6.0.1 INTRODUCTION

Section 15126.6(a) of the California Environmental Quality Act (CEQA) Guidelines requires environmental impact reports (EIRs) to describe "a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives."

An EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed, other than the rule of reason. CEQA Guidelines Section 15126.6(b) describes the purpose of the alternatives analysis as follows:

> *Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly.*

The CEQA Guidelines suggest that alternatives should be compared to the proposed project's environmental impacts and that the "no project" alternative be considered (CEQA Guidelines Section 15126.6[e]). In defining feasibility (e.g., "feasibly attain most of the basic objectives of the project"), CEQA Guidelines Section 15126.6(f)(1) states, in part:

> *Among 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). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.*

In determining what alternatives should be considered in the EIR, it is important to acknowledge the project's objectives, significant effects, and unique considerations. These factors are crucial to the development of alternatives that meet the criteria specified in CEQA Guidelines Section 15126.6(a).

For the purposes of this EIR, the proposed project is the draft of PLAN Hermosa and is designed to achieve the following objectives:

1) Preserve the city's small beach town character through policies and design standards that maintain buildings at an appropriate scale and size with existing ones (including potentially historic buildings) and recognize the unique features of the city's eclectic residential neighborhoods.

2) Enhance and support a strong, diverse, and vibrant local economy through policies that stimulate sustainable businesses and jobs, enhance safe and beautiful commercial corridors, articulate clear and consistent standards for new businesses, and provide convenient services to residents, employees, and visitors.

3) Promote healthy and active lifestyles through land use and transportation improvements that enhance pedestrian, transit, and bike safety and access to a variety of destinations in the city.

4) Provide a safe and clean natural environment—including clean air and water—and stewardship of our ocean resources, open space, and other natural resources.

5) Achieve a low or no carbon future through the reduction of greenhouse gas emissions by reducing fuel consumption, diverting solid waste from landfills, conserving water, and improving the efficiency of energy use and utilizing renewable energy sources.

6.0.2 ALTERNATIVES EVALUATED

Project alternatives are intended to reduce or eliminate the potentially significant adverse environmental effects of PLAN Hermosa while attempting to meet most of the project objectives. An EIR is required to contain a discussion of a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain the basic objectives of the project (CEQA Guidelines Section 15126.6[a]). The comparative merits of the alternatives should also be presented. CEQA also provides the following guidelines for considering alternatives to the project:

- If an alternative would cause one or more significant environmental effects in addition to those that would be caused by the project, the significant effects of the alternatives shall be discussed, but in less detail than the significant effects of the project (CEQA Guidelines Section 15126.6[d]).
- The "no project" alternative shall be evaluated. If the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e]).
- The range of alternatives required by an EIR is governed by the rule of reason that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision-making and informed public participation. An EIR need not consider an alternative whose effect cannot be ascertained and whose implementation is remote and speculative (CEQA Guidelines Section 15126.6[f]).

POTENTIALLY SIGNIFICANT ADVERSE ENVIRONMENTAL EFFECTS OF PLAN HERMOSA

- Since the project alternatives should be designed to reduce or eliminate potentially adverse effects of the proposed project, it is important to identify where the proposed project may have significant adverse environmental effects. The potentially significant adverse environmental effects of PLAN Hermosa, as analyzed and identified in this EIR, are noted in **Table 6.0-1 (Potentially Significant Adverse Effects of PLAN Hermosa)**.

TABLE 6.0-1
POTENTIALLY SIGNIFICANT ADVERSE EFFECTS OF PLAN HERMOSA

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.1 Aesthetics and Visual Resources		
4.1-1 Scenic Vistas and Viewsheds	PS	LTS
4.1-2 Scenic Resources within a State Scenic Highway	LTS	LTS
4.1-3 Visual Character	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.1-4 Shade and Shadow	LTS	LTS
4.1-5 Light or Glare	LTS	LTS
4.1-6 Cumulative Visual Resources	LTCC	LTCC
4.2 Air Quality		
4.2-1 Applicable Air Quality Plan	LTS	LTS
4.2-2 Violate Air Quality Standards – Short-Term Impacts	PS	SU
4.2-3 Violate Air Quality Standards – Long-Term Impacts	LTS	LTS
4.2-4 Increase in Criteria Pollutants – CO Hot Spots	LTS	LTS
4.2-5 Toxic Air Contaminants	LTS	LTS
4.2-6 Odors	LTS	LTS
4.2-7 Cumulative Air Quality Impacts	CC	CC/SU
4.3 Biological Resources		
4.3-1 Special-Status Species	PS	LTS
4.3-2 Sensitive Biological Communities or Riparian Habitat	NI	NI
4.3-3 Wetlands	LTS	LTS
4.3-4 Movement or Migration of Wildlife Species	LTS	LTS
4.3-5 Conflict with Species Protection Policies or Ordinances	LTS	LTS
4.3-6 Cumulative Effects on Biological Resources	LTCC	LTCC
4.4 Cultural Resources		
4.4-1 Archaeological Resources	LTS	LTS
4.4-2 Disturbance of Human Remains	LTS	LTS
4.4-3 Paleontological Resource, Site, or Geologic Feature	PS	LTS
4.4-4 Historical Resources	PS	SU
4.4-5 Cumulative Effects on Archaeological Resources	LTCC	LTCC
4.4-6 Cumulative Effects on Human Remains	LTCC	LTCC
4.4-7 Cumulative Effects on Paleontological Resources	CC	LTCC
4.4-8 Cumulative Effects on Historical Resources	CC	CC/SU
4.5 Geology and Soils		
4.5-1 Fault Rupture and Seismic Hazards	LTS	LTS
4.5-2 Soil Erosion or Loss of Topsoil	LTS	LTS
4.5-3 Unstable and Expansive Soils	LTS	LTS
4.5-4 Cumulative Geologic and Soil Hazards	LTCC	LTCC
4.6 Greenhouse Gas Emissions		
4.6-1 Generate GHG Emissions	PS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.6-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS
4.7 Hazards and Hazardous Materials		
4.7-1 Transport, Use, or Disposal of Hazardous Materials	LTS	LTS
4.7-2 Accidental Release of Hazardous Materials	PS	LTS
4.7-3 Emission or Handling of Hazardous Materials Near Schools	LTS	LTS
4.7-4 Adopted Emergency Response Plan	LTS	LTS
4.7-5 Cumulative Effects of Hazardous Materials	LTCC	LTCC
4.8 Hydrology and Water Quality		
4.8-1 Water Quality Standards and Waste Discharge Requirements	LTS	LTS
4.8-2 Groundwater Supplies or Recharge	LTS	LTS
4.8-3 Surface Hydrology and Drainage – Off-Site Erosion or Siltation	LTS	LTS
4.8-4 Surface Hydrology and Drainage – On- or Off-Site Flooding	LTS	LTS
4.8-5 Surface Hydrology and Drainage – Water Runoff	LTS	LTS
4.8-6 Water Quality	LTS	LTS
4.8-7 Housing within Flood Hazard Area	LTS	LTS
4.8-8 Impede or Redirect Flood Flows	LTS	LTS
4.8-9 Risk of Loss, Injury, or Death Involving Flooding	LTS	LTS
4.8-10 Inundation by Seiche, Tsunami, or Mudflow	LTS	LTS
4.8-11 Cumulative Effects on Water Quality Standards and Waste Discharge Requirements	LTCC	LTCC
4.8-12 Cumulative Effects on Groundwater Supply or Recharge	LTCC	LTCC
4.8-13 Cumulative Effects on Surface Hydrology and Flooding	LTCC	LTCC
4.8-14 Cumulative Effects on Risk of Loss, Injury, or Death Involving Flooding	LTCC	LTCC
4.8-15 Cumulative Effects of Inundation by Seiche, Tsunami, or Mudflow	LTCC	LTCC
4.9 Land Use and Planning		
4.9-1 Physically Divide an Established Community	LTS	LTS
4.9-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS
4.9-3 Cumulative Impact on Dividing a Community or Conflicting with a Plan	LTCC	LTCC
4.10 Mineral Resources		
4.10-1 Result in the Loss of Availability of Mineral Resources	NI	NI
4.11 Noise and Vibration		
4.11-1 Noise Levels in Excess of Standards	LTS	LTS
4.11-2 Groundborne Vibration or Groundborne Noise Levels	PS	LTS
4.11-3 Permanent Increase in Ambient Noise Levels	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.11-4 Temporary or Periodic Increase in Ambient Noise Levels	LTS	LTS
4.11-5 Cumulative Effects of Noise Sources	LTCC	LTCC
4.12 Population and Housing		
4.12-1 Induce Substantial Population Growth	LTS	LTS
4.12-2 Displace People or Housing	LTS	LTS
4.12-3 Cumulative Inducement of Population Growth	LTCC	LTCC
4.12-4 Cumulative Impacts on Displacing People or Housing	LTCC	LTCC
4.13 Public Services, Community Facilities, and Utilities		
4.13.2-1 Demand for Fire Protection Services	LTS	LTS
4.13.2-2 Cumulative Demand for Fire Protection Services	LTCC	LTCC
4.13.3-1 Demand for Law Enforcement Services	LTS	LTS
4.13.3-2 Cumulative Demand for Law Enforcement Services	LTCC	LTCC
4.13.4-1 Demand for Additional School Facilities	LTS	LTS
4.13.4-2 Cumulative Demand for Additional School Facilities	LTCC	LTCC
4.13.5-1 Demand for Additional Park Facilities	LTS	LTS
4.13.5-2 Cumulative Demand for Parks and Recreation Facilities	LTCC	LTCC
4.13.6-1 Demand for Additional Library Facilities	LTS	LTS
4.13.6-2 Cumulative Demand for Library Facilities	LTCC	LTCC
4.13.7-1 Wastewater Treatment Facilities Exceeding Influent Flows Beyond Permitted Capacity	LTS	LTS
4.13.7-2 Demand for New or Expanded Water or Wastewater Treatment Facilities	LTS	LTS
4.13.7-3 Demand for Stormwater Drainage Facilities	LTS	LTS
4.13.7-4 Demand for Water Supplies Beyond Projections	LTS	LTS
4.13.7-5 Exceed Capacity for Wastewater Treatment	LTS	LTS
4.13.7-6 Cumulative Water Supply Impacts	LTCC	LTCC
4.13.7-7 Cumulative Wastewater Impacts	LTCC	LTCC
4.13.8-1 Demand for Solid Waste Disposal	LTS	LTS
4.13.8-2 Compliance with Solid Waste Disposal Regulations	LTS	LTS
4.13.8-3 Cumulative Solid Waste Impacts	LTCC	LTCC
4.13.9-1 Demand for Additional Energy Resources	LTS	LTS
4.13.9-2 Cumulative Energy Consumption Impacts	LTCC	LTCC
4.14 Transportation		
4.14-1 Exceedance of LOS Performance Standards		
4.14-1a Intersections	10/13 LTS	10/13 LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
1. Hermosa Ave & 13th St	LTS	LTS
2. Hermosa Ave & Pier Ave	LTS	LTS
3. Pacific Coast Hwy & Artesia Blvd	PS	SU
4. Pacific Coast Hwy & Aviation Blvd	PS	SU
5. Pacific Coast Hwy & Pier Ave	LTS	LTS
6. Pacific Coast Hwy & 2nd St	LTS	LTS
7. Pacific Coast Hwy & 16th St	LTS	LTS
8. Pacific Coast Hwy & 21st St	LTS	LTS
9. Prospect Ave & Artesia Blvd	LTS	LTS
10. Prospect Ave & Aviation Blvd	LTS	LTS
11. Prospect Ave & Anita St	LTS	LTS
12. Manhattan Ave & 27th St	PS	SU
13. Valley Drive & Gould Ave	LTS	LTS
4.14-1b Roadway Segments	19/20 LTS	19/20 LTS
1. Hermosa Avenue (27th Street to 22nd Street)	LTS	LTS
2. Hermosa Avenue (22nd Street to 16th Street)	LTS	LTS
3. Hermosa Avenue (16th Street to 8th Street)	LTS	LTS
4. Hermosa Avenue (8th Street to Herondo Street)	LTS	LTS
5. Valley Drive (Gould Avenue to Pier Avenue)	LTS	LTS
6. Valley Drive (Pier Avenue to 8th Street)	LTS	LTS
7. Ardmore Avenue (16th Street to 11th Street)	LTS	LTS
8. Ardmore Avenue (8th Street to 2nd Street)	LTS	LTS
9. Pacific Coast Highway (Artesia Boulevard to Aviation Boulevard)	LTS	LTS
10. Pacific Coast Highway (Aviation Boulevard to 2nd Street)	LTS	LTS
11. Prospect Avenue (Artesia Boulevard to Aviation Boulevard)	LTS	LTS
12. Prospect Avenue (Aviation Boulevard to 2nd Street)	PS	SU
13. Artesia Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
14. Aviation Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
15. Pier Avenue (Hermosa Avenue to Valley Drive)	LTS	LTS
16. Pier Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS
17. Gould Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS
18. 8th Street (Hermosa Avenue to Valley Drive)	LTS	LTS
19. 8th Street (Pacific Coast Highway to Prospect Avenue)	LTS	LTS
20. Herondo Street (Hermosa Avenue to Valley Drive)	LTS	LTS

Issue Area	Proposed Project	
	Without Mitigation	With Mitigation
4.14-2 Conflict with the LA County Congestion Management Program	LTS	LTS
4.14-3 Air Traffic Patterns	LTS	LTS
4.14-4 Roadway Design Hazards	LTS	LTS
4.14-5 Adequate Emergency Access	LTS	LTS
4.14-6 Public Transit, Bicycle, and Pedestrian Facilities	LTS	LTS
4.14-7 Cumulative Exceedance of LOS Performance Standards	CC	CC
4.14-8 Cumulative Impact on LA County Congestion Management Program	LTCC	LTCC
4.14-9 Cumulative Effect on Air Traffic Patterns	LTCC	LTCC
4.14-10 Cumulative Roadway Design Hazards	LTCC	LTCC
4.14-11 Cumulative Effect on Emergency Access	LTCC	LTCC
4.14-12 Cumulative Effect on Public Transit, Bicycle, and Pedestrian Facilities	LTCC	LTCC

Definition	
LTS	*Less Than Significant – if impacts were identified as less than significant in the technical analysis*
PS	*Potentially Significant – if impacts were identified as potentially significant*
NI	*No Impact – if no impacts were identified in the technical analysis*
CC	*Cumulatively Considerable – if impacts, cumulative in nature, were determined to be significant*
LTCC	*Less Than Cumulatively Considerable – if impacts, cumulative in nature, were determined to be less than significant*
SU	*Significant and Unavoidable – if impacts, after feasible mitigation measures were identified, remained a significant impact and determined unavoidable in the technical analysis*

The City of Hermosa Beach considered a range of land use alternatives when formulating PLAN Hermosa. The previous public discussion of land use alternatives is distinct from the alternatives analysis presented in this EIR, although there may be overlap with certain concepts presented earlier. The purpose of the EIR alternatives is primarily to identify means to reduce or avoid significant environmental effects of the project. For this EIR, the following three alternatives to PLAN Hermosa are evaluated:

- **Alternative 1** – Retain Existing General Plan/Coastal Land Use Plan (No Project Alternative)
- **Alternative 2** – Achieve Carbon Neutrality by 2030 (2030 Carbon Neutral Alternative)
- **Alternative 3** – Stronger Retention of Visual and Cultural Resources (Character Retention Alternative)

Each alternative—with the exception of the CEQA-required No Project Alternative—was formulated to provide rational and meaningful modifications to proposed land uses that would reduce environmental impacts while still achieving most project objectives. CEQA Guidelines Section 15126.6(a) allows the City to select alternatives that would result in reduction of any significant effects of the project, but does not require reduction of all impacts to a less than significant level. Project alternatives are not required to reduce specific individual impacts of PLAN

Hermosa, as long as the City has established a reasonable range of feasible alternatives that address the significant effects of the project. Each alternative is described briefly below.

Alternative 1 – Retain Existing General Plan/Coastal Land Use Plan (No Project Alternative)

This alternative assumes that PLAN Hermosa would not be implemented and that future development would proceed as indicated in the existing General Plan and Coastal Land Use Plan. Hermosa Beach would continue to grow and develop consistent with currently allowable land uses according to the existing 1980 Land Use Element (Figure 3-3). However, redevelopment patterns would be expected to be similar to PLAN Hermosa because the same infill properties would be vacant or available for redevelopment, resulting in increased intensity of development in an identical development footprint as PLAN Hermosa. **Table 6.0-2 (Comparison of Allow/Estimated Density and Intensity)** provides an estimate of what density or intensity of development is anticipated to be allowed under the adopted General Plan, compared to the proposed densities and intensities of PLAN Hermosa. Note that the existing General Plan does not include floor area ratios (FAR) but has setback and height requirements which can be used to calculate an estimate of FAR allowed based on recently approved or constructed projects.

TABLE 6.0-2
COMPARISON OF ALLOWED/ESTIMATED DENSITY AND INTENSITY

	No Project Alternative	Proposed under PLAN Hermosa		Allowed Density/Intensity Comparison of No Project to PLAN Hermosa
Land Use Designation	Maximum	Minimum	Maximum	
Low Density (DU/AC)	13.0	2.0	13.0	Similar
Medium Density (DU/AC)	25.0	13.1	25.0	Similar
High Density (DU/AC)	33.0	25.1	33.0	Similar
Mobile Home (DU/AC)	13.0	2.0	13.0	Similar
Neighborhood Commercial (FAR)	1.0	0.5	1.0	Similar
Community Commercial (FAR)	1.75	0.5	1.25	Greater
Recreational Commercial (FAR)	2.5	1.0	1.75	Greater
Gateway Commercial (FAR)	1.5	1.0	2.0	Lesser
Service Commercial (FAR)	1.0	0.25	0.5	Greater
Light Industrial Creative (FAR)	0.75	0.25	1.0	Lesser
Public Facilities (FAR)	n/a	0.1	1.0	Similar
Open Space (FAR)	n/a	0.0	0.1	Similar
City Beach (FAR)	n/a	0.0	0.05	Similar

DU/AC = dwelling units per acre; FAR = floor area ratio.

Information on du/acre and FAR from the public review draft of PLAN Hermosa (City of Hermosa Beach 2015). Italicized lines indicate new or altered land use designations introduced through PLAN Hermosa.

This alternative is analyzed in this EIR, as it is required under CEQA Guidelines Section 15126.6(e). According to CEQA Guidelines Section 15126.6(e)(2), the "no project" analysis shall discuss "what is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services."

As shown in **Table 6.0-2**, the No Project Alternative would allow similar levels of residential development as PLAN Hermosa. For nonresidential development, the No Project Alternative would allow greater levels of development in the Community Commercial, Recreational Commercial, and Service Commercial designations, and lesser levels of development in the Gateway Commercial and Light Industrial Creative designations than proposed under PLAN Hermosa. All other nonresidential or institutional categories propose similar levels of allowed development intensity for both PLAN Hermosa and the No Project Alternative.

Additionally, as shown in **Table 6.0-3 (No Project/Existing General Plan Vehicle Miles Traveled (VMT) and Vehicle Trips Generated)**, Alternative 1 would result in 30,000 more VMT per day and 2,600 more daily vehicle trips compared to PLAN Hermosa.

TABLE 6.0-3
NO PROJECT/EXISTING GENERAL PLAN VEHICLE MILES TRAVELED (VMT) AND VEHICLE TRIPS GENERATED

Scenario	Daily Vehicle Miles Traveled	Daily Vehicle Trips
2040 No Project Alternative	356,000	37,200
2040 PLAN Hermosa	326,000	34,600

Source: City of Hermosa Beach Traffic Study 2015

Alternative 2 – Achieve Carbon Neutrality by 2030 (2030 Carbon Neutral Alternative)

This alternative would be focused on achieving a community-wide goal of carbon neutrality by 2030. Carbon neutrality is the state of achieving net zero carbon emissions, generally by balancing a measured amount of carbon released with an equivalent amount sequestered or offset by the community. There are two primary differences between this alternative and the proposed draft of PLAN Hermosa, which currently includes a goal to achieve carbon neutrality no later than the year 2040:

1) Expediting achievement of a carbon neutral goal by 10 years from 2040 to 2030.

2) Bypassing the use of carbon credits to offset carbon emissions that could not be eliminated.

Changing these two parameters would have a number of effects. While the total levels of local reductions needed to achieve a carbon neutral goal by 2030 or 2040 are virtually identical, the number of years to achieve the goal would be reduced from 24 years to 14. A 2030 goal would necessitate the implementation of new policies and programs each year to reduce emissions at a rate of 6,750 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year, compared to annual reductions of 3,975 $MTCO_2e$ per year for a 2040 goal.

To do this, the following steps would be taken to modify PLAN Hermosa to increase and accelerate the rate of carbon emissions reductions from the energy, waste, and transportation sectors:

- Require on-site renewable energy generation and zero net energy as part of all new construction and major building renovations.
- Mandate retrofits to existing buildings to improve energy efficiency at time of sale, through rental inspections, and prior to issuance of building permits.
- Eliminate the use of natural gas within the city through the installation of biogas technologies and electrification of heating and cooking appliances and fixtures within the building stock.

- Participate in a Community Choice Aggregation program or other similar program, and procure or generate renewable energy to account for 100 percent of the energy portfolio by increasing the rate of installation for local renewable energy generation sources or procuring long-term renewable energy contracts for sources outside of the city.
- Modify land use designations to facilitate mixed-use development and increase commercial and residential densities within the Community Commercial and Gateway Commercial designations to facilitate shorter trip lengths and increase the number of trips captured internally.
- Mandate public and private clean fuel and electric vehicle infrastructure to facilitate deployment of electric vehicles, neighborhood electric vehicles, and/or clean fuel vehicles.
- Modify parking standards and programs to disincentivize conventionally fueled automobile use, and incentivize alternative modes of transportation and zero-emission vehicle use through programs that include, but are not limited to, increases in the cost of public parking, elimination of parking minimums and establishment of maximums for new development, elimination of practices to assign parking spaces to particular uses, and changes to the preferential parking permit program.
- Pursue regional transportation projects and infrastructure to facilitate carbon-free regional travel options.
- Mandate transportation demand management (TDM) programs for institutions and businesses.
- Accelerate the implementation of pedestrian and bicycle network investments, electric vehicle and alternative fuel infrastructure, programs to achieve zero waste, and net zero energy requirements.

The 2030 Carbon Neutral Alternative with the added or modified policies would result in greater levels of emissions reductions compared to the policies and programs proposed in PLAN Hermosa, as noted in **Table 6.0-4 (Comparison of Emissions Reduction Scenarios 2030 vs. 2040).**

TABLE 6.0-4
COMPARISON OF EMISSIONS REDUCTION SCENARIOS 2030 VS. 2040

	2030 Scenario		2040 Scenario	
	Share of Carbon Reductions (%)	Annual Carbon Reduction (MTCO2e)	Share of Carbon Reductions (%)	Annual Carbon Reduction (MTCO2e)
Baseline 2005 Emissions		137,160		137,160
2012 Emissions	-7.7%	126,610	-7.7%	126,610
BAU Emissions (2040)	+1.2%	128,290	+5.0%	133,430
State Programs (2040)	-24.6%	33,750	-27.7%	38,010
Local Remaining Emissions to be Reduced		94,540		95,420
Building Efficiency				
New Construction Residential Efficiency	-0.8%	1,090	-1.3%	1,810
Existing Buildings Residential Efficiency	-4.4%	6,100	-4.4%	6,100
New Construction Nonresidential Efficiency	-1.2%	1,690	-2.0%	2,810
Existing Buildings Nonresidential Efficiency	-2.0%	2,770	-2.0%	2,770
Subtotal	-8.5%	11,650	-9.8%	13,490
Renewable Energy Generation				
Rooftop Solar	-5.8%	8,020	-5.9%	8,100
Community Solar	-27.0%	36,990	-0.4%	550
Community Choice Aggregation	-7.5%	10,290	-7.3%	10,010
Purchased Renewables (Green Rate)	-0.0%	0	-0.0%	0
Subtotal	-40.3%	55,300	-13.6%	18,660
Transportation + Land Use				
Land Use & Transportation Alternatives	-8.1%	11,130	-4.0%	5,500
Additional Transportation Strategies	-3.2%	4,450	-1.9%	2,560
Electric Vehicles	-5.7%	7,750	-7.4%	10,100
Subtotal	-17.0%	23,330	-13.0%	18,160
Other Sectors + Offsets				
Waste + Recycling	-2.5%	3,430	-2.5%	3,480
Water + Wastewater	-0.6%	840	-0.2%	330
Purchase Offsets	-0.0%	0	-30.1%	41,310
Subtotal	-3.1%	4,270	-32.9%	45,120
TOTAL	**-100.0%**	**94,540**	**-100.0%**	**95,420**

Source: City of Hermosa Beach 2016

Alternative 3 – Stronger Retention of Visual and Cultural Resources (Character Retention Alternative)

This alternative would focus on implementing additional policies or implementation actions that would facilitate greater retention of visual and cultural resources in Hermosa Beach. While PLAN Hermosa includes several goals and policies to address community character, historic buildings, and scenic views, they largely do so in a manner that encourages rather than mandates the protection of these resources. To facilitate greater retention of the existing visual and cultural resources in Hermosa Beach, the steps taken to modify PLAN Hermosa would include:

- Reduction in density or establishment of floor area ratios (FAR) for medium- and high-density residential (reduce capacity to encourage retention of existing buildings that contribute to the character of residential neighborhoods).
- Establishment of an overall cap or reduction in development intensity for the Community Commercial and Recreational Commercial land use designations to limit the scale and amount of additional development or increased redevelopment within those areas.
- Addition of a mixed-use designation to allow limited residential development, in conjunction with commercial uses, accommodating the projected population growth reduced through changes to medium- and high-density designations.
- Development of design standards (as opposed to guidelines) to address the compatibility of building scale, design aesthetics, and community character for residential and commercial neighborhoods.
- Addition of historic resource protection policies, including City initiation of historic landmark designation of potentially eligible historic resources.
- Achievement as a Certified Local Government (CLG) by the California Office of Historic Preservation, including establishment of an historic preservation commission.
- Development of a historic preservation plan, historic context statement, and/or historic preservation element of the General Plan.
- Establishment of view protection ordinances and development standards to physically depict building form/massing in the evaluation of a project's impact on views.
- Revision of the issuance of a demolition permit from a ministerial action to a discretionary action for those properties that have been identified as a potentially eligible historic resource.

The Character Retention Alternative, with the added or modified policies, would result in greater levels of certainty that cultural and visual resources would be retained, compared to the policies and programs proposed in PLAN Hermosa. However, the policies in this alternative may also discourage the redevelopment, reuse, or renovation of existing buildings and structures that will be necessary to improve energy efficiency and reduce carbon emissions.

6.0.3 IMPACTS OF EACH ALTERNATIVE

In the following discussion, the impacts of PLAN Hermosa for each environmental topic area considered in this EIR are described. This is followed by a description of how impacts for each alternative would differ from PLAN Hermosa, including whether impacts would be greater, lesser, or similar to the proposed project and why the alternative would result in different impacts to the proposed project. **Table 6.0-5 (Comparison of Environmental Impacts of Alternatives to PLAN Hermosa)** summarizes the impact comparison.

AESTHETICS AND VISUAL RESOURCES

Impacts of PLAN Hermosa related to adverse effects on scenic vistas, degradation of existing visual character, creation of shadows, and creation of new sources of light or glare that would adversely affect nighttime views are less than significant. No designated scenic highways are located in the planning area, so there is no impact to scenic highways. PLAN Hermosa would result in new development that could alter views and the visual character, and add new sources of shadow, light, and glare in the planning area. However, policies and actions applicable to new development would reduce these impacts to a less than significant level.

Alternative 1

The No Project Alternative would generally have similar effects on degradation of existing visual character, creation of shadows, and creation of new sources of light or glare as PLAN Hermosa. The existing General Plan has similar policies related to the preservation of aesthetic resources, especially the beaches, shoreline, and the Santa Monica Bay viewshed. However, the existing General Plan does not identify specific scenic vistas associated with the beaches, shoreline, and the Santa Monica Bay viewshed, nor does it identify the character defining features of the city's mix of neighborhoods, corridors, and districts. In the absence of these identified vistas and public viewing areas, and the absence of descriptors to identify the visual character, impacts to scenic vistas and visual character would be **greater** under this alternative than with PLAN Hermosa. This would potentially be a new significant impact and may cause greater cumulative impacts to visual resources.

Alternative 2

The 2030 Carbon Neutral Alternative would include similar policies to PLAN Hermosa to identify the locations and public viewing areas for scenic vistas and viewsheds. This alternative would also include similar descriptions of the community's character-defining features and similar policies addressing scenic resources within a state scenic highway. However, this alternative could increase the amount of renewable energy installations in Hermosa Beach by an order of magnitude (34 megawatts [MW] in PLAN Hermosa compared to 166 MW in this alternative) compared to the projections used in the draft of PLAN Hermosa, potentially in the form of solar, wind, or ocean-based renewable energy development. These renewable energy resources have the potential to create new sources of light or glare or be placed in areas adjacent to high quality scenic viewing areas or within the Santa Monica Bay viewshed. Thus, impacts to aesthetics could be **greater** than those of PLAN Hermosa.

Alternative 3

The Character Retention Alternative would incorporate additional development standards to address compatibility of building scale, design aesthetics, and community character as well as the consideration of scenic views. While this alternative would incorporate descriptions of the community's character-defining features, similar to PLAN Hermosa, it would take additional steps to further protect scenic vistas and visual character by incorporating development standards and a design review process. These design standards would guide and evaluate new construction or redevelopment projects to design buildings and structures in a manner that minimizes impacts to visual resources and provide guidance to ensure new buildings are consistent with the form, scale, and orientation of existing buildings. This alternative would also identify specific vistas and key public viewpoints of the identified vistas. The Character Retention Alternative would also potentially have lesser impacts on shade and shadow, by establishing intensities or floor area ratios for residential development, thereby facilitating greater variation of building forms to avoid creating shadow impacts. Thus, this alternative would have **lesser** impacts than PLAN Hermosa.

AIR QUALITY

Air pollutants are generated from the combustion of fuels for automobiles and small engines powering equipment for activities such as landscaping and construction. Impacts of PLAN Hermosa related to consistency with air quality plans, long-term operational emissions, carbon monoxide (CO) hot spots, toxic air contaminants, and odors are less than significant. PLAN Hermosa would result in potentially significant impacts related to short-term construction emissions. These impacts would remain significant and unavoidable even after implementation of PLAN Hermosa policies and implementation actions.

Alternative 1

The No Project Alternative results in similar amounts of residential and commercial development as PLAN Hermosa; however, this alternative would result in an increase of approximately 30,000 daily vehicle miles traveled (VMT) and 2,600 daily vehicle trips (VT). Fuel consumption from vehicle trips is a primary determinant in the emittance of several air quality pollutants, and contributes to CO hot spots and toxic air contaminants. Therefore, this alternative would result in relatively **greater** impacts related to violating long-term air quality standards, CO hot spots, and toxic air contaminants compared to PLAN Hermosa. Similarly, due to the greater VMT and VT, this alternative would be potentially inconsistent with the South Coast Air Quality Management District's (SMAQMD) Air Quality Management Plan and would have greater cumulative impacts on air quality. Since this alternative would result in similar levels of construction compared to the proposed project, it would have similar air quality impacts related to short-term emissions and would have similar impacts on odors.

Alternative 2

Under the 2030 Carbon Neutral Alternative, the quantity of internal combustion engines in the city would be reduced at a greater rate and would be replaced with electric equipment and vehicles at a greater rate. Thus, because the decrease would occur more quickly and there would be a greater rate of conversion, there would be fewer transportation-related pollutants generated locally, resulting in **lesser** impacts related to consistency with the Air Quality Management Plan, long-term operational emissions, CO hot spots, and toxic air contaminants. Since this alternative would result in greater levels of construction compared to PLAN Hermosa, it would have higher air quality impacts related to short-term construction-related emissions and would have similar impacts on odors.

Alternative 3

The Character Retention Alternative proposes to reduce density or establish floor area ratios (FAR) for medium- and high-density residential to encourage the retention of existing buildings that contribute to the character of residential neighborhoods. This would in effect discourage redevelopment of existing parcels, which would reduce the amount of emissions generated by construction equipment, resulting in fewer impacts from or a lower likelihood of violating air quality standards on a short-term basis. This alternative would otherwise have similar mobility and transportation policies, resulting in **similar** impacts to PLAN Hermosa related to consistency with the Air Quality Management Plan, long-term operational emission, CO hot spots, toxic air contaminants, and odors. This would result in similar cumulative air quality impacts compared to PLAN Hermosa.

BIOLOGICAL RESOURCES

PLAN Hermosa was evaluated to determine whether its adoption and implementation would cause adverse effects to special-status species, sensitive natural communities, and wildlife movement. The majority of the planning area is urbanized, and limited areas of habitat are

focused along the beach and shoreline, where no change in the developed footprint is planned. The Draft EIR has found that, after mitigation, no significant biological impacts would occur.

Alternative 1

Although the existing General Plan lacks some of the specific policies and programs requiring consideration of biological resources in development decisions, the current General Plan does not envision development or changes to existing open space areas along the beach and shoreline that would potentially affect biological resources. By retaining existing open spaces along the beach and shoreline, Alternative 1 would have impacts to sensitive biological communities, wetlands, movement or migration of wildlife, and conflicts with species protection policies, similar to those identified for PLAN Hermosa. However, impacts to special-status species have been identified as a potentially significant impact under PLAN Hermosa, but lowered to a less than significant impact with a mitigation measure to require any construction on the beach proposed to occur during the summer months to conduct preconstruction surveys for western snowy plovers or California least terns, and not allowing any construction on the beach to occur if the surveys identify these species as roosting. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action and associated environmental review required to implement mitigation of this impact. Thus, the impacts on special-status species would be potentially **greater** under the No Project Alternative.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and policies as PLAN Hermosa. However, this alternative may introduce additional renewable energy resources—including solar, wind, or ocean-based renewable energy sources—each of which may have varying adverse effects on special-status species, sensitive natural communities, and wildlife migration. While the potential impacts to California least terns and western snowy plovers could be mitigated with similar measures identified for PLAN Hermosa, the potential introduction of ocean-based renewable energy sources may cause impacts to other special-status species, particularly marine mammals such as cetaceans (whales, dolphins, and porpoises), pinnipeds (seals and sea lions), and sea otters, which are protected under the Marine Mammal Protection Act. Additionally, both ocean- and land-based renewable energy resources have been known to alter or impact the movement and migration of wildlife species. Since the location, size, technology, and design of any new renewable energy resources cannot be identified at this time, further study of the potential impacts and additional mitigation measures or implementation actions may be needed to protect sensitive biological habitats and wildlife movement or migration and to reach a less than significant impact related to biological resources for this alternative. Thus, impacts to special-status species, movement and migration of wildlife species, and cumulative effects on biological resources may be **greater** than those of PLAN Hermosa.

Alternative 3

The Character Retention Alternative would include similar policies related to biological resources and generally follows the same development footprint or urbanized area as PLAN Hermosa. Additionally, this alternative does not envision development or changes to existing open space areas along the beach and shoreline that could potentially affect biological resources. While a potentially significant impact to special-status species has been identified for PLAN Hermosa, this alternative could similarly incorporate a mitigation measure to require any construction on the beach proposed to occur during the summer months to conduct preconstruction surveys for western snowy plovers or California least terns, and not allow any construction on the beach to occur if the surveys identify these species as roosting. Therefore, biological resources impacts with this alternative would be **similar** to PLAN Hermosa.

CULTURAL RESOURCES

Impacts of PLAN Hermosa related to archaeological, paleontological, cultural, and historic resources are considered potentially significant. With the application of mitigation measures, the impacts to archaeological and paleontological resources would be reduced to less than significant. PLAN Hermosa, with application of mitigation measures, would still be considered a significant and unavoidable impact causing substantial change to the significance of a historical resource. With redevelopment and reuse of existing properties, as opposed to development of vacant land, as the primary means to reinvestment in Hermosa Beach in the future, the risk of potentially historic buildings or structures being demolished or substantially modified is high.

Alternative 1

The No Project Alternative would retain the policies and programs of the existing General Plan. Such policies related to cultural and historic resources are included in the Urban Design Element, but do not preclude property owners from demolishing or significantly altering older buildings and identified potentially historic resources. Since PLAN Hermosa includes an inventory of potentially historic resources, additional policies, and a set of implementation actions, this alternative would result in potentially greater impacts to historic resources than the plan. Additionally, impacts to archaeological and paleontological resources are less than significant because of the inclusion of specific implementation actions to require archaeological investigations for future projects involving ground-disturbing activities in areas that have not been previously surveyed and/or determined sensitive for cultural resources. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action or associated environmental review required to implement mitigation measures to reduce impacts. Thus, the impacts on archaeological and paleontological resources would be potentially greater under this alternative. On a cumulative basis, this alternative would likely cause **greater** impacts to cultural resources than PLAN Hermosa.

Alternative 2

Potential impacts to archaeological or paleontological resources and disturbance of human remains would be similar to PLAN Hermosa under this alternative because Alternative 2 would have similar implementation actions to address future ground-disturbing activities.

However, this alternative would likely result in greater alterations or demolitions to the existing building stock to increase the installation of solar panels on the majority of rooftops in Hermosa Beach, achieve deep energy renovations of existing buildings, and result in a greater number of buildings being torn down and rebuilt as zero net energy and high-performance buildings. While the installation of energy-efficient equipment or renewable energy technology would not necessarily damage or alter designated or potentially historic resources, additional guidance and technical information would be needed to describe how historic properties can incorporate sustainable practices to reduce energy consumption, while maintaining those characteristics that make historic properties significant. Unless additional policies are identified to prohibit the demolition or significant alteration of potentially historic resources, impacts to historical resources would still be expected to be significant and unavoidable and would likely be somewhat **greater** under this alternative given the level of alterations to building stock needed to achieve higher energy performance. Potential impacts to historical resources on a cumulative basis, which is identified as a significant and unavoidable impact with PLAN Hermosa, would also be somewhat greater under this alternative.

Alternative 3

The Character Retention Alternative would incorporate similar implementation actions as PLAN Hermosa to address archaeological and paleontological resources, and therefore would have

similar impacts on those resources. However, this alternative would incorporate additional policies and programs to directly or indirectly address cultural and specifically historic resources. Additional policies or implementation actions under this alternative would include:

- Addition of historic resource protection policies, including City initiation of historic landmark designation of potentially eligible historic resources.
- Achievement as a Certified Local Government (CLG) by the California Office of Historic Preservation, including establishment of an historic preservation commission.
- Development of a historic preservation plan, historic context statement, and/or historic preservation element of the General Plan.
- Reduction in density or establishment of floor area ratios (FAR) for medium- and high-density residential (reduce capacity to encourage retention of existing buildings that contribute to the character of residential neighborhoods).
- Revision of the issuance of a demolition permit from a ministerial action to a discretionary action for those properties that have been identified as a potentially eligible historic resource.

These specific additions proposed for this alternative are intended to provide additional oversight and information or regulation to preserve both designated historic resources and potentially eligible resources. Thus, the impacts and cumulative effects on historic resources, under this alternative, would be **lesser** than with PLAN Hermosa, although the impact may not necessarily be reduced to a less than significant level.

GEOLOGY AND SOILS

Implementation of PLAN Hermosa, including future land uses consistent with the Land Use Map, would provide for construction of new uses in areas potentially subject to seismic ground shaking, soil liquefaction and ground failure, and earthquake-induced landslides. New land uses would also potentially be exposed to erosion hazards and to expansive and collapsible soils. However, PLAN Hermosa policies and implementation actions require enforcement of regulations, programs, and building code requirements. All geology and soils impacts of PLAN Hermosa would be less than significant.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

Alternative 3

The Character Retention Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa and would follow the same general footprint of development; therefore, the number of people and structures subject to potential geological hazards would be similar. The same regulations and building code requirements would apply to new development under this alternative. Thus, impacts related to geology and soils, including fault rupture, soil erosion, and unstable expansive soils, would be **similar** to those with PLAN Hermosa.

GREENHOUSE GAS EMISSIONS

PLAN Hermosa includes numerous policies and implementation actions to address and dramatically reduce greenhouse gas (GHG) emissions. While the generation of GHG emissions is identified as a potentially significant impact with the proposed project, the mitigation measures establish interim GHG reduction goals and requirements to evaluate progress a minimum of every five years, and to adjust policies or programs if Hermosa Beach is not on track to achieve long-term targets. The policies and actions identified in PLAN Hermosa are designed to comply with local GHG reduction planning efforts and policies, including the 2011 Hermosa Beach Sustainability Plan and the Municipal Carbon Neutral Goal for 2020, and are consistent with the State's long-term GHG reduction targets articulated under Assembly Bill (AB) 32, Senate Bill (SB) 32, and the AB 32 Scoping Plan. With these mitigation measures, PLAN Hermosa would result in less than significant impacts related to GHG emissions and would not conflict with any applicable plans, policies, or regulations.

Alternative 1

Impacts related to the generation of GHG emissions have been identified as potentially significant under PLAN Hermosa, but are lowered to a less than significant impact with mitigation measures to establish interim GHG reduction goals and requirements to evaluate progress a minimum of every five years, and to adjust policies or programs if Hermosa Beach is not on track to achieve long-term targets. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action and associated environmental review required and therefore no mitigation measures.

This alternative would result in similar amounts of residential and commercial development as PLAN Hermosa; however, because of the location and distribution of uses allowed, this alternative would result in an increase of approximately 30,000 VMT per day and 2,600 additional daily vehicle trips. Additionally, Alternative 1 would not include the policies and implementation actions identified in PLAN Hermosa that would reduce operational emissions from other sources such as energy use, waste disposal, and water consumption. Therefore, this alternative would result in **greater** impacts related to GHG emissions compared to PLAN Hermosa. Similarly, this alternative would not include policies and actions that reduce GHG emissions to the levels identified by the City's 2011 Sustainability Plan and the Municipal Carbon Neutral Goal for 2020. Therefore, impacts related to consistency with applicable GHG reduction plans would be **greater**.

Alternative 2

Under the 2030 Carbon Neutral Alternative, a greater quantity of emissions would be reduced by 2030. The key policies incorporated into this alternative include:

- Require on-site renewable energy generation and zero net energy as part of all new construction and major building renovations.
- Mandate retrofits to existing buildings to improve energy efficiency at time of sale, through rental inspections, and prior to issuance of building permits.

- Eliminate the use of natural gas within the city through the installation of biogas technologies and electrification of heating and cooking appliances and fixtures within the building stock.
- Participate in a Community Choice Aggregation program or other similar program and procure or generate renewable energy to account for 100 percent of the energy portfolio by increasing the rate of installation for local renewable energy generation sources or procuring long-term renewable energy contracts for sources outside of the city.
- Modify land use designations to facilitate mixed-use development and increase commercial and residential densities within the Community Commercial and Gateway Commercial designations to facilitate shorter trips lengths and increase the number of trips captured internally.
- Mandate public and private clean fuel and electric vehicle infrastructure to facilitate deployment of electric vehicles, neighborhood electric vehicles, and/or clean fuel vehicles.
- Modify parking standards and programs to disincentivize conventionally fueled automobile use, and incentivize alternative modes of transportation and zero-emission vehicle use through programs that include, but are not limited to, increases in the cost of public-parking, elimination of parking minimums and establishment of maximums for new development, elimination of practices to assign parking spaces to particular uses, and changes to the preferential parking permit program.
- Pursue regional transportation projects and infrastructure to facilitate carbon-free regional travel options.
- Mandate transportation demand management (TDM) programs for institutions and businesses.
- Accelerate the implementation of pedestrian and bicycle network investments, electric vehicle and alternative fuel infrastructure, programs to achieve zero waste, and net zero energy requirements.

However, the certainty in which emissions could be reduced when relying, even if to a lesser extent than PLAN Hermosa, on voluntary and incentive-based measures remains. Therefore, similar mitigation measures to ensure emissions reductions were achieved by the identified target years would be required. More aggressive implementation of programs and policies to achieve a goal of community-wide carbon neutrality by 2030 rather than 2040 would set the City of Hermosa Beach up to exceed state greenhouse gas reduction targets earlier, and therefore would have **lesser** impacts related to GHG emissions than PLAN Hermosa. This alternative would similarly include policies and actions that reduce GHG emissions to levels that meet or exceed local plans such as the 2011 Hermosa Beach Sustainability Plan and the Municipal Carbon Neutral Goal for 2020 and would therefore have a **similar** impact on applicable plans, policies, or regulations compared to PLAN Hermosa.

Alternative 3

The Character Retention Alternative proposes to reduce density or establish floor area ratios (FAR) for medium- and high-density residential to encourage the retention of existing buildings that contribute to the character of residential neighborhoods. This would in effect discourage redevelopment of existing parcels, which would result in lower construction-related emissions, but would also discourage the development of higher-performance buildings or the installation of renewable energy systems, a key strategy to reducing GHG emissions. The mobility policies and implementation actions in this alternative would mirror those proposed in PLAN Hermosa, resulting in similar levels of transportation-related reductions in GHG emissions. Waste reduction, water

conservation, and some energy efficiency measures, similar to PLAN Hermosa, would still be implemented under Alternative 3.

Given that energy-related emissions account for 41 percent of the emissions profile for Hermosa Beach and that this alternative may decrease the GHG reduction potential from energy sources, the GHG impacts under this alternative would be **greater** than with PLAN Hermosa. However, the implementation of policies and actions related transportation, waste, and water/wastewater and the incorporation of similar mitigation measures to PLAN Hermosa means that Alternative 3 may not necessarily result in a significant impact. Similarly, this alternative would have **similar** impacts, compared to PLAN Hermosa, related to consistency with applicable GHG reduction plans, policies, and regulations.

HAZARDS AND HAZARDOUS MATERIALS

Implementation of PLAN Hermosa could result in increased routine use, transport, and disposal of hazardous materials, including the potential for hazardous materials handling near schools and development on sites included on the Cortese List. However, compliance with existing hazardous materials regulations and PLAN Hermosa policies and implementation actions would result in less than significant impacts related to the transport, use, or disposal of hazardous materials, emission or handling of hazardous materials near schools, and consistency with adopted emergency response plans.

As it relates to the accidental release of hazardous materials into the environment, PLAN Hermosa has been identified to have a potentially significant impact due to the known contamination at the City of Hermosa Beach Maintenance Yard and the potential for unknown contamination at other sites throughout the city. To mitigate the potential impacts, this EIR includes mitigation measures to require the development and implementation of a Human Health Risk Assessment and Remedial Action Plan for any development activities at the City Maintenance Yard, and requirements for future projects involving hazardous materials to stop work, identify the scope, coordinate with the appropriate agencies, and conduct the necessary remediation. With these measures, the impacts related to the accidental release of hazardous materials is mitigated to a less than significant level.

Alternative 1

The No Project Alternative results in similar amounts and the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of materials used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar**.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts and the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of material used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar** with this alternative.

Alternative 3

The Character Retention Alternative would result in slightly less but the same general footprint of residential and commercial development as PLAN Hermosa; therefore, the volume of material used and transported, and the number of people subject to potential hazards through routine use and transport of materials, would be similar. The use and transportation of hazardous materials would be subject to the same federal, state, and local regulations as identified for PLAN Hermosa. Impacts related to hazards and hazardous materials would be **similar**.

HYDROLOGY AND WATER QUALITY

Development under PLAN Hermosa would result in infill development and a slight increase in impervious surfaces in a largely built-out environment. Development would not result in increased erosion. Development under PLAN Hermosa would not significantly affect water quality or flooding potential and hazards. Implementation of PLAN Hermosa policies and implementation actions and compliance with existing regulations would result in less than significant impacts to water quality, groundwater recharge, and stormwater drainage patterns related to erosion. Similarly, PLAN Hermosa identifies policies, programs, and implementation actions that would reduce impacts related to flooding from anticipated sea level rise to less than significant.

Alternative 1

Compliance with the existing General Plan and enforcement of existing regulations would result in similar water quality and flood hazard impacts, including impacts related to seiche or mudflow. The No Project Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. While the existing General Plan does not include policies to address the current standards or regulations related to water quality, groundwater recharge, surface hydrology, and flood hazard areas, the City's existing code requirements related to stormwater compliance and use of low impact development standards to reduce stormwater runoff would ensure that impacts related to these topics are less than significant.

This alternative would not include the policies, programs, and actions related to resiliency and the mitigation of potential sea level rise. Current sea level rise projections identify that the 100-year flood zone could be expanded up to 300 percent—from approximately 22 acres currently to 64 acres in Hermosa Beach—by the end of the twenty-first century with 55 inches of sea level rise. In Hermosa Beach, there are currently no structures or roadways located within the 100-year flood zone, but with 55 inches of sea level rise, approximately 200 existing buildings and nearly 1,000 residents could be located in an expanded flood zone and thereby exposed to loss, injury, or death involving flooding. Therefore, Alternative 1 would have **greater** impacts related to hydrology and water quality, specifically as it relates to impacts involving flood hazard areas.

Alternative 2

The 2030 Carbon Neutral Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. This alternative would also include the policies, programs, and actions related to resiliency and the mitigation of potential sea level rise. Therefore, Alternative 2 would have **similar** impacts related to hydrology and water quality.

Alternative 3

The Character Retention Alternative includes a similar development footprint, resulting in similar impacts related to stormwater flows (including erosion and flooding) and groundwater recharge. This alternative would also include the policies, programs, and actions related to resiliency and

the mitigation of potential sea level rise. Therefore, Alternative 3 would have **similar** impacts related to hydrology and water quality.

LAND USE AND PLANNING

The environmental analysis for PLAN Hermosa examined potential impacts related to consistency with applicable local and regional land use regulations including the Hermosa Beach Zoning Ordinance, California Coastal Act, Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), South Coast Air Quality Management Plan, and Beach Cities Livability Plan. The review included a detailed assessment of consistency with the California Coastal Act and SCAG's RTP/SCS and found that PLAN Hermosa is consistent with the goals and policies of these applicable regulations and plans and therefore would have a less than significant impact.

The proposed land use changes identified in PLAN Hermosa follow established land use patterns and would not divide an existing community, resulting in a less than significant impact requiring no mitigation measures. Implementation of PLAN Hermosa policies and implementation actions would result in less than significant impacts related to the division of existing communities and consistency with applicable land use plans.

Alternative 1

The No Project Alternative would not divide existing communities because it would continue to allow development in conformance with the established land use patterns in the community. The existing General Plan, which would be continued under this alternative, is generally consistent with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy and with air quality plans. Although the existing General Plan's policies and programs meet many of the goals of the RTP/SCS, it does not have the same emphasis on sustainability and a reduction in vehicle miles traveled as PLAN Hermosa. Additionally, the existing Coastal Land Use Plan, which would be continued under this alternative, does not address certain topics of the California Coastal Act—including public access, low-cost visitor and recreational facilities, and flood hazards—at a level that meets today's standards or expectations. As a result, this alternative would have a **greater** impact related to consistency with other plans.

Alternative 2

Under the 2030 Carbon Neutral Alternative, the proposed land use mix would be adjusted, allowing mixed-use and professional office uses, and would allow additional neighborhood-serving uses in some neighborhoods. This would be done with the express intent to reduce vehicle miles traveled, improve the jobs-housing balance, and allow a greater percentage of residents to reach daily goods and services on bike or foot or by electric vehicle. Under this alternative, the City's land use plan would be aligned with the intent of the RTP/SCS. Alternative 2 would also incorporate policies and implementation actions, similar to PLAN Hermosa, to address the California Coastal Act. Therefore, the impacts would be **similar** to PLAN Hermosa.

Alternative 3

With the Character Retention Alternative, some land use designations would be adjusted to discourage redevelopment of medium- and high-density residential uses and instead allow some residential development to occur within a mixed-use designation. This alternative would have a similar amount of overall allowable development and would identify sufficient land area in which redevelopment may occur to be consistent with SCAG's 2012–2035 Regional Transportation Plan/Sustainable Communities Strategy and with air quality plans. This alternative would retain a similar emphasis on sustainability policies and policies to reduce vehicle miles traveled as PLAN Hermosa. The alternative would also incorporate policies and implementation actions similar to

PLAN Hermosa to address the California Coastal Act. Therefore, Alternative 3 would have a **similar** impact related to consistency with other plans.

MINERAL RESOURCES

The entirety of Hermosa Beach is classified as Mineral Resource Zone 3 (MRZ-3) under the California Mineral Land Classification System. In MRZ-3 areas, mineral resources are present, but the significance of the resource is considered speculative because no mining has historically occurred in the area. Additionally, the City of Hermosa Beach currently prohibits drilling for oil within the city. A vote of the people would be required to lift the existing ban. A ballot measure in 2015, Measure O, proposed to lift the existing ban, but failed at a rate of four to one. Therefore, PLAN Hermosa would have no impact on mineral resources, and each alternative would **similarly** have no impact because these resources can no longer be feasibly extracted.

NOISE AND VIBRATION

The environmental analysis for PLAN Hermosa examined potential noise and vibration impacts associated with future transportation levels and land use activities. Evaluated noise and vibration sources include transportation sources, bars and restaurants, events and parties, commercial and industrial activities, construction and demolition activity, and refuse collection. These noise and vibration sources were found to have a less than significant impact on noise standards, periodic and permanent increases in ambient noise levels, and cumulative effects of noise sources.

However, the Draft EIR has found that groundborne vibration and noise levels with the implementation of PLAN Hermosa could have a potentially significant impact. To mitigate this impact, new development that may cause exceedance of groundborne vibration and noise standards would be required to have a report prepared by a structural engineer identifying the vibration limits and specifying measures and a monitoring plan to mitigate the site-specific impacts. With the incorporation of this mitigation measure, all noise-related impacts from PLAN Hermosa would be considered less than significant.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa, resulting in similar impacts to temporary or periodic increases in ambient noise levels. This alternative would, however, result in an increase of approximately 30,000 VMT and 2,600 VT, and would subsequently generate additional sources of transportation-related noise that could exceed noise standards or create a permanent increase in ambient noise levels causing impacts that are **greater** than PLAN Hermosa.

Additionally, impacts related to groundborne noise and vibration levels have been identified as a potentially significant impact under PLAN Hermosa, but lowered to a less than significant impact with a mitigation measure to require the preparation of a report by a structural engineer identifying the vibration limits and specifying measures and a monitoring plan to mitigate the site-specific impacts for new development projects. Since this alternative proposes a continuation of existing adopted policy, there is no discretionary action or associated environmental review required and therefore no mitigation measures. Thus, the impacts to groundborne noise and vibration standards would be potentially **greater** under Alternative 1.

Alternative 2

The 2030 Carbon Neutral Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa, resulting in similar impacts to temporary or periodic increases in ambient noise levels and groundborne noise or vibration sources. This alternative would similarly

incorporate a mitigation measure applied to new development projects to reduce impacts related to groundborne noise and vibration sources.

This alternative would also lower VMT by an additional 12 percent, compared to PLAN Hermosa (25 percent in Alternative 2 compared to 13 percent in PLAN Hermosa). With automobile use a primary contributor to ambient noise levels, a reduction in vehicle trips would also result in a reduction in automobile-related noise to a lesser impact than with PLAN Hermosa. Thus, this alternative would overall have **lesser** impacts on noise levels than PLAN Hermosa due to the reduction in transportation noise.

Alternative 3

With the Character Retention Alternative, the goals, policies, and implementation actions related to transportation, events, and commercial activity would largely mirror PLAN Hermosa. These sources of noise would have a similar effect to the proposed project; however, there would potentially be fewer sources of construction/demolition noise and vibration and temporary increases in ambient noise levels due to reduced construction activity compared to PLAN Hermosa. Overall, this alternative would have **lesser** impacts to noise and vibration, depending on the source of noise.

POPULATION AND HOUSING

The environmental analysis examined the potential of PLAN Hermosa to induce population growth or to displace people or housing. PLAN Hermosa provides accommodation for a limited increase in population (660 residents), housing (300 units), and employment (2,400 jobs) in Hermosa Beach over the next 25 years. PLAN Hermosa includes policies to manage this anticipated growth and focus it in certain infill areas while maintaining existing density in established residential neighborhoods. Therefore, the Draft EIR has found that PLAN Hermosa would have a less than significant impact related to the displacement of people or housing, nor would the plan induce population growth directly or indirectly.

Alternative 1

The No Project Alternative would follow the same general footprint of development and housing-related policies and allow similar amounts of residential and commercial development as PLAN Hermosa, generating a modest level of growth in population, housing, and employment over the next 25 years. This alternative would have a **similar** impact on population and housing as PLAN Hermosa.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and housing-related policies; thus, impacts would be largely the same as those of PLAN Hermosa. Generally, the same amount of residential growth would be expected with this alternative. Nonresidential growth would be similar in magnitude, but different in type, with less regional-serving commercial development and more professional office development. Thus, the impacts of Alternative 2 related to population growth and displacement would be **similar** to PLAN Hermosa.

Alternative 3

The Character Retention Alternative would reduce the development capacity in medium- and high-density residential land uses, and correspondingly introduce a new designation to allow limited residential development as part of a mixed-use development. These two actions under Alternative 3 would have the same amount of residential development capacity of approximately 300 units, which would accommodate roughly the same population as the proposed project.

Nonresidential development capacity and policies to create additional employment opportunities would mirror those of PLAN Hermosa. Thus, the impacts of this alternative related to population growth and displacement would be **similar** to PLAN Hermosa.

PUBLIC SERVICES, COMMUNITY FACILITIES, AND UTILITIES

The environmental analysis examined the potential impacts of PLAN Hermosa on fire protection and emergency medical services, law enforcement services, public schools, parks and recreation, library facilities, water supply and service, wastewater services, solid waste services, and energy. PLAN Hermosa would have less than significant impacts related to the provision of fire protection, law enforcement, school, park, library, wastewater conveyance and treatment, stormwater drainage, water supply, and solid waste generation facilities and services.

Alternative 1

The No Project Alternative would result in similar amounts of residential and commercial development as PLAN Hermosa. However, the current General Plan, which would be continued under this alternative, does not include the same focus on conservation of resources and sustainability policies and programs that are contained in PLAN Hermosa. A lesser focus on resource conservation policies would generally result in greater consumption or disposal of water, wastewater, solid waste, and energy, which could contribute to greater impacts on wastewater treatment facilities, water supply, solid waste facilities, and energy consumption on an individual and cumulative basis. Therefore, impacts related to the provision of public services and utilities would be **greater**.

Alternative 2

The 2030 Carbon Neutral Alternative would follow the same general footprint of development and public services–related policies; thus, demand for public services would be largely the same as those with PLAN Hermosa. However, this alternative would require significant public investment to be implemented, and additional City spending might ultimately impact funding for public services. Thus, the impacts of Alternative 2 are expected to be **similar** to PLAN Hermosa as long as funding for public services is not significantly diverted for emissions reduction projects and programs.

Alternative 3

The Character Retention Alternative would follow the same general footprint of development and would include similar public services–related policies as PLAN Hermosa. This alternative would also include similar sustainability and resource conservation policies as the plan. Thus, demand for public services would be largely the same as those of PLAN Hermosa, and impacts to public services under this alternative are expected to be **similar** to the plan.

TRANSPORTATION

The environmental analysis of the proposed project examined direct and cumulative impacts related to congestion and level of service (LOS) standards, conflicts with the Los Angeles County Congestion Management Program, conflicts to air traffic patterns, creation of design hazards, impacts to emergency vehicle access, and impacts to transit, bicycle, and pedestrian facilities. Impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would be less than significant.

As it relates to LOS standards, PLAN Hermosa was evaluated for potential impacts to 13 intersections and 20 roadway segments in Hermosa Beach. Based on the analysis of volume-to-capacity ratios for these study intersections and roadway segments, three intersections and one

roadway segment would operate at a reduced level of service compared to existing conditions, thereby causing a potentially significant impact. The three intersections where level of service would be LOS D or lower are Pacific Coast Highway and Artesia Boulevard; Pacific Coast Highway and Aviation Boulevard, and Manhattan Avenue and 27th Street.

Opportunities to apply physical mitigations at these intersections to improve LOS were investigated, but were ultimately deemed infeasible because they would conflict with other impact areas, potentially adding roadway hazards or decreasing safety for other modes of transportation. Therefore, impacts to these three intersections would be considered a significant and unavoidable impact.

Through implementation of PLAN Hermosa, the roadway segment on Prospect Avenue from Aviation Boulevard to 2nd Street would be degraded from its current operation at LOS C to LOS D by 2040. While this operation is improved from the projected LOS E that would be experienced under the 2040 scenario without PLAN Hermosa, it still represents a potentially significant impact. Opportunities to expand roadway volume on this segment through physical changes to the street were explored but were ultimately deemed infeasible. In order to mitigate this impact, Prospect Avenue would need to be widened to accommodate an additional lane of travel in each direction, which would require removal of on-street parking and/or expansion of the street right-of-way. This would additionally conflict with other impact areas, potentially adding roadway hazards or decreasing safety for other modes of transportation. Therefore, the impacts to this roadway segment would be considered a significant and unavoidable impact.

Alternative 1

The No Project Alternative would generate similar amounts of residential and commercial development as PLAN Hermosa; however, this alternative would result in an increase of approximately 30,000 daily VMT and 2,600 daily VT. Alternative 1 was evaluated specifically for impacts to the 13 study intersections and 20 roadway segments. The analysis identified that nine of the 13 study intersections would have greater impacts, including greater impacts to all three intersections identified as significant and unavoidable impacts, and that five of the 20 roadway segments would experience greater impacts than with PLAN Hermosa. Therefore, this alternative would result in **greater** impacts related to level of service performance standards compared to the plan.

Additionally, the No Project Alternative would not include the policies and implementation actions that would balance the need for complete streets and alternative modes of transportation with efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would also be **greater** compared to PLAN Hermosa.

Alternative 2

Under the 2030 Carbon Neutral Alternative, a suite of additional land use and transportation measures would be implemented with the express intent of reducing vehicle miles traveled by shortening trip lengths, eliminating trips, and shifting trips from conventionally fueled automobiles to electric vehicles powered by renewable energy sources. The policies to reduce total vehicle miles traveled would reduce VMT by an additional 13 percent, which would reduce the congestion burden on the road network. This alternative would support improvements to the level of service at the three intersections identified as having significant and unavoidable impacts under PLAN Hermosa, though may not necessarily mitigate impacts to a level that is less than significant. For roadway segments, this alternative would improve LOS performance of four roadway segments, although it may not mitigate impacts to a less than significant level for impacted roadway segments.

Additionally, Alternative 2 would include similar policies and implementation actions that would balance the need for complete streets and alternative modes of transportation with efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, and emergency access would be **similar** compared to PLAN Hermosa, while impacts to public transit, bicycle, and pedestrian facilities would be **lesser** than with the plan due to greater implementation of TDM measures and pursuit of regional transportation options.

Alternative 3

The Character Retention Alternative would generate similar amounts of residential and commercial development as PLAN Hermosa. Additionally, this alternative would retain transportation and mobility goals, policies, and implementation actions that mirror PLAN Hermosa to balance the need for complete streets and alternative modes of transportation with the efficient movement of vehicles. Therefore, impacts related to conflict with the Congestion Management Program, design hazards, emergency access, and public transit, bicycle, and pedestrian facilities would be **similar** to the plan.

6.0.4 SUMMARY OF IMPACTS OF EACH ALTERNATIVE COMPARED TO PLAN HERMOSA

The factors that may be used to eliminate alternatives from detailed consideration in an EIR include (1) failure to meet most of the basic project objectives, (2) infeasibility of implementation, or (3) inability to lessen or avoid significant environmental effects (CEQA Guidelines Section 15126.6[c]). A summary of how each alternative compares to these factors is provided following **Table 6.0-5 (Comparison of Environmental Impacts of Alternatives to PLAN Hermosa),** which summarizes the environmental impacts of each alternative and compares these relative impacts to the environmental impacts of PLAN Hermosa.

TABLE 6.0-5
COMPARISON OF ENVIRONMENTAL IMPACTS OF ALTERNATIVES TO PLAN HERMOSA

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.1 Aesthetics and Visual Resources			**Greater**	**Greater**	**Lesser**
4.1-1 Scenic Vistas and Viewsheds	PS	LTS	▲	▲	▼
4.1-2 Scenic Resources within a State Scenic Highway	LTS	LTS	●	●	●
4.1-3 Visual Character	LTS	LTS	▲	●	▼
4.1-4 Shade and Shadow	LTS	LTS	●	●	▼
4.1-5 Light or Glare	LTS	LTS	●	▲	●
4.1-6 Cumulative Visual Resources	LTCC	LTCC	▲	▲	▼
4.2 Air Quality			**Greater**	**Lesser**	**Similar**
4.2-1 Applicable Air Quality Plan	LTS	LTS	▲	▼	●
4.2-2 Violate Air Quality Standards – Short-Term Impacts	PS	SU	●	▲	▼
4.2-3 Violate Air Quality Standards – Long-Term Impacts	LTS	LTS	▲	▼	●
4.2-4 Increase in Criteria Pollutants – CO Hot Spots	LTS	LTS	▲	▼	●
4.2-5 Toxic Air Contaminants	LTS	LTS	▲	▼	●
4.2-6 Odors	LTS	LTS	●	●	●
4.2-7 Cumulative Air Quality Impacts	CC	CC/SU	▲	▼	●
4.3 Biological Resources			**Similar**	**Greater**	**Similar**
4.3-1 Special-Status Species	PS	LTS	▲	▲	●
4.3-2 Sensitive Biological Communities or Riparian Habitat	NI	NI	●	●	●
4.3-3 Wetlands	LTS	LTS	●	●	●
4.3-4 Movement or Migration of Wildlife Species	LTS	LTS	●	▲	●
4.3-5 Conflict with Species Protection Policies or Ordinances	LTS	LTS	●	●	●
4.3-6 Cumulative Effects on Biological Resources	LTCC	LTCC	●	▲	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.4 Cultural Resources			**Greater**	**Greater**	**Lesser**
4.4-1 Archaeological Resources	LTS	LTS	▲	●	●
4.4-2 Disturbance of Human Remains	LTS	LTS	●	●	●
4.4-3 Paleontological Resource, Site, or Geologic Feature	PS	LTS	▲	●	●
4.4-4 Historical Resources	PS	SU	▲	▲	▼
4.4-5 Cumulative Effects on Archaeological Resources	CC	LTCC	▲	●	●
4.4-6 Cumulative Effects on Human Remains	CC	LTCC	●	●	●
4.4-7 Cumulative Effects on Paleontological Resources	CC	LTCC	▲	●	●
4.4-8 Cumulative Effects on Historical Resources	CC	CC/SU	▲	▲	▼
4.5 Geology and Soils			**Similar**	**Similar**	**Similar**
4.5-1 Fault Rupture and Seismic Hazards	LTS	LTS	●	●	●
4.5-2 Soil Erosion or Loss of Topsoil	LTS	LTS	●	●	●
4.5-3 Unstable and Expansive Soils	LTS	LTS	●	●	●
4.5-4 Cumulative Geologic and Soil Hazards	LTCC	LTCC	●	●	●
4.6 Greenhouse Gas Emissions			**Greater**	**Lesser**	**Greater**
4.6-1 Generate GHG Emissions	PS	LTS	▲	▼	▲
4.6-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS	▲	●	●
4.7 Hazards and Hazardous Materials			**Similar**	**Similar**	**Similar**
4.7-1 Transport, Use, or Disposal of Hazardous Materials	LTS	LTS	●	●	●
4.7-2 Accidental Release of Hazardous Materials	PS	LTS	●	●	●
4.7-3 Emission or Handling of Hazardous Materials Near Schools	LTS	LTS	●	●	●
4.7-4 Adopted Emergency Response Plan	LTS	LTS	●	●	●
4.7-5 Cumulative Effects of Hazardous Materials	LTCC	LTCC	●	●	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.8 Hydrology and Water Quality			**Greater**	**Similar**	**Similar**
4.8-1 Water Quality Standards and Waste Discharge Requirements	LTS	LTS	●	●	●
4.8-2 Groundwater Supplies or Recharge	LTS	LTS	●	●	●
4.8-3 Surface Hydrology and Drainage – Off-Site Erosion or Siltation	LTS	LTS	●	●	●
4.8-4 Surface Hydrology and Drainage – On- or Off-Site Flooding	LTS	LTS	●	●	●
4.8-5 Surface Hydrology and Drainage – Water Runoff	LTS	LTS	●	●	●
4.8-6 Water Quality	LTS	LTS	●	●	●
4.8-7 Housing within Flood Hazard Area	LTS	LTS	▲	●	●
4.8-8 Impede or Redirect Flood Flows	LTS	LTS	▲	●	●
4.8-9 Risk of Loss, Injury, or Death Involving Flooding	LTS	LTS	▲	●	●
4.8-10 Inundation by Seiche, Tsunami, or Mudflow	LTS	LTS	●	●	●
4.8-11 Cumulative Effects on Water Quality Standards and Waste Discharge Requirements	LTCC	LTCC	●	●	●
4.8-12 Cumulative Effects on Groundwater Supply or Recharge	LTCC	LTCC	●	●	●
4.8-13 Cumulative Effects on Surface Hydrology and Flooding	LTCC	LTCC	●	●	●
4.8-14 Cumulative Effects on Risk of Loss, Injury, or Death Involving Flooding	LTCC	LTCC	▲	●	●
4.8-15 Cumulative Effects of Inundation by Seiche, Tsunami, or Mudflow	LTCC	LTCC	●	●	●
4.9 Land Use and Planning			**Greater**	**Similar**	**Similar**
4.9-1 Physically Divide an Established Community	LTS	LTS	●	●	●
4.9-2 Conflict with an Applicable Plan, Policy, or Regulation	LTS	LTS	▲	●	●
4.9-3 Cumulative Impact on Dividing a Community or Conflicting with a Plan	LTCC	LTCC	●	●	●
4.10 Mineral Resources			**Similar**	**Similar**	**Similar**
4.10-1 Result in the Loss of Availability of Mineral Resources	NI	NI	●	●	●
4.11 Noise and Vibration			**Greater**	**Lesser**	**Lesser**
4.11-1 Noise Levels in Excess of Standards	LTS	LTS	▲	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.11-2 Groundborne Vibration or Groundborne Noise Levels	PS	LTS	▲	●	▼
4.11-3 Permanent Increase in Ambient Noise Levels	LTS	LTS	▲	▼	●
4.11-4 Temporary or Periodic Increase in Ambient Noise Levels	LTS	LTS	●	●	▼
4.11-5 Cumulative Effects of Noise Sources	LTCC	LTCC	▲	▼	●
4.12 Population and Housing			**Similar**	**Similar**	**Similar**
4.12-1 Induce Substantial Population Growth	LTS	LTS	●	●	●
4.12-2 Displace People or Housing	LTS	LTS	●	●	●
4.12-3 Cumulative Inducement of Population Growth	LTCC	LTCC	●	●	●
4.12-4 Cumulative Impacts on Displacing People or Housing	LTCC	LTCC	●	●	●
4.13 Public Services			**Greater**	**Similar**	**Similar**
4.13.2-1 Demand for Fire Protection Services	LTS	LTS	●	●	●
4.13.2-2 Cumulative Demand for Fire Protection Services	LTCC	LTCC	●	●	●
4.13.3-1 Demand for Law Enforcement Services	LTS	LTS	●	●	●
4.13.3-2 Cumulative Demand for Law Enforcement Services	LTCC	LTCC	●	●	●
4.13.4-1 Demand for Additional School Facilities	LTS	LTS	●	●	●
4.13.4-2 Cumulative Demand for Additional School Facilities	LTCC	LTCC	●	●	●
4.13.5-1 Demand for Additional Park Facilities	LTS	LTS	●	●	●
4.13.5-2 Cumulative Demand for Parks and Recreation Facilities	LTCC	LTCC	●	●	●
4.13.6-1 Demand for Additional Library Facilities	LTS	LTS	●	●	●
4.13.6-2 Cumulative Demand for Library Facilities	LTCC	LTCC	●	●	●
4.13.7-1 Wastewater Treatment Facilities Exceeding Influent Flows Beyond Permitted Capacity	LTS	LTS	▲	▼	●
4.13.7-2 Demand for New or Expanded Water or Wastewater Treatment Facilities	LTS	LTS	▲	▼	●
4.13.7-3 Demand for Stormwater Drainage Facilities	LTS	LTS	●	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.13.7-4 Demand for Water Supplies Beyond Projections	LTS	LTS	▲	▼	●
4.13.7-5 Exceed Capacity for Wastewater Treatment	LTS	LTS	▲	▼	●
4.13.7-6 Cumulative Water Supply Impacts	LTCC	LTCC	▲	▼	●
4.13.7-7 Cumulative Wastewater Impacts	LTCC	LTCC	▲	▼	●
4.13.8-1 Demand for Solid Waste Disposal	LTS	LTS	▲	▼	●
4.13.8-2 Compliance with Solid Waste Disposal Regulations	LTS	LTS	▲	▼	●
4.13.8-3 Cumulative Solid Waste Impacts	LTCC	LTCC	▲	▼	●
4.13.9-1 Demand for Additional Energy Resources	LTS	LTS	▲	▼	●
4.13.9-2 Cumulative Energy Consumption Impacts	LTCC	LTCC	▲	▼	●
4.14 Transportation			**Greater**	**Lesser**	**Similar**
4.14-1 Exceedance of LOS Performance Standards			▲		▲
4.14-1a Intersections	10/13 LTS	10/13 LTS	▲	▼	●
1. Hermosa Ave & 13th St	LTS	LTS	●	●	●
2. Hermosa Ave & Pier Ave	LTS	LTS	●	●	●
3. Pacific Coast Hwy & Artesia Blvd	PS	SU	▲	▼	●
4. Pacific Coast Hwy & Aviation Blvd	PS	SU	▲	▼	●
5. Pacific Coast Hwy & Pier Ave	LTS	LTS	▲	●	●
6. Pacific Coast Hwy & 2nd St	LTS	LTS	▲	●	●
7. Pacific Coast Hwy & 16th St	LTS	LTS	●	●	●
8. Pacific Coast Hwy & 21st St	LTS	LTS	▲	●	●
9. Prospect Ave & Artesia Blvd	LTS	LTS	▲	●	●
10. Prospect Ave & Aviation Blvd	LTS	LTS	▲	●	●
11. Prospect Ave & Anita St	LTS	LTS	●	●	●
12. Manhattan Ave & 27th St	PS	SU	▲	▼	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
13. Valley Drive & Gould Ave	LTS	LTS	▲	●	●
4.14-1b Roadway Segments	19/20 LTS	19/20 LTS	▲	▼	●
1. Hermosa Avenue (27th Street to 22nd Street)	LTS	LTS	●	●	●
2. Hermosa Avenue (22nd Street to 16th Street)	LTS	LTS	●	●	●
3. Hermosa Avenue (16th Street to 8th Street)	LTS	LTS	●	●	●
4. Hermosa Avenue (8th Street to Herondo Street)	LTS	LTS	●	●	●
5. Valley Drive (Gould Avenue to Pier Avenue)	LTS	LTS	●	●	●
6. Valley Drive (Pier Avenue to 8th Street)	LTS	LTS	●	●	●
7. Ardmore Avenue (16th Street to 11th Street)	LTS	LTS	●	●	●
8. Ardmore Avenue (8th Street to 2nd Street)	LTS	LTS	●	●	●
9. Pacific Coast Highway (Artesia Boulevard to Aviation Boulevard)	LTS	LTS	▲	▼	●
10. Pacific Coast Highway (Aviation Boulevard to 2nd Street)	LTS	LTS	●	▼	●
11. Prospect Avenue (Artesia Boulevard to Aviation Boulevard)	LTS	LTS	●	●	●
12. Prospect Avenue (Aviation Boulevard to 2nd Street)	PS	SU	▲	▼	●
13. Artesia Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	▲	▼	●
14. Aviation Blvd (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	▲	●	●
15. Pier Avenue (Hermosa Avenue to Valley Drive)	LTS	LTS	●	●	●
16. Pier Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS	●	●	●
17. Gould Avenue (Ardmore Avenue to Pacific Coast Highway)	LTS	LTS	●	●	●
18. 8th Street (Hermosa Avenue to Valley Drive)	LTS	LTS	●	●	●
19. 8th Street (Pacific Coast Highway to Prospect Avenue)	LTS	LTS	●	●	●
20. Herondo Street (Hermosa Avenue to Valley Drive)	LTS	LTS	▲	●	●
4.14-2 Conflict with the LA County Congestion Management Program	LTS	LTS	▲	●	●
4.14-3 Air Traffic Patterns	LTS	LTS	●	●	●

Issue Area	Proposed Project		Potential Impacts of Alternatives		
	Without Mitigation	With Mitigation	No Project	Carbon Neutral by 2030	Character Retention
4.14-4 Roadway Design Hazards	LTS	LTS	▲	●	●
4.14-5 Adequate Emergency Access	LTS	LTS	▲	●	●
4.14-6 Public Transit, Bicycle, and Pedestrian Facilities	LTS	LTS	▲	▼	●
4.14-7 Cumulative Exceedance of LOS Performance Standards	CC	CC	▲	▼	●
4.14-8 Cumulative Impact on LA County Congestion Management Program	LTCC	LTCC	▲	●	●
4.14-9 Cumulative Effect on Air Traffic Patterns	LTCC	LTCC	●	●	●
4.14-10 Cumulative Roadway Design Hazards	LTCC	LTCC	▲	●	●
4.14-11 Cumulative Effect on Emergency Access	LTCC	LTCC	▲	●	●
4.14-12 Cumulative Effect on Public Transit, Bicycle, and Pedestrian Facilities	LTCC	LTCC	▲	▼	●

Symbol	Definition
LTS	*Less Than Significant – if impacts were identified as less than significant in the technical analysis*
PS	*Potentially Significant – if impacts were identified as potentially significant*
NI	*No Impact – if no impacts were identified in the technical analysis*
CC	*Cumulatively Considerable – if impacts, cumulative in nature, were determined to be significant*
LTCC	*Less Than Cumulatively Considerable – if impacts, cumulative in nature, were determined to be less than significant*
SU	*Significant and Unavoidable – if impacts, after feasible mitigation measures were identified, remained a significant impact and determined unavoidable in the technical analysis*
▲	*Greater = impacts are greater than PLAN Hermosa*
●	*Similar = impacts are similar to PLAN Hermosa*
▼	*Lesser = level of significance is less than PLAN Hermosa, but the impact is not necessarily reduced to a less than significant level*

No Project Alternative

Project Objectives

The No Project Alternative would only partially meet the project objectives established for PLAN Hermosa. The existing General Plan and Coastal Land Use Plan can reasonably achieve project objectives to enhance and support a strong, diverse, and vibrant local economy (Objective 2) and provide a safe and clean natural environment (Objective 4) by relying on the existing policies and programs related to economic development and resource conservation. Additionally, the existing General Plan contains an Urban Design Element; however, it fails to establish various character areas and identify the unique characteristics of each area, making it difficult to effectively achieve project Objective 1, to preserve the city's small beach town character. Finally, while the existing General Plan and Coastal Land Use Plan contain policies and programs to reduce vehicle miles traveled and expand alternative modes of transportation, these documents do not identify promoting healthy and active lifestyles (Objective 3) and achieving a low or no carbon future (Objective 5) as the primary motivation for including such policies, nor do the mobility policies and programs contained in the existing General Plan advance the reduction in VMT sufficiently to claim that they can effectively achieve Objectives 3 and 5.

Comparison of Environmental Impacts

The No Project Alternative would not lessen any environmental impacts compared to PLAN Hermosa. Instead, it would have greater impacts to aesthetics and visual resources, air quality, greenhouse gas emissions, hydrology and water quality, land use and planning, noise and vibration, public services, community facilities, and utilities, and transportation.

Carbon Neutral by 2030

Project Objectives

The 2030 Carbon Neutral Alternative has the ability to substantially support each of the project objectives. Implementation of this alternative would prioritize the achievement of a low or no carbon future (Objective 5), while also providing a safe and clean natural environment (Objective 4) and promoting healthy and active lifestyles through land use and transportation investments (Objective 3) by reducing air quality and transportation impacts compared to PLAN Hermosa. This alternative would also meet Objective 2, to enhance and support a strong, diverse, and vibrant local economy, as many of the land use and transportation policies that reduce vehicle miles traveled do so by providing a greater range of daily services and employment opportunities in closer proximity so that residents may reasonably choose alternative modes of transportation.

While this alternative could cause greater impacts to cultural resources, and thereby potentially conflict with Objective 1, to preserve the city's small beach town character, additional mitigation measures and design standards could provide direction that minimizes the impacts associated with this alternative on cultural resources and aesthetics.

Comparison of Environmental Impacts

Alternative 2 could pose greater impacts to aesthetics and biological resources due to increased use of renewable energy systems such as solar, wind, or ocean-based renewable energy sources, and greater impacts to cultural resources due to greater alteration or demolition of designated or potentially eligible historic resources to construct high energy performance buildings. While the impacts to aesthetics, biological resources, and cultural resources may be greater than with PLAN Hermosa, it is unknown whether they would rise to the level of being considered a significant impact, because the specific design and location of additional renewable energy projects cannot be determined at this time.

This alternative would also have far-reaching environmental benefits for Hermosa Beach by decreasing impacts related to air quality, greenhouse gas emissions, noise and vibration, and transportation. Air pollutants associated with the burning of fuel for building energy and transportation uses would be reduced. Noise levels would likely be somewhat lower, as the primary source of noise in Hermosa Beach is automobile use. Reduced automobile use and an increase in electric vehicles, which are quieter than gasoline- and diesel-powered vehicles, would reduce noise levels. Transportation impacts would also likely be decreased because this alternative would result in a reduction in vehicle trips and vehicle miles traveled.

Character Retention Alternative

Project Objectives

The Character Retention Alternative prioritizes achievement of Objective 1, to preserve the city's small beach town character, and Objective 2, to enhance and support a strong, diverse, and vibrant local economy through safe and beautiful commercial corridors, but would not conflict or prevent the achievement of the other project objectives. This alternative would provide similar policies and implementation actions to PLAN Hermosa related to the mobility network, transportation enhancements, and resource conservation, meaning it would equally achieve project Objective 3, to promote healthy and active lifestyles, and Objective 4, to provide a safe and clean environment including clean air and water.

While this alternative may have a slightly greater impact on greenhouse gas emissions, it would carry forward similar policies to PLAN Hermosa related to reducing emissions from transportation sources, water conservation, and diverting solid waste from landfills to support a reduction in greenhouse gas emissions partially consistent with Objective 5, to achieve a low or no carbon future. Additional mitigation measures and design standards could provide direction to implement energy efficiency and renewable energy projects consistent with standards for the treatment of historical resources to minimize the impacts associated with this alternative on greenhouse gas emissions while retaining the historical significance of designated landmarks and the eligibility of potentially historic resources.

Comparison of Environmental Impacts

This Character Retention Alternative would pose greater impacts to greenhouse gas emissions compared to PLAN Hermosa. The challenge of renovating or constructing high energy performance buildings in a manner that does not diminish the significance of a historical resource or cause potentially eligible historic resources to become ineligible due to alterations that are inconsistent with standards for the treatment of historical resources is presented in this alternative.

This alternative would also reduce impacts associated with aesthetics and visual resources, air quality, and cultural resources, where construction-related air quality impacts and the significance of a historical resource are both considered significant and unavoidable impacts under implementation of PLAN Hermosa. However, it is unknown whether this alternative would lessen these impacts to levels that are considered less than significant.

6.0.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

- CEQA requires a lead agency to identify the "environmentally superior alternative." Based on the alternative analysis, both the 2030 Carbon Neutral Alternative and the Character Retention Alternative would reduce several of the categories listed as potentially significant or significant and unavoidable under PLAN Hermosa. The No Project Alternative would have potentially greater impacts to several categories, including aesthetics and visual resources, air quality, cultural resources, greenhouse gas emissions, hydrology and water quality, land use and planning, noise and vibration, public services, and

transportation. The 2030 Carbon Neutrality Alternative would also have potentially greater impacts to aesthetics and visual resources, biological resources, and cultural resources, while the Character Retention Alternative would only cause potentially greater impacts to one category, greenhouse gas emissions. For this reason, the Character Retention Alternative is considered the environmentally superior alternative.

6.0.6 REFERENCES

City of Hermosa Beach. 2015. *PLAN Hermosa* (public review draft).

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