses under the CM land use category that was previously approved under the 2018 Specific Plan for PA3. PA1 and PA2 would remain the same as proposed under the 2021 Project and remediation of the Project Site would continue in accordance with the approved RAP. Similar to the 2021 Project, Alternative 4 would be required to implement the mitigation measure requiring that a minimum 70-foot setback be provided from the Torrance Lateral for buildings in PA3 at the western boundary. With implementation of such mitigation measure, Alternative 4 would not result in a substantial contrast with the existing off-site residential development. As such, impacts under Alternative 4 would be less than significant with implementation of mitigation and similar to the less-than-significant impacts identified for the 2021 Project.

c) Comparison of with Existing Regulations

As with the 2021 Project and as discussed above, Alternative 4 would require a General Plan Amendment to allow light industrial uses and associated amendments to the 2018 Specific Plan. Alternative 4, as with the 2021 Project, would comply with site-specific development standards that would reduce the potential for adverse effects of development on the visual quality of the area by regulating the development on the Project Site, including but not limited to permitted uses, setbacks, maximum permitted building heights, landscaping, signage, and lighting. Alternative 4 would implement mitigation measures related to aesthetics similar to the measures that would be implemented for the 2021 Project. Therefore, Alternative 4 would not conflict with regulations regarding design and impacts would be similar to the less-than-significant impacts identified for the 2021 Project.

d) View Resources

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site is not considered a view resource given the history of use as a landfill and the ongoing remediation activities and does not contain any features that would typically fall under the heading of view resource. Views of the two notable features that might catch the eye of travelers through the area, the Goodyear Wingfoot Two and the Big Man statue on the south of the I-405 Freeway would not be lost due

to development of Alternative 4, similar to the 2021 Project. Views over the Project Site are limited due to intervening development, the flat terrain in the area surrounding the Project Site, and the fact that the Project Site sits atop a berm that slopes down to surrounding areas. Therefore, similar to the 2021 Project, development of Alternative 4 would not substantially diminish views. Impacts on views of unique, valued scenic resources would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

e) Shade/Shadow

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the maximum off-site shading that could occur on sun-sensitive uses is limited, with the greatest shading potential occurring during the spring/autumn equinox, with the longest shadows extending to the west across the Project Site boundary by proposed buildings in the southwestern portion of PA3. Since the land uses and building footprints would be the same in PA1 and PA2 under Alternative 4 as with the 2021 Project, the potential for shade and shadow in those areas of the Project Site would be the same between Alternative 4 and the 2021 Project. Even with the changes in land uses proposed for PA3 under Alternative 4, the amount of buildings, total square footage, and building heights would be similar as the 2021 Project and, as such, the potential for shading would be similar. In addition, Alternative 4 would be required to implement the minimum setbacks from the Project Site boundaries as with the 2021 Project to limit the extent of off-site shading. Therefore, similar to the 2021 Project, impacts related to shade/shadow with implementation of Alternative 4 would be less than significant. Impacts under Alternative 4 would be similar to the less-than-significant impacts identified for the 2021 Project.

f) Conclusion

In summary, based on the applicable aesthetics threshold for projects in urbanized areas, Alternative 4, as with the 2021 Project, would not conflict with applicable zoning and other regulations governing scenic quality. Therefore, impacts related to zoning and other regulations governing scenic quality would be the similar to the less-than-significant impacts identified for the 2021 Project.

(b) Light/Glare

As stated in Section IV.B, *Aesthetics*, of this 2021 SEIR, the Project Site would be located within an urban area, amidst existing roadways (including the I-405 Freeway) with numerous sources of nighttime illumination. Similar to the 2021 Project, Alternative 4 would also be required to comply with the lighting and signage design features included in the 2021 Specific Plan Amendment as well as the CALGreen lighting standards, which would limit off-site light spill by controlling light intensity and by shielding on-site light sources. However, Alternative 4 would be assumed to be required to implement similar mitigation measures as the 2021 Project, which would ensure that the presentation of signs along the I-405 Freeway and the use of signage and lighting

are in compliance with the conceptual sign requirements set forth in the 2021 Specific Plan Amendment, to avoid a significant impact. Therefore, impacts associated with artificial lighting with implementation of Alternative 4 would be less than significant and similar to less-than-significant impacts identified for the 2021 Project.

(3) Transportation

(a) Conflict with a Program, Plan, Ordinance or Policy

Under Alternative 4, the mix of land uses would change compared to the 2021 Project, but the total square footage of land uses would not change. However, vehicle trips generated by Alternative 4 can be expected to be more than the number generated by the 2021 Project due to the substantially higher trip generation rates of commercial uses as compared to light industrial uses. The complementary nature of the proposed land uses would partially offset this increase in trip generation; however, this reduction in external vehicle trips would not be enough to offset the overall substantial increase. In other words, some vehicle trips under Alternative 4 would be made within the Project Site between different (e.g., retail, hotel, restaurant, light industrial, etc.) unlike the 2021 Project, in which most if not all vehicle trips would travel to/from the Project Site due to the lack of diversity in land uses. Under Alternative 4, access points connecting the Project Site to the regional roadway network would remain unchanged from the 2021 Project, as would bicycle, pedestrian, and transit facilities. Alternative 4 would not conflict with any programs, plans, ordinances or policies addressing the circulation system, transit, roadways, bicycle and pedestrian facilities, including those of the 2021 Specific Plan Amendment, which would be modified to accommodate the proposed reduction under this alternative, the City of Carson General Plan, and the Master Plan of Bikeways. Accordingly, Alternative 4 would not conflict with any such programs, plans, ordinances, or policies, and, as such, less-than-significant impacts would occur. Impacts under Alternative 4 would be similar to the less-than-significant impacts identified for the 2021 Project.

(b) VMT

As noted above, the number of vehicle trips generated by Alternative 4 can be expected to be higher than the number generated by the 2021 Project due to the higher trip generation rates associated with commercial uses as compared with light industrial uses. In order for VMT per service population to be below the VMT impact threshold adopted by the City (32.5 miles), Alternative 4 would have to reduce VMT by approximately 20 percent as compared with the 2021 Project (39.1 miles). Such reduction is unlikely given the convenient location of the Project Site adjacent to a major regional freeway (i.e., I-405/I-110 Freeways) and arterial roadways, the size and scale of the proposed land uses, and the lack of high capacity transit in the vicinity. Accordingly, because Alternative 4 would likely result in VMT per service population that exceeds the City's impact threshold, it would result in an impact with respect to consistency with

CEQA Guidelines Section 15064.3(b). As with the 2021 Project, Alternative 4 would be assumed to be required to implement mitigation measures requiring the implementation of a TDM Program. However, even with implementation of mitigation measures, impacts related to VMT under Alternative 4 would remain significant and unavoidable, and likely greater than the impacts identified for the 2021 Project, due to the greater number of vehicle trips given the additional square footage of commercial uses under Alternative 4, which have a greater vehicle trip rate than the light industrial uses.

(4) Air Quality

(a) Construction

Under Alternative 4, regional and localized construction emissions would be similar to the 2021 Project as the size of the total square footage would not change—only the type and nature of the allowed land uses would change. It would be anticipated that Alternative 4 would see an increase in architectural coating, either days of activity or emissions depending on schedule, associated with development because more of the interior area would be painted for non-industrial land uses than was assumed in the 2021 Project analysis. Alternative 4 would be assumed to be required to implement similar mitigation measures as the 2021 Project. As such, with incorporation of the same mitigation as the 2021 Project, Alternative 4 emissions would be able to reduce impacts to less-than-significant levels for regional construction emissions and localized construction emissions. Impacts during construction of Alternative 4 would be greater than the impacts identified for the 2021 Project (which determined a less-than-significant impact with implementation of mitigation), as Alternative 4 would include an increase in interior painted area, thus increasing VOC emissions or construction schedule. Given similar mitigation to the 2021 Project, VOC emissions would be reduced to less-than-significant levels through the use of lower VOC content coatings or extension of the coating application schedule.

Under Alternative 4, TAC emissions would be emitted from on-site construction activities, as with the 2021 Project. Construction TAC impacts would be similar to those identified for the 2021 Project as the amount of construction would be similar, assuming a similar construction schedule and intensity as the 2021 Project. Risk could increase or decrease slightly depending on the change in construction schedule (i.e., lengthening or shortening construction periods) or a slight change in equipment for construction due to different land use types. Regardless, similar to the 2021 Project, Alternative 4 would be anticipated to result in a less-than-significant impact to health risk and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Operation

Under Alternative 4, regional operational emissions impacts would remain similar to or slightly less than the 2021 Project. It is anticipated that mobile source emissions would be reduced under this alternative with respect to emissions generated by the trucks due to the reduction in light

industrial square footage proposed (and the fact that truck trips generated from commercial uses would be lower than the truck trips generated by light industrial uses). While passenger vehicle use would be increased for the commercial/retail uses, these would be at least partially offset by the reduction in light industrial employees needed and passenger vehicles are substantially more efficient/cleaner than diesel trucks for most pollutants (CO is greater from passenger vehicles).³⁶⁸ Regardless, as both the 2018 SEIR and 2021 SEIR resulted in significant and unavoidable operational emissions, and Alternative 4 is a mix of the 2018 SEIR and 2021 SEIR land uses, it is anticipated that the level of emissions from Alternative 4 would also result in significant and unavoidable regional operational impacts with respect to VOC, NOx, CO, PM10, and PM2.5. Therefore, even with implementation of the identified mitigation measures, regional operational impacts and concurrent construction and operational impacts under Alternative 4 would remain significant and unavoidable. Impacts related to regional emissions during operation and regional emissions during concurrent construction and operational under Alternative 4 would be similar to the impacts identified for the 2021 Project.

CO hotspot and localized impacts under Alternative 4, would be remain relatively consistent with the 2021 Project analysis as on-site emissions would decrease based on the revised land uses. However, as both the 2018 SEIR and 2021 Project resulted in less than significant CO hotspot and localized operational impacts and Alternative 4 takes some elements of each scenario in lesser amounts, Alternative 4 would be consistent with the findings. Under Alternative 4, TAC emissions would be emitted from operational activities. Operational TAC impacts would be slightly less than those identified for the 2021 Project as there would be a reduction in diesel trucks accessing the site. However, as lifetime risk is driven by exposure in early years, such as the construction activities, which would remain the same, overall risk would be consistent with what was identified for the 2021 Project. Therefore, while risk would be reduced from a reduction in operational activities, the reduction in total risk would be minimized based on the small contribution of operational activities to the combined risk. Overall, impacts related to CO hotspots, localized emissions, and TACs during operation under Alternative 4 would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(5) Noise

(a) Construction

Because the type of construction associated with Alternative 4 would be similar to the 2021 Project, maximum daily construction-related noise levels experienced both within the Project Site and the immediate vicinity would be similar to the 2021 Project. As such, impacts under Alternative 4 would be significant and unavoidable, even with implementation of the same

³⁶⁸ Comparison is taken from the quantified emissions for the 2021 Project as detailed in Appendix D.

mitigation measures as with the 2021 Project. Impacts related to Alternative 4 would be similar to the impacts identified for the 2021 Project, which would also be significant and unavoidable.

In addition to noise, construction activities and equipment under Alternative 4 would generate vibration throughout the Project Site. Alternative 4 would be assumed to be required to implement similar mitigation measures as the 2021 Project, and with implementation of mitigation measures, vibration impacts would be reduced to a less-than-significant level during construction of Alternative 4. Impacts related to construction vibration under Alternative 4 would be similar to the impacts identified for the 2021 Project, which would also be less than significant with mitigation.

(b) Operation

The reduction in industrial land use intensity would result in a slight reduction in on-site noise sources such as loading activity, and heavy-duty truck travel. The elimination of the Carson Country Mart would eliminate noise sources including outdoor recreational and social gathering spaces and amplified sound. Noise associated with parking lot activity and mechanical equipment would be similar to the 2021 Project and similar proximity to sensitive noise receptors would occur. The on-site equipment and activity noise levels associated with the 2021 Project are not considered significant and would be similar to Alternative 4. An expected reduction in daily truck volumes may be offset by an increase in commercial-related passenger vehicle trips. As with the 2021 Project, Alternative 4 would result in a less than significant roadway noise impact. Overall, operational noise impacts under Alternative 4 would be less than significant with implementation of mitigation and impacts would be less than the impacts identified for the 2021 Project, due to the removal noise sources associated with the outdoor lawn space and amphitheater proposed under the Carson Country Mart under Alternative 4.

As discussed above, the 2021 Project would contribute to a significant increase in cumulative traffic noise along three roadway segments. As discussed in Section IV.E, *Noise*, of this 2021 SEIR, cumulative increases in traffic noise would reach 3.9 dBA CNEL along Main Street between Lenardo Drive and Torrance Boulevard and along Del Amo Boulevard between Main Street and Stamps Drive, which is less than 1 dBA over than the significance threshold of an increase of 3.0 dBA CNEL applicable to these roadway segments (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). The cumulative increase in traffic noise would reach up to 11.1 dBA CNEL along Lenardo Drive between I-405 Freeway southbound Ramp and Avalon Boulevard, which is just over 6 dBA more than the significance threshold of an increase of 5.0 dBA CNEL applicable to this roadway segment (refer to Table IV.E-17 in Section IV.E, *Noise*, of this 2021 SEIR). Alternative 4 would reduce Project-related truck volumes. However, Alternative 4 would result in increased passenger vehicle trips. While a truck generates a greater noise level than a passenger vehicle, Alternative 4 would increase overall trips, such that the number of trips would be higher than the number generated by the 2021 Project due to the higher

trip generation rates associated with commercial uses as compared to light industrial uses. Therefore, Alternative 4 would likely result in significant traffic noise impacts along the three roadway segments. Thus, under Alternative 4, cumulative operational traffic noise impacts would be significant and unavoidable along three studied street segments and similar to the impacts identified for the 2021 Project, which would be significant and unavoidable along the same three studied street segments.

(6) Biological Resources

As described in Section IV.F, *Biological Resources*, of this 2021 SEIR, the Project Site is located in an urbanized setting and is completely disturbed with no vegetation or habitat present to support candidate, sensitive, or special-status species on site. The Project Site supports only non-native grassland vegetation, relatively bare ground, and a few artificial detention/retention basins, where such areas may be used by ground nesting birds, some songbirds, and possibly shorebirds, and other non-special-status species. The Project Site does not contain any natural hydrologic features or federally protected wetlands as defined by Clean Water Act Section 404, does not function as a wildlife corridor, and does not contain any notable natural features or protected biological resources. For these reasons, implementation of Alternative 4 would result in less-than-significant impacts to biological resources. Impacts under Alternative 4 would be similar to less-than-significant impacts identified for the 2021 Project.

(7) Energy

(a) Construction

Alternative 4, consistent the 2021 Project, would be assumed to utilize fuel efficient equipment consistent with state and federal regulations, and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. Implementation of the construction waste management plan would reduce truck trips to landfills, which are typically located some distance away from city centers, and increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. Based on the available data, construction would utilize energy for necessary on-site activities and to transport construction materials and demolition debris to and from the site. Implementation of the enhanced idling restrictions required by the 2021 Project's PDFs, and the use of cleaner, energy-efficient equipment similar to the PDFs proposed under the 2021 Project, would result in less fuel combustion and energy consumption and thus minimize Alternative 4's construction-related energy use. Therefore, construction of this alternative would not result in the wasteful, inefficient, and unnecessary consumption of energy. Impacts would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

(b) Operation

Operation of Alternative 4 would require energy in the form of electricity and natural gas for building heating, cooling, cooking, lighting, water demand and wastewater treatment, consumer electronics, and other energy needs, and transportation-fuels, primarily gasoline, for vehicles traveling to and from the site. The energy usage required for operations and routine and incidental maintenance activities is based on the increase in energy demand from the new buildings. Alternative 4 would comply with or exceed the applicable provisions of the Title 24 standards and the CALGreen Code in effect at the time of building permit issuance.

Alternative 4's electricity and natural gas usage is expected to represent a small fraction of SCE and SoCalGas' energy use and would therefore not constitute a discernible increase in the utilities' energy demands. Energy usage for PA3 would increase for electricity, natural gas, and gasoline over the 2021 Project as commercial buildings are more energy intensive than light industrial uses. Due to the reduction in industrial uses, diesel consumption would be less. There would be some fluctuation in the exact quantity of energy consumed as different land uses result in different energy use. For example, natural gas would be anticipated to increase as industrial uses use little to no natural gas whereas restaurants and commercial developments use natural gas for heating and cooking. Consistent with the 2021 Project analysis, these utilities would be expected to meet the operational demand of Alternative 4 on electricity and natural gas services. Operational impacts to electricity and natural gas supply and infrastructure would be less than significant.

With respect to operational transportation-related fuel usage, Alternative 4, similar to the 2021 Project, would support statewide efforts to improve transportation energy efficiency. This alternative itself would co-locate complementary employment, retail, restaurant, entertainment, and residential land uses on the Project Site, although some employment opportunities would be replaced with commercial/recreational opportunities. Alternative 4 would also be located near major transit facilities, including the MTA bus Routes 446, 447, and 205. The proximity to transit and existing off-site uses would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation, which would result in corresponding reductions in transportation-related fuel demand. Additionally, Alternative 4 would be anticipated to reduce truck trips although relatively similar level of passenger vehicle trips would be anticipated. Alternative 4 would include the installation of EVSE in excess of what is required by the CALGreen Code, consistent with the 2021 Project. Alternative 4 would still incorporate the same PDFs as the 2021 Project which includes the incorporation of electrical vehicle truck fleets. Alternative-fueled, electric, and hybrid vehicles, to the extent these types of vehicles would be utilized by passengers, would reduce the consumption of gasoline and diesel on the Project Site. As Alternative 4 would incorporate characteristics and measures that would reduce transportation fuel usage, energy impacts on transportation fuel supplies and infrastructure associated with this alternative would be less than significant.

Based on the above, operational energy impacts under Alternative 4 would be similar to those posed by the 2021 Project, which have been identified to be less-than-significant impact.

(8) Greenhouse Gas Emissions

Alternative 4 would result in the development of the same land uses in PA1 and PA2 and the same total square footage in PA3 as proposed under the 2021 Project (i.e., 1,600,890 sf), but the uses in PA3 would be 50 percent light industrial pursuant to a new light industrial land use designation, and 50 percent commercial uses pursuant to the CM uses allowed under the 2018 Specific Plan compared to approximately 98 percent light industrial and two percent commercial under the 2021 Project. As noted above, the number of vehicle trips generated by Alternative 4 can be expected to be higher than the number generated by the 2021 Project due to the higher trip generation rates associated with commercial uses as compared with light industrial uses. Vehicle trip lengths would be similar between the light industrial uses and commercial uses in PA3. Therefore, VMT under Alternative 4 would be greater than the 2021 Project. Compared to the 2021 Project, Alternative 4 would generate a greater portion of the VMT from passenger vehicles rather than heavy-duty trucks. Compared to the 2021 Project, Alternative 4 would include reduced light industrial uses and generate fewer truck trips, which would decrease GHG emissions, but would result in increased VMT and generate greater passenger vehicle trips from the increase in commercial square footage within PA3, which would increase GHG emissions. Thus, under Alternative 4, the overall GHG emissions profile would be similar to what was analyzed for the 2021 Project. However, emissions associated with Alternative 4 would be anticipated to represent an increase in comparison to the 2021 Project due to increased energy consumption from the addition in commercial land uses within PA3, which will result in an increase in passenger vehicles. While in the short-term, mobile source emissions should be similar between Alternative 4 and the 2021 Project, over the long-term, mobile source emissions from Alternative 4 would exceed that of the 2021 Project because of the reduction in the use of near-zero- and zero-emissions trucks with Alternative 4, and the increase in passenger vehicle use which would not be similarly reduced. Assuming Alternative 4 incorporates the same PDFs as with the 2021 Project, Alternative 4 would be consistent with emissions reduction strategies and would not conflict with any applicable plan, policy, regulation or recommendation to reduce GHG emissions consistent with the 2021 Project analysis. Therefore, through implementation of required GHG emissions reduction strategies, this alternative would be consistent with and would not hinder the ability of the state or the City to achieve emissions reduction targets. Therefore, impacts related to GHG emissions associated with the construction and operation of Alternative 4 would be less than significant and similar to the less-than-significant impacts identified for the 2021 Project.

c. Relationship of Alternative 4 to the 2021 Project Objectives and Impacts

Alternative 4 would continue to implement the RAP as consistent with the requirements for the 2021 Project. Alternative 4 would be the same as the 2021 Project for PA1 and PA2 but would consist of a hybrid of light industrial uses proposed under the 2021 Project and a mix of commercial uses as allowed by the 2018 Specific Plan. While this alternative would achieve most of the 2021 Project Objectives, it would only partially achieve Objective 8. Specifically, while Alternative 4 could include outdoor community amenities, recreational spaces and, gathering areas, it is unknown at this time to what scale this would be provided. Whereas the 2021 Project includes the development of 6.29 acres of vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site. As such, Alternative 1B would only partially meet Objective 8 (i.e., “provide a project that contains vibrant and attractive community amenities, passive and active park/recreational areas, and gathering spaces that are directly accessible to residents and constitute a regional draw for other visitors to the Project Site”).

Implementation of Alternative 4 would result in reduced operational noise impacts to adjacent sensitive receptors in comparison to the 2021 Project based upon the removal of certain noise sources associated with the Carson Country Mart. Under Alternative 4, the significant and unavoidable VMT impacts would be greater as compared to the 2021 Project due to the greater number of vehicle trips that would be generated as a result of proposed commercial uses under Alternative 4. In addition, construction-related air quality emissions associated with Alternative 4 would result in greater impacts, due primarily to the proposed increase in vehicle trips by this alternative in comparison to the 2021 Project. All other impacts would be similar as those anticipated under the 2021 Project.

In summary, Alternative 4 would result in reduced operational noise impacts, but increased VMT and air quality impacts. For the reasons stated above, Alternative 4 would not substantially lessen significant environmental impacts associated with the 2021 Project and it does not feasibly attain all of the basic 2021 Project Objectives to the same degree as the 2021 Project.

V.G ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR must identify the environmentally superior alternative. While Alternative 1A, *No Project – No Development*, would have a greater impact as compared to the 2021 Project regarding consistency with applicable land use plans, policies and regulations, it is identified as environmentally superior to the 2021 Project based on the minimization or avoidance of physical environmental impacts. However, Alternative 1A does not meet the majority of the 2021 Project Objectives. In addition, CEQA Guidelines (Section 15126.6(c)) requires that, if the

environmentally superior alternative is the No Project – No Development Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

A summary comparison of the potential impacts associated with the alternatives and the 2021 Project is provided in **Table V-3, Summary Comparison of 2021 Project Alternatives Impacts**. Based on this comparison, Alternative 2, Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3), is the environmentally superior alternative because Alternative 2 would reduce the environmental effects compared to the 2021 Project more so than Alternatives 1B, 3, and 4. Implementation of Alternative 2 would result in a reduction of impacts regarding shade/shadow, light/glare, air quality (during construction), noise during operation, energy, and GHG emissions impacts, in comparison to the 2021 Project. Alternative 2 would also serve to reduce the significant and unavoidable operational air quality impacts proposed by the 2021 Project due to the reduction in building square footage under Alternative 2. Specifically, Alternative 2 reduces emissions of all air pollutants attributed to the 25 percent decrease in PA3 square footage whereas Alternative 3 would result in a reduction in NOx and DPM but Alternative 3 would potentially result in increased emissions of CO and non-diesel PM10 and PM2.5 due to the changes to land use and corresponding increase in passenger vehicles trips. In addition, Alternative 2 would reduce significant and unavoidable cumulative roadway noise impacts for two of the three intersections that would otherwise occur as part of the 2021 Project, resulting in fewer significant and unavoidable cumulative impacts (although one significant and unavoidable impact would remain at Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard).

However, Alternative 2 would reduce the amount of revenue and/or property tax that could be generated on site due to the reduction in square footage, as well as the number of employment opportunities offered on the Project Site. Consequently, Alternative 2 would not allow the City to achieve the same level of productive reuse of a large brownfield site as the 2021 Project. In addition, since Alternative 2 would reduce all uses by 25 percent, it would not provide the same level of pedestrian traffic or vibrancy as the 2021 Project due to the reduction of commercial uses within the Carson Country Mart.

**Table V-3
Summary Comparison of 2021 Project Alternatives Impacts**

Environmental Issue Area	2021 Project	Alternative 1A: No Project – No Development	Alternative 1B: No Project – Development under 2018 Project/ Existing Specific Plan and Zoning	Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)	Alternative 3: Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/ Fulfillment Only) Uses in PA3	Alternative 4: Commercial/ Industrial PA3 Hybrid
Land Use and Planning:						
• Physically Divide an Established Community	LTS	Similar	Similar	Similar	Similar	Similar
• Consistency with Applicable Land Use Plans, Policies, and Regulations	LTS	Greater	Less	Similar	Similar	Similar
Aesthetics:						
• Regulations Governing Scenic Quality – Construction	SU	Less	Similar	Similar	Similar	Similar
• Regulations Governing Scenic Quality – Operation	LTS	Less	Similar	Similar	Greater	Similar
• Light/Glare	LTS	Less	Similar	Less	Less	Similar
Transportation:						
• Consistency with Programs, Plans, Ordinances or Policy	LTS	Less	Greater	Similar	Similar	Similar
• VMT	SU	Less	Greater	Similar	Similar	Greater
Air Quality:						
• Construction	LTS	Less	Greater	Less	Less	Greater
• Operation	SU	Less	Similar	Less	Similar	Similar
Noise:						
• Construction	SU	Less	Similar	Similar	Similar	Similar
• Operation	LTS	Less	Similar	Less	Less	Less
• Cumulative Operational Roadway Noise	SU	Less	Less	Less	Less	Similar

**Table V-3
Summary Comparison of 2021 Project Alternatives Impacts**

Environmental Issue Area	2021 Project	Alternative 1A: No Project – No Development	Alternative 1B: No Project – Development under 2018 Project/ Existing Specific Plan and Zoning	Alternative 2: Reduced 2021 Project (25 Percent Reduction of Commercial, Retail, and Industrial Uses in PA3)	Alternative 3: Reduced 2021 Project with Reduction of Light Industrial (E-Commerce/ Fulfillment Only) Uses in PA3	Alternative 4: Commercial/ Industrial PA3 Hybrid
Biological Resources	LTS	Less	Similar	Similar	Similar	Similar
Energy	LTS	Less	Similar	Less	Less	Similar
Greenhouse Gas Emissions	LTS	Less	Similar	Less	Less	Similar

ABBREVIATIONS:

LTS = less than significant; SU = significant and unavoidable

VI. EFFECTS FOUND NOT TO BE SIGNIFICANT

The chapter provides a discussion of issue CEQA topics (and/or thresholds within a topic) that were determined not to be significant and are, therefore, not discussed in detail in this 2021 SEIR pursuant to CEQA Guidelines Section 15128. A Lead Agency may make an Effect Found Not to Be Significant determination if the analysis concludes that there is no change in circumstances and/or no new information of substantial importance as a result of the 2021 Project relative to the 2018 Project that would result in new or substantially more-severe environmental impacts. If there are no new or substantially more-severe environmental impacts, no further analysis is required in this 2021 SEIR. It is not necessary to find “no impact” to conclude that it is “less than significant” or “insignificant” according to CEQA Guidelines Section 15128. However, the analysis must explain the reasons for each of the conclusions. In accordance with the CEQA Guidelines, this section supports the conclusion that these environmental issues were adequately analyzed in the previous environmental documentation (e.g., the 2006 FEIR and/or 2018 SEIR), as updated to reflect the environmental effects from the 2021 Project. The thresholds reflect those provided in the 2021 CEQA Guidelines Appendix G, and the topics are presented in alphabetical order.

Under the 2018 SEIR, a 2018 Mitigation Monitoring and Reporting Program (MMRP) was prepared and included in the certified 2018 SEIR. The mitigation measures established in the 2018 MMRP that remain relevant to the 2021 Project are listed below and continue to remain in effect for the 2021 Project. If any mitigation measure is eliminated, the reason for doing so is described relative to the previously identified environmental impact. Certain additions and modifications to 2018 SEIR mitigations measures may be provided to reflect impacts associated with the 2021 Project and, where that occurs, reasons for the modifications are also described.

A cumulative impact analysis is only provided for Effects Found Not to Be Significant that result in a less-than-significant impact, either with or without mitigation. Where an Effects Found Not to Be Significant analysis concludes that the 2021 Project would result in no impact, a cumulative impact analysis is not provided because the 2021 Project would not combine with other projects to cause related impacts.

Table I-1, Environmental Topics and Thresholds Evaluated in, in Chapter I, *Summary*, of this 2021 SEIR identifies which topics and thresholds are evaluated either as an Effect Found Not to Be Significant or as a section in this 2021 SEIR. This table also identifies where each threshold is evaluated, by section.

VI.A AESTHETICS

VI.A.1 2021 Project Impact Analysis

Would the Project:

a) Have a substantial adverse effect on a scenic vista?

The Project Site is located in an urbanized area adjacent to the San Diego Freeway (Interstate 405 [I-405] Freeway) that contains little vertical differentiation. In addition, the Project Site was formerly a solid waste landfill that is currently undergoing remediation.

The viewscape from the Project Site includes transportation infrastructure (i.e., the I-405 Freeway and other local roadways), residential development, and other development (e.g., storage/truck rental facility, vacant lot, nursery, and the Porsche Driving Experience). A commonly used definition of a scenic vista is a scene, view, or panorama that one would specifically stop to see (e.g., Half Dome from a rest stop, the Hollywood sign, panoramic views of the beach from public areas). As a result of views to or from the Project Site, there are no scenic vistas in the area and, as with the 2018 Project, the 2021 Project would continue to result in **no impact**.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The I-405 Freeway is not designated as a state scenic highway in the South Bay area of Los Angeles County.

Neither the Project Site nor the area in the vicinity of the Project Site contain notable features that would be considered unique geologic features. A unique geologic feature can vary considerably, but it would typically be a geologic feature that includes the best example of its kind locally or regionally; embodies the distinctive characteristics of a geologic principle that is exclusive locally or regionally; provides a key piece of geologic information important in geology or geologic history; is a “type locality” of a geologic feature; is a geologic formation that is exclusive locally or regionally; contains a mineral that is not known to occur elsewhere in the County; or is used repeatedly as a teaching tool.

While there are two notable features as travelers pass through the area, the Goodyear Wingfoot Two and the Big Man statue on the south side of the I-405 Freeway, as reflected in both the 2006 FEIR and the 2018 SEIR, neither is considered a scenic resource. Goodyear Wingfoot Two is the Goodyear Blimp that is housed (i.e., moored) at Goodyear’s airship base in Carson, on the

opposite side of the I-405 Freeway to the north of the Project Site. The Big Man³⁶⁹ statue is a large fiberglass statue of a man holding a motorsport flat that is located on the Porsche Driving Experience site, on the same side of the I-405 Freeway as the Project Site and north of Del Amo Boulevard and Development District 3 (DD3).

The 2021 Project would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. Therefore, as with the 2018 Project, the 2021 Project would continue to result in **no impact**.

Would the Project:

- ***Adversely affect the viability of retail uses within the market area that the proposed modified Project is intended to serve such that the existing retail uses could fall into long-term physical disrepair unable to recover with forecasted increases in economic demand in the future?***³⁷⁰

With respect to urban decay, the 2018 SEIR included an urban decay study, which analyzed the potential for the 2018 Project to result in urban decay that could result in impacts on the physical environment, including off-site impacts on aesthetic character.³⁷¹ The 2018 SEIR concluded that forecasted growth in retail demand would be sufficient to support existing retail development, as well as the 2018 Project. From a regional commercial perspective, the 2018 SEIR concluded that there would be no loss in retail sales or an increase in vacancies on a short-term or long-term basis to the point of inducing urban decay. Similarly, with respect to local-serving commercial uses, while the introduction of local-serving commercial uses associated with the 2018 would increase vacancy levels, the effects would be temporary; would also be substantially reduced over the long term; and would not induce urban decay. The 2018 SEIR stated that the addition of the 2018 Project's new retail activities would not cause any widespread, prolonged urban decay that would result in impacts on the physical environment, such as impacts on off-site aesthetic character. In summary, the 2018 SEIR concluded that impacts on the physical environment from induced vacancies or effects on sales with the introduction of regional commercial uses would be less than significant.

³⁶⁹ The Big Man statue was previously referred to as "Golf Man," when the Dominguez Golf Course was in operation and he carried a golf club. He is now sometimes referred to as "Porsche Man," with the golf club replaced by a checkered racing flag.

³⁷⁰ This threshold was provided in the 2018 SEIR. Because it was not an Appendix G CEQA threshold in 2018, the threshold was not designated with an alphanumeric designation; instead, it was denoted with a "bullet." Therefore, as with the 2018 SEIR, the 2021 SEIR also designates this threshold with a bullet to continue to indicate that it is not an Appendix G CEQA threshold.

³⁷¹ The threshold addressing urban decay was contained in the Land Use section of the 2018 SEIR; however, it was also analyzed in the Visual Quality section of the 2018 SEIR with respect to physical environmental impacts and, therefore, is discussed in Section IV.B, Aesthetics, of this 2021 SEIR.

The 2021 Project would change the uses in PA3 from regional and neighborhood-serving commercial uses to primarily light industrial uses, with some neighborhood-serving commercial uses; however, the neighborhood commercial uses in PA3 under the 2021 Project would be reduced to 33,800 square feet (sf) as compared to 175,000 sf under the 2021 Project. In addition, the 711,500 sf of regional commercial uses in PA2 would remain the same as the 2018 Project. Therefore, as with the 2018 Project, the 2021 Project would also not cause any widespread, prolonged urban decay that would result in off-site impacts. In summary, the 2021 Project would result in a **less-than-significant impact** related to physical environmental impacts related to urban decay, and any impacts would be further reduced under the 2021 Project due the reduction in neighborhood commercial uses in PA3.

VI.A.2 2021 Project Cumulative Impact Analysis

A cumulative impact analysis is not required for scenic vistas or scenic resources because the 2021 Project would result in no impacts to scenic vistas or scenic resources and, therefore, would not combine with other projects to cause related impacts. No cumulative impact would occur.

In terms of cumulative impacts related to urban decay, the analysis of urban decay is inherently cumulative in nature. The urban decay analysis prepared for the 2018 SEIR (Appendix B to the 2018 SEIR) analyzed a primary trade area for the regional retail components of the project as a 5.0-mile radius from the Project Site. A 2.5-mile radius was used to identify the local serving trade area for the proposed grocery, specialty food, and drug store tenants likely to be included within the neighborhood serving component of the proposed project. Additionally, a significant visitor component from tourists from outside the primary 5.0-mile trade area was analyzed, particularly from expected patronage from Pacific Rim countries at the planned, premium outlet mall. Therefore, the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.A.3 Applicable Mitigation Measures

As with the 2006 FEIR and the 2018 SEIR, no mitigation measures related to aesthetics Thresholds (a) and (b) (i.e., scenic vistas and scenic resources) are required because no significant impacts would occur.

VI.A.4 Aesthetics Impact Conclusions

With respect to aesthetics Thresholds (a) and (b) (i.e., scenic vistas and scenic resources), construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects regarding scenic vistas or scenic resources. In addition, since there are no impacts, no mitigation measures are necessary. All impacts related to aesthetics Thresholds (a) and (b) (i.e.,

scenic vistas and scenic resources) would result in no impact for the 2021 Project, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.B AIR QUALITY

VI.B.1 2021 Project Impact Analysis

Would the Project:

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

a. Construction

During construction, as with both the 2006 Project and the 2018 Project, the 2021 Project is anticipated to generate odors that are typical of construction projects and would be temporary in nature. This 2021 SEIR does not modify any of these conclusions.

In addition, Section 7.4.6, Odor Control, of the Upper Operable Unit Remedial Action Plan (RAP) states that the remedial activities are not anticipated to include any soil excavation into the waste or the existing soil cover except limited drillings for typical well/piling installation. In addition, there would be limited exposure of open landfill to no more than 500 sf, consistent with SCAQMD Rule 1150.1, and the daily practice of covering any stockpile would occur, consistent with the SWPPP BMPs. Due to limited disturbance and the daily covering of any stockpile, odor issues are not anticipated to occur during remediation activities. Further, perimeter monitoring during construction will be provided, as required by the RAP and as provided for by Mitigation Measure D-3, which could also detect any potential odor problems.

b. Operation

According to the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook*, land uses associated with odors typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The former Cal Compact landfill has been closed for over 50 years and, therefore, is not operational. As part of 2021 SEIR PDF-O3, as included in Section IV.D, *Air Quality*, of this 2021 SEIR, land uses on the Project Site would be limited to those that do not emit high levels of odors. In accordance with this project design feature (PDF), the 2021 Project, like the 2006 Project and the 2018 Project, would not involve elements related to the types of uses described above.

The 2021 Specific Plan Amendment, as with the 2018 Specific Plan, requires several design or operational elements that would reduce potential operational odor impacts, including that trash collection enclosures: (1) are located in obscured areas, such as behind buildings or adjacent to

loading areas; and (2) are screened from view with enclosures (either solid wall or landscaped, depending on the use). Further, the 2021 Specific Plan Amendment will require trash enclosure designs for commercial and residential uses that must be approved by the Community Development Director prior to issuance of any building permit(s).

c. Construction and Operation

With respect to both construction and operation under the 2021 Project, Mitigation Measure G-8 requires compliance with SCAQMD Rule 402 to reduce potential nuisance impacts. SCAQMD Rule 402 specifically prohibits the discharge, from any source whatsoever that causes detriment, nuisance, or annoyance to any considerable number of persons or to the public, which could include odors from either construction or operational activities.

d. Conclusion

The unintended release of odors that could affect a substantial number of people would be reduced through 2021 Specific Plan Amendment requirements; incorporation of 2021 SEIR PDF-O3, which would limit land uses on the Project Site to those that do not emit high levels of odors; and implementation of Mitigation Measure D-3, which provides for perimeter monitoring during construction activities consistent with the approved RAP, and Mitigation Measure G-8, which would enforce implementation of SCAQMD Rule 402. Impacts would remain **less than significant with implementation of the identified PDF and mitigation measures.**

VI.B.2 2021 Project Cumulative Impact Analysis

As discussed above, the 2021 Project would be less than significant with implementation of identified mitigation measures. As with the 2021 Project, the cumulative projects would similarly implement SCAQMD Rule 402, which would require the cumulative projects to reduce any odors emitted during construction or operation. In addition, the cumulative projects listed in Table III-1, Cumulative Projects, are not land uses identified by the SCAQMD as associated with odors. Notwithstanding, given the location of nearest cumulative projects, the 2021 Project would not combine with the cumulative projects to generate cumulative odor impacts. Thus, cumulative air quality impacts related to odors would be less than significant.

VI.B.3 Applicable Mitigation Measures

The following mitigation measure was included in the 2018 SEIR and its associated 2018 MMRP, and the 2021 Project would implement this same mitigation measure:

Mitigation Measure G-8: ~~The~~ Each Applicant shall comply with SCAQMD Rule 402 to reduce potential nuisance impacts due to odors from construction activities.
(Applicable to PA1, PA2, and PA3.)

There are no additional or revised mitigation measures required to address impacts associated with air quality Threshold (e) (i.e., odors) as a result of the 2021 Project.

VI.B.4 Air Quality Impact Conclusions

With respect to air quality Threshold (e) (i.e., odors), construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR, all impacts related to air quality Threshold (e) (i.e., odors) would remain less than significant for the 2021 Project, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.C CULTURAL RESOURCES

VI.C.1 2021 Project Impact Analysis

Would the Project:

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

The 2005 Initial Study for the Boulevards at South Bay Specific Plan determined that there would be a less-than-significant impact to historical resources as there were no extant buildings, structures, objects, sites, or districts with any historical associations or significance necessary for California Register eligibility. Due to the findings of the 2005 Initial Study, historical resources were scoped out of the 2006 FEIR and the 2018 SEIR (given that no changes had been identified as applicable to historical resources within the area between 2006 and 2018).

The 157-Acre Site is undeveloped, but was used as a landfill site between 1959 and 1965, prior to the incorporation of the City of Carson, for the deposition of waste/refuse from areas throughout Los Angeles County. The 157-Acre Site, subsequently, has been subject to remediation activities, which has resulted in the creation of crushed concrete piles, detention and retention ponds, a groundwater treatment plant, and a gas plant extraction facility. Based on a review of modern aerial photos, there were paved roads within the site and no structures evident until 2009, after which the groundwater treatment plant and gas plant extraction facility were constructed in 2014/2015 in the southwestern portion of the Project Site, adjacent to the Torrance Lateral Flood Control Channel (Torrance Lateral). Neither of these on-site structures is considered historic as they do not meet the 45-year threshold set by the Office of Historic

Preservation (OHP). Therefore, the 2021 Project would result in a **less-than-significant direct impact** to historical resources.

The 2005 Initial Study did not evaluate impacts to indirect historical resources that could be affected by the 2006 Project then proposed by the Boulevards at South Bay Specific Plan. A review of the Built Environment Resource Directory (BERD) listing through the OHP did not indicate any eligible resources have been recorded in the vicinity of the Project Site that could be indirectly affected by development of the 2021 Project. Therefore, the 2021 Project would result in a **less-than-significant indirect impact** to historical resources.

Archaeological resources that are significant for eligibility under the California Register are also considered “historical resources” under CEQA. The evaluation of impacts to such resources is included in the discussion under Threshold (b) (i.e., archaeological resources), below.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

The 2005 Initial Study found that there was a less-than-significant impact to archaeological resources due to the grading and landfill-related activities that occurred within the Project Site in the past. Due to the findings of the 2005 Initial Study, archaeological resources were scoped out of the 2006 FEIR and the 2018 SEIR (given that no changes were identified as being applicable with respect to archaeological resources within the area between 2006 and 2018).

Although there are known archaeological sites and Native American village sites in the vicinity of the 157-Acre Site, an archaeological survey and record search were both negative for recorded sites within the Project Site in 2005. Further, due to the landfill activities, grading, and the limits of ground disturbance on the Project Site, the likelihood of encountering resources is very low. The nature of the materials that were deposited in the landfill in the 1950s and 1960s would not be found to be significant resources in their own right. Furthermore, the extent and depth of grading under the 2021 Project would be similar to that proposed for the 2018 Project, as further described in Chapter II, *2021 Project Description*, of this 2021 SEIR. Therefore, under the 2021 Project, impacts associated with a substantial adverse change in the significance of an archaeological resource would remain **less than significant**.

c) Disturb any human remains, including those interred outside of formal cemeteries?

The 2005 Initial Study found that there was a less-than-significant impact to human remains due to the grading and landfill-related activities that occurred within the Project Site in the past. Due to the findings of the 2005 Initial Study, human remains were scoped out of the 2006 FEIR and also addressed in Chapter VI, *Effects Found Not to Be Significant*, of the 2018 SEIR.

Due to the landfill activities, grading, and the limits of ground disturbance on the Project Site, the likelihood of encountering human remains is very low. In addition, in the event that

excavation required for the 2021 Project uncovered human remains, these resources would be treated in accordance with federal, state, and local guidelines, as appropriate. Therefore, under the 2021 Project, impacts would remain **less than significant**.

VI.C.2 2021 Project Cumulative Impact Analysis

The geographical context for the analysis of cumulative impacts associated with historic and cultural resources is the Los Angeles region. A cumulative impact to historic and cultural resources would occur if development of any of the cumulative projects identified in Table III-1, Cumulative Projects, were to damage a historic resources or a buried unknown cultural resource (i.e., archeological resources or human remains) during construction of the cumulative project, which would reduce the available historic, cultural resources and archeological record within the region. While each cumulative project's potential to impact historic or cultural resources are site specific due to the underlying subsurface conditions and previous development disturbance, each cumulative project has the potential to contribute to a significant cumulative impact to historic and cultural resources.

As discussed above, the Project Site does not contain any historic resources and, therefore, would not result in any significant direct or indirect impacts to historic resources. Thus, the 2021 Project would not contribute to any cumulative project impacts associated with historic resources.

The Project Site is entirely surrounded by extensive urban and suburban development, with the I-405 Freeway located adjacent to the eastern edge of the Project Site. Similar to the 2021 Project, the cumulative projects listed on Table III-1 are either urban infill projects or are located on highly disturbed sites, where the potential to encounter cultural resources is considered low. Therefore, because of the low potential for cultural resources in the vicinity of the Project Site, cumulative impacts to cultural resources as a result of development of the cumulative projects identified in Table III-1, Cumulative Projects, of this 2021 SEIR, would not be cumulatively significant. In addition, due to the history of the Project Site being a former landfill, there is no potential for cultural resources to be contained within the Project Site. Furthermore, given the disturbed nature of the Project Site and the limited potential impacts of the 2021 Project, implementation of the 2021 Project would not have a cumulatively considerable contribution to cumulative effects on cultural resources. Therefore, cumulative impacts to cultural resources as a result of implementation of the 2021 Project would remain less than significant.

VI.C.3 Applicable Mitigation Measures

As with the 2006 FEIR and the 2018 SEIR, no mitigation measures related to cultural resources are required because no significant impacts would occur.

VI.C.4 Cultural Resources Impact Conclusions

With respect to cultural resources, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, since there are only less-than-significant impacts, no mitigation measures are necessary. Thus, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

All impacts related to cultural resources would result in a less-than-significant impact for the 2021 Project, which was the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.D GEOLOGY AND SOILS

VI.D.1 2021 Project Impact Analysis

The following information applies to the discussion of all thresholds related to geology and soils, and, as such, is presented before the impact analysis.

As discussed in detail in the 2018 SEIR, the California Department of Toxic Substances Control (DTSC) approved a final RAP for the Upper OU (as defined in Chapter II, *2021 Project Description*, in 1995 to address contamination in soils and groundwater underlying the 157-Acre Site, required remediation of the former landfill and specific criteria that must be met as a condition to any future vertical site development. The change in land uses proposed by the 2021 Project in comparison to the 2018 Project would not affect or alter the required remediation actions under the RAP or other regulatory requirements applicable to the 157-Acre Site, or the coordination that would take place with DTSC during construction of the 2021 Project.

In addition, with respect to potential seismic or other geological impacts and geotechnical control measures that would reduce seismic or other geological impacts, and consistent with the requirements for the 2018 Project, the 2021 Project's structural design would continue to comply with the design standards set forth in the Carson Municipal Code, which incorporates, by reference, the Los Angeles County Code, Title 26, including Chapter 16, Seismic Design Standards, as amended and in effect on January 1, 2020. Title 26 of the Los Angeles County Code prescribes building regulations and the required evaluation of current soils, project-specific geotechnical, and site-specific geologic conditions for proposed development activities.

The Carson Municipal Code also incorporates, by reference, the California Building Code, 2019 Edition (California Code of Regulations Title 24, Part 2) in Chapter 1, Carson Building Code. In addition, all proposed development associated with the 2021 Project would be required to adhere

to Special Publication 117A in accordance with the Seismic Hazards Mapping Act (2018 SEIR, p. IV.E-8).

Would the Project:

- a) ***Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***
 - i) ***Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.***
 - ii) ***Strong seismic ground shaking?***
 - iii) ***Seismic-related ground failure, including liquefaction?***
 - iv) ***Landslides?***

a. Fault Rupture

The 2018 SEIR concluded that impacts related to fault rupture would be less than significant as the Project Site is located outside of any established Alquist-Priolo Earthquake Fault Zone for fault rupture hazards (2018 SEIR p. IV.E-6). No active or potentially active faults are known to pass directly under the Project Site. Since no active earthquake faults intersect the Project Site, the potential for ground rupture within the Project Site is considered low (2018 SEIR p. IV.E-6).

The Project Site for the 2021 Project is the same 157-acre site that was previously analyzed in the 2018 SEIR, which acknowledged that the Project Site is located within a seismically active region that is susceptible to seismic risks. The nearest earthquake fault is the Newport-Inglewood fault zone, which is located approximately 2.2 miles northeast of the Project Site. While the Project Site is located in a seismically active region, the Project Site is not located in an identified regulatory zone that is regulated by the Alquist-Priolo Earthquake Fault Zoning Act, which regulates development near active faults to mitigate the likelihood of surface rupture on a given fault. Since the distance to the nearest earthquake fault line has not changed from the analysis in the 2018 SEIR and the regulatory zone/identified fault zones under the Alquist-Priolo Earthquake Fault Zoning Act have not been changed in a manner that would implicate the Project Site, seismic impacts related to fault rupture would remain the same as previously disclosed in the 2018 SEIR. Therefore, impacts related to fault rupture would remain less than significant under the proposed 2021 Project.

b. Ground Shaking and Seismic-Related Ground Failure

As disclosed in the 2018 SEIR (2018 SEIR p. IV.E-6), ground shaking effects are dependent on a number of factors, such as the distance to the epicenter of the seismic effect, the duration of ground shaking, and the geotechnical characteristics of the underlying materials. As stated in the

2006 FEIR (and also the 2018 SEIR), the Project Site remains in an area that is susceptible and likely to experience a substantial seismic event(s) over the next 30 years.³⁷²

Exposure to ground shaking hazards would remain reduced through the implementation of seismic construction standards set forth in the Carson Municipal Code, which include design provisions for structures within 15 kilometers (9.3 miles) of an active fault. The Carson Municipal Code would also still require the preparation of updated soils, geotechnical, or geology reports and the compliance of the 2021 Project with any recommendations developed as part of any such report. The required final design level geotechnical reports would also still be required to adhere to Special Publication 117A, updated in 2008, to address potential liquefaction hazards that may be present at the Project Site.

Therefore, as stated in the 2006 FEIR, with compliance with the Carson Municipal Code seismic design standards and site evaluation requirements, as incorporated through Los Angeles County Code and the California Building Code Title 26, as well as adherence to Special Publication 117A, the risk of exposure of the 2021 Project's occupants and structures to ground shaking or other geologic hazards, such as seismic-related ground failure, would be less than significant. As concluded in the 2006 FEIR and the 2018 SEIR, implementation of the final design level geotechnical recommendations would ensure that the final site conditions would also not be susceptible to, and would not cause, off-site geologic hazards.

Impacts related to ground shaking and seismic-related ground failure would remain less than significant under the 2021 Project, as with the 2018 Project.

c. Liquefaction

As described in the 2018 SEIR, the Project Site is largely located within an area designated by the City of Carson General Plan Safety Element and the State of California Seismic Hazard Maps as a CGS Liquefaction Hazard Zone (2018 SEIR p. IV.E-7).³⁷³ However, the 2018 SEIR identified that prior geotechnical evaluations of the Project Site determined that the potential for liquefaction at the Project Site would be low (2018 SEIR p. IV.E-7).³⁷⁴ Furthermore, the 2018 SEIR incorporated Mitigation Measure E-2, which requires further analysis and reporting of

³⁷² *United States Geological Survey (USGS), UCERF3: A New Earthquake Forecast for California's Complex Fault System, USGS Fact Sheet 2015-3009, March 2015.*

³⁷³ *City of Carson General Plan EIR, Exhibit 4.6-2 (October 22, 2002), based on State of California Seismic Hazard Zone Maps: Inglewood Quadrangle, Long Beach Quadrangle, Southgate Quadrangle, and Torrance Quadrangle (March 26, 1999); Special Studies Zones, Torrance Quadrangle (July 1, 1986), as cited in the 2018 SEIR.*

³⁷⁴ *Western Laboratories, Geotechnical Engineering Report for Proposed Commercial Development and Northeast Corner of Main Street and Del Amo Boulevard, December 24, 1996; and Law/Crandall, Report of Geotechnical Investigation and Pile Loading Testing for L.A. Metromall, September 5, 1996, as cited in the 2018 SEIR.*

liquefaction potential on the Project Site to be performed prior to future construction, in accordance with the Carson Building Code requirements and Special Publication 117A (in accordance with the Hazards Mapping Act), to ensure impacts related to liquefaction would be reduced to a less-than-significant level (2018 SEIR p. IV.E-7).

The 2021 Project would be developed on the same site as the 2018 Project Site, which was previously analyzed under the 2018 SEIR, and as such, the potential for liquefaction would remain low due to the same soil conditions present at the site. The 2021 Project would be required to comply with the City's Municipal Code seismic design standards and site evaluation requirements, as incorporated through Title 26 of the Los Angeles County Code and the California Building Code, which would ensure that impacts associated with the 2021 Project related to the risk of exposure of the 2021 Project's occupants and structures to geologic hazards resulting from liquefaction would be less than significant, as with the 2018 Project.

The 2021 Project would also comply with all applicable California Building Code (Chapter 16) and Carson Building Code (Chapter 95) requirements related to seismic design standards and Special Publication 117A, which provides guidelines for evaluating and mitigating seismic hazards in California. Compliance with these regulatory requirements are also required by Mitigation Measures E-1 and E-2, which would ensure that impacts related to seismic hazards are further reduced.

d. Conclusion

Under the 2021 Project, potential substantial adverse effects, including the risk of loss, injury, or death, related to rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure, including liquefaction, would remain **less than significant with implementation of the identified mitigation measures**.

iv) Landslides?

The 2018 SEIR described the Project Site, as well as the surrounding area, as being relatively flat and does not contain any steep slopes (2018 SEIR p. VI-6). For that reason, the 2018 SEIR concluded that the potential for landslides or slope instability is considered to be low (2018 SEIR p. VI-6).

The Project Site is the same 157-acre site for both the 2018 Project and 2021 Project, and the topographical conditions of the Project Site remain the same in terms of overall site elevation as those described in the 2018 SEIR; however, there are now concrete piles and dirt mounds located throughout the Project Site, which would be removed during site development and prior to occupancy of the Site. Therefore, development of the Project Site with the 2021 Project would not expose people or structures to risk of loss, injury, or death associated with landslides, which is the same conclusion made for the 2018 Project. Under the 2021 Project, potential substantial

adverse effects, including the risk of loss, injury, or death, related to landslides would continue to result in **no impact**.

b) Result in substantial soil erosion or the loss of topsoil?

The 2018 SEIR identified that while the 2018 Project would result in construction over a large area, development of the landfill site would be highly regulated by DTSC, including through the approved RAP, and would be subject to additional regulations that specifically address soil erosion through the construction period (2018 SEIR pp. VI-6 and VI-7). With adherence to the requirements of DTSC (including the approved RAP), the 2018 SEIR concluded that impacts to soil erosion or loss of topsoil would be less than significant (2018 SEIR p. VI-7).

Any roads realigned from the existing configuration, or otherwise located in areas underlain by waste soils, shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of the City of Carson building officials, as also required by Mitigation Measure E-3.

The 2021 Project would be required to adhere to the applicable National Pollutant Discharge Elimination System (NPDES) General Construction Permit, which requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP) by a certified Qualified SWPPP Developer (QSD) to address soil erosion through the construction period. The site-specific SWPPP would include erosion- and sediment-control best management practices (BMPs) designed to prevent erosion from occurring on and off site during construction. There would be limited exposure of open landfill to no more than 500 sf, consistent with SCAQMD Rule 1150.1, and the daily practice of covering any stockpile would occur, consistent with the SWPPP BMPs. In addition, as with the 2018 Project, the 2021 Project would be regulated by the Upper OU RAP, which would also reduce potential impacts from soil erosion. Compliance with the SWPPP and Upper OU RAP would ensure the impacts related to soil erosion or loss of topsoil would be reduced to a less-than-significant level during construction of the 2021 Project, as with the 2018 Project. During operation, the 2021 Project would adhere to the drainage control requirements of the Carson Building Code (Chapter 21) to minimize soil erosion and loss of topsoil, as also discussed in the 2018 SEIR. After construction activities are completed, all exposed soils would either be paved or revegetated with landscaping to minimize the potential for soil erosion or loss of topsoil during operation of the 2021 Project. Thus, the 2021 Project would not result in substantial soil erosion or loss of topsoil, as with the 2018 Project. Impacts would remain **less than significant with implementation of the identified mitigation measure**.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

The 2018 SEIR concluded that because the DTSC-approved RAP anticipated potential future vertical development of the former landfill site, the RAP takes into account underlying geologic conditions on the Project Site that could potentially compromise the RAP implementation (2018 SEIR p. VI-7). The 2018 SEIR also stated that because these impacts have been taken into account in the RAP, development of the Project Site would not be adversely affected by unstable geologic conditions (2018 SEIR p. VI-7).

The City of Carson General Plan states that the entire City, as well as the entire South Bay area, is underlain with a subbase of sandy soil, which is considered to be unstable.³⁷⁵ As stated above, the DTSC-approved RAP has accounted for the unstable soils that underlie the landfill and includes appropriate remediation and operation standards to ensure that potential effects from unstable soils would be minimized. As with the 2018 Project, the 2021 Project would also be developed on the former landfill site, which is regulated by the DTSC-approved RAP that accounts for underlying geologic conditions.

As with the 2018 Project, the 2021 Project would continue to include the use of driven piles in all three planning areas in lieu of slabs on grade as outlined by the 2006 FEIR to provide stable building foundations. Pile caps would be used to connect the piling and the overlying impermeable cap. Piles could range from approximately 40 to 90 feet in length, with an average length of 65 feet, which is the same as was proposed for the 2018 Project. Existing roadways are not underlain by fill/waste and, as such, roadway construction in existing alignments would not require the use of foundation pilings, but would still require evaluation and design in accordance with all applicable Carson Building Code requirements. In addition, and as with the 2018 Project, the depth of ground disturbance related to mass grading would be zero to four feet, with cuts as deep as 10 feet in a few isolated areas, in addition to the depth required for placement of the membrane liner over the existing waste material, where required. This 2021 SEIR does not modify any of the conclusions regarding the installation of piles or mass grading, and the 2021 Project shall continue to adhere to all identified Carson Building Code requirements.

As stated in the 2018 SEIR (2018 SEIR p. III-A-7), deep dynamic compaction (DDC) activities were conducted in approximately 2010 on 68 acres of PA2 to densify the upper portion of the landfill waste and provide a more stable base foundation layer for the landfill cap and any subsequent improvements, as proposed for the 2006 Project and evaluated in the 2006 FEIR.³⁷⁶

³⁷⁵ *City of Carson, Carson General Plan, Chapter 6, Safety Element, 2004, https://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%206_Safety.pdf, accessed May 2021.*

³⁷⁶ *Tetra Tech Inc., Draft Deep Dynamic Compaction Report, 2012.*

DDC is a proven geotechnical engineering approach to minimize future subsidence associated with development over areas with loose uncompacted materials such as fill or waste. DDC will continue to be a possible technique that could be used for construction of the 2021 Project; however, if used, it would only be used on PA1 and PA2 and is no longer proposed for PA3. Further, DDC would not be required in PA1 or PA2 where pile installation is required to support building pads. While the extent of where potential DDC activities could occur is reduced under the 2021 Project, this 2021 SEIR reflects the same impact conclusions regarding the use of DDC as disclosed in the 2018 FEIR. The 2021 Project shall also continue to adhere to all identified Carson Building Code and DTSC requirements.

All aboveground development would also adhere to the Carson Building Code (Chapter 22, Section 44) to ensure that all development would meet the specific building requirements for unstable soils. Moreover, implementation of Mitigation Measures E-1 and E-2 would also help to further reduce potential geologic hazards that could occur from unstable soils by requiring compliance with all geotechnical requirements of the Carson and California Building Codes, as well as minimizing effects of liquefaction. Therefore, implementation of the various regulatory requirements that are further required by Mitigation Measures E-1 and E-2, as well as compliance with Chapter 22 of the Carson Building Code, would minimize the potential for on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse as a result of unstable soils.

Thus, impacts related to unstable soils would remain **less than significant with implementation of the identified mitigation measures**.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

The 2018 SEIR determined that no impacts to expansive soils would occur as the 2018 Project would be required to adhere to the Carson Municipal Code, which incorporates, by reference, Los Angeles County Code, Title 26, including site preparation standards which would address potential expansive soils that may be present at the site. In general, the use of engineered fill is used to minimize the effects of any potentially expansive soils.

As with the 2018 Project, the 2021 Project would also adhere to Carson Municipal Code, Chapter 22, which sets forth site preparation standards to address potential expansive soils that may be present at the Project Site. In general, engineered fill would be used to minimize the effects of any potentially expansive soils. In addition, the RAP takes into account underlying geologic conditions, including but not limited to the potential for expansive soils, on the Project Site that could potentially compromise the RAP implementation and includes any necessary design measures to ensure adequate geologic conditions with future development. Therefore, as with the 2018 Project, the 2021 Project would continue to result in **no impact**.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?

The Project Site is located within an urbanized area of the City that is currently served by existing sewer systems. The 2021 Project would require on-site upgrades of sewer systems. However, as with the approved 2018 Project, the 2021 Project would tie into the existing sewer lines and would not require any new off-site sewer lines or the expansion of capacity of existing off-site sewer lines. In addition, the 2021 Project, as with the 2018 Project, would not require the use of septic tanks. Therefore, as with the 2018 Project, impacts related to incompatible soils supporting the use of septic tanks or alternative wastewater disposal systems under the 2021 Project would continue to result in **no impact**.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

As discussed in the 2018 SEIR, the Project Site has been disturbed in the past due to its use as a former landfill and, as such, there is no potential to encounter unknown paleontological resources. Even with the changes of land uses in PA3 under the 2021 Project, there would still be no potential to encounter paleontological resources as the 2021 Project would be developed within the same horizontal and Project Site boundaries of the 2018 Project. Therefore, with respect to the potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, the 2021 Project would continue to result in **no impact**.

VI.D.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts resulting associated with geology and soils is site-specific because each project site has different geological considerations that would be subject to specific site-specific laws, regulations, codes, and standards.

Given the comprehensive regulatory framework designed to address impacts related to geology and soils, cumulative impacts would be less than significant. As discussed above in the impact analysis, the applicable regulations include, but are not necessarily limited to, the RAPs, APEFZA, the City Building Code and Municipal Code, Special Publications 117A of the Hazards Mapping Act, the 2019 California Building Code, and the NPDES program. The 2021 Project's contribution to cumulative impacts would be further reduced by implementation of mitigation measures that address site-specific impacts related to geology and soils, which include Mitigation Measures E-1 through E-3. These mitigation measures require the preparation of engineering geology and geotechnical reports in compliance with the City of Carson Municipal Code to address all potential geologic and/or geotechnical hazards. Compliance with these regulations and mitigation measures would ensure that the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.D.3 Applicable Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 MMRP. The 2021 Project would implement these mitigation measures, either as they were presented in the 2018 SEIR or revised as indicated:

Mitigation Measure E-1: In accordance with City of Carson Municipal Code, ~~the each~~ Applicant shall comply with site-specific recommendations set forth in engineering geology and geotechnical reports prepared to the satisfaction of the City of Carson Building Official, as follows:

- The engineering geology report shall be prepared and signed by a California Certified Engineering Geologist and the geotechnical report shall be prepared and signed by a California Registered Civil Engineer experienced in the area of geotechnical engineering. Geology and geotechnical reports shall include site-specific studies and analyses for all potential geologic and/or geotechnical hazards. Geotechnical reports shall address the design of pilings, foundations, walls below grade, retaining walls, shoring, subgrade preparation for floor slab support, paving, earthwork methodologies, and dewatering, where applicable.
- Geology and geotechnical reports may be prepared separately or together.
- Where the studies indicate, compensating siting and design features shall be required.
- Laboratory testing of soils shall demonstrate the suitability of underlying native soils to support driven piles to the satisfaction of the City of Carson Building Official.

Mitigation Measure E-2: Due to the classification of portions of the ~~Property Project~~ Site as a liquefaction zone, ~~the each~~ Applicant shall demonstrate that liquefaction either (a) poses a sufficiently low hazard to satisfy the defined acceptable risk criteria, in accordance with CGS Special Bulletin 117A, or (b) implements suitable mitigation measures to effectively reduce the hazard to acceptable levels (CCR Title 14, Section 3721). The analysis of liquefaction risk shall be prepared by a registered civil engineer and shall be submitted to the satisfaction of the City ~~B~~uilding ~~O~~fficial.

Mitigation Measure E-3: Any roads realigned from the existing configuration, or otherwise located in areas underlain by waste soils, shall comply with site-specific recommendations as set forth in engineering, geology, and geotechnical reports prepared to the satisfaction of the City of Carson building officials.

VI.D.4 Geology and Soils Impact Conclusions

With respect to geology and soils, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of

previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR or as revised in this 2021 SEIR, all impacts related to geology and soils would remain less than significant or would result in no impact for the 2021 Project, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

VI.E HAZARDS AND HAZARDOUS MATERIALS

VI.E.1 2021 Project Impact Analysis

Would the Project:

- a) *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b) *Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

a. Construction

Development of the 2021 Project would occur on a site that is subject to ongoing remediation activities due to its prior use as a landfill. The 2005 Initial Study for the 2006 FEIR (p. B-13) disclosed that “soil that is determined to be impacted and not suitable for placing near the surface would be segregated, stockpiled, and placed under the final remediation cap/liner. Therefore, future exposure to these potentially impacted soils would be eliminated. It is not anticipated that soil would be exported off site for disposal. Should it be necessary to remove any materials, such removal would be limited and would occur pursuant to applicable regulations, which would preclude a significant impact to the public or the environment. As such, construction of the Proposed Development would not create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials.” This 2021 SEIR does not modify any of these conclusions, and the 2021 Project shall continue to adhere to all identified requirements.

The 2006 FEIR (p. 283) also concluded that “the RAP [as defined below] envisioned that much of the soil used to construct the earthen cap, including topsoil would likely be imported. In addition, existing soil cover and soil contained in the sloped areas surrounding the cap would remain and be used as part of the cap or remain adjacent to the cap. During Remedial Design (RD), additional soil cover samples will be collected and analyzed to further evaluate existing

soil-cover quality, particularly soil that will reside near land surface such as in landscaped areas. Human-health risk evaluations and a soil management plan will be completed and provided to DTSC for evaluation and approval to ensure that exposure to soil at the Project Site does not pose unacceptable human health risks.”³⁷⁷ This 2021 SEIR does not modify any of these conclusions, and the 2021 Project shall continue to adhere to all identified requirements.

b. Operation

The changes associated with the 2021 Project consist of land use changes allowed for PA3, by converting the previously approved commercial/retail uses to light-industrial uses (i.e., distribution and fulfillment) and inclusion of the Carson Country Mart, which would be a privately maintained, publicly accessible open space and community commercial use and amenity area. There are no changes proposed to PA1 or PA2; these planning areas would continue to consist of residential uses (PA1) and regional commercial uses (PA2).

The goods received and distributed at the fulfillment and distribution facilities within PA3(a) would vary, depending on the shipments received, and some shipments could include hazardous materials. This could represent a change from the previous uses proposed for PA3, which included retail, commercial, and hotel uses. Any hazardous materials from those uses would be limited to routine cleaning and disinfectant products, whereas the 2021 Project, as a distribution and e-commerce facility, may receive other hazardous products, in addition to routine cleaning and disinfectant products (for facility maintenance).

Hazardous materials are defined and regulated in the United States primarily by laws and regulations administered by the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), the Department of Transportation (DOT), and the Nuclear Regulatory Commission (NRC). OSHA³⁷⁸ and EPA³⁷⁹ define a hazardous material as any substance or chemical which is a “health hazard” or “physical hazard,” including: (1) chemicals that are carcinogens, toxic agents, irritants, corrosives, sensitizers; (2) agents that act on the hematopoietic system;³⁸⁰ (3) agents that damage the lungs, skin, eyes, or mucous membranes; (4) chemicals that are combustible, explosive, flammable, oxidizers, pyrophorics,³⁸¹ unstable-reactive or water-reactive; (5) chemicals which in the course of normal handling, use, or storage may produce or release dusts, gases, fumes, vapors, mists or smoke which may have any

³⁷⁷ A discussion of the RAPs is provided in Threshold (d) (i.e., hazardous materials sites), provided below.

³⁷⁸ 29 Code of Federal Regulations (CFR) 1910.120 Subpart H, <https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.120>.

³⁷⁹ 40 CFR 261, <https://www.law.cornell.edu/cfr/text/40/part-261>.

³⁸⁰ The hematopoietic system are organs and tissues, primarily the bone marrow, spleen, tonsils, and lymph nodes involved in the production of blood.

³⁸¹ A pyrophoric is a substance that ignites spontaneously in air at or below 54°C (129°F) (for gases) or within 5 minutes after coming into contact with air (for liquids and solids).

of the previously mentioned characteristics; and (6) any item or chemical that can cause harm to people, plants, or animals when released by spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. In summary, a hazardous material is any item or agent (biological, chemical, radiological, and/or physical), which has the potential to cause harm to humans, animals, or the environment, either by itself or through interaction with other factors.

Some hazardous materials are also regulated California Accidental Release Protection Program (CalARP) to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. These are considered the most highly toxic or flammable hazardous substances. Therefore, the CalARP risk management program applies to a distinct set of regulated hazardous substances that contain more than a threshold quantity of regulated substances.³⁸² Due to the toxicity and/or flammability of CalARP-regulated substances, the risk management program requirements for CalARP-regulated substances go beyond standard emergency planning and reporting as required for a Business Plan³⁸³ for other hazardous materials, which is further described below. The 2021 Project would not use, transport, or store any CalARP materials above the allowed regulatory standards.³⁸⁴

Other hazardous substances, which could be used, transported, or stored at the Project Site, would be subject to the hazardous chemical reporting requirements under Health and Safety Code Chapter 6.95, Article 1 (Business Plan), which are separate and distinct from those required for CalARP substances. To protect public health and safety and the environment (by preventing or mitigating the damage to the health and safety of persons and the environment from the release or threatened release of hazardous materials into the workplace and environment), the Business Plan hazardous chemical inventory reporting identifies the types and amounts of hazardous materials handled, used, stored, or disposed of at a site, which could be

³⁸² 19 California Code of Regulations (CCR) 2735.1 to 2785.1, <https://www.law.cornell.edu/regulations/california/19-CCR-Sec-2735-1>.

³⁸³ A Hazardous Material Business Plan is a combination of two different regulatory programs. The first is Chemical Inventory Program. This requires that businesses within Los Angeles Fire Department jurisdiction complete and submit a chemical inventory to disclose hazardous materials stored, used or handled on site. This disclosure information assists emergency responders in planning for and handling emergencies which involve hazardous materials. The program objective is to safeguard lives and minimize property loss.

The second is the Business Emergency Plan (BEP). Chapter 6.95 of the California Health and Safety code requires that businesses which use, store or handle hazardous materials submit an emergency plan which outlines a facility's emergency response preparations and notification requirements in case of emergency. The information is also shared with emergency response personnel to mitigate a release and to minimize harm or damage to human life, the environment, and property.

³⁸⁴ California Accidental Release Prevention Program Guidance, accessed August 12, 2021.

accidentally released into the environment; location and storage information; facility contact information; emergency response plan; and implementation of a training program for employees. The Business Plan is prepared by businesses using hazardous materials and must be annually certified. It must also be made available to the public through the California Environmental Reporting System (CERS) and shared with emergency response personnel/agencies. Therefore, the operator for any business that handles or uses hazardous materials on the Project Site must prepare an annual Business Plan and obtain a Unified Program Facility Permit from the Los Angeles County Public Works.

In addition, the operator of any business that handles or uses hazardous materials on the Project Site must also provide Material Safety Data Sheets (MSDS), which lists the hazardous ingredients of a product, its physical and chemical characteristics (e.g., flammability, explosive properties), its effect on human health, the chemicals with which it can adversely react, handling precautions, the types of measures that can be used to control exposure, emergency and first aid procedures, and methods to contain a spill. When new regulatory information, such as exposure limits, or new health effects information becomes available, the MSDS would be updated.

Lastly, in terms of the transport of hazardous materials to or from the Project Site, in California, transportation-related chemical safety is the responsibility of the California Department of Transportation, the California Public Utilities Commission and the California Highway Patrol.

As required for the 2006 and 2018 Projects, operation of the 2021 Project would be required to adhere to all existing local, state, and federal regulatory requirements (e.g., California Highway Patrol hazardous materials transportation regulations, Cal/OSHA worker safety requirements, Hazardous Materials Unified Program requirements, Resource Conservation and Recovery Act (RCRA) requirements, and California Health and Safety Code requirements that call for preparation of a Hazardous Materials Business Plan). All of these regulations serve to minimize emissions and exposure risks associated with operational activities related to the routine transport, storage, and disposal of hazardous materials and wastes and the potential for accidental release and upset conditions.

c. Construction and Operation

With specific respect to upset and accident conditions related to remediation activities, the 2006 FEIR (Draft EIR p. 300) stated that “As part of the RD process, upset scenarios that could impact human health and the environment, during either the RA/construction phase or the operation phase of the Project, would be further evaluated and refined. Based upon that evaluation and refinement, design elements, engineering controls, and monitoring and contingency plans would be developed and incorporated into the remedial designs and specifications to minimize the potential for upset events and to establish plans for protection of human health and the environment should an upset event occur. DTSC review and approval of such design elements,

engineering controls and monitoring and contingency plans would be a component of DTSC’s review and approval of the final remedial designs and specifications for the Project.” This 2021 SEIR does not modify any of these conclusions, and the 2021 Project shall continue to adhere to all identified requirements.

d. Conclusion

Under the 2021 Project, construction and operational impacts to the public or the environment related to the routine transport, use, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment would remain **less than significant**.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no existing or proposed schools within 0.25 miles of the Project Site. The closest schools to the Project Site are the Van Deene Elementary School, which is located approximately 0.75 miles to the west, and the Carson Street Elementary School, which is located approximately 0.5 miles to the south. To the north and east, the closest schools are located beyond the I-405 Freeway. The Gardena High School is located about 1.7 miles to the north; the Towne Avenue Elementary School is located about 0.8 miles to the northeast; and the Curtis Middle School is located about 1.1 miles to the east. Further, the 2006 FEIR concluded that the 2006 Project would not result in a significant impact with regard to hazardous and hazardous materials, and removal or transport of hazardous materials, if required, would occur in accordance with all existing regulatory requirements and would be hauled over designated routes (2018 SEIR p. VI-8). The City of Carson has designated truck routes,³⁸⁵ and the closest routes to the Project Site are Del Amo Boulevard and Main Street, both of which will be used to access the Project Site. None of the schools listed above is located along any designated truck routes. Therefore, the 2021 Project would not result in hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Under the 2021 Project, impacts would remain **less than significant**.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The Project Site is located on a hazardous materials site pursuant to Government Code Section 65962.5, and, as a result, has been the subject of numerous prior investigations, as described in detail in Section II.F, *Remediation Activities*, of this 2021 SEIR. The Project Site was a solid waste disposal landfill that operated between 1959 and 1965, and, as a result,

³⁸⁵ *City of Carson, Truck Routes & Parking Map, November 6, 2019. https://ci.carson.ca.us/content/files/pdfs/ENGINEERING/traffic_engineering/TruckRoutesAndParking_11x17_2019.pdf, accessed April 2021.*

contamination was found in the subsurface soils and groundwater; however, the former haul roads do not contain landfill waste.

RAPs have already been approved for the 157-Acre Site by DTSC: one for what was identified as the Upper Operable Unit and a second for what was identified as the Lower (deep groundwater) Operable Unit (Upper OU and Lower OU, respectively). The purpose of each of the RAPs is to provide detailed information about the environmental issues found on the 157-Acre Site during site characterization; outline a plan of action to identify which remedies will be used to achieve cleanup goals; provide a plan of implementation; and identify how effectiveness will be measured.

The RAP for the Upper OU was approved by DTSC in 1995 (and modified in 2009 through an Explanation of Significant Differences [ESD]), and the RAP for the Lower OU was approved by DTSC in 2005. The Lower OU RAP has been determined not to be applicable to any development on the 157-Acre Site. DTSC conducted appropriate CEQA analyses for both the RAPs.³⁸⁶

The Upper OU RAP requires the installation, operation, and maintenance of (1) a landfill cap designed to encapsulate the waste and create a barrier between future improvements and buried waste; (2) an active gas collection and control system (LGGCCS) designed to remove landfill gases from under the landfill cap; and (3) a groundwater extraction and treatment system (GETS) designed to contain the groundwater plume and treat the extracted groundwater prior to discharge.

In addition to the two RAPs, certain Consent Decrees were issued for the 157-Acre Site by DTSC in December 1995, October 2000, and January 2004 in order to resolve claims made regarding the resolution of the contamination issues afflicting the 157-Acre Site (the Consent Decrees); the 1995 Consent Decree applies to the remedial obligations for the 157-Acre Site. In addition, the development of the 157-Acre Site is subject to the terms and conditions set forth in a document entitled the Management Approach to Phased Occupancy (File No. 01215078.02), approved by DTSC in April 2018 (the MAPO) and the phased development letter, issued by DTSC to the Carson Reclamation Authority, dated October 17, 2017 (Phased Development Letter). The MAPO and Phased Development Letter are included in this 2021 SEIR as Appendices G3 and G4, respectively.

The 2006 Project anticipated that the remedial work and subsequent construction on each of the planning areas would be completed in a phased manner, but that occupancy of any one Cell would not occur until all remedial work was completed and a site-wide human health risk

³⁸⁶ CEQA documentation for the Upper OU RAP is provided in Appendix E of the 2018 SEIR and can be found at: <https://ci.carson.ca.us/communitydevelopment/thedistrict.aspx>, and CEQA documentation for the Lower OU RAP is provided in Appendix G2 of this 2021 SEIR.

assessment (HHRA) was performed; this intent, with additional detail, is provided in the MAPO and Phased Development Letter.

In addition, payment of annual fees by the Applicant(s) for CFD No. 2012-1, as amended or modified from time to time, also supports the ongoing operation, maintenance, and monitoring of the remedial systems on the Project Site in accordance with the Upper OU RAP.³⁸⁷

With adherence to the RAP, MAPO, Phased Development Letter, and 1995 Consent Decree (and as also concluded in the 2006 FEIR), development on the 157-Acre Site does not require further review under CEQA and, as such, would not constitute new or worsening impacts and does not require analysis in this 2021 SEIR. For informational purposes, the previous and future remedial activities performed on the 157-Acre Site to comply with the RAP and 1995 Consent Decree are described below.

e. Previous and Future Remediation Activities

The remediation systems that have been constructed on the 157-Acre Site include the following:

- A landfill cap, comprised of an impermeable linear low density polyethylene (LLDPE) geomembrane with a minimum of 1 foot of overlying protective cover soil, which has been completed in portions of the site, and a clay cap that has been constructed along the perimeter slopes adjacent to the I-405 Freeway and the Torrance Lateral. The landfill cap is designed to encapsulate the waste and create a barrier between future improvements and buried waste;
- A GETS, which has been installed/completed and approved by DTSC. The GETS consists of a network of 29 groundwater extraction wells around the downgradient edge of the 157-Acre Site, which are pumped to collect and control groundwater in and beneath the waste zone. The Remedial Action Completion Report (RACR) for the GETS and the DTSC approval letter for the GETS RACR is provided as Appendix G5 of this 2021 SEIR; and
- An active LGCCS, which has been designed to remove landfill gases from under the landfill cap and has been completed in portions of the Project Site.

Completion of the remaining portions of the landfill cap and LGCCS installation would be coordinated with any proposed development associated with the 2021 Project, as further described below.

The 2018 SEIR analyzed phased occupancy of certain commercial uses concurrent with remediation and construction activities, subject to DTSC approval. However, pursuant to the 2006 approval by DTSC of phased development, residential occupancy on the 157-Acre Site is

³⁸⁷ *City of Carson, Community Facilities District Report – Community Facilities District No. 2012-1 of the City of Carson (The Boulevard at South Bay – Remedial Systems Operations, Maintenance and Monitoring), July 10, 2012.*

not allowed until all areas of the former Cal Compact Landfill are capped and all necessary remedial actions are completed for the entire 157-Acre Site. Phased occupancy for non-residential uses was approved by DTSC in March 2018 through the approval of the MAPO, subject to further DTSC review and approval of an implementation plan for establishing buffer zones prior to occupancy.

As with the 2018 Project and the 2018 SEIR, implementation of the Upper OU RAP is required to make the 157-Acre Site safe for residents and visitors of the 2021 Project. Implementation of the Lower OU RAP is being implemented by the Responsible Parties (RPs), which consists of monitoring only because the monitoring results received to date have indicated that the groundwater in the Gage Aquifer is clean. Monitoring will continue to be performed after completion of the 2021 Project. A detailed discussion of construction-related development activities and remediation activities is also provided in Section II.L, *Project Construction Activities and Schedule*, of this 2021 SEIR.

The remediation systems will continue to meet all requirements of the DTSC-approved RAP and 1995 Consent Decree and would include any additional design refinements necessary to support development, such as membrane integration into the structural pile caps; grading of landfill cap elevations to accommodate placement of utility trenches and site drainage; and integration of development infrastructure, as needed. As detailed in the 2006 FEIR, any changes in the design of the remedial systems would only be allowed if DTSC determines that the proposed design accomplishes the same performance objectives as the previously approved design and is sufficiently protective of human health and the environment.

The change in land uses proposed by the 2021 Project would not affect or alter existing and/or future remediation efforts or the coordination that would take place with the DTSC during construction of the 2021 Project and would not require new or different construction techniques or depth of soil disturbance. In addition, Mitigation Measures D-1 through D-4 were provided and amended in the 2018 SEIR to ensure that: (1) any revisions to the RAP would be approved by DTSC; (2) DTSC permits any proposed residential uses prior to issuance of building permits for those uses, with occupancy permitted only after all remediation is completed under the RAP; (3) on- and off-site risks associated with RAP construction have been evaluated and modified to the satisfaction of the DTSC, including air monitoring, and applicable to the 2021 Project; and (4) the Applicant has provided, to the City, documentation that DTSC has approved a Cell-specific assessment demonstrating the risk of exposure for occupancy of that Cell is within the acceptable levels approved by DTSC and a RACR has been approved for such Cell by DTSC. Outside of the remediation systems, a 2008 Oil/Water Well Investigation Report performed by Arcadis identified the possibility that at least two potentially abandoned oil wells and at least two water wells may have been located on the Project Site prior to its use as a landfill; however, these wells could not be located at that time. To ensure that mitigation and appropriate closure of

such wells would be carried out if such wells were discovered during construction, the 2018 SEIR added Mitigation Measure D-6.

Implementation of these mitigation measures would ensure that remediation activities are completed and protective of future occupants of proposed development such that the potential impacts of the 2021 Project would remain **less than significant with implementation of the identified mitigation measures**.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

The closest public airport to the Project Site remains the Compton Airport, which is located approximately 3.25 miles to the north. Therefore, development of the 2021 Project would not occur within 2 miles of a public or public use airport and would not result in a safety hazard for people residing or working in the vicinity of the Project Site.

As with the 2018 Project, the 2021 Project would also not interfere with the Goodyear blimp operations, located approximately 0.4 miles northeast of the Project Site, and would not result in a safety hazard for people working and residing in or around the Project Site (2018 FEIR p. VI-10). Thus, as with the 2018 Project, the 2021 Project would not pose a safety hazard for people working or residing on the Project Site from public airport related hazards. Therefore, as with the 2018 Project, the 2021 Project would continue to result in **no impact**. Potential impacts related to excessive noise are addressed in Section VI.E, *Noise*, of this 2021 SEIR.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Carson has adopted a Multi-Hazard Functional Plan (1996) for emergency response within the City, which also meets the State's Standardized Emergency Management System (SEMS) requirements and complies with the Los Angeles County Emergency Management Plan.³⁸⁸ These plans address emergency response requirements, including but not limited to, provision of shelter, staging, and meeting locations, communications operations, travel routing, and emergency evacuation.

The 2021 Project, as with the approved 2018 Project, would be required to comply with the City's Multi-Hazard Functional Plan, the State's SEMS requirements, and the Los Angeles County Emergency Management Plan to ensure that the 2021 Project would not interfere with an adopted emergency response or evacuation plan. Further, the 2021 Project would include on-site circulation improvements that would enhance access to the 157-Acre Site and within the Project

³⁸⁸ *City of Carson, Carson General Plan, Chapter 6, Safety Element, 2004, p. SAF-2, https://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%206_Safety.pdf, accessed May 2021.*

Site, including improvements to Street A (Lenardo Drive) and Street B (Stamps Drive), which would facilitate truck, vehicular, and emergency vehicle access. Therefore, as concluded in the 2018 SEIR, impacts from the 2021 Project related to the potential to impair implementation of or physically interfere with emergency response and evacuation would remain **less than significant**.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The 2018 SEIR concluded that there is no impact with respect to this threshold as the 157-Acre Site is located within an urbanized area and there are no adjacent wildland areas. This remains the case for the 2021 Project, which scoped out wildland fires in the Notice of Preparation. Based on the California Department of Forestry and Fire Protection (CAL FIRE) Fire Hazard Severity Zones Map for Los Angeles County, the City of Carson is categorized as Non-VHFHSZ or an area outside of the Very High Fire Hazard Severity Zones (adopted November 7, 2007, by CAL FIRE) (2018 SEIR, p. VI-10). Therefore, as with the 2018 Project, the 2021 Project would continue to result in **no impact**.

VI.E.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts associated with the use and storage of hazards and hazardous materials or the existence of hazardous materials on the Project Site is site-specific because each site has a different set of storage and use considerations. The geographic context of the transport of hazardous materials, including upset and accident conditions and emergency transport and evacuation, is the Los Angeles region, which represents the general area within which trucks and/or passenger vehicles would travel to or from the Project Site. Hazards and hazardous materials provide little, if any, cumulative relationship between a project site and other nearby projects unless the combined project sites contain flammable or other highly hazardous materials that can be combined in the event of an unanticipated incident.

The 2021 Project and its cumulative projects include a variety of uses, such as light industrial, general warehouse, retail, hospitality, and residential projects; none of these cumulative projects would use, store, or transport CalARP substances, which are substances that pose the greatest risk of immediate harm to the public and the environment. Hazardous materials used, transported, or stored under the 2021 Project and related (or cumulative) projects would be required to adhere to existing local, state, and federal regulatory requirements (e.g., California Highway Patrol hazardous materials transportation regulations, Cal/OSHA worker safety requirements, Hazardous Materials Unified Program requirements, RCRA requirements, and California Health and Safety Code requirements that call for preparation of a Hazardous Materials Business Plan). These regulations serve to minimize emissions and exposure risks associated with operational activities related to the routine transport, storage, and disposal of hazardous materials and wastes and the potential for accidental release and upset conditions.

Given the comprehensive regulatory framework designed to address impacts related to the presence, use, storage, and transport of hazards and hazardous materials, including upset and accident conditions, cumulative impacts would be less than significant. As discussed in the impact analysis, the applicable regulations include, but are not necessarily limited to, the RAPs, California Highway Patrol hazardous materials transportation regulations, Cal/OSHA worker safety requirements, Hazardous Materials Unified Program requirements, RCRA requirements, and California Health and Safety Code requirements that call for a Hazardous Materials Business Plan. In addition, the specific storage of hazardous materials in any project is the responsibility of the applicable tenant/owner, subject to all prevailing local, state, and federal regulations.

The 2021 Project's contribution to cumulative impacts would be further reduced by implementation of mitigation measures that address site-specific impacts related to hazards and hazardous materials, which include Mitigation Measures D-1 through D-6. These mitigation measures require compliance with the RAPs, the manner in which the proposed residential uses would be permitted, and requirement to prepare an oil/water well investigation report. Compliance with these regulations and mitigation measures would ensure that the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.E.3 Applicable Mitigation Measures

The following mitigation measures were included in the adopted 2018 SEIR and its associated 2018 MMRP to ensure that any revisions to the RAP are approved by DTSC and that access to the necessary areas or monitoring programs required in the RAP would be provided although no significant hazards impact was determined. While the 2021 Project will also result in a less-than-significant impact, the 2021 Project would implement these mitigation measures subject to the following revisions:

Mitigation Measure D-1: To the extent ~~the~~ each Applicant desires to refine or modify requirements in the RAP, the Applicant shall provide documentation to the City indicating DTSC approval of such refinements or modifications prior to commencement of construction.

Mitigation Measure D-2: ~~The~~ Each Applicant shall provide documentation to the City indicating DTSC shall permit any proposed residential uses prior to issuance of a building permit for residential development.

Mitigation Measure D-3: ~~The~~ Each Applicant shall provide documentation to the City indicating that both on- and off-site risks associated with RAP construction have been evaluated to the satisfaction of the DTSC, and at a minimum, perimeter air monitoring shall be completed for dust, particulates, and constituents determined to be Constituents of Concern (COCs). Should the air monitoring indicate any violations of air quality as defined in the RAP, then construction activities causing

the exceedance shall cease until modifications have been implemented to remedy the exceedances.

Mitigation Measure D-4: ~~The Each~~ Applicant shall provide to the City documentation indicating that (1) a cell-specific risk assessment has been prepared by the Applicant and approved by DTSC demonstrating that the risk of exposure for occupancy of that cell is within acceptable levels to DTSC and (2) DTSC has approved a remedial action completion report documenting that the remedial systems are properly functioning prior to issuance of a Certificate of Occupancy.

Mitigation Measure D-5: This measure was removed in the 2018 SEIR.³⁸⁹ A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure D-6: ~~The Each~~ Applicant's construction contractor shall incorporate the contingency plan recommended under the July 9, 2008, Oil/Water Well Investigation report by Arcadis into construction specifications. The contingency plan shall be physically on site during any earthwork activities and implemented in the event that a previously unknown well is encountered at the Property Project Site.

There are no additional or revised mitigation measures required to address environmental impacts associated with hazards and hazardous materials as a result of the 2021 Project.

VI.E.4 Hazards and Hazardous Materials Impact Conclusions

With respect to hazards and hazardous materials, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR, all impacts related to hazards and hazardous materials would be reduced to a less-than-significant level or would result in no impact for the 2021 Project, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

³⁸⁹ *Mitigation Measure D-5 from the 2006 FEIR required the Applicant to provide documentation to the City indicating that applicable remedial systems and monitoring plans, including the location of the flare and treatment facility, are in accordance with applicable SCAQMD regulations. The flare facility has been constructed in accordance with SCAQMD requirements; therefore, this mitigation measure was determined to no longer be required in the 2018 SEIR, and it was deleted in the adopted 2018 MMRP and 2018 SEIR.*

VI.F HYDROLOGY AND WATER QUALITY³⁹⁰

The 2006 FEIR focused on surface water quality because on-site groundwater resources were addressed by DTSC as part of the remediation efforts for the Cal Compact Landfill site, which the 157-Acre Site encompasses, and were also discussed in Section IV.D, *Hazards and Hazardous Materials*, of the 2006 FEIR. The 2018 SEIR continued to discuss surface water quality in a section called *Hydrology and Water Quality* in Chapter VI, *Effects Found Not to Be Significant*, to describe the changes resulting from the 2018 Project as compared to the 2006 Project. This discussion has been expanded to address all of the current CEQA Guidelines Appendix G Thresholds related to Hydrology and Water Quality, referring to previous analyses, where appropriate.

VI.F.1 2021 Project Impact Analysis

Would the Project:

- a) *Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*
- b) *Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*
- c) *Substantially alter the existing drainage pattern of the site or area including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface run off in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of the existing or planned stormwater drainage system or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows?*

The Torrance Lateral is concrete-lined and conveys runoff from residential, commercial, industrial, and public roadways to the west and south of the Project Site in the City of Carson. This channelized flood-control feature also receives storm runoff from the Project Site via numerous, existing connecting drains. The Torrance Lateral is located outside of the Project Site, to the west and south, and is separated from the Project Site by chain-link fencing. Ultimately, the Torrance Lateral connects to the Dominquez Channel, east of I-405 Freeway and downstream of the Project Site.

The Torrance Lateral has been designated by the Environmental Protection Agency as a Clean Water Act Section 303(d) impaired water body, which means it does not meet, or is not expected

³⁹⁰ Referred to as "Surface Water Quality" in the 2018 SEIR.

to meet, water quality standards. The water quality standards that are or may be exceeded for the Torrance Lateral include copper, coliform bacteria, and lead.³⁹¹

Runoff from the Project Site to the Torrance Lateral would be regulated during both construction and post-construction activities. During construction, activities would be regulated by the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002 (Construction General Permit [CGP]), which was amended in both 2010 (2010-0014-DWG) and 2012 (2012-006-DWQ) and has been approved by the State Water Quality Control Board (SWQCB).³⁹² Post-construction activities would be regulated by Order No. R4-2012-0175 as amended by State Water Board Order WQ 2015-0075 and Los Angeles Water Board Order R4-2012-0175-A01, NPDES Permit No. CAS004001 (MS4 permit)³⁹³ with the proposed BMPs detailed in the approved (2009) Standard Urban Stormwater Mitigation Plan (SUSMP). Each of these regulatory controls are further described below. In addition, an existing on-site GETS, which has been installed/completed and approved by DTSC, contains the groundwater plume and treats the extracted groundwater prior to discharge to the sanitary sewer system. This system would remain operational during both construction and post-construction activities.

a. Construction: Surface Water

The 2018 SEIR concluded that the 2018 Project, would adhere to the currently applicable NPDES General Construction Permit, which requirements would be maintained for the 2021 Project. Dischargers of projects that disturb 1 acre or more of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 acre or more, are required to obtain coverage under the CGP.³⁹⁴ Construction activities subject to this permit include clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

³⁹¹ State Water Resources Control Board, 2014 and 2016 California Integrated Report (Clean Water Act Section 303(d) List And 305(b) Report), https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml, accessed August 4, 2021.

³⁹² State Water Resources Control Board, Construction Stormwater General Permits, https://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.html, accessed June 2021.

³⁹³ State Water Resources Control Board, Stormwater – Los Angeles County Permits, https://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/losangeles.html, accessed June 2021.

³⁹⁴ The Construction General Permit Order 2009-0009-DWQ has been administratively extended until a new order is adopted and becomes effective.

Compliance with the CGP requires the preparation of an SWPPP by a certified Qualified SWPPP Developer (QSD) and ongoing implementation by a Qualified SWPPP Practitioner (QSP) for projects that disturb one or more acres of soil, which would include the Project Site. An SWPPP was prepared for the Project Site in October 2015, and revised in July 2019.

The SWPPP is the site specific plan for the QSP to implement to ensure that stormwater discharge quality is managed during construction activities and stays in compliance with the terms of the CGP. The SWPPP is considered a “living document” that is modified based on changing site conditions, when necessary. Under current conditions, runoff from the construction area is also monitored for a variety of constituents to confirm that specified levels in the CGP are maintained.

In summary, the SWPPP identifies site-specific sources of construction-related pollutants and describes BMPs that will reduce these pollutants in storm water discharges to the Torrance Lateral. In addition, on an annual basis, dischargers are required to submit an annual report to the SWRCB that indicates whether a discharger complies with and has addressed all applicable requirements of the General Permit.

As with the 2018 Project, the changes under the 2021 Project would have no substantive difference in terms of the BMPs that would be implemented to reduce potential adverse surface water quality effects during construction as required by the SWPPP. In fact, the BMPs would likely be more stringent with the newer version of the General Construction Permit that has been updated since certification of the 2006 FEIR.

b. Operation: Surface Water

The 2021 Project would utilize existing connections to the Torrance Lateral; no new or modified connections are proposed. All stormwater from the 2021 Project would continue to be contained in an on-site drainage system and discharged to the Torrance Lateral in compliance with the City’s drainage control requirements of the 2009 Standard Urban Stormwater Mitigation Plan (2009 SUSMP) and the City’s Storm Water Pollution Control Measures for New Development Projects, which contains more stringent regulatory requirements than assumed in 2006, to address post-construction runoff from the 2006 Project. A SUSMP plan must be submitted as a condition of project approval to ensure that the Developer/Applicant(s) conforms to the City’s drainage control requirements. The SUSMP permit requirements have been updated since the 2006 FEIR and are generally more stringent for new development. Therefore, the proposed changes to drainage patterns associated with the 2021 Project would not be materially different and still subject to the drainage control requirements consistent with the 2009 SUSMP.

In furtherance of the SUSMP, a portion of the backbone storm drain system has been constructed and Vortechs units, which are hydrodynamic separators that trap and retain trash, sediment, debris, and hydrocarbons, have been installed. As part of the 2021 Project, the Developer intends

to fully implement the approved SUSMP, which includes additional post-construction stormwater treatment systems, including Filterra units, which are biofiltration systems that provide high volume/flow treatment and pollutant removal, along Lenardo Drive and other backbone streets; and Bioclean filter inserts in all on-site catch basins and discharge pipes.

In 2012, Los Angeles County issued the MS4 permit, which applies to the City of Carson. The MS4 permit focuses on pollutant removal, runoff management, and watershed-scale stormwater improvement. The City of Carson refers to the Los Angeles County Department of Public Works Low Impact Development Standard Manual (LID Manual) to guide post-construction BMP planning under the County's current MS4 permit.

When compared to the current 303(d) listing, TMDLs, and constituents that the City is monitoring for, metals (copper, zinc, and lead) are the only expected pollutants of concern from the proposed development. Therefore, even under the current MS4 permit, the BMPs approved in the 2009 SUSMP would only focus on managing the discharge of metals. The suite of BMPs in the SUSMP address the pollutants of concern that may be generated by this development and remain appropriate to assist the City with meeting water quality objectives for metals, and as an added benefit, bacteria.

The proposed changes in the land use program in PA3 under the 2021 Project would be consistent with the stormwater drainage approach assumed for the 2018 Project. All stormwater from the Project Site would be contained in an on-site drainage system and discharged to the Torrance Lateral in compliance with the City's drainage control requirements, which contains more stringent regulatory requirements than assumed in 2006. The 2009 SUSMP includes drainage control requirements that all development must incorporate into drainage control design. New development, including that proposed under the 2021 Project, must include drainage control features that address water quality and water quantity control to minimize adverse effects to downstream locations.

The 2021 Project would also introduce new impervious surfaces to the Project Site, similar to the new impervious surfaces described in the 2006 FEIR and 2018 SEIR. However, the RAP, which is the DTSC-approved plan that specifies the remediation approach and objectives for protection of public health and the environment,³⁹⁵ requires an impermeable landfill cap across the entire 157-Acre Site. Therefore, as was the case for the 2006 and 2018 Projects, the 2021 Project would similarly be required to implement drainage control features that control off-site runoff volumes in accordance with the City's drainage control regulations, as well as the 2009 SUSMP requirements.

³⁹⁵ *Brown and Root Environmental, Final Remediation Plan (RAP), Cal Compact Landfill (Upper Operable Unit), October 1995. The Upper OU RAP was modified by an ESD in 2009.*

c. Construction and Operation: Groundwater

In 2013 and 2014, a GETS was installed, and it was approved by DTSC before becoming operational in 2014. The GETS hydraulically contains impacted groundwater along the Project Site boundary where contaminated groundwater is located and could potentially migrate off site through a network of 29 groundwater extraction wells around the downgradient edge of the 157-Acre Site. These extraction wells are pumped to collect and control groundwater in and beneath the waste zone. The RACR for the GETS and the DTSC approval letter for the GETS RACR is provided as Appendix G5 of this 2021 SEIR.

The existing GETS is located at the southern end of the 157-Acre Site (refer to Figure II-2, Existing On-Site and Off-Site Uses, provided in Chapter II, *2021 Project Description*, of this 2021 SEIR) and will remain operational after development of the Project Site. Discharges associated with the groundwater treatment program are permitted under the Los Angeles County Sanitization Industrial Wastewater Discharge Permit, and all groundwater treatment effluent is required to adhere to discharge requirements of the GETS permit. Discharges associated with the 2021 Project related to groundwater treatment (effluent) remain unchanged, as compared to the 2018 Project, and are permitted with the Los Angeles County Sanitization District (LACSD).³⁹⁶ All treated groundwater effluent is required to be in accordance with the LACSD flow and substance limits, which would not change with the 2021 Project. Thus, the proposed changes in the land use program in PA3 under the 2021 Project would be consistent with the GETS assumed for the 2018 Project.

d. Conclusion

The proposed changes in the 2021 Project would be consistent with the previously proposed (2018) stormwater drainage and surface water and groundwater quality management approaches, as well as the more stringent regulatory requirements that have occurred since the 2006 FEIR. Implementation of the BMP plan developed in the SWPPP to comply with the CGP during construction activities and implementation of the approved SUSMP to comply with MS4 requirements for post-construction activities would avoid or minimize discharge of deleterious materials to the Torrance Lateral from the Project Site. In summary, with respect to surface or ground water quality, water quality standards, groundwater recharge, flooding, or exceeding the capacity of the existing or planned stormwater drainage system, the 2021 Project, as with the 2018 Project, impacts would remain **less than significant**.

³⁹⁶ *Tetra Tech Incorporated, Remedial Action Completion Report, Groundwater Extraction and Treatment System for the Upper Operable Unit, March 2015.*

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As identified in the Safety Element of the 2004 City of Carson General Plan, the limits of the 100-year storm are limited to the Dominguez Channel;³⁹⁷ therefore, no portion of the Project Site is designated within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Maps or any other flood hazard delineation map. As determined in the 2006 FEIR and 2018 SEIR, no impacts related to hazards associated with flooding would occur. The Project Site is also not located within close proximity to a dam or levee or in seiche, tsunami, or mudflow hazard area. Based on the topography of the Project Site and surrounding area, there is not a significant risk for flooding. As determined in the 2006 FEIR and 2018 SEIR, development on the Project Site would not expose people or structures to flooding or significant risks as a result of a flood hazard, tsunami, or seiche, resulting in the release of pollutants due to project inundation. As concluded in the 2018 SEIR, the 2021 Project would continue to result in **no impact**.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Since publication of the 2006 FEIR and 2018 SEIR, the CEQA guidelines have added an additional significance threshold that states a project's impacts could be significant if it would result in a conflict with or obstruction of implementation of a water quality control plan or sustainable groundwater management plan. As noted above, construction of the 2021 Project and inclusion of required drainage control requirements consistent with the 2009 SUSMP would be considered as complying with a water quality control plan and, as a result, there would be no conflict associated with the 2021 Project. As analyzed in both the 2006 FEIR and the 2018 SEIR, water supply that would be provided by California Water Service Company (Cal Water) Rancho Dominguez District was determined by a Water Supply Assessment (WSA) to be sufficient for the then proposed projects in normal, dry, and multiple dry years. The total water demand for the 2006 FEIR was calculated at 795,470 gallons per day (gpd), or 892 acre-feet/year (afy). The revisions to the 2018 SEIR reduced the water demand from the 2006 FEIR to 629,445 gpd, or 705 afy. The 2018 SEIR analysis further confirmed that there were no changes in circumstances or conditions that would substantially affect the ability of Cal Water to provide a sufficient supply of water. Water served by Cal Water comes from a combination of local groundwater and surface water purchased from Central Basin MWD and West Basin MWD, which is imported from the Colorado River and the State Water Project. Water supply is managed through implementation of the Urban Water Management Plan (UWMP) that was prepared for the Rancho Dominguez District in 2015 and is currently being updated. The water demand from the

³⁹⁷ *City of Carson, Carson General Plan, Chapter 6, Safety Element, 2004, p. SAF-3, https://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%206_Safety.pdf, accessed May 2021.*

2021 Project would result in a water demand even further reduced to 419,315 gpd or 470 afy, which would result in a decrease as compared to both the approved 2006 and 2018 Projects.

Due to the decrease in water demand, the 2021 Project would not cause a substantial change that would affect Cal Water's ability to provide adequate water supply or manage its groundwater resources consistent with its current 2020 UWMP, which was the UWMP assumed in the 2018 SEIR (refer to Section VI.M, *Utilities and Service Systems*, of this 2021 SEIR for a discussion of water supply). Therefore, the 2021 Project would not conflict with a groundwater management plan. Impacts would remain **less than significant**.

VI.F.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts associated with hydrology and water quality is site-specific because each project site has a different set of hydraulic and drainage considerations that would be subject to specific site-development and construction standards.

Given the comprehensive regulatory framework designed to address construction-related and post-construction impacts related to stormwater runoff, cumulative impacts would be less than significant. As discussed in the impact analysis, all projects of over one-acre in size would be required to comply with the State Construction Stormwater General Permit, including preparation of an SWPPP with construction-related BMPs. Post-construction stormwater runoff would comply with the NPDES permit for Phase II regulated small municipal separate storm sewer system (MS4), which would include post-construction runoff control minimum control measures. Compliance with these regulations would ensure that the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.F.3 Applicable Mitigation Measures

Mitigation Measure F-1 was provided in the 2006 FEIR to address surface water quality impacts related to DD3; however, because DD3 was removed from the Project Site as part of the 2018 Project and it had already been constructed, the mitigation measure was also deleted as part of the certified 2018 SEIR. As a result, Mitigation Measure F-1 is not included in this 2021 SEIR. There are no mitigation measures required to address environmental impacts associated with hydrology and water quality as a result of the 2021 Project.

VI.F.4 Surface Water Quality Impact Conclusions

With respect to hydrology and water quality, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures

that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

All impacts related to hydrology and water quality would be less than significant or would result in no impacts for the 2021 Project, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.G NOISE

VI.G.1 2021 Project Impact Analysis

Would the project result in:

- c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?*

The Project Site is not located within an airport land use plan area. The closest airport is the Compton Airport, located approximately 3.25 miles north of the Project Site. The nearest private airstrip is the port for Goodyear Wingfoot Two, which is a rigid-frame blimp, and it is located approximately 0.4 miles northeast of the Project Site to the east of the I-405 Freeway. As the blimp generates low noise levels and arrives and departs only to cover special events, such as sporting or entertainment events, the continuing operations of the private airstrip would not expose people residing or living on the Project Site to excessive noise levels.

The 2021 Project would not expose people residing or working in the area to excessive noise levels due to private airstrip or public use airport operations. Impacts would remain **less than significant**.

VI.G.2 2021 Project Cumulative Impact Analysis

As the only private or public use airport within two miles of the Project Site, there are no other related private or public use airport projects that would combine with the existing Goodyear Wingfoot Two airstrip to create a cumulative impact. Therefore, the 2021 Project would not combine with other projects to cause related impacts, and no cumulative impacts would result.

VI.G.3 Applicable Mitigation Measures

As with the 2006 FEIR and the 2018 SEIR, no mitigation measures related to noise Threshold (c) (i.e., airport noise) are required because no significant impacts would occur.

VI.G.4 Noise Impact Conclusions

With respect to public airport or private airstrip noise, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

Impacts related to airport noise would be less than significant for the 2021 Project, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.H POPULATION AND HOUSING

VI.H.1 2021 Project Impact Analysis

Would the Project:

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

The 2018 SEIR concluded that the 2018 Project could support a residential population increase of approximately 4,550 persons, including PA1 and DD3, which would be within Southern California Association of Governments' (SCAG) forecasted short- and long-term growth within the South Bay Cities Subregion (2018 SEIR p. VI-16). Since the number of residential units (i.e., up to 1,250 residential units) would remain the same under the 2021 Project as with the 2018 Project and 2018 SEIR, additional direct population growth as a result of increasing the housing stock within the City would not occur. For this reason, anticipated residential population growth of approximately 4,550 persons from the residential uses under the 2018 Project would remain the same for the 2021 Project. This 2021 SEIR does not modify any of these conclusions.

The 2021 Project has the potential to induce indirect population growth by increasing the amount of employment opportunities for City residents and residents within Los Angeles County as a whole, as further discussed in Section II.L, *Employees*, and Table II8, 2021 Project – Estimated Employees Generated during Operation. Because PA1 continues to propose residential uses, it is not assumed to result in the generation of Project-related employees. The employees anticipated for land uses within PA2 would also remain the same under the 2021 Project as for the 2018 Project, which would total approximately 1,089 employees (2018 SEIR Appendix J, *Solid Waste Calculations*, and Table II-9, 2021 Project – Estimated Employees Generated during

Operation).³⁹⁸ However, due to the changes in land uses in PA3, the projected number of employees in this planning area would increase from 3,299 employees (2018 SEIR Appendix J, *Solid Waste Calculations*) to 4,640 employees due to the provision of higher employment-generating fulfillment and distribution uses.

Overall, total operational employees would increase from 4,388 employees under the 2018 Project to 5,729 employees under the 2021 Project, resulting in an increase of 1,341 employees due to the provision of the higher employee-generating fulfillment and distribution uses in PA3.

While implementation of the 2021 Project would provide a total of 5,729 jobs anticipated for the Project Site during operation, future employees are anticipated to come from the existing local and regional labor force for (1) the light industrial uses within PA3(a), which would employ truckers and warehouse employees, and (2) the commercial and retail uses within PA3(b). These jobs are not anticipated to draw new residents to the City or surrounding area since they do not require a highly specialized workforce.

The number of construction-related employees associated with the 2021 Project is assumed to remain similar as for the 2018 Project. As disclosed in Section II.L, *Employees*, construction employees associated with the 2021 Project would vary by planning area, from a low of 32 to a maximum daily high of 702. The 2018 Project would have required a maximum of 702 construction employees (2018 SEIR Appendix G, *Air Quality Calculations*).³⁹⁹ As with the operational employees, the construction jobs are not anticipated to draw new residents to the City or surrounding area since they do not require a highly specialized workforce.

Therefore, even though the 2021 Project would increase the amount of operational employment opportunities within the City, these jobs are not anticipated to draw new residents to the City or surrounding area since they do not require a highly specialized workforce. In addition, the population growth associated with the residential development in PA1 would not increase from the population growth for PA1 as disclosed in the 2018 SEIR. Thus, this 2021 SEIR does not modify any of the conclusions under the 2018 SEIR with respect to population growth.

Furthermore, as with the 2018 Project, the 2021 Project is considered an infill project and would not necessitate the extension of existing roads or other infrastructure improvements beyond the Project Site, which could cause indirect population growth. For these reasons, the 2021 Project would not induce substantial unplanned population growth in the area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure. Impacts would remain **less than significant**.

³⁹⁸ Appendix J of the 2018 SEIR can be found at:
<https://ci.carson.ca.us/communitydevelopment/thedistrict.aspx>.

³⁹⁹ Appendix G of the 2018 SEIR can be found at:
<https://ci.carson.ca.us/communitydevelopment/thedistrict.aspx>.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Similar to the existing conditions disclosed in the 2018 SEIR, the Project Site is a currently undeveloped and does not contain any residential development (2018 SEIR p. VI-16). Therefore, development of the 2021 Project would not displace existing housing or persons necessitating the construction of replacement housing. As with the 2018 Project, the 2021 Project would continue to result in **no impact**.

VI.H.2 2021 Project Cumulative Impact Analysis

The geographical context for the analysis of cumulative impacts associated with population and housing is the South Bay Cities Subregion of Los Angeles County. The Southern California Association of Governments (SCAG), in coordination with individual cities within its jurisdiction, forecasts anticipated population growth within the region as part of its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in order to ensure infrastructure and service systems are upgraded and/or expanded, as necessary, in pace with the growing population. The most recently adopted RTP/SCS is the Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS).⁴⁰⁰ The SCAG RTP/SCS undergoes its own CEQA review at the time of adoption, where environmental impacts of the plan are reviewed and mitigated, as required. If a jurisdiction is consistent with the population growth projected by SCAG, the jurisdiction’s population growth will have been planned for and mitigated, where necessary, and any cumulative impacts associated with such growth would have been previously addressed. However, if a jurisdiction under SCAG is not consistent with the RTP/SCS population projections, then a cumulative impact related to unplanned population growth could occur.

The City of Carson’s General Plan is consistent with the 2020–2045 RTP/SCS.⁴⁰¹ The 2018 Project was determined to be within the SCAG’s population growth forecasts in the 2018 SEIR, which relied on the 2016–2040 RTP/SCS. In addition, the 2021 Project is within the population growth forecasts of the 2020–2045 RTP/SCS. Further, implementation of the 2021 Project would not change the population growth compared to the population growth projected in the 2018 SEIR as the proposed residential uses in PA1 would remain the same. Therefore, the 2021 Project’s contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

⁴⁰⁰ Southern California Association of Governments (SCAG), *Connect SoCal*, <https://scag.ca.gov/connect-social>, accessed May 2021.

⁴⁰¹ SCAG, *Connect SoCal, Local Input and Envisioning Process Data/Map Book*, <https://scag.ca.gov/sites/main/files/file-attachments/carson.pdf?1604793216>, accessed May 2021.

VI.H.3 Applicable Mitigation Measures

As with the 2006 FEIR and 2018 SEIR, mitigation measures related to population and housing are required because no significant impacts would occur.

VI.H.4 Population and Housing Impact Conclusions

With respect to population and housing, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. All impacts related to population and housing would remain less than significant without mitigation or would result in no impact for the 2021 Project, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.I PUBLIC SERVICES

VI.I.1 2021 Project Impact Analysis

Would the Project:

- a) *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*
 - i) *Fire protection?*

Fire protection service would be provided to the Project Site by the Los Angeles County Fire Department (LACoFD), as with the 2018 Project (2018 SEIR p. VI-17). Since the adoption of the 2006 Project, LACoFD has included the Project Site in its service area and within its service needs projections to ensure adequate fire protection services are available for development of the Project Site.

During operation, the occupancy of the new buildings under the 2021 Project would increase the demand for LACoFD staffing, equipment, and facilities, as was the case for the 2018 Project. Fire Station No. 36 is the closest station to the Project Site and, therefore, is likely to provide first response for emergency incidents.

Like the 2018 Project, compliance with all applicable fire code regulations regarding site access, fire hydrant spacing, water storage, building materials, construction standards, and fire flow would address the 2021 Project's demand on fire protection services. To further ensure compliance with all applicable fire safety codes and requirements, the 2018 SEIR also incorporated Mitigation Measures I.1-1 through I.1-18, which address a range of fire protection and safety requirements otherwise required by code or regulation, such as adequate construction

access, adequate ingress/egress access points for emergency response, provision of access from on-site driveways within 150 feet from all portions of the exterior walls within the first story of any building, installation of fire sprinkler systems, provision of adequate water pressure to meet Code-required fire flow, provision of fire hydrant spacing of 300 feet of each hydrant, provision of appropriate signage to prohibit parking in fire access areas, and provision of adequate water supplies. In addition, Mitigation Measure J.1-8 (for water supply) would also require that water lines and hydrants are sized and located to meet the fire flow requirements established by LACoFD. These mitigation measures would also be implemented by the 2021 Project to address fire protection requirements.

While the 2006 Project was required to pay a fair-share contribution to the LACoFD for new fire facilities, with the 2018 Project, LACoFD did not identify or request any such contribution for facilities and has not identified or requested any specific contribution for the 2021 Project. As such, a fair-share contribution was not required for the 2018 Project, and Mitigation Measure I.1-13 was deleted in the 2018 SEIR. Similarly, Mitigation Measure I.1-13 would not be applicable to the 2021 Project. However, the annual fees required to be paid by the Applicant(s) of the 2021 Project in association with CFD No. 2012-2, as amended or modified from time to time, could be used for improvements to fire facilities.⁴⁰²

The currently vacant landfill site does not generate any property taxes or revenue for governmental services. Development and occupancy of the 2021 Project would generate annually recurring revenue to the Los Angeles County General Fund in the form of taxes and other miscellaneous charges (e.g., sales tax, property tax, etc.). A portion of such revenue, including direct assessments that are received by the LACoFD, could be used to address costs associated with demand for LACoFD operations and staffing.

Therefore, with implementation of Mitigation Measures I.1-1 through I.1-14 and J.1-8, the 2021 Project would comply with all applicable fire code regulations, mandatory fee payments and recommended fire safety measures. In addition, Mitigation Measures I.1-15 through I.1-18 would require the development of traffic-calming measures and alternate construction-related route plans, as well as the provision of bridge designs that would allow emergency access and provision of adequate water supply. The 2021 Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives. Impacts related to fire services would remain **less than significant with implementation of the identified mitigation measures.**

⁴⁰² *City of Carson, Community Facilities District Report – Community Facilities District No. 2012-2 of the City of Carson (The Boulevard at South Bay – Capital Improvements), September 12, 2012.*

ii) Police protection?

The Project Site is located within the jurisdiction of the Los Angeles County Sheriff's Department (Sheriff's Department). More specifically, the City of Carson, including the Project Site, is served by the Carson Sheriff Station located at 21356 South Avalon (2018 SEIR p. VI-20). Since the adoption of the 2006 Project, the Sheriff's Department has included the Project Site in its service area and within its service needs projections to ensure adequate police protection services are available for development of the Project Site.

Since the 2021 Project would allow for the addition of different uses (i.e., light industrial uses and community amenity, recreational, and park uses) and more overall square footage than proposed in 2018 (an increase of approximately 477,557 sf of light industrial/commercial uses in PA3), additional demand for police services could occur as compared to what was analyzed and disclosed in the 2018 SEIR for the 2018 Project.

Mitigation Measures I.2-1 and I.2-3 through I.2-7 included in the 2018 SEIR would also be required under the 2021 Project, which requires early coordination and approval from the Sheriff's Department on various policing and safety measures, such as development of a private security plan for PA2 and PA3, installation of security (video) cameras, development of a community policing plan, notification to the Sheriff's Department of planned entertainment activities at Carson Country Mart (e.g., performance pavilion), general coordination with the Sheriff's Department regarding crime prevention, and payment of an annual Citywide Community Facilities District (Citywide CFD) fee to support Los Angeles County Sheriff's services in the City of Carson.⁴⁰³

⁴⁰³ *The Los Angeles County Sheriff's Department is responsible for public safety throughout the City of Carson, which also includes code enforcement of all local laws and ordinances, animal control, emergency services, pedestrian and employee safety, building security, and community watch crime prevention programs.*

The annual Citywide CFD fee,⁴⁰⁴ as required by Mitigation Measure I.2-8, will be used, in part, to fund police (i.e., Los Angeles County Sheriff) services of the City of Carson required to sustain the public safety service delivery capability for emergency and non-emergency services, including related facilities, equipment, vehicles, services, supplies and personnel.

On April 20, 2021, a consultation meeting was held with Lt. Williams from the Sheriff's Department regarding the 2021 Project. Lt. Williams was provided the mitigation measures from the 2018 SEIR and a brief description of the changes between the 2018 Project and 2021 Project. In a follow up e-mail dated April 22, 2021, and provided in Appendix H of this 2021 SEIR, Lt. Williams noted that mitigation measures from the 2018 SEIR were acceptable, with a few minor, editorial revisions for Mitigation Measure I.2-5 and I.2-7. The revised mitigation language is provided below.

The 2021 Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios, response times or other performance objectives. Therefore, impacts to police services would continue to be **less than significant with implementation of the identified mitigation measures**.

iii) Schools?

Since the 2021 Project would not change the amount of residential units in PA1 from the 2018 Project, the amount of new students generated on the Project Site would be the same. As with the 2018 Project, the 2021 Project would generate students that would be within the boundaries of the Carson Street Elementary School, Stephen M. White Middle School, and Carson High School (2018 SEIR p. VI-22). The increase in students would result in potentially significant impacts to Los Angeles Unified School District (LAUSD) schools (2018 SEIR p. VI-22). As with the 2018 Project, the 2021 Project would be required to pay fees in accordance with Senate Bill (SB) 50 pursuant to California Government Code Section 65995. Payment of such fees is for

⁴⁰⁴ *City of Carson, City-Wide Community Facilities District (CFD No. 2018-01), 2021, <https://ci.carson.ca.us/communitydevelopment/CFD.aspx>, accessed May 2021. There are two annual CFD fees that would be applicable to public services related to the 2021 Project. The Citywide CFD funds support Citywide sheriff services; street sweeping; sidewalk cleaning and maintenance; maintenance of parkways and open space; maintenance of roadways; and flood and storm protection services. CFD No. 2012-2, as amended or modified from time to time, supports public on-site and/or off-site improvements related to potential impacts specifically occurring as a result of the 2021 Project, including street facilities; storm control facilities; sewer improvements; domestic water facilities; Sanitation District facilities; park, recreational, and open space facilities; school facilities; fire facilities; and library facilities. CFD No. 2012-1, as amended or modified from time to time, supports operation, maintenance, and monitoring of the remedial systems on the Project Site in accordance with the RAP approved by the Department of Toxic Substances Control on October 25, 1995; this CFD is mentioned in the hazards and hazardous materials discussion of this chapter.*

the purpose of addressing the construction of new school facilities, whether schools serving the project in question are at capacity or not and, pursuant to Section 65995(h), payment of such fees is deemed full mitigation of a project's development impacts.⁴⁰⁵ Therefore, as with the 2018 Project, impacts to schools under the 2021 Project would remain **less than significant**.

iv) Parks?

This discussion focuses on whether the 2021 Project would result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives. Refer also to Section VI.J, *Recreation*, for a discussion of whether the 2021 Project would: (1) increase the use of existing parks or recreational facilities such that substantial physical deterioration would occur or be accelerated; and (2) include recreational facilities or require the construction or expansion of recreational facilities that might result in an adverse physical effect on the environment.

Since the amount of allowable residential units would not change from the 2018 Project, residential demand for parks and recreational areas would not change under the 2021 Project from levels described in the 2018 SEIR. Furthermore, the 2021 Project includes the Carson Country Mart, which would add additional recreational acreage to the City's existing park acreage, by providing a new private park and open space area available for current and future residents.

Even with the addition of the Carson Country Mart, the Applicant would be required to pay a one-time Development Impact Fee (DIF),⁴⁰⁶ as required by Mitigation Measure I.4-1, with the funds used for the following six capital improvement components: (1) traffic; (2) parks; (3) beautification; (4) general government facilities (e.g., City Hall and the Corporate Yard); (5) transportation infrastructure, and (6) Utilities and Sustainability. In addition, the 2021 Project would also be required to implement Mitigation Measures 1.4-2 and I.4-3 for park impacts related to residential uses provided in PA1, as with the 2018 Project.

The 2021 Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park facilities (other than those proposed as part of the 2021 Project), the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or other performance objectives. Thus, impacts related to

⁴⁰⁵ *Government Code Section 65995(h) states in part: "The payment or satisfaction of a fee ...specified in Section 65995 ... are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving but not limited to the planning, use, or development of real property ... on the provision of adequate school facilities.*

⁴⁰⁶ *Interim Development Impact Fee (IDIF) Program (carson.ca.us), accessed May 2021.*

parks would be similar to those identified in the 2018 SEIR. Impacts would remain **less than significant with implementation of the identified mitigation measures**.

v) *Other public facilities (libraries)?*

The Project Site is within the service area of the Carson Regional Library, located approximately 1.5 miles south of the Project Site (2018 SEIR p. VI-24). The Carson Library service area includes the southern half of the City and nearby unincorporated areas of the County. Library demand is primarily based on residential population. Since the 2021 Project would not change the residential units included in PA1, there would be no change in the demand for library services in comparison to the conclusions reached under the 2018 SEIR for the 2018 Project. As stated in the 2018 SEIR, the 2018 Project could increase demand on the library system and would incorporate Mitigation Measure I.5-1, which requires the payment of its fair-share contribution for the improvement of library facilities to off-set potential impacts. Specifically, payment of annual fees by the Applicant(s) for CFD No. 2012-2, as amended or modified from time to time, supports public on-site and off-site improvements related to potential impacts specifically occurring as a result of the 2021 Project, which includes fees to improve library facilities.

The 2021 Project would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or other performance objectives. As such, impacts to library services would remain **less than significant with implementation of the identified mitigation measures**.

VI.I.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts associated with public services is the City of Carson.

As discussed above, the 2021 Project would be consistent with SCAG's forecasted population growth projections and, as such, would not generate unplanned population growth within the City. In addition, implementation of the Mitigation Measures I.1-1 through I.1-18, I.2-1 through I.2-8, I.4-1 through I.4-3, and I.5-1, including payment of all applicable development fees (e.g., Community Facilities District [CFD] and Developer Impacts fees [DIF]), would also reduce impacts to public services under the 2021 Project by ensuring compliance with City codes and ordinances related to emergency access and fire flows, provision of a community policing plan with video cameras, and provision of required parks, open space, and recreation areas. Therefore, the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.I.3 Applicable Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 MMRP. The 2021 Project would implement these mitigation measures, either as they were presented in the 2018 SEIR or revised as indicated:

Mitigation Measure I.1-1: Prior to construction, ~~the each~~ Applicant shall submit buildings plans to the Los Angeles County Fire Department (LACoFD) for review. Based on such plan check, any additional fire safety recommendations shall be implemented to the satisfaction of the LACoFD.

Mitigation Measure I.1-2: ~~The Each~~ Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.

Mitigation Measure I.1-3: ~~The Each~~ Applicant shall comply with all applicable fire code and ordinance requirements for construction, access, water mains, fire flows, and fire hydrants as required by the LACoFD.

Mitigation Measure I.1-4: Every building shall be accessible to ~~Fire Department~~ LACoFD apparatus by way of access roadways, with an all-weather surface of not less than the width prescribed by the LACoFD. The roadway shall extend to within 150 feet of all portions of exterior building walls when measured by an unobstructed route around the exterior of the building or as otherwise required by the LACoFD according to Los Angeles County Fire Code.

Mitigation Measure I.1-5: Requirements for access, fire flows, and hydrants shall be addressed during the City's subdivision tentative map stage or prior to the transfer of any portion of the Project Site to the Applicant.

Mitigation Measure I.1-6: Fire sprinkler systems shall be installed in all residential and commercial occupancies to the satisfaction of the LACoFD.

Mitigation Measure I.1-7: ~~The Each~~ Applicant shall ensure that adequate water pressure is available to meet Code-required fire flow. Based on the size of the buildings, proximity of other structures, and construction type, a maximum fire flow up to 4,000 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for up to a four-hour duration may be required.

Mitigation Measure I.1-8: Fire hydrant spacing shall be as required by the LACoFD according to Los Angeles County Fire Code, which is anticipated to be 300 feet and shall-meeting the following requirements:

- No portion of a lot's frontage shall be more than 200 feet via vehicular access from a properly spaced fire hydrant;
- No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant;

- Additional hydrants shall be required if spacing exceeds specified distances;
- When a cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block;
- A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use; and
- Turning radii in a commercial zone shall not be less than 32 feet. The measurement shall be determined at the centerline of the road. A turning area shall be provided for all driveways exceeding 150 feet in length at the end of all cul-de-sacs, to the satisfaction of the LACoFD.

Mitigation Measure I.1-9: All on-site driveways and roadways shall provide a minimum unobstructed (clear-to-sky) width of 28 feet. The on-site driveways shall be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet of, an exterior wall on one side of the proposed structure or ~~as otherwise in accordance with~~ required by the City LACoFD according to Los Angeles County Fire Code.

Mitigation Measure I.1-10: All on-site driveways shall be provided as required by the LACoFD according to Los Angeles County Fire Code, which is anticipated to be a minimum unobstructed (clear-to-sky) width of 28 feet. ~~Driveway width shall but~~ may be increased under the following conditions:

- If parallel parking is allowed on one side of the access roadway/driveway, the roadway width shall be 34 feet; and
- If parallel parking is allowed on both sides of the access roadway/driveway, the roadway width shall be 36 feet in a residential area or 42 feet in a commercial area.

Mitigation Measure I.1-11: The entrance to any street or driveway with parking restrictions shall be posted with LACoFD-approved signs stating “NO PARKING – FIRE LANE” in 3-inch-high letters, at intermittent distances of 150 feet. Any access-way that is less than 34 feet in width shall be labeled “Fire Lane” on the final tract map and final building plans.

Mitigation Measure I.1-12: The following standards apply to the 2021 Project’s residential component only or as otherwise required by the LACoFD according to Los Angeles County Fire Code:

- A cul-de-sac shall be a minimum of 34 feet in width and shall not be more than 700 feet in length;
- The length of the cul-de-sac may be increased to 1,000 feet if a minimum 36-foot-wide roadway is provided; and

- An LACoFD-approved turning radius shall be provided at the terminus of all residential cul-de-sacs.

Mitigation Measure I.1-13: This measure was removed from the 2018 SEIR.⁴⁰⁷ A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.

Mitigation Measure I.1-14: All access devices and gates shall meet the following requirements or as otherwise required by the LACoFD according to Los Angeles County Fire Code:

- Any single-gated opening used for ingress and egress shall be a minimum of 26 feet clear-to-sky;
- Any divided gate opening (when each gate is used for a single direction of travel, i.e., ingress or egress) shall be a minimum width of 20 feet clear to sky;
- Gates and/or control devices shall be positioned a minimum of 50 feet from a public right-of-way and shall be provided with a turnaround having a minimum of 32 feet of turning radius. If an intercom system is used, the 50 feet shall be measured from the right-of-way to the intercom control device;
- All limited access devices shall be of a type approved by LACoFD; and
- Gate plans shall be submitted to LACoFD prior to installation. These plans shall show all locations, widths, and details of the proposed gates.

Mitigation Measure I.1-15: All proposals for traffic calming measures (speed humps/bumps/cushions, traffic circles, roundabouts, etc.) shall be submitted to LACoFD for review prior to implementation.

Mitigation Measure I.1-16: Provide three sets of alternate route (detour) plans with a tentative schedule of planned closures prior to the beginning of construction. Complete architectural/structural plans are not necessary.

Mitigation Measure I.1-17: Any temporary bridges shall be designed, constructed, and maintained to support a live load of at least 70,000 pounds. A minimum vertical clearance of 13'6" shall be required throughout construction.

Mitigation Measure I.1-18: Disruptions to water services shall be coordinated with LACoFD, and alternate water sources shall be provided for fire protection during such disruptions.

⁴⁰⁷ This mitigation measure was deleted as part of the 2018 SEIR because the LACoFD has not identified or requested a fair-share contribution for the 2018 Project. As such, a fair-share contribution was not required for the 2018 Project, and Mitigation Measure I.1-13 was deleted.

Mitigation Measure I.2-1: The Applicant shall provide private security services within ~~Planning Areas PA2 and PA3~~ that are occupied by commercial development. On-site security services shall maintain an ongoing dialogue with the Sheriff's Department so as to maximize the value of the security service provided.

Mitigation Measure I.2-2: ~~The Applicant shall incorporate into the Project design a space for a Sheriff's substation for use by Los Angeles County Sheriff's Department shall be incorporated into the Project design. This 2021 SEIR deletes this mitigation measure in lieu of Mitigation Measure I.2-8, which requires the payment of an annual CFD fee to fund Sheriff's Department services, facilities, and equipment that would offset the impacts of the 2021 Project. A placeholder for this mitigation measure is provided here to maintain consistent numbering of the mitigation measures.~~

Mitigation Measure I.2-3: The Applicant shall install video cameras throughout the commercial development within ~~Planning Areas PA2 and PA3~~ with a digitally recorded feed to the substation that is also accessible via the internet at the Carson Sheriff's Station.

Mitigation Measure I.2-4: The Applicant shall develop jointly with the Sheriff's Department a community policing plan, subject to final review and approval by the Sheriff's Department.

Mitigation Measure I.2-5: ~~The Each Applicant shall confer with develop a private security plan that shall be provided to the Sheriff's Department and, if private security is not sufficient, shall fund Deputy Sheriffs on an overtime basis to augment security during peak periods, as jointly determined by the Applicant or its successor, and the Sheriff's Department for input on the adequacy of the private security plan and provide further recommendations, as necessary, to be incorporated into the private security plan.~~

Mitigation Measure I.2-6: The management of the entertainment venues (e.g., performance pavilion) located within the Project sSite shall annually notify the Sheriff's Station in advance of planned activities (i.e., movie schedules).

Mitigation Measure I.2-7: The Sheriff's Department Crime Prevention Unit shall be contacted for advice on crime prevention programs that could be incorporated into the ~~proposed modified~~ Project, including Neighborhood Watch.

Mitigation Measure I.2-8: Applicant(s) of ~~Planning Areas PA1, PA2, and PA3~~ shall pay an annual Citywide Community Facilities District (CFD) fee payment as part of their fair-share contribution for Sheriff department services, facilities, and equipment that is required to offset the impacts of the proposed modified Project, as determined by the City of Carson after consultation with the Sheriff's Department.

Mitigation Measure I.4-1: Residential uses of the 2021 Project shall provide park and recreation facilities pursuant to ~~Section 9207.19~~, equivalent to ~~3 acres per 1,000 population~~, that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu Development Impact Fees (DIF).

Mitigation Measure I.4-2: Residential uses of the 2021 Project shall meet the intent of Municipal Code Sections ~~9128.54 and 9128.15~~ and 9128.54 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs.

Mitigation Measure I.4-3: Public open space for residential uses of the 2021 Project shall be calculated on a per-unit basis:

- For PA-1:
 - Studio and 1-Bedroom Units: a minimum of 150 ~~sq.ft.~~sf per unit
 - 2-Bedroom Units: a minimum of 220 ~~sq.ft.~~sf per unit
 - 3+-Bedroom Units: a minimum of 250 ~~sq.ft.~~sf per unit
 - All with a minimum dimension of 15 feet in any direction
- ~~For DD3:~~
 - ~~All Units: a minimum of 300 sq.ft. per unit with a minimum dimension of 15 feet in any direction~~

Mitigation Measure I.5-1: Applicants for residential uses shall pay a fair-share contribution for the improvement of library facilities that are required to offset impacts of the 2021 Project, subject to approval of the County of Los Angeles Public Library.

VI.I.4 Public Services Impact Conclusions

With respect to public services, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR or as revised in this 2021 SEIR, all impacts related to public services would remain less than significant, which is the same conclusion reached for both the 2006 Project and the 2018 Project.

VI.J RECREATION

VI.J.1 2021 Project Impact Analysis

Would the Project:

- a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?*
- b) *Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?*

As discussed in Section VI.I, *Public Services*, Threshold (a.iv) (i.e., parks), above, since the number of residential units would not change from the 2018 Project, residential demand for parks and recreational areas under the 2021 Project would not change from that described in the 2018 SEIR. For this reason, implementation of the 2021 Project would not increase the demand for parks and recreational facilities within the City and would not cause the substantial physical deterioration of existing parks or recreational facilities within the City or surrounding area.

Furthermore, the 2021 Project includes the Carson Country Mart, which would add 6.29 acres⁴⁰⁸ of private park amenities and active and passive open space to the City's existing public parkland acreage, which would increase the available parkland and recreational facilities available to residents of the City and other visitors to the Project Site. Specifically, as described further in Chapter II, *2021 Project Description*, of this 2021 SEIR, 6.29 acres of open space and programmed spaces and amenity areas would be provided in the Carson Country Mart. Of the 6.29 acres, 2.36 acres would be open space/parks and 3.93 acres would programmed spaces, including: a 6,365-square-foot (sf) arrival plaza, 26,265 sf food and beverage plaza area, 22,740 sf dog park, 3,343 sf performance pavilion, 19,400 sf botanic garden, 25,400 sf children's play area, 19,490 sf bioretention garden, 1,800 sf beer garden, 2,990 games terrace, 35,210 sf event lawn, 2,975 sf sculpture garden, 4,425 sf water feature and iconic element, 570 sf arrival area of pedestrian community bridge, 50,774 sf of planted open spaces, and 52,159 sf of planted buffer areas on the western and southern portions of the Carson Country Mart.

Any potential environmental impacts that could occur as a result of construction and operation of the Carson Country Mart (which includes park, open space, and community amenity areas) have been addressed in this 2021 SEIR in Section IV.C, *Transportation*; Section IV.D, *Air Quality*; Section IV.E, *Noise*; Section IV.F, *Biological Resources*; and Section IV.H, *Greenhouse Gas Emissions*.

⁴⁰⁸ *The Carson Country Mart is 11.12 acres, of which 6.29 acres would include park amenities and active and passive open space areas; in addition, 0.62 acres would be provided as the Enhanced Parkway along Lenardo Drive, but is not considered as part of the total active and passive open space provided within PA3.*

All uses included within the 2021 Specific Plan Amendment will be required to pay in-lieu Development Impact Fees (DIF) to the City to ensure the City's park and recreational facilities are provided as described in Mitigation Measure I.4-1. In addition, the 2021 Project would also be required to implement Mitigation Measure I.4-2, which would require the 2021 Project to meet the intent of Carson Municipal Code Sections 9128.15 and 9128.54, which specify requirements to provide private open space and common recreational facilities to meet the recreational needs of Project residents.

Mitigation Measure I.4-3 would mitigate potential park impacts related to the residential uses provided in PA1 (as was the case in the 2018 SEIR with respect to the 2018 Project). This mitigation measure would ensure that specific common open space is provided for residential uses of the 2021 Project on a per-unit basis.

The 2021 Project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or result in a substantial or accelerated physical deterioration of existing neighborhood or regional parks or other recreational facilities. Additionally, given the fact that the 2021 Project would include park and recreational amenities proposed in connection with the Carson Country Mart, the 2021 Project would reduce the demand within the City for other parks or other recreational facilities. Nonetheless, as required for all new construction, the Developer/Applicant(s) would pay a one-time Developer Impact Fee (DIF), a portion of which would be allocated to finance land acquisition and infrastructure costs to meet demand for park space attributable to new development. The Developer/Applicant(s) would also be required to pay an annual Citywide CFD fee, a portion of which would be allocated for the maintenance of parkways and open space within the City. Neither of these fees are required to mitigate any effects of the 2021 Project.

Based on the above, park and recreational environmental impacts would be less than those identified in the 2018 SEIR and, thus, would remain **less than significant with implementation of the identified mitigation measures**.

VI.J.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts associated with recreation is the City of Carson.

As discussed above, the 2021 Project would be consistent with SCAG's forecasted population growth projections and, as such, would not generate unplanned population growth within the City. In addition, implementation of the 2021 Project would not change the population growth as compared to the population growth projected in the 2018 SEIR as the proposed residential uses in PA1 would remain the same. Thus, the 2021 Project would not increase the number of residents within the City and would, therefore, not increase usage of existing parkland and recreational facilities by residents.

The 2021 Project would also develop new park and recreational amenities associated with the proposed Carson Country Mart on the Project Site, which would reduce the need within the City for other parks or other recreational facilities. While the number of employees under the 2021 Project would increase as compared to the 2018 Project (by 1,341 total employees), which are attributable to the uses at PA3, the nearby Carson Country Mart would fulfill any need for nearby recreational and open space opportunities for nearby employees.

The 2021 Project would also be required to implement Mitigation Measures I.4-1 through I.4-3, which would ensure compliance with the City's codes related to the provision of private and public open spaces. Compliance with these mitigation measures would reduce impacts to parks and recreational facilities to a less-than-significant level. Therefore, the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.J.3 Applicable Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 MMRP. The 2021 Project would implement these same mitigation measures, either as they were presented in the 2018 SEIR or revised as indicated:

Mitigation Measure I.4-1: Residential uses of the 2021 Project shall provide park and recreation facilities pursuant to ~~Section 9207.19, equivalent to 3 acres per 1,000 population,~~ that would be met through the provision of park space, on-site improvements, and/or, the payment of in-lieu Development Impact Fees (DIF).

Mitigation Measure I.4-2: Residential uses of the 2021 Project shall meet the intent of Municipal Code Sections ~~9128.54 and 9128.15~~ and 9128.54 through the provision of private open space as defined therein and/or the provision of additional amenities that meet the recreational needs of Project residents, e.g., health clubs.

Mitigation Measure I.4-3: Public open space for residential uses of the 2021 Project shall be calculated on a per-unit basis:

- For PA-1:
 - Studio and 1-Bedroom Units: a minimum of 150 ~~sq.ft.~~sf per unit
 - 2-Bedroom Units: a minimum of 220 ~~sq.ft.~~sf per unit
 - 3+-Bedroom Units: a minimum of 250 ~~sq.ft.~~sf per unit
 - All with a minimum dimension of 15 feet in any direction
- ~~For DD3:~~
 - ~~All Units: a minimum of 300 sq.ft. per unit with a minimum dimension of 15 feet in any direction~~

VI.J.4 Recreation Impact Conclusions

With respect to recreation, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR, all impacts related to recreation would be reduced to a less-than-significant level or would result in no impact for the 2021 Project, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

VI.K TRANSPORTATION

VI.K.1 2021 Project Impact Analysis

Would the Project:

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The 2018 SEIR concluded that there are no existing hazardous design features, such as sharp curves or dangerous intersections, on site or within the vicinity of the Project Site. The proposed site plan for the 2021 Project (refer to Figure II-6, Conceptual Site Plan, of this 2021 SEIR) is similar to that of the 2018 Project (refer to Figure II-4, Conceptual Project Components – Proposed Modified Project). All driveways and internal roadways would be designed to all applicable local, state, and federal roadway regulations to ensure that there would be no traffic hazards related to geometric design features (e.g., sharp curves or dangerous intersections), as further supported by *The District at South Bay 2021 Project Transportation Impact Analysis (TIA)*.⁴⁰⁹ Moreover, as with the 2018 Project, implementation of the 2021 Project would not introduce incompatible uses, such as a housing development located along a rural road frequently used by slow-moving farming vehicles or an arena or coliseum located in a low-density residential area. For these reasons, the site design would not include the creation of any geometric design features or include any uses that are incompatible with normal traffic operations. As with the 2018 Project, impacts under the 2021 Project related to traffic hazards would remain **less than significant**.

⁴⁰⁹ *Fehr & Peers, The District at South Bay 2021 Project Transportation Impact Analysis, October 2021.*

d) Result in inadequate emergency access?

The 2018 SEIR concluded that the 2018 Project would not significantly impact the City's adopted emergency response plan/emergency plan and would include roadways and access features in order to meet the requirements of the LACoFD as required by Mitigation Measure I.1-2 (2018 SEIR p. VI-26). As described in the Safety Element of the City's 2004 General Plan, the City prepared a Multi-Hazard Functional Plan for emergency response, which meets the State's SEMS requirements of state law.⁴¹⁰ The City also complies with the Los Angeles County Emergency Management Plan. In addition, the Safety Element of the General Plan identifies emergency response and recovery efforts, as well as evacuation routes and strategies.

As with the 2018 Project, the 2021 Project would also be consistent with the City's adopted emergency response plan/emergency plans as articulated in the Safety Element of the 2004 General Plan. All driveways into the Project Site would be designed and approved by LACoFD to ensure they are adequate to allow emergency vehicles clearance and access into the Project Site during an emergency. Additionally, the 2021 Project would continue to adhere to the requirements of all applicable codes within the County Fire Code and would install all applicable emergency systems and features throughout the Project Site. Refer also to Section VI.F, *Hazards and Hazardous Materials*, Threshold (f) (i.e., impair an emergency response plan), above, for an additional discussion of interference with an adopted emergency response plan or emergency evacuation plan.

In summary, impacts related to emergency access would be the same as those disclosed in the 2018 SEIR and would remain **less than significant with implementation of the identified mitigation measure**.

VI.K.2 2021 Project Cumulative Impact Analysis

The 2021 Project would result in less than significant impacts as it relates to traffic hazards and emergency access. As with the 2021 Project, proposed uses under the cumulative projects are those typical of the area (e.g., residential, industrial, and commercial), and all proposed driveways and internal roadways under the cumulative projects would be designed to all applicable local, state, and federal roadway regulations to ensure there would be no traffic hazards related to geometric design features. In addition, similar to the 2021 Project, all cumulative projects would include roadways and access features in order to meet the requirements of the LACoFD. As such, the 2021 Project would not combine with cumulative projects to generate cumulative traffic hazard and emergency access impacts. Thus, cumulative impacts related to geometric design features or incompatible uses would be less than significant.

⁴¹⁰ *City of Carson, Carson General Plan, Chapter 6, Safety Element, 2004*, https://ci.carson.ca.us/content/files/pdfs/planning/generalplan/Chapter%206_Safety.pdf, accessed May 2021.

VI.K.3 Applicable Mitigation Measures

The following mitigation measure was included in the 2018 SEIR and its associated 2018 MMRP, and the 2021 Project would continue to implement the same mitigation measure:

Mitigation Measure I.1-2: ~~The~~ Each Applicant shall provide adequate ingress/egress access points for emergency response to the satisfaction of the LACoFD.

VI.K.4 Transportation Impact Conclusions

With respect to transportation Thresholds (c) and (d) (i.e., design hazards, incompatible uses, or inadequate emergency access), construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR, all impacts related to transportation Thresholds (c) and (d) (i.e., design hazards, incompatible uses, or inadequate emergency access) would remain less than significant for the 2021 Project, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

VI.L TRIBAL CULTURAL RESOURCES

VI.L.1 2021 Project Impact Analysis

Would the Project:

- a) *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or*
- b) *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.*

Pursuant to the requirements of SB 18⁴¹¹ and Assembly Bill (AB 52),⁴¹² the City, as the lead agency, sent consultation notification letters via certified mail to Native American groups geographically and culturally affiliated with the Project Site. The letters included a description of the 2018 Project; the description of the Project Site location, which remains the same under both the 2018 Project and 2021 Project; and a notification of the type of consultation being initiated. In response to that request, the City received one response from the Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation) regarding consultation, the details of which are provided below.

The Kizh Nation responded on August 25, 2017, stating that the Project Site is located within the tribe's traditional ancestral territory and requested formal government-to-government consultation. On October 18, 2017, representatives from the City and the Kizh Nation met via a telephone conference. During the call, the Kizh Nation provided their knowledge of the Project Site and nearby potential resources. The City also presented the 2018 Project and provided documentation of the capping and proposed geotechnical work. The tribe asked that for a copy of these documents, which were provided by the City. The tribe also asked to be contacted if

⁴¹¹ *The purpose of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage for the purpose of protecting, or mitigating impacts to, cultural places. It requires local governments to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process. These consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.)*

⁴¹² *SB 52 established a new class of resources under CEQA: "tribal cultural resources" (TCRs) On July 1, 2015, TCRs were added to the list of resources that require analysis under CEQA. In accordance with SB 52, Native American Tribes culturally affiliated with a project area must be contacted for input regarding the potential impacts a proposed project would have on tribal cultural resources if they request consultation in writing. SB 52 applies to any project for which a Notice of Preparation, Notice of Mitigated Negative Declaration, or Notice of Negative Declaration will be filed on or after July 1, 2015.*

anything should change regarding excavation into native soils. Following this conversation, consultation was closed with the tribe.

In 2020, consultation was again initiated in response to the development proposal submitted by the Developer for the 2021 Project, which proposed the same extent of horizontal ground disturbance (e.g., grading, excavation, and geotechnical) as under the prior 2018 Project, which the City had completed its consultation with the Kizh Nation in 2017. The City requested a “consultation list of tribes” from the Native American Heritage Commission (NAHC). The NAHC provided the list on July 20, 2020, and the City initiated consultation on July 20, 2020, sending letters to all tribes provided by the NAHC, including: San Gabrieleno Band of Mission Indians – Kizh Nation (Kizh Nation); Gabrieleno/Tongva San Gabriel Band of Mission Indians; Gabrielino-Tongva Nation; Gabrielino Tongva Indians of California Tribal Council; Gabrieleno/Tongva Tribe; and Soboba Band of Luiseno Indians. In response, only one tribe responded, the Kizh Nation, on July 29, 2020. Formal government-to-government consultation was held on October 1, 2020, with representatives from the City and the Kizh Nation pursuant to a telephone conference meeting. As discussed during this 2020 consultation meeting, the tribe wanted to understand the depth of the landfill to confirm that the 2021 Project would not cause further ground disturbance. The City confirmed that grading and pile driving activities for the 2021 Project are the same as what was proposed for the 2018 Project. The tribe stated that no further consultation would be required provided that development activities did not require excavation beyond what was previously proposed.

Should any unanticipated prehistoric archaeological resources be encountered during construction and then subsequently be determined during consultation between the tribes and the City to potentially be tribal cultural resources, PRC Section 21084.3 would apply. Should the lead agency (City) determine that the 2021 Project may cause a substantial adverse change to a tribal cultural resource, the agency will need to consider avoidance and preservation of the resources as well as mitigation measures outlined in PRC Section 21084.3(b)(1)–(4), which can be considered to avoid or minimize the significant adverse impacts. As stated above, as required by AB 52, consultation between the City and the Kizh Nation was conducted in both 2017 and 2020. No identified tribal cultural resources as defined in PRC Section 21074(a)(1) that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k) have been identified within the Project Site.

Due to previous landfill activities, grading, and ground disturbance on the Project Site, the likelihood of encountering unknown tribal cultural resources is very low. Furthermore, ground disturbance, beyond the installation of a limited number of piles, is not anticipated to extend to any sediments buried below the landfill materials or native soils, and the grading activities proposed in 2021 (mass grading and installation of piles) is the same as proposed for the 2018

Project. Therefore, the 2021 Project would result in **no impact** to tribal cultural resources based upon the consultation provided in 2017 and 2020.

VI.L.2 2021 Project Cumulative Impact Analysis

A cumulative impact analysis is not required for these thresholds because the 2021 Project would result in no impacts to tribal cultural resources as defined in PRC Section 21074(a)(1) that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); therefore, the 2021 Project would not combine with other projects to cause related impacts. No cumulative impacts would occur.

VI.L.3 Applicable Mitigation Measures

There are no mitigation measures required to address impacts to tribal cultural resources as a result of the 2021 Project.

VI.L.4 Tribal Cultural Resources Impact Conclusions

With respect to tribal cultural resources, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, since there are no impacts, no mitigation measures are necessary. Thus, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more of these scenic vista or scenic resource significant effects.

All impacts related to tribal cultural resources would result in no impact for the 2021 Project.

VI.M UTILITIES AND SERVICE SYSTEMS

VI.M.1 2021 Project Impact Analysis

Would the Project:

- a) *Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*

a. Water

The Project Site is served by a 12-inch water main located in Main Street and a 16-inch water main located both on Del Amo Boulevard and Lenardo Drive. The pipeline ends at the Lenardo

Drive and Stamps Drive intersection, and the 2021 Project proposes to continue the 16-inch water main along Lenardo Drive to the south.

Within the Project Site, the water system consists of a 16-inch water main buried under Lenardo Drive and a 12-inch PVC water main buried under Stamps Drive and the existing on-site access/haul roads within PA1, PA2, and PA3. This backbone distribution of mains and fire hydrants was engineered for future commercial/industrial uses and was approved by the Los Angeles County Department of Public Works (2018 SEIR p. VI-27).

The 2021 Project would also incorporate water conservation methods such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The 2021 Specific Plan Amendment will include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features. Additionally, it is proposed to connect the on-site system to the West Basin Recycling Facility to decrease the potable water demand and enhance the water conservation efforts for the development.

In summary, as compared to the 2018 Project, the 2021 Project would reduce water demand and wastewater generation due to the changes in land uses proposed for PA3, as shown in **Table VI-1, Projected Water Demand**. The 2018 Project, including DD3 for comparison purposes, was projected to generate 692,158 gallons per day (gpd) of wastewater. With the land use changes proposed by the 2021 Project within PA3, the 2021 Project, along with those previously developed within DD3, would generate 588,711 gpd of wastewater, which is a reduction of 103,447 gpd of wastewater from the 2018 Project.

In April 2021, Michael Baker International (MBI) reviewed the existing water distribution system within PA1, PA2, and PA3 to determine its ability to supply water during average day demands and fire flow demands.⁴¹³ Because the water distribution system was determined to meet maximum day demands of the 2018 Project, and total water demand have decreased under the 2021 Project as compared to the 2018 Project, MBI determined that the water distribution system is also sufficient to meet maximum day demands for the 2021 Project.

With respect to any new construction in the City, all projects shall comply with LACoFD review of fire access and fire flow requirements, including fire flow demands, static pressure, residual pressure, fire hydrant locations, sprinkler information, and fire water connections. As part of final design approval, the Applicant(s) must provide evidence to the LACoFD that the 2021 Project meets all LACoFD fire flow requirements. In addition, the Applicant(s) must also provide evidence to the LACoFD that the 2021 Project provides adequate fire flow access, including unobstructed widths and vehicular access, and distance from fire hydrants to property lines.

⁴¹³ *Michael Baker International, Carson Country Mart Technical Memorandum, April 2021.*

**Table VI-1
Projected Water Demand**

Land Use	Planning Area	Size	Demand Rate	Total		
				gpd	afy	
Residential	PA1	1,250 du	203 gpd/du	253,750	284	
Commercial	PA2 Retail	696,500 sf	0.11 gpd/sf	76,615	86	
	PA2 Restaurant	15,000 sf	1.10 gpd/sf	16,500	18	
Light Industrial	PA3	1,567,090 sf (4,589 emp) ^a	9 gpcd ^b	41,292	46	
Park – Commercial	PA3 Retail	10,000 sf	0.11 gpd/sf	1,110	1	
	PA3 Restaurant	23,800sf	1.10 gpd/sf	26,180	29	
Park	PA3 Passive Park – Restrooms	1,800 sf	0.09 gpd/ksf ^c	158	0.2	
Park – Irrigation	PA3 Passive Park	11.74 acres		25,972 ^d	29	
				2021 Total	441,567	495
				2021 with DD3 Total	502,467	564
				2006 with DD3 Total	795,470	891
				2018 with DD3 Total	690,345	774
Change from 2006 with DD3 to 2021 with DD3				-293,003	-328	
Change from 2018 with DD3 to 2021 with DD3				-187,878	-210	

SOURCES: ESA 2018 (2018 SEIR Appendix K); ESA 2021.

NOTES:

gpd = gallons per day; afy = acre-feet per year; du = dwelling unit; sf = square feet; ksf = 1,000 square feet; gpcd = gallons per capita per day

^a The employee generation for the e-commerce/fulfillment center and distribution center/parcel hub uses is based on a Colliers International, U.S. Industrial Services January 2018 Spotlight Report: The E-commerce Revolution: How Labor, Automation, and Amazon Will Impact Industrial Real Estate, <https://www2.colliers.com/download-research?itemId=682b390e-b773-400d-ac75-d724a901816d>. Based on the report, e-commerce employee counts are estimated to be one employee per 700 sf per shift and distribution center employee counts are estimated to be one employee per 2,000 sf per shift.

^b Industrial Demand Rate: Pacific Institute, Urban Water Demand in California to 2100: Incorporating Climate Change, August 2012, Table 2, Region 4 column, <https://pacinst.org/wp-content/uploads/2014/04/2100-urban-water-efficiency.pdf>.

^c Water generation for restroom use in PA3 based on City of Los Angeles sewage generation factors for retail area uses less than 100,000 sf (see line 138) with a 10 percent mark-up for water uses.

^d The water generation for Project landscaping are based on the Model Water Efficient Landscape Ordinance (MWELO) calculations provided in Appendix I of this 2021 SEIR. As used for this estimate, the Maximum Applied Water Allowance (MAWA) (which was calculated to be 9,479,616 gallons per year) is a conservative upper limit of annual applied water for the established landscaped area in a given year. It is based on a number of factors, including the area's reference evapotranspiration, the evapotranspiration adjustment factor and the overall size of the landscaped area. The Estimated Total Water Use (ETWU) (which was calculated to be 7,407,070 gallons per year) is calculated according to the specific plant palette and the proposed irrigation methods. The ETWU amount must be less than the MAWA, as it takes into account the water efficiency of the landscaping plan as designed and is meant to improve upon the conservative MAWA estimates.

Furthermore, the 2018 SEIR included Mitigation Measures J.1-1 through J.1-8 and J.2-3, which require various design features and/or compliance with existing laws or regulations that reduce the 2018 Project's demand on water supply, such the use of reclaimed water, installation of water

efficient features and landscaping, and ensuring water lines and fire hydrants are sized and located correctly to meet the fire flow requirements established by the LACoFD. These mitigation measures will also apply to the 2021 Project. PA1 and PA3 would also be subject to the 2019 CALGreen requirements, which may include more stringent sustainability and efficient requirements as compared to the 2018 Project. Based on the analysis conducted and referenced above, the 2021 Project would generate less demand for water as compared to the 2018 Project; in addition, the 2021 Project would not exceed water distribution infrastructure capabilities and would result in similar impacts as those stated in the 2018 SEIR. Thus, this 2021 SEIR does not modify the conclusions under the 2018 SEIR with respect to water impacts.

b. Reclaimed Water

There is a backbone reclaimed (or recycled) water system in place on the northern side of the I-405 Freeway and Dominguez Channel, which is operated by the West Basin Municipal Water District (WBMWD). The WBMWD currently implements a program for water recycling in the South Bay area. The 2021 Project would be served by an existing 6-inch recycled water line in Lenardo Drive, with recycled water also supplied by the West Basin Municipal Water District. Recycled water would be used for landscape irrigation and other uses, such as street sweeping and toilet flushing (2018 SEIR p. VI-27).

2018 SEIR Mitigation Measures J.1-3, J.1-6, J.1-7, and J.2-4 require that the 2018 Project must provide reclaimed water for use during grading/construction activities and during operation of the site, such as for landscaping and that cooling system water is recycled. These mitigation measures will also apply to the 2021 Project.

The 2021 Project does not propose any changes to the existing or proposed reclaimed water system as assumed under the 2018 Project and evaluated in the 2018 SEIR. Thus, this 2021 SEIR does not modify the conclusions under the 2018 SEIR with respect to reclaimed water impacts.

c. Wastewater

On May 6, 2021, the Los Angeles County Sanitation Districts (Districts) submitted a comment letter on the Notice of Preparation for this 2021 SEIR related to wastewater (or sewerage service). The comment letter offers the following information regarding the nearby wastewater systems:

- The wastewater flow originating from a portion of the proposed Project Site (PA1 and PA2) will discharge directly to the Districts' Del Amo Replacement Trunk Sewer, located in Del Amo Boulevard, east of Main Street. The Districts' 42-inch-diameter trunk sewer has a capacity of 10.8 million gallons per day (mgd) and conveys a peak flow of 2.9 mgd when last measured in 2015.
- The remaining wastewater flow originating from the Project Site (PA3) will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' Main Street Relief Trunk Sewer, located in Main Street at Jim Dear Boulevard

(which has been renamed to Lenardo Boulevard). The Districts' 42-inch-diameter trunk sewer has a capacity of 20.2 mgd and conveyed a peak flow of 3.9 mgd when last measured in 2016.

- The wastewater generated by the 2021 Project would be treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson, which has a capacity of 400 mgd and currently processes an average flow of 259.6 mgd.
- The capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansions of Districts' facilities must be sized and service planned in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. A discussion of the consistency of the 2021 Project with SCAG's regional growth forecasts is provided in Section IV.A, *Land Use and Planning*, of this 2021 SEIR.

The Districts' Notice of Preparation (NOP) comment letter also identified several permitting processes and/or fees that would be required to implement the 2021 Project, including:

- (1) approval to construct improvements within a Districts' sewer easement and/or over or near a Districts' sewer prior to construction activities;
- (2) receipt of a Trunk Sewer Connection Permit from the Districts for direct connection to a 6-inch-diameter or smaller Districts line;
- (3) approval of Sewer Plans by the Districts for direction connection to a 8-inch or larger Districts line; and
- (4) payment of a fee under the Districts' Connection Fee Ordinance and Program to connect to the Districts' Sewerage System or to increase the strength or quantity of wastewater discharged from connected facilities.

The Project Site will be served by an existing 18-inch sewer pipeline in Lenardo Drive and another pipeline within PA3. The sewer pipeline in PA3 starts south of Lenardo Drive with an 8-inch pipe, which gradually increases to a 10-inch, 12-inch, 15-inch, and 18-inch as it reaches north to join the 18-inch line in Lenardo Drive (at Stamps Drive). Flows continue east in the 18-inch pipe in Lenardo Drive, where it ultimately discharges into the Districts' sewer in Main Street.

In summary, as compared to the 2018 Project, the 2021 Project would reduce wastewater generation due to the changes in land uses proposed for PA3, as shown in **Table VI-2, Projected Wastewater Generation**. The 2018 Project, including DD3 for comparison purposes, was projected to generate 692,158 gallons per day (gpd) of wastewater. With the land use changes in PA3, the 2021 Project, along with those previously developed within DD3, would generate 588,711 gpd of wastewater, which is a reduction of 103,447 gpd of wastewater from the 2018 Project.

**Table VI-2
Projected Wastewater Generation**

Land Use	Planning Area	Size	Factor ^a	Average Daily Flow (gpd)	Annual Flow (million gpy)
Residential	PA1	1,250 du	156 gpd/du	195,000	71.2
Commercial	PA2 Retail	696,500 sf	0.325 gpd/ksf	226,363	82.6
	PA2 Restaurant	15,000 sf	1.00 gpd/ksf	15,000	5.5
Light Industrial	PA3	1,567,090 sf	0.05 gpd/ksf	78,355	28.6
Park – Commercial	PA3 Retail	10,000 sf	0.325 gpd/ksf	3,250	1.2
	PA3 Restaurant	23,800 sf	1.00 gpd/ksf	23,800	8.7
Park	PA3 Passive Park – Restrooms	1,800 sf	0.08 gpd/ksf	144	0.1
2021 Total				541,911	197.8
2021 with DD3 Total				588,711	214.9
2018 Total				645,358	235.6
2018 with DD3 Total				692,158	252.6
Change from 2018 with DD3 to 2021 with DD3				-103,447	-37.8

SOURCES: ESA 2018 (2018 SEIR Appendix I); ESA 2021.

NOTES:

gpd = gallons per day; du = dwelling unit; gpy = gallons per year; sf = square feet; ksf = 1,000 square feet

^a The employee generation for the e-commerce/fulfillment center and distribution center/parcel hub uses is based on a Colliers International, U.S. Industrial Services January 2018 Spotlight Report: *The E-commerce Revolution: How Labor, Automation, and Amazon Will Impact Industrial Real Estate*, <https://www2.colliers.com/download-research?itemId=682b390e-b773-400d-ac75-d724a901816d>. Based on the report, e-commerce employee counts are estimated to be one employee per 700 sf per shift and distribution center employee counts are estimated to be one employee per 2,000 sf per shift.

^b Unless noted otherwise, wastewater factor for industrial use in PA3 based on the City of Los Angeles sewage generation factors for an industrial facility (see line 81); wastewater factor for restroom use in PA3 based on City of Los Angeles sewage generation factors for retail area uses less than 100,000 sf (see line 138); all other sewage generation factors based on the County Sanitation Districts of Los Angeles County average daily generation factors for wastewater from different types of land uses (Microsoft Word - wilsrv_loadings_tbl1.doc (lacs.org), accessed May 2021). In 2018, the wastewater generation rate for retail uses in PA2 (regional commercial) was 0.322 gpd/ksf. The current rate, based on the website link cited in the previous sentence, is 0.325 gpd/ksf; therefore, to present a conservative analysis for the 2021 Project, the higher rate for retail uses in PA2 is used.

A sewer capacity analysis was completed by MBI for the 2018 Project in May 2019, which approved by Los Angeles County Public Works (LACPW).⁴¹⁴ The report analyzed the wastewater generated by the 2018 Project using hydraulic modeling software to determine whether the existing sewer collection system that was installed in compliance with approved utility plans and concluded that the existing wastewater collection system was sufficient to serve the 2018 Project. Because the wastewater collection system was determined to meet the maximum day demands of the 2018 Project, and total wastewater generation decreased under the

⁴¹⁴ Michael Baker International, Sewer Area Study Update, May 2019.

2021 Project as compared to the 2018 Project, MBI determined that the wastewater collection system is also sufficient to meet maximum day demands for the 2021 Project.

Furthermore, the 2018 SEIR included Mitigation Measures J.2-1 and J.2-2, which require that all sewer improvements are designed and constructed according to the standards of the City of Carson and County of Los Angeles and all required fees are paid prior to the issuance of a permit to connect to District facilities. These mitigation measures will also apply to the 2021 Project. Based on the analysis conducted and referenced above, the 2021 Project would generate less wastewater as compared to the 2018 Project; in addition, the 2021 Project would not exceed wastewater distribution infrastructure capabilities and would result in similar impacts as those stated in the 2018 SEIR. Thus, this 2021 SEIR does not modify the conclusions under the 2018 SEIR with respect to wastewater impacts.

A discussion of the specific capacity of the JWPCP in terms of serving the 2021 Project's projected wastewater generation, in addition to the provider's existing commitments, is provided under Threshold (c) (wastewater capacity), below.

d. Stormwater

The Project Site is located in an urban area that features designed drainage systems that connect the City's urban stormwater drainage infrastructure (2018 SEIR p. VI-12). As previously mentioned, in furtherance of the SUSMP, a portion of the backbone storm drain system has been constructed within the former haul roads, which do not contain landfill waste. As with the 2018 Project, all stormwater from the 2021 Project would continue to be contained in an on-site drainage system and discharged to the Torrance Lateral in compliance with the City's drainage control requirements of the 2009 SUSMP and the City's Storm Water Pollution Control Measures for New Development Projects, which contains more stringent regulatory requirements than assumed in 2006 FEIR and 2018 SEIR.

The 2021 Project does not propose any changes to the existing or proposed stormwater water system as assumed under the 2018 Project and evaluated in the 2018 SEIR. Thus, this 2021 SEIR does not modify the conclusions under the 2018 SEIR with respect to stormwater water impacts.

e. Electrical, Natural Gas, and Telecommunication Systems

Additionally, new electrical, natural gas, and telecommunication lines would be installed on the Project Site during construction of the 2021 Project, similar to what was assumed for the 2018 Project. The electrical, natural gas, and telecommunication systems would be designed and sized to meet the needs of the land uses proposed under the 2021 Project and would be provided by existing service providers within the current networks and grids, as was assumed for the 2018 Project. Thus, this 2021 SEIR does not modify the conclusions under the 2018 SEIR with respect to electrical, natural gas, or telecommunication system impacts.

f. Conclusion

Therefore, as with the 2018 Project, the 2021 Project would be served by existing off-site utilities conveyance systems and upgraded on-site utilities conveyance systems and would not necessitate the construction of new or expanded off-site facilities. However, as required for all new construction, the Developer/Applicant(s) for PA1 and PA3 would pay a one-time DIF fee, which would help to finance the expansion, design, and construction of Citywide utilities; however, this fee is not required to mitigate any effects of the 2021 Project. Thus, impacts related to potential environmental impacts associated with the expansion of current or construction of new utilities systems and/or facilities under the proposed 2021 Project would remain **less than significant with implementation of the identified mitigation measures**.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

Water service in the City of Carson is provided by the Cal Water and the Southern California Water Company (SCWC). The Project Site is served by Cal Water, which serves a 35-square-mile area, including most of the City of Carson. Water supplies for Cal Water are from two principal sources: local groundwater and purchased imported water.

In accordance with the requirements of SB 610 and California Water Code Section 10912(a), Cal Water, as the designated water supplier, prepared a WSA to assess whether the projected water demands for the 2006 Project could be met by its projected water supply. The WSA is provided as Appendix H to the 2006 FEIR. The WSA determined the projected water demand for the 2006 Project and compared that demand with the projected water supply for the Dominguez District for a 20-year period from 2005 to 2025 under normal, single-dry-year, and multiple-dry-year conditions. The WSA determined that Cal Water had adequate water supplies to meet the projected demands of the 2006 Project in addition to those of its existing customers and other anticipated future water users in the Dominguez District for the 20-year period under all conditions.

As part of the 2018 SEIR, a water supply memorandum (2018 SEIR Appendix K) was prepared to calculate the projected water demand for the 2018 Project and to determine whether adequate water supply would be available to meet the demands of the 2018 Project. In the water supply technical memorandum, the projected water demand and supply contained in the 2015 UWMP⁴¹⁵ were reviewed (2018 SEIR p. VI-30). Tables 7-2, 7-3, 7-4 of the 2015 UWMP showed that there would be adequate supply during normal, single-dry-year, and multiple-dry-year conditions for a 20-year period from 2020 to 2040 (i.e., 2020, 2025, 2030, 2035, and 2040).

⁴¹⁵ *California Water Service, 2015 Urban Water Management Plan, Dominguez District, June 2016, [https://www.calwater.com/docs/uwmp2015/rd/Dominguez/2015_Urban_Water_Management_Plan_Final_\(DOM\).pdf](https://www.calwater.com/docs/uwmp2015/rd/Dominguez/2015_Urban_Water_Management_Plan_Final_(DOM).pdf), accessed October 22, 2021.*

Since the 2015 UWMP accounted for the water generated by the 2006 Project and indicated that the Dominguez District has adequate projected water supply to cover the projected water demand until 2040, and the 2018 Project would result in a decrease in water demand compared with the 2006 Project due to land use changes and incorporation of water efficient features, there was reasonable basis to conclude that there is adequate water supply to serve the 2018 Project (2018 SEIR p. VI-30; 2018 Draft SEIR Appendix K). Furthermore, the 2018 Project did not cause a substantial change in circumstance or conditions that would affect Cal Water's ability to provide adequate water supply to its service area. For these reasons, the 2018 SEIR concluded that the 2018 Project did not trigger the necessity to prepare a new WSA analysis under California Water Code Section 10910(h), and the WSA prepared for the 2006 Project remained a valid assessment of the water supply and water demand for the 2018 Project (2018 SEIR p. VI-30). Impacts with regard to water supply were determined to be less than significant under the 2018 Project.

Since certification of the 2018 SEIR, the California Water Service prepared a 2020 UWMP.⁴¹⁶ Urban Water Management Plans are prepared by urban water suppliers every five years to support long-term resource planning and water supply sustainability. As with the 2015 UWMP, Tables 7-2, 7-3, and 7-4 of the 2020 UWMP showed that there would be adequate supply during normal, single-dry-year, and multiple-dry-year conditions for a 20-year period from 2025 to 2045 (i.e., 2025, 2030, 2035, 2040, and 2045).

Using the same methodology as the 2018 SEIR, if the 2021 Project would have a similar or reduced water demand compared to the 2018 Project, then the WSA would also continue to be a valid assessment of water supplies and demand within the Dominguez District service area. Compared to the 2018 Project, water demand in PA1, PA2, and DD3 would remain the same under the 2021 Project. However, due to the land use changes proposed in PA3, water demand would change under the 2021 Project. Under the 2018 Project, PA3 consisted of 1,123,333 sf of commercial, restaurant, and hotel uses; however, under the 2021 Project, PA3 would consist of 1,567,090 sf of light industrial/ancillary office space and 33,800 sf of commercial uses, as well as publicly accessible but privately maintained open space within the Carson Country Mart for a total of 1,600,890 sf.

Table VI-1 shows the anticipated water demand by land use proposed under the 2021 Project, as well as the previously forecasted water demand for the 2006 and 2018 Projects. Based on the land use changes in PA3, the 2021 Project, including DD3 for comparison purposes, is anticipated to require 502,467 gpd or approximately 564 acre-feet per year (afy) as shown in Table VI-1. The 2018 Project (including DD3) was projected to have a water demand of 690,345 gpd or approximately 774 afy, and the 2006 Project (including DD3) was projected to have a water demand of 795,470 gpd or approximately 891 afy. The 2021 Project would reduce

⁴¹⁶ California Water Service, 2020 Urban Water Management Plan, Dominguez District, June 2021, https://www.calwater.com/docs/uwmp2020/DOM_2020_UWMP_FINAL.pdf, accessed October 22, 2021.

water demand by 187,878 gpd (or 27 percent) as compared to the 2018 Project and by 293,003 gpd (or 37 percent) as compared to the 2006 Project. Therefore, the 2021 Project would require substantially less water than previously projected for both the 2006 and 2018 Projects.

In addition, the 2018 SEIR (and this 2021 SEIR) include Mitigation Measures J.1-1 through J.1-8, which provide various design features and/or compliance with existing laws or regulations that reduce the 2018 Project's demand on water supply, such the use of reclaimed water and installation of water efficient features and landscaping and ensuring water lines and fire hydrants are sized and located correctly to meet the fire flow requirements established by the LACoFD. These mitigation measures would also be implemented by the 2021 Project to further reduce water demand.

g. Water Demand and Supply Evaluation

California Water Code Section 10910(h) indicates that a new water supply assessment is not required for subsequent projects for which a previous water supply assessment determined that water supplies would be sufficient to meet projected water demand, in addition to the existing and planned future uses, unless one or more of the following changes occurs: (1) changes in the project that result in a substantial increase in water demand for the project; (2) changes in the circumstances or conditions substantially affecting the ability of the public water system to provide a sufficient supply of water for the project; or (3) significant new information becomes available that was not known and could not have been known at the time when the original water supply assessment was prepared.

As demonstrated below, the 2021 Project would not trigger the necessity to prepare a new WSA analysis under California Water Code Section 10910(h).

(1) Are Water Supplies Sufficient to Meet Projected Water Demand for the 2021 Project, in Addition to Existing and Planned Future Uses?

As previously mentioned, both the 2015 UWMP and 2020 UWMP determined there are adequate water supplies to meet demand during normal, single-dry-year, and multiple-dry-year conditions through 2040 and 2045, respectively. Further, the 2020 UWMP specifically states that “[B]ased on this analysis, the Dominguez District expects the available supplies to be sufficient to meet projected demands in all hydrologic conditions, including a five-year drought period, and considering the impacts of climate change.” (2020 UWMP, p. 16). With specific respect to the Project Site, the demand reflected in the 2020 UWMP is based on the Carson General Plan land use designation of regional commercial (2020 UWMP, Appendix B), which would generate demand well in excess of what was projected for either the 2006 or 2018 Projects. Therefore, water supplies are determined to be sufficient to meet projected water demand.

(2) Does the 2021 Project Result in Changes in the Circumstances or Conditions Substantially Affecting the Ability of California Water Services to Provide a Sufficient Supply of Water for the Project?

The Water Conservation Act of 2009 (SB X7-7) was enacted in November 2009 and requires the state of California to achieve a 20 percent reduction in urban per capita water use by December 31, 2020. In order to achieve this, each urban retail water supplier was required to establish water use targets for 2015 and 2020 using methodologies established by DWR. The Dominguez District is in compliance with its 2020 water use target of 173 gallons per capita per day (GPCD), having reduced its water use in 2020 to 157 GPCD (2020 UWMP, p. 15). As a result, per capita water use has been decreasing in the Dominguez District since the mid-2000s. Several factors have contributed to this reduction. California Water Services implemented conservation pricing starting in 2009, supplying stronger financial incentives to use water efficiently, and starting around 2012, California Water Services tripled the level of expenditure on conservation programs aimed at reducing water usage and, therefore, demands on critical water sources. Additionally, appliance efficiency standards and plumbing codes have contributed to significant improvement over time in the average water use efficiency of the installed base of appliances and plumbing fixtures. Overall, the changes in circumstances or conditions reflect a decrease in water demand as the result of improved water conservation measures and new building codes and standards that promote water savings. In summary, there are no changes in circumstances or conditions that substantially affect the ability of California Water Services to provide a sufficient supply of water to the 2021 Project, in addition to existing and planned future uses.

(3) Has Significant New Information Become Available That Was Not Known and Could Not Have Been Known at the Time the 2006 WSA or 2018 Water Supply Technical Memorandum Was Prepared?

The California Water Code requires each urban water supplier to update its UWMP at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

As stated in the 2020 UWMP (on p. 12), a subsequent and substantial revision to the UWMP Act was made in 2018 through a pair of bills (i.e., AB 1668 and SB 606), referred to as “Making Water Conservation a California Way of Life” or the “2018 Water Conservation Legislation.” These changes include, among other things, additional requirements for Water Shortage Contingency Plans (WSCPs), expansion of dry year supply reliability assessments to a five-year drought period, establishment of annual drought risk assessment procedures and reporting, and new conservation targets referred to as “annual water use objectives,” which will require retailers to continue to reduce water use beyond the 2020 SB X7-7 targets. With respect to the 2021 Project, and as previously mentioned, the 2021 SEIR includes Mitigation Measures J.1-1 through

J.1-8, which provide various design features and/or compliance with existing laws or regulations that reduce the 2018 Project's water demand, such as the use of reclaimed water and installation of water efficient features and landscaping and ensuring water lines and fire hydrants are sized and located correctly to meet the fire flow requirements established by the LACoFD.

In addition, as also stated in the 2020 UWMP (on p. 39), new construction in California are now subject to CALGreen Code requirements, with the most current requirements published in 2019. CALGreen includes prescriptive indoor provisions for maximum water consumption of plumbing fixtures and fittings in new and renovated properties. CALGreen also allows for an optional performance path to compliance, which requires an overall aggregate 20 percent reduction in indoor water use from a calculated baseline using a set of worksheets provided with the CALGreen guidelines. As required by law, the 2021 Project will comply with these requirements.

In summary, there is no significant new information that would affect the analysis and conclusions in the 2006 water supply assessment or the 2018 water supply technical memorandum.

(4) Conclusion

As disclosed in the 2018 SEIR, there would be sufficient water supplies available to serve the 2021 Project and reasonably foreseeable future development during normal, dry, and multiple dry years through 2045. Impacts would remain **less than significant with implementation of the identified mitigation measures**.

c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

As discussed in the 2018 SEIR, wastewater generated on the Project Site would be treated at the JWPCP, located at 24501 South Figueroa Street in the City of Carson (2018 SEIR p. IV.J-3). The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd (2018 SEIR p. IV.J-3).⁴¹⁷

Table VI-2 shows the projected wastewater generation by land use proposed under the 2021 Project, as well as the previously forecasted wastewater generation for the 2018 Project. The 2018 SEIR determined that the 2018 Project, including DD3 for comparison purposes, would require a 692,158 gpd of wastewater, which equates to 253 million gallons per year and would

⁴¹⁷ LACSD, *Joint Water Pollution Control Plant (JWPCP)*, n.d., <http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp>, accessed May 2021.

not exceed the available wastewater capacity at the JWPCP. Compared to the 2018 Project, the 2021 Project is expected to reduce wastewater generation as the 2021 Project, including DD3, would generate 588,711 gpd of wastewater or 214.9 million gallons per year. As shown in Table VI-2, the 2021 Project would reduce wastewater generation by approximately 103,447 gpd or 37.8 million gallons per year.

As was anticipated for the 2018 Project, wastewater would continue to be conveyed to, and treated at, the JWPCP for the 2021 Project. As indicated above, the JWPCP has a design capacity of 400 mgd and, based on 2021 information, currently processes an average flow of 260 mgd.⁴¹⁸ The 2018 SEIR determined that the 2018 Project would utilize approximately 0.27 percent of the available daily capacity of the JWPCP (as determined in 2018); as such, the 2018 Project would not exceed JWPCP's service capacity. The 2021 Project would result in decreased wastewater generation and would utilize approximately 0.22 percent of the JWPCP's daily capacity.

In addition, the City contracts with the Los Angeles County Public Works Department (LACPWD) to maintain the local sewer lines that run in the street to the Districts' trunk sewer lines. Wastewater conveyance in the Project Site area is under the jurisdiction of the Districts, which is part of LACPWD (2018 SEIR p. IV.J-2). As indicated in the 2018 SEIR, and described above under Threshold (a) (i.e., expanded facilities), above, the Districts own, operate and maintain the large trunk sewer that form the backbone of the regional wastewater conveyance system. The City of Carson continues to contract with the Districts to maintain the trunk sewer lines within the City of Carson. According to the Districts' service area map, the Project Site remains located within the jurisdictional boundaries of District No. 8 (2018 SEIR p. IV.J-2).⁴¹⁹ The Los Angeles County Wastewater Ordinance and Districts Connection Fee Ordinance and Program discussed in the 2018 SEIR also remain in place.

The 2018 SEIR also determined that all wastewater from the 2018 Project would flow to the Main Street Relief Sewer. While no known capacity constraints have been identified for the Main Street Relief Sewer, capacities would be verified at the time actual new connections are made (2018 SEIR p. IV.J-8). As a matter of course, the Districts reviews projects at the time building permits are issued and new sewer connection permits are requested. As indicated in the 2018 SEIR, and as mentioned in the Districts' NOP comment letter and discussed in Threshold (a) (i.e., expanded facilities), above, connections to trunk lines require that the Districts issue a Trunk Sewer Connection Permit and that connection fees be paid at the time of permit issuance, where fees will be utilized by the District to construct incremental expansions of the sewerage system to mitigate any potential impact of projects on the existing wastewater system.

⁴¹⁸ LACSD, JWPCP, *n.d.*, <http://www.lacsd.org/wastewater/wwfacilities/jwpcp/default.asp>, accessed May 2021.

⁴¹⁹ Sanitation Districts of Los Angeles (LACSD), *Service Area, Maps, and GIS Data, n.d.*, <http://www.lacsd.org/aboutus/gis/default.asp>, accessed May 2021.

As with the 2018 Project, the 2021 Project would be subject to the same permitting processes and fee programs as discussed in the 2018 SEIR.

Additionally, as discussed in the 2018 SEIR, all expansions of the Districts' facilities are sized and service is phased in a manner that is consistent with the SCAG regional growth forecast (2018 SEIR p. IV.J-8). As described in Section VI.A, *Land Use and Planning*, the 2021 Project would be consistent with SCAG regional forecasts for the South Bay Cities sub-region.

Furthermore, the 2018 SEIR incorporated Mitigation Measures J.2-1 through J.2-4 to ensure that all wastewater facilities would be designed and constructed in accordance with all applicable City and County regulations, ensure payment of all applicable wastewater development fees, and ensure that reclaimed water would be utilized throughout the 2018 Project to help reduce use of potable water sources in order to help further reduce impacts to the wastewater system. These mitigation measures would also be applicable to the 2021 Project to further reduce impacts to the existing wastewater system.

Implementation of the 2021 Project would not exceed the wastewater treatment capacity of the JWPCP, either individually or in combination with the Districts existing commitments, as with the 2018 Project. Therefore, impacts to the wastewater conveyance system would remain **less than significant with implementation of the identified mitigation measures**.

- d) *Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e) *Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

h. Construction

As with the 2018 Project, solid waste would be generated during construction and operation of the 2021 Project. While the land uses in PA1 and PA2 would remain the same as the 2018 Project, the 2021 Project would allow for an increase of 477,557 sf of light industrial/commercial uses in PA3, which would cause an increase in the amount of solid waste generated during construction compared to the 2018 Project. Using the same construction debris generation rates of an average of 4.34 pounds of construction debris per square foot of commercial or non-residential construction and 4.39 pounds of construction debris per square foot of residential construction⁴²⁰ used in the 2018 SEIR (2018 SEIR p. IV.J-18), the 2021 Project would generate an additional 2,072 tons of commercial construction debris then the 2018 Project. Overall, the 2018 Project was estimated to generate approximately 10,828 tons of construction debris, while

⁴²⁰ *Generation factor obtained from USEPA, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, March 2009, pp. 8 and 10.*

the 2021 Project would generate approximately 12,900 tons of construction debris, which is an increase since the 2018 SEIR that is attributable to the overall increase in square footage.

Effective January 1, 2017, the State requires 65 percent diversion of construction waste to be recycled. With implementation of the mandatory diversion of construction and demolition debris, a minimum of 65 percent of the 2021 Project-generated construction waste would be diverted, and thus, not be disposed of at landfill facilities. Therefore, the total amount of construction debris disposed of at a landfill would be approximately 4,515 tons. As of 2019, Azusa Land Reclamation is the only permitted Inert Waste Landfill in the County that has a solid waste facility permit. The remaining capacity of this landfill is estimated at 55.71 million tons, or 44.56 million cubic yards. Given the remaining permitted capacity and the average disposal rate of 1,057 tons per day in 2017, this landfill's capacity will be exhausted in 132 years.⁴²¹ As the 2021 Project construction debris would represent approximately 0.008 percent of remaining inert landfill capacity, the Azusa Land Reclamation facility would be able to service the 2021 Project during construction.

In addition, Mitigation Measure J.3-6 requires that all construction debris is recycled in a practical, available, and accessible manner. In summary, while the 2021 Project would generate a greater amount of construction debris compared to the 2018 Project, impacts related to solid waste during construction would remain less than significant with implementation of the identified mitigation measure.

i. Operation

Operation of the 2021 Project would reduce the amount of solid waste generated at buildout compared to the 2018 Project. **Table VI-3, Projected Solid Waste Generation**, shows the projected solid waste generation by land use anticipated during operation of the 2021 Project as well, as the previously forecasted solid waste generation during operation for the 2018 Project.

⁴²¹ *Los Angeles County Department of Public Works, Los Angeles County Integrated Waste Management Plan, 2017 Annual Report, April 2019, p. 35.*

**Table VI-3
Projected Solid Waste Generation**

Land Use	Planning Area	Size	No. of Employees ^a	Solid Waste Disposal Rate (tons/emp) ^b	Total (tpy)
Residential	PA1	1,250 du	N/A	0.74	925
Commercial	PA2 Retail	696,500 sf	1,066	2.14	2,280.48
	PA2 Restaurant	15,000 sf	23	2.4	55.08
Light Industrial	PA3	1,567,090 sf	4,588	1.28	5,872.64
Park – Commercial	PA3 Retail	10,000 sf	15	2.14	32.74
	PA3 Restaurant	23,800 sf	36	2.4	87.39
2021 Total					9,165.94
2021 with DD3 Total					9,387.94
2018 Total					11,964.32
2018 with DD3 Total					12,225.32
Change from 2018 with DD3 to 2021 with DD3					-2,837.38

SOURCE: ESA 2018 (2018 SEIR Appendix J, Table 2); ESA 2021.

NOTES:

tpy = tons per year; du = dwelling unit; sf = square feet; emp = employee

^a Los Angeles Unified School District, 2020 Developer Fee Justification Study, Los Angeles School District, March 2020, Table 14, Employees per Square Foot of Commercial Development, p. 19. Employees per average SF generation factors used include: Community Shopping Centers (0.00153). Industrial employee rate: Colliers International, U.S. Industrial Services January 2018 Spotlight Report: The E-commerce Revolution: How Labor, Automation, and Amazon Will Impact Industrial Real Estate. Based on the report, e-commerce employee counts are estimated to be one employee per 700 sf per shift and distribution center employee counts are estimated to be one employee per 2,000 sf per shift.

^b The solid waste generation rates were based on: CalRecycle, 2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California, September 10, 2015, Table 1, <https://www2.calrecycle.ca.gov/WasteCharacterization/PubExtracts/2014/GenSummary.pdf>.

The 2018 SEIR determined that the 2018 Project, without DD3 included, would generate approximately 11,964 tons per year of solid waste, which would increase to approximately 12,225 tons per year if DD3 is included (2018 SEIR p. IV.J-19). The 2021 Project, without DD3 included, would generate approximately 9,166 tons per year of solid waste, which would increase to approximately 9,388 tons per year if DD3 is included. Therefore, since overall solid waste generation would decrease from the 2018 Project by about 2,837.38 tons per year, impacts related to the solid waste would be reduced under the 2021 Project as compared to the 2018 Project. In addition, Mitigation Measure J.3-5 requires that compaction facilities for non-recyclable materials are provided in every occupied building greater than 20,000 sf to reduce the total volume of solid waste produced, as well as the number of trips required for collection. Therefore, this mitigation measure would likely further reduce the amount of solid waste disclosed in Table VI-3.

Moreover, when considering the 2021 Project's contribution to the Los Angeles County's solid waste system, the amount of solid waste generated during operation of the 2021 Project would constitute a very small fraction of the amount of solid waste generated in Los Angeles County on an annual basis. Specifically, buildout of the 2021 Project would constitute approximately 0.06 percent of the 10.3 million tons of solid waste disposed in landfills in Los Angeles County in 2017.⁴²²

Municipal solid waste generated within the City of Carson is primarily disposed of at the El Sobrante Landfill located in Riverside County or H.M. Holloway Landfill in Kern County. The 2018 SEIR determined that these two landfills had adequate capacity to service the 2018 Project. In order to determine whether solid waste from the 2021 Project could be accommodated at the two landfill facilities that accept waste from the City of Carson, the current capacities of these landfills have been identified.

The El Sobrante Landfill has a remaining capacity of 132,130,376 tons and a maximum permitted throughput of approximately 10,000 tons per day.⁴²³ Based on current disposal rates, the El Sobrante Landfill is projected to remain open for another 39 years, from 2019 to 2058. The H.M. Holloway Landfill has a remaining capacity of 4 million tons and a lifespan of 5 years from 2021 (to 2026).⁴²⁴ While the El Sobrante Landfill has adequate capacity to serve the 2021 Project, the H.M. Holloway Landfill would only be operational for a few years during operation of the 2021 Project, presuming operation of the Project Site begins in 2024. However, once the H.M. Holloway Landfill closes, the 2021 Project will use the El Sobrante landfill. Therefore, even without the H.M. Holloway Landfill be an available option for the 2021 Project, there is adequate capacity at the El Sobrante Landfill and other existing landfills to service the 2021 Project.

In addition, the 2021 Project would also be required to comply with all applicable laws and regulations related to disposal of operational solid waste, including recycling requirements. The 2018 SEIR also identified Mitigation Measures J.3-1 through J.3-4 to ensure the maximum amount of recycling is incorporated throughout the lifetime of the 2018 Project to further reduce impacts to the solid waste system. These mitigation measures would also be applicable to the 2021 Project. Therefore, impacts related to solid waste would remain less than significant with implementation of the identified mitigation measures.

⁴²² *Los Angeles County, Department of Public Works Solid Waste Management System*, <https://dpw.lacounty.gov/epd/swims/>, accessed May 2021.

⁴²³ *Riverside County Department of Waste Resources, El Sobrante Landfill 2019 Annual Report, October 2020*, http://www.rcwaste.org/Portals/0/Files/ElSobrante/2020/October_8th_El_Sobrante_ARC_Agenda_Package.pdf, accessed May 2021.

⁴²⁴ *County of Los Angeles, Countywide Integrated Waste Management Plan, 2016 Annual Report, September 2017*, p. 50.

j. Conclusion

Under the 2021 Project, construction and operational impacts related to generating solid waste in excess of State or local standards and compliance with federal, state, and local regulations related to solid waste would remain **less than significant with implementation of the identified mitigation measures**.

VI.M.2 2021 Project Cumulative Impact Analysis

The geographic context for the analysis of cumulative impacts associated with utilities and service systems is the City of Carson.

As discussed above, there is adequate water supply, wastewater treatment, infrastructure capacity, and solid waste disposal capacity to serve the 2021 Project and cumulative projects. Implementation of the 2021 Project would not exceed the current or future capacities of the existing utility systems that serve the Project Site. In addition, the 2021 Project would be required to implement Mitigation Measures J.1-1 through J.1-8, J.2-1 through J.2-4, and J.3-1 through J.3-6, which require payment of applicable development fees and compliance with the City's codes. Compliance with these mitigation measures would further reduce impacts to utilities and service systems to a less-than-significant level. Therefore, the 2021 Project's contribution to an already less-than-significant cumulative impact would not be considered cumulatively considerable.

VI.M.3 Applicable Mitigation Measures

The following mitigation measures were included in the 2018 SEIR and its associated 2018 MMRP. The 2021 Project would implement these same mitigation measures (with minor revisions as indicated below):

Mitigation Measure J.1-1: The Building Department and the ~~Planning Division~~ Community Development Department shall review building plans to ensure that water-reducing measures are utilized, as required by Title 20 and Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow control devices for faucets.

Mitigation Measure J.1-2: The 2021 Project shall comply with the City's landscape ordinance, "A Water Efficient Landscape Ordinance," as required by the State Water Conservation Landscape Act.

Mitigation Measure J.1-3: ~~The Each~~ Applicant shall provide reclaimed water for the 2021 Project's non-potable water needs, if feasible.

- Mitigation Measure J.1-4:** Landscaping of the ~~Property~~ Project Site shall utilize xeriscape (low-maintenance, drought-resistant) plantings.
- Mitigation Measure J.1-5:** Automatic irrigation systems shall be set to ensure irrigation during early morning or evening hours to minimize water loss due to evaporation. Sprinklers must be reset to water less in cooler months and during rainfall season so that water is not wasted on excessive landscape irrigation.
- Mitigation Measure J.1-6:** The 2021 Project shall be designed to recycle all water used in cooling systems to the maximum extent possible.
- Mitigation Measure J.1-7:** To the maximum extent feasible, reclaimed water shall be used during the grading and construction phase of the 2021 Project for the following activities: (1) dust control, (2) soil compaction, and (3) concrete mixing.
- Mitigation Measure J.1-8:** Water lines and hydrants shall be sized and located so as to meet the fire flow requirements established by the Los Angeles County Fire Department.
- Mitigation Measure J.2-1:** All required sewer improvements shall be designed and constructed according to the standards of the City of Carson and County of Los Angeles.
- Mitigation Measure J.2-2:** Fee payment is required prior to the issuance of a permit to connect to district sewer facilities.
- Mitigation Measure J.2-3:** The Building and Safety and Planning Divisions of the Community Development Department shall review building plans to ensure that water-reducing measures are utilized, as required by Title 24 of the California Administrative Code. These measures include, but are not limited to, water conserving dishwashers, low-volume toilet tanks, and flow-control devices for faucets.
- Mitigation Measure J.2-4:** When available, the ~~proposed modified~~ 2021 Project shall use reclaimed water for the irrigation system and for other appropriate purposes such as during construction.
- Mitigation Measure J.3-1:** All structures constructed or uses established within any part of the Project ~~s~~Site shall be designed to be permanently equipped with clearly marked, durable, source-sorted recycling bins at all times to facilitate the separation and deposit of recyclable materials.
- Mitigation Measure J.3-2:** Primary collection bins shall be designed to facilitate mechanized collection of such recyclable wastes for transport to on- or off-site recycling facilities.

Mitigation Measure J.3-3: ~~The~~ Each Applicant shall coordinate with the City of Carson to continuously maintain in good order for the convenience of patrons, employees, and residents clearly marked, durable, and separate recycling bins on the same lot, or parcel to facilitate the deposit of recyclable or commingled waste metal, cardboard, paper, glass, and plastic therein; maintain accessibility to such bins at all times, for collection of such wastes for transport to on- or off-site recycling plants; and require waste haulers to utilize local or regional material recovery facilities as feasible and appropriate.

Mitigation Measure J.3-4: Any existing on-site roads that are torn up shall be ground on site and recycled into the new road base.

Mitigation Measure J.3-5: Compaction facilities for non-recyclable materials shall be provided in every occupied building greater than 20,000 square feet in size to reduce both the total volume of solid waste produced and the number of trips required for collection, to the extent feasible.

Mitigation Measure J.3-6: All construction debris shall be recycled in a practical, available, accessible manner, to the extent feasible, during the construction phase.

VI.M.4 Utilities and Service Systems Impact Conclusions

With respect to utilities and service systems, construction and operation of the 2021 Project would not give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, there are no mitigation measures that were previously found to be infeasible that are now determined to be feasible or are considerably different from those analyzed in the previous environmental documents that would substantially reduce one or more significant effects.

With implementation of the identified mitigation measures, as adopted by the 2018 SEIR, all impacts related to utilities and service systems would be reduced to a less-than-significant level or would result in no impact for the 2021 Project, which are the same conclusions reached for both the 2006 Project and the 2018 Project.

VII. OTHER ENVIRONMENTAL CONSIDERATIONS

California Environmental Quality Act (CEQA) Guidelines Section 15126 requires that an EIR shall discuss the: (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project, (5) mitigation measures proposed to minimize significant effects, and (6) alternatives to the proposed project. Each of these items are addressed in this chapter.

VII.A SIGNIFICANT ENVIRONMENTAL EFFECTS OF THE PROPOSED PROJECT

The significant environmental effects of the 2021 Project are addressed in the following sections of this 2021 SEIR:

- Table I-5, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, which is contained in Chapter I, *Summary*, of this 2021 SEIR, identifies each significance threshold; the level of significance before mitigation; applicable and feasible mitigation measures; and the level of significance after mitigation. In addition, project design features (PDFs) are also identified in the impact summary table that reduce air quality emissions, greenhouse gas (GHG) emissions, and energy use. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements that are used in the unmitigated modeling scenario for air quality, energy, and GHG.⁴²⁵
- Sections IV.A through IV.H provide a detailed analysis of potential impacts to land use and planning, aesthetics, transportation, air quality (including a health risk assessment), noise, biological resources, energy, and GHGs, including the resulting level of significance of Project-related and cumulative impacts. The impact analysis assumes the implementation of any PDFs, prior to mitigation, and, in addition, may require or propose mitigation measures to reduce the level of significance of impacts; and

⁴²⁵ Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.

- Chapter VI, which addresses Effects Found Not to Be Significant⁴²⁶ for topics or thresholds related to aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems, including the level of significance of Project-related and cumulative impacts.

VII.B SIGNIFICANT ENVIRONMENTAL EFFECTS THAT CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

The significant impacts of the 2021 Project that cannot be avoided, even with implementation of feasible mitigation measures, are provided in **Table I-4, Significant and Unavoidable Project-Related Impacts**. Table I-4 also identifies the significant and unavoidable impacts associated with construction and/or operation of the 2018 Project and the 2021 Project for comparative purposes.

**Table VII-1
Significant and Unavoidable Project-Related Impacts**

Topic	2018 Project Conclusion	2021 Project Conclusion
Aesthetics	Conversion of the Appearance of the Site	Significant and Unavoidable (2018 SEIR pp. I-25, IV.B-19, and VII-1)
	Cumulative Contribution Related to the Conversion of the Appearance of the Site	Significant and Unavoidable (2018 SEIR p. IV.B-32)
		Significant and Unavoidable

⁴²⁶ As provided by CEQA Guidelines Section 15128, Effects Found Not to Be Significant are impacts that are determined not to be significant and, therefore, are not discussed in detailed in the EIR. For purposes of this 2021 SEIR, these are impacts for which the 2021 Project has been adequately addressed in the 2006 FEIR and/or the 2018 SEIR.

**Table VII-1
Significant and Unavoidable Project-Related Impacts**

Topic		2018 Project Conclusion	2021 Project Conclusion
Transportation	Intersection Operations	Significant and Unavoidable (Avalon Boulevard/I-405 Freeway southbound ramps; Vermont Avenue/Del Amo Boulevard; Figueroa Street/Del Amo Boulevard; Main Street/Del Amo Boulevard; Avalon Boulevard/Del Amo Boulevard; Figueroa Street/I-110 Freeway northbound ramps; Vermont Avenue/Carson Street; Avalon Boulevard/Carson Street; Hamilton Avenue/Del Amo Boulevard) (2018 SEIR pp. I-42, IV.C-37, IV.C-51, IV.C-64, IV.C-70, IV.C-71, VII-1)	N/A – An intersection level of service analysis is no longer required by CEQA; the analysis of transportation impacts is now provided by a VMT analysis
	Freeway Service Levels	Significant and Unavoidable (three segments of the I-110 Freeway; four segments of the I-405 Freeway; and one segment of the I-710 Freeway) (2018 SEIR pp. I-43, IV.C-69, IV.C-71, VII-1)	N/A – A freeway level of service analysis is no longer required by CEQA
	VMT	N/A – A VMT analysis was not required by CEQA in 2018	Significant and Unavoidable
	Cumulative VMT	N/A – A VMT analysis was not required by CEQA in 2018	Significant and Unavoidable
Air Quality	Regional Construction Emissions	Significant and Unavoidable (VOC and CO) (2018 SEIR pp. I-52, IV.G-1, and VII-1)	Less than Significant Impacts with Mitigation
	Regional Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-1, IV.G-55, and VII-1)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)
	Regional Concurrent Construction and Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-57, IV.G-58, VII-1, and VII-2)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)
	Cumulative Regional Operational Emissions	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5) (2018 SEIR pp. I-52, IV.G-1, IV.G-55, and VII-1)	Significant and Unavoidable (VOC, NOx, CO, PM10, and PM2.5)

**Table VII-1
Significant and Unavoidable Project-Related Impacts**

	Topic	2018 Project Conclusion	2021 Project Conclusion
Noise	Construction Noise	Significant and Unavoidable (2018 SEIR pp. IV.H-35 and VII-2) (Pile Driving and Deep Dynamic Compaction in PA1, PA2, and PA3)	Significant and Unavoidable (Pile Driving occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8; Deep Dynamic Compaction occurring in PA1 and PA2 at sensitive receptors R2 through R8; and concurrent pile driving and DDC occurring in PA1, PA2, and PA3 at sensitive receptors R1 through R8)
	Cumulative Construction Noise	Significant and Unavoidable (2018 SEIR pp. IV.H-32)	Significant and Unavoidable
	Cumulative Operational Noise - Contribution to Roadway Noise	Less than Significant	Significant and Unavoidable (Future Plus Project in 2024, 2025, and 2026 at three roadway segments: Main Street between Lenardo Drive and Torrance Boulevard; Del Amo Boulevard between Main Street and Stamps Drive; and Lenardo Drive between I-405 Freeway southbound ramp and Avalon Boulevard)

VII.B.1 Reasons the Project Is Being Proposed, Notwithstanding Its Significant Unavoidable Impacts

As required by CEQA Guidelines Section 15126.2(c), where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, such impacts should be described. The 2021 Project would achieve the following described benefits.

a. Need for Remediation Activities in the City

(1) Land Use Element Principles, Goals, and Policies Regarding City of Carson Brownfields Sites

The City’s Land Use Element’s Guiding Principle specifically states that:

The City of Carson is committed to providing a sustainable balance of land uses, including residential, commercial, industrial, educational, recreational, and open space. The City is also committed to providing quality development that incorporates features such as integrated, walkable, and mixed use neighborhoods.

Furthermore, the City is committed to facilitating the adaptive reuse of former landfills and contaminated sites. The City of Carson is committed to creating an attractive environment for its citizens by developing, implementing and enforcing community design guidelines which will assure quality development and the maintenance and beautification of properties.

In addition, Goal LU-1 of the Carson General Plan Land Use Element (and its associated policies) address the need for the productive reuse of brownfield sites, which includes the Project Site. As further discussed below, implementation of the 2021 Project would result in the productive reuse of a brownfield site.

(2) Project Site Remediation Background and Project Need

The Carson Reclamation Authority (CRA), as the current owner of the Project Site, is obligated to comply with the Department of Toxic Substances Control (DTSC) regulations and requirements applicable to the site, including, among others, the approved Remedial Action Plans (RAPs), the 2006 Compliance Framework Agreement (as amended in 2007, the CFA) and various Consent Decrees (dated December 1995, October 2000, and January 2004), all of which require the CRA to remediate the Project Site to ensure: (1) ongoing operations and maintenance activities are performed on the Project Site such that there are no releases of hazardous materials or substances from the former Cal Compact landfill, and (2) the health and human safety of nearby residents and those working on the Project Site is protected.

The CRA was formed in 2015 to help facilitate the development of the 157-Acre Site into an NFL stadium for the then-San Diego Chargers and Oakland Raiders. The owner of the Project Site at the time, Carson Marketplace LLC, was willing to convey the 157-Acre Site to the CRA for the stadium because it had had difficulty developing its own proposed project given the changes in retail economics after the 2008 recession and the significant remedial costs of developing on a former landfill, despite the fact that the Carson Redevelopment Agency (RDA) had pledged and or expended up to \$120,000,000 in order to assist Carson Marketplace LLC with the remedial and infrastructure costs of its development. Thus, in 2015, Carson Marketplace LLC offered to convey the Project Site to the City at no cost, but sought indemnification from the City from any environmental liability associated with the former Cal Compact Landfill. The City determined that it would need a governmental agency to oversee the remediation and development of the 157-Acre Site, given the 50-year history of failed development and remediation of the former Cal Compact Landfill. Development of the Project Site was first proposed in the 1980s after ownership was transferred from the former landfill operator to a real estate developer in 1980, but since then ownership was transferred to various developers each of whom were unable to ultimately develop the Project Site primarily due to the substantial costs of, and liability for, the environmental cleanup required to enable the Project Site to be developed. However, the City was unwilling to take on the environmental liability associated with the Project Site and, therefore, incorporated a separate agency, the CRA (through the Housing

Authority and two separate Community Facilities Districts [CFDs] as members), as a separate legal entity to take over the responsibilities of CM for the environmental liabilities and remediation obligations associated with the Project Site.

However, the CRA was originally capitalized with the former RDA funds (2015B Bond Funds) and assets that were acquired through a separate grant from the California Pollution Control Financing Authority's (CPCFA) Cal ReUSE Program. Given the ongoing costs of operations and maintenance (O&M) of the Project Site, the capital of the CRA will ultimately be exhausted. Ultimately, under the RAP and other DTSC requirements, the CRA must either cap the Project Site at a cost of tens of millions of dollars, which the CRA does not have, or coordinate with one or more developers for the Project Site that would provide for a development project with uses that are economically viable to pay for the costs of development on a former landfill (including the remedial systems required for any development project, and other site development improvements required for the development of a landfill site (i.e., structural piles required for any project development, foundations, and associated infrastructure)

(3) Productive Reuse of the Project Site

The City of Carson and the CRA have engaged with various developers for many years in an attempt to realize the potential for public benefit associated with completion of the legally mandated environmental remediation through development of the Project Site. The development efforts included direct negotiations with an entity representing the San Diego Chargers and the Oakland Raiders (i.e., Cardinal Calvary), commencing in 2015 for the proposed development of an NFL Stadium on the Project Site. The project ultimately failed due to the decision of the NFL ownership group to go forward with a NFL Stadium in Inglewood for the Rams/Chargers (now the SoFi Stadium).

The CRA acquired the Project Site from the then-owner (Carson Marketplace LLC) during the City's negotiations with Cardinal Calvary, since the City determined there was a need to establish an entity to coordinate future development of the Project Site and ensure the performance of site remediation in accordance with DTSC requirements, operate the remedial systems established for the Project Site, and perform site maintenance in accordance. But the City was unwilling to put its general fund and taxpayer dollars at risk for the environmental liability associated with the Project Site (given its operation as a former landfill), the cleanup expenses and remediation costs required for the Project Site, which would have the potential to divert City funds and resources from core municipal resources and functions.

Following the determination of the NFL ownership group to reject the Carson NFL stadium proposal, the CRA has issued numerous RFPs/RFQs. However, negotiations with all such other developers for development of all or a portion of the Project Site have also failed due to the

economic complications and liability associated with developing a project on a former landfill (except with respect to the LAPO Project (as defined and described below).

Prior to the CRA's ownership of the Project Site, and at the direction of the DTSC, two Community Facilities Districts (CFDs) were formed for the Project Site (CFD No. 2012-1 and No. 2012-2) in order to pay for the operations and maintenance (O&M) and infrastructure costs associated with the former landfill site. However, the CFDs can only be funded by actual development projects established on the Project Site (i.e., since no development has been achieved on the Project Site to date, there are no funds running through the CFDs to pay for O&M or infrastructure costs – since 2015 the CRA has been paying for such costs, primarily on its own behalf, but also with some contributions from proposed developers for the Project Site). The CFDs provide for funding with differential rates based on the type of project and with funds received only once such developments are realized.

The CRA was able to enter into agreements (PA2 Agreements) with CAM-Carson LLC (CAM) in September 2018 that would enable remediation and development of a project on PA2. The project proposed by CAM is known as the Los Angeles Premium Outlets Project (LAPO Project), and it was evaluated and environmentally cleared in the 2018 SEIR and approved as part of the 2018 Specific Plan. However, under the LAPO Project, and pursuant to the PA2 Agreements, the CRA was responsible for funding and constructing the remedial systems necessary to enable the development of the LAPO Project. Therefore, the LAPO Project on PA2 includes a significant financial commitment by the CRA to cover remediation costs, as well as a sales tax-sharing arrangement to enable the LAPO Project's economic feasibility.

Following approval of the LAPO Project, the CRA commenced remediation activities on PA2 in October 2018 and site development improvement activities in 2019; however, all remediation and development work was halted in late 2019 due to significant unexpected costs the CRA was incurring to enable with respect to remediation and site development to enable the development of the LAPO Project and disputes over repayment obligations between the CRA and CAM for such costs. As a result, the Project Site, including all three planning areas, remains undeveloped, as it has for over fifty years, falling substantially short of its revenue-generating and job-generating potential.

The 2021 Project is only the second project proposal over the last 6 years of the CRA's attempts to realize development on the Project Site that has advanced to the stage of an actual development proposal that requires CEQA review

The 2021 Project would put to productive reuse a former toxic/brownfield site through a mix of uses that would be sufficient to fund ongoing and future O&M costs associated with the Project Site, which is consistent with the guiding principles, goals, and policies of the Land Use Element of the City's General Plan. The CRA, as the owner of the Project Site, cannot fund remediation

and O&M costs associated with the Project Site indefinitely, based on its existing financing and funding sources, which is why the CRA has sought developer-partners to develop the Project Site.

The 2021 Project proposes new light industrial uses that are sufficient to produce the revenue and/or income required to pay for the costs of remediation and the site development improvements required in order to develop a former landfill site. Development of the Project Site pursuant to the 2021 Project would adaptively reuse a former landfill, which is highly contaminated. The uses proposed by the 2021 Project would be sufficient to enable the full remediation of the Project Site, including funding for a majority of the ongoing and future O&M costs associated with the Project Site, which has long been the goal of the CRA and City. Further, the 2021 Specific Plan Amendment will provide development standards and design guidelines, including artistic features and landscaping themes, that would ensure a consistent, coordinated, and high-quality built environment for 2021 Project.

In addition, the Developer of the 2021 Project must not only complete and pay for the remediation obligations imposed by DTSC on the PA3 portion of the Project Site, thus, relieving the CRA of such responsibilities (as the owner of the Project Site), but also, the Developer's financial consideration for acquisition of PA3 will be crucial to ensuring the CRA's ability to complete its legally mandated PA2 remediation obligation. In addition, the PA3 Consideration would help the CRA pay for its ongoing operation and maintenance (O&M) costs it continues to incur with respect to the Project Site, with most costs being attributable to the remedial systems necessary to prevent the release of hazardous materials/substances into the air surrounding the Project Site and/or into the groundwater.

b. Housing and Employment

The 2021 Project would add up to 1,250 residential units from high density residential to urban residential, which would assist the City in achieving its Regional Housing Needs Assessment (RHNA) allocation of 5,618 housing units. The 2014 Housing Element indicates that the City's 2010 housing stock is comprised of 80 percent single-family residential units, and by providing multifamily residential units, the 2021 Project would increase the variety of housing opportunities within the City.

The 1,250 residential units provided under the 2021 Project would also be located in close proximity to commercial and light industrial and recreational uses, which provide nearby employment opportunities, and live-work housing is permitted in portions of the Project Site.

c. Local and Regional Destination

The 2021 Project would provide both neighborhood-serving and regional commercial uses, as well as a privately maintained, publicly accessible open space and community commercial uses

and amenity areas described as the Carson Country Mart in PA3(b), which would provide a local activity center.

As discussed further in Chapter II, *2021 Project Description*, of this 2021 SEIR, the commercial and community amenity area programmed for the Carson Country Mart will encompass 11.12 acres and will include a variety of passive and active open spaces, programmed areas, and community-serving commercial uses intended to serve local City residents and to activate the area to draw visitors to the area. Hours of operation for all uses within PA3(b) will be from 6 a.m. to 11 p.m.

The Carson Country Mart will provide for approximately 273,906 sf (or 6.29 acres) of programmed spaces and open space/amenity areas that would include an arrival plaza; food and beverage plaza area; dog park; performance pavilion and event lawn; botanic garden; children's play area; bioretention garden; beer garden; games terrace; sculpture garden; water feature; arrival area for a potential pedestrian community bridge;⁴²⁷ and planted open spaces and planted buffer areas on the western and southern portions of the Carson Country Mart.

The Carson Country Mart will also include 33,800 sf total of commercial/retail uses, including 10,000 sf provided in a single retail use catered to pets and animals; four restaurants (with drive-through capability) totaling 12,600 sf; 9,000 sf of food and beverage kiosks; and a 2,200 sf cafe adjacent to the dog park. The Carson Country Mart will also include tables and seating areas for people to eat and drink in a social setting and green environment. The sale of alcoholic beverages will be permitted. Amplified music will occur in the Carson Country Mart's programmed event space (i.e., the performance pavilion and event lawn area). The restaurant components of the Carson Country Mart will operate from 7:00 A.M. until 11:00 P.M. The retail uses will likely open later and close earlier.

Pedestrian and bicycle pathways will be provided throughout the Project Site that would connect the Carson Country Mart to the City's street bicycle system (in accordance with the City's Master Plan of Bikeways, adopted August 2013). The 2021 Project also includes connections to nearby public transit routes, thereby providing a variety of local and regional transportation options that would contribute to mobility and accessibility to/from and around the Project Site.

⁴²⁷ *The arrival area would serve a potential pedestrian bridge that is contemplated for a potential future project located at 21207 South Avalon Boulevard.*

d. Project Siting and Project Design Features Relative to the Reduction of Air Quality and Greenhouse Gas Emissions

(1) Reduction in VMT

The location/placement of light industrial and commercial uses in the design of the 2021 Project serves the objective of reducing mobile source air quality pollutant emissions from trucks associated with the industrial uses in PA3(a) due to the Project Site's proximity to the on- and off-ramps for the San Diego Freeway (Interstate 405 [I-405] Freeway) and the Harbor Freeway (I-110 Freeway), which allows for quick, safe and easy access to and from the regional transportation system. The Project Site is also located in close proximity to the Port of Los Angeles and the Port of Long Beach, with convenient access to Los Angeles and Orange County. Truck trip lengths from the Project Site to end users are expected to be relatively short, within 32.5 miles and 40 miles, depending on whether the deliveries are related to the distribution or fulfillment uses.^{428,429} These truck trip lengths reflect the Project Site's central location relative to anticipated end users, rather than truck trip lengths that would likely result if the 2021 Project was located in more remote locations, such as the Inland Empire. The truck trip lengths would also result in reduced truck-related VMT and GHG emissions.

The 2021 Project would also promote a reduction in mobile source emissions and GHG emissions by providing a supply of housing, employment, retail and dining opportunities within close proximity to one another, as well as to existing off-site residential uses, making it possible for an individual to both reside and work/shop/dine within close proximity to the Project Site. While VMT was found to be a significant and unavoidable impact, as provided in Section IV.C, *Transportation*, of this 2021 SEIR, the 2021 Project would generate about 18 percent less total VMT per service population than would be generated by the 2018 Project.

The 2021 Project includes pedestrian and bicycle connections within the Project Site that would be linked to nearby public transit routes, thereby providing a variety of local and regional transit options that would contribute to non-vehicular mobility and accessibility to/from and around the Project Site, which would also reduce VMT and associated air quality and GHG emissions.

In summary, through the mix of proposed uses, the Project Site's proximity to the I-405 and I-110 Freeways and the Ports, the distance to anticipated end users (i.e., recipients of delivery items originating from the Project Site), and the provision of or connections to alternate modes of

⁴²⁸ *Fehr & Peers*, Memorandum: Carson District Project – Truck Trip Length Estimates, *September 30, 2021*.

⁴²⁹ SCAQMD, Review of SCAQMD Staff Comments and Testimony on Warehouse Projects, *March 14, 2014*, http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/sclc_warehouse-presentation-final.pdf, accessed June 2021.

transportation, the 2021 Project would improve mobility and accessibility of people and goods, thereby reducing VMT and associated air quality and GHG emissions.

(2) Project Design Features that Reduce GHG Emissions, Air Quality Emissions, and Energy Use

The Developer has committed to providing a range of construction and operational PDFs that will reduce GHG emissions, air quality emissions, and energy use, all of which reduce the use of nonrenewable resources. In summary, these PDFs describe various construction and operational methods and features, including but not necessarily limited to the type of construction equipment that will be used; maximum length of construction truck idling; the use of electricity rather than gas or diesel for some or all on-site equipment (e.g., landscaping, forklifts, transport refrigeration units); the use of non-diesel generators or Tier 4 diesel generators; the use of skylights and solar photovoltaic arrays for lighting; provision of passenger vehicle and truck vehicle charging stations substantially in excess of regulatory (CALGreen) requirements; compliance with Title 24 energy efficiency standards; and the implementation of trip reduction (or travel demand) measures.

The incorporation of the 2021 Project's PDFs, specifically with respect to the introduction of the zero-emissions truck fleets and incorporation of EV charging stations and infrastructure substantially in excess of regulatory obligations, and increases in regulatory efficiency/reduction requirements, would specifically reduce the 2021 Project GHG emissions below 2018 Project levels by 2040, which further demonstrate the 2021 Project's compliance and consistency with applicable GHG reduction plans.

These PDFs are assumed as part of the 2021 Project and are taken into account in the analyses of potential impacts. Each of these PDFs is described in detail in Section IV.D, *Air Quality* (pp. IV.D-37 through IV.D-42); Section IV.G, *Energy* (pp. IV.G-25 to IV.G-29); and Section IV.H, *Greenhouse Gas Emissions* (pp. IV.H-43 to IV.H-47) of this 2021 SEIR. These PDFs are also identified in Table I-4, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, as provided in Chapter I, *Summary*, of this 2021 SEIR and will be tracked in the 2021 Project's Mitigation Monitoring and Reporting Program (MMRP).

VII.C SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD RESULT FROM IMPLEMENTATION OF THE PROPOSED PROJECT

CEQA Guidelines Section 15126.2(c) requires a discussion of any significant irreversible environmental changes that would be caused by a project. Specifically, CEQA Guidelines Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as a highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if any of the following would occur as a result of construction and/or operation of the 2021 Project:

- Involve a large commitment of nonrenewable resources and the proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy);
- Commit future generations to similar uses, such as a new highway that opens up access to an area that was previously inaccessible; or
- Results in irreversible damage from environmental accidents.

VII.C.1 Use of Nonrenewable Resources

As stated in CEQA Guidelines Section 15126.2(d), the use of nonrenewable resources during initial or continued phases of the 2021 Project may be irreversible if a large commitment of such resources makes removal or non-use thereafter unlikely.

Like the 2018 Project, the 2021 Project would necessarily consume limited, slowly renewable and non-renewable resources. This consumption would occur during the construction phase of the 2021 Project and would continue throughout the operational lifetime of the 2021 Project. Development of the 2021 Project would require a commitment of resources that would include: (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the Project Site. Project construction would require the consumption of resources that are non-replenishable or may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: certain types of lumber and other forest products; aggregate materials used in concrete and asphalt such as sand, gravel and stone; metals such as steel, copper, and lead; petrochemical construction materials such as plastics; and water. Furthermore, nonrenewable fossil fuels such as gasoline and oil would also be

consumed in the use of construction vehicles and equipment, as well as the transportation of goods and people to and from the Project Site.

Throughout the life of the 2021 Project, the consumption of nonrenewable resources that are currently consumed within the City would continue, as with the 2018 Project. These include energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water. Fossil fuels would represent the primary energy source associated with both construction and ongoing operation of the 2021 Project, and the existing, finite supplies of these natural resources would be incrementally reduced. Energy resources would be used for heating and cooling of buildings, lighting, and transporting of patrons to and from the Project Site during operation.

As with the 2018 Project, operation of the 2021 Project would occur in accordance with California Code of Regulations Title 24, Part 6, and Building Standards Code Title 24, Part 11, commonly referred to as CALGreen Code, as well as specific energy conservation measures incorporated in the 2021 Specific Plan Amendment that set forth conservation practices to limit the amount of energy consumed by the 2021 Project. Although consumption of resources would necessarily occur, the 2021 Project would be an infill development designed and operated to reduce the necessary consumption of nonrenewable resources, similar to what was proposed for the 2018 Project, although the 2021 Project proposes additional measures to reduce the use of nonrenewable resources.

The Developer has committed to providing a range of construction and operational PDFs that will reduce GHG emissions, air quality emissions, and energy use, all of which reduce the use of nonrenewable resources. For example, 576 passenger electric vehicle (EV) charging stations will be provided in PA1, PA3, and/or in other areas of the City and 25 percent of all trucking parking spaces in PA3(a) would be equipped for EV charging (refer to 2021 SEIR PDF O-7). In addition, for the light industrial uses within PA3(a), leasing preference shall be given to prospective tenants with facility-owned and operated fleet that is alternative/zero-emissions, and all owned or contracted fleets shall meet or exceed the 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Industrial tenants shall ensure that of all trucks of model year 2021 and newer, 75 percent will be zero- or near-zero-emissions vehicles by 2035 and 100 percent zero- or near-zero-emissions vehicles by 2040. In addition, no diesel truck refrigeration units (TRUs) shall be permitted in PA3(a); however, due to the nature of deliveries for the restaurant uses in PA3(b), while diesel TRU trucks could access the site, the TRU units would not allowed to be running while the deliveries are being made.

All PDFs designed to reduce air quality emissions, energy use, and GHG emissions are assumed as part of the 2021 Project and are taken into account in the analyses of potential impacts. Each of these PDFs is described in detail in Section IV.D, *Air Quality* (pp. IV.D-37 through IV.D-42);

Section IV.G, *Energy* (pp. IV.G-25 to IV.G-29); and Section IV.H, *Greenhouse Gas Emissions* (pp. IV.H-43 to IV.H-47) of this 2021 SEIR. These PDFs are also identified in Table I-4, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, as provided in Chapter I, *Summary*, of this 2021 SEIR and will be tracked in the 2021 Project's MMRP.

The 2021 Project would also incorporate water conservation methods, such as ultralow-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by existing regulations. The 2021 Specific Plan Amendment will include provisions for the installation of a reclaimed water infrastructure system for irrigation and proposed water features. Additionally, it is proposed to connect the on-site system to the West Basin Recycling Facility to decrease the potable water demand, and enhance the water conservation efforts for the development. In addition, 2021 Mitigation Measures J.1-1 through J.1-8 provide various design features and/or compliance with existing laws or regulations that reduce the 2021 Project's demand on water supply, such as compliance with the City's Water Efficient Landscape Ordinance; the use of reclaimed water for non-potable water needs (e.g., landscaping and during grading/construction activities), to the maximum extent feasible; the use of automatic irrigation systems that are set for watering in the early morning or evening hours; and recycling all water used in cool systems to the maximum extent possible.

As described in more detail in Section VII.B.1(d), *Project Siting and Project Design Features Relative to the Reduction of Air Quality and Greenhouse Gas Emissions*, VMT associated with operation of the 2021 Project would be reduced through the mix of proposed uses, the Project Site's proximity to the I-405 and I-110 Freeways and the Ports of Long Beach and Los Angeles, the distance to anticipated end users (i.e., recipients of delivery items originating from the Project Site), and the provision of or connections to alternate modes of transportation, which would also reduce the consumption of non-renewable resources (e.g., petroleum products). Also as noted above, the 2021 Project would generate about 18 percent less total VMT per service population than would be generated by the 2018 Project.

The City's Land Use Element Guiding Principle and Goal LU-1 of the City's Land Use Element specifically address the need for the productive reuse of brownfield sites, which includes the Project Site. Consistent with the objectives, goals, and policies of the City's Land Use Element, the 2021 Project would adaptively and productively reuse a former landfill and provide sufficient funding for remediation activities, as well as ongoing and future O&M costs. Development of the site has long been envisioned and pursued, as described in Section VII.B.1, *Reasons the Project Is Being Proposed, Notwithstanding Its Significant Unavoidable Impacts*. As also described in Section VII.B.1, the 2021 Project, including its recommended mitigation measures and PDFs, provide a comprehensive program to reduce the use of nonrenewable resources. Therefore, the 2021 Project would not substantially increase the use of nonrenewable resources during construction and operation of the 2021 Project as compared to the 2018 Project.

Nonetheless, while the 2021 Project would minimize the amount of nonrenewable resources used during construction and operational activities, as described above, the use of such resources, as with the 2018 Project, would continue to represent a long-term commitment of nonrenewable resources. The commitment of nonrenewable resources required for the construction and operation of the 2021 Project would “generally commit future generations to similar uses,” as defined by CEQA Guidelines Section 15126.2(d); while, implementation of any project on the Project Site would result in a commitment of nonrenewable resources, the 2021 Project provides a substantial commitment to the reduction of nonrenewable resources, as described above.

Further, when compared to existing developments within the City that are currently consuming energy and nonrenewable resources, including other existing warehouse and logistics facilities, implementation of the 2021 Project would incorporate newer technologies to reduce usage of energy and nonrenewable resources and would comply with more stringent laws and regulations to further reduce such uses. Therefore, implementation of the 2021 Project would further reduce the use of nonrenewable resources as compared to the 2018 Project.

VII.C.2 Actions that Commit Future Generations to Similar Uses

Development of the Project Site with the land uses proposed under the 2021 Project would likely commit the use of the Project Site to developed land uses for future generations. It is unlikely that the Project Site would be converted to undeveloped uses in the future, given its location in an urbanized area and adjacent to the I-405 Freeway and the requirement by DTSC to ultimately formally close the landfill, which involves the installation of remedial systems on the site.

While implementation of the 2021 Project would increase the use of nonrenewable resources compared to the existing vacant condition of the Project Site, development of the 2021 Project would enable the final remediation of the Project Site from its former use as a landfill and its current contaminated state, which has long been a goal of the City. The 2021 Project would also require compliance with a wide variety of PDFs, mitigation measures, and regulatory controls that would reduce the use of nonrenewable resources and reduce air quality emissions, energy use, and GHG emissions.

In addition, the 2021 Project would provide for an infill development that would minimize VMT and the consumption of non-renewable resources, as described above. In addition, the use of energy and nonrenewable resources under the 2021 Project would be similar to, or likely less than, the consumption of nonrenewable resources that are currently consumed within the City, including existing warehouse and logistics facilities, given the robust PDFs, mitigation measures, and regulatory controls that would be required for implementation of this 2021 Project.

VII.C.3 Irreversible Damage from Environmental Accidents

Environmental accidents could occur at the Project Site during the remediation, construction, or operation phases, which could result in irreversible damage to the environment. However, all subsurface remediation activities are subject to a variety of regulatory controls under the oversight of the DTSC, including the RAPs; the 206 Compliance Framework Agreement (as amended in 2007, the CFA); various Consent Decrees (dated December 1995, October 2000, and January 2004); the Management Approach to Phased Occupancy (File No. 01215078.02), approved by DTSC in April 2018 (the MAPO); a the phased development letter, issued by DTSC to the Carson Reclamation Authority, dated October 17, 2017 (Phased Development Letter). Due to the highly regulated nature of the remediation process, the potential for an accidental release of hazardous materials on the Project Site into the environment would be very low. In the unlikely event that an accident were to occur, all applicable contingency plans and/or procedures established in the regulatory controls described above would be implemented in order to contain the release as quickly as possible so as to avoid any large-scale environmental accident. Furthermore, all other applicable laws and regulations would be implemented to further reduce the potential for an environmental accident.

Construction of the 2021 Project would require the transport, storage, use, and disposal of small amounts of hazardous materials, including but not limited to fuels (e.g., gasoline, diesel), hydraulic fluids, oils and lubricants, paint, and other similar materials in varying quantities on the Project Site. However, the 2021 Project would not use, store, or transport CalARP substances above the allowed regulatory standards⁴³⁰; CalARP substances are those that that pose the greatest risk of immediate harm to the public and the environment.

Hazardous materials used, transported, or stored under the 2021 Project would be required to adhere to existing local, state, and federal regulatory requirements (e.g., California Highway Patrol hazardous materials transportation regulations, Cal/OSHA worker safety requirements, Hazardous Materials Unified Program requirements, RCRA requirements, and California Health and Safety Code requirements that call for preparation of a Hazardous Materials Business Plan). These regulations serve to minimize emissions and exposure risks associated with operational activities related to the routine transport, storage, and disposal of hazardous materials and wastes and the potential for accidental release and upset conditions.

The 2021 Project would also be required to comply with all relevant and applicable federal, state, and local laws and regulations that pertain to the transport, storage, and disposal of hazardous materials and waste during construction. In the event of an accidental release during construction, containment and clean up would be conducted in accordance with existing

⁴³⁰ *California Office of Emergency Services, California Accidental Release Prevention Program Guidance, May 2020.*

regulatory requirements. Each contractor that handles hazardous materials would be required to have a Hazardous Materials Business Plan that would require that hazardous materials used for construction are stored in appropriate containers, with secondary containment to contain a potential release. Furthermore, installation and implementation of the Stormwater Pollution Prevention Plan (SWPPP) would ensure that any accidental release of hazardous materials is contained on site and would be able to be cleaned up accordingly. Therefore, the potential for an environmental accident during construction would be considered to be low.

Operation of the 2021 Project would include the limited use of potentially hazardous materials contained in typical cleaning agents and pesticides for landscaping, which would be used, handled, stored, and disposed of in accordance with applicable government regulations and standards. Additionally, there is a potential for hazardous materials to be stored and distributed as part of the e-commerce/distribution uses proposed within PA3(a); however, the type of hazardous materials that could be present on site would be regulated in accordance with all applicable laws and regulations and would not permit large quantities of dangerous hazardous materials on site. All use, transport, storage, and disposal of hazardous materials on site would be stringently regulated to reduce the likelihood of irreversible damage caused by an accidental release. Compliance with all applicable laws, regulations, and plans would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

As demonstrated above, and further described in Section VI.E, *Hazards and Hazardous Materials*, the potential for irreversible environmental damage caused by an accidental release of hazardous materials during any phase of the 2021 Project is considered to be less than significant as the 2021 Project would comply with all applicable laws, regulations, and plans to minimize impacts.

VII.D GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT

As required by the CEQA Guidelines Section 15126.2(e), an EIR must include a discussion of ways in which a Project could directly or indirectly foster economic or population growth or the construction of additional housing and how that growth would, in turn, affect the surrounding physical environment (CEQA Guidelines Section 15126.2(d)).

Growth can be induced in a number of ways, including the elimination of obstacles to growth or through the stimulation of economic activity within the region. The discussion of removal of obstacles to growth relates directly to the removal of infrastructure limitations or regulatory constraints that could result in unforeseen growth.

In general, the 2021 Project may foster spatial, economic, or population growth in a geographic area if it would result in:

- Direct population growth or employment that is not satisfied by the project or the surrounding areas;
- Urbanization of land in a remote location (leapfrog development);
- Removal of an impediment to growth (e.g., the establishment of additional utility capacity associated with existing infrastructure or the provision of new access or infrastructure to an area); and/or
- Economic expansion or growth occurs in response to the project (e.g., changes in revenue base, employment expansion, etc.).

If a project meets any one of these criteria, it may be considered growth inducing. Generally, growth-inducing projects: (1) are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major transportation or utility infrastructure; or (2) encourage unplanned growth.

VII.D.1 Direct Population Growth or Employment Demand Not Satisfied by the 2021 Project or Surrounding Area

Implementation of the 2021 Project would develop the currently vacant Project Site into a mixed-use development that would support residential, commercial, light industrial, and open space uses, which would result in direct on-site growth. The 2021 Project would allow for: (1) approximately 1,250 residential units within a Mixed-Use Marketplace (MU-M) zone in PA1, (2) up to 714,000 sf of regional commercial uses and up to 15,000 sf of restaurant uses within a Commercial Marketplace (CM) zone in PA2, and (3) a maximum of 1,567,090 sf of light industrial development and supportive office uses under a Light Industrial (LI) zone in PA3(a) and up to approximately 12 acres of publicly accessible but privately maintained open space and commercial/community-use and amenity areas under the CM zone in PA3(b). Under the 2021 Project the uses proposed for PA1 and PA2 would remain the same as under the 2018 Project while the uses in PA3 would differ.

Direct population growth would occur from development of the residential uses proposed under the 2021 Project. Since the number of residential units (i.e., up to 1,250 residential units) would remain the same under the 2021 Project as with the 2018 Project, direct population growth as compared to the 2018 SEIR would also remain the same. For this reason, anticipated residential

population growth of approximately 4,550 persons⁴³¹ from the residential uses under the 2018 Project would remain the same for the 2021 Project. Furthermore, since the 2018 Project and 2018 SEIR were approved and certified, the growth anticipated from the 2018 Project has been incorporated into the Southern California Association of Governments' (SCAG) Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) growth projections for the South Bay Cities Subregion (subregion). Since the 2021 Project would allow for the same direct population growth associated with the residential uses as the 2018 Project, the direct population growth under the 2021 Project would also be within SCAG's forecasted short- and long-term growth for the subregion. Therefore, development of the 2021 Project would not result in direct unplanned population growth within the subregion.

In addition, the current 2014 Housing Element of the City's General Plan projected an increase of approximately 5,786 residents from 2010 to 2020 to a total of approximately 103,286 residents, which equates to an approximately 6.3 percent increase in the City's population over the 10-year period.⁴³² The 2014 Housing Element also projected the City's population to increase to approximately 160,000 residents by 2035, which would be an increase of approximately 56,714 residents over 15 years.⁴³³ Assuming full buildout of the 2021 Project by 2035, the additional 4,550 residents generated by the 2021 Project would represent 8.0 percent of the total City's forecasted population growth by 2035. Therefore, implementation of the 2021 Project would not substantially increase the City's population between 2020 and 2035. Therefore, development of the 2021 Project would not result in direct unplanned population growth within the City.

Furthermore, the 2021 Project would be infill development on the Project Site within a larger metropolitan area, which would serve growth that is ongoing and anticipated in the Southern California area and the subregion in particular. As discussed in Section IV.A, *Land Use and Planning*, the 2014 Housing Element provides for the City's housing needs and strategies through 2021. The Housing Element is being updated as required by State law as part of the General Plan

⁴³¹ Population increase was calculated by multiplying the number of residential units by the City of Carson average household size for 2015, which was 3.64 persons (1,250 units x 3.64 = 4,550 residents) (US Census Bureau 2015). The household size has decreased to 3.62 persons per household since 2015 (<https://www.census.gov/quickfacts/carsoncitycalifornia>), but to maintain the same, and conservative, analysis, the same household size of 3.64 persons per household continues to be used in this 2021 SEIR.

⁴³² City of Carson, Carson General Plan, Chapter 5, City of Carson 2014–2021 Housing Element, 2014, https://ci.carson.ca.us/content/files/pdfs/planning/Carson2014-2021HousingElement_FINAL%20Draft_withAppendices.pdf, accessed June 2021.

⁴³³ City of Carson, Carson General Plan, Chapter 5, City of Carson 2014–2021 Housing Element, 2014, https://ci.carson.ca.us/content/files/pdfs/planning/Carson2014-2021HousingElement_FINAL%20Draft_withAppendices.pdf, accessed June 2021. A new Housing Element is currently being prepared, and the growth assumptions in the updated Housing Element may vary from those identified in the 2014–2021 Housing Element.

Update. The City's RHNA identifies a need for 5,618 additional housing units for the City that would be required between 2021 and 2029. The proposed 1,250 residential units within PA1, which would add to the range and mix of housing available in the City, would also bring much needed housing to the City and would contribute to meeting the City's RHNA allocation for the sixth RHNA Cycle.⁴³⁴ Therefore, development of the 2021 Project would help to increase the available housing stock within the City for existing and future residents.

The 2021 Project has the potential to induce indirect population growth by increasing the employment opportunities for City residents and residents within Los Angeles County as a whole, as discussed in Chapter II, *2021 Project Description*, of this 2021 SEIR, and Table II-7, *2021 Project – Estimated Employees Generated during Operation*. Because PA1 would be designated for residential uses, it is not assumed to result in the generation of employees. The employees anticipated for the land uses within PA2 would also remain the same under the 2021 Project as for the 2018 Project, which would total approximately 1,089 employees (2018 SEIR Appendix J, *Solid Waste Calculations*).⁴³⁵ However, due to the changes in land uses in PA3, the projected number of employees in this planning area would increase from 3,299 employees from the proposed commercial uses (2018 SEIR Appendix J, *Solid Waste Calculations*) to 4,640 employees from the light industrial and commercial uses due to the provision of higher employment-generating fulfillment and distribution uses. Overall, total employees would increase from 4,388 employees under the 2018 Project to 5,729 employees under the 2021 Project, resulting in an increase of 1,341 employees due to the provision of the higher employee-generating fulfillment and distribution uses in PA3.

While implementation of the 2021 Project would provide a total of 5,729 jobs anticipated for the Project Site during operation, future employees are anticipated to come from the existing local and regional labor force for (i) the light industrial uses within PA3(a), which would employ truckers and warehouse employees, and (ii) the commercial/retail and restaurant uses within PA3(b). These jobs are not anticipated to draw new residents to the City or surrounding area since they do not require a highly specialized workforce. Therefore, even though the 2021 Project would increase the employment opportunities within the City, population growth within the City would be consistent with SCAG's population forecasts as they consider buildout of the City's General Plan.

The increment of population growth with implementation of the 2021 Project has been the subject of each of the analyses of the 2021 Project's impacts presented in Chapter IV,

⁴³⁴ *Southern California Association of Governments (SCAG), SCAG 6th Cycle Final RHNA Allocation Plan, March 4, 2021, <https://scag.ca.gov/sites/main/files/file-attachments/6th-cycle-rhna-final-allocation-plan.pdf?1616462966>, accessed June 2021.*

⁴³⁵ *Appendix J of the 2018 SEIR can be found at: <https://ci.carson.ca.us/communitydevelopment/thedistrict.aspx>.*

Environmental Impact Analysis, of this 2021 SEIR. This 2021 SEIR analyzes potential impacts associated with implementation of the 2021 Project on or from visual resources/aesthetics, air quality, biological resources, cultural resources, energy, GHG emissions, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems. Furthermore, Chapter III, *Introduction to the Analysis*, of this 2021 SEIR identifies cumulative project growth that is anticipated to occur in the Project vicinity in conjunction with the 2021 Project. Therefore, the impacts of direct and indirect growth on the physical environment is accounted for in the analysis provided in Chapter IV, *Environmental Impact Analysis*, of this 2021 SEIR; and the limited amount of growth attributable to the 2021 Project would not be classified as induced growth beyond expected levels in the region or the subregion.

A portion of the demand for housing in the City could be accommodated by the residential uses proposed under the 2021 Project. Parts of the on-site resident and employee populations are expected to seek employment and housing, respectively, in areas surrounding the Project Site and at greater distances, just as existing off-site residents and employees would be expected to seek employment or housing within the Project Site. Furthermore, the 2021 Project would be consistent with SCAG's subregional projections, and would help to absorb existing demand, rather than create new demand.

While the 2021 Project itself represents growth, the provision of new housing and employment opportunities would not indirectly encourage substantial new growth in the City that has not previously been projected. The 2021 Project would provide much-needed housing accommodate the City's workforce, as well as the region. The 2021 Project would also provide substantial employment opportunities that would be drawn from the local and regional workforce.

Therefore, the mix of 2021 Project uses and generated residential, employment, and visitor population would not be considered growth-inducing. The 2021 Project would not provide uses that are not otherwise already occurring in the area as part of the overall anticipated growth pattern, but rather would provide a mixed-use development that provides for some demand to be met internally, and the 2021 Project would absorb, and therefore minimally reduce anticipated demand, rather than create new demand.

VII.D.2 Leapfrog Development and/or Removal of an Impediment to Growth

The Project Site is located in an urbanized area, with water, wastewater, electric power, natural gas, telephone, and transportation infrastructure provided both on the Project Site and in the surrounding area. Further, the 2021 Project would connect to existing off-site City infrastructure, with new infrastructure only provided on the Project Site. The 2021 Project would not require the

off-site extension of roads or infrastructure improvements or an increase in infrastructure capacity (e.g., water, wastewater, stormwater) that could cause indirect population growth. Therefore, there is no potential for leapfrog development with implementation of the 2021 Project, as concluded for the 2018 Project.

VII.D.3 Conclusions Regarding Growth Inducing Impacts

As discussed above, the 2021 Project is a modification of the already approved 2018 Project and is, thus, a component of anticipated, ongoing regional growth. Furthermore, the 2021 Project does not include features that would notably cause new growth not otherwise anticipated that would result in substantial increases in population above that which was part of the previously approved 2018 Project. While the 2021 Project would consist of a mix of uses that would be attractive for potential future residents as well as commercial, light industrial, and open space uses, the 2021 Project would also capture a significant portion of the existing demand for such uses in the area. No additional capacity in existing service and utility systems beyond that stated in the 2018 SEIR would be required by the 2021 Project. Therefore, growth related impacts would not be substantial in nature and thus, are concluded to be less than significant.

VII.E MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS

Mitigation measures proposed to minimize significant environmental effects of the 2021 Project are provided in the following sections of this 2021 SEIR:

- Table I-5, District at South Bay 2021 Project: Summary of Impacts, Mitigation Measures, and Significance Conclusions, which is contained in Chapter I, *Summary*, of this 2021 SEIR, identifies each significance threshold; the level of significance before mitigation; applicable and feasible mitigation measures; and the level of significance after mitigation. In addition, PDFs are also identified in the impact summary table that reduce air quality emissions, energy use, and GHG emissions. These PDFs represent either 2021 Project design, construction, and/or operational features or regulatory requirements that are used in the unmitigated modeling scenario for air quality, energy, and GHG.⁴³⁶
- Sections IV.A through IV.H provide a detailed analysis of potential impacts to land use and planning, aesthetics, transportation, air quality (including a health risk assessment), noise, biological resources, energy, and GHGs, including the resulting level of significance of Project-related and cumulative impacts that may, in cases, require or propose mitigation measures.

⁴³⁶ Some of the PDFs for air quality, energy, and/or GHG were previously identified as 2018 SEIR mitigation measures, but are now included this 2021 SEIR as PDFs since they are more appropriately part of the unmitigated modeling scenario.

- including the resulting level of significance of Project-related and cumulative impacts. The impact analysis assumes the implementation of any PDFs, prior to mitigation, and, in addition, may require or propose mitigation measures to reduce the level of significance of impacts.
- Chapter VI, which addresses Effects Found Not to Be Significant⁴³⁷ for topics or thresholds related to aesthetics, air quality, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, population and housing, public services, recreation, transportation, tribal cultural resources, and utilities and service systems, including the level of significance of Project-related and cumulative impacts.

VII.F ALTERNATIVES TO THE PROPOSED PROJECT

Alternatives to the 2021 Project are described and analyzed in Chapter V, *Alternatives*, of this 2021 SEIR.

⁴³⁷ *As provided by CEQA Guidelines Section 15128, Effects Found Not to Be Significant are impacts that are determined not to be significant and, therefore, are not discussed in detailed in the EIR. For purposes of this 2021 SEIR, these are impacts for which the 2021 Project has been adequately addressed in the 2006 FEIR and/or the 2018 SEIR.*

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