

CHAPTER 6 Alternatives to the Proposed Project

CEQA Guidelines Section 15126.6(a) requires that an EIR describe a range of reasonable alternatives to the project or to the location of the project that could feasibly attain the basic objectives of the project while reducing significant project impacts. An EIR is not required to consider every conceivable alternative to a project; rather, it must consider a range of potentially feasible alternatives that will foster informed decision-making and public participation. In addition, an EIR should evaluate the comparative merits of the alternatives. Therefore, this chapter sets forth potential alternatives to the proposed project and evaluates them, as required by CEQA.

Key provisions of the CEQA Guidelines relating to the alternatives analysis (Sections 15126.6 et seq.) are summarized below:

- The discussion of alternatives shall focus on alternatives to the project or its location that 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 “no project” alternative shall be evaluated along with its impact. The “no project” analysis shall discuss the existing conditions, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved.
- The range of alternatives required in an EIR is governed by a “rule of reason”; therefore, the EIR must evaluate only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project.
- An EIR need not consider an alternative whose effects cannot be reasonably ascertained and whose implementation is remote and speculative.

6.1 RATIONALE FOR SELECTING POTENTIALLY FEASIBLE ALTERNATIVES

The alternatives may include a different type of project, modification of the proposed project, or suitable alternative project sites. However, the range of alternatives discussed in an EIR is governed by a “rule of reason” which CEQA Guidelines Section 15126.6(f) defines as:

... set[ting] forth only those Alternatives necessary to permit a reasoned choice. The Alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those Alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project. The range of feasible Alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision-making.

Among the factors that may be taken into account when addressing the feasibility of alternatives (as described in CEQA Guidelines Section 15126.6(f)(1)) are environmental impacts, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the project proponent could reasonably acquire,

control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose effects could not be reasonably identified, and whose implementation is remote or speculative.

For purposes of this analysis, the project alternatives are evaluated to determine the extent to which they attain the basic project objectives, as presented in Section 3.3 (Project Objectives), while significantly lessening any significant effects of the project. The identified objectives are as follows:

City Objectives

- Orchestrate new public and private investment toward the establishment of a more lasting framework for growth and development—a framework of clearly defined districts, centers, street patterns, and local architecture, and landscape identity—upon which new development can reliably respond to, build upon, and draw value from.
- Re-position disinvested corridor properties to capture value in the contemporary marketplace.
- Begin the transformation of the visual character of Beach Boulevard from “anywhere strip” to its proper role as the iconic gateway to and from the beach, and as the city’s most visible north-south thoroughfare.
- Instigate the development of a network of pedestrian-oriented streets, promenades, and other public open spaces that encourage walking, and ultimately, walking in combination with transit ridership.
- Balance mobility and community development objectives that enable continued market-driven growth and development while maintaining minimum community mobility standards, and furthering patterns of land use and development that contribute toward long-term regional mobility and livability.
- Make the most of each increment of new development to build toward a more environmentally sustainable future city and region.
- Ensure that new buildings and landscaping contribute to the emergence of an increasingly visible and memorable visual identity appropriate to the unique history and character of the City.
- Ensure adequate utility infrastructure and public services for new development.
- Enhance development intensity to ensure the emergence of a vital urban district (Five Points District).

Applicant Objectives

Community Objectives

- Support the regional mobility system by encouraging development within the existing corridor’s transportation and activity centers that will reduce vehicular trips and infrastructure costs, and encourages the expansion and use of public transportation services.
- Provide local residents and business employees with alternative housing and employment opportunities within a highly urbanized environment supporting local retailers and service-oriented businesses.
- Accommodate a demand for Class-A residential units otherwise not met in the City.

Development and Site Design Objectives

- Encourage revitalization through mixed-use development by constructing service-oriented development serving new residents and surrounding residential development.

- Maximize an undervalued site with more urbanized high density mixed use development.
- Improve the open space environment within the development by providing both public open space and private open space such as roof top decks, while incorporating public landscaped walkways throughout the development.
- Provide convenient and safe parking for residential units and maximize available parking for shoppers.
- Incorporate Green Building practices such as those found in the Leadership in Energy and Environmental Design (LEED) Green Building Rating System.

Economic Objectives

- Maximize the proximity to one of the most urbanized segments of the Specific Plan, create a development that is consistent with market demands for retail and housing projects, and capitalize on this primary intersection.
- Incorporate sufficient residential development to replace revenue from the existing commercial development and ensure a financially feasible future development venture.
- Construct a project within an area that has existing infrastructure to support development or that can be easily upgraded.
- Improve the economic vitality of the area by providing jobs during construction and post construction through sufficient land use diversity.

In addition, the proposed project's objectives are consistent to those included in the BECSP for future development anticipated to occur on sites located within the Five Points District Segment as described in Section 1.4.1-3 (Five Points District Segment) of the BECSP:

- **Five Points District Segment:** The Five Points area occupies the halfway point between the beachfront and I-405, and is organized around the confluence of Beach Boulevard and Main Street/Ellis Avenue. It contains the 160,000 sf Five Points Shopping Center, which includes a mix of national and regional retailers. The area south of Main Street is characterized by a more diverse mix of uses (e.g., office, medical services, multi-family, and senior housing) and building types. The planning approach to this area is twofold: (1) retain the Five Points community retail center and support its eventual intensification and mix and (2) encourage the restructuring and revitalization of surrounding areas to enhance market focus and district appeal. This area of the Specific Plan would be designated as a potential City center characterized by convenience and urban vitality. This area is envisioned to have greater development intensity than surrounding segments. The greatest development intensities would be provided in the core retail area. Infill development on underutilized properties would be composed of the types of coherent arrangements of building, streets, and blocks that are presently lacking in this centrally located district. New apartments, condominiums, and professional and medical office buildings would face public sidewalks with lobby entrances, shop fronts, and attractively detailed facades. Parking would be screened from view along primary street frontages. Buildings would be taller and development more compact in this segment compared to other City neighborhoods, providing the intensity and activity expected in a vibrant urban district.

Alternatives to Be Evaluated

The alternatives that are evaluated in this section include the following:

- **Alternative 1: No Project/No Development Alternative**—In addition to alternative development scenarios, CEQA Guidelines Section 15126.6(e) requires the analysis of a “no project” alternative. The purpose of examining such an alternative is to allow decision-makers to compare the effects of approving the project with the effects of not approving the project. For the purposes of this analysis, the “no project” alternative would serve as a “no development” alternative with the site remaining in its existing condition. Under this alternative all existing development and uses would remain. CEQA Guidelines Section 15126.6(e)(3)(C) states that the lead agency should analyze the effects of the no project alternative by evaluating what could reasonably be expected to occur in the foreseeable future if no changes were to occur. Therefore, under Alternative 1, the impacts of the proposed project are compared to the impacts that could occur under the existing development. As such, this alternative would result in the continuation of the existing retail, restaurant, office, and gas station uses on the site and no improvements would be constructed at the site.
- **Alternative 2: All Commercial Alternative**—This alternative assumes that the site would be developed with 77,300 sf of commercial uses and a three-story parking structure. All commercial development would front Beach Boulevard and Ellis Avenue. At the corner of Beach Boulevard and Ellis Avenue, the site would be developed with a one-story, 22,500 sf market. Adjacent to the market, along Beach Boulevard, a one-story, 5,000 sf restaurant would be developed. Along Ellis Avenue, two three-story buildings would include a total of approximately 16,600 sf of ground-floor retail uses and 33,200 sf of upper level office uses. A total of 7,700 sf of public open space would be provided on site in the form of an internal plaza area.

Parking would be provided in a three-story, four-level (one level below-grade, one level at-grade, and two levels above-grade), 240-space parking structure and a 48-space surface parking lot located along the southern boundary of the site. A total of 288 parking spaces would be provided on the site. Figure 6-1 (Alternative 2 Site Plan and Building Elevations) illustrates development that would occur under Alternative 2.

Driveways located on Beach Boulevard and Ellis Avenue would provide access to the parking structure and surface parking lot. Table 6-1 (Summary of Alternatives) includes a breakdown of uses proposed under Alternative 2.

Table 6-1 Summary of Alternatives

<i>Use</i>	<i>Proposed Project</i>	<i>Alternative 2: All Commercial</i>	<i>Alternative 3: Increased Residential Mixed Use</i>
Residential	105 du	0	274 du
Retail	7,000 sf	16,600 sf	8,500 sf
Market	30,000 sf	22,500 sf	0
Office	0	33,200 sf	0
Restaurants	0	5,000 sf	0
Public Open Space	1,850 sf	7,700 sf	16,000 sf
Private Open Space	10,500 sf	0	16,020 sf
Parking Spaces	483 spaces	288 spaces	463 spaces

SOURCE: Phoenix Property Company, Beach and Ellis Project Commercial and Residential Mixed-Use Project Descriptions.

- **Alternative 3: Increased Residential Mixed-Use Alternative**—This alternative assumes that the site would be developed with a mostly six-story, mixed-use project consisting of two buildings comprised of 8,500 sf of ground-floor commercial uses fronting Beach Boulevard, 274 apartment dwelling units located primarily on the upper levels, and a 463-space internal parking garage located on the ground floor and on one subterranean level. Residential development would include 7 live-work units located along Ellis Avenue, accessed directly from the street, as well as 25 studio units, 117 one-bedroom units, and 125 two-bedroom units accessed from the interior of the proposed building. Access to the parking garage would be provided directly from Ellis Avenue and from an alley accessed from Beach Boulevard.

Alternative 3 would also include 16,000 sf of public open space in the form of an internal plaza area associated with the commercial uses, and a courtyard on the podium level. Additionally, Alternative 3 would include 16,020 sf of private open space, including dwelling unit balconies and patios. Figure 6-2 (Alternative 3 Site Plan and Building Elevations) illustrates development that would occur under Alternative 3. Table 6-1 includes a breakdown of uses proposed under Alternative 3.

6.2 ALTERNATIVES REJECTED AS INFEASIBLE

In addition to the identified alternatives, other alternatives were considered but ultimately determined to be infeasible as described below.

6.2.1 Alternative Locations/Sites

Given that the City of Huntington Beach is a highly urbanized area, undeveloped or vacant land parcels of similar size to the project site are limited. Additionally, moving the project to another location would not satisfy many of the project objectives; nor would it reduce project-related significant and unavoidable impacts. The extent and intensity of all anticipated development activity within the BECSP area, including the proposed project, has been identified in the Specific Plan. The proposed project site is designated as Town Center Neighborhood in the BECSP. According to the BECSP, development occurring on sites designated as Town Center Neighborhood should support and enhance the vitality of the Five Points District core retail area by intensifying the amount of development in the area and introducing a mix of uses including residential, office and retail. As the site is designated as Town Center Neighborhood, it is anticipated that residential or commercial uses would be developed on the proposed project site even if the proposed project were not implemented. Relocating the project to an alternate site outside of the Five Points District would not satisfy the stated City and Applicant objectives which call for the revitalization of the area through the development of more urbanized, high density, mixed use projects that would support the emergence of a vital urban district (Five Points District). Additionally, relocating the project to a site that is not served by public transportation and does not provide easy access to community serving uses would conflict with the City and Applicant's objectives of improving mobility through a reduction of vehicular trips, and encouraging walking and the use of public transit. No feasible locations are available in the City to successfully achieve both the proposed project objectives and a reduction in project-related impacts. Therefore, this alternative was rejected as infeasible.

6.3 ANALYSIS OF ALTERNATIVES TO THE PROPOSED PROJECT

This section provides an analysis of the environmental impacts of each of the project alternatives, including a comparison of the potential impacts of the alternative to the proposed project, as well as the impacts that would result from implementation of the project alternatives themselves.

6.3.1 Alternative 1: No Project Alternative

■ Description

Section 15126.6(e) of the CEQA Guidelines requires the analysis of a “no project” alternative. The purpose of examining such an alternative is to help decision-makers to compare the effects of approving the project with the effects of not approving the project. This “no project” analysis must discuss the existing conditions of the site, as well as what would be reasonably expected to occur in the foreseeable future if the proposed project were not to be approved. For a development project (such as the proposed project), the analysis generally focuses on the property remaining in its existing state with the addition of no new development or improvements. The No Project Alternative represents the status quo; the project site would continue to be developed with existing retail, restaurant, office, and gas station uses. No improvements (building or amenities) would be developed at the site.

■ Potential Impacts

In general, no new environmental effects would directly result from the selection of this alternative. Maintenance of the project site in its current state would allow existing uses to continue. The project site would not be developed with new uses, and no demolition, grading or building construction activities would occur, eliminating potential construction-related air quality and noise impacts. No increase in traffic would occur above what currently exists at the site, as the No Project Alternative would not include additional uses or associated trips, eliminating potential traffic impacts. The absence of new traffic trips would eliminate potential operational air quality impacts associated with the proposed project. The project site would remain as it is aesthetically, and no changes to the visual character of the project site would occur. As no new development would occur on the project site, including earth-moving activities, the potential to encounter geology and soil constraints or contaminated soils would be eliminated, in contrast to the proposed project. Further, as no new residential uses or additional commercial uses would be developed, increased demands associated with an increased residential population, including demands on utilities and public services, would not occur.

No significant and adverse environmental impacts would occur as a result of the No Project Alternative. However, as the entire BECSP area is currently constrained with regards to utility infrastructure and no upgrades to utilities or associated infrastructure would occur, the project site and the BECSP area as a whole, would not experience the benefit of the necessary upgrades.

Although implementation of the No Project Alternative would effectively eliminate all potential impacts associated with the proposed project, the No Project Alternative would fail to meet the objectives of the BECSP, and would not address the needs of the community including improvements to circulation, increased open space, and utility upgrades.

■ Attainment of Project Objectives

Under Alternative 1, new residential and community serving commercial uses would not be provided and the project site would remain in its existing state. As a result, none of the stated City and Applicant project objectives would be achieved. As the project site would remain underutilized, the existing development would not contribute to the emergence of an urbanized and vibrant Five Points District or the visual transformation of Beach Boulevard into an iconic gateway. Additionally, Alternative 1 would not support the use of public transit and would not encourage a reduction in vehicle trips, because residential and community serving uses would not be provided. While Alternative 1 would eliminate most environmental impacts associated with the proposed project, it would not satisfy the identified project objectives.

6.3.2 Alternative 2: All Commercial Alternative

■ Description

Alternative 2 assumes that the site would be developed with 77,300 sf of commercial uses and a three-story parking structure. All commercial development would front Beach Boulevard and Ellis Avenue. Development would include a one-story, 22,500 sf market at the corner of Beach Boulevard and Ellis Avenue, as well as a one-story, 5,000 sf restaurant on Beach Boulevard in the location of the existing restaurant. Two, three-story buildings consisting of approximately 16,600 sf of ground-floor retail uses and 33,200 sf of office uses on the upper two levels would be constructed along Ellis Avenue. A total of 7,700 sf of public open space would be provided on site in the form of an internal plaza area.

Parking would be provided in a three-story, four-level (one level below grade, one level at grade, and two levels above grade), 240-space parking structure and a 48-space surface parking lot located along the southern boundary of the site. A total of 288 parking spaces would be provided on the site. Figure 6-1 illustrates Alternative 2.

Driveways located at the southern site boundary on Beach Boulevard and the eastern site boundary on Ellis Avenue would provide access to the parking structure and surface parking lot. Table 6-1 includes a breakdown of uses proposed under Alternative 2.

■ Potential Impacts

Aesthetics

Development under Alternative 2 would be of a reduced height, scale and mass compared to the proposed project. Specifically, the proposed buildings would range from one story along Beach Boulevard to three stories along Ellis Avenue and in the central portion of the site. Unlike the proposed project, development would include several buildings that would be spaced out along Ellis Avenue, creating visual breaks in development. Additionally, Alternative 2 would include a surface parking lot along the southern portion of the site consistent with existing conditions on the project site and the surrounding area, but reducing the intensity of development occurring on the site.

As is the case with the proposed project, there are no scenic vistas available from the proposed project site as most are located along the coast. As such, Alternative 2 would have a less than significant impact on scenic vistas similar to the proposed project. As the project site is located approximately 3 miles from the ocean, no views of the coast currently exist. Building heights would not exceed three stories under Alternative 2, which would ensure that Alternative 2 would not impact views to a greater extent than what was analyzed for the proposed project.

Overall, Alternative 2 would result in a reduced height and density of development on the project site compared to the proposed project, but would result in an intensification of uses on the project site compared to existing conditions. As seen from Beach Boulevard and Ellis Avenue, development under Alternative 2 would be built out to the sidewalk, and shop fronts and building entrances would front these roadways, consistent with the proposed project. Parking would not be visible from adjacent roadways. As the project site is currently dominated by a gas station and large surface parking lot, development occurring under Alternative 2 would result in a change to the visual character of the site, but would not degrade the visual quality of the project site or area, similar to the proposed project.

Development occurring under Alternative 2 would be designed in compliance with Town Center Neighborhood development standards included in BECSP Section 2.1.4 (Town Center Neighborhood). Development standards relating to the visual quality and character of Alternative 2 would include regulations for building scale, frontage and building placement, streets, open space, architecture and signage.

As shown in Figure 6-1, under Alternative 2, buildings along Beach Boulevard would be one story in height, while buildings along Ellis Avenue and the remainder of the site would be three stories in height. Building heights under Alternative 2 would not be consistent with BECSP Section 2.3.1 (Building Height) and with BECSP Section 2.3.2 (Special Building Height Limits), which establishes minimum and maximum building height on the site, and special building height limits for development along Beach Boulevard or located adjacent to, or across from, housing, as defined in Section 4.1 (Aesthetics) of this EIR. Specifically, buildings are to be a minimum of two stories in height, and the height of buildings are to be limited for a distance of 65 feet from the back of sidewalk along Beach Boulevard and where buildings are located across from, and adjacent to housing on Ellis Avenue. Consequently, Alternative 2 is not consistent with BECSP development standards for building height that directly relate to the visual quality of the site. Additionally, the low height of buildings and density of development on the site would not be consistent with the desired visual character of the Five Points District as set forth by the BECSP, which states that buildings would be taller and development more compact in this segment compared to other City neighborhoods. The height of buildings would however be compatible with buildings in the immediate vicinity which range in height from one to three stories, in contrast to the proposed project.

All buildings would be oriented toward streets and built to the sidewalk, as required by BECSP Section 2.4 (Frontage and Building Placement Regulations) and building frontages would be designed in compliance with BECSP Section 2.4.2 (Private Frontage Types). Compliance with BECSP Section 2.5 (Street Regulations) would ensure that adjacent streets are improved to enhance the connectivity of the community and create a safe and attractive streetscape environment. Compliance with these development standards would ensure that Alternative 2 would be visually consistent with the BECSP's vision for the Five Points District and would be visually compatible with adjacent residential and commercial uses.

Although inconsistencies between the height of buildings and the BECSP Development Code have been identified, during the site plan review process revisions to the design of Alternative 2 would likely be required in an effort to achieve consistency with the BECSP, as is the case for all development occurring in the BECSP area. As such, site plan review approval would ensure that Alternative 2 would not degrade the existing visual character and quality of the site and surrounding area, similar to the proposed project. Therefore, Alternative 2 would have a similar less than significant impact than the proposed project.

Building heights under Alternative 2 would be reduced to one to three stories from two to six stories under the proposed project. Reduced building heights would reduce the length and duration of shadows that would be cast on light sensitive uses located to the northeast and east of the site during a small portion of the day. Alternative 2 would place public open space in an area that would be covered in shadow for a large portion of the day due to the orientation of the three story buildings on the site; however, these shadows would not decrease the utility of the public open space. Therefore, as shadows created by Alternative 2 would be less than that occurring under the proposed project and would not substantially affect any existing or proposed light-sensitive uses as defined by the BECSP, implementation of Alternative 2 would result in a less than significant impact due to shade/shadow, similar to, but less than, the proposed project.

Due to the urbanized nature of the surrounding area, a significant amount of ambient nighttime light currently exists, reducing the views of stars and affecting views of the nighttime sky. Streetlights and headlights along adjacent roadways provide a significant amount of existing ambient light surrounding the project site. Development of Alternative 2 would introduce nighttime lighting directly onto the project site, primarily for security and way-finding. Consequently, the surrounding uses could be exposed to exterior lighting associated with the proposed building. However, BECSP Section 2.6.8(5)(a) requires that lighting fixtures shall be directed downward from the horizontal plane of the light source to preserve a dark sky and prevent unnecessary light pollution, and requires that lighting and planting plans for public and private frontage areas be visually and aesthetically coordinated. Furthermore, BECSP Section 2.6.8(5)(d) requires specific luminaire types that would prevent light spill over, and provide for an efficient distribution of lighting. Additionally, some of this light would be masked by existing street lighting and nighttime vehicular traffic.

To address potential glare impacts, mitigation measure BECSP MM4.1-2 requires that new structures be designed to maximize the use of nonreflective treatments, and that this must be demonstrated on final building plans. As such, compliance with mitigation measure BECSP MM4.1-2 would ensure that impacts related to daytime glare would be reduced to a less than significant level by reducing the reflective properties of the building materials employed. This impact would be similar to the proposed project.

Overall, aesthetic impacts anticipated under Alternative 2 would be less than significant, similar to, but less than, the proposed project, due to the reduced height, scale and mass of development that would occur on the project site, the requirement to comply with the BECSP, and the site plan review and approval process.

Air Quality

Similar to the proposed project, Alternative 2 would result in impacts on air quality during construction. Anticipated emissions for Alternative 2 were estimated using CalEEMod 2011.1.1 software. Construction emissions would result from fuel used in construction equipment, dust produced by grading, paving, building construction, architectural coatings, and emissions from worker trips. The construction timeline and equipment used for Alternative 2 was assumed to be similar to the proposed project. Table 6-2 (Daily Peak Construction Emissions for Alternative 2) summarizes the construction emissions for Alternative 2 with the incorporation of mitigation measures BECSP MM4.2-1 through BECSP MM4.2-14, identified in the BECSP EIR, and Project MM4.2-15, intended to improve air quality emissions generated by construction activities.

Table 6-2 Daily Peak Construction Emissions for Alternative 2						
Emissions Source	Peak Day Emissions in Pounds per Day					
	VOC	NO_x	CO	SO_x	PM₁₀^a	PM_{2.5}^a
2016 (DEMOLITION/GRADING/TRENCHING/PAVING/BUILDING CONSTRUCTION)						
Maximum Daily Emissions	8.20	48.30	42.23	0.08	4.64	3.31
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	No	No	No	No	No	No
2017 (BUILDING CONSTRUCTION/ARCHITECTURAL COATINGS)						
Maximum Daily Emissions	93.27	24.71	24.35	0.05	2.20	1.41
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	Yes	No	No	No	No	No

SOURCE: Atkins (2011) (calculation sheets are provided in Appendix F1)
 Assumes the implementation of mitigation measures BECSP MM4.2-1 through MM4.2-14, identified in the BECSP EIR, and Project MM4.2-15.

As shown in Table 6-2, emissions resulting from construction of Alternative 2 would be less than the proposed project, but would still exceed the established emissions threshold for volatile organic compounds (VOCs), a criteria pollutant, associated with architectural coatings, consistent with proposed project. Compliance with the BECSP EIR mitigation measures would reduce emissions of criteria pollutants during construction, but not to the extent that Alternative 2 would result in emissions below the SCAQMD thresholds of significance. Therefore, similar to the proposed project, construction activities would exceed the SCAQMD emission thresholds for criteria pollutants during construction and this impact would be **significant and unavoidable**, similar to, but less than, the proposed project.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities in the surrounding area after build-out. Stationary area source emissions would be generated by space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by motor vehicles traveling to and from the project site.

The results of the CalEEMod calculations for the daily operational emissions of Alternative 2 are presented in Table 6-3 (Net Daily Operational Emissions for Alternative 2). The emissions shown below reflect the net increase in emissions anticipated by implementation of the Alternative 2.

Table 6-3 Net Daily Operational Emissions for Alternative 2						
Emissions Source	Emissions in Pounds per Day^a					
	VOC	NO_x	CO	SO_x	PM₁₀	PM_{2.5}
Water and Space Heating (Natural gas)	0.05	0.46	0.39	0.00	0.04	0.04
Landscape Maintenance	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	3.81	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	0.61	0.00	0.00	0.00	0.00	0.00
Motor Vehicles	19.31	12.19	61.01	0.14	16.19	0.81
Maximum Daily Emissions	23.78	12.65	61.40	0.14	16.23	0.85
SCAQMD Thresholds (lb/day)	55.00	55.00	550.00	150.00	150.00	55.00
Significant Impact	No	No	No	No	No	No

SOURCE: Atkins (2011) (calculation sheets are provided in Appendix F1).

As shown in Table 6-3, operation of Alternative 2 would not generate emissions that exceed the thresholds of significance recommended by the SCAQMD for any criteria pollutants. Similar to the proposed project, Alternative 2 would not generate daily emissions that exceed the thresholds of significance recommended by the SCAQMD and this impact would be *less than significant*.

Biological Resources

The proposed project site is currently developed with retail, restaurant, office, and gas station uses and consists almost entirely of paved surfaces. Biological resources on the project site are limited to parking lot trees, landscaping and a small grassy area in the southwest corner of the site associated with the entrance to the existing restaurant. The project site does not contain riparian habitats, wetlands, or sensitive species, nor does it contain a wildlife corridor or other biological resources of importance to the region. No adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plans are applicable to project site.

As implementation of Alternative 2 would result in the removal or disturbance of on-site trees and landscaping, Alternative 2 is subject to the provisions of the City of Huntington Beach Tree Ordinance (Chapter 13.50 of the Huntington Beach Municipal Code), which requires the submittal of a landscape plan, and the replacement of existing mature trees. Compliance with the City's Tree Ordinance would ensure that Alternative 2 would not interfere with or impact the implementation of any City, State, or federal policies or ordinances that apply to biological resources. Therefore, similar to the proposed project, Alternative 2 would result in a less than significant impact.

Within the limited trees located on the project site for landscaping purposes, there is the potential for birds protected under the Migratory Birds Treaty Act (MBTA) to nest. As a result of the removal of existing trees on the project site, implementation of Alternative 2 could have a direct or indirect impact

on habitat for nesting birds. However, implementation of mitigation measure BECSP MM4.3-1 would ensure protection of migratory bird species/habitat through focused surveys. Therefore, Alternative 2 would have a similar impact as the proposed project with respect to migratory birds. Impacts of Alternative 2 on biological resources would be similar to the impacts of the proposed project and would be less than significant.

Cultural Resources

Existing buildings on the project site were built in 1965 and are therefore subject to mitigation measure BECSP MM4.4-1 which requires buildings or structures 45 years or older to be investigated by a cultural resource professional to ensure that development does not adversely affect previously unrecorded historic-period resources. Investigation of existing buildings on the site, as required by BECSP MM4.4-1 would ensure that Alternative 2 would not result in a significant impact to historic resources, similar to the proposed project.

Both the proposed project and Alternative 2 would result in ground disturbing activities associated with grading and excavation for the building foundation. However, Alternative 2 would require grading and excavation at greater depths below grade as a result of the subterranean parking level, which could increase the likelihood of encountering and potentially disturbing previously unknown archeological or paleontological resources, including human remains. Alternative 2 would be required to adhere to the policies of the City's General Plan and Municipal Code requirements with regard to cultural resources, as well as mitigation measures BECSP MM4.4-2(b) and BECSP MM4.4-3(b) identified for the proposed project. Impacts of Alternative 2 would be greater than the proposed project due to the subterranean parking level, but the impact would remain less than significant, consistent with the proposed project.

Geology/Soils

Similar to the proposed project, Alternative 2 could expose people and/or structures to adverse effects resulting from strong seismic groundshaking or seismic-related ground failure. The proposed project site is located in an area identified as having a low potential for liquefaction. Impacts associated with seismic hazards, including liquefaction, would be addressed through adherence to applicable regulations including the City of Huntington Beach Building Code, which has adopted the 2010 CBC, the Grading and Excavation Code, and State requirements pertaining to geologic, soil and seismic hazards. Additionally, as required by mitigation measure BECSP MM4.5-1, a soil and geotechnical report would be prepared for Alternative 2. The design, grading, and structural recommendations of this report would be incorporated into the grading plan for Alternative 2.

Alternative 2 would require a greater amount of earth-moving activities compared to the proposed project due to the subterranean parking level. Grading and excavation would expose soil to erosional processes and could result in the loss of topsoil during construction. As part of the project, a site-specific Stormwater Pollution Prevention Plan, which is part of the National Pollution Discharge Elimination System (NPDES) Municipal General Permit, would be prepared for development under Alternative 2. Implementation of Best Management Practices during construction activities as required by NPDES permit would reduce the potential for soil erosion or the loss of top soil. Unstable soil conditions would be addressed through compliance with the Grading and Excavation Code and incorporation of the recommendations of the project-specific final soils and geotechnical report into the project's final

grading plan, as required by mitigation measure BECSP MM4.5-1. Compliance with applicable requirements would ensure that this impact would remain less than significant, but greater than the proposed project in consideration of the subterranean component of Alternative 2.

Hazards and Hazardous Materials

Although the intensity of development under Alternative 2 would be less than that identified for the proposed project and would not include residential uses, potential impacts with respect to hazards and hazardous materials would be similar. Commercial uses occurring under Alternative 2 would be substantially similar to those proposed for the project, but at a greater intensity, and do not include a component that would traditionally introduce hazards or hazardous materials to the site. As such, operation of the proposed project would not require the handling of hazardous or other materials that would result in the production of large amounts of hazardous waste. Construction of Alternative 2 would involve the use of hazardous materials, specifically in the form of diesel fuel. Project construction could expose construction workers to significant health and safety hazards through earthmoving activities and excavation for the subterranean garage that could result in the release of hazardous materials to the environment through reasonably foreseeable upset and accident conditions. Implementation of mitigation measures BECSP MM4.6-1 through BECSP MM4.6-4 would reduce this impact. Further, compliance with federal and state laws to eliminate or reduce the consequence of hazardous material accidents resulting from routine use, disposal, and storage of hazardous materials on the site during both the construction and operation phases of Alternative 2 would be required. As such, Alternative 2 would result in a *less than significant* impact, similar to the proposed project.

Hydrology/Water Quality

Impacts to hydrology and water quality associated with Alternative 2 would be similar to those identified for the proposed project. As the site would be almost entirely developed with impervious surfaces consistent with existing conditions on the site, development occurring on the site under Alternative 2 would not create additional impervious surfaces, and would therefore not create additional runoff. Potential impacts to hydrology and water quality would be reduced through compliance with existing regulations and implementation of mitigation measures BECSP MM4.7-1 through BECSP MM4.7-4 which requires the preparation of a project-specific Water Quality Management Plan (WQMP) and a hydrology and hydraulic study to address potential issues. A Preliminary WQMP prepared for the proposed project to address appropriate stormwater quality best management practices (BMPs) and water quality management practices would also apply to Alternative 2. Review and acceptance of the WQMP by the City prior to receiving a Precise Grading permit for Alternative 2 would ensure that operation of the proposed project would not result in impacts to water quality. Therefore, impacts would be less than significant, similar to the proposed project.

Land Use

The site is designated as Town Center Neighborhood in the BECSP. Development occurring on the site would be regulated by Town Center Neighborhood development standards included in BECSP Sections 2.1.4. Alternative 2 would be consistent with existing commercial land uses on the site, but would eliminate the gas station, and develop commercial uses at a greater density than what currently

exists on the site. As land uses occurring under Alternative 2 would be a continuation of existing uses and would not extend past the existing site boundaries, land use patterns would not change and would not divide an established community. Alternative 2 would not conflict with any applicable habitat conservation plans.

Under Alternative 2, buildings along Beach Boulevard would be one story in height, while buildings along Ellis Avenue and the remainder of the site would be three stories in height. Building heights under Alternative 2 would not be consistent with BECSP Section 2.3.1 (Building Height) and with BECSP Section 2.3.2 (Special Building Height Limits), which establishes minimum and maximum building height on the site, and special building height limits for development along Beach Boulevard or located adjacent to, or across from, housing, as defined in Section 4.8 (Land Use/Planning) of this EIR. As shown in Figure 6-1, buildings on the site would be one story in height which is below the established two story minimum and the height of buildings would not be limited for a distance of 65 feet from the back of sidewalk along Beach Boulevard and where buildings are located across from, and adjacent to housing on Ellis Avenue. Consequently, Alternative 2 is not consistent with BECSP development standards regarding building heights.

To ensure that Alternative 2 is consistent with the BECSP, including building heights, Alternative 2 would undergo Site Plan Review. In order for the Site Plan Review application to be approved, the Director of Planning and Building must make the following findings:

- i. The project is consistent with the City's General Plan and all applicable requirements of the Municipal Code
- ii. The project will not be detrimental to the general welfare of persons working or residing in the vicinity nor detrimental to the value of the property and improvements in the neighborhood
- iii. The project will not adversely affect the Circulation Plan of this Specific Plan
- iv. The project complies with the applicable provisions of the BECSP and other applicable regulations

Approval of the required applications for Alternative 2, which may require revisions to the design of Alternative 2, would ensure that development would not conflict with any applicable plans, policies, and regulations. Therefore, Alternative 2 would not conflict with land use policies established by the City, and would result in a less than significant impact, similar to the proposed project. However, as designed, Alternative 2 would result in a greater impact than the proposed project.

Noise

Demolition of the approximately 27,784 sf of existing building area and construction of new commercial uses would occur under Alternative 2. Construction activities under Alternative 2 would be similar to the proposed project as the amount of demolition would be the same and construction activities would be similar to the proposed project. The closest noise sensitive receptors to the project site would be the residential uses located immediately east of the site along Ellis Avenue and the single-family residential uses located to the north of the project site across from Ellis Avenue. These residential uses are located approximately 75 feet from the project site. Construction activity noise levels at these residential uses would be approximately 83 dBA during the excavation/grading and external finishing phases of Alternative 2. While construction noise could be a nuisance to nearby sensitive uses, compliance with the City's Noise Ordinance would ensure that construction noise impacts remain less than significant.

Implementation of identified mitigation measures BECSP MM4.9-1 through BECSP MM4.9-3 would reduce temporary construction noise impacts, and construction-related noise would be less than significant, similar to the proposed project.

Similar construction activities would occur under Alternative 2 as with the proposed project; therefore, vibration levels could reach approximately 78 VdB within 75 feet of the project site. As such, sensitive receptors would not experience vibration levels that would exceed the FTA's vibration impact threshold of 85 VdB for human annoyance and this impact would be less than significant, similar to the proposed project.

Alternative 2 would result in the development of 77,300 sf of commercial uses, and a three-story parking structure, with no residential uses at the project site. Therefore, operational noise impacts due to vehicle trips and human activity at the site would be slightly less than the proposed project due to the reduction of residential uses. Operational noise levels generated by commercial uses such as mechanical equipment (HVAC) would be similar to the proposed project. The development of Alternative 2 would result in an increase in the amount of HVAC equipment required for the project site; however, installation of shielding around HVAC systems would be required by mitigation measure BECSP MM4.9-4, which would reduce HVAC noise levels, such that noise levels from HVAC equipment would be substantially similar to the proposed project. The amount of goods to be delivered to the project site would increase from levels anticipated under the proposed project due to the increase in commercial and retail uses. Further, design of Alternative 2 includes a surface parking lot to the south of the parking structure, immediately adjacent to the southern property line. This would expose the commercial uses to the south and quasi-residential uses to the east to a noise level greater than under the proposed project in which all parking would be confined to a parking structure. However, Alternative 2 would be a continuation of the existing retail and commercial uses at the project site and noise levels generated would not change substantially over existing conditions. Noise associated with typical retail activities would attenuate at a rate of 6 dBA per doubling of distance to levels below 50 dBA at 75 feet away, which would be below the City of Huntington Beach Noise Ordinance Exterior Noise Standards. With implementation of mitigation measure BECSP MM4.9-4, operational noise would remain less than significant, similar to the proposed project. Overall, noise impacts anticipated under Alternative 2 would be similar to, but greater than, the proposed project, and would be less than significant.

Population/Housing

Alternative 2 would not include a residential component. As such, Alternative 2 would not be growth inducing and would not result in a permanent population at the site. Additionally, as the site is not currently developed with residential uses, implementation of Alternative 2 would not displace existing housing or residential. Therefore, Alternative 2 would have no impact with respect to population and housing, which is less than the less than significant impact that would occur with the proposed project.

Public Services

Fire Protection

Alternative 2 does not include a residential component and therefore would not result in a direct population increase. Although Alternative 2 would not result in a permanent resident population at the

site, an increase in development at the site would require a proportionate increase in the amount of public safety staff, fire station facilities, fire apparatus, and equipment. However, approximately 80 percent of all calls to HBFD are medically related, without a permanent increase in residential uses, impacts would be less than the proposed project. Similar to the proposed project, though all development plans prepared for Alternative 2 would be reviewed by the HBFD prior to construction to ensure that adequate fire flows would be maintained. Compliance with all required policies, rules, and regulations would ensure that implementation of Alternative 2 would not require any new or physically altered fire facilities to maintain adequate response times and staffing, the construction of which could result in significant environmental impacts. In addition, implementation of mitigation measure BECSP MM4.11-1 would ensure that the HBFD receives adequate staffing and/or equipment to maintain acceptable levels of service. This impact would be less than significant, but less than the proposed project.

Police Protection

Alternative 2 does not include a residential component and therefore would not result in a direct population increase at site. As such, implementation of Alternative 2 would result in reduced impact to police services compared to the proposed project, and would not notably affect HBPD resources given that an increase in population would not occur and calls to the site would tend to be less at a commercial development. Additionally, implementation of mitigation measure BECSP MM4.11-1 would ensure that adequate staffing levels are maintained as development occurs. Therefore, impacts to police services would be less than significant, and less than the proposed project.

School Service

Alternative 2 does not include a residential component and therefore would not result in a direct population increase at the site and therefore would not generate a school-aged resident population. However, like the proposed project, Alternative 2 is subject to code requirements BECSP CR4.11-1 and BECSP CR4.11-2, which requires the payment of school impact fees that would offset any increase in educational demand at schools serving the site. As such, a less than significant impact to schools serving the project site would occur, similar to, but less than, the proposed project.

Library Service

Alternative 2 does not include a residential component and therefore would not result in a direct population increase. As such, implementation of Alternative 2 would result in a reduced impact to library services compared to the proposed project. However, similar to the proposed project, implementation of code requirement BECSP CR4.11-3 would be required under Alternative 2 to ensure that library service impacts would remain less than significant, similar to, but less than, the proposed project.

Recreation

Alternative 2 would not include a residential component and therefore would not result in a direct permanent population increase that could create additional demand for recreational facilities. However, BECSP Section 2.6.1 (Provision of Open Space) requires that open space is provided on the site at a rate of 100 sf per 1,000 sf of office use and 50 sf per 1,000 sf of retail use. As such, Alternative 2 would be

required to provide a total of 5,525 sf of public open space. Alternative 2 would include approximately 7,700 sf of public open space on the site in the form of a courtyard plaza, as shown on Figure 6-1, which exceeds the BECSP open space requirements. Public open space would be designed in conformance with BECSP Section 2.6.4, which identifies guidelines for design of the various types of public open space. In addition to the provision of open space on the site, Alternative 2 would be subject to code requirement BECSP CR4.12-1 which requires the payment of a park fee pursuant to Chapter 230.20 of the City's Zoning and Subdivision Ordinance. Compliance with code requirement BECSP CR4.12-1 and the BECSP would ensure that recreational impacts would be less than significant, similar to, but less than, the proposed project.

Transportation/Traffic

As part of the analysis of project-related traffic impacts, Austin Foust Associates, Inc. prepared both a peer review and analysis of the traffic impacts of Alternative 2.¹⁴³ Alternative 2 is estimated to result in a 25 percent reduction in average daily trips (ADT), a 20 percent reduction in the PM peak hour, and a 13 percent reduction in the AM peak hour compared to the approved BECSP land uses for the project site. Table 6-4 (Trip Generation Comparison for Alternative 2) provides a summary of the estimated trip generation for Alternative 2 and the approved BECSP land uses for the project site. Although there would be an overall reduction in the number of peak hour trips generated by Alternative 2 compared to the approved BECSP land uses, as shown in Table 6-4, there would be an increase of 38 inbound trips in the AM peak hour and an increase of 27 outbound trips in the PM peak hour. However, these increases are minimal enough that they will not alter the operating conditions of the intersections.

Table 6-5 (2030 ADT Volume Summary for Alternative 2) summarizes the change in ADT volumes associated with Alternative 2, compared to the BECSP in 2030. As shown in Table 6-5, all roadway segments are projected to have decreases in daily traffic volumes compared to those projected for the BECSP in 2030, similar to the proposed project. Based on this reduction in ADT, Alternative 2 would not exceed anticipated daily traffic volumes identified for the BECSP, which were determined to be less than significant in the BECSP EIR.

Table 4.13-3 (2030 ICU Summary) included in Section 4.13 (Transportation/Traffic), shows that all study intersections would operate at an acceptable LOS in 2030 with the BECSP build out with the exception of Beach Boulevard and Talbert Avenue, which would operate with a PM deficiency (LOS E). Because the reduction in ADT under Alternative 2 is too small to result in a change, the anticipated LOS at these intersections identified in Table 4.13-3 would not change as a result of this alternative. Therefore, although Alternative 2 would result in an increase in inbound vehicle trips in the AM peak hour and outbound vehicle trips during the PM peak hour that would contribute to the identified deficiency at the intersection of Beach Boulevard and Talbert Avenue during the PM peak hour, Alternative 2 would not result in a significant impact at this intersection as the LOS would not change. Alternative 2 would however be required to make a fair share contribution to the traffic improvements identified in mitigation measures BECSP MM4.13-13 and BECSP MM4.13-14 for the Beach Boulevard and Talbert Avenue intersection as part of the overall BECSP development. As such, Alternative 2 would not

¹⁴³ Austin-Foust Associates, Inc., *Beach and Edinger Corridors Specific Plan Area Traffic Analysis for Beach-Ellis Project* (July 21, 2011).

conflict with the City’s acceptable LOS standard and a less than significant impact would occur, similar to the proposed project.

Table 6-4 Trip Generation Comparison for Alternative 2

Project Description	Amount	Peak Hour						ADT
		AM			PM			
		In	Out	Total	In	Out	Total	
Alternative 2								
Shopping Center	44,100	27	17	44	81	84	165	1,894
Office	33,200	69	9	78	20	96	116	571
Internal Capture*		-6	-6	-12	-21	-21	-42	-132
Pass-by Reduction**		-1	-1	-2	-35	-35	-70	-93
Alternative 2 Trip Generation Total		89	19	108	45	124	169	2,240
Approved BECSP Land Uses for the Project Site								
Mixed-Use Residential	120 du	12	49	61	48	26	74	806
General Commercial	71,000	43	28	71	130	135	265	3,049
Internal Capture*		-4	-4	-4	-8	-24	-22	-46
Pass-by Reduction**						-40	-42	-82
Approved BECSP Land Uses Trip Generation Total		51	73	124	114	97	211	2,971
Net Change from Approved BECSP		38	-54	-16	-69	27	-42	-731
% Difference from Approved BECSP		75%	-74%	-13%	-61%	28%	-20%	-25%
Existing Uses								
Shopping Center	27,540	17	11	28	50	52	102	1,1183
Existing Land Uses Trip Generation Total		17	11	28	50	52	102	1,1183
Net Change from Existing		72	8	80	-5	72	67	1,057
% Difference from Existing		81%	42%	74%	-11%	58%	40%	47%
SOURCES: Austin-Foust Associates, Inc., <i>Beach and Edinger Corridors Specific Plan Area Traffic Analysis for Beach-Ellis Project</i> (July 21, 2011), Table 7.								

Table 6-5 2030 ADT Volume Summary for Alternative 2

Location	2030 BECSP ADT Volume	2030 ADT Volume with Alternative 2	% Change
Beach Boulevard north of Ellis Avenue	62,000	61,781	<-1%
Beach Boulevard south of Ellis Avenue	51,000	50,759	<-1%
Beach Boulevard south of Garfield Avenue	45,000	44,759	<-1%
Ellis Avenue (Main Street) west of Beach Boulevard	7,000	6,956	<-1%
Ellis Avenue east of Beach Boulevard	22,000	21,773	-1.0
SOURCE: Austin-Foust Associates, Inc., <i>Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Ellis Project</i> (July 21, 2011).			

Although Alternative 2 would not conflict with the City's acceptable LOS standard under 2030 conditions, Alternative 2 could result in a conflict under existing year (2008) conditions based on existing land uses on the site (as required for the Existing plus Project condition analysis). As shown in Table 6-4, Alternative 2 would result in a net increase of 1,057 daily trips, 80 trips in the AM peak hour and 67 trips in the PM peak hour compared to existing conditions. In consideration of this increase in vehicle trips generated by Alternative 2, a potentially significant impact would occur based on existing roadway conditions surrounding the site. This impact is more substantial than that created by the proposed project. However, it should be noted that the Existing plus Project analysis is hypothetical because the actual build out and occupancy of Alternative 2 is year 2019.

Consistent with the proposed project, construction of Alternative 2 would not cause an increase in traffic, as the site is easily accessible from two designated truck routes and the I-405, which reduces truck traffic on surrounding arterial streets. Additionally, this alternative would be required to implement mitigation measures BECSP MM4.2-8 through BECSP MM4.2-10 (as included in Section 4.2 [Air Quality]) which would ensure that construction traffic does not block the free flow of traffic. This alternative would also be required to submit a traffic control plan during construction to ensure appropriate emergency access during construction. Accordingly, Alternative 2 would not result in construction-related traffic impacts, consistent with the proposed project.

With regard to applicable congestion management program (CMP), Alternative 2, consistent with the proposed project, would not result in impacts to CMP intersections. Alternative 2 will generate 25 percent fewer average daily trips (ADT), 20 percent fewer PM peak hour trips and a 13 percent fewer AM peak hour trips compared to the approved BECSP land uses for the project site. As such, the contribution to CMP intersections would be less than identified in the BECSP EIR, which resulted in a less than significant impact. Therefore, a *less than significant* impact to CMP intersections would occur as a result of Alternative 2, consistent with the proposed project.

As is the case for the proposed project, Alternative 2 would not substantially increase hazards due to design features or incompatible uses nor would Alternative 2 result in inadequate emergency access. This would be ensured through the site plan review process undertaken by the City where design of vehicular access points to the site will be formally approved. Additionally, plans for Alternative 2 would be submitted to the City of Huntington Beach Fire Department for review and approval to ensure that adequate emergency access is provided. Further, Alternative 2 would be required to prepare a traffic control plan for its construction; this would ensure adequate emergency access would be maintained during construction. As such, impacts related to design hazards and emergency access have been determined to be *less than significant* with compliance of existing regulations, consistent with the proposed project.

As Alternative 2 would be located on the same site as the proposed project which is located in close proximity to public transportation, is easily walkable to the Five Points shopping center, and is subject to the same design requirements included in the BECSP for the Town Center Neighborhood designation, Alternative 2 would promote and allows for the use of alternative transportation modes. Accordingly, Alternative 2 is compatible with adopted policies supporting alternative transportation; and this impact would be *less than significant*, similar to the proposed project.

Utilities/Service Systems

Implementation of Alternative 2 would result in utility impacts that are similar to, but less than, the proposed project for wastewater and solid waste. However, Alternative 2 would result in slightly greater impact to domestic water supply and energy compared to the proposed project.

Domestic Water Supply

Alternative 2 would result in a water demand of 63,165 gallons per day (gpd), as shown in Table 6-6 (Water Demand for Alternative 2), which is an increase of approximately 36,615 gpd compared to the proposed project. The Diemer Filtration Plant has an operating capacity of 520 million gallons per day (mgd) and treats approximately 213 mgd, while the Jensen Filtration Plant currently has an operating capacity of 750 mgd and treats approximately 420 mgd.¹⁴⁴ If the imported water demand of Alternative 2 were treated solely at either Filtration Plant, this increase would represent less than 1 percent of the remaining capacities of either facility. For the reasons discussed in Section 4.14 (Utilities/Service Systems), Impact 4.14-1 of this EIR, the development of Alternative 2 would not directly result in the construction of new treatment facilities or expanded water treatment facilities. Therefore, this is considered a less than significant impact, similar to, but slightly greater than, the proposed project.

Table 6-6 Water Demand for Alternative 2

<i>Land Use</i>	<i>Generation Rates</i>	<i>Units</i>	<i>Total Demand</i>
Office	1.5 gpd/sf	33,200 sf	55.78 afy (49,800 gpd)
Retail	0.15 gpd/sf	16,600 sf	2.79 afy (2,490 gpd)
Market	0.15 gpd/sf	22,500 sf	3.78 afy (3,375 gpd)
Restaurant	1.5 gpd/sf	5,000 sf	8.40 afy (7,500 gpd)
Total		—	70.75 afy (63,165 gpd) (0.063 mgd)

SOURCE: PBS&J, *Water Supply Assessment for the Proposed Beach and Edinger Specific Plan Project* (August 2009). Prepared for City of Huntington Beach.

Development of Alternative 2 would result in an increased demand for municipal water services compared to existing conditions. However, for the reasons discussed in Section 4.14, Impact 4.14-2 of this EIR, the City would be able to provide a reliable source of water to accommodate its existing users and the additional demand on water supplies created by Alternative 2 for the 20-year projection. The City's conservation programs coupled with increased groundwater would improve water supply reliability. In addition, implementation of mitigation measure BECSP MM4.14-1 would serve to reduce the municipal water demand from Alternative 2. Therefore this impact would be less than significant, similar to, but greater than, the proposed project due to the increased demand for water. As with the proposed project, the project Applicant shall submit building plans for approval to the City of Huntington Beach to incorporate the project conditions to ensure that conservation and efficient water use practices are implemented for Alternative 2.

¹⁴⁴ City of Huntington Beach, *Beach and Edinger Corridors Specific Plan Environmental Impact Report* (August 2009), Section 4.7 (Utilities/Services Systems).

Wastewater

Alternative 2 would include the development of approximately 33,200 sf of office, 16,600sf of retail-shop, 22,500sf of market and 5,000 sf of restaurant space. As shown in Table 6-7 (Wastewater Generated from Alternative 2), Alternative 2 would generate approximately 21,960 gpd (0.0219 mgd) of wastewater that would be transported by the City’s sewer system. This would be approximately 11,690 gpd (0.0116 mgd) less than the proposed project.

Table 6-7 Wastewater Generated from Alternative 2			
<i>Land use</i>	<i>Units</i>	<i>Generation Rates</i>	<i>Estimated Flow</i>
Office	33,200 sf	0.2 gpd/sf	6,640 gpd
Retail	16,600 sf	0.2 gpd/sf	3,320 gpd
Market	22,500 sf	0.2 gpd/sf	4,500 gpd
Restaurant	5,000 sf	1.5 gpd/sf	7,500 gpd
Total	—	—	21,960 gpd (0.0219 mgd) (24.60 afy)

SOURCE: City of Huntington Beach, *Beach and Edinger Corridor Specific Plan EIR* (2009), Section 4.14 (Utilities/Services System).

The project developer(s) would be responsible for constructing local mains and extensions to serve the proposed project. Prior to allowing additional connections to the sewer lines, the capacity of the existing sewers would need to be confirmed and a sewer study would be needed at the time of development to determine if the existing sewer lines need to be upgraded to accommodate the proposed project’s sewer flow. Similar to the proposed project, Alternative 2 would be required to implement code requirements BECSP CR4.14-1 and BECSP CR4.14-2. In addition, any development connecting directly or indirectly to the OCSD sewer system is required to pay a connection fee in accordance with the OCSD Connection Fee Master Ordinance. The Connection Fee Program ensures that all users pay their fair share of any necessary expansion of the system, including expansion to wastewater treatment facilities. These fees are considered full mitigation under CEQA for potential impacts resulting from project development.

For wastewater impacts, Alternative 2 would result in similar, but reduced impacts as compared to the proposed project. The NPDES permit system requires that all existing and future municipal and industrial discharges to surface waters within the City be subject to specific discharge requirements. Alternative 2 would not result in the discharge of wastewater to any surface water. Instead, operational discharges will be sent to the project's sewer system, which would ultimately be treated at one or more of the OCSD wastewater treatment plants. The OCSD wastewater treatment plants are required to comply with their associated waste discharge requirements (WDRs). WDRs set the levels of pollutants allowable in water discharged from a facility.

Compliance with any applicable WDRs, as monitored and enforced by the OCSD, would ensure that Alternative 2 would not exceed the applicable wastewater treatment requirements of the SARWQCB with respect to discharges to the sewer system. This would result in a less than significant impact, similar to, but less than, the proposed project.

Construction of the wastewater collection systems for Alternative 2 would adhere to existing laws and regulations, and infrastructure would be sized appropriately to accommodate the proposed project.

Individual water and wastewater connections would occur as part of the proposed project site. In addition, code requirements BECSP CR4.14-1 and BECSP CR4.14-2 would ensure that proper sewer connections are provided at the site under Alternative 2. Therefore, this impact is considered less than significant, similar to, but less than, the proposed project.

Solid Waste

Alternative 2 would reduce the overall amount of solid waste generated at the project site compared to the proposed project. Alternative 2 is estimated to produce approximately 458.8 pounds per day and approximately 167,462 pounds per year of solid waste. This translates to a generation rate of approximately 0.23 ton of solid waste per day and 83.73 tons of solid waste per year, as shown in Table 6-8 (Waste Generated from Alternative 2). Alternative 2 would result in a reduction of approximately 0.09 ton per day and 33.27 tons per year compared to the proposed project.

Table 6-8 Waste Generated from Alternative 2

Land Use	Solid Waste Generation Rates (lbs/sf/day)	Proposed Project	
		Units	Waste Generated (lbs/day)
Office	0.006 lbs/sf/day	33,200 sf	199.2 lbs/day
Retail	0.006 lbs/sf/day	16,600 sf	99.6 lbs/day
Market	0.006 lbs/sf/day	22,500 sf	135 lbs/day
Restaurant	0.005 lbs/sf/day	5,000 sf	25 lbs/day
Total			458.8 lbs/day (0.23 tons/day) 167,462 lbs/yr (83.73 tons/yr)

SOURCE: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates, <http://www.ciwmb.ca.gov/wastechar/wastegenrates/> (accessed August 20, 2010).

Rainbow Disposal is the exclusive hauler of all solid waste for the City of Huntington Beach. Rainbow Disposal’s Transfer Station has a design capacity of 2,800 tons per day, and current utilization ranges between 53 and 71 percent. For purposes of this analysis, and assuming a worst-case scenario of 71 percent current utilization, the daily solid waste contribution to this transfer station under Alternative 2 would be less than 0.1 percent. Utilization of the transfer station would remain at 71 percent under the implementation of Alternative 2.

As described in Section 4.14 (Utilities/Service Systems) of this EIR, there are three landfills (Frank R. Bowerman Landfill in Irvine; Olinda Alpha Landfill in Brea; and Prima Deshecha Landfill in San Juan Capistrano) that could serve the project site, which have a design capacity of 8,500, 4,000, and 8,000 tons per day, respectively. Based on landfill capacity, the solid waste contribution of 0.23 tons per day to any of the three landfills that serve the project site is less than 1 percent of their allowed daily capacity. This impact would be similar to, although less than, the proposed project. Alternative 2 would result in a less than significant impact.

Energy

Alternative 2 includes the development of approximately 33,200 sf of office, 16,600sf of retail-shop, 22,500sf of market and 5,000 sf of restaurant space and would demand similar, although slightly less

electricity and natural gas compared to the proposed project. As shown in Table 6-9 (Alternative 2 Projected Electricity Demand), the amount of electricity consumed annually by future development under Alternative 2 is estimated to be approximately 1,059,215 kWh/year, 32,917 kWh/year less than anticipated under the proposed project. As an adequate supply of electricity is anticipated to be available to serve the proposed project and Alternative 2 would result in less demand for electricity, Alternative 2 would be served adequately.¹⁴⁵ Development of Alternative 2 would comply with the provisions of Title 24 of the CCR and be designed to further conserve energy. Also, because SCE is currently in the process of upgrading its transmission systems, it is anticipated that the electricity demand generated by future development could be supplied without the need for additional construction or expansion of energy facilities beyond that which is planned.

Table 6-9 Alternative 2 Projected Electricity Demand			
Type of use	Energy Consumption Rates	Proposed Development	Electricity (kWh/year)
Office	8.8 kWh/sf/year	33,200 sf	292,160 kWh/year
Retail	13.55 kWh/sf/year	16,600 sf	224,930 kWh/year
Market	13.55 kWh/sf/year	22,500 sf	304,875 kWh/year
Restaurant	47.45 kWh/sf/year	5,000 sf	237,250 kWh/year
Total	—	—	1,059,215 kWh/year

SOURCE: South Coast Air Quality Management District, *CEQA Air Quality Handbook* (1993), Natural Gas and Electricity Consumption Rates.

As shown in Table 6-10 (Alternative 2 Projected Natural Gas Demand), the demand for natural gas generated by Alternative 2 would be approximately 7,449,980 cf/year, approximately 1,107,890 cf/year more than the proposed project (6,342,090 cf/year). However, the SCGC declares itself a “reactive” utility that will provide natural gas as customers request its services. The SCGC has indicated that an adequate supply of natural gas is currently available to serve the proposed project and that the level of service provided to the surrounding area would not be impaired by future development. As such, natural gas demands generated by Alternative 2 would be accommodated by the SCGC. New natural gas lines to serve future development at the project site would be located underground and would be constructed in accordance with the SCGC’s policies and extension rules on file with the CPUC at the time contractual agreements are made.

Similar to the proposed project, all utility impacts under Alternative 2 would be less than significant.

¹⁴⁵ City of Huntington Beach, *Beach and Edinger Corridors Specific Plan Environmental Impact Report* (August 2009), Section 4.7 (Utilities/Services Systems), p 4.14-48.

Table 6-10 Alternative 2 Projected Natural Gas Demand

Type of use	Energy Consumption Rates	Proposed Development	Natural Gas (ft ³ /year)
Office	24 ft ³ /sf/year	33,200 sf	796,800 ft ³ /year
Retail-shop	34.8 ft ³ /sf/year	16,600 sf	577,680 ft ³ /year
Retail-market	34.8 ft ³ /sf/year	22,500 sf	783,000 ft ³ /year
Restaurant	1,058.5 ft ³ /sf/year	5,000 sf	5,292,500 kWh/year
Total	—	—	7,449,980 ft³/year

SOURCE: South Coast Air Quality Management District, CEQA Air Quality Handbook (1993), Natural Gas and Electricity Consumption Rates.

Climate Change

Similar to the proposed project, construction of Alternative 2 would result in GHG emissions due to the operation of heavy pieces of construction equipment, in addition to worker commute trips to and from the project site and building supply vendor vehicles. As such, construction of Alternative 2 would result in additional GHG emissions, which could represent a substantial contribution. Operation of Alternative 2 would result in GHG emissions as a result of direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation, as shown in Table 6-11 (Estimated Annual Emissions for Alternative 2). Implementation of mitigation measures BECSP MM4.15-1 through BECSP MM4.15-9, which are consistent with strategies recommended by the CCAT, CAPCOA, and the California Attorney General, would reduce impacts associated with GHG emissions of Alternative 2, but not to less than significant levels. Therefore Alternative 2 would have a **significant and unavoidable** impact on greenhouse gas emissions, which is greater than the proposed project.

Table 6-11 summarizes the estimated annual GHG emissions for Alternative 2. In order to calculate service population, employment was estimated using SCAG’s values for office and retail employment densities, 287 sf/employee and 325 sf/employee, respectively.¹⁴⁶ This amounted to 116 office employees and 136 retail employees for a total service population of 252.

Under Alternative 2, the lack of residential land use would increase emissions from mobile sources since trip lengths to the commercial land uses would be longer than if there were on-site residential units. The mobile source emissions accounted for most of the disparity between the proposed project and Alternative 2. Because the estimated emissions per service population would be above the SCAQMD draft threshold for GHG emissions, this impact would be considered **significant and unavoidable**, which is substantially greater than the proposed project.

¹⁴⁶ Southern California Association of Governments, *Employment Density Study* (October 31, 2001).

<i>Emission Source</i>	<i>Metric Tons CO₂e</i>
Amortized Construction ^a	37.2
Area Source ^b	0.00
Energy	325.4
Mobile	1,634.8
Solid Waste	29.9
Water Use	38.9
Total	2,066.1
Service Population (SP)	252
Operational MT CO ₂ e/SP	8.20
SCAQMD Draft Threshold MT CO ₂ e/SP	4.80
Significant?	Yes

SOURCE: CalEEMod 2011.1.1 was used to determine all emissions. CalEEMod output is included in Appendix F1. Service Population is the total employees of the proposed project.

a. Total construction emissions are 1,115.21 metric tons CO₂e.

b. Area Source emissions include only emissions from landscaping equipment.

■ Attainment of Project Objectives

Under Alternative 2, new development would include 77,300 sf of commercial uses. Implementation of Alternative 2 would generally satisfy most of the City and Applicant objectives, as well as objectives of the BECSP. However Alternative 2 does not include residential uses, and the intensity of development on the site would be less than what is called for in the BECSP development standards for the site and would not satisfy related objectives. Alternative 2 would however provide employment opportunities and community serving uses in the form of a market, a restaurant and retail uses, all of which would support the adjacent residential neighborhood, and would include approximately 7,700 sf of public open space, which satisfies a number of objectives. Although Alternative 2 would not include residential uses, proposed land uses, including the provision of open space, the design and configuration of buildings in combination with the site's location on Beach Boulevard and within walking distance to residential neighborhoods and activity centers and close proximity to public transportation would ensure that all of the City's and most of the Applicant's objectives would be satisfied with the exception of those directly related to the provision of housing.

Overall, Alternative 2 would result in similar less than significant impacts compared to the proposed project; however, the extent of each impact varies due to the absence of residential uses, the inclusion of a subterranean parking level, as well as the type of commercial uses and building design. Aesthetic impacts would be reduced compared to the proposed project, due to the reduced building heights which would limit the length and extent of shadows impacting adjacent light sensitive uses compared to the proposed project. Due to the subterranean parking component of Alternative 2 which requires deeper excavation and increases the potential to encounter archeological or paleontological resources, impacts relating to cultural resources would be greater than the proposed project, but would remain less than

significant. As Alternative 2 would not include a residential component, impacts relating to population and housing, public services, and recreation would generally be less than the proposed project. Impacts relating to biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality would be the same as the proposed project as these relate to site-specific conditions and Alternative 2 would be subject to the same BECSP and project mitigation as the proposed project. Traffic impacts would be similar to the proposed project, as Alternative 2 would not exceed anticipated daily traffic volumes identified for the BECSP under 2030 conditions. However, under the Existing plus Project conditions, unlike the proposed project, Alternative 2 has the potential to result in a conflict with the City's acceptable LOS standard. Utilities would generally be similar to the proposed project but would be slightly reduced. Impacts to air quality due to construction and operation of Alternative 2 would be similar to the proposed project, but would be slightly greater. Without the residential component, Alternative 2 would not be a mixed-use project and would have a greater impact on trip generation; therefore Alternative 2 would have a greater impact on GHG emissions than the proposed project.

6.4 ALTERNATIVE 3: RESIDENTIAL MIXED USE ALTERNATIVE

■ Description

Alternative 3 includes development of a mixed-use project consisting of two buildings comprised of 274 apartment dwelling units and 8,500 sf of commercial uses, as well as a 463-space, parking garage. Development along Beach Boulevard would be four stories in height; the remainder of the site would have development six stories in height. Residential development would include 7 live-work units, accessed directly from Ellis Avenue, as well as 25 studio units, 117 one-bedroom units, and 125 two-bedroom units located on the upper levels of the development and accessed from the interior of the proposed building. Most of the residential dwelling units would be oriented around a courtyard located on the podium level (Level Two). Commercial uses would be located on the ground floor fronting Beach Boulevard. Parking would be provided in a 463-space parking garage located on the ground floor and on one subterranean level. Access to the parking garage would be provided directly from Ellis Avenue and from an alley accessed from Beach Boulevard.

Alternative 3 would also include 16,000 sf of public open space in the form of an internal plaza area associated with the commercial uses, and a courtyard on the podium level. Additionally, Alternative 3 would include 16,020 sf of private open space, including dwelling unit balconies and patios. Figure 6-2 illustrates development that would occur under Alternative 3. Table 6-1 includes a breakdown of uses proposed under Alternative 3.

■ Potential Impacts

Aesthetics

Development under Alternative 3 would be more substantial as seen from both Beach Boulevard and Ellis Avenue, compared to the proposed project, due to the height of buildings and their relationship to the sidewalk.

As is the case with the proposed project, there are no scenic vistas available from the proposed project site as most are located along the coast. As such, Alternative 3 would have a less than significant impact on scenic vistas, similar to the proposed project. As the project site is located approximately 3 miles from the ocean, no views of the coast currently exist. Building heights would not exceed six stories under Alternative 3, consistent with the proposed project, and therefore would not impact views to a greater extent than what was analyzed for the proposed project.

Development occurring under Alternative 3 would be designed in compliance with Town Center Neighborhood development standards included in BECSP Section 2.1.4 (Town Center Neighborhood). Development standards relating to the visual quality and character of Alternative 3 would include regulations for building scale, frontage and building placement, streets, open space, architecture and signage.

Under Alternative 3, development along Beach Boulevard would be four stories in height, while the remainder of development on the site would be six stories in height. Building heights under Alternative 3 would be consistent with BECSP Section 2.3.1 (Building Height), which establishes a minimum building height of two stories and maximum building height of six stories on the site, but would be inconsistent with BECSP Section 2.3.2 (Special Building Height Limits), which establishes special building height limits for development along Ellis Avenue or located adjacent to, or across from, housing, as defined in Section 4.1 (Aesthetics) of this EIR. As shown in Figure 6-2, the height of the building would not be limited for a distance of 65 feet from the back of sidewalk where development is located across from housing on Ellis Avenue and would exceed the maximum permitted height where development is adjacent to housing. Consequently, Alternative 3 is not consistent with BECSP development standards for building height that directly relate to the visual quality of the site. However, Alternative 3 has been designed with building breaks along Ellis Avenue, which minimizes the building mass and limits the area of nonconformity. Nonetheless, Alternative 3 would result in a greater, less than significant impact relating to the visual quality and character of the project site and surrounding area.

All buildings would be built to the sidewalk with uses along Beach Boulevard and Ellis Avenue fronting these roadways, as required by BECSP Section 2.4 (Frontage and Building Placement Regulations) and building frontages would be designed in compliance with BECSP Section 2.4.2 (Private Frontage Types). Compliance with BECSP Section 2.5 (Street Regulations) would ensure that adjacent streets are improved to enhance the connectivity of the community and create a safe and attractive streetscape environment. Compliance with these development standards would ensure that Alternative 3 would be visually consistent with the BECSP's vision for the Five Points District and would be visually compatible with adjacent residential and commercial uses. Although inconsistencies between the height of buildings and the BECSP Development Code have been identified, during the site plan review process, revisions to the design of Alternative 3 would likely be required in an effort to achieve consistency with the BECSP, as is the case for all development occurring in the BECSP area. As such, site plan review approval would ensure that Alternative 3 would not degrade the existing visual character and quality of the site and surrounding area, similar to the proposed project. Therefore, Alternative 3 would result in a less than significant impact, similar to, but slightly greater than, the proposed project due to the increased massing.

Building heights under Alternative 3 would be similar to the proposed project, but do not include compliance with height restrictions in horizontal setback areas along Ellis Avenue and the alley. As the majority of the buildings on the site would be six stories, shadows created by Alternative 3 could be more substantial than the proposed project, and could potentially impact light sensitive uses (residential uses) located to the northeast and east of the site. Additionally, Alternative 3 would include an internal open space area that would be covered in shadow for a large portion of the day due to orientation of the buildings; however, these shadows would not decrease the utility of the public open space. Therefore, Alternative 3 could create shadows that could affect existing or proposed light-sensitive uses as defined by the BECSP, to a greater extent than the proposed project.

Due to the urbanized nature of the surrounding area, a significant amount of ambient nighttime lighting currently exists, reducing the views of stars and affecting views of the nighttime sky. Streetlights and headlights along adjacent roadways provide a significant amount of existing ambient light at the site. Development of Alternative 3 would introduce nighttime lighting directly onto the project site, primarily for security and way-finding. Consequently, the surrounding uses could be exposed to exterior lighting associated with the proposed building. However, BECSP Section 2.6.8(5)(a) requires that lighting fixtures shall be directed downward from the horizontal plain of the light source to preserve a dark sky and prevent unnecessary light pollution, and requires that lighting and planting plans for public and private frontage areas be visually and aesthetically coordinated. Furthermore, BECSP Section 2.6.8(5)(d) requires specific luminaire types that would prevent light spillover, and provide for an efficient distribution of lighting. Additionally, some of this light would be masked by existing street lighting and nighttime vehicular traffic.

To address potential daytime glare impacts, mitigation measure BECSP MM4.1-2 requires that new structures be designed to maximize the use of nonreflective treatments, and that this must be demonstrated on final building plans. As such, compliance with mitigation measure BECSP MM4.1-2 would ensure that impacts related to daytime glare would be reduced to a less than significant level by reducing the reflective properties of the building materials employed, such as glass, metal, or finished concrete. This impact would be similar to the proposed project.

Overall, aesthetic impacts anticipated under Alternative 3 would be greater than the proposed project due to the increased scale and mass of development that would occur on site.

Air Quality

Similar to the proposed project, Alternative 3 would result in impacts on air quality during construction. Anticipated emissions for Alternative 3 were estimated using CalEEMod 2011.1.1 software. Construction emissions would result from fuel used in construction equipment, dust produced by demolition, excavation, grading, paving, building construction, architectural coatings, and emissions from worker trips. The construction timeline for Alternative 3 was assumed to be similar to the proposed project. Table 6-12 (Daily Peak Construction Emissions for Alternative 3) summarizes the construction emissions for Alternative 3 with the incorporation of mitigation measures BECSP MM4.2-1 through MM4.2-14, identified in the BECSP EIR, and Project MM4.2-15, intended to improve air quality emissions generated by construction activities.

Table 6-12 Daily Peak Construction Emissions for Alternative 3						
<i>Emissions Source</i>	<i>Peak Day Emissions in Pounds per Day</i>					
	<i>VOC</i>	<i>NO_x</i>	<i>CO</i>	<i>SO_x</i>	<i>PM₁₀^a</i>	<i>PM_{2.5}^a</i>
2016 (DEMOLITION/EXCAVATION/GRADING/TRENCHING/PAVING/BUILDING CONSTRUCTION)						
Maximum Daily Emissions	8.28	73.60	49.16	0.13	129.81	6.75
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	No	No	No	No	No	No
2017 (BUILDING CONSTRUCTION/ARCHITECTURAL COATINGS)						
Maximum Daily Emissions	170.83	28.66	35.85	0.08	4.72	1.82
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	Yes	No	No	No	No	No

SOURCE: Atkins (2011) (calculation sheets are provided in Appendix F2)
Assumes the implementation of mitigation measures BECSP MM4.2-1 through MM4.2-14, identified in the BECSP EIR, and Project MM4.2-15.

As shown in Table 6-12, emissions resulting from construction of Alternative 3 would be greater than estimated for the proposed project, and would exceed the established emissions threshold for VOCs, a criteria pollutant, associated with architectural coatings, consistent with proposed project. Compliance with the BECSP EIR mitigation measures would reduce emissions of criteria pollutants during construction, but not to the extent that Alternative 3 would result in emissions below the SCAQMD thresholds of significance. Therefore, construction activities would exceed the SCAQMD emission threshold for a criteria pollutant during construction and this impact would be *significant and unavoidable*, similar to, but greater than, the proposed project.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities in the surrounding area after build-out. Stationary area source emissions would be generated by space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by motor vehicles traveling to and from the site.

The results of the CalEEMod calculations for the daily operational emissions of Alternative 3 are shown in Table 6-13 (Net Daily Operational Emissions for Alternative 3).

As shown, operation of Alternative 3 would not generate emissions that exceed the thresholds of significance recommended by the SCAQMD for any criteria pollutants. Therefore, Alternative 3 would not generate daily emissions that exceed the thresholds of significance recommended by the SCAQMD and this impact would be *less than significant*, similar to, but greater than, the proposed project, due to the increase in residential uses on the site.

Table 6-13 Net Daily Operational Emissions for Alternative 3

Emissions Source	Emissions in Pounds per Day ^a					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Water and Space Heating (Natural gas)	0.10	0.83	0.36	0.01	0.07	0.07
Landscape Maintenance	0.70	0.27	22.99	0.00	0.13	0.13
Consumer Products	8.98	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.10	0.00	0.00	0.00	0.00	0.00
Motor Vehicles	20.13	12.53	62.35	0.15	17.23	0.85
Maximum Daily Emissions	31.01	13.63	85.7	0.16	17.43	1.05
SCAQMD Thresholds (lb/day)	55.00	55.00	550.00	150.00	150.00	55.00
Significant Impact	No	No	No	No	No	No

SOURCE: Atkins (2011) (calculation sheets are provided in Appendix F2).

a. Assumes no natural gas fireplaces.

Biological Resources

The proposed project site is developed with retail, restaurant, office, and gas station uses and consists almost entirely of paved surfaces. Biological resources on the project site are limited to parking lot trees, landscaping and a small grassy area in the southwest corner of the site associated with the entrance to the existing restaurant. The project site does not contain riparian habitats, wetlands, or sensitive species, nor does it contain a wildlife corridor or other biological resource of importance to the region. No adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan are applicable to project site.

As implementation of Alternative 3 would result in the removal or disturbance of on-site trees and landscaping, Alternative 3 is subject to the provisions of the City of Huntington Beach Tree Ordinance (Chapter 13.50 of the Huntington Beach Municipal Code), which requires the submittal of a landscape plan, and the replacement of existing mature trees. Compliance with the City’s Tree Ordinance would ensure that Alternative 3 would not interfere with or impact the implementation of any City, State, or federal policies or ordinances that apply to biological resources. Therefore, similar to the proposed project, Alternative 3 would result in a less than significant impact.

Within the limited trees located on the project site for landscaping purposes, there is the potential for birds protected under the Migratory Birds Treaty Act (MBTA) to nest. As a result of the removal of existing trees on the project site implementation of Alternative 3 could have a direct or indirect impact on habitat for nesting birds. However, implementation of mitigation measure BECSP MM4.3-1 would ensure protection of migratory bird species/habitat through focused surveys. Therefore, Alternative 3 would have a similar impact as the proposed project with respect to migratory birds. Impacts of Alternative 3 on biological resources would be similar to the impacts of the proposed project and would be less than significant.

Cultural Resources

Existing buildings on the project site were built in 1965 and are therefore subject to mitigation measure BECSP MM4.4-1 that requires buildings or structures 45 years or older to be investigated by a cultural resource professional to ensure that development does not adversely affect previously unrecorded historic-period resources. Investigation of existing buildings on the site, as required by BECSP MM4.4-1 would ensure that Alternative 3 would not result in a significant impact to historic resources, consistent with the proposed project.

Both the proposed project and Alternative 3 would result in ground disturbing activities, associated with grading and excavation for the building foundation; however Alternative 3 would require a greater amount grading and excavation associated with the subterranean parking level, which could potentially disturb previously unknown archeological or paleontological resources, including human remains. Alternative 3 would be required to adhere to the policies of the City's General Plan and Municipal Code requirements with regard to cultural resources as well as mitigation measures BECSP MM4.4-2(b) and BECSP MM4.4-3(b) identified for the proposed project. Impacts of Alternative 3 would be greater than the proposed project due to the subterranean parking component, but the impact would remain less than significant, consistent with the proposed project.

Geology/Soils

Similar to the proposed project, Alternative 3 could expose people and/or structures to adverse effects resulting from strong seismic groundshaking or seismic-related ground failure. The proposed project site is located in an area identified as having a low potential for liquefaction. Impacts associated with seismic hazards, including liquefaction, would be addressed through adherence to applicable regulations including the City of Huntington Beach Building Code, which has adopted the 2010 CBC, the Grading and Excavation Code, and State requirements pertaining to geologic, soil and seismic hazards. Additionally, as required by mitigation measure BECSP MM4.5-1, a soil and geotechnical report would be prepared for Alternative 3. The design, grading, and structural recommendations of this report would be incorporated into the grading plan for Alternative 3.

Alternative 3 would require a greater amount of earth-moving activities compared to the proposed project due to the subterranean parking level. Grading and excavation would expose soil to erosional processes and could result in the loss of topsoil during construction. As part of the project, a site-specific Stormwater Pollution Prevention Plan, which is part of the NPDES Municipal General Permit, would be prepared for development under Alternative 3. Implementation of Best Management Practices during construction activities as required by NPDES permit would reduce the potential for soil erosion or the loss of top soil. Unstable soil conditions would be addressed through compliance with the Grading and Excavation Code and incorporation of the recommendations of the project-specific Geotechnical Engineering Feasibility Report into the project's final grading plan, as required by Mitigation measure BECSP MM4.5-1. Compliance with applicable requirements would ensure that this impact remain less than significant, but slightly greater than the proposed project.

Hazards and Hazardous Materials

Although development under Alternative 3 would result in an increase in residential uses and a decrease in commercial uses compared to the proposed project, potential impacts with respect to hazards and hazardous materials would be similar to the proposed project. Construction of Alternative 3 would involve the use of hazardous materials, specifically in the form of diesel fuel. Project construction could expose construction workers to significant health and safety hazards through earthmoving activities and excavation for the subterranean level that could result in the release of hazardous materials to the environment through reasonably foreseeable upset and accident conditions. Implementation of mitigation measures BECSP MM4.6-1 through BECSP MM4.6-4 would reduce this impact to a less than significant level, similar to the proposed project. Operation of the residential uses for Alternative 3 could involve the use of hazardous materials in the form of basic household cleaning materials and landscaping chemicals. Overall, Alternative 3 would result in similar impacts with respect to hazards and hazardous materials as compared to the proposed project. Therefore, impacts would be less than significant, similar to the proposed project.

Hydrology/Water Quality

With respect to hydrology and water quality, impacts associated with Alternative 3 would be similar to those identified for the proposed project, as the site would be almost entirely developed with impervious surfaces consistent with existing conditions on the site. As such, development occurring on the site would not create additional impervious surfaces, and would therefore not create additional runoff. Potential impacts to hydrology and water quality would be reduced through compliance with existing regulations and implementation of mitigation measures BECSP MM4.7-1 through BECSP MM4.7-4, which require the preparation of a project-specific WQMP and hydrology and hydraulic study to address potential issues. A Preliminary WQMP prepared for the proposed project to address appropriate stormwater quality best management practices (BMPs) and water quality management practices would also apply to Alternative 3. Review and acceptance of the WQMP by the City prior to receiving a Precise Grading permit for Alternative 3 would ensure that operation of the proposed project would not result in impacts to water quality. Therefore, impacts would be less than significant, similar to the proposed project.

Land Use

Implementation of Alternative 3 would result in land use impacts similar to the proposed project, as a similar level of new land uses and land use intensification would occur on-site. As identified for the proposed project, Alternative 3 would not change land use patterns in a manner that would divide an established community and would not conflict with any applicable habitat conservation plans.

Under Alternative 3, development along Beach Boulevard would be four stories in height, while the remainder of development on the site would be six stories in height. Building heights under Alternative 3 would be consistent with BECSP Section 2.3.1 (Building Height), which establishes a minimum building height of two stories and maximum building height of six stories on the site, but would be inconsistent with BECSP Section 2.3.2 (Special Building Height Limits), which establishes special building height limits for development along Beach Boulevard or located adjacent to, or across from, housing, as defined

in Section 4.8 (Land Use/Planning) of this EIR. As shown in Figure 6-2, the height of the building would not be limited for a distance of 65 feet from the back of sidewalk where development is located across from housing on Ellis Avenue and would exceed the maximum permitted height where development is adjacent to housing. Consequently, Alternative 3 is not consistent with BECSP development standards regarding building height.

To ensure that Alternative 3 is consistent with the BECSP, including building heights, Alternative 3 would undergo a Site Plan Review. In order for the Site Plan Review application to be approved, the Director of Planning and Building must make the following findings:

- i. The project is consistent with the City's General Plan and all applicable requirements of the Municipal Code
- ii. The project will not be detrimental to the general welfare of persons working or residing in the vicinity nor detrimental to the value of the property and improvements in the neighborhood
- iii. The project will not adversely affect the Circulation Plan of this Specific Plan
- iv. The project complies with the applicable provisions of the BECSP and other applicable regulations

Approval of the required applications for Alternative 3, which may require revisions to the design of Alternative 3, would ensure that development would not conflict with any applicable plans, policies, and regulations, and may require Alternative 3 to apply for additional permits to resolve conflicts. Therefore, Alternative 3 would not conflict with land use policies established by the City, and would result in a less than significant impact, similar to, but greater than, the proposed project. However, as designed, Alternative 3 would result in a greater impact than the proposed project.

Noise

Demolition of all existing structures and construction of new mixed uses would occur under Alternative 3. Construction noise impacts would be similar to the proposed project as the amount and type of demolition activities and construction activities would be similar. The closest noise sensitive receptors to the project site would be the uses located immediately east of the site along Ellis Avenue and the residential uses located to the north of the project site across from Ellis Avenue. These residential uses are approximately 75 feet from the project site. Construction activity noise levels at these residential uses would be approximately 83 dBA during the excavation/grading and external finishing phases of Alternative 3. While construction noise could be a nuisance to nearby sensitive uses, compliance with the City's Noise Ordinance would ensure that construction noise impacts remain less than significant. Implementation of identified mitigation measures BECSP MM4.9-1 through BECSP MM4.9-3 would reduce temporary construction noise impacts, and construction-related noise would be less than significant, similar to the proposed project.

Similar construction activities would occur under Alternative 3 as with the proposed project; therefore, vibration levels could reach approximately 78 VdB within 75 feet of the project site. As such, sensitive receptors would not experience vibration levels that would exceed the FTA's vibration impact threshold of 85 VdB for human annoyance and this impact would be less than significant, similar to the proposed project.

Operational noise impacts would be similar to, but slightly greater than, the proposed project, as Alternative 3 would increase residential uses on site compared to the proposed project, resulting in increased vehicle trips and human activity. Operational noise impacts generated by residential uses such as mechanical equipment (HVAC) would be similar to the proposed project. Installation of shielding around HVAC systems would be required by mitigation measure BECSP MM4.9-4, which would further reduce HVAC noise levels. Deliveries of goods to the retail component would be reduced from the proposed project due to the reduction of retail square footage Mitigation measure BECSP MM4.9-5 would ensure that exterior living spaces, such as patios, are constructed in a manner so that noise levels, including noise from the occasional retail delivery, do not exceed the City's noise standards. Alternative 3 would result in an intensification of human activity at the proposed project site with the introduction of a permanent, residential population. This could increase noise levels at the identified off-site residential receptors. Once operational, noise levels from residential and retail activities on the project site are not anticipated to be greater than the established 55 dBA limit for residential zones. With implementation of mitigation measures BECSP MM4.9-4 and BECSP MM4.9-5, operational noise would remain less than significant, similar to the proposed project. Overall, noise impacts anticipated under Alternative 3 would be less than significant, similar to, but slightly greater than, the proposed project due to the increase of vehicle trips generated at the site and the intensification of human activity.

Population/Housing

Alternative 3 would result in the development of 274 residential units, an increase of 169 units compared to the proposed project. Once fully occupied, the population increase as a result of Alternative 3 would result in a new residential population of approximately 732 persons, an estimated increase of 452 persons from the proposed project.¹⁴⁷ Alternative 3 would provide the equivalent of 10 percent of the dwelling units to affordable households, pursuant to a development agreement as specified in the BECSP.

Residential development on the site was accounted for in the overall population growth analysis performed in the BECSP EIR. BECSP Section 2.1.1 establishes the maximum amount of net new development (MAND) of residential and commercial uses permitted in the BECSP, which ultimately included 4,500 residential dwelling units and associated commercial uses. Section 4.10 (Population/Housing) of the BECSP EIR concluded that full build out of residential uses in the plan area would not exceed the City's General Plan policy of limiting growth, but would exceed SCAG 2030 household projections. However, the exceedance of such projections is an existing condition and is not a direct result of the BECSP. The BECSP would not exceed SCAG 2030 population projections, though it would represent approximately 56 percent of the remaining growth that is anticipated through 2030.¹⁴⁸

Alternative 3 (approximately 274 units) accounts for approximately 6 percent of the 4,500 dwelling units ultimately approved for full build-out of the BECSP. When the MAND is reached, no further development may be permitted without an amendment to the MAND provisions and environmental review. The proposed project and Alternative 3 are one of the first residential projects to be evaluated under the BECSP and MAND and would be well within the established MAND for the BECSP. Because

¹⁴⁷ Based on the existing average household size of 2.67 persons for the City of Huntington Beach.

¹⁴⁸ City of Huntington Beach, *Beach and Edinger Corridors Specific Plan Environmental Impact Report* (August 2009), Section 4.10 (Population and Housing).

BECSP EIR Section 4.10 (Population/Housing) concluded that population growth induced by implementation of the BECSP would not result in significant impacts, population growth associated with Alternative 3 would not induce population growth beyond that already anticipated, and a less than significant impact would occur. Alternative 3 would result in a greater impact than the proposed project with respect to population and housing due to the increase in residential population associated with the additional residential units. However, the impact would be less than significant and increasing population within the Town Center Neighborhood district is a goal of the BECSP.

Public Services

Fire Protection

Development of 274 residential units would result in a new residential population of approximately 732 persons at the site, an increase of 452 persons over the proposed project.¹⁴⁹ As Alternative 3 would result in more new residents than the proposed project, Alternative 3 would result in greater impacts to public services beyond those identified for the proposed project, although still less than significant.

Similar to the proposed project, all development plans prepared for Alternative 3 would be reviewed by the HBFD prior to construction to ensure that adequate fire flows would be maintained. Although Alternative 3 would result in additional residents compared to the proposed project, compliance with all required policies, rules, and regulations would ensure that implementation of Alternative 3 would not require any new or physically altered fire facilities to maintain adequate response times and staffing, the construction of which could result in significant environmental impacts. In addition, implementation of mitigation measure BECSP MM4.11-1 would ensure that the HBFD receives adequate staffing and/or equipment to maintain acceptable levels of service. This impact would be less than significant, but greater than the proposed project.

Police Protection

The HBPD has 235 sworn officers and currently employs a total of 215 sworn officers, currently protecting 203,484 residents in the City.^{150,151} Implementation of Alternative 3 could result in up to 732 new residents. Using the worst-case population increase scenario, the additional 732 residents generated by Alternative 3 would increase the existing population of the City of Huntington Beach from 203,484 residents to 204,216 residents. This increase in residential population would create greater demand on police services than those identified for the proposed project. However, consistent with the proposed project, this increase in residential population associated with Alternative 3 is not expected to notably affect HBPD resources given that general fund monies from increased property tax revenue associated with development as well as other fee revenues (i.e., building permit fees) may be used to augment equipment levels. Further, implementation of mitigation measure BECSP MM4.11-1 would ensure that adequate staffing levels are maintained. Therefore, persons on site or elsewhere in the City would not be

¹⁴⁹ Based on the existing average household size of 2.67 persons for the City of Huntington Beach.

¹⁵⁰ Jan Thomas, Project Implementation Recommendations Memorandum (October 10, 2010), Prepared by the Huntington Beach Police Department.

¹⁵¹ California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001–2010, with 2000 Benchmark* (Sacramento, California, May 2010).

exposed to increased risks as a result of Alternative 3. Therefore, this impact would be less than significant, but greater than the proposed project.

School Service

The project site would be served by the HBUHSD and the HBCSD. Based on a student generation rate of 0.1624 student per housing unit for elementary school students, 0.0812 student per housing unit for middle school students, and 0.1367 student per housing unit for high school student, Alternative 3 would generate approximately 46 elementary school students, 22 middle school students, and 38 high school students for a total of 106 students.¹⁵²¹⁵³ As such, consistent with the proposed project, direct population growth resulting from implementation of Alternative 3 would not have an impact on the capacity of Ocean View High School and Perry Elementary School, as these schools are not currently overcrowded and could accommodate students generated by this alternative but would contribute to existing overcrowded conditions at Dwyer Middle School. This impact would be addressed through with implementation of CR4.11-1 and CR4.11-3, which requires the payment of school impact fees. Accordingly, implementation of Alternative 3 would not require any new or physically altered school facilities to serve the project, the construction of which could result in significant environmental impacts. This impact would be less than significant, but greater than the proposed project.

Library Service

Similar to the proposed project, implementation of Alternative 3 would place a higher demand on services provided by the Huntington Beach Library System. Implementation of Alternative 3 would contribute to the current condition of the City's library system being severely under staffed and staffing would need to be increased to meet current professional service standards for both current and new residents. Similar to the proposed project, implementation of code requirement CR4.11-3 would be required under Alternative 3 to ensure that these additional residents would not notably affect the current ratio of staff per resident. Library service impacts would be less than significant for Alternative 3, similar to, but greater than, the proposed project due to the additional resident population generated.

Recreation

Alternative 3 would result in 274 residential units, generating an estimated population of 732 persons.¹⁵⁴ BECSP Section 2.6.1 (Provision of Open Space) requires that open space is provided on the site at a rate 50 sf per 1,000 sf of retail use and dwelling unit. As such, Alternative 3 would be required to provide a total of 14,125 sf of public open space. Alternative 3 would include 16,000 sf of public open space in the form of a courtyard plaza and a courtyard on the podium level, which exceeds BECSP open space requirements. Public open space would be designed in conformance with BECSP Section 2.6.4, which identifies guidelines for design of the various types of public open space. Alternative 3 would also include 16,020 sf of private open space in the form residential dwelling unit balconies and patios. In addition to the provision of open space on the site, Alternative 3 would be subject to code requirement BECSP CR4.12-1 which requires the payment of a park fee pursuant to Chapter 230.20 of the City's Zoning and

¹⁵² Dolinka Group, *Residential Development School Fee Justification Study*, Huntington Beach City School District (April 2, 2008).

¹⁵³ Total School Solutions, *Huntington Beach Union High School District, Developer Fee Justification Document for Residential, Commercial, and Industrial Development Projects—Level 1* (August 1, 2008).

¹⁵⁴ Based on the existing average household size of 2.67 persons for the City of Huntington Beach.

Subdivision Ordinance. Compliance with code requirement BECSP CR4.12-1 and the BECSP would ensure that recreational impacts would be less than significant, similar to the proposed project.

Transportation/Traffic

As part of the analysis of project-related traffic impacts, Austin Foust Associates, Inc. prepared both a peer review and analysis of the traffic impacts of Alternative 3.¹⁵⁵ Alternative 3 is anticipated to result in a 30 percent reduction in ADT, a 22 percent reduction in the PM peak hour and a 19 percent increase in AM peak hour compared to the approved BECSP land uses for the project site. Table 6-14 (Trip Generation Comparison for Alternative 3) provides a summary of the estimated trip generation for Alternative 3 and the approved BECSP land uses for the project site. However, these increases are minimal enough that they will not alter the operating conditions of these intersections.

Table 6-14 Trip Generation Comparison for Alternative 3								
<i>Project Description</i>	<i>Amount</i>	<i>Peak Hour</i>						<i>ADT</i>
		<i>AM</i>			<i>PM</i>			
		<i>In</i>	<i>Out</i>	<i>Total</i>	<i>In</i>	<i>Out</i>	<i>Total</i>	
Alternative 3								
Apartments	274 DU	28	112	140	110	59	170	1,822
Retail Center	8,500	6	4	10	10	13	23	377
Internal Capture*		-1	-1	-2	-8	-8	-16	-76
Pass-by Reduction**		-1	0	-1	-6	-6	-12	-29
Alternative 3 Trip Generation Total		32	115	147	106	58	165	2,094
Approved BECSP Land Uses for the Project Site								
Mixed-Use Residential	120 du	12	49	61	48	26	74	806
General Commercial	71,000	43	28	71	130	135	265	3,049
Internal Capture*		-4	-4	-4	-8	-24	-22	-46
Pass-by Reduction**						-40	-42	-82
Approved BECSP Land Uses Trip Generation Total		51	73	124	114	97	211	2,971
Net Change from Approved BECSP		-19	42	23	-8	-39	-46	-877
% Difference from Approved BECSP		-37%	58%	19%	-7%	-40%	-22%	-30%
Existing Uses								
Shopping Center	27,540	17	11	28	50	52	102	1,183
Existing Land Uses Trip Generation Total		17	11	28	50	52	102	1,183
Net Change from Existing		15	104	119	56	6	63	911
% Difference from Existing		47%	90%	81%	53%	10%	38%	44%
SOURCES: Austin-Foust Associates, Inc., <i>Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Ellis Project</i> (July 21, 2011), Table 7								

¹⁵⁵ Austin-Foust Associates, Inc., *Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Ellis Project* (July 21, 2011).

Table 6-15 (2030 ADT Volume Summary for Alternative 3) summarizes the change in ADT volumes associated with Alternative 3, compared to the BECSP in 2030. As shown in Table 6-15, all roadway segments are projected to have decreases in daily traffic volumes compared to those projected for the BECSP in 2030, similar to the proposed project. Based on this reduction in ADT, Alternative 2 would not exceed anticipated daily traffic volumes identified for the BECSP, which were determined to be less than significant in the BECSP EIR.

Table 6-15 2030 ADT Volume Summary for Alternative 3			
Location	2030 BECSP ADT Volume	2030 ADT Volume with Alternative 2	% Change
Beach Boulevard north of Ellis Avenue	62,000	61,737	<-1%
Beach Boulevard south of Ellis Avenue	51,000	50,711	<-1%
Beach Boulevard south of Garfield Avenue	45,000	44,711	<-1%
Ellis Avenue (Main Street) west of Beach Boulevard	7,000	6,947	<-1%
Ellis Avenue east of Beach Boulevard	22,000	21,728	-1.2%

SOURCE: Austin-Foust Associates, Inc., *Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Ellis Project* (July 21, 2011).

Table 4.13-3 (2030 ICU Summary) included in Section 4.13 (Transportation/Traffic), shows that all study intersections would operate at an acceptable LOS in 2030 with the BECSP build out with the exception of Beach Boulevard and Talbert Avenue, which would operate with a PM deficiency (LOS E). Because the reduction in ADT under Alternative 3 is too small to result in a change, the anticipated LOS at these intersections would not change as a result of this alternative. Therefore, although Alternative 3 would result in an increase in outbound vehicle trips in the AM peak hour, Alternative 3 would not contribute to the existing deficiency at the intersection of Beach Boulevard and Talbert Avenue as it would not contribute to vehicle trips during the PM peak hour. Regardless, Alternative 3 would be required to make a fair share contribution to the traffic improvements identified in mitigation measures BECSP MM4.13-13 and BECSP MM4.13-14 for the Beach Boulevard and Talbert Avenue intersection as part of the overall BECSP development. As such, Alternative 3 would not conflict with the City’s acceptable LOS standard and a less than significant impact would occur, similar to the proposed project.

Although Alternative 3 would not conflict with the City’s acceptable LOS standard under 2030 conditions, Alternative 3 could result in a conflict under existing year (2008) conditions based on existing land uses on the site (as required for the Existing plus Project condition analysis). As shown in Table 6-14, Alternative 3 would result in a net increase of 911 daily trips, 119 trips in the AM peak hour and 63 trips in the PM peak hour compared to existing conditions. In consideration of this increase in vehicle trips generated by Alternative 3, a potentially significant impact could occur based on existing roadway conditions surrounding the site. This impact is more substantial than that created by the proposed project. However, it should be noted that the Existing plus Project analysis is hypothetical because the actual build out and occupancy of Alternative 3 is year 2019.

Consistent with the proposed project, construction of Alternative 3 would not cause an increase in traffic, as the site is easily accessible from two designated truck routes and the I-405, reducing truck traffic on surrounding arterial streets. Additionally, this alternative would be required to implement mitigation measures BECSP MM4.2-8 through BECSP MM4.2-10 (as included in Section 4.2 [Air

Quality]) which would ensure that construction traffic does not block the free flow of traffic. This alternative would also be required to submit a traffic control plan during construction to ensure appropriate emergency access during construction. Accordingly, Alternative 3 would result in less than significant construction-related traffic impacts, consistent with the proposed project.

With regard to the applicable CMP, Alternative 3, would not result in impacts to CMP intersections, consistent with the proposed project, As Alternative 3 will generate 30 percent fewer average daily trips (ADT) compared to the approved BECSP land uses for the project site, Alternative 3's contribution to CMP intersections would be less than identified in the BECSP EIR, which resulted in a less than significant impact. Therefore, a ***less than significant*** impact to CMP intersections would occur as a result of Alternative 3, consistent with the proposed project.

As is the case for the proposed project, Alternative 3 would not substantially increase hazards due to design features or incompatible uses nor would Alternative 3 result in inadequate emergency access. This would be ensured through the site plan review process undertaken by the City where design of vehicular access points to the site will be formally approved. Additionally, plans for Alternative 3 would be submitted to the City of Huntington Beach Fire Department for review and approval to ensure that adequate emergency access is provided. Further, Alternative 3 will be required to prepare a traffic control plan for its construction; this would ensure adequate emergency access would be maintained during construction. As such, impacts related to design hazards and emergency access have been determined to be ***less than significant*** with compliance of existing regulations, consistent with the proposed project.

As Alternative 3 would be located on the same site as the proposed project which is located in close proximity to public transportation, is easily walkable to the Five Points shopping center, and is subject to the same design requirements included in the BECSP, Alternative 3 would promote and allows for the use of alternative transportation modes. Accordingly, Alternative 3 is compatible with adopted policies, plans and programs regarding alternative transportation; and this impact would be ***less than significant***, similar to the proposed project.

Utilities/Service Systems

Implementation of Alternative 3 would result in utility impacts that are similar to, but greater than, the proposed project.

Domestic Water Supply

Alternative 3 would result in a water demand of 56,075 gallons per day (gpd), as shown in Table 6-16 (Water Demand for Alternative 3), an increase compared to the proposed project which generates 29,525 gpd. The Diemer Filtration Plant has an operating capacity of 520 million gallons per day (mgd) and treats approximately 213 mgd, while the Jensen Filtration Plant currently has an operating capacity of 750 mgd and treats approximately 420 mgd.¹⁵⁶ If the imported water demand of Alternative 3 were treated solely at either Filtration Plant, this increase would represent less than 1 percent of the remaining capacities of either facility. For the reasons discussed in Section 4.14, under Impact 4.14-1 of this EIR, the development of Alternative 3 would not directly result in the construction of new treatment facilities

¹⁵⁶ City of Huntington Beach, *Beach and Edinger Corridors Specific Plan Environmental Impact Report* (August 2009), Section 4.7 (Utilities/Services Systems).

or expanded water treatment facilities. Therefore, this is considered a less than significant impact, similar to, but greater than, the proposed project.

Table 6-16 Water Demand for Alternative 3

Land Use	Generation Rates	Alternative 3	
		Units	Total Demand
Residential	200 gpd/du	274 units	0.084 afy (54,800 gpd)
Retail	0.15 gpd/sf	8,500 sf	0.008 afy (1,275 gpd)
Total		—	56,075 gpd (0.056mgd) (62.81 afy)

SOURCE: PBS&J, *Water Supply Assessment for the Proposed Beach and Edinger Specific Plan Project*, Prepared for City of Huntington Beach (August 2009).

Development of Alternative 3 would result in an increased demand for municipal water services compared to existing conditions. However for the reasons discussed in Section 4.14, Impact 4.14-2 of this EIR, the City would be able to provide a reliable source of water to accommodate its existing users and the additional demand on water supplies created by Alternative 3 for the 20-year projection. The City’s conservation programs coupled with increased groundwater would improve water supply reliability. In addition, implementation of mitigation measure BECSP MM4.14-1 would serve to reduce the municipal water demand from Alternative 3. Therefore this impact would be less than significant, similar to, but greater than, the proposed project due to the increased demand for water. As with the proposed project, the project Applicant shall submit building plans for approval to the City of Huntington Beach to incorporate the project conditions to ensure that conservation and efficient water use practices are implemented for Alternative 3.

Wastewater

Alternative 3 would include the development of 274 residential units and approximately 8,500 sf of commercial space. As shown in Table 6-17 (Wastewater Generated from Alternative 3), Alternative 3 would generate approximately 70,200 gpd (0.07 mgd) of wastewater that would be transported by the City’s sewer system, and increase of 36,550 gpd (0.036 mgd) over the proposed project.

Table 6-17 Wastewater Generated from Alternative 3

Land use	Quantity	Duty Factor	Estimated Flow
Residential	274 du	250 gpd/du	68,500 gpd
Commercial	8,500 sf	0.2 gpd/sf	1,700 gpd
Total		—	70,200 gpd (0.07mgd) (78.63 afy)

SOURCE: City of Huntington Beach,, *Beach and Edinger Corridor Specific Plan EIR* (2009), Section 4.14 (Utilities/Services System).

The project developer(s) would be responsible for constructing local mains and extensions to serve the proposed project. Prior to allowing additional connections to the sewer lines, the capacity of the existing sewers would need to be confirmed and a sewer study would be needed at the time of development to determine if the existing sewer lines need to be upgraded to accommodate the proposed project’s sewer

flow. Similar to the proposed project, Alternative 3 would be required to implement code requirements BECSP CR4.14-1 and BECSP CR4.14-2. In addition, any development connecting directly or indirectly to the OCSD sewer system is required to pay a connection fee in accordance with the OCSD Connection Fee Master Ordinance. The Connection Fee Program ensures that all users pay their fair share of any necessary expansion of the system, including expansion to wastewater treatment facilities. These fees are considered full mitigation under CEQA for potential impacts resulting from project development.

For wastewater impacts, Alternative 3 would result in similar but greater impacts than the proposed project. The NPDES permit system requires that all existing and future municipal and industrial discharges to surface waters within the City be subject to specific discharge requirements. Alternative 3 would not result in the discharge of wastewater to any surface water. Instead, operational discharges will be sent to the project's sewer system, which would ultimately be treated at one or more of the OCSD wastewater treatment plants. The OCSD wastewater treatment plants are required to comply with their associated waste discharge requirements (WDRs). WDRs set the levels of pollutants allowable in water discharged from a facility.

Compliance with any applicable WDRs, as monitored and enforced by the OCSD, would ensure that Alternative 3 would not exceed the applicable wastewater treatment requirements of the SARWQCB with respect to discharges to the sewer system. This would result in a less than significant impact, similar to, but more than, the proposed project.

Construction of the wastewater collection systems for Alternative 3 would adhere to existing laws and regulations, and the infrastructure would be sized appropriately for the proposed project. Individual water and wastewater connections would occur as part of the proposed project site. In addition, code requirements BECSP CR4.14-1 and BECSP CR4.14-2 would ensure that proper sewer connections are provided for at the project site under this Alternative. Therefore, this impact is considered less than significant, similar to, but greater than, the proposed project.

Solid Waste

Alternative 3 would increase the overall amount of solid waste generated at the project site. Alternative 3 is estimated to produce approximately 1,147 pounds per day and approximately 418,655 pounds per year of solid waste. This translates to a generation rate of approximately 0.57 ton of solid waste per day and 209.33 tons of solid waste per year as shown in Table 6-18 (Waste Generated from Alternative 3). Development of Alternative 3 would result in an increase of approximately 0.25 ton per day and 92.33 tons per year over the proposed project.

Rainbow Disposal is the exclusive hauler of all solid waste for the City of Huntington Beach. Rainbow Disposal's Transfer Station has a design capacity of 2,800 tons per day, and current utilization ranges between 53 and 71 percent. For purposes of this analysis, and assuming a worst-case scenario of 71 percent current utilization, the daily solid waste contribution to this transfer station under Alternative 3 would be less than 0.1 percent at approximately 0.0001 percent of its entire design capacity. Utilization of the transfer station would remain at 71 percent under the implementation of Alternative 3.

Table 6-18 Waste Generated from Alternative 3

Land Use	Solid Waste Generation Rates (lbs/unit/day)	Proposed Project	
		Units	Waste Generated (lbs/day)
Residential (medium-high density)	4 lbs/dwelling unit/day	274 du	1,096 lbs/day
Commercial	0.006 lbs/sf/day	8,500 sf	51 lbs/day
Total			1,147 lbs/day (0.57 tons/day) 418,655 lbs/yr (209.33 tons/yr)

SOURCE: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates, <http://www.ciwmb.ca.gov/wastechar/wastegenrates/> (accessed August 20, 2010).

As described in Section 4.14 (Utilities/Service Systems), there are three landfills (Frank R. Bowerman Landfill in Irvine; Olinda Alpha Landfill in Brea; and Prima Deshecha Landfill in San Juan Capistrano) that could serve the project site, which have a design capacity of 8,500, 4,000, and 8,000 tons per day, respectively. Based on landfill capacity, the solid waste contribution of 0.57 tons per day to any of the three landfills that serve the project site is less than 1 percent of their allowed daily capacity. This would be similar to, although greater than, the proposed project but would result in a less than significant impact.

Energy

Alternative 3 would require greater energy resources than the proposed project. As shown in Table 6-19 (Alternative 3 Projected Electricity Demand), the total annual electricity consumption by future development under Alternative 3 is estimated to be approximately 1,641,961 kWh/year, 549,829 kWh/year more than the proposed project. Although this is greater than the proposed project, it was determined in Section 4.14 of this EIR that the proposed project would be served, and it is understood that Alternative 3 could also be served. Further, it is also understood that an adequate supply of electricity is anticipated to be available. Development of Alternative 3 would comply with the provisions of Title 24 of the CCR and Alternative 3 would be designed to further conserve energy. Also, because SCE is currently in the process of upgrading its transmission systems, it is anticipated that the electricity demand generated by future development could be supplied without the need for additional construction or expansion of energy facilities beyond that which is planned.

Table 6-19 Alternative 3 Projected Electricity Demand

Type of use	Energy Consumption Rates	Proposed Development	Electricity (kWh/year)
Residential	5,626.50 kWh/units/year	274 du	1,541,661 kWh/year
Commercial	11.8 kWh/year/sf	8,500 sf	100,300 kWh/year
Total	—	—	1,641,961 kWh/year

SOURCE: South Coast Air Quality Management District, CEQA Air Quality Handbook (1993), Natural Gas and Electricity Consumption Rates.

As shown below in Table 6-20 (Alternative 3 Projected Natural Gas Demand) the project-generated demand for natural gas would be approximately 13,485,612 cf/year, 7,143,522 more than the proposed project. The SCGC declares itself a “reactive” utility that will provide natural gas as customers request its

services. The SCGC has indicated that an adequate supply of natural gas is currently available to serve the proposed project and that the level of service provided to the surrounding area would not be impaired by future development, including Alternative 3. New natural gas lines to serve future development at the project site would be located underground and would be constructed in accordance with the SCGC's policies and extension rules on file with the CPUC at the time contractual agreements are made.

Table 6-20 Alternative 3 Projected Natural Gas Demand

Type of use	Energy Consumption Rates	Proposed Development	Natural Gas (ft ³ /year)
Residential	48,138 ft ³ /unit/year	274 du	13,189,812 ft ³ /year
Commercial	34.8 ft ³ /sf/year	8,500 sf	295,800 kWh/year
Total	—	—	13,485,612 ft³/year

SOURCE: South Coast Air Quality Management District, CEQA Air Quality Handbook (1993), Natural Gas and Electricity Consumption Rates.

Similar to the proposed project, all utilities impacts under the reduced alternative would be less than significant. However, because an increase in overall resource consumption would occur under Alternative 3, the impacts would be greater than the proposed project.

Climate Change

Similar to the proposed project, construction of Alternative 3 would result in GHG emissions due to the operation of heavy pieces of construction equipment, worker commute trips, and building supply vendor vehicles. Operation of Alternative 3 would result in GHG emissions as a result of direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation. Implementation of mitigation measures BECSP MM4.15-1 through BECSP MM4.15-9, which are consistent with strategies recommended by the CCAT, CAPCOA, and the California Attorney General, would reduce impacts associated with GHG emissions of Alternative 3 to **less than significant** levels, similar to the proposed project.

Table 6-21 (Estimated Annual Emissions for Alternative 3) summarizes the estimated annual GHG emissions for Alternative 3. In order to calculate service population, employment was estimated using SCAG's value for retail employment density, 325 sf/employee, and resident population was estimated using the 2.67 persons/household estimate from the City. This amounts to 26 retail employees and 732 residents for a total service population of 758.

Under Alternative 3, the residential mixed-use project would increase residential density such that even though the overall emissions for Alternative 3 are higher than the proposed project's, the MT CO₂e per service population is lower for Alternative 3. Because the estimated emissions per service population would be below the SCAQMD draft threshold for GHG emissions, this impact would be considered **less than significant**, similar to, but less than, the proposed project.

Table 6-21 Estimated Annual Emissions for Alternative 3

<i>Emission Source</i>	<i>Metric Tons CO₂e</i>
Amortized Construction ^a	57.29
Area Source ^b	7.0
Energy	382.6
Mobile	1,843.7
Solid Waste	30.7
Water Use	73.4
Total	2,394.6
Service Population (SP)	758
Operational MT CO ₂ e/SP	3.16
SCAQMD Draft Threshold MT CO ₂ e/SP	4.80
Significant?	No

SOURCE: CalEEMod 2011.1.1 was used to determine all emissions. CalEEMod output is included in Appendix F2. Service Population is the sum of total residents and total employees of the proposed project.

a. Total construction emissions are 1,526.57 metric tons CO₂e.

b. Area Source emissions include only emissions from landscaping equipment.

■ Attainment of Project Objectives

Under Alternative 3, new development would include 274 residential dwelling units and 8,500 sf of commercial uses. Implementation of Alternative 3 would satisfy all of the City and Applicant objectives, as well as objectives of the BECSP applicable to sites designated as Town Center Neighborhood, as it would provide both residential and community serving commercial uses on a site that is currently underutilized and well served by public transit. Additionally, Alternative 3 would include a public open space component, and support the emergence of a vital Five Points District.

Although Alternative 3 would satisfy all of the stated City and Applicant objectives, due to the increased number of residential units and mass of the proposed development, the severity of a number of impacts would be increased compared to the proposed project. Building heights under Alternative 3 would range from four stories along Beach Boulevard, to six stories throughout the remainder of the site. As building heights would conflict with BECSP development standards, aesthetic and land use impacts would be increased compared to the proposed project. Additionally, the substantial height and mass of buildings would create greater shadow impacts.

Because Alternative 3 would result in the development of an additional 169 residential units compared to the proposed project, increased demands associated with the increased residential population and increased building densities, including demands on public services, recreation as well as utilities would occur. These impacts would remain less than significant, but would be greater than the proposed project.

Due to the subterranean parking component of Alternative 3 which requires deeper excavation and increases the potential to encounter archeological or paleontological resources, impacts relating to

cultural resources would be greater than the proposed project, but would remain less than significant. Impacts relating to biological resources, geology and soils, hazards and hazardous materials, hydrology and water quality would be the same as the proposed project as these relate to site-specific conditions and Alternative 3 would be subject to the same BECSP and project mitigation as the proposed project but greater with the addition of the subterranean level.

Traffic impacts would be similar to, but slightly greater than, the proposed project, as Alternative 3 would not exceed anticipated daily traffic volumes identified for the BECSP under 2030 conditions but would generate a great number of vehicle trips than the proposed project. Further, under Existing plus Project conditions, unlike the proposed project, Alternative 2 has the potential to result in conflict with the City's acceptable LOS standard.

Impacts to air quality through construction and operation of Alternative 3 would be similar to the proposed project, but would be slightly greater. Construction impacts would still be significant and unavoidable while operational impacts would still be less than significant. Impacts on GHG emissions would be slightly less than the proposed project; this is due to the increased residential density of Alternative 3. Overall, the GHG emissions are greater for Alternative 3 than the proposed project, but on a per service population basis, the impacts to GHG emissions are less than the proposed project.

6.5 COMPARISON OF ALTERNATIVES

Table 6-22 (Comparison of Alternatives to the Proposed Project) provides a summary of the comparison of alternatives to the proposed project.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Overall, the No Project Alternative would result in the fewest number of impacts, and would eliminate significant and unavoidable impacts identified for the proposed project, but would not achieve any of the project objectives. Accordingly, the environmentally superior alternative would be Alternative 3. Alternative 3 would result in the development of the site with a residential mixed-use project that includes an increased residential component and reduced commercial component compared to the proposed project. As Alternative 3 includes a residential component, this alternative would achieve all of the stated project objectives and would not result in additional significant and unavoidable impacts compared to the proposed project. Under Alternative 3, all impacts were determined to be less than significant with implementation of mitigation measures required by the proposed project, with the exception of construction-related emissions that would contribute to a significant and unavoidable air quality impact, as is the case for the proposed project.

Table 6-22 Comparison of Alternatives to the Proposed Project

<i>Environmental Issue Area</i>	<i>Alternative 1</i>	<i>Alternative 2</i>	<i>Alternative 3</i>
Aesthetics	-	-	+
Air Quality (construction)	-	-	+
Air Quality (operation)	-	+	+
Biological Resources	-	=	=
Cultural Resources	-	+	+
Geology/Soils	-	+	+
Hazards and Hazardous Materials	-	=	=
Hydrology/Water Quality	-	=	=
Land Use/Planning	-	=	=
Noise	-	-	+
Population/Housing	-	-	+
Public Services	-	-	+
Recreation	-	-	=
Transportation/Traffic	-	+	+
Utilities/Service Systems	-	-	+
Greenhouse Gas Emissions	-	+	-

(-) = Impacts considered to be less when compared with the proposed project.

(+) = Impacts considered to be greater when compared with the proposed project.

(=) = Impacts considered to be equal or similar to the proposed project.

6.7 REFERENCES

- Austin-Foust Associates, Inc. *Beach and Edinger Specific Plan Area Traffic Analysis for Beach-Ellis Project*, July 21, 2011.
- California Department of Finance. *E-5 Population and Housing Estimates for Cities, Counties and the State, 2001–2010, with 2000 Benchmark*. Sacramento, California, May 2010.
- California Integrated Waste Management Board. *Estimated Solid Waste Generation Rates*. <http://www.ciwmb.ca.gov/wastechar/wastegenrates/> (accessed August 20, 2010).
- Huntington Beach, City of. *Beach and Edinger Corridor Specific Plan EIR*, 2009.
- Dolinka Group. *Residential Development School Fee Justification Study, Huntington Beach City School District*, April 2, 2008.
- PBS&J. *Water Supply Assessment for the Proposed Beach and Edinger Specific Plan Project*. Prepared for City of Huntington Beach, August 2009.
- Phoenix Property Company. *Beach and Ellis Project Commercial and Residential Mixed-Use Project Descriptions*.
- South Coast Air Quality Management District. *CEQA Air Quality Handbook*. Natural Gas and Electricity Consumption Rates, 1993.
- Southern California Association of Governments. *Employment Density Study*, October 31, 2001.

Thomas, Jan. Project Implementation Recommendations Memorandum. Prepared by the Huntington Beach Police Department, October 10, 2010.

Total School Solutions. *Huntington Beach Union High School District, Developer Fee Justification Document for Residential, Commercial, and Industrial Development Projects—Level 1*, August 1, 2008.

