



INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION

**STANTON TOWNHOMES
12200 BEACH BOULEVARD
STANTON, CALIFORNIA
APN 131-422-20**



LEAD AGENCY:

**CITY OF STANTON
7800 KATELLA AVENUE
STANTON, CA 90680**

REPORT PREPARED BY:

**BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING
2211 S. HACIENDA BOULEVARD, SUITE 107
HACIENDA HEIGHTS, CALIFORNIA 92240**

OCTOBER 18, 2021

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MITIGATED NEGATIVE DECLARATION

PROJECT NAME: Stanton Townhomes

PROJECT APPLICANT: The Applicant for the proposed project is Mr. Chris Segesman, Bonanni Development, 5500 Bolsa Avenue, Suite 120, Huntington Beach, California 92649.

PROJECT ADDRESS: 12200 Beach Boulevard, Stanton, CA 90680.

CITY AND COUNTY: City of Stanton, Orange County

Lead Agency: City of Stanton. The contact information for the Lead Agency is as follows: Jennifer Lilley, AICP, Community and Economic Development Director (714)890-4213. 7800 Katella Ave, City of Stanton, Orange County.

PROJECT: The City of Stanton Community Development Department is reviewing a request submitted by Bonanni Development for the construction of a 3-story, 79-units multi-family residential development located at 12200 Beach Boulevard, near the intersection of Beach Boulevard and Chapman Avenue in the City of Stanton. Other public agencies that will be reviewing the development request include Santa Ana Regional Water Quality Control Board (RWQCB) and South Coast Air Quality Management District (SCAQMD). The proposed 3.55-acre (154,470 square-foot) project site has a zoning designation of Commercial General (CG) with a General Mixed-Use Overlay (GLMX). The General Plan land use designation is General Mixed-Use, which permits the construction of multi-family residential developments. The total floor area for the proposed multi-family residential development would be 123,805 square feet. Surrounding land uses to the proposed project site include: commercial businesses to the north and the south, the Anaheim City Barber Channel to the east, and a regional eight lane arterial roadway to the west. In addition, the proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project applicant is responsible for the design, construction and completion of the parkette as part of their community benefit contribution. As a result, this parkette is an element of the proposed residential development.

FINDINGS: The environmental analysis provided in the attached Initial Study indicates that the proposed project will not result in any significant adverse unmitigable environmental impacts. The initial study identifies potentially significant effects, but:

- (1) Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and
- (2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

For these reasons, the City of Stanton determined that a *Mitigated Negative Declaration* is the appropriate CEQA document for the proposed project. The following findings may be made based on the analysis contained in the attached Initial Study:

- The proposed project *will not* have the potential to substantially degrade the quality of the



environment, substantially reduce the habitat of a fish or wildlife species, cause a fish/wildlife population to drop below self-sustaining levels, threaten to eliminate a plant/animal community, substantially reduce the number or restrict the range of a rare/endangered plant/animal or eliminate important examples of the major periods of California history or prehistory.

- The proposed project *will not* have impacts that are individually limited, but cumulatively considerable.
- The proposed project *will not* have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly.

The environmental analysis is provided in the attached Initial Study prepared for the proposed project. The project is also described in greater detail in the attached Initial Study.





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SECTION 1 INTRODUCTION

1.1 PURPOSE OF THIS INITIAL STUDY

The proposed project would include the construction of a 79-unit, multi-family residential development located at 12200 Beach Boulevard. The proposed 3.55-acre (154,470 square-foot) project site has a zoning designation of Commercial General (CG) with a General Mixed-Use Overlay (GLMX), which permits the construction of multi-family residential developments. The proposed multiple-family residential development will consist of 79-unit townhomes located within fifteen (15) separate buildings that will contain between four to six units in each building. The total floor area for the proposed multi-family residential development would be 123,805 square feet. In addition, the proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project applicant is responsible for the design, construction and completion of the parkette as part of their community benefit contribution. As a result, this parkette is an element of the proposed residential development.

The City of Stanton is the designated *Lead Agency* for the proposed project and will be responsible for the project's environmental review. Section 21067 of the Public Resources Code, part of the California Environmental Quality Act (CEQA) defines a Lead Agency as the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect on the environment.¹ The proposed development is considered to be a project pursuant to CEQA. As part of the proposed project's environmental review, the City of Stanton has authorized the preparation of this Initial Study.² Although this Initial Study was prepared with consultant support, the analysis, conclusions, and findings made as part of its preparation fully represent the independent judgement and analysis of the City of Stanton, in its capacity as the Lead Agency. The primary purpose of CEQA is to ensure that decision-makers and the public understand the environmental impacts of the proposed project and that the decision-makers have considered such impacts before considering approval of the project. Pursuant to the CEQA Guidelines, additional purposes of this Initial Study include the following:

- To provide the City of Stanton with information to use as the basis for deciding whether to prepare an Environmental Impact Report (EIR), mitigated negative declaration, or negative declaration for the proposed project;
- To facilitate the project's environmental assessment early in the design and development of the proposed project;
- To eliminate unnecessary EIRs; and,
- To determine the nature and extent of any impacts associated with the proposed project.
- To enable modification of the project to mitigate significant impacts of the project.

The City determined, as part of this Initial Study's preparation, that a *Mitigated Negative Declaration* is the appropriate document for the proposed project's environmental review pursuant to CEQA. This Initial Study and the *Notice of Intent to Adopt a Mitigated Negative Declaration* will be forwarded to responsible

¹ California, State of. *California Public Resources Code, Division 13, Chapter 2.5, Definitions*. as Amended 2001. §21067.

² Ibid. (CEQA Guidelines) §15050.



agencies, trustee agencies, and the public for review and comment. A 30-day public review period will be provided to allow these agencies and other interested parties to comment on the proposed project and the findings of this Initial Study.³³ Questions and/or comments should be submitted to the following contact at the City of Stanton:

Jennifer Lilley, AICP, Community and Economic Development Director
City of Stanton Planning Division
7800 Katella Avenue
Stanton, CA 90680
CommunityDevelopment@ci.stanton.ca.us

1.2 INITIAL STUDY'S ORGANIZATION

The following annotated outline summarizes the contents of this Initial Study:

- *Section 1 Introduction*, provides the procedural context surrounding this Initial Study's preparation and insight into its composition.
- *Section 2 Project Description*, provides an overview of the existing environment as it relates to the project site and describes the proposed project's physical and operational characteristics.
- *Section 3 Environmental Analysis*, includes an analysis of potential impacts associated with the construction and the subsequent operation of the proposed project.
- *Section 4 Findings*, indicates the conclusions of the environmental analysis and the Mandatory Findings of Significance. In addition, this section includes the Mitigation Monitoring and Reporting Program (MMRP).
- *Section 5 References*, identifies the sources used in the preparation of this Initial Study.

The Appendix includes the air quality impact analysis worksheets, noise measurement worksheets, and the traffic study.



³³ California, State of. Public Resources Code section 21091, subdivision (b).



SECTION 2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The proposed project is to construct a three-story multi-family residential development within a 3.55-acre (154,470 square-foot) site. The proposed multiple-family residential development would consist of 79-unit townhomes located within fifteen (15) separate buildings that will contain between four to six units in each building. The project site has a zoning designation of Commercial General (CG) with a General Mixed-Use Overlay (GLMX), which permits the construction of multi-family residential developments.⁴ In addition, the proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street.⁴The project applicant is responsible for the design, construction and completion of the parkette as part of their community benefit contribution. As a result, this parkette is an element of the proposed residential development. The project is described in greater detail in Section 2.4 herein.

2.2 PROJECT LOCATION

The project site is located within the *General Mixed-Use (GLMX)* boundaries of the City of Stanton which is located in the northwestern portion of Orange County. The City of Stanton is bounded to the north by the cities of Buena Park and Fullerton; to the east by the City of Anaheim; to the south by the City of Westminster and Garden Grove; and Cypress and Cerritos to the west.⁵ Major geographical features around the City include the Pacific Ocean approximately 7 miles southwest, Coyote Hills located approximately 8 miles north and the Anaheim and Chino Hills Mountains approximately 12 miles from the project site. The general topography of the project site and the surrounding area are level due to being part of the coastal plane. Regional access to the proposed project site is provided by two area highways: The Garden Grove Freeway (SR-22), which extends in an east to west orientation approximately 1.1 miles south of the proposed project site, and Beach Boulevard (SR-39), which extends in a north to south orientation adjacent to the proposed project site.⁶ The location of the proposed project shown in an area map is provided in Exhibit 2-1.

The project site's legal address is 12200 Beach Boulevard. The Assessor's Parcel Number (APN) that is applicable to the site is 131-422-20. Major roadways in the vicinity of the project site include Beach Boulevard, which extends along the project site's west side, and Chapman Avenue, which is located approximately 1,000 feet to the north of the project site. The Orangewood Parkette will be located at the terminus of Orangewood Avenue and Santa Rosalia Street. The corresponding Assessor's Parcel Number (APN) for the future park will be assigned. A local vicinity map is provided in Exhibit 2-2.

2.3 ENVIRONMENTAL SETTING

The proposed 3.55-acre (154,470 square-foot) project site is located within an urbanized area that has been previously developed for its current commercial land use by a recreational vehicle (RV) Help You Sell and ShareMyCoach RV Rental Company sales and storage lot. The majority of the property is paved over with asphalt, and ornamental landscaping on the premises.

⁴ WHA Architects, Planners, Designers. *Architectural Site Plan, Stanton Townhomes, 12200 Beach Boulevard, A1.10*. July 22, 2020.

⁵ Google Earth. Website accessed November 17, 2020. Field survey was completed on November 16, 2020.

⁶ Ibid.

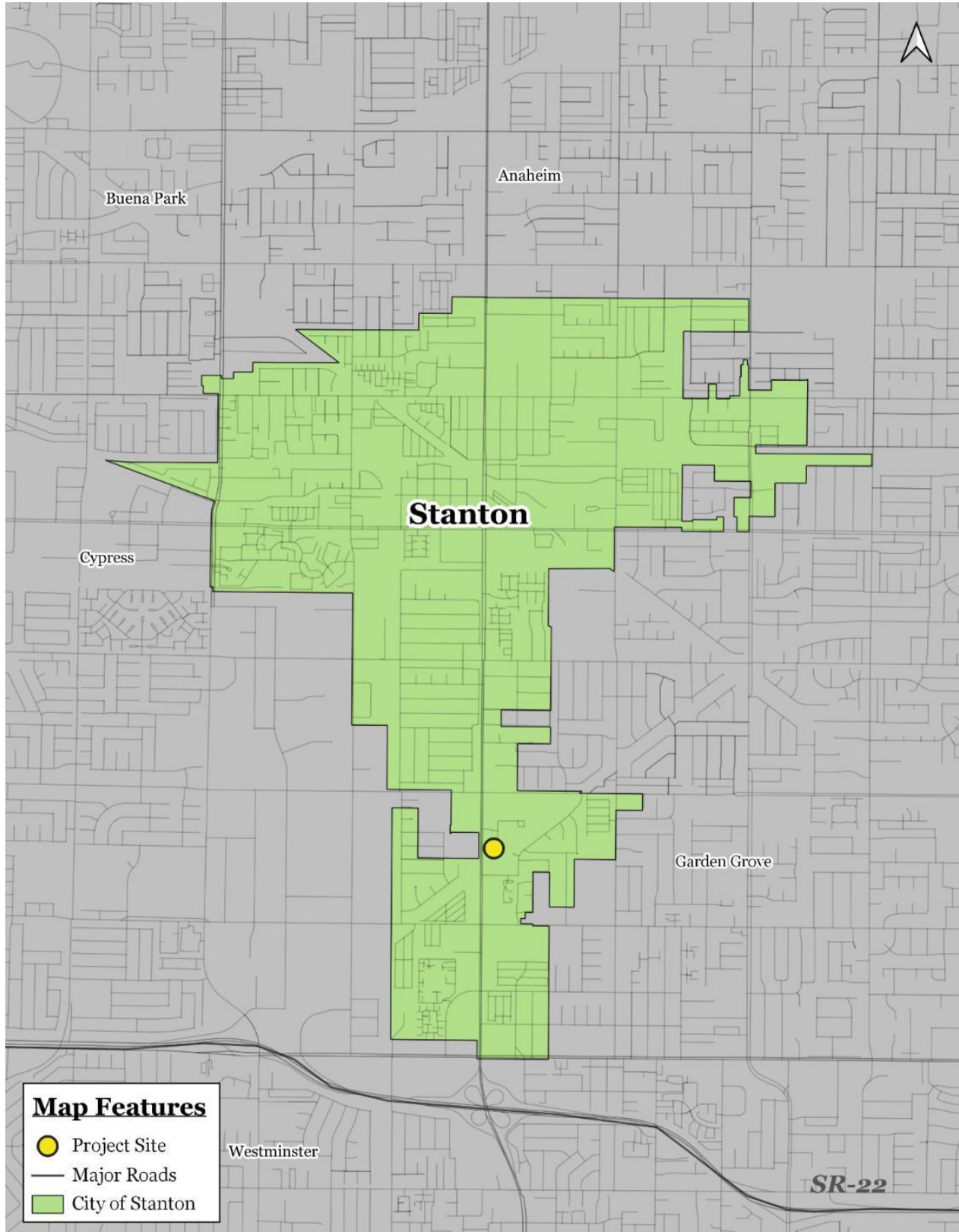


EXHIBIT 2-1
PROJECT SITE'S LOCATION IN STANTON

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING

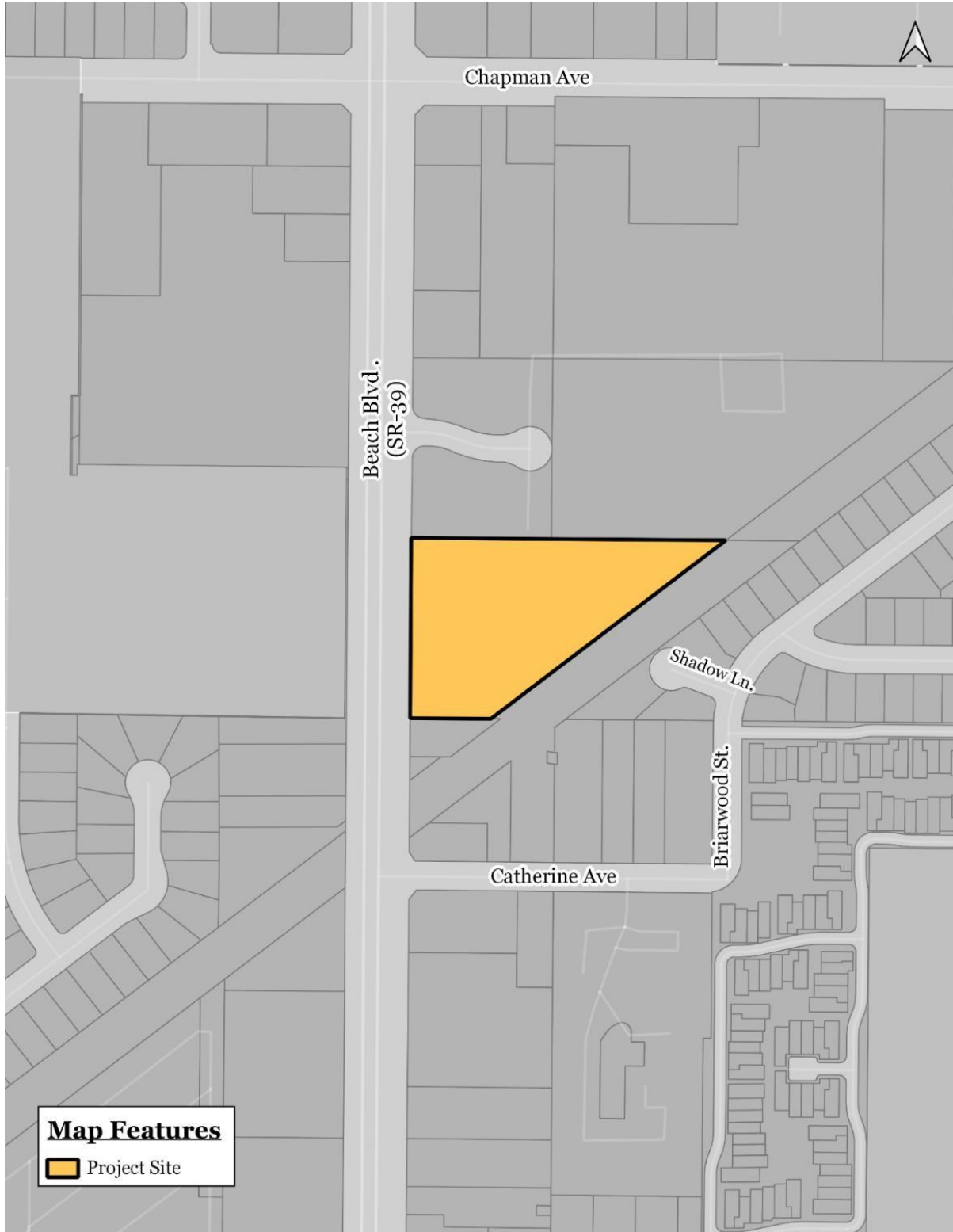


EXHIBIT 2-2 VICINITY MAP

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



The project site is located in the southern portion of the City of Stanton. Key land uses located in the vicinity of the proposed project site are outlined below⁷⁷:

- *North of the project site:* Adjacent to the north boundary of the proposed project site is a small commercial center comprised of a community health center, liquor store, dine-in restaurants, and other small commercial land uses. To the northeast is a multi-family residential apartment development that is separated from the project area with parking bordering the structures. Approximately 950-feet north of the proposed project site is the intersection of Beach Boulevard and Chapman Avenue.
- *South of the project site:* Immediately south of the project site is a commercial business, Beach Auto Glass shop. The Anaheim-Barber City Channel extends along the southern boundary of the proposed project site. A three-story mixed used development is currently under construction approximately 150 feet south of the proposed project site. Land uses southwest are a mix of commercial businesses, wholesale manufactured homes and multi-unit residential developments.
- *East of the project site:* To the east of the proposed project site, a 25-foot-wide access road divides the property line from the Anaheim-Barber City Channel. Land uses located to the east of this flood control channel consist of single-family residential land uses.
- *West of the project site:* Abutting west of the proposed project site is Beach Boulevard. Beach Boulevard (SR-39) is a regional eight-lane arterial roadway that extends in a north-to-south orientation connecting the City of Stanton to neighboring communities in Los Angeles and Orange County. Land uses to the west of the project site include a Home Depot, as well as multi-residential uses, churches uses and single-family further west.

The project site is currently occupied by an RV rental commercial business, ShareMyCoach (12200 Beach Boulevard). The project site is shared with another commercial rental business, RV Help You Sell (12200 Beach Boulevard).⁸⁸ An aerial photograph of the project site and the surrounding area is provided in Exhibit 2-3. Photographs of the site are provided in Exhibits 2-5 and 2-6. Additionally, a site plan of the proposed Orangewood Parkette is provided in Exhibit 2-4.

2.4 PROJECT DESCRIPTION

2.4.1 PHYSICAL CHARACTERISTICS OF THE PROPOSED PROJECT

Key project elements are summarized below and on the following pages:

- *Project Site.* The proposed multiple-family residential development will consist of 79-unit townhomes located within fifteen (15) separate buildings that will contain between four to six-plex units in each building configuration. The buildings will be arranged around a central courtyard area. The overall density of the proposed project would be 22.28 dwelling units per acre.⁹

⁷ Google Earth. Website accessed November 17, 2020. Field survey was completed on November 16, 2020.

⁸ Ibid.

⁹ WHA Architects, Planners, Designers. *Architectural Site Plan, Stanton Townhomes. 12200 Beach Boulevard. A1.10.* July 22, 2020.

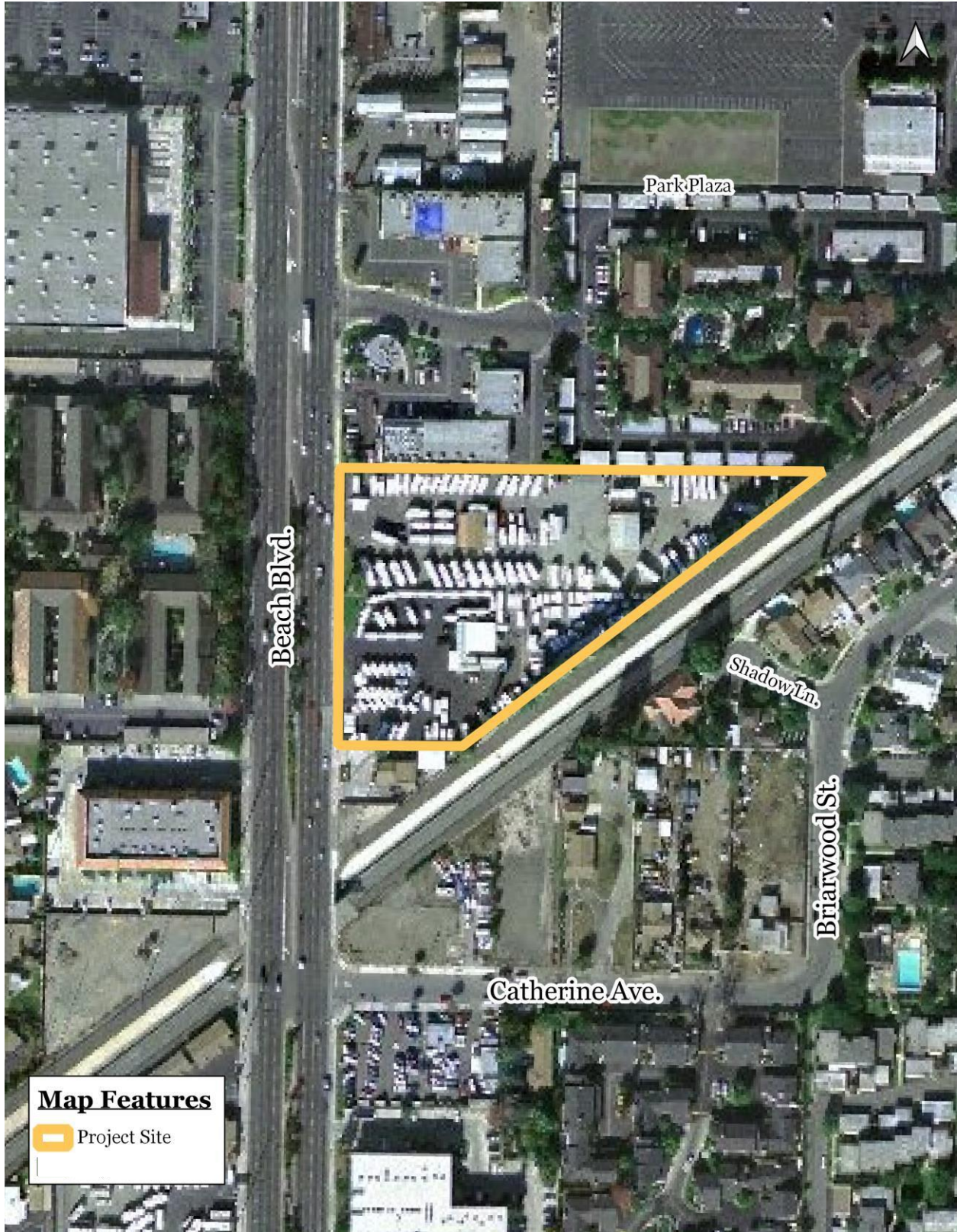


EXHIBIT 2-3
AERIAL PHOTOGRAPH
SOURCE: GOOGLE MAPS



EXHIBIT 2-4
PARKETTE CONCEPTUAL SITE PLAN
 SOURCE: Bonanni Development



View 1: View looking north toward the site across Beach Boulevard.



View 2: View looking south from the site.

EXHIBIT 2-5
PHOTOGRAPHS OF THE PROJECT SITE
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



View 3: View looking east with the Anaheim-Barber Channel in the central view.



Figure 4: View of the project site looking north across the Anaheim-Barber Channel (in the foreground).

EXHIBIT 2-6
PHOTOGRAPHS OF THE PROJECT SITE
SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



- *Proposed Building.* The proposed residential building floor area will be a total of 123,805 square feet. The proposed three-story, 79-unit townhome development would consist of twelve (12) one-bedroom units, seven (7) two-bedroom units, and sixty (60) three-bedroom units with a proposed maximum building height of thirty-seven (37) feet. Ten percent of the units (8 units) will be reserved for moderate income households pursuant to the Stanton Municipal Code, Chapter 20, Section 330.¹⁰
- *Parking.* The one-bedroom units provide one ground level, enclosed parking space each. Each two and three-bedroom unit would be provided two ground level, enclosed parking spaces (146 spaces in total). A total of 56 open, off-street parking spaces will be provided along the project site’s south side in addition to the 146-garage parking spaces (per unit size). As required, a total of 3 spaces will be provided that are ADA accessible.¹¹
- *Access and Circulation.* The only public access will be provided by a gated entrance located at the southernmost portion of the site on Beach Boulevard. For emergency access, a secondary gated entrance will be provided on the northern portion of the site along Beach Boulevard. Internal circulation will be facilitated by a 25-foot-wide drive aisle that will provide access to the individual units. Lighting for this project will be provided by FX luminaire fixtures for surface mounting, tight fitting areas and walking paths. Additionally, pole lights and LED string lights will be installed.
- *Open Space and Landscaping.* Open space will total 34,381 square feet in the form of street trees, ornamental shrubs and ground cover and vines. This open space will be provided along the Beach Boulevard frontage, around the individual buildings, and in the central portion of the development. The Applicant is proposing an affordable component to the project by applying for an allowable concession and proposing an alternative development standard that would conform to the City of Stanton Municipal Code Section 20.330.040 (Affordability and Density Bonus). The community benefit is the affordable units being proposed.
- *Utilities.* The Golden State Water District (GSWD) West Orange County System would continue to provide water services to the proposed project site. The proposed project would utilize existing curbs and gutters in adjacent roadways for stormwater runoff collection (storm drain facilities are owned and maintained by the City’s Public Works Department).

The proposed project is summarized in Table 2-1, which is shown below. The proposed site plan is shown in Exhibit 2-7 and the building elevations are provided in Exhibit 2-8 and 2-9.

**Table 2-1
 Project Summary Table**

Project Element	Description
Site Area	154,470 sq. ft. (3.5 acres)
No. of Units	79 Condominium Units
Total Building Floor Area	123,805 sq. ft.
Floor Area Ratio (FAR)	FAR: 0.80
Maximum Building Height	37 ft.
Landscaping	52,764 sq. ft.
Parking	202 spaces

SOURCE: BONANNI DEVELOPMENT

¹⁰ WHA Architects, Planners, Designers. *Architectural Site Plan, Stanton Townhomes. 12200 Beach Boulevard. A1.10.* July 22, 2020.

¹¹ Ibid.



EXHIBIT 2-7
SITE PLAN OF PROJECT
SOURCE: BONANNI DEVELOPMENT



REAR



RIGHT



LEFT



FRONT



REAR



RIGHT



LEFT



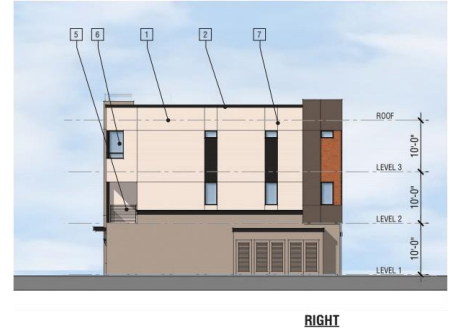
FRONT
 AT BUILDINGS #10,12,15

EXHIBIT 2-8 PROJECT ELEVATIONS

SOURCE: BONANNI DEVELOPMENT



REAR



RIGHT



LEFT



FRONT

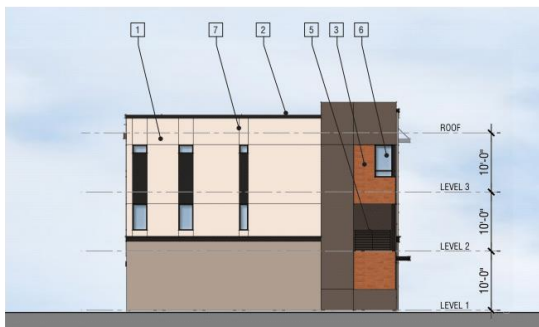
See Sheet A2.33 for Front Elevation



REAR



RIGHT



LEFT



FRONT

EXHIBIT 2-9
PROJECT ELEVATIONS
 SOURCE: BONANNI DEVELOPMENT



2.4.2 OPERATIONAL CHARACTERISTICS OF THE PROPOSED PROJECT

The proposed project would consist of a 79-unit townhome development, comprised of twelve (12) one-bedroom units, seven (7) two-bedroom units, and sixty (60) three-bedroom units with a maximum building height of thirty-seven (37) feet. These units would be “for sale” owner-occupied units. In addition, ten percent of the total number of units or eight (8) units, would be reserved for moderate income households. Assuming an average household size of 3.38 persons per household, which corresponds to the most recent U. S. Census estimates for the City of Stanton, the proposed development would potentially house up to 267 residents.¹²

2.4.3 CONSTRUCTION CHARACTERISTICS

The total land area to be developed during the construction of the proposed project is a 3.55-acre (154,470 square-foot) parcel, located near the intersection of Beach Boulevard and Chapman Avenue in the City of Stanton. The construction for the proposed project would take approximately twelve months to complete. The construction is anticipated to commence in the beginning of 2022. The key construction phases are outlined below:

- *Phase 1 - Grading.* The project site would be graded and readied for construction. This phase would require one month to complete.
- *Phase 2 - Site Preparation.* During this phase, the building footings, utility lines, and other underground infrastructure would be installed. This phase would require one month to complete.
- *Phase 3 - Vertical Construction.* The new buildings would be constructed during this phase. This phase will take approximately seven months to complete.
- *Phase 4 - Paving and Finishing.* This phase will involve the paving of the site. This phase will take approximately two months to complete.
- *Phase 5 – Landscaping and Finishing.* This phase will involve the installation of landscaping and the completion of the on-site improvements. This phase will take approximately one month to complete.

2.4.4 DESCRIPTION OF PROPOSED PARKETTE

The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. No wastewater connections will be required though water connections will be required for irrigation. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. The conceptual design for the Orangewood Parkette includes play structures, a bike rack, seating, trees, and a shaded picnic table.

¹² United States Bureau of the Census, Quick facts [for the] City of Stanton, California.



Key safety implementation measures are outlined below:

- The installation of a second guardrail that is in-line with the westerly curb of Santa Rosalia Street;
- The installation of additional warning signage on the guardrail;
- The installation of louvers on the traffic lights at Orangewood Avenue; and,
- The installation of an oversized, solar-powered blinking stop sign; and “Stop Ahead” stenciling westbound on Orangewood.

2.5 DISCRETIONARY ACTIONS

A lead agency issues a discretionary approval when the approval requires the exercise of judgement or deliberation, as distinguished from situations where the lead agency merely has to determine whether there has been conformity with applicable statutes or fixed standards. The City of Stanton is the lead agency for the proposed project, and the project will require the following discretionary approvals from the City:

- The Approval of the Site Plan and Design Review SPDR– 811;
- The Approval of the Conditional Use Permit (CUP) 20-04, for a stand-alone residential project in the Mixed-Use zone;
- Planned Development Permit (PDP) 20-07, for projects between 51-500 units;
- Development Agreement (DA) 20-04, for project requiring a PDP;
- Tentative Tract Map (TTM) 20-06, for subdivision of land for condominium purposes TTM; and,
- Mitigated Negative Declaration (MND); and the Adoption of a Mitigation Monitoring and Reporting Program.

Other City nondiscretionary permits include:

- Demolition permits, grading permits, building permits, and occupancy permits issued by the City of Stanton.

Other permits required by responsible agencies will also include:

- National Pollutant Discharge Elimination System (NPDES) Construction permit issued by California State Water Resources Control Board;
- General and Operations Permit issued by the Santa Ana Regional Water Quality Control Board (SWRCB);
- A Construction Permit issued by the South Coast Air Quality Management District (SCAQMD); and,
- An encroachment permit from Caltrans for the Beach Boulevard driveways.





SECTION 3 ENVIRONMENTAL ANALYSIS

This initial study is prepared in compliance with the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21000, et seq. and the State CEQA Guidelines (California Code of Regulations Section 15000, et seq.). Specifically, the preparation of an Initial Study is guided by Section 15063 of the State CEQA Guidelines. This format of the study is presented as follows. The project is evaluated based on its effect on 21 major categories of environmental factors. Each factor is reviewed by responding to a series of questions regarding the impact of the project on each element of the overall factor. The Initial Study checklist provides a formatted analysis that provides a determination of the effect of the project on the factor and its elements. The effect of the project is categorized into one of the following four categories of possible determinations:

- *No Impact*: No impacts are identified or anticipated, and no mitigation measures are required.
- *Less than Significant Impact*: No significant adverse impacts are identified or anticipated, and no mitigation measures are required.
- *Less than Significant Impact with Mitigation*: Possible significant adverse impacts have been identified or anticipated and the following mitigation measures are required as a condition of project approval to reduce these impacts to a level below significant. The required mitigation measures are: (List of mitigation measures)
- *Potentially Significant Impact*: Significant adverse impacts have been identified or anticipated. An Environmental Impact Report (EIR) is required to evaluate these impacts, which are (List of the impacts requiring analysis within the EIR).

At the end of the analysis the required mitigation measures are restated and categorized as being either self-monitoring or as requiring a Mitigation Monitoring and Reporting Program.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below will be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use/ Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation / Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities / Service Systems | <input type="checkbox"/> Wildfire | <input type="checkbox"/> Mandatory Findings of Significance |



DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation, the following finding is made:

<input type="checkbox"/>	The proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION shall be prepared.
<input checked="" type="checkbox"/>	Although the proposed project could have a significant effect on the environment, there shall not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION shall be prepared.
<input type="checkbox"/>	The proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	The proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	Although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

 Signature (prepared by)

 Date





3.1 AESTHETICS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project have a substantial adverse effect on a scenic vista?				✘
B. Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?				✘
C. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly accessible vantage point)? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				✘
D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			✘	

3.1.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project have a substantial adverse effect on a scenic vista? • No Impact*

There are no major physiographic features within the vicinity of the project site. Distant views of the Chino Hills and Anaheim Mountains approximately 12 miles to the northeast are obscured by existing commercial and residential developments as well as above ground utility lines located adjacent to Beach Boulevard. The proposed three-story townhome development would have a maximum building height of thirty-seven (37) feet. This development would not affect distant mountain views from nearby developments or the public-right-of-way. The proposed development of the parkette would not require any significant vertical construction that will obstruct any surrounding views. Additionally, the City of Stanton’s General Plan does not list any scenic views within the City. As a result, no impacts will occur.

B. *Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? • No Impact.*

According to the California Department of Transportation (Caltrans), the proposed project site is not located near a designated State or County designated scenic highway. The closest designated scenic highway to the project site is a 16-mile segment of the Pacific Coast Highway (SR-1) located approximately 7 miles to the southwest of the project site. The project site is paved over in its entirety and previously developed for its current commercial land use with no trees, significant rock outcroppings, or existing structures. The project site does not contain any buildings listed in the State or National registrar (refer to the discussion under Cultural Resources). Additionally, the parkette is currently paved over with asphalt and will require limited excavation for the installation of the new turf. As a result, no impacts will occur.



- C. In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from a publicly accessible vantage point)? If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? • No Impact*

The proposed project site is located in an urbanized area and surrounded by commercial and residential land uses. Distant views of the Chino Hills and Anaheim Mountains approximately 12 miles to the northeast are obscured by existing commercial and residential developments as well as above ground utility lines located adjacent to Beach Boulevard. The proposed three-story townhome development would have a maximum building height of thirty-seven (37) feet. The new project would not affect distant mountain views from nearby developments or the public-right-of-way. Furthermore, the proposed development would conform to the applicable development standards within the Municipal Code Chapter 20.530, Site Plan and Design Review. According to the proposed design plan, the development of the parkette would enhance the visual character of the immediate area due to limited excavation and the open space character of the new parkette. The proposed project will not obstruct any views from a public vantage point. As a result, no impacts will occur.

- D. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? • Less than Significant Impact*

Exterior lighting can be a nuisance to adjacent land uses that are sensitive to this lighting. This nuisance lighting is referred to as light trespass, which is typically defined as the presence of unwanted light on properties located adjacent to the source of lighting. A high level of nighttime illumination already exists along Beach Boulevard due to the degree of development in the vicinity of the project area. Project-related sources of nighttime light would be typical of that associated with residential land uses, including parking area lighting, security lighting, and vehicular headlights. Light sensitive land uses that are located in close proximity to the project site include the Beach Creek Resort Apartments, located opposite the project site on the west side of Beach Boulevard; the Su Casa Apartments and the Park Plaza Apartment located to the north of the project site; and a single-family residential neighborhood located to the south side of the project site on the south side of the Anaheim-Barber City Channel. The proposed development of the Orangewood Parkette is adjacent to residential developments on the northern and southern sides. To the west of the project site is vacant land that is closed off by a permanent wall and secondary fencing due to the presence of functional railroad tracks. The City of Stanton Municipal Code Section 20.300.080, Outdoor Light and Glare, includes the following requirements that are designed to minimize the impacts of outdoor lighting on sensitive uses.

- Outdoor lighting fixtures shall be designed, shielded, aimed, located, and maintained to shield adjacent properties and to not produce glare onto adjacent properties or roadways.
- Parking lot light fixtures and light fixtures on buildings shall be full cut-off fixtures.
- In parking lots, light fixture poles shall not be more than 30 feet in height and lamps shall be high pressure sodium (HPS).
- Street lighting shall be provided in compliance with the requirements of the Department of Public Works.



- Flashing, revolving, or intermittent exterior lighting visible from any lot line or street shall be prohibited, except if approved as an accessory feature on a temporary basis in conjunction with a Temporary Use Permit issued in compliance with Municipal Code Chapter 20.540, Temporary Use Permits, Annual Advertising Permits and Special Event Permits.
- Pursuant to Municipal Code Section 20.300.080, the average-maintained lighting levels for the proposed project shall not exceed 0.5 foot-candles at lot line boundaries and 1.0 foot-candles at buildings, parking lots, or other areas. The maximum-to-average ratio shall not exceed 2.5 to 1. Additionally, the project's light sources would be similar to those of the surrounding land uses.

As previously indicated, the project Applicant will be required to adhere to the abovementioned policies and regulations governing light and glare. Additionally, uses being incorporated within this project would be consistent with surrounding land uses. As a result, the potential impacts are considered to be less than significant.

3.1.2 CUMULATIVE IMPACTS

The potential for cumulative aesthetic impacts is typically site specific. Due to the surrounding area being largely developed, the lighting associated with the projects developments and structures would not substantially increase light and glare in the vicinity of both the project sites. Compliance with Municipal Code regulations would ensure light and glare impacts are less than significant. Potential light-trespass impacts resulting from lighting would be minimized through compliance with all pertinent development standards.

3.1.3 MITIGATION MEASURES

The preceding analysis indicated that the projects aesthetic impacts would be less than significant. As a result, no mitigation measures are required.



EXHIBIT 3-1
ARCHITECTURAL ELEVATION
SOURCE: BONANNI DEVELOPMENT



3.2 AGRICULTURE & FORESTRY RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses?				✘
B. Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract?				✘
C. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?				✘
D. Would the project result in the loss of forest land or conversion of forest land to a non-forest use?				✘
E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to a non-forest use?				✘

3.2.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural uses? • No Impact.*

According to the California Department of Conservation, both of the proposed project sites (the proposed residential development and the parkette) do not contain any areas of Farmland of Statewide Importance, and no agricultural uses are located onsite or adjacent to the properties. The implementation of the proposed projects would not involve the conversion of any prime farmland, unique farmland, or farmland of statewide importance to urban uses. As a result, no impacts will occur.¹¹

B. *Would the project conflict with existing zoning for agricultural uses, or a Williamson Act Contract? • No Impact.*

According to the California Department of Conservation Division of Land Resource Protection, neither the Stanton Townhomes nor the Orangewood Parkette projectsites are subject to a Williamson Act Contract.¹² As a result, no impacts on existing Williamson Act Contracts will result from the proposed project's implementation.

¹¹ California Department of Conservation, Division of Land Resource Protection, Farmland Mapping, and Monitoring Program. *California Important Farmland Finder*.

¹² California Department of Conservation. *State of California Williamson Act Contract Land*. <http://ftp.consrv.ca.gov/>



- C. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?* • *No Impact.*

The City of Stanton and the proposed project site are located within a larger built-up urban area. Specifically, the project site is zoned for *General Mixed-Use (GLMX)* land uses and is surrounded by urban development. Additionally, the proposed parkette project site is located within an established *Single-Family Residential (RL)* zone. As a result, no impacts on forest land or timber resources will result from the proposed projects implementation.

- D. Would the project result in the loss of forest land or conversion of forest land to a non-forest use?* • *No Impact.*

No forest lands are found within the project sites or the adjacent properties. As stated previously, the project sites are located within the *General Mixed-Use (GLMX)* and *Single-Family Residential (RL)* zones and are surrounded by urban and residential development. The land use designation that is applicable to the project sites do not provide for the forest land protection. Therefore, no loss or conversion of existing forest lands will result from implementation of the proposed projects. As a result, no impacts will occur.

- E. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to a non-forest use?* • *No Impact.*

The proposed projects would not involve the disruption or damage to the existing environment that results in a loss of farmland to nonagricultural use or conversion of forest land to non-forest use because the project sites are not located in close proximity to farmland or forest land. As a result, no impacts will occur.

3.2.2 CUMULATIVE IMPACTS

As indicated in the previous section, both the Stanton Townhomes and Orangewood Parkette projects do not include any farmland uses or forest resources. As a result, the proposed projects implementation will not lead to a cumulative loss of farmland or forest land resources and no cumulative impacts will occur.

3.2.3 MITIGATION MEASURES

The analysis of agricultural and forestry resources indicated that no impact on these resources would occur as part of the proposed projects implementation. As a result, no mitigation is required.



3.3 AIR QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with or obstruct implementation of the applicable air quality plan?			✘	
B. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard?			✘	
C. Would the project expose sensitive receptors to substantial pollutant concentrations?			✘	
D. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?				✘

3.3.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project conflict with or obstruct implementation of the applicable air quality plan? • Less Than Significant Impact.*

The project sites and the City of Stanton are located within the South Coast Air Basin (SCAB). The SCAB covers a 6,600 square mile area within Orange County and the non-desert portions of Los Angeles County, Riverside County, and San Bernardino County. Air quality in the SCAB is monitored by the South Coast Air Quality Management District (SQAQMD) at various monitoring stations throughout the area. Measures to improve regional air quality are outlined in the SQAQMD’s Air Quality Management Plan (AQMP). The most recent AQMP was adopted in 2017 and was jointly prepared with the California Air Resources Board (CARB) and the Southern California Association of Governments (SCAG). The AQMP will help the SQAQMD maintain focus on the air quality impacts of major projects associated with goods movement, land use, energy efficiency, and other key areas of growth. The SQAQMD has established quantitative thresholds of significance for the following criteria of pollutants:

- *Ozone (O₃)* is a nearly colorless gas that irritates the lungs, damages materials, and vegetation. Ozone is formed by photochemical reaction (when nitrogen dioxide is broken down by sunlight).
- *Carbon Monoxide (CO)* is a colorless, odorless toxic gas that interferes with the transfer of oxygen to the brain and is produced by the incomplete combustion of carbon-containing fuels emitted as vehicle exhaust.
- *Nitrogen Oxide (NO_x)* is a yellowish-brown gas, which at high levels can cause breathing difficulties. NO_x is formed when nitric oxide (a pollutant from burning processes) combines with oxygen.
- *Sulfur Dioxide (SO₂)* is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms.



- *PM₁₀ and PM_{2.5}* refers to particulate matter less than ten microns and two and one-half microns in diameter, respectively. Particulates of this size cause a greater health risk than larger-sized particles since fine particles can more easily cause irritation.
- *Reactive Organic Gasses (ROG)* refers to organic chemicals that, with the interaction of sunlight photochemical reactions may lead to the creation of “smog.”

Projects in the South Coast Air Basin (SCAB) generating construction-related emissions that exceed any of the following emissions thresholds are considered to be significant under CEQA:

- 75 pounds per day of reactive organic compounds;
- 100 pounds per day of nitrogen oxides;
- 550 pounds per day of carbon monoxide;
- 150 pounds per day of PM₁₀;
- 55 pounds per day of PM_{2.5}; or,
- 150 pounds per day of sulfur oxides.

A project would have a significant effect on air quality if any of the following operational-related emissions thresholds for criteria pollutants are exceeded:

- 55 pounds per day of reactive organic compounds;
- 55 pounds of nitrogen oxides;
- 550 pounds per day of carbon monoxide;
- 150 pounds per day of PM₁₀;
- 55 pounds per day of PM_{2.5}; or,
- 150 pounds per day of sulfur oxides.

According to the SCAQMD, a project is non-conforming if it conflicts with, or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts may be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area relative to the applicable land use plan.¹⁴

The proposed project involves the construction of a 79-unit multi-family residential development located at 12200 Beach Boulevard, near the intersection of Beach Boulevard and Chapman Avenue in the City of Stanton. The proposed 3.55-acre (154,470 square-foot) project site has a General Plan and Zoning designation for *General Mixed-Use (GLMX)* land uses, which permits the construction of multi-family

¹⁴ South Coast Air Quality Management District (SCAQMD). *California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*. Report dated August 2016.



residential developments. The proposed three-story townhomes would consist of twelve (12) one-bedroom units, seven (7) two-bedroom units, and sixty (60) three-bedroom units for a total of seventy-nine (79) new townhome units with a total building footprint of 123,805 square feet.

Projects that are consistent with the projections of employment and population forecasts identified in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) prepared by SCAG are considered consistent with the SCAQMD growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the SCAQMD. According to the Growth Forecast Appendix prepared by SCAG for the 2016-2040 RTP/SCS, the City of Stanton is projected to add a total of 2,900 new residents and 1,300 new employees through the year 2040.¹⁵ The proposed residential development is projected to add 267 new residents to the City. This figure assumes 3.38 people per household, which is the average household size in the City of Stanton according to the U.S. Census. This number of new residents is well within SCAG's population projections for the City of Stanton (refer to the analysis included in the next section where construction emissions are summarized in Table 3-2). In addition, the proposed project's long-term (operational) airborne emissions will be below levels that the SCAQMD considers to be a significant impact (the long-term stationary and mobile emissions for the proposed project are summarized in Table 3-3). Additionally, due to the nature of the parkette project, it would not contribute to an increase of residential population and does not interfere with SCAG growth projections set by the City. Therefore, the proposed project will not conflict with or obstruct implementation of the applicable air quality plan and as a result, the impacts will be less than significant.

B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? • Less than Significant Impact.

According to the SCAQMD, a project results in a significant impact if it triggers or exceeds the SCAQMD daily emissions threshold identified previously and noted at the bottom of Tables 3-1 and 3-2. In general, a project will have the potential for a significant air quality impact if the project:

- Generates total emissions (direct and indirect) that exceeds the SCAQMD thresholds (the proposed project emissions are less than the thresholds as indicated in Tables 3-1 and 3-2);
- Results in a violation of any ambient air quality standard when added to the local background (the proposed project will not result, in any violation of these standards);
- Does not conform with the applicable attainment or maintenance plan(s) (the proposed project is also in conformance with the City's Zoning and General Plan designations); and,
- Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1 (the proposed project will not expose sensitive receptors to substantial pollutant concentrations nor is the site located near any sensitive receptors).

The proposed project's construction and operation will not lead to a violation of the above-mentioned criteria. The analysis of daily construction and operational emissions was estimated using the California Emissions Estimator Model (CalEEMod V.2020.4.0). For air quality modeling purposes, a twelve-month

¹⁵ SCAG 2016 RTP/SCS Demographics and Growth Forecast Appendix. December 2015.
http://scagrtpscsc.net/Documents/2016/draft/d2016RTPSCS_DemographicsGrowthForecast.pdf



period of construction for all five phases was assumed. The daily construction emissions are shown in Table 3-1 and operational emissions in pounds per day are shown in Table 3-2.

**Table 3-1
 Estimated Daily Construction Emissions**

Construction Phase	ROG	NO_x	CO	SO₂	PM₁₀	PM_{2.5}
Site Preparation (on-site)	3.17	33.08	19.70	0.04	21.27	11.59
Site Preparation (off-site)	0.06	0.04	0.68	--	0.20	0.05
Total Site Preparation	3.23	33.12	20.38	0.04	21.47	11.64
Grading (on-site)	1.95	20.85	15.27	0.03	8.02	4.29
Grading (off-site)	0.05	0.04	0.57	--	0.17	0.04
Total Grading	2.00	20.89	15.84	0.03	8.19	4.33
Building Construction (on-site)	1.71	15.62	16.36	0.03	0.81	0.76
Building Construction (off-site)	0.33	0.83	3.58	0.01	1.09	0.30
Total Building Construction	2.04	16.45	19.94	0.04	1.90	1.06
Paving (on-site)	0.92	8.79	12.19	0.02	0.44	0.40
Paving (off-site)	0.06	0.04	0.70	--	0.22	0.06
Total Paving	0.98	8.83	12.89	0.02	0.66	0.46
Architectural Coating (on-site)	43.23	1.30	1.81	--	0.71	0.71
Architectural Coating (off-site)	0.06	0.04	0.63	--	0.20	0.05
Total Architectural Coating	43.29	1.34	2.44	--	0.91	0.76
Maximum Daily Emissions	43.29	33.13	21.16	0.04	21.47	11.64
Daily Thresholds	75	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod V.2020.4.0.

The maximum daily construction emissions derived from the CalEEMod are compared to the SCAQMD's thresholds in Table 3-1. As indicated in Table 3-1, the maximum daily construction emissions would be significantly below the SCAQMD thresholds. Nevertheless, the Applicant and/or the contractors will be required to comply with SCAQMD Rule 402 (nuisance odors) and SCAQMD Rule 403 (fugitive dust). These two SCAQMD Rules require the implementation of Best Available Control Measures (BACMs) for each fugitive dust source, and the Best Available Control Technologies (BACTs) for area sources and point sources. The BACMs and BACTs would include the following;

- *Fugitive Dust Prevention.* The Applicant/Contractors shall ensure that watering of the site or other soil stabilization method shall be employed on an on-going basis after the initiation of any grading activity on the site. Portions of the site that are actively being graded shall be watered regularly (at least twice a day).
- *Erosion Prevention.* The Applicant/Contractors shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon. The Applicant/Contractors shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion. The Applicant/Contractors shall ensure that all grading activities are suspended during first and second stage ozone episodes or when winds exceed 25 miles per hour.



- *Equipment Emissions.* During Construction, exhaust emissions from construction vehicles and equipment and fugitive dust generated by equipment traveling over exposed surfaces, would increase NOx and PM10 levels in the area.

Long-term emissions refer to those air quality impacts that will occur once the proposed project has been constructed and is operational. These impacts will continue over the operational life of the project. The two main sources of operational emissions include mobile emissions and area emissions related to off-site electrical generation. The analysis of long-term operational impacts summarized in Table 3-2 also used the CalEEMod V.2020.4.1 computer model. The analysis summarized in Table 3-2 indicates that the operational (long-term) emissions will be below the SCAQMD daily emissions thresholds.

Table 3-2
Estimated Operational Emissions in lbs./day

Emission Source	ROG	NOx	CO	SO2	PM10	PM2.5
Area-wide (lbs./day)	35.41	2.68	73.17	0.16	9.51	9.51
Energy (lbs./day)	0.06	0.52	0.52	--	0.04	0.04
Mobile (lbs./day)	2.96	3.15	30.12	0.07	7.30	1.98
Total (lbs./day)	38.4	6.35	103.5	0.23	16.86	11.53
Daily Thresholds	55	55	550	150	150	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod V.2020.4.0.

The potential long-term (operational) and short-term (construction) emissions associated with the proposed project’s implementation are compared to the SCAQMD’s daily emissions threshold in Table 3-1 and 3-2, respectively. As indicated in these tables, the short and long-term emissions will not exceed the SCAQMD daily thresholds. Adherence to the above SCAQMD rules will further reduce the potential construction related impacts to levels that are less than significant.

C. Would the project expose sensitive receptors to substantial pollutant concentrations? • Less than Significant Impact.

The SCAQMD requires that CEQA air quality analyses determine whether a proposed project would result in an exceedance of localized emissions thresholds or localized standard thresholds (LSTs). LSTs only apply to short-term (construction) and long-term (operational) emissions at a fixed location and do not include off-site or area-wide emissions. The approach used in the analysis of the proposed project utilized a number of screening tables that identified maximum allowable emissions (in pounds per day) at a specific distance to a receptor. The pollutants that are the focus of the LST analysis include the conversion of NO_x to NO₂; carbon monoxide (CO) emissions from construction; PM₁₀ emissions from construction; and PM_{2.5} emissions from construction. According to the SCAQMD, residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive receptor land uses. Furthermore, fugitive dust emission, which is responsible for PM10 and PM2.5 emissions, will further be reduced through the implementation of SCAQMD regulations related to fugitive dust generation and other construction-related emissions. These SCAQMD regulations are standard conditions required for every construction project undertaken in the City of Stanton as well as in the cities and counties governed by the SCAQMD.



The nearest sensitive receptors are located approximately 75 feet to the northeast of the project site. The sensitive receptors are shown in Exhibit 3-2. For purposes of the LST analysis, the receptor distance used was 25 meters since sensitive receptors are located approximately 25 meters from the site. The thresholds for five acres were selected for the project even though the project site encompasses 3.55 acres.

**Table 3-3
 Local Significance Thresholds Exceedance SRA 17 for 5-Acre Sites
 (the site is 3.55 acres)**

Emissions	Project Emissions (lbs./day)	Type	Allowable Emissions Threshold (lbs/day) and a Specified Distance from Receptor (in meters)				
			25	50	100	200	500
NO ₂	33.13	Construction	183	167	180	202	245
CO	21.16	Construction	1,053	1,734	2,498	4,018	9,336
PM ₁₀	21.47	Construction	3	10	14	22	45
PM _{2.5}	11.64	Construction	2	3	4	8	27

The emissions generated by the construction of the proposed project will not exceed the LSTs identified above in Table 3-3. Based on the analysis of LST impacts summarized above in Table 3-3, the potential impacts will be less than significant. Further analysis indicated that the primary source of construction PM emissions is fugitive dust. Adherence to the SCAQMD’s Rule 403 will reduce fugitive dust emissions to levels that are less than significant.

D. Would the project result in other emissions (such as odors or dust) adversely affecting a substantial number of people? • Less than Significant Impact.

The SCAQMD has identified land uses that are typically associated with odor complaints. These uses include activities involving livestock, rendering facilities, food processing plants, chemical plants, composting activities, refineries, landfills, and businesses involved in fiberglass molding.¹⁴ The proposed residential development will not be involved in any of the aforementioned odor-generating activities. Future construction-related trucks must adhere to Title 13 - §2485 of the California Code of Regulations, which limits the idling of diesel-powered vehicles to less than five minutes. Adherence to the aforementioned standard condition will minimize odor impacts from diesel trucks. In addition, the project’s contractors must adhere to SCAQMD Rule 403 regulations, which significantly reduces the generation of fugitive dust. Adherence to Rule 403 Regulations and Title 13 - §2485 of the California Code of Regulations will reduce potential impacts to levels that are less than significant.

¹⁴ South Coast Air Quality Management District. *CEQA Air Quality Handbook, Appendix 9*. As amended 2017.

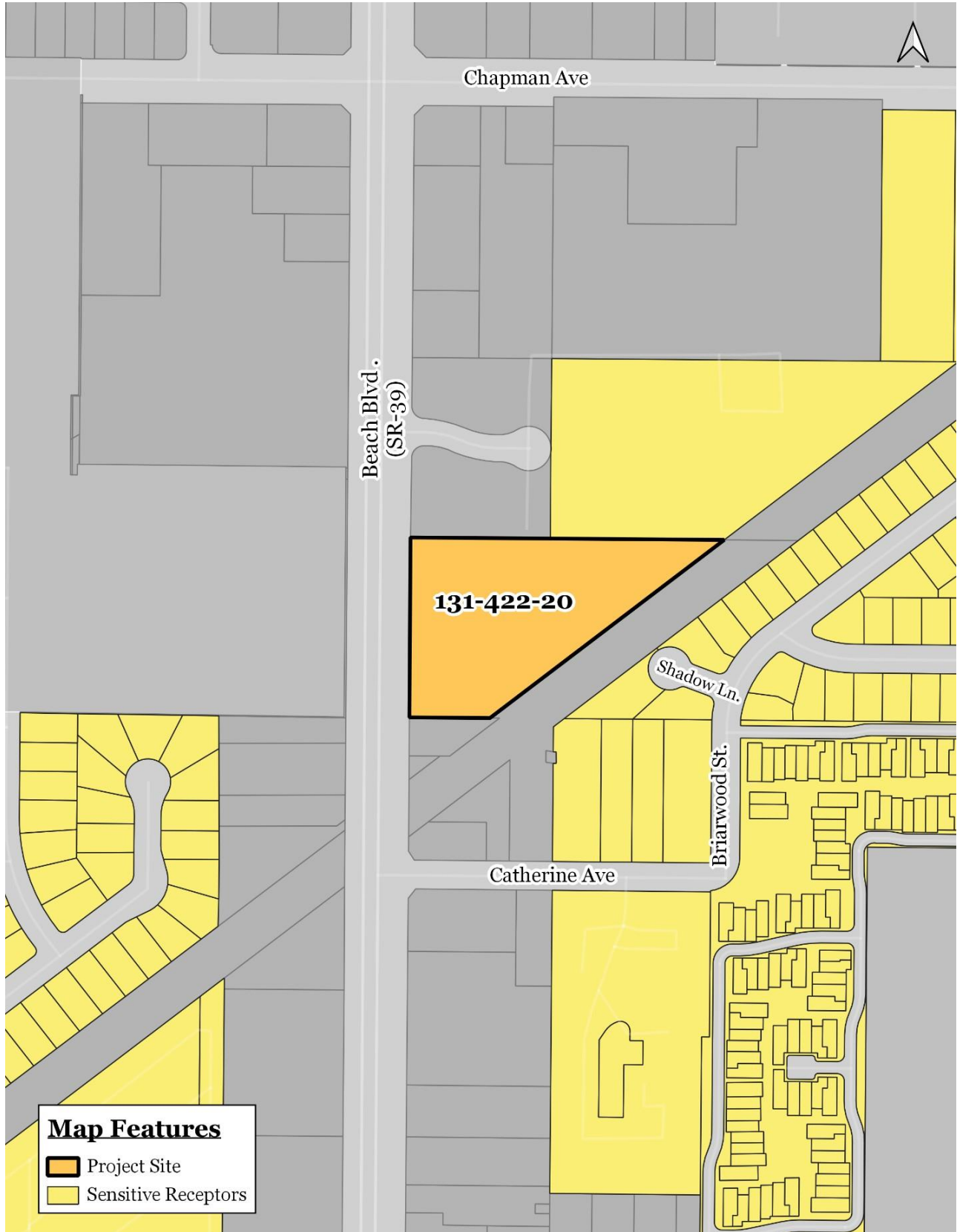


EXHIBIT 3-2

AIR QUALITY SENSITIVE RECEPTORS

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



3.3.2 CUMULATIVE IMPACTS

The SCAQMD developed the operational thresholds of significance based on the level above which a project's individual emissions would result in a cumulatively considerable contribution to the South Coast's existing air quality conditions. Therefore, a project that exceeds the SCAQMD operational thresholds would also be a cumulatively considerable contribution impact. As described in this section, the proposed project's operational emissions would not exceed thresholds. Therefore, the proposed project would not result in a cumulatively considerable contribution to significant cumulative air quality impacts.

3.3.3 MITIGATION MEASURES

The proposed project's air emissions are not considered to represent a significant adverse impact. As a result, no mitigation measures are required. The analysis of air quality impacts indicated that the projected emissions would be below the SCAQMD's thresholds of significance and for every construction project undertaken in the City as well as in the cities governed by the SCAQMD would follow the pertinent rules and standard conditions required.



3.4 BIOLOGICAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				✘
B. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		✘		
C. Would the project have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✘
D. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites?				✘
E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✘
F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				✘

3.4.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? • No Impact.*

The proposed project site is located in an urban area surrounded by commercial and residential developments and is adjacent to a major roadway (Beach Boulevard/SR-39). Additionally, the parkette project site is surrounded by residential developments and is currently paved over with asphalt. There are no naturally occurring habitats or associated flora and fauna located on either project site that would be affected by the proposed projects implementation. As a result, the site is not a suitable habitat for any species of concern by the United States Fish and Wildlife Service (USFWS) and no impacts are anticipated.

B. *Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? • Less than Significant Impact with Mitigation.*

According to the United States Fish and Wildlife Service and the results of the site visits, there are no wetland or migratory bird nesting areas located within the project site.¹⁵ The only trees located within the project site boundaries are found along the southern and western boundaries of the project site next to



the Anaheim-Barber Channel. The United States Fish and Wildlife Service is responsible for enforcing the Migratory Bird Treaty Act of 1918. The Migratory Bird Treaty Act of 1918 under US Code, Title 16 Sections 703-712, makes it illegal to take, possess import, export, transport, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such bird except under the terms of a valid Federal permit. There are a number of mature trees and shrubs located on-site along the southern and western boundaries of the project site which may have the potential to harbor migratory birds. These mature trees and shrubs will be removed during the construction phase to accommodate the proposed project. Nesting and/or migratory species may be impacted by construction activities depending on the time of year. As a result, the following mitigation will be required to reduce potential impacts to nesting and migratory species to a level of less than significant.

- **MM-BIO-1:** If clearing and/or construction activities would occur during the raptor or migratory bird nesting season (February 15 to August 15), the Applicant and/or its contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before the construction activities commence. A copy of the report must be provided to the Director of Community Development for review and approval prior to the start of any work on the project site. The qualified biologist shall survey the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, the biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance may occur within the no-activity setback until the nest is deemed inactive by the biologist. The biologist must be approved by the Community Development Director prior to the issuance of any type of permit for the project.

The proposed development will abide by all migratory and nesting bird protections required by the Migratory Bird Treaty Act of 1918. Furthermore, the Orangewood Parkette, is not located by any wetland or migratory bird nesting areas and is currently uninhabited by any vegetation. As a result, the project would result in a less than significant impacts with the incorporation of the aforementioned mitigation.

- C.** *Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? ● No Impact.*

No wetland areas or riparian habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on either of the sites (the residential development site and the proposed parkette site) during the field investigations.¹⁹ Additionally, no offsite wetland habitats would be affected by the proposed developments since the project's construction would be limited to the proposed project sites. As a result, less than significant impacts are anticipated.

- D.** *Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory life corridors, or impede the use of native wildlife nursery sites? ● No Impact.*

The project site has no utility as a wildlife migration corridor due to the proposed site location adjacent to a major roadway and in the midst of an urban area. The Anaheim-Barber City Channel is located directly southeast of the project site and is listed by the U.S. Fish and Wildlife Service as a riverine habitat. This segment of the flood control channel has been paved over in its entirety and is an unsuitable habitat or,



wildlife corridor for any native resident or migratory fish or wildlife species.¹⁸ The project area is surrounded on all sides by urban and residential developments. Similarly, the proposed parkette project site has been disturbed, paved over and is deemed an unfit habitat or, wildlife migration corridor due to being adjacent to railroad tracks and surrounded by residential developments. Given the urban character of the adjacent parcels and the disturbed character of the project sites, no impacts will occur.

E. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? • No Impact

Title 12, Chapter 12.20 of the Stanton Municipal Code addresses the City's Street Tree Plan, and no street trees would be impacted by the proposed project. The only trees located within the project site boundaries are found along the southern and western boundary of the project site next to the Anaheim-Barber Channel and Beach Boulevard. Furthermore, there would be an incorporation of additional trees and no need for any tree replacement or preservation requirements that would be applicable to the proposed project. There are no mature trees located on the parkette site that would be displaced. As a result, no impacts on this issue would result from the projects implementation.

F. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? • No Impact.

The project sites (the proposed residential development and the parkette) and the surrounding areas are urban and residential land uses that are located within Orange County's Transportation Authority, Natural Community Conservation Plan, and Habitat Conservation Plan regions. The proposed project's implementation would not be in conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plans. Therefore, no impacts will occur.

3.4.2 CUMULATIVE IMPACTS

All the related projects in the area would be subject to individual project review and conformance with conservation plans and standard provisions for compliance with the state and federal protection laws. Since project-related impacts would be less than significant, cumulative projects would also be required to follow suit, and the cumulative impact from other past, present, and reasonably foreseeable projects would be expected to be less than significant. Therefore, cumulative impacts would be less than significant.

3.4.3 MITIGATION MEASURES

Nesting and/or migratory species may be impacted by construction activities depending on the time of year. As a result, the following mitigation will be provided to reduce potential impacts to nesting and migratory species.

MM-BIO-1 (Biological Resources Impacts). If clearing and/or construction activities would occur during the raptor or migratory bird nesting season (February 15 to August 15), the Applicant and/or its contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before the construction activities commence. A copy of the report must be provided to the Director of Community Development for review and approval prior to the start of any work on the project site. The qualified biologist shall survey the construction zone to determine whether the activities taking place



have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, the biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance may occur within the no-activity setback until the nest is deemed inactive by the biologist. The biologist must be approved by the Community Development Director prior to the issuance of any type of permit for the project.



3.5 CULTURAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines?				✘
B. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines?		✘		
C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?			✘	

3.5.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5 of the CEQA Guidelines?* • No Impact.

Historical resources are generally defined by Local, State, and Federal criteria. A site or structure may be historically significant if it is locally protected through a General Plan or historic preservation ordinance. In addition, a site or structure may be historically significant according to State or Federal criteria even if the locality does not recognize such significance. The State of California, through the State Historic Preservation Office (SHPO), also maintains an inventory of those sites and structures that are considered to be historically significant. Finally, the U.S. Department of the Interior has established specific guidelines and criteria that indicate the manner in which a site, structure, or district is to be identified as having historic significance. To be considered eligible for the National Register, a property’s significance may be determined if the property is associated with events, activities, or developments that were important in the past, with the lives of people who were important in the past, or represents significant architectural, landscape, or engineering elements. Ordinarily, properties that have achieved significance within the past 50 years are not considered eligible for the National Register. Buildings and properties will qualify for a listing on the National Register if they are integral parts of districts that meet certain criteria. Specific criteria outlined in State CEQA Guidelines Section 15064.5 used to evaluate the significance of a historical or cultural resource includes the following:

- A resource listed in or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific,



economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; is associated with the lives of persons important in our past; embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or has yielded, or may be likely to yield, information important in prehistory or history.

A search of the National Register of Historic Places and the list of California Historical Resources was conducted for the City.²¹ There are no recorded structures in the National Register of Historic Places or the California Historical Resources list within the City of Stanton. The proposed development will be limited to the project site and will not affect any structures or historical resources listed on the National or State Register or those identified as being eligible for listing on the National or State Register. Furthermore, the project site is not present on the list of historic resources identified by the State Office of Historic Preservation (SHPO).²² Since the project's implementation will not impact any Federal, State, or locally designated historic resources, no impacts will occur.

B. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 of the CEQA Guidelines? • Less than Significant Impact with Mitigation.*

The first occupants of the Southern California area migrated into the region thousands of years prior to the arrival of Europeans. The Southern California area was first occupied by Native Americans who were the descendants of the hunting and gathering peoples that migrated from Asia into North America. The time period in which these early peoples were first established in the Southern California region is uncertain, though there is archaeological evidence that a fully maritime-adapted, seafaring culture existed in Southern California at least ten thousand years ago. On the mainland, discoveries at Rancho La Brea and the recovery of artifacts at Malaga Cove on Santa Monica Bay, suggest a long history of occupation for the region.¹⁶

The greater Los Angeles Basin was previously inhabited by the Gabrieleño-Kizh people, named after the San Gabriel Mission.¹⁷ The Gabrieleño tribe has lived in this region for around 7,000 years.¹⁸ Prior to Spanish contact, approximately 5,000 Gabrieleño people lived in villages throughout the Los Angeles Basin.¹⁹ The early anthropologist and ethnographer, J. P. Harrington, noted the presence of two Indian settlements located in what is now Buena Park along Coyote Creek. Both sites are located at least five miles from the project site.²⁰ Another encampment was recorded in the Brea Canyon area. As part of the AB-52

²⁰²¹CEQA Statutes and Guidelines. Section 15064.5. 2019. Website accessed November 20, 2020.
https://resources.ca.gov/CNRALegacyFiles/ceqa/docs/2019_CEQA_Statutes_and_Guidelines.pdf

²¹ California State Parks, Office of Historic Preservation. *Listed California Historical Resources*. Website accessed November 20, 2020.

¹⁶ McCawley, William. *The First Angelinos, The Gabrielino Indians of Los Angeles*. 1996.

¹⁷ Tongva People of Sunland-Tujunga. *Introduction*. http://www.lausd.k12.ca.us/Verdugo_HS/classes/multimedia/intro.html

¹⁸ Ibid.

¹⁹ Rancho Santa Ana Botanical Garden. *Tongva Village Site*. <http://www.rsabg.org/tongva-village-site-1>

²⁰ McCawley, William. *The First Angelinos, The Gabrielino Indians of Los Angeles*. 1996.



requirements, local Native American groups were contacted for further information. The Gabrielino-Tongva Tribe indicated that the project area is located within the Tribe's ancestral territory but has no specific information regarding cultural resources in the immediate vicinity. However, the Tribe considers the area to be sensitive for cultural resources, and requests the following mitigation measure:

- MM-CUL-1: The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City's Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.

The potential impacts will be less than significant with adherence to the aforementioned mitigation.

C. Would the project disturb any human remains, including those interred outside of dedicated cemeteries? • Less than Significant Impact.

There are no dedicated cemeteries located in the vicinity of the project site.²¹ The nearest dedicated cemetery is Magnolia Memorial Park, located approximately 1.5 miles from the project site. The proposed project will be restricted to the project site and therefore will not affect any dedicated cemeteries. Notwithstanding, the following mitigation is mandated by California Code of Regulations (CCR) Section 15064.5(b)(4):

“A lead agency shall identify potentially feasible measures to mitigate significant adverse changes in the significance of an historical resource. The lead agency shall ensure that any adopted measures to mitigate or avoid significant adverse changes are fully enforceable through permit conditions, agreements, or other measures.”

Additionally, Section 5097.98 of the Public Resources Code and Section 5097.98 Healthy and Safety Code states:

“In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with (b) Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27491 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative. The coroner shall make his or her determination within two working days from the time the person



responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.”

Adherence to the aforementioned standard condition will ensure potential impacts remain at levels that are less than significant.

3.5.2 CUMULATIVE IMPACTS

The potential cumulative impacts on cultural resources are typically site specific. Furthermore, the analysis determined that the proposed project would not result in any unmitigable impacts on cultural resources. As a result, no cumulative impacts on cultural resources are anticipated.

3.5.3 MITIGATION MEASURES

The analysis of potential cultural resources impacts indicated that the project site’s previous disturbance would limit the potential for cultural resources or human remains to be discovered within the project site. Nevertheless, the following mitigation measure is provided below and in Section 3.18 (Tribal Cultural Resources) to ensure that a tribal representative is present during construction-related ground-disturbing activities.

MM-CUL-1 (Cultural Resources). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City’s Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.



3.6 ENERGY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?			✘	
B. Would the project conflict with or obstruct a State or local plan for renewable energy or energy efficiency?			✘	

3.6.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation? • Less than Significant Impact.*

The City of Stanton is reviewing an application submitted for the construction of a 79-unit multi-family residential development located at 12200 Beach Boulevard. In addition, the proposed project will also involve the construction of a new, off-site parkette known as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. Electricity in the City of Stanton is provided by Southern California Edison Company (SCE). Natural gas service in the City is provided by Southern California Gas Company (SCGC). SCGC maintains medium pressure facilities in nearly every street of the City. As indicated in Table 3-4, the project is estimated to consume approximately 1,217.5 kilowatt (kWh) per year of electricity and 10,423 cubic feet of natural gas on a daily basis. Limited electrical consumption is anticipated for the parkette. The energy consumption will be limited to electricity consumption for the exterior safety lighting.

**Table 3-4
 Estimated Annual Energy Consumption**

Project	Consumption Rate	Total Project
Existing Conditions (154,470 sq. ft.)		
Electrical Consumption	0.50 kWh/sq. ft./year	211.6 kWh/day
Natural Gas Consumption	--	--
Proposed Project (assumes 79-units)		
Electrical Consumption	5,625 kWh/unit/year	1,217.5 kWh/day
Natural Gas Consumption	4,011 cu. ft/unit/month	10,423 cu. ft./day
Net Change		
Electrical Consumption		1,005.9 kWh/day
Natural Gas Consumption		10,423 cu. ft./day

Source: Southern California Edison and Southern California Gas Company.



The existing uses currently consume an average of 21.6 kWh of electricity daily with little or no natural gas consumption. The majority of this existing consumption is related to on-site security lighting. As shown in Table 3-4, the project will result in an increase of 1,005.9 kWh per day in electrical consumption and an increase of 10,423 cubic feet per day of natural gas consumption.

It is important to note that the project will be constructed in compliance with Part 6 and Part 11 of Title 24 of the California Code of Regulations. Part 6 of Title 24 requires the installation of fixtures and appliances that are certified to the Energy Commission such as windows, indoor and outdoor lighting, doors, appliances, water heaters, and insulation. The use of these materials will ensure the project's energy consumption is kept at levels that are considered to be less than significant, especially insulation, which allows buildings to retain heat or cooler indoor temperatures. In addition, Southern California Edison will be able to accommodate the development. Nevertheless, the proposed project will be required to adhere to the policy identified in the City's Climate Action Plan that requires project to be 20 percent more efficient than existing code requirement. For all of the foregoing reasons, the proposed project will have a less than significant impact relating to consumption of energy.

B. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? • Less Than Significant Impact.*

In 2019, the State Building Standards Commission adopted updates to the California Green Building Standards Code (Code) which became effective on January 1, 2020. The California Code of Regulations (CCR) Title 24, Part 11: California Green Building Standards (Title 24) became effective to aid efforts to reduce GHG emissions associated with energy consumption. Title 24 now requires that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials. The 2016 version of the standards became effective as of January 1, 2017. The proposed project will conform to all pertinent energy conservation requirements. As a result, the potential impacts will be less than significant.

3.6.2 CUMULATIVE IMPACTS

The potential cumulative impacts on energy are programmed and planned for in the energy master plans prepared by the utility providers (the Southern California Edison Company and South California Gas Company). These utility providers work with the local jurisdictions and the California Public Utilities Commission (CPUC) to develop their long-range energy plans. As part of this planning process, the utility providers review the local general plans to develop growth projections. As a result, no cumulative impacts on energy impacts are anticipated.

3.6.3 MITIGATION MEASURES

The analysis determined that the proposed project will not result in significant impacts related to energy and mitigation measures are not required.



3.7 GEOLOGY & SOILS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides?			✘	
B. Would the project result in substantial soil erosion or the loss of topsoil?			✘	
C. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?			✘	
D. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property?			✘	
E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✘
F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✘

3.7.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A.** *Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; or landslides? • Less than Significant Impact.*

The City of Stanton is located within a seismically active region. Many major and minor local faults traverse the entire Southern California region and earthquakes from several active and potentially active faults in the Southern California region could affect the project site. In 1972, the Alquist-Priolo Earthquake Zoning Act was passed in response to the damage sustained in the 1971 San Fernando Earthquake. The Alquist-Priolo Earthquake Fault Zoning Act's main purpose is to prevent the construction of buildings used for human occupancy on the surface trace of active faults. There are no active faults identified by the State within the project site, nor is the project site within an Alquist-Priolo Earthquake Fault Zone. Although the site is within a seismically active region prone to occasional damaging earthquakes, there are no Earthquake Zones of Required Investigation in the vicinity of the project area.



The closest earthquake fault zone defined by the Alquist Priolo Earthquake Fault Zoning Act, is the Los Alamitos fault, which is located approximately three miles to the west of the proposed project site. The proposed project would comply with the 2019 California Building Standards code and Municipal Code Section 16.36.010, which are effective in minimizing any potential seismic-related impacts to structures.

Surface ruptures are visible instances of horizontal or vertical displacement, or a combination of both. The amount of ground shaking depends on the intensity of the earthquake, the duration of shaking, soil conditions, types of building, and distance from epicenter or fault. Other potential seismic issues include ground failure and liquefaction. Ground failure is the loss in stability of the ground and includes landslides, liquefaction, and lateral spreading. According to the United States Geological Survey, liquefaction is the process by which water-saturated sediment temporarily loses strength and acts as a fluid following seismic activity. According to California Department of Conservation Earthquake Hazard Zone maps, the project sites (both the proposed residential development site and the parkette), along with the entire City, are located in an area that is subject to potential liquefaction. The risk for liquefaction is no greater on-site than it is for the surrounding City and this portion of Orange County. The groundwater is estimated to be 20-feet below the ground surface according to Orange County Water District.

A geotechnical study was performed by Group Delta (April 26, 2021) that outlined both the liquefaction characteristics and the requisite design measures that would be required to address the liquefaction for the proposed project. These measures would include 1. the construction of conventional shallow spread footings or mat foundations with ground improvement would be required to reduce or remove liquefaction-induced settlement; 2. the installation of a mat foundation would be required that is structurally designed to accommodate total static and seismic settlements of up to 4inches; and 3. the construction of deep foundations would be required, consisting of grouped 16-inch diameter auger displacement piles (ACD) with either a slab on grade (prone to significant damage following a seismic event with liquefaction triggered) or a structural slab designed to resist liquefaction-induced settlements between the pile groups. The aforementioned geotechnical report concluded that the project is feasible from a geotechnical standpoint, provided that recommendations presented in the report were implemented during design and construction phases of the proposed project. In addition, the proposed project would be required to be constructed in compliance with the CBC which would be verified through the plan check and permitting process. With compliance with existing regulations, the potential impacts related to seismically related ground failure and liquefaction would be less than significant. Additionally, the project site is not subject to the risk of landslides because there are no hills or mountains within the vicinity of the project site. As a result, the potential impacts in regard to ground shaking, liquefaction, and landslides are less than significant.

B. Would the project result in substantial soil erosion or the loss of topsoil? • Less than Significant Impact.

According to the University of California, Davis SoilWeb database, the soils association that underlies the project site belong to the Hueneme-San Emigdio-Bolsa soil complex.²⁷ The project site is level and limited grading will be required for structural supports, building foundations, and utility lines. All grading activities will require grading permits from the City, which include requirements and standards designed to reduce potential erosion impacts. These requirements will effectively mitigate potential stormwater runoff impacts during construction. The project site is currently level and will remain level following the site's

²⁷United States Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey*. Website accessed November 20, 2020.

²⁸ Ibid.



development. The surface grades within the parking and internal roadways will be designed to facilitate drainage into the nearest curbs and gutters. The implementation will conform to national pollution discharge elimination system (NPDES) guidelines, a storm water pollution prevention plan (SWPPP) and be in compliance with SCAQMD Rule 403. As a result, the impacts will be less than significant.

- C.** *Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? • Less than Significant Impact.*

The project's construction will not result in soil erosion since the project's contractors must implement the construction best management practices (BMPs) identified in the mandatory SWPPP. The BMPs will minimize soil erosion and the discharge of sediment off-site. The proposed project would be in conformance with Municipal Code Section 16.55.014 for a site specific soil and engineering geology report to help reduce the possibility of liquefaction due to ground shaking. As stated in Subsection B, a geotechnical study was performed by Group Delta (April 26, 2021) that outlined both the liquefaction characteristics and the requisite design measures that would be required to address the liquefaction for the proposed project. Additionally, the project site is not located within an area that could be subject to landslides because there are no hills or mountains in the vicinity of the project site.²⁸ The soils that underlie the project site possess a low potential for shrinking and swelling given the site's developed character. The soils that underlie the site may be subject to liquefaction in the event of a major earthquake though this characteristic is the same for the entire City (refer to Exhibit 3-3). The project's construction would require adherence to all pertinent construction related requirements related to the site's preparation and the actual construction of the units. In addition, the proposed project would be required to be constructed in compliance with the CBC which would be verified through the plan check and permitting process. With compliance with existing regulations, the potential impacts related to seismically related ground failure and liquefaction would be less than significant. The likelihood of lateral spreading will be further reduced since the project's implementation will not require grading and excavation that would extend to depths required to encounter groundwater. Moreover, the project will not result in the direct extraction of groundwater. As a result, the potential impacts are will be less than significant.

- D.** *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (2012), creating substantial direct or indirect risks to life or property? • Less than Significant Impact.*

By definition, expansive soils are soils that expand when water is added and shrink when they dry out. The University of California, Davis SoilWeb database was consulted to determine the nature of the soils that underlie the project site. According to the University of California Davis SoilWeb database, the project site is underlain by the Hueneme-San Emigdio-Bolsa soil complex.²⁹ None of the soils identified are classified as expansive soils. In addition, the applicant is required to adhere to all requirements detailed by the USDA and California Building Code Chapter 18 Soils and Foundations, resulting in potential impacts which would be less than significant.

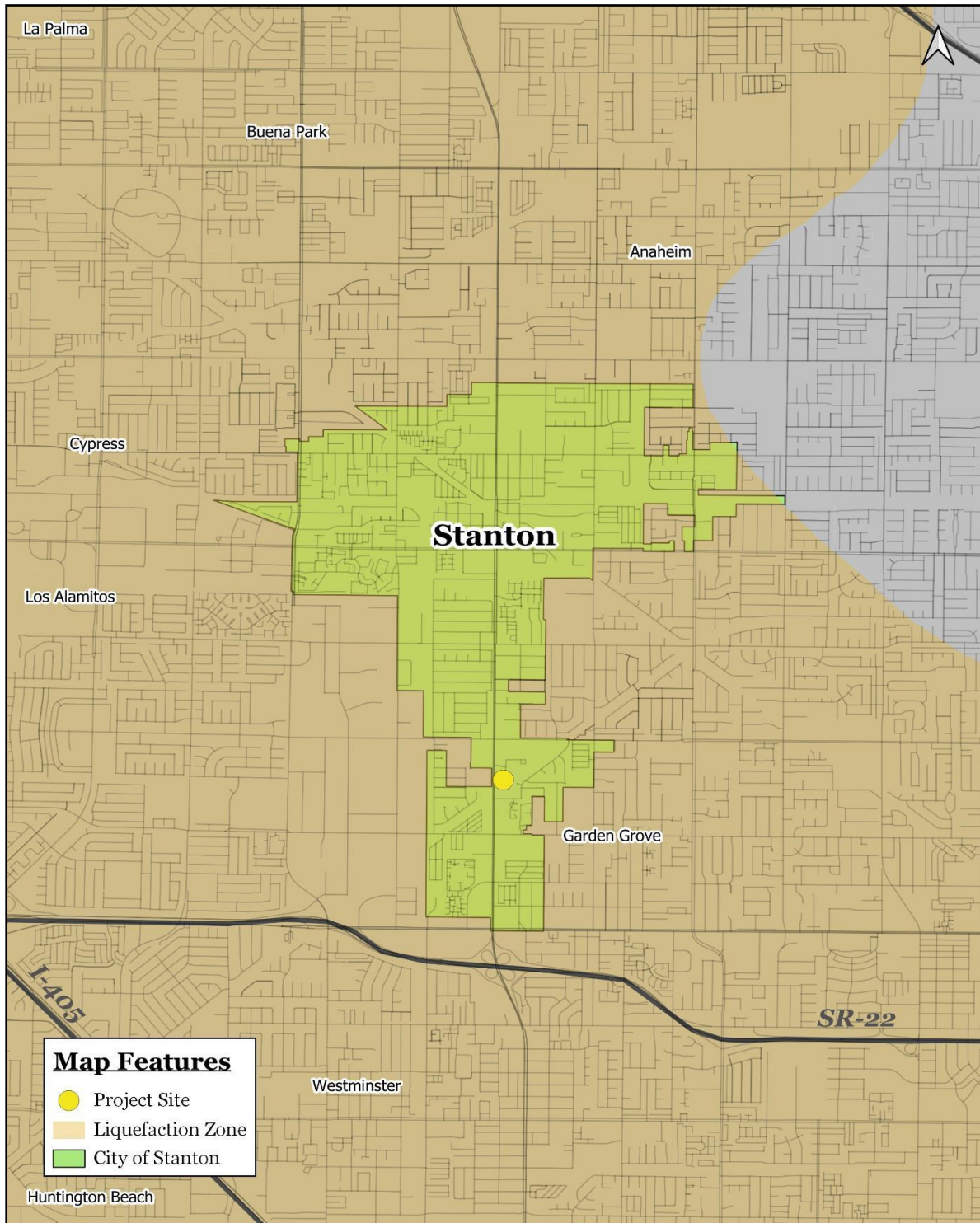


EXHIBIT 3-3
GEOLOGIC HAZARDS MAP
SOURCE: CALIFORNIA GEOLOGICAL SURVEY



- E. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? • No Impact.*

No septic tanks will be used for the proposed residential project since the new development will be connected to the sanitary sewer system. The proposed parkette will not include any restrooms or water or sewer connections. As a result, no impacts associated with the use of septic tanks will occur as part of the proposed project's implementation.

- F. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? • No Impact*

Results of an on-line paleontological resources record search through the University of California Museum of Paleontology (UCMP) database indicate that there are no known vertebrate fossil localities that have been previously identified within the vicinity of the project site. Additionally, the UCMP database shows surface deposits in the proposed project area are composed entirely of younger Quaternary alluvium. This younger Quaternary alluvium is unlikely to contain significant vertebrate fossils in the uppermost layers. The very limited and shallow excavations associated with the proposed project's construction are not likely to yield significant vertebrate fossil remains. As a result, no impacts will occur.

3.7.2 CUMULATIVE IMPACTS

The potential cumulative impacts related to earth and geology are typically site specific. The analysis herein determined that the proposed project's impacts of geology would be less than significant. The proposed project's construction will not result in any significant impacts related to landform modification, grading, or the destruction of a geologically significant landform or feature. In addition, the future development would not be exposed to any unique and adverse geological and soils effects including fault rupture, ground shaking, seismic-induced ground failure, liquefaction, and landslides. The existing development standards would ensure that the incremental geological effects of the proposed project would not result in greater adverse cumulative effects. As a result, the cumulative impacts of the proposed project, related to geology and soils, would be less than cumulatively considerable.

3.7.3 MITIGATION MEASURES

The analysis determined that the proposed project will not result in significant impacts related to paleontological resources and no mitigation measures are required. The proposed project will be required to comply with the provision outlined in the CBC governing seismic building code requirements and the recommendations outlined in the geotechnical report prepared for the project.

²⁹ UC Davis. *Soil Web*. <https://casoilresource.lawr.ucdavis.edu/gmap/>



3.8 GREENHOUSE GAS EMISSIONS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✘	
B. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?				✘

3.8.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?* • *Less than Significant Impact.*

The State of California requires CEQA documents to include an evaluation of greenhouse gas (GHG) emissions, or gases that trap heat in the atmosphere. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). The accumulation of GHG in the atmosphere regulates the earth's temperature. Without these natural GHG, the Earth's surface would be about 61°F cooler.²² However, emissions from fossil fuel combustion have elevated the concentrations of GHG in the atmosphere to above natural levels. These man-made GHG will have the effect of warming atmospheric temperatures with the attendant impacts of changes in the global climate, increased sea levels, and changes to the worldwide biome. The major GHG that influence global warming are described below.

- *Water Vapor.* Water vapor is the most abundant GHG present in the atmosphere. While water vapor is not considered a pollutant, while it remains in the atmosphere it maintains a climate necessary for life. Changes in the atmospheric concentration of water vapor is directly related to the warming of the atmosphere rather than a direct result of industrialization. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to “hold” more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. When water vapor increases in the atmosphere, more of it will eventually also condense into clouds, which are more able to reflect incoming solar radiation. This will allow less energy to reach the Earth’s surface thereby affecting surface temperatures.
- *Carbon Dioxide (CO₂).* The natural production and absorption of CO₂ is achieved through the terrestrial biosphere and the ocean. Manmade sources of CO₂ include the burning coal, oil, natural gas, and wood. Since the industrial revolution began in the mid-1700’s, these activities have increased the atmospheric concentrations of CO₂. Prior to the industrial revolution, concentrations

²² California, State of. OPR Technical Advisory – CEQA and Climate Change: Addressing Climate Change through the California Environmental Quality Act (CEQA) Review. June 19, 2008.



were fairly stable at 280 parts per million (ppm). The International Panel on Climate Change (IPCC) Fifth Assessment Report, 2014) Emissions of CO₂ from fossil fuel combustion and industrial processes contributed about 78% of the total GHG emissions increase from 1970 to 2010, with a similar percentage contribution for the increase during the period 2000 to 2010.

- *Methane (CH₄)*. CH₄ is an extremely effective absorber of radiation, although its atmospheric concentration is less than that of CO₂. Methane's lifetime in the atmosphere is brief (10 to 12 years), compared to some other GHGs (such as CO₂, N₂O, and Chlorofluorocarbons (CFCs)). CH₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other human-related sources of methane production include fossil-fuel combustion and biomass burning.
- *Nitrous Oxide (N₂O)*. Concentrations of N₂O also began to increase at the beginning of the industrial revolution. In 1998, the global concentration of this GHG was documented at 314 parts per billion (ppb). N₂O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is also commonly used as an aerosol spray propellant.
- *Chlorofluorocarbons (CFC)*. CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C₂H₆) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.
- *Hydrofluorocarbons (HFC)*. HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF₃), HFC-134a (CF₃CH₂F), and HFC-152a (CH₃CHF₂). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade and used for applications such as automobile air conditioners and refrigerants.
- *Perfluorocarbons (PFC)*. PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF₄) and hexafluoroethane (C₂F₆). Concentrations of CF₄ in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.



- *Sulfur Hexafluoride (SF6)*. SF6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF6 has the highest global warming potential of any gas evaluated; 23,900 times that of CO2. Concentrations in the 1990s were about 4 ppt. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

The State of California requires CEQA documents to include an evaluation of greenhouse gas (GHG) emissions and gases that trap heat in the atmosphere. GHG are emitted by both natural processes and human activities. Examples of GHG that are produced both by natural and industrial processes include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). The SCAQMD has recommended several GHG thresholds of significance. These thresholds include 1,400 metric tons of CO2E (MTCO2E) per year for commercial projects, 3,500 MTCO2E per year for residential projects, 3,000 MTCO2E per year for mixed-use projects, and 10,000 MTCO2E per year for industrial projects. Table 3-5 summarizes annual greenhouse gas (CO2E) emissions from build-out of the proposed project. Carbon dioxide equivalent, or CO2E, is a term that is used for describing different greenhouse gases in a common and collective unit. As indicated in Table 3-5, the CO2E total for the construction phase of the project is 334.88 MTCO2E per year. This translates into an annual long-term emission of 1,343.94 MTCO2E, which is below the aforementioned threshold for residential projects. The emissions are much lower when amortized over a 30-year project lifetime.

**Table 3-5
 Greenhouse Gas Emissions Inventory**

Source	GHG Emissions (MT/year)			
	CO ₂	CH ₄	N ₂ O	CO ₂ E
Construction Phase - Demolition	34.0	--	0.00	34.2
Construction Phase - Site Preparation	8.36	--	0.00	8.43
Construction Phase - Grading	10.42	--	0.00	10.51
Construction Phase - Construction	263.00	0.06	0.00	264.58
Construction Phase - Paving	14.74	--	0.00	14.86
Construction Phase - Coatings	2.30	--	0.00	2.3
Total Construction Emissions	332.82	0.06	0.00	334.88
Long-term Area Emissions	40.51	0.04	--	41.80
Long-term Energy Emissions	215.15	0.01	--	216.34
Long-term Mobile Emissions	1,002.61	0.06	0.04	1,017.38
Total Long-term Emissions	1,301.03	1.07	0.05	1,343.94

Source: CalEEMod V.2020.4.0.

Accordingly, because the proposed project's annual emissions will not exceed the above referenced threshold, the proposed project's impacts are less than significant.

B. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?* • No Impact.

AB-32 requires the reduction of GHG emissions to 1990 levels, which would require a minimum 28% in "business as usual" GHG emissions for the entire State. Additionally, Governor Edmund G. Brown signed into law Executive Order (E.O.) B-30-15 on April 29, 2015, the Country's most ambitious policy for reducing



Greenhouse Gas Emissions. Executive Order B-30-15 calls for a 40% reduction in greenhouse gas emissions below 1990 levels by 2030. The proposed Residential redevelopment project will not involve or require any variance from an adopted plan, policy, or regulation governing GHG emissions. As a result, no potential conflict with an applicable greenhouse gas policy plan, policy, or regulation will occur and no impacts will occur.

C. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases? • No Impact.

AB-32 requires the reduction of GHG emissions to 1990 levels, which would require a minimum 28% in "business as usual" GHG emissions for the entire State. Additionally, Governor Edmund G. Brown signed into law Executive Order (E.O.) B-30-15 on April 29, 2015, the Country's most ambitious policy for reducing Greenhouse Gas Emissions. Executive Order B-30-15 calls for a 40% reduction in greenhouse gas emissions below 1990 levels by 2030. The proposed Residential redevelopment project will not involve or require any variance from an adopted plan, policy, or regulation governing GHG emissions. As a result, no potential conflict with an applicable greenhouse gas policy plan, policy, or regulation will occur and no impacts will occur.

3.8.2 CUMULATIVE IMPACTS

GHG impacts are exclusively considered to be cumulative impact since there are no "non-cumulative" GHG emission impacts from a global warming or climate change perspective. As discussed in the previous section (section 3.8.1), the proposed project's emissions would be below SCAQMD's threshold of 3,500 MTCO₂E per year for residential projects with projected emissions for the project at 1,703.98 MTCO₂E. Thus, the proposed project's cumulative contribution to GHG emissions would be less than significant.

3.8.3 MITIGATION MEASURES

The analysis of potential impacts related to greenhouse gas emissions indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.



3.9 HAZARDS & HAZARDOUS MATERIALS

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				✘
B. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				✘
C. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✘
D. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				✘
E. Would the project for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✘
F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✘
G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?				✘

3.9.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? • No Impact.*

A hazardous material is defined as any material that, due to its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to environment if released into the environment. Hazardous materials include, but are not limited to, hazardous substances, hazardous wastes, and any material that regulatory agencies have a reasonable basis for believing would be injuries to the health and safety of persons or harmful to the environment if released into the home, workplace, or environment. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment. Due to the residential nature of the proposed project, the use of any hazardous materials will be limited to those that are commercially available and typically used in a residential setting for routine cleaning and maintenance. The project's construction would require the use of diesel fuel to power the construction equipment. The diesel fuel would be properly sealed in tanks and would be transported to the site by truck. Other hazardous materials that would be used on-site during the project's construction phase include, but are not limited to, gasoline, solvents, architectural coatings, and equipment lubricants. These products are strictly controlled and regulated and in the event of any spill, cleanup activities would be required to adhere to all pertinent protocols. The United



States Environmental Protection Agency's multi-system search was consulted to determine whether the project site is identified on any Federal or State hazardous site list. The project site is not listed on the California Department of Toxic Substances Control's Hazardous Waste and Substances database. In addition, the proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. Since the project will not require the transport or disposal of hazardous materials, no impacts will result from the project's implementation. Once in operation, the proposed project will not involve the transport, use, or disposal of hazardous materials. Therefore, no impacts will result upon project implementation. As a result, less than significant impacts will occur.

B. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? • No Impact.*

During construction activities, requirements must be adhered to regarding the transport and handling of fuels and lubricants for the construction equipment used on-site. In the event of a fuel spill, the contractors will be required to adhere to all pertinent requirements related to the cleaning up of any spilled fuels to prevent further contamination of the nearby environment. In addition, these materials are regulated by Federal and State requirements that would be implemented City during the construction activities. These regulations include: the Federal Occupational Safety and Health Act and Hazardous Materials Transportation Act; Title 8 of the California Code of Regulations (CalOSHA), and the State Unified Hazardous Waste and Hazardous Materials Management Regulatory Program. Once occupied and due to, the proposed development's residential nature, the use of any hazardous materials will be limited to those that are commercially available and typically used in a residential setting for routine cleaning and maintenance. Therefore, the proposed project will not create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment through the routine use or transport of hazardous materials during the project's constructions and occupancy.

C. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? • No Impact.*

The proposed residential and parkette project would not involve the transport, use, or disposal of any hazardous materials. The nearest sensitive receptor is Wakeman Elementary School located approximately 0.4 miles southeast of the proposed project site. As a result, the proposed project will not create a hazard to any local school within a one-quarter mile of the project site and no impacts are anticipated.

D. *Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? • No Impact.*

Government Code Section 65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List. The Cortese List is a planning document used by the State and other local agencies to comply with CEQA requirements that require the provision of information regarding the location of hazardous materials release sites. A search of the California Department of Toxic Substances Control EnviroStor and the State Water Resources Control Board GeoTracker websites determined that the residential project site is not identified as a Cortese site.³² The proposed parkette would occupy a former



dead-end street where the existing pavement will be removed and replaced with turf. Therefore, no impacts will occur.

E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or a public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? • No Impact.

The project site is not located within two miles of a public use airport. The nearest airport is the Long Beach Municipal Airport, located approximately 12 miles west of the project site. As a result, the proposed project will not present a safety or noise hazard related to aircraft or airport operations at a public use airport to people working in the project site. As a result, no impacts related to this issue will occur.

F. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? • No Impact.

The nearest emergency evacuation route in proximity to the project site is Beach Boulevard (SR-39). At no time will the aforementioned emergency evacuation routes or any adjacent streets be completely closed to traffic during the proposed project's construction. As a result, no impacts are associated with the proposed project's implementation.

G. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? • No Impact.

The proposed 3.55-acre (154,470 square-foot) project site is located within an urbanized area that has been previously developed for its current commercial land use as a recreational vehicle (RV) sales and storage lot. In addition, the proposed 7,600 square foot parkette site is surrounded by urban development. The majority of both properties are paved over with asphalt, with little ruderal vegetation on the premises. The proposed residential parcel has a General Plan and Zoning designation for *General Mixed-Use (GLMX)* land uses, which permits the construction of multi-family residential developments. The proposed residential project site is surrounded by commercial and residential land uses and adjacent to a major roadway (Beach Boulevard/SR-39). According to the Cal FIRE Fire Hazard Severity Zone Database, the project site is not located within a severe fire hazard zone.³³ As a result, no impacts will occur.

3.9.2 CUMULATIVE IMPACTS

The analysis determined the proposed project would not result in incremental effects to hazards or hazardous materials that could be compounded or increased when considered together with similar effects from related projects in the area and, as a result, the proposed project would not result in cumulatively considerable hazards or hazardous materials impacts.

3.9.3 MITIGATION MEASURES

The analysis of potential impacts related to hazards and hazardous materials indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.

³² CalEPA. *DTSC's Hazardous Waste and Substances Site List - Site Cleanup (Cortese List)*. <http://www.dtsc.ca.gov/List.cfm>.

³³ CalFire. *Fire Hazard Severity Zone Map Viewer*. <https://egis.fire.ca.gov/FHSZ/>



3.10 HYDROLOGY & WATER QUALITY

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?			✘	
B. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			✘	
C. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows?			✘	
D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?				✘
E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✘

3.10.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?* • *Less than Significant Impact.*

The Clean Water Act (CWA) established regulations governing the discharge of pollutants to waters of the U.S. from any point source. The CWA also has established a framework for regulating nonpoint source stormwater discharges under the National Pollutant Discharge Elimination System (NPDES). The proposed project would be required to implement storm water pollution control measures pursuant to the NPDES requirements. The contractors would also be required to prepare a Water Quality Management Plan (WQMP) utilizing Best Management Practices to control or reduce the discharge of pollutants to the maximum extent practicable during construction activities. The WQMP will also identify post-construction best management practices (BMPs) that will be the responsibility of the contractors to implement over the life of the project.

Prior to issuance of any grading permit for the project that would result in soil disturbance of one or more acres of land, the Applicant shall demonstrate that coverage has been obtained under California's General Permit for Storm Water Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board, and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing shall be provided to the Chief Building Official and the City Engineer. In addition, the contractors would be



required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would be submitted to the Chief Building Official and City Engineer prior to the issuance of a grading permit. Additionally, a Municipal Separate Storm Sewer System (MS4) permit for County will be required for this project. With the above-mentioned standard conditions, the impacts would be reduced to levels that are considered to be less than significant. The proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project will involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. As a result, no impacts will result from the implementation of the proposed parkette.

B. *Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? • Less than Significant Impact.*

A search was conducted through the Regional Water Quality Control Board's on-line database Geotracker to identify the presence of any natural underground water wells within the project site. The search yielded no results. In addition, the proposed project will be connected to the City's utility lines and will not deplete groundwater supplies. Since there are no underground wells on-site that would be impacted by the proposed development, no impacts will occur.

No new direct construction-related impacts to groundwater supplies, or groundwater recharge activities would occur as part of the proposed project's implementation. Water used to control fugitive dust will be transported to the site via truck. No direct ground water extraction will occur. Furthermore, the construction and post-construction BMPs will address contaminants of concern from excess runoff, thereby preventing the contamination of local groundwater. Water used for indoor irrigation will be transported to the project site and will be stored in an above ground water reservoir tank. As a result, there would be no direct groundwater withdrawals associated with the proposed project's implementation. As a result, the impacts are considered to be less than significant.

C. *Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner in which would result in flooding on- or off-site; create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or, impede or redirect flood flows? • Less than Significant Impact.*

The project's construction will be restricted to the designated project site and the project will not alter the course of any stream or river that would lead to on- or off-site siltation or erosion. The existing project site's condition is currently paved and conveys water runoff to existing storm drains. No significant grading and/or excavation into the local aquifer will occur. No additional undisturbed land will be affected. As a result, the potential impacts will be less than significant.



D. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation? • No Impact.

As indicated previously, the impervious surfaces (asphalt, building slabs, etc.) that will be constructed will result in the generation of storm water runoff. However, the project will be properly drained and is not expected to result in flooding on-or off-site. A City approved drainage plan will be used, which will ensure that the site will be designed so that storm water runoff will continue to be directed to the curbs and gutters on the adjacent roadways or storm drain inlets. According to the Federal Emergency Management Agency (FEMA) flood insurance maps obtained for the City of Stanton, the proposed project site is located in Zone X.³⁴ Thus, properties located in Zone X are not located within a 100-year flood plain. A tsunami is defined as a long high sea wave caused by an earthquake or other disturbance. Similarly, a seiche is defined as a temporary disturbance or oscillation in the water level of a lake or partially enclosed body of water. The proposed project site is not located in an area that is subject to inundation by seiche or tsunami. In addition, the project site is located inland, and the project site would not be exposed to the effects of a tsunami.³⁵ As a result, no impacts are anticipated.

E. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? • No Impact.

The proposed project's construction and operation will comply with the City of Stanton Water Quality Management Plan per Chapter 20.500.090 of the Stanton Municipal Code. Compliance with the ordinance will help minimize the discharge and transport of pollutants associated with the new development through the control of volume and rate stormwater runoff, therefore preventing any potential violations or inconsistencies with the local requirements. As a result, the construction impacts will be less than significant. In addition, the project's operation will not interfere with any groundwater management or recharge plan because there are no active groundwater management recharge activities on-site or in the vicinity. As a result, no impacts are anticipated.

3.10.2 CUMULATIVE IMPACT

The potential impacts related to hydrology and storm water runoff are typically site specific. BMP's will be implemented at the project level for individual developments and standards. The analysis within the previous section concluded there will be no significant adverse hydrological or water quality impacts. As a result, no cumulative impacts are anticipated.

3.10.3 MITIGATION MEASURES

As indicated previously, hydrological characteristics will not substantially change as a result of the proposed project. As a result, no mitigation is required.

³⁴ Federal Emergency Management Agency. *Flood Insurance Rate Mapping Program*. 2020.

³⁵ Google Earth. Website accessed November 20, 2020.



3.11 LAND USE & PLANNING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project physically divide an established community?				✘
B. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				✘

3.11.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project physically divide an established community?* • No Impact.

Both the residential and parkette sites are located within the southern portion of the City of Stanton adjacent to Beach Boulevard. The project site is currently developed as a recreational vehicle (RV) rental commercial business, ShareMyCoach (12200 Beach Boulevard) and is shared with another commercial rental business, RV Help You Sell (12200 Beach Boulevard). The project site has a General Plan and Zoning designation of *General Mixed-Use (GLMX)* land uses. Key land uses located in the vicinity are described below:

- *North of the project site:* Adjacent to the north boundary of the proposed project site is a small commercial center comprised of a community health center, liquor store, dine-in restaurants, and other small commercial land uses. To the northeast is a multi-family residential apartment that is separated from the project area with parking bordering the structures. Approximately 950-feet north of the proposed project site is the intersection of Beach Boulevard and Chapman Avenue.
- *South of the project site:* Immediately south of the project site is a commercial business, Beach Auto Glass shop. The Anaheim-Barber City Channel continues along the southern boundary of the proposed project site. A three-story mixed-use development is currently under construction approximately 150 feet south of the proposed project site. Land uses southeast are a mix of commercial businesses, wholesale manufactured homes and multi-unit residential developments.
- *East of the project site:* To the east of the proposed project site, a 25-foot-wide access road divides the property line from the Anaheim-Barber City Channel. Land uses located to the east of this flood control channel consist of single-family residential land uses.
- *West of the project site:* Abutting west of the proposed project site is Beach Boulevard. Beach Boulevard (SR-39) is a regional eight-lane arterial roadway which extends in a north-to-south orientation connecting the City of Stanton to neighboring communities in Los Angeles and Orange County. Land uses to the west of the project site include a Home Depot, as well as multi-residential uses and single-family residential developments further west.

This issue is specifically concerned with the expansion of an inconsistent land use into an established neighborhood. The proposed project will be confined within the project site’s boundaries. As previously



stated, the project site currently serves as an RV commercial business and is surrounded by various commercial and residential land uses, contributing to a cohesiveness and enhancement of the existing community. The granting of the requested entitlements and subsequent construction of the proposed project will not result in any expansion of use beyond the current boundaries. The proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project will involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. As a result, no impacts will result from the implementation of the proposed parkette. As a result, the project will not lead to any division of an existing established neighborhood and no impacts will occur.

B. *Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? • No Impact.*

As indicated in the previous subsection, the proposed residential redevelopment project will not require the approval of either a Zone Change or a General Plan Amendment. The project site is located within a *General Mixed-Use (GLMX)* Zone which is designated under the General Plan to provide a balance of residential, commercial, recreational, etc. facilities that will encourage land uses that maximize economic development and enhance the quality of life of the citizens. The proposed project is consistent with the General Plan and Zoning land use designations that are applicable to the project site. Refer to Table 3-6 for the City of Stanton’s General Plan and Zoning development standards and the proposed project’s requests. As a result, no impacts will occur.

**Table 3-6
 Development Standards for Mixed-Use Overlay Zones**

Development Features	Mixed Use Overlay Zone Standards	Proposed Project’s Standards
Front Setback	0 ft (min); 15 ft (max).	
Street Side Setback	5 ft (min); 15 ft (max).	10 ft.
Interior Side Setback	10 ft min; No max.	10 ft.
Rear Setback	10 ft min; No max.	18 ft.
# of Stories	3 max.	3
Maximum Height	45 ft. max.	37 ft.

Source: City of Stanton Municipal Code.

3.11.2 CUMULATIVE IMPACTS

If implemented, the proposed site would not conflict with any applicable land use regulations, land use policies, or applicable land use plans. Therefore, the proposed project would not contribute towards any cumulative land use impacts nor contribute to a cumulative impact or result in land use conflicts. Therefore, the project’s impacts are not considered cumulatively considerable, and no mitigation is required.

3.11.3 MITIGATION MEASURES

The analysis determined that no impacts on land use and planning would result upon the implementation of the proposed project. As a result, no mitigation measures are required.

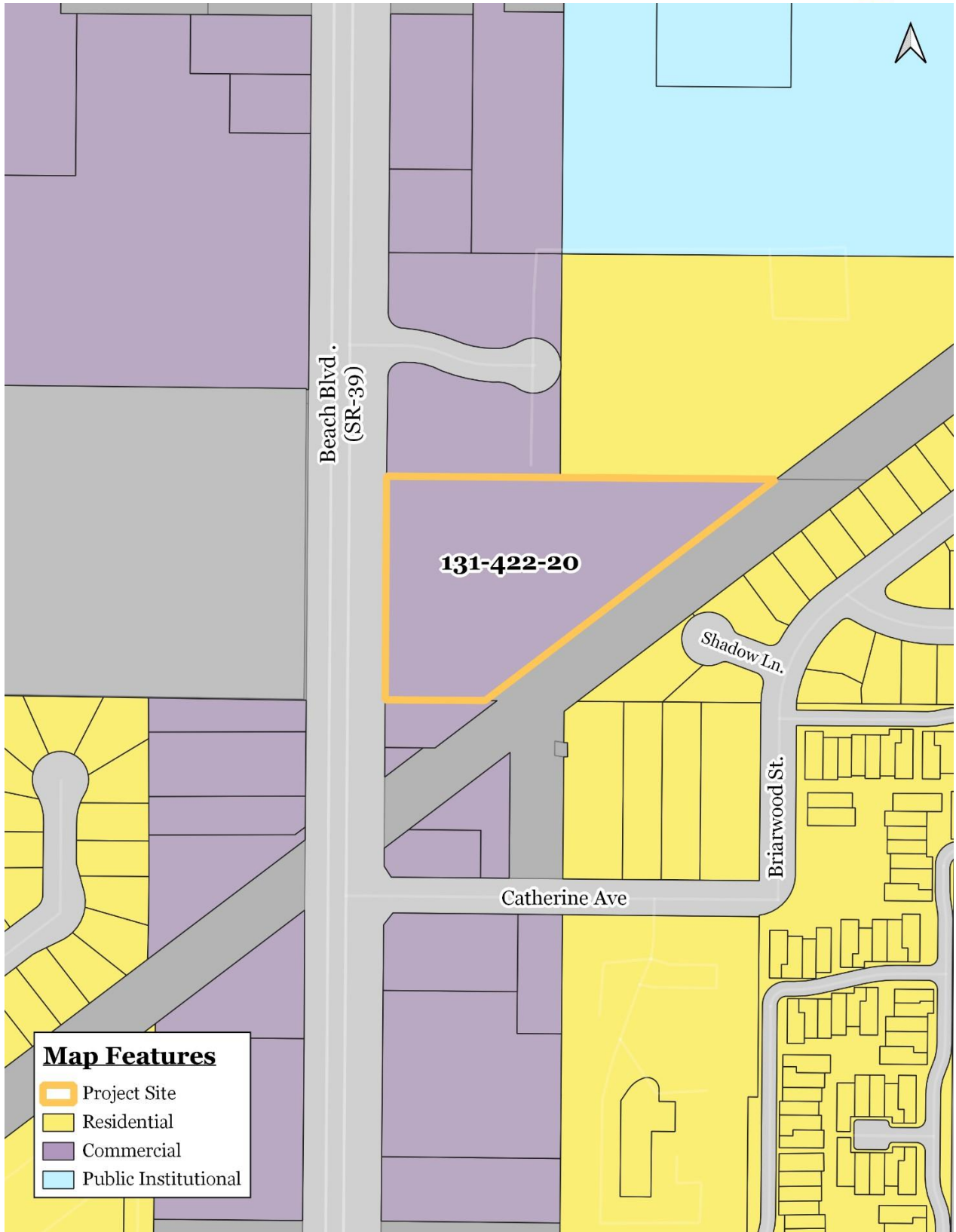


EXHIBIT 3-4
LAND USE MAP
SOURCE: CITY OF STANTON



3.12 MINERAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?				✘
B. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?				✘

3.12.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?* • No Impact.

A review of California Division of Oil, Gas, and Geothermal Resources well finder indicates that there are no wells located in the vicinity of the project site.³⁶ The Surface Mining and Reclamation Act of 1975 (SMARA) has developed mineral land classification maps and reports to assist in the protection and development of mineral resources. According to the SMARA, the following four mineral land use classifications are identified:

- *Mineral Resource Zone 1 (MRZ-1):* This land use classification refers to areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- *Mineral Resource Zone 2 (MRZ-2):* This land use classification refers to areas where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood for their presence exists.
- *Mineral Resource Zone 3 (MRZ-3):* This land use classification refers to areas where the significance of mineral deposits cannot be evaluated from the available data. Hilly or mountainous areas underlain by sedimentary, metamorphic, or igneous rock types and lowland areas underlain by alluvial wash or fan material are often included in this category. Additional information about the quality of material in these areas could either upgrade the classification to MRZ-2 or downgraded it to MRZ-1.
- *Mineral Resource Zone 4 (MRZ-4):* This land use classification refers to areas where available information is inadequate for assignment to any other mineral resource zone.

Both the proposed residential development site and the parkette site are located within Mineral Resource Zone 1 (MRZ-1) within the City of Stanton, which indicates that no significant mineral deposits are present in the area and it has been judged that little

³⁶ California, State of. Department of Conservation. *California Oil, Gas, and Geothermal Resources Well Finder*. <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-117.41448/34.56284/14>.



likelihood exists for their presence. In addition, there are no active mineral extraction activities occurring on-site or in the adjacent properties. As a result, no impacts to mineral resources will occur.

B. Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? • No Impact.

As previously mentioned, no mineral, oil, or energy extraction and/or generation activities are located within either the proposed residential development site or the parkette site. Moreover, the proposed project will not interfere with any resource extraction activity. Therefore, no impacts will result from the implementation of the proposed project.

3.12.2 CUMULATIVE IMPACTS

The proposed project would not result in any direct or indirect impacts related to mineral resources. The implementation of the proposed project would not result in the loss of an area designated for mineral resource extraction and would not prevent the ability to use any other areas for such purpose. As stated in the previous section, the proposed project site has not been used for mineral resource recovery and is not dedicated as a mineral resource recovery site on any land use plans. Therefore, the proposed project would not result in incremental effects to the loss of mineral resources. As a result, no cumulative impacts related to mineral resources would occur.

3.12.3 MITIGATION MEASURES

The analysis of potential impacts related to mineral resources indicated that no significant adverse impacts would result from the approval of the proposed project and its subsequent implementation. As a result, no mitigation measures are required.



3.13 NOISE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		✘		
B. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?			✘	
C. For a project located within the vicinity of a private airstrip or- an airport land use plan, or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✘

3.13.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

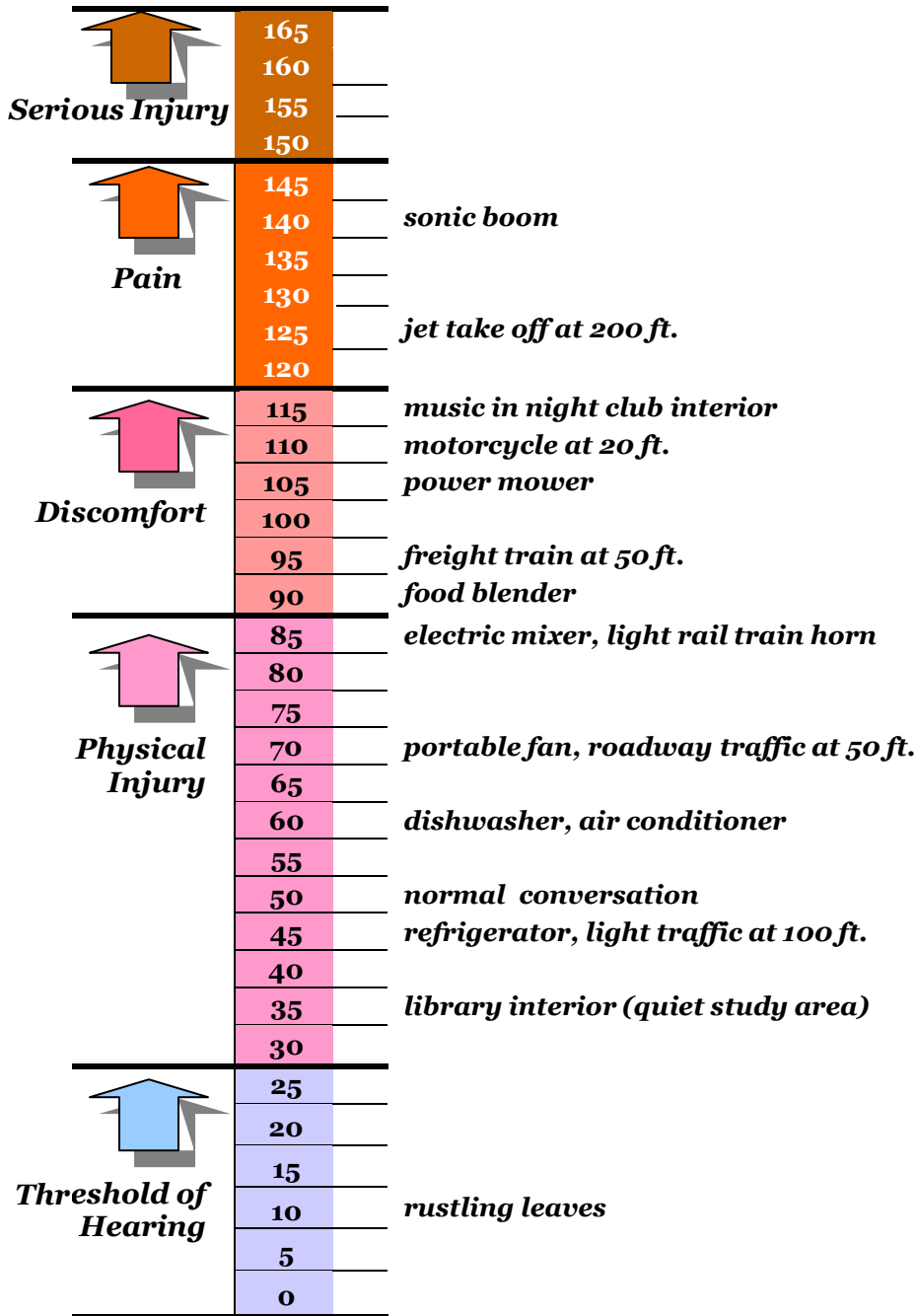
- A. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? • Less than Significant Impact with Mitigation*

Sound is mechanical energy transmitted by pressure waves through the air and is characterized by various parameters that include sound frequency, the speed of propagation, and the pressure level or energy content (amplitude). Noise is most often defined as unwanted sound. Noise levels may be described using a number of methods designed to evaluate the "loudness" of a particular noise. The most commonly used unit for measuring the level of sound is the decibel (dB). Zero on the decibel scale represents the lowest limit of sound that can be heard by humans. At the other extreme, the eardrum may rupture at 140 dB. The noise levels associated with everyday activities are noted in Exhibit 3-5.

The human ear can detect changes in sound levels greater than 3.0 dBA under normal ambient conditions. Changes of less than 3.0 dB are noticeable to some people under quiet conditions while changes of less than 1.0 dB are only discernible by few people under controlled, extremely quiet conditions. Though in general, an increase of between 3.0 dB and 5.0 dB in the ambient noise level is considered to represent the threshold for human sensitivity. Noise levels may also be expressed as dBA where an "A" weighting has been incorporated into the measurement metric to account for increased human sensitivity to noise. The A-weighted measurements correlate well with the perceived noise levels at lower frequencies.



Noise Levels – in dBA



**EXHIBIT 3-5
 TYPICAL NOISE LEVELS**

SOURCE: BLODGETT BAYLOSIS ENVIRONMENTAL PLANNING



Noise may be generated from a point source, such as machinery, or from a line source, such as a roadway segment containing moving vehicles. Because the area of the sound wave increases as the sound gets further and further from the source, less energy strikes any given point over the surface area of the wave. This phenomenon is known as “spreading loss.” Due to spreading loss, noise attenuates (decreases) with distance. Stationary, or point, noise subject to spreading loss experiences a 6.0 dBA reduction for every doubling of the distance beginning with the initial 50-foot distance.²³ Noise emanating from travelling vehicles, also referred to as a line source, decreases by approximately 3.0 dBA 50 feet from a source over a hard, unobstructed surface such as asphalt, and by approximately 4.5 dBA over a soft surface, such as vegetation. For every doubling of distance thereafter, noise levels drop another 3.0 dBA over a hard surface and 4.5 dBA over a soft surface.²⁴

Time variation in noise exposure is typically expressed in terms of the average energy over time (called Leq), or alternatively, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L₅₀ noise level represents the noise level that is exceeded 50% of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. Other values that are typically noted during a noise survey include the L_{min} and L_{max} that represent the minimum and maximum noise levels obtained over a given period, respectively. Noise sensitive receptors located in the vicinity of the proposed project site are described below:

- *Receptor #1 North of the project site:* Park Plaza, a multiple-family development, is located to the northeast of the project site. The apartment’s garages are located just north of the property line. The apartment buildings are located approximately 84 feet to the north of the property line.
- *Receptor #2 South/East of the project site:* Land uses located to the southeast, south of the Barber City Channel, are single family homes. At their closest point to the site, these units are located approximately 95-feet from the property line. A three-story mixed-use development is currently under construction approximately 150 feet south of the proposed project site.
- *Receptor #3 West of the project site:* A multi-residential development is located approximately 130 feet west of the project site. The receptor is separated from the project by Beach Boulevard.

The ambient noise environment is dominated by traffic noise from Beach Boulevard. To characterize the existing noise environment, a series of onsite noise measurements were taken. An *Extech Model 407730* Digital Sound Meter was used to conduct the noise measurements. A series of 100 discrete intervals were recorded at two separate locations (referred to herein as Location 1 and Location 2). Location 1 was situated along the west side of Beach Boulevard. Location 2 was positioned within the central portion of the parcel located at 12345 Beach Boulevard. The measurements were captured five feet above the ground surface. The measurements taken at Locations 1 and 2 were collected at Location 2 were captured free from any obstructions. The measurements were taken on a Monday morning at 9:45 AM. Table 3-7 indicates the variation in noise levels over time during the measurement period. As indicated previously, the L₅₀ noise level represents the noise level that is exceeded 50 percent of the time. Half the time the noise level exceeds this level and half the time the noise level is less than this level. The average noise levels during the measurement period were 66.5 dBA for Location 1 and 60.5 dBA for Location 2. The noise measurement worksheets are included in Appendix B.

²³ United States Department of Transportation – Federal Highway Administration. *Transit Noise and Vibration Impact Assessment Manual*. Report dated September 2018.



**Table 3-7
 Noise Measurement Results**

Noise Metric	Noise Level (dBA) for Location 1	Noise Level (dBA) for Location 2
L _{max} (Maximum Noise Level)	93.1 dBA	66.3 dBA
L ₉₉ (Noise levels <99% of time)	77.1 dBA	65.6 dBA
L ₉₀ (Noise levels <90% of time)	73.3 dBA	63.5 dBA
L ₇₅ (Noise levels <75% of time)	70.5 dBA	61.8 dBA
L ₅₀ (Noise levels <50% of time)	66.9 dBA	60.5 dBA
L _{min} (Minimum Noise Level)	52.2 dBA	54.3 dBA
Average Noise Level	66.5 dBA	60.5 dBA

Source: Blodgett Baylosis Environmental Planning.
 Measurements were taken in December 2019.

Noise generated within the City of Stanton is regulated under Title 9, Chapter 9.28 - Noise Control of the City’s Municipal Code. Chapter 9.28 of the City’s Municipal Code contains both general noise regulations and noise regulations specific to construction. According to Section 9.28.070(e) of the Municipal Code, noise sources associated with construction, repair, remodeling, or grading of any real property are exempt from the City’s noise control regulations provided the construction activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday. The City’s Noise Control Ordinance referenced above does not establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. Thus, the construction noise thresholds from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment were used to establish a significant construction noise threshold impact if construction noise exceeds 80 dBA at sensitive receptors. In addition, Chapter 9.28 outlines specific interior and exterior dBA limits within residential zones. As indicated in Section 9.28.050(a), exterior noise levels within residential zoned properties are restricted to 55 dBA between the hours of 7:00 a.m. and 10:00 p.m. Exterior noise levels within residential zoned properties are further restricted to 50 dBA between the hours of 10:00 p.m. and 7:00 a.m. Section 9.28.050(b) of the Municipal Code states:

“It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level, when measured on any other residential property, either incorporated or unincorporated, to exceed:

- The noise standard for a cumulative period of more than thirty minutes in any hour;
- The noise standard plus five dBA for a cumulative period of more than fifteen minutes in any hour;
- The noise standard plus ten dBA for a cumulative period of more than five minutes in any hour; The noise standard plus fifteen dBA for a cumulative period of more than one minute in any hour; or

²⁴ United States Department of Transportation – Federal Highway Administration. *Transit Noise and Vibration Impact Assessment Manual*. Report dated September 2018.



- The noise standard plus twenty dBA for any period of time.”

Section 9.28.060(a) establishes interior noise standards for residential land uses. According to that Section of the Municipal Code, interior noise levels within residential zoned properties are restricted to 55 dBA between the hours of 7:00 a.m. and 10:00 p.m. Interior noise levels within residential zoned properties are further restricted to 45 dBA between the hours of 10:00 p.m. and 7:00 a.m. Furthermore, Section 9.28.060(b) of the Municipal Code states:

“It is unlawful for any person at any location within the incorporated area of the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by such person, when the foregoing causes the noise level when measured within any other dwelling unit on any residential property, either incorporated or unincorporated, to exceed:

- The interior noise standard for a cumulative period of more than five minutes in any hour;
- The interior noise standard plus five dBA for a cumulative period of more than one minute in any hour; or
- The interior noise standard plus ten dBA for any period of time.”

Construction activities would generate perceptible noise levels during the demolition, grading, paving, and building construction phases. Relatively high groundborne noise levels would be generated by the operation of heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, scrapers, and other heavy duty construction equipment. Table 3-8, Maximum Noise Levels Generated by Construction Equipment, indicates the anticipated noise levels from specific types of construction equipment. Point sources of noise emissions are attenuated by a factor of 6 dBA per a doubling of distance from the noise source.

Table 3-8 then indicates the anticipated construction noise levels for the selected construction equipment types at the three sensitive receptors discussed previously. As indicated in the Table, Receptor #1 is 84 feet from the nearest construction activity, Receptor #2 is construction 95 feet, and Receptor #3 is 130 feet. The noise levels were adjusted under the three “receptor” columns to take into account the spreading loss due to distance. For example, the noise levels for Receptor #1 were adjusted by a -3 dBA from the actual Lmax at 50 feet. The noise levels for Receptor #2 were adjusted by a +1 dBA from the actual Lmax at 100 feet though in reality the difference would be negligible. The noise levels for Receptor #3 were adjusted by a -3 dBA from the actual Lmax at 100 feet. As indicated previously, the construction noise thresholds were taken from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment. A significant construction noise threshold impact if construction noise exceeds 80 dBA at a sensitive receptor. As indicated in the Table, there is a potential for this significant impact when graders and tractors are being used next to the property lines near Receptors #1, and #2. These occurrences are noted using bold lettering in Table 3-8. These noise levels could intermittently occur for a few days when construction equipment is operating closest to the residential uses. The remainder of the time, the construction noise levels would be much less because the equipment would be working further away from the existing sensitive uses.

²⁵ California Department of Transportation. *Technical Noise Supplement to the Traffic Noise Analysis Protocol – Table 7-1 FHWA Building Noise Reduction Factors*. Report dated 2013.

²⁶ Ibid.



Table 3-8
Maximum Noise Levels Generated by Construction Equipment

Construction Equipment	Actual L _{max} @27 ft.	Actual L _{max} @50 ft.	Actual L _{max} @100 ft.	Receptor #1 L _{max} 84 ft.	Receptor #2 L _{max} 95 ft.	Receptor #3 L _{max} 130 ft.
Backhoe	83 dBA	78 dBA	72 dBA	75 dBA	73 dBA	69 dBA
Bulldozer/Compactor	87 dBA	82 dBA	76 dBA	79 dBA	77 dBA	73 dBA
Concrete Mixer	84 dBA	79 dBA	73 dBA	77 dBA	74 dBA	70 dBA
Concrete Pump	86 dBA	79 dBA	73 dBA	77 dBA	74 dBA	70 dBA
Crane, Mobile	86 dBA	81 dBA	75 dBA	79 dBA	76 dBA	72 dBA
Dump Truck	81 dBA	76 dBA	70 dBA	73 dBA	71 dBA	67 dBA
Excavator	86 dBA	81 dBA	75 dBA	79 dBA	76 dBA	72 dBA
Grader	90 dBA	85 dBA	79 dBA	82 dBA	80 dBA	76 dBA
Loader	84 dBA	79 dBA	73 dBA	76 dBA	74 dBA	70 dBA
Paver	82 dBA	77 dBA	71 dBA	74 dBA	72 dBA	68 dBA
Roller	85 dBA	80 dBA	76 dBA	77 dBA	77 dBA	73 dBA
Tractor	89 dBA	84 dBA	78 dBA	81 dBA	79 dBA	75 dBA
Truck, Flatbed	79 dBA	74 dBA	68 dBA	71 dBA	69 dBA	65 dBA

Source: Bugliarello, et. al., *The Impact of Noise Pollution*, Chapter 127, 1976

As indicated previously, construction activities undertaken within the City are exempt from the provisions outlined in Chapter 9.28 of the City’s Municipal Code. As indicated previously, the City’s Noise Control Ordinance does not establish numeric maximum acceptable construction source noise levels at potentially affected receivers, which would allow for a quantified determination of what CEQA constitutes a substantial temporary or periodic noise increase. For this reason, the construction noise thresholds from the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment were used to establish a significant construction noise threshold impact if construction noise would exceed 80 dBA at sensitive receptors. As a result, the following mitigation measures focus on ways to further reduce construction noise levels at the nearest sensitive receptors so that the impacts would be less than significant:

- MM-NOI-1: Construction staging areas must be located within the western portion of the project site, at least 200 feet east of the project site’s eastern boundary away from the noise sensitive receptors.
- MM-NOI-2: The use of Tier IV rated construction equipment must be used during demolition, site preparation, and construction activities.
- MM-NOI-3: The Applicant must notify local residents regarding construction times and local contact information by placing a notice in the form of a sign along the project site’s boundaries in prominent locations. The notice shall include the name and phone number of the contact person at both the construction site and at the City’s Code Enforcement office where residents may call to register a complaint about noise. Upon receipt of a complaint, the contractors must stop work to inspect their equipment to ensure that they are properly tuned and muffled. Construction activities may not resume until the contractors confirm that the equipment is properly tuned and muffled. In addition, copies of all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City’s Community Development Director.



- MM-NOI-4: Construction shall be prohibited from taking place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.

These mitigation measures will reduce the Project's potential construction noise impacts to a level of less than significant. Notably, MM-NOI-3 will ensure a less than significant impact because the Project's potential construction noise impacts, set forth in Table 3-8 above, are premised on the assumption that the Project will not use Tier 4 machines. Tier 4 machines are quieter than their predecessors, and this is especially true as to the equipment referred to in Table 3-8. For example, Tier 4 equipment of JCB (a company) realized significant noise reductions over its older, non-Tier 4 equipment, from 87 dBA to 72 dBA. The Tier 4 diesel construction equipment utilizes advanced technology that adjusts maximum engine output and MCRs that translated into both improved fuel economy, lower air emissions, and reduced noise and vibration. In general, the Tier 4 requirements took effect in 2015. This Tier 4 requirement will apply to all equipment shown in Table 3-8, including those that could potentially exceed 80 dBA near a sensitive receptor, namely graders and tractors. Overall, the use of this equipment will reduce the Project's potential construction noise levels by 17%, which will ensure that construction noise resulting from the Project will not exceed the 80 dBA threshold.

Moreover, the Project's operation will result in a less than significant noise impact. As indicated previously, Beach Boulevard extends along the east side of the project site in a north-south orientation. The noise levels that were captured averaged 66.5 dBA along the west side of Beach Boulevard. The noise measurements were recorded with an unobstructed line of sight between the project site and Beach Boulevard. The predominant source of noise in the site's vicinity is roadway noise generated by passenger vehicles and trucks. Presently, noise levels on-site exceed the City's 55 dBA exterior threshold. Nevertheless, roadway noise emanating from Beach Boulevard will be reduced by complying with the California Green Building code, which requires the use of energy efficient windows and insulation. Insulation will be placed between the joists and studs and will serve as an additional buffer which when combined with stucco and drywall, will reduce interior noise levels by a minimum of 10.0 dBA. Noise reductions of up to 20 dBA are possible with closed windows.²⁶ Therefore, roadway noise emanating from Beach Boulevard will be attenuated by an additional 20 dBA, bringing average interior noise levels below the 55 dBA threshold established in the City's Municipal Code.

A majority of the exterior noise that will be generated from operation of the proposed project will originate from the open (unenclosed) parking areas. Noise generated within the open parking garage would include people shouting/laughing, which averages 64.5 dBA; car door slamming, which averages 62.5 dBA; car idling, which averages 61 dBA; car starting, which averages 59.5 dBA; and people talking, which averages 41 dBA. All of these averages were taken at a distance of 50 feet from the source. This information is based on actual parking lot noise measurements taken by Blodgett Baylosis Environmental Planning. Other sources of exterior noise will include noise generated on individual balconies and within the public courtyard areas located in the center and western portions of the project site. Exterior noise produced on balconies and within the public courtyard areas will originate from residents conversing, shouting, laughing, or engaging in any other physical activity. Noise produced by residents on private balconies and within the public courtyard areas will be masked by traffic noise emanating from the adjacent roadways. In addition, noise produced on balconies will be subject to spreading loss. It is important to note that noise originating from the project site is not expected to affect the nearby sensitive receptors. Nevertheless, the project's operational noise impacts are considered to be less than significant, and no mitigation is required. The proposed project will also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their



replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no stationary noise impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.

B. Would the project result in generation of excessive ground borne vibration or groundborne noise levels? • Less than Significant Impact.

Ground vibrations associated with construction activities using modern construction methods and equipment rarely reach the levels that result in damage to nearby buildings though vibration related to construction activities may be discernible in areas located near the construction site. A possible exception is in older buildings where special care must be taken to avoid structural damage. The U.S. Department of Transportation (U.S. DOT) has guidelines for vibration levels from construction and recommends that the maximum peak-particle-velocity (PPV) levels remain below 0.05 inches per second at the nearest structures. PPV refers to the movement within the ground of molecular particles and not surface movement. Vibration levels above 0.5 inches per second have the potential to cause architectural damage to normal dwellings. The U.S. DOT also states that vibration levels above 0.015 inches per second (in/sec) are sometimes perceptible to people, and the level at which vibration becomes an irritation to people is 0.64 inches per second. Caltrans guidance defines the threshold of perception from transient sources as 0.25 inch per second PPV. The project's implementation would not require excessively deep foundations though construction measures would be implemented under the residential structures to address the liquefaction constraints. The use of these measures will not involve the use of pile drivers or impact producing equipment.

The nearest sensitive receptors (Su Casa Apartments) are located approximately 75 feet to the northeast of the project site. Single family homes are located southeast of the site on the opposite side of the adjacent flood control channel approximately 90 feet. The primary source of vibration during construction would be from the operation of construction equipment, such as a bulldozer. A bulldozer would create a vibration level of 0.058 inch-per-second PPV at 25 feet. Based on typical propagation rates, the vibration level at the nearest offsite sensitive receptors, the apartments located more than 75 feet to the northeast of the project site, would be 0.058 inch per second PPV, which would be well below the 0.25 inch per second PPV threshold detailed above (this type of bulldozer would create a vibration level of 0.003 inch-per-second PPV at 25 feet). Based on typical propagation rates, the vibration level from a small dozer at a residence located just five feet away from the proposed project site boundary would be 0.03 inch per second PPV, which would be below the 0.25 inch per second PPV threshold. As a result, the impacts will be less than significant.

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? • No Impact.

The project site is not located within an airport land use plan and is not located within two miles of a public airport or public use airport. The nearest airport is the Long Beach Municipal Airport, located approximately 12 miles west of the project site. As a result, the proposed project will not expose people residing or working in the project area to excessive noise levels related to airport uses. As a result, no impacts will occur.

3.13.2 CUMULATIVE IMPACTS



As discussed in the previous section, all noise impact will be less than significant. Construction related noise impacts are limited and fall in accordance with the City's construction- related noise control requirements. Therefore, cumulative impacts relative to temporary and permanent noise generation associated with the proposed project would not be cumulatively considerable, and thus, less than significant.

3.13.3 MITIGATION MEASURES

The analysis of potential noise impacts indicated that the proposed project would result in a potentially significant noise impact absent mitigation. To reduce the Project's potential noise impacts to a level of less than significant, the project applicant has agreed to the following mitigation measures :

- *MM-NOI-1 (Noise Impacts):* Construction staging areas must be located within the western portion of the project site, at least 200 feet east of the project site's eastern boundary away from the noise sensitive receptors.
- *MM-NOI-2 (Noise Impacts):* The use of Tier IV rated construction equipment must be used during the demolition, site preparation, and construction activities.
- *MM-NOI-3 (Noise Impacts):* The Applicant must notify local residents regarding construction times and local contact information by placing a notice in the form of a sign along the project site's boundaries in prominent locations. The notice shall include the name and phone number of the contact person at both the construction site and at the City's Code Enforcement office where residents may call to register a complaint about noise. Upon receipt of a complaint, the contractors must stop work to inspect their equipment to ensure that it is properly tuned and muffled. Construction activities may not resume until the contractors confirm that the equipment is properly tuned and muffled. In addition, copies of all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Community Development Director.
- *MM-NOI-4 (Noise Impacts):* Construction shall be prohibited from taking place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.

³⁹ Google Earth. Website Accessed November 20, 2020.



3.14 POPULATION & HOUSING

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				✘
B. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				✘

3.14.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?* • *No Impact.*

According to the Growth Forecast Appendix prepared by SCAG for the 2016-2040 RTP/SCS, the City of Stanton is projected to add a total of 2,900 new residents and 1,300 new employees through the year 2040.²⁷ The project's implementation will not result in an increase in population growth that would exceed the SCAG's projections. Growth-inducing impacts include the following:

- *New development in an area presently undeveloped and economic factors which may influence development.* The proposed 3.55-acre (154,470 square-foot) project site is located within an urbanized area that has been previously developed for its current commercial land use as a recreational vehicle (RV) sales and storage lot. The project site is surrounded on all sides by urban development.
- *Extension of roadways and other transportation facilities.* No roadway extensions will be required to accommodate the proposed development.
- *Extension of infrastructure and other improvements.* The installation of any new utility lines will not lead to subsequent offsite development since these utility lines will serve the site only.
- *Major off-site public projects (treatment plants, etc.).* The project's increase in demand for utility services can be accommodated without the construction or expansion of landfills, water treatment plants, or wastewater treatment plants.
- *The removal of housing requiring replacement housing elsewhere.* The site does not contain any housing units. As a result, no replacement housing will be required.

²⁷Southern California Association of Governments. *Growth Forecast. Regional Transportation Plan 2016-2040.* Adopted on April 7, 2016.



- *Additional population growth leading to increased demand for goods and services.* The project's construction would result in a limited increase in construction employment which can be accommodated by the local labor market.
- *Short-term growth-inducing impacts related to the project's construction.* The project will result in temporary employment during the construction phase.

The proposed residential development will not induce substantial unplanned population growth in an area. The approximate 267 new residents that will be a result of the proposed residential development would result in a less than one percent population increase (0.75%) from the 2010 Census population of the City. These numbers are within the projected population numbers provided by SCAG RTP/SCS forecast for the City. The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette. As a result, no impacts will occur.

B. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?* • *No Impact.*

The proposed 3.55-acre (154,470 square-foot) project site is located within an urbanized area that has been previously developed for its current commercial land use as a recreational vehicle (RV) sales and storage lot. The majority of the property is paved over with asphalt, with little ruderal vegetation on the premises. This property and surrounding areas have a General Plan and Zoning designation for *General Mixed-Use (GLMX)* land uses, which permits the construction of multi-family residential developments. There are currently no housing units within the project site, and no housing units will be displaced as a result of the proposed project's implementation. Therefore, no impacts will result.

3.14.2 CUMULATIVE IMPACTS

The proposed project will not result in direct or indirect, permanent or temporary impacts on population and housing. The proposed project is compliant with the population growth forecast provided by the City. Therefore, the proposed project would not result in incremental effects to population and housing that could be compounded or otherwise increased when considered to other related projects.

3.14.3 MITIGATION MEASURES

The analysis of potential population and housing impacts indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.



3.15 PUBLIC SERVICES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
<p>A. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for: fire protection; police protection; schools; parks; or other public facilities?</p>			<p>✘</p>	

3.15.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A.** *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which would cause significant environmental impacts, in fire protection; police protection; schools; parks; or other public facilities? • Less than Significant Impact.*

Fire Department

The City of Stanton contracts fire protection services with the Orange County Fire Department from one fire station within the City limits, located at 7871 Pacific Street. The OCFD currently reviews all new development plans. The proposed project will be required to conform to all fire protection and prevention requirements, including, but not limited to, building setbacks, emergency access, and fire flow (or the flow rate of water that is available for extinguishing fires). The proposed residential project would only place an incremental demand on fire services since the project will be constructed with strict adherence to all pertinent building and fire codes. In addition, the proposed project would be required to implement all pertinent Fire Code Standards including the installation of fire hydrants and sprinkler systems inside the buildings. Furthermore, the project will be reviewed by City and Fire officials to ensure adequate fire service and safety as a result of project implementation. The project will also be required to comply with the City’s Development Impact Fee (DIF) requirements to assist in the funding public facilities and services, including fire. As a result, the potential impacts to fire protection services will be less than significant. The proposed project will also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.

Law Enforcement

The City of Stanton contracts with the Orange County Sheriff’s Department for law enforcement services. The OCSD will review security and site plans to ensure the proposed project conforms to the Department’s



security regulations. The proposed facility will also be required to comply with the OCSD requirements along with the City's DIF regulations. As a result, the potential impacts to law enforcement services will be less than significant.

Schools

The proposed residential development consisting of 79 residential units is projected to add 267 new residents to the City. The project site is served by the following schools within the Garden Grove Unified School District: Hare High School, Alamitos Intermediate School, and Wakeham Elementary School.

According to the 2010 Census, 25.8 percent of the City's population is school-aged (five years of age to 18 years of age). Using the Citywide Census data, there is a potential for 69 school-age students to be added to the school system as a result of the project, based on the City's percentage of children in between the ages of 5 and 18. Pursuant to SB-50, payment of fees to the applicable school district is considered full mitigation for project-related impacts. The proposed project's school enrollment impacts will be offset by the school fees (\$3,379 per square foot for residential development) that will be paid by the developer. As a result, less than significant impacts will result from the proposed project's implementation.

Recreational Services

The nearest public park, Premier Park, is located approximately ½ mile from the project site. Due to the residential nature of the proposed project, the proposed project will place an incremental demand for recreational open space and services. Additionally, Orange County Public Libraries services may experience incremental demand with the closest library being Stanton Library, approximately 1.2 miles north. However, the potential impacts to park and library services will be offset since the project will involve the installation of an on-site dog park, walking trail, and reading nook. As a result, the impacts anticipated are less than significant. The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.

Governmental Services

The proposed project would redevelop the project site with 79 residential units that would also include 8 affordable housing units that improve the City's housing supply. The site is already served by various governmental services and while the project would result in a limited increase in population, the project would not result in the need for new or physically altered facilities to provide these services. Furthermore, the Applicant is providing various recreational amenities. The proposed project will also include a recreational room equipped with outdoor sitting areas and a double barbeque grilling counter. In addition, the Applicant would be providing a community park and reading nook, a paseo, and a dog park. In addition, the Applicant is required to pay all pertinent development fees that will further offset the cost of the development to the City. Finally, the new development will enhance the assessed valuation of the property which will provide additional long-term property tax revenue to the City. As a result, less than significant impacts will result from the proposed project's implementation.



3.15.2 CUMULATIVE IMPACTS

The proposed project will not result in any significant adverse impacts on public services. Therefore, the proposed project would not result in incremental effects to public services that could be compounded or otherwise increased when considered to other related projects.

3.15.3 MITIGATION MEASURES

The analysis of public service impacts indicated that less than significant adverse impacts are anticipated, and no mitigation is required with the implementation of the proposed project.



3.16 RECREATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✘	
B. Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				✘

3.16.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?* • *Less than Significant Impact.*

The proposed 3.55-acre (154,470 square-foot) project site has a General Plan and Zoning designation for *General Mixed-Use (GLMX)* land uses, which permits the construction of multi-family residential developments. The nearest public park, Premier Park, is located approximately 0.7 miles from the project site. Due to the residential nature of the proposed project, the proposed project will place an incremental demand for recreational open space and services. To address the incremental demand of recreational spaces, the proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. Additionally, the proposed project would involve the construction of a recreation room, common activity areas, reading nook, a paseo, and a dog park. As a result, less than significant impacts will result from the implementation of the proposed parkette.

- B. *Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?* • *No Impact.*

The proposed project would not result in any improvements that would potentially significantly physically alter any public park facilities and services within the City. The proposed project would include the construction of a recreation room, community park, reading nook, paseo and dog park. Additionally, the proposed project would also involve the construction of a new, off-site parkette referred to as the Orangewood Parkette, a passive park consisting of approximately 7,600 square feet. Due to the park's small size, no impacts will occur.



3.16.2 CUMULATIVE IMPACTS

The proposed project will not result in direct or indirect, permanent or temporary impacts on recreational facilities and services. The proposed project is compliant with the population growth forecast provided by the City. Therefore, the proposed project would not result in incremental effects to such facilities and services that could be compounded or otherwise increased when considered to other related projects.

3.16.3 MITIGATION MEASURES

The analysis of potential impacts related to parks and recreation indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.



3.17 TRANSPORTATION

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project conflict with a plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			✘	
B. Conflict or be inconsistent with CEQA Guidelines §15064.3 subdivision (b)?			✘	
C. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✘	
D. Would the project result in inadequate emergency access?				✘

3.17.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

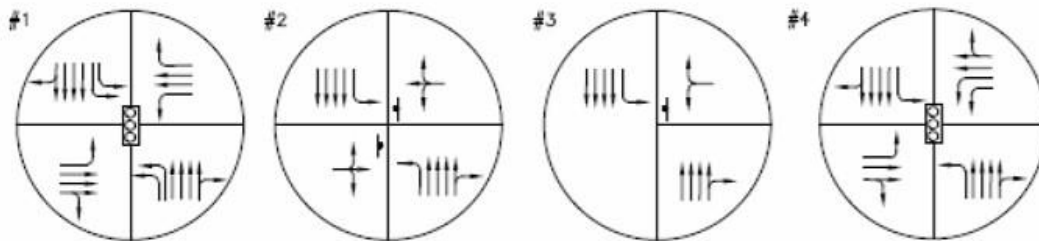
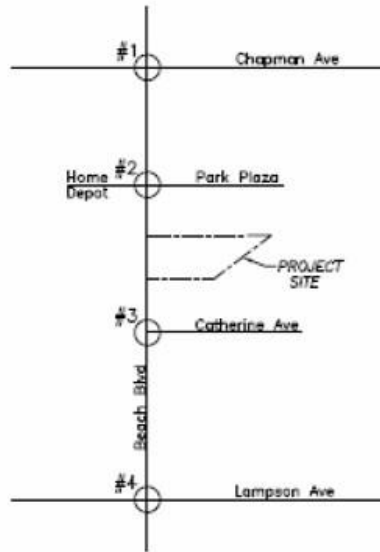
A. *Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? • Less than Significant Impact.*

The main residential project site is located on the east side of Beach Boulevard between Park Plaza and Catherine Avenue. Beach Boulevard is a north-south Principal Arterial that provides four lanes in each direction separated by raised medians and exclusive left-turn lanes at major intersections. The posted speed limit is 45 mph. On-street parking is prohibited along Beach Boulevard in the project vicinity.²⁸

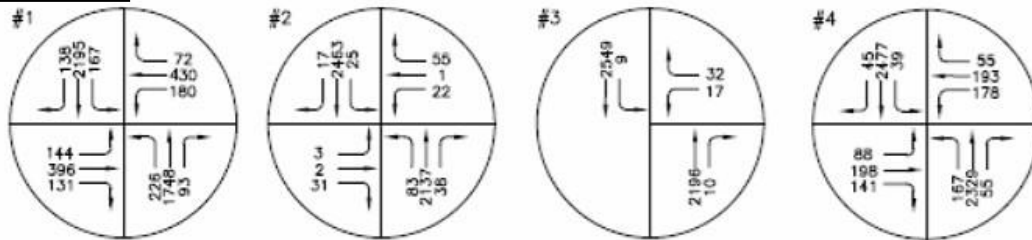
All traffic counts of AM and PM peak hour turning movements at study intersections were collected on Thursday, February 20, 2020, except intersection No.2 (Beach Boulevard at Park Plaza) which was collected on Thursday, October 15, 2020. Lane configurations and traffic volumes at the study intersections are shown in Exhibit 3-6. Complete traffic data can be found in Appendix B of the Traffic Impact Analysis (TIA). Level of service (LOS) and V/C ratio for existing conditions are shown in Table 3-9. The analysis worksheets can be found in Appendix C. All study intersections operate at acceptable LOS D or better in the AM and PM peak hours under existing conditions.²⁹

²⁸ KT Traffic Engineering, Inc. *Traffic Impact Study and Vehicle Miles Travelled (VMT) Screening*. Report dated November 2020.

²⁹ Ibid.



AM Peak Hours



PM Peak Hours

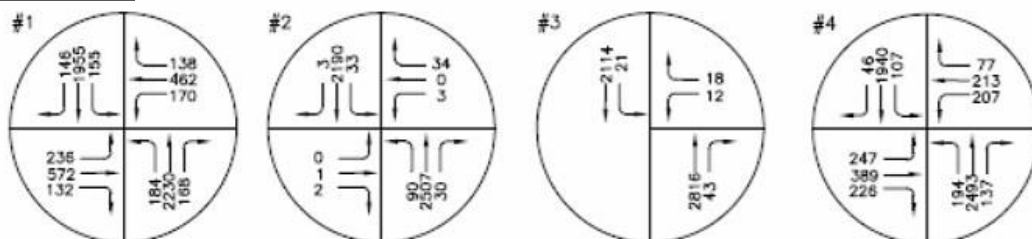


EXHIBIT 3-6
EXISTING CIRCULATION SYSTEM
 SOURCE: K2 TRAFFIC ENGINEERING



**Table 3-9
 Existing Conditions**

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	C	0.791	D	0.845
2. Beach Blvd at Park Plaza*	D	26.2	D	27.7
3. Beach Blvd at Catherine Ave*	C	22.4	D	30.8
4. Beach Blvd at Lampson Ave	C	0.801	C	0.877

*Stop controlled at minor approach with delay shown in seconds

Trip generation represents the amount of traffic attracted and produced by the project development. Based upon the recommendations from *Trip Generation, Tenth Edition*, published by the Institute of Transportation Engineers (ITE), applicable trip generation rates are shown in Table 3-10.³⁰

**Table 3-10
 Project Trip Generation**

Land Use	Unit	Quantity	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Proposed Use Multifamily Housing (Mid-Rise) (221)	Dwelling Unit	79	39	9	30	48	30	18	622
Existing-Use Credit Recreational Vehicle Sales (842)	1000 Sq. Ft.	-6.52	-3	-3	0	-5	-2	-3	-33
NET Trip Generation			36	6	30	43	28	15	589

Trip distribution represents the directional orientation of traffic to and from the proposed project. Directional orientation is largely influenced by the geographical location of the site, among many other factors. The trip distribution pattern for the project is illustrated on Exhibit 3-7.

The traffic assignment to and from the site has been based upon the results of trip generation, trip distribution, and access layouts. Exhibit 3-8 illustrates the traffic assignment of the proposed project in the AM and PM peak hour.

³⁰ KT Traffic Engineering, Inc. *Traffic Impact Study and Vehicle Miles Travelled (VMT) Screening*. Report dated June 30, 2021.
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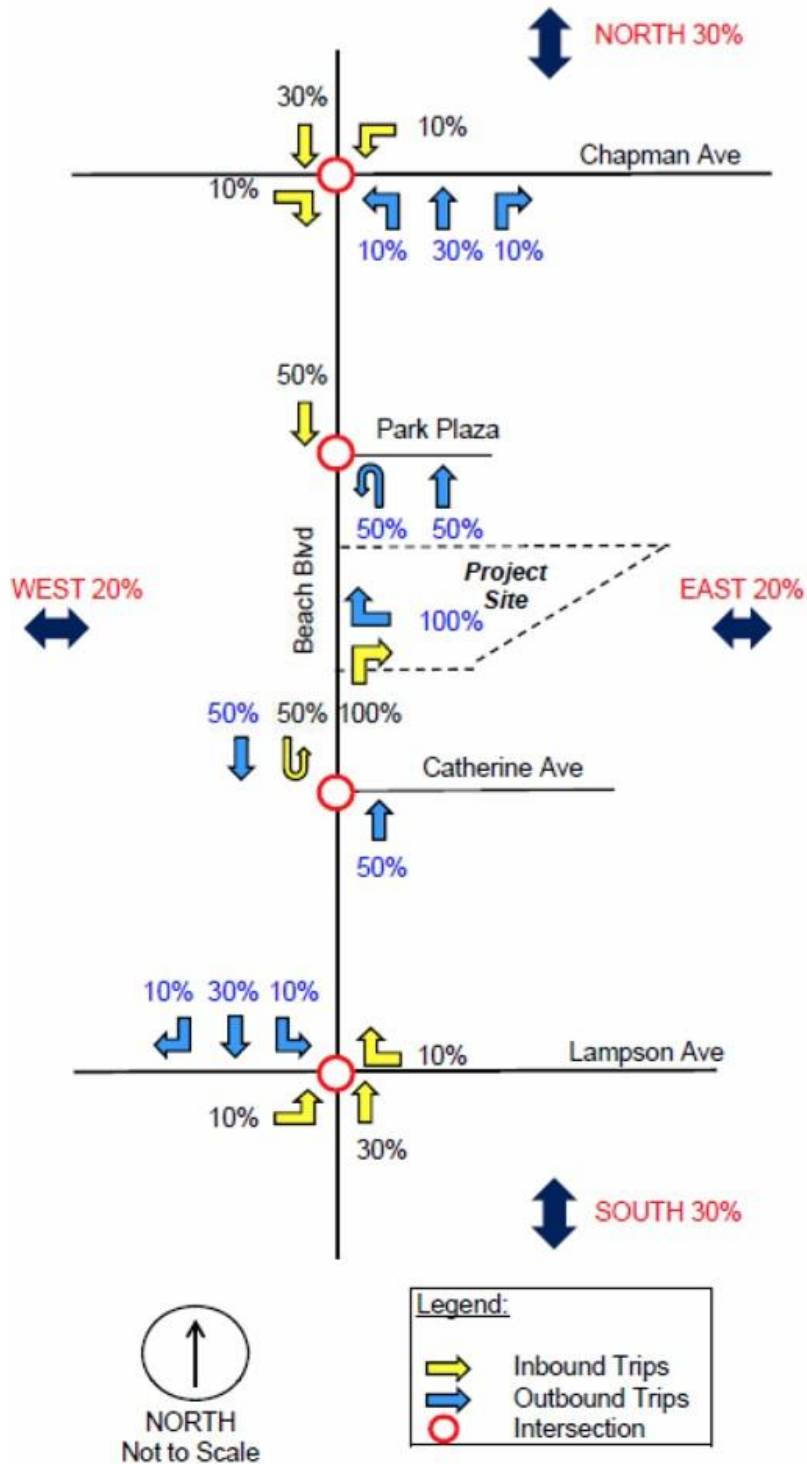


EXHIBIT 3-7
TRIP DISTRIBUTION
 SOURCE: K2 TRAFFIC ENGINEERING

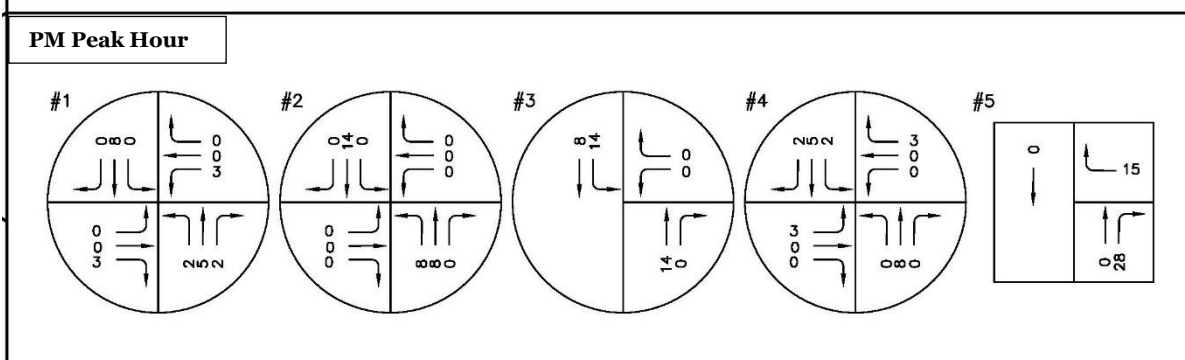
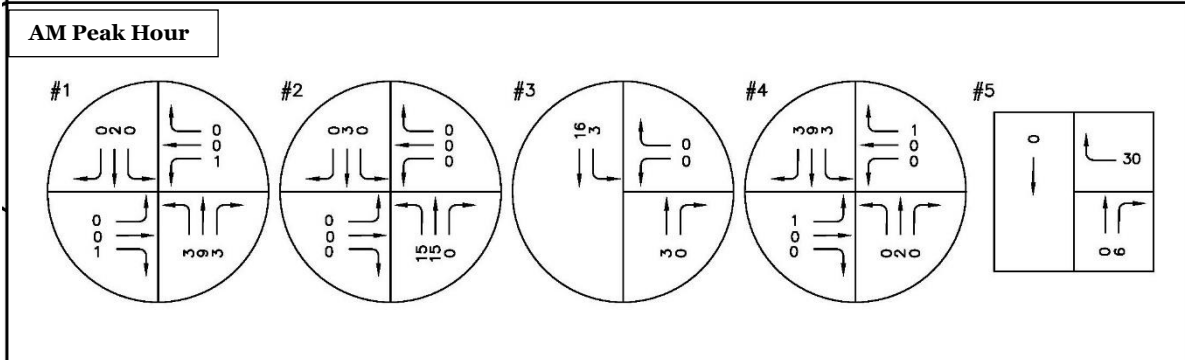
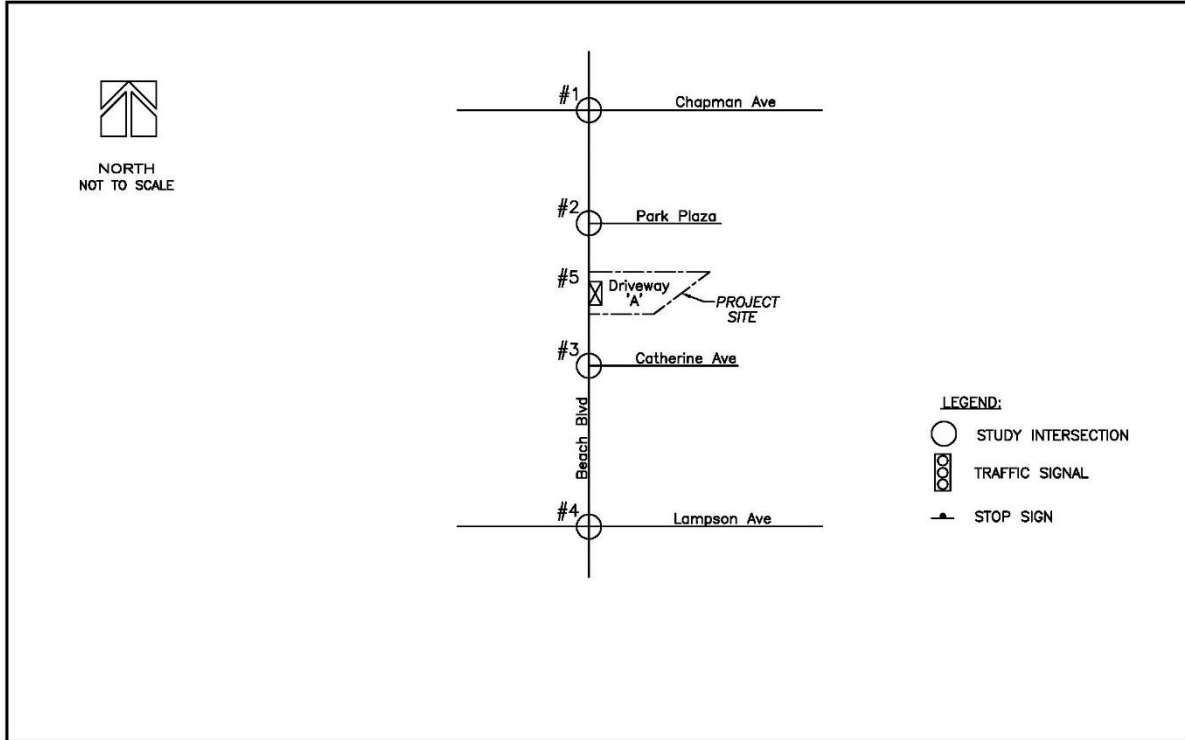


EXHIBIT 3-8
TRIP ASSIGNMENT
 SOURCE: K2 TRAFFIC ENGINEERING



The level of service and V/C ratios are shown in Table 3-11. All study intersections will operate at LOS D or better for the AM and PM peak hours in this scenario.

**Table 3-11
 Existing Conditions with Project**

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	C	0.793	D	0.847
2. Beach Blvd at Park Plaza*	D	26.2	D	27.9
3. Beach Blvd at Catherine Ave*	C	22.4	D	31.0
4. Beach Blvd at Lampson Ave	C	0.803	D	0.879
5. Beach Blvd. @ Project Drivwy	C	22.6	D	30.2

*Stop controlled at minor approach with delay shown in seconds

The traffic impacts of the proposed project based on existing conditions are shown in Table 3-12.

**Table 3-12
 Project Intersection Impact Analysis Existing Conditions with Project**

Intersection	W/O Project		W/Project		Increase	Significant Impact
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)		
AM Peak Hour						
1. Beach Blvd at Chapman Ave	C	0.791	C	0.793	0.001	No
2. Beach Blvd at Park Plaza*	D	26.2	D	26.2	0	No
3. Beach Blvd at Catherine Ave*	C	22.4	C	22.4	0	No
4. Beach Blvd at Lampson Ave	C	0.801	C	0.803	0.002	No
5. Beach Blvd. @ Driveway	--	--	C	22.6	--	No
PM Peak Hour						
1. Beach Blvd at Chapman Ave	D	0.845	D	0.847	0.001	No
2. Beach Blvd at Park Plaza*	D	27.7	D	27.9	0.2 sec	No
3. Beach Blvd at Catherine Ave*	D	30.8	D	31.0	0.2 sec	No
4. Beach Blvd at Lampson Ave	C	0.877	C	0.879	0.002	No
5. Beach Blvd. @ Driveway	--	---	D	30.2	--	--

*Stop controlled at minor approach with delay shown in seconds



According to the City of Stanton's standard, a significant impact occurs at a study intersection when the peak hour LOS falls below D, and the intersection capacity utilization (ICU) increases by 0.03 or more. The City of Stanton is required to demonstrate compliance with 2019 Orange County Transportation Authority (OCTA) Congestion Management Plan (CMP) as Beach Boulevard is designated as Orange County CMP facility, the traffic impact is deemed significant and mitigation is required if both of the following conditions are met: 1. The intersection operates at worse than LOS E, and 2. The ICU increases by 0.10 or more. The project does not have a significant traffic impact and mitigation measures are not required.

The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.

B. *Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)? • Less than Significant Impact.*

According to the "Los Angeles County Public Works Transportation Impact Analysis Guidelines", projects located within a Transit Priority Area (TPA) as determined by the most recent Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) should be exempt from VMT analysis. TPA is within one-half mile from major transit stops. Major transit stop is defined as a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. It also includes major transit stops that are included in the applicable regional transportation.

The draft Transit Priority Area (TPA) in the SCAG Region for the 2045 plan, updated on June 2019, has illustrated that the project site is within one-half mile from the intersection of Beach Boulevard and Chapman Avenue, a major transit stop defined as an intersection of two major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods. Relevant bus schedules can be found in Appendix B of the traffic study. The project located within TPA is presumed to have less than significant VMT impact. For projects that are in TPA, a secondary screening is required to verify the proposed project's consistency with the assumptions from the RTP/SCS. The proposed project is a high-density residential development, consistent with the proposed land uses in the RTP/SCS.

The project is located within the Transit Priority Area (TPA) and presumed to have less than significant VMT impact. The project is a high-density residential development, consistent with the proposed land uses in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Initial and secondary screening show that project has no or less than significant VMT impacts. The proposed project is not applicable to the following secondary screening requirements: is consistent with RTP/SCS, has a floor-to-area ratio (FAR) less than 0.75, does not provide an excessive amount of parking, and reduces the number of affordable housing units. The project would therefore have a less than significant impact, and mitigation measure is therefore not required for the project.



- C. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? • Less than Significant Impact.*

The proposed project includes the proper design and implementation of ingress and egress traffic openings. To reduce possible hazards, the traffic entrances will be electrically operated gates which will be in compliance with OCFA guidelines, well lit, properly designated, and have enhanced paving. As a result, less than significant impacts will result.

- D. *Would the project result in inadequate emergency access? • No Impact.*

The proposed project would not affect emergency access to any adjacent parcels. The proposed project site provides emergency access at the north end of the project site along Beach Boulevard. In addition, at no time during construction will adjacent streets be completely closed to traffic. All construction staging must occur on-site. As a result, no impacts are associated with the proposed project's implementation.

3.17.2 CUMULATIVE IMPACTS

As indicated previously, the proposed project is a high-density residential development, consistent with the proposed land uses in the RTP/SCS. The project is located within the Transit Priority Area (TPA) and presumed to have less than significant VMT impact. The project is a high density residential development, consistent with the proposed land uses in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Initial and secondary screening show that project has no or less than significant VMT impact. Mitigation measure is, therefore, not required for the project. Initial and secondary screening show that project has no or less than significant VMT impact.

Based on the information provided by the Planning Department of the City of Stanton, the following cumulative developments are taken into consideration for analysis of the opening year conditions:

- *Village Center and Village Center North:* The development of Village Center includes 208 multi-family dwelling units in total and 105,000 square feet of commercial retail; There are 94 family dwelling units in Village Center and 114 multi-family dwelling units in Village Center North.
- *VRV Mixed-Use:* The mixed-use development includes 300 apartment units, and 6,200 square feet of retail uses.
- *Cloud House Apartment:* The development of 321 apartment units includes 41 studios, 196 one-bedroom, and 84 two-bedroom units.

For project opening year 2023, the annual growth rate of two percent (2%) is used. This factor represents traffic increases resulting from regional growth. The project's level of service under opening year with cumulative developments conditions are shown in Table 3-13. All study intersections operate at acceptable LOS E or better in the AM and PM peak hours except the following: Intersection #3, Beach Boulevard at Catherine Avenue: LOS E in the PM peak hours and Intersection #4, Beach Boulevard at Lampson Avenue: LOS E in the PM peak hours.



**Table 3-13
 Cumulative Traffic Conditions**

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	D	0.833	D	0.899
2. Beach Blvd at Park Plaza*	D	28.5	D	31.8
3. Beach Blvd at Catherine Ave*	D	26.0	E	35.6
4. Beach Blvd at Lampson Ave	D	0.849	E	0.949

*Stop controlled at minor approach with delay shown in seconds

3.17.3 MITIGATION MEASURES

The analysis of potential impacts related to traffic and circulation indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation measures are required.



3.18 TRIBAL CULTURAL RESOURCES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact with Mitigation	Less Than Significant Impact	No Impact
<p>A. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?</p>			<p>✘</p>	
<p>B. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1 In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe?</p>		<p>✘</p>		

3.18.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? • Less than Significant Impact.*

A Tribal Resource is defined in Public Resources Code section 21074 and includes the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following: included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.



- A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.
- A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a “non-unique archaeological resource” as defined in subdivision (h) of Section 21083.2 may also be a tribal cultural resource if it conforms to the criteria of subdivision (a).

There are no documented historic resources on or within the vicinity of the project site. The project site is not eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. The proposed project would not result in an impact to a tribal cultural resource.

- B.** *Would the project cause a substantial adverse change in the significance of an object with cultural value to a California Native American Tribe, and that is: a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resource Code Section 5024.1 In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe 5020.1(k)?* • *Less than Significant Impact with Mitigation.*

The proposed project’s construction would involve excavation as part of development of the proposed building foundations. The project grading is anticipated to remain within the fill material but has the potential to encroach into native soils that have not been previously disturbed. Assembly Bill 52 Chapter 532, Statutes of 2014 (Assembly Bill [AB] 52), requires that Lead Agencies evaluate a project’s potential to impact “tribal cultural resources.” Such resources include “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources.” AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a “tribal cultural resource.” Also, per AB 52 (specifically PRC 21080.3.1), Native American consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects. A search of the Sacred Lands File (SLF) was requested for the project by the Native American Heritage Commission (NAHC). The NAHC responded stating that there are no known/known sacred lands within 0.5 mile of the project site.

These tribes include the following: Gabrielino-Tongva Tribe, Gabrielino Band of Mission Indians – Kizh Nation, Gabrielino Tongva – San Gabriel Band of Mission Indians, Gabrielino Tongva – San Gabriel California Tribal Council, and Gabrielino/Tongva Nation. On April 16, 2021, the City received an e-mailed response to the City’s AB 52 outreach letters, which was from the Gabrieleno Band of Mission Indians stating that the subject site is within their Ancestral Tribal Territory and thus had requested that a consultation be scheduled to go over the project and surrounding location in further detail. The tribe Chairman, Andy Salas, provided modifications to the previous mitigation measure that was used for another project within the City for its use for the proposed project. The measure has been included as Mitigation Measure TCR-1 that provides tribal monitoring of initial site clearing (such as pavement removal) and ground disturbing activities. Also, as described previously, Mitigation Measure CUL-1 has been included to provide procedures to be followed in the event that potential resources are discovered during grading, excavation, or construction activities. As detailed previously, if the discovered resource(s) appears Native American in origin, a Native American Monitor shall be contacted to evaluate any potential tribal cultural resource(s) and shall have the opportunity to consult on appropriate



treatment and curation of these resources. Additionally, as described previously (and included as PPP CUL-1), California Health and Safety Code, Section 7050.5 requires that if human remains are discovered in the project site, disturbance of the site shall halt and remain halted until the coroner has conducted an investigation. If the coroner determines that the remains are those of a Native American, he or she shall contact by telephone within 24 hours, the Native American Heritage Commission. Thus, impacts related to California Native American tribe resources would be less than significant with the implementation of the following mitigation measures:

- MM-TCR-1. The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City's Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.
- MM-TCR-2. All archaeological resources unearthed by Project construction activities shall be evaluated by the Monitor. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding treatment and curation of these resources. The preferred treatment will be reburial or preservation in place.
- MM-TCR-3. If any human skeletal material or related funerary objects are discovered during ground disturbance, the Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the remains are Native American, the coroner will notify the Native American Heritage Commission (NAHC) as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. The preferred treatment will be to keep the remains in situ and protected. If that treatment is not feasible, as determined by the applicant, the burials may be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. Once complete, a final report of all activities is to be submitted to the NAHC.



3.18.2 CUMULATIVE IMPACT

The potential cumulative impacts on tribal/cultural resources are typically site specific. Furthermore, the analysis determined that the proposed project would be required to employ mitigation to address any resources that may be encountered during excavation. As a result, no cumulative impacts on tribal cultural resources are anticipated.

3.18.3 MITIGATION MEASURES

Adherence to the mitigation measures presented in Subsection B under Cultural Resources will minimize potential impacts to levels that are less than significant. Nevertheless, the following mitigation measures have been provided to ensure the project's impacts are less than significant.

MM-TCR-1 (Tribal Cultural Resources). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City's Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.

MM-TCR-2 (Tribal Cultural Resources). All archaeological resources unearthed by Project construction activities shall be evaluated by the Monitor. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding treatment and curation of these resources. The preferred treatment will be reburial or preservation in place.

MM-TCR-3 (Tribal Cultural Resources). If any human skeletal material or related funerary objects are discovered during ground disturbance, the Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the remains are Native American, the coroner will notify the Native American Heritage Commission (NAHC) as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. The preferred treatment will be to keep the remains in situ and protected. If that treatment is not feasible, as determined by the applicant, the burials may be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. //Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. Once complete, a final report of all activities is to be submitted to the NAHC.



3.19 UTILITIES

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			✘	
B. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?			✘	
C. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			✘	
D. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			✘	
E. Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste?				✘

3.19.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

- A. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? • Less than Significant Impact.*

The project's implementation will not require the relocation of any utilities. The current infrastructure in place can support the needs of the proposed project. The City of Stanton's current providers for this specific project location are: Golden State Water for water, Southern California Edison for electricity, Southern California Gas for natural gas, and Frontier Communications for telecommunication services. Golden State Water Company has been serving Los Alamitos and West Orange County since 1929. They currently serve approximately 27,200 customers, including Stanton residents. Water supplies are provided by water pumped from the Orange County Groundwater Basin and imported water from the Colorado River that is distributed by Metropolitan Water District of Southern California. GSWC owns and operates 11,850 gallons of water per minute. The proposed project would be posing a limited incremental demand on local water systems. In addition, the increase in demand for waste disposal, water, and wastewater treatment services can be adequately handled and no expansion of these services is required. As a result, the potential impacts will be less than significant. The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette,



consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. No wastewater connections will be required though water connections will be required for irrigation. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.

B. *Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years? • Less than Significant Impact.*

Water service to the project site is provided by the Golden State Water Company (GSWC), a private water purveyor. GSWC owns and operates the system, which serves cities within west Orange County. In order to meet demand, GSWC supplies its customers with imported water from the Metropolitan Water District of Southern California and groundwater from the Orange County basin. GSWC does not currently operate a separate recycled water distribution system within the area. According to the General Plan EIR, the existing water supply for the City is sufficient to meet projected water demands associated with the General Plan buildout, assuming source and supply capacities remain consistent with current conditions. Exacerbated drought conditions, climate conditions or impacts to regional water conveyance infrastructure could quickly change these conclusions. GSWC facilities currently serving the West Orange County System, including the City of Stanton, are adequate to meet anticipated service demands. As indicated in Table 3-14, the proposed project is anticipated to consume 30,810 gallons of water on a daily basis while GSWC, owns and operate 11,850 gallons of water per minute.

**Table 3-14
 Water Consumption (gals/day)**

Use	Unit	Factor	Generation
Single-family Home	79 units	390 gals/dwelling unit	30,810 gals/day
Total	79 units		30,810 gals/day

Source: California Home Building Foundation

The existing water supply facilities and infrastructure will accommodate this additional demand. In addition, the proposed project will be equipped with water efficient fixtures and drought tolerant landscaping will be planted throughout the project site. As a result, the impacts are considered to be less than significant. The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The project would involve the removal of the existing hardscape surfaces and their replacement with landscaped turf. No wastewater connections will be required though water connections will be required for irrigation. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no impacts will result from the implementation of the proposed parkette.



C. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? • Less than Significant Impact.

Wastewater is collected by the City of Stanton Public Works Department’s Sewer Maintenance Division and then is treated by the Orange County Sanitation Districts (OCSD). The City of Cypress transfers wastewater to the treatment plants located in Fountain Valley (Plant #1) and Huntington Beach (Plant #2). The City of Stanton Public Works Department and the OCSD indicate that presently no deficiencies exist within their facilities serving the City. According to the City of Stanton Public Works Department, the local sanitary sewer system has adequate capacity to accommodate the proposed development. According to Table 3-15, the proposed project is expected to generate approximately 19,355 gallons of sewage per day. As a result, the impacts are expected to be less than significant.

**Table 3-15
 Wastewater (Effluent) Generation (gals/day)**

Use	Unit	Factor	Generation
Single Family Residential	79 units	245 gallons/unit/day	19,355 gals/day
Total	79 units		19,355 gals/day

Source: California Home Building Foundation

D. Would the project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? • Less than Significant Impact.

Solid waste collection services in Stanton are contracted with CR&R, Incorporated, which operates Stanton Disposal Services. In 2017, the City disposed over 97 percent of its solid waste at the Frank R. Bowerman Sanitary Landfill at 11002 Bee Canyon Access Road in the City of Irvine.¹ The Frank R. Bowerman Sanitary Landfill has a maximum permitted throughput of 11,500 tons per day, remaining capacity of 205,000,000 cubic yards, and anticipated closure date of 2053. The proposed project is anticipated to generate approximately 966 pounds per day of solid waste (refer to Table 3-16 shown on the following page). As a result, the potential impacts are considered to be less than significant.

**Table 3-16
 Solid Waste Generation (lbs./day)**

Use	Unit	Factor	Generation
Single Family Residential	79 units	12 lbs./day	966 lbs./day
Total	79 units		966 lbs./day

Source: Blodgett Baylosis Environmental Planning.

The proposed project would also involve the construction of a new, off-site parkette referred to as Orangewood Parkette, consisting of approximately 7,600 square feet located at the intersection of Orangewood Avenue and Santa Rosalia Street. The new parkette will be a passive park and because of its small size, no significant impacts are anticipated. As a result, no solid waste generation impacts will result from the implementation of the proposed parkette.



E. Would the project comply with Federal, State, and local management and reduction statutes and regulations related to solid waste? • No Impact.

The proposed project, like all other development in Orange County and the City of Stanton, will be required to adhere to City and County ordinances with respect to waste reduction and recycling. The proposed project will be in compliance with the California Integrated Waste Management Act of 1989, specifically California statute AB 939 and AB1327 of the California Solid Waste Reuse and Recycling Access Act of 1991. These statutes were created to help cities divert 50% of solid waste yearly and ensure that local agencies only issue a building permit to projects that provide adequate areas for collecting and loading recyclable materials. As a result, no impacts related to State and local statutes governing solid waste are anticipated.

3.19.2 CUMULATIVE IMPACT

The Golden State Water Company (GSWC) provides service to more than 1 million people in over 80 communities, including the City of Stanton. According to the City's 2020 Urban Water Management Plan, the City is projected to have enough water to meet the increase in demand. In addition, the City is projected to have enough water to meet demand during a single dry year, and a multiple dry year scenario. The project at total build-out will consume 30,810 gallons of water per day and generate 19,355 gallons of effluent per day. The potential cumulative impacts on utilities indicated that no significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.

3.19.3 MITIGATION MEASURES

The analysis of utilities impacts indicated that no significant adverse impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.



3.20 WILDFIRE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
A. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?				✘
B. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				✘
C. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				✘
D. If located in or near State responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				✘

3.20.1 ANALYSIS OF ENVIRONMENTAL IMPACTS

A. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan? • No Impact.*

According to the Cal FIRE Fire Hazard Severity Zone Database, the residential project site and the proposed parkette site are not located within a severe fire hazard zone. Furthermore, the proposed project would not involve the closure or alteration of any existing evacuation routes that would be important in the event of a wildfire. As a result, no impacts will occur.

B. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? • No Impact.*

The proposed project may be exposed to particulate emissions generated by wildland fires in the surrounding region. However, the potential impacts would not be exclusive to the project site since criteria pollutant emissions from wildland fires may affect the entire City as well as the surrounding cities and unincorporated county areas. As a result, no impacts will occur.



- C. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? • No Impact.*

The project site is not located in an area that is classified as a high fire risk severity, and therefore will not require the installation of specialized infrastructure such as fire roads, fuel breaks, or emergency water sources. As a result, no impacts will occur.

- D. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? • No Impact.*

There is no risk from wildfire within the project site or the surrounding area given the project site's distance from any area that may be subject to a wildfire event. Therefore, the project will not result in any impacts related to flooding or landslides facilitated by runoff flowing down barren and charred slopes given the area's level topography and developed character and no impacts will occur.

3.20.2 CUMULATIVE IMPACTS

Impacts related to wildfire are typically site specific. The analysis determined that the proposed project would not result in any impacts relative to potential wildfire risk. As a result, no cumulative wildfire impacts are anticipated to result from the proposed project's implementation.

3.20.3 MITIGATION MEASURES

The analysis of wildfires impacts indicated that less than significant impacts would result from the proposed project's approval and subsequent implementation. As a result, no mitigation is required.



3.21 MANDATORY FINDINGS OF SIGNIFICANCE

Environmental Issue Areas Examined	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
<p>A. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p>		✘		
<p>B. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p>		✘		
<p>C. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p>			✘	

The following findings can be made regarding the Mandatory Findings of Significance set forth in Section 15065 of the CEQA Guidelines based on the results of this environmental assessment:

- A.** The proposed project *will not* have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory. As indicated in Section 3, the proposed project will have less than significant impact for the majority of the environmental issues though mitigation will be required for the proposed project’s potential impacts on biological and cultural resources.
- B.** The proposed project *will not* have impacts that are individually limited, but cumulatively considerable. The proposed project is relatively small, and the attendant environmental impacts will not lead to a cumulatively significant impact on any of the issues analyzed herein. As indicated in Section 3, the proposed project will have less than significant impact for the majority of the environmental issues though mitigation will be required for the proposed project’s potential impacts on biological and cultural resources.
- C.** The proposed project *will not* have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. As indicated in Section 3, the proposed project will have less than significant impact.



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SECTION 4 CONCLUSIONS

4.1 FINDINGS

Section 21081(a) of the Public Resources Code states that findings must be adopted by the decision-makers coincidental to the approval of a Mitigated Negative Declaration. These findings shall be incorporated as part of the decision-maker's findings of fact, in response to AB-3180. In accordance with the requirements of Section 21081(a) and 21081.6 of the Public Resources Code, the following additional findings may be made:

- A mitigation reporting or monitoring program will be required;
- Site plans and/or building plans, submitted for approval by the responsible monitoring agency, shall include the required standard conditions; and,
- An accountable enforcement agency or monitoring agency shall be identified for the mitigations adopted as part of the decision-maker's final determination.

4.2 MITIGATION MONITORING

The following mitigation will be provided to reduce potential impacts to nesting and migratory species:

MM-BIO-1 (Biological Resources Impacts). If clearing and/or construction activities would occur during the raptor or migratory bird nesting season (February 15 to August 15), the Applicant and/or its contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before the construction activities commence. A copy of the report must be provided to the Director of Community Development for review and approval prior to the start of any work on the project site. The qualified biologist shall survey the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist. The biologist must be approved by the Community Development Director prior to the issuance of any type of permit being issued for the project.

The following mitigation is required to ensure that a tribal representative is present during construction-related ground-disturbing activities:

MM-CUL-1 (Cultural Resources Impacts). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and the City's Community Development Director and will be present on-site during the grading and construction phases that involve any



ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.

The following mitigation measures will be required to further reduce construction noise levels so that the impacts would be less than significant:

MM-NOI-1 (Noise Impacts): Construction staging areas must be located within the western portion of the project site, at least 200 feet east of the project site's eastern boundary away from the noise sensitive receptors.

MM-NOI-2 (Noise Impacts): *MM-NOI-2 (Noise Impacts):* The use of Tier IV rated construction equipment must be used during demolition, site preparation, and construction activities.

MM-NOI-3 (Noise Impacts): The Applicant must notify local residents regarding construction times and local contact information by placing a notice in the form of a sign along the project site's boundaries in prominent locations. The notice shall include the name and phone number of the contact person at both the construction site and at the City's Code Enforcement office where residents may call to register a complaint about noise. Upon receipt of a complaint, the contractors must stop work to inspect their equipment to ensure that they are properly tuned and muffled. Construction activities may not resume until the contractors confirm that the equipment is properly tuned and muffled. In addition, copies of all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Community Development Director.

MM-NOI-4 (Noise Impacts): The use of jackhammers or hoe rams (breakers) to demolish the existing pavement shall be prohibited from taking place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.

The analysis determined that the proposed project will require the following mitigation in order to minimize potential impacts to tribal cultural resources:

MM-TCR-1 (Tribal Cultural Resources Impacts). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City's Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.



MM-TCR-2 (Tribal Cultural Resources). All archaeological resources unearthed by Project construction activities shall be evaluated by the Monitor. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding treatment and curation of these resources. The preferred treatment will be reburial or preservation in place.

MM-TCR-3 (Tribal Cultural Resources). If any human skeletal material or related funerary objects are discovered during ground disturbance, the Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the remains are Native American, the coroner will notify the Native American Heritage Commission (NAHC) as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. The preferred treatment will be to keep the remains in situ and protected. If that treatment is not feasible, as determined by the applicant, the burials may be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. Once complete, a final report of all activities is to be submitted to the NAHC.

The monitoring and reporting on the implementation of these measures, including the period for implementation, monitoring agency, and the monitoring action, are identified in Table 7.1 provided on the following pages.



**TABLE 7.1
 MITIGATION-MONITORING PROGRAM**

<i>Measure</i>	Enforcement Agency	Monitoring Phase	Verification
<p>MM-BIO-1 (Biological Resources Impacts). If clearing and/or construction activities would occur during the raptor or migratory bird nesting season (February 15 to August 15), the Applicant and/or its contractor shall retain a qualified biologist to conduct preconstruction surveys for nesting birds up to 14 days before the construction activities commence. A copy of the report must be provided to the Director of Community Development for review and approval prior to the start of any work on the project site. The qualified biologist shall survey the construction zone to determine whether the activities taking place have the potential to disturb or otherwise harm nesting birds. Surveys shall be repeated if project activities are suspended or delayed for more than 15 days during nesting season. If active nest(s) are identified during the preconstruction survey, a qualified biologist shall establish a 100-foot no-activity setback for migratory bird nests and a 250-foot setback for raptor nests. No ground disturbance should occur within the no-activity setback until the nest is deemed inactive by the qualified biologist. The biologist must be approved by the Community Development Director prior to the issuance of any type of permit being issued for the project.</p>	<p>Director of Community Development</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>Prior to the issuance of building permits.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-CUL-1 (Cultural Resources Impacts). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor(s) must be approved by the tribal representatives and the City's Community Development Director and will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-NOI-1 (Noise Impacts): Construction staging areas must be located within the western portion of the project site, at least 200 feet east of the project site's eastern boundary away from the noise sensitive receptors.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>



TABLE 7.1 MITIGATION-MONITORING PROGRAM (CONTINUED)			
Measure	Enforcement Agency	Monitoring Phase	Verification
<p>MM-NOI-2 (Noise Impacts): The use of Tier IV rated construction equipment must be used during demolition, site preparation, and construction activities.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-NOI-3 (Noise Impacts): The Applicant must notify local residents regarding construction times and local contact information by placing a notice in the form of a sign along the project site's boundaries in prominent locations. The notice shall include the name and phone number of the contact person at both the construction site and at the City's Code Enforcement office where residents may call to register a complaint about noise. Upon receipt of a complaint, the contractors must stop work to inspect their equipment to ensure that they are properly tuned and muffled. Construction activities may not resume until the contractors confirm that the equipment is properly tuned and muffled. In addition, copies of all complaints and subsequent communication between the affected residents and contractors must be forwarded to the City's Community Development Director.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-NOI-4 (Noise Impacts): The use of jackhammers or hoe rams (breakers) to demolish the existing pavement shall be prohibited from taking place between the hours of eight p.m. and seven a.m. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p><i>(Applicant is responsible for implementation)</i></p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>



TABLE 7.1 MITIGATION-MONITORING PROGRAM (CONTINUED)			
Measure	Enforcement Agency	Monitoring Phase	Verification
<p>MM-TCR-1 (Tribal Cultural Resources Impacts). The project Applicant will be required to obtain the services of a qualified Native American Monitor during construction-related ground disturbance activities. Ground disturbance is defined by the Tribal Representatives from the Gabrieleño Band of Mission Indians, Kizh Nation as activities that include, but are not limited to, pavement removal, potholing or auguring, boring, grading, excavation, and trenching, within the project area. The monitor must be approved by the tribal representatives and the City's Community Development Director. The monitor will be present on-site during the grading and construction phases that involve any ground disturbing activities. The on-site monitoring shall end when the project site grading and excavation activities are completed, or when the monitor has indicated that the site has a low potential for archeological resources. Documentation that the required monitoring has been completed shall be provided to the Chief Building Official prior to the issuance of a Certificate of Occupancy.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p>(Applicant is responsible for implementation)</p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-TCR-2 (Tribal Cultural Resources Impacts). All archaeological resources unearthed by Project construction activities shall be evaluated by the Monitor. If the resources are Native American in origin, the Tribe shall coordinate with the landowner regarding treatment and curation of these resources. The preferred treatment will be reburial or preservation in place.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p>(Applicant is responsible for implementation)</p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>
<p>MM-TCR-3 (Tribal Cultural Resources) If any human skeletal material or related funerary objects are discovered during ground disturbance, the Monitor will immediately divert work at minimum of 50 feet and place an exclusion zone around the burial. The Monitor will then notify the construction manager who will call the coroner. Work will continue to be diverted while the coroner determines whether the remains are Native American. The discovery is to be kept confidential and secure to prevent any further disturbance. If the remains are Native American, the coroner will notify the Native American Heritage Commission (NAHC) as mandated by state law who will then appoint a Most Likely Descendent. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. The preferred treatment will be to keep the remains in situ and protected. If that treatment is not feasible, as determined by the applicant, the burials may be removed. The Tribe will work closely with the Qualified Archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery is approved by the Tribe, documentation shall be taken which includes at a minimum detailed descriptive notes and sketches. Additional types of documentation shall be approved by the Tribe for data recovery purposes. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all material. Once complete, a final report of all activities is to be submitted to the NAHC.</p>	<p>Community Development Director and the Chief Building Official</p> <ul style="list-style-type: none"> • <p>(Applicant is responsible for implementation)</p>	<p><i>During the project's grading and construction phases.</i></p> <ul style="list-style-type: none"> • <p>Mitigation ends when construction is completed.</p>	<p>Date:</p> <p>Name & Title:</p>



SECTION 5 REFERENCES

5.1 PREPARERS

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(626) 336-0033

Marc Blodgett, Project Principal
Andrea Withers, Project Manager
Karla Nayakarathne GIS Geographer Technician

5.2 REFERENCES

Bugliarello, et. al., *The Impact of Noise Pollution*, Chapter 127, 1976.

California Department of Conservation, Division of Land Resource Protection, Farmland Mapping, and Monitoring Program. *California Important Farmland Finder*.

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Google Earth.

Stanton, City of, *Municipal Code*, Chapter 17.70, Signs.

Southern California Association of Governments, *Regional Transportation Plan/Sustainable Communities Strategy 2016-2040*, April 2016.

KT Traffic Engineering, Inc. *Traffic Impact Study and Vehicle Miles Travelled (VMT) Screening*. Report dated November 2020.

United States Department of Agriculture. *Web Soil Survey*.



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APPENDIX

APPENDIX A – AIR QUALITY WORKSHEETS

APPENDIX B – NOISE MEASUREMENTS WORKSHEETS

APPENDIX C – TRAFFIC STUDY



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APPENDIX A – AIR QUALITY WORKSHEETS



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Stanton Homes
 South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	123.81	Dwelling Unit	3.50	123,805.00	354

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Project Characteristics
 Construction Phase - Default

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	7.74	3.50

2.0 Emissions Summary



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2315	33.1269	21.1624	0.0403	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,899.9529	3,899.9529	1.1970	0.0607	3,927.4537
2023	43.2862	15.0502	19.5298	0.0380	1.0780	0.7080	1.7860	0.2878	0.6661	0.9539	0.0000	3,690.3080	3,690.3080	0.6387	0.0571	3,723.2934
Maximum	43.2862	33.1269	21.1624	0.0403	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,899.9529	3,899.9529	1.1970	0.0607	3,927.4537

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	3.2315	33.1269	21.1624	0.0403	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,899.9529	3,899.9529	1.1970	0.0607	3,927.4537
2023	43.2862	15.0502	19.5298	0.0380	1.0780	0.7080	1.7860	0.2878	0.6661	0.9539	0.0000	3,690.3080	3,690.3080	0.6387	0.0571	3,723.2934
Maximum	43.2862	33.1269	21.1624	0.0403	19.8582	1.6138	21.4720	10.1558	1.4847	11.6405	0.0000	3,899.9529	3,899.9529	1.1970	0.0607	3,927.4537



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	35.4106	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805
Energy	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622
Mobile	2.9657	3.1487	30.1239	0.0690	7.2552	0.0483	7.3035	1.9333	0.0449	1.9782		7,028.3507	7,028.3507	0.4289	0.2850	7,124.0014
Total	38.4367	6.3511	103.5120	0.2334	7.2552	9.6035	16.8587	1.9333	9.6001	11.5334	1,159.6245	9,934.0022	11,093.6267	3.9174	0.3758	11,303.5441

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	35.4106	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805
Energy	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622
Mobile	2.9657	3.1487	30.1239	0.0690	7.2552	0.0483	7.3035	1.9333	0.0449	1.9782		7,028.3507	7,028.3507	0.4289	0.2850	7,124.0014
Total	38.4367	6.3511	103.5120	0.2334	7.2552	9.6035	16.8587	1.9333	9.6001	11.5334	1,159.6245	9,934.0022	11,093.6267	3.9174	0.3758	11,303.5441



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/4/2022	5	5	
3	Grading	Grading	2/5/2022	2/16/2022	5	8	
4	Building Construction	Building Construction	2/17/2022	1/4/2023	5	230	
5	Paving	Paving	1/5/2023	1/30/2023	5	18	
6	Architectural Coating	Architectural Coating	1/31/2023	2/23/2023	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0

Residential Indoor: 250,705; Residential Outdoor: 83,568; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Cranes	1	7.00	231	0.29
Demolition	Excavators	3	8.00	158	0.38



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Excavators	1	8.00	158	0.38
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	89.00	13.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.7812	3,746.7812	1.0524		3,773.0920

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616
Total	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616
Total	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000				0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922			3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.0619	3,686.0619	1.1922			3,715.8655

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0614	0.0434	0.6820	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		183.8060	183.8060	4.8100e-003	4.3900e-003	185.2340
Total	0.0614	0.0434	0.6820	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		183.8060	183.8060	4.8100e-003	4.3900e-003	185.2340



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000				0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922			3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860	0.0000	3,686.0619	3,686.0619	1.1922			3,715.8655

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0614	0.0434	0.6820	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		183.8060	183.8060	4.8100e-003	4.3900e-003	185.2340
Total	0.0614	0.0434	0.6820	1.8200e-003	0.2012	1.2000e-003	0.2024	0.0534	1.1100e-003	0.0545		183.8060	183.8060	4.8100e-003	4.3900e-003	185.2340



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000				0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656		2,872.0464	2,872.0464	0.9289			2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903		2,872.0464	2,872.0464	0.9289			2,895.2684

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616
Total	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000				0.0000
Off-Road	1.9486	20.8551	15.2727	0.0297		0.9409	0.9409		0.8656	0.8656	0.0000	2,872.0464	2,872.0464	0.9289			2,895.2684
Total	1.9486	20.8551	15.2727	0.0297	7.0826	0.9409	8.0234	3.4247	0.8656	4.2903	0.0000	2,872.0464	2,872.0464	0.9289			2,895.2684

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616
Total	0.0512	0.0361	0.5683	1.5200e-003	0.1677	1.0000e-003	0.1687	0.0445	9.2000e-004	0.0454		153.1717	153.1717	4.0100e-003	3.6600e-003	154.3616



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0237	0.6134	0.2052	2.4900e-003	0.0832	6.2500e-003	0.0895	0.0240	5.9800e-003	0.0299		268.5107	268.5107	9.8800e-003	0.0390	280.3782
Worker	0.3036	0.2144	3.3719	8.9900e-003	0.9948	5.9600e-003	1.0008	0.2638	5.4800e-003	0.2693		908.8187	908.8187	0.0238	0.0217	915.8790
Total	0.3273	0.8278	3.5771	0.0115	1.0780	0.0122	1.0903	0.2878	0.0115	0.2993		1,177.3295	1,177.3295	0.0337	0.0607	1,196.2572



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0237	0.6134	0.2052	2.4900e-003	0.0832	6.2500e-003	0.0895	0.0240	5.9800e-003	0.0299		268.5107	268.5107	9.8800e-003	0.0390	280.3782
Worker	0.3036	0.2144	3.3719	8.9900e-003	0.9948	5.9600e-003	1.0008	0.2638	5.4800e-003	0.2693		908.8187	908.8187	0.0238	0.0217	915.8790
Total	0.3273	0.8278	3.5771	0.0115	1.0780	0.0122	1.0903	0.2878	0.0115	0.2993		1,177.3295	1,177.3295	0.0337	0.0607	1,196.2572



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555,209.9	2,555,209.9	0.6079			2,570,406.1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555,209.9	2,555,209.9	0.6079			2,570,406.1

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4757	0.1826	2.3700e-003	0.0832	2.6300e-003	0.0859	0.0240	2.5100e-003	0.0265		255.5542	255.5542	9.4600e-003	0.0371	266.8359
Worker	0.2815	0.1896	3.1033	8.7000e-003	0.9948	5.6100e-003	1.0004	0.2638	5.1600e-003	0.2690		879.5439	879.5439	0.0213	0.0201	886.0514
Total	0.2954	0.6653	3.2858	0.0111	1.0780	8.2400e-003	1.0863	0.2878	7.6700e-003	0.2955		1,135,098.1	1,135,098.1	0.0308	0.0571	1,152,887.3



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4757	0.1826	2.3700e-003	0.0832	2.6300e-003	0.0859	0.0240	2.5100e-003	0.0265		255.5542	255.5542	9.4600e-003	0.0371	266.8359
Worker	0.2815	0.1896	3.1033	8.7000e-003	0.9948	5.6100e-003	1.0004	0.2638	5.1600e-003	0.2690		879.5439	879.5439	0.0213	0.0201	886.0514
Total	0.2954	0.6653	3.2858	0.0111	1.0780	8.2400e-003	1.0863	0.2878	7.6700e-003	0.2955		1,135.0981	1,135.0981	0.0308	0.0571	1,152.8873



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025		1,805.4304	1,805.4304	0.5673		1,819.6122

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0633	0.0426	0.6974	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0605		197.6503	197.6503	4.7900e-003	4.5000e-003	199.1127
Total	0.0633	0.0426	0.6974	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0605		197.6503	197.6503	4.7900e-003	4.5000e-003	199.1127



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9181	8.7903	12.1905	0.0189		0.4357	0.4357		0.4025	0.4025	0.0000	1,805.4304	1,805.4304	0.5673		1,819.6122

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0633	0.0426	0.6974	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0605		197.6503	197.6503	4.7900e-003	4.5000e-003	199.1127
Total	0.0633	0.0426	0.6974	1.9600e-003	0.2236	1.2600e-003	0.2248	0.0593	1.1600e-003	0.0605		197.6503	197.6503	4.7900e-003	4.5000e-003	199.1127



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.0377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	43.2293	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014
Total	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	43.0377					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	43.2293	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014
Total	0.0569	0.0384	0.6276	1.7600e-003	0.2012	1.1300e-003	0.2023	0.0534	1.0400e-003	0.0544		177.8853	177.8853	4.3200e-003	4.0500e-003	179.2014



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.9657	3.1487	30.1239	0.0690	7.2552	0.0483	7.3035	1.9333	0.0449	1.9782		7,028.3507	7,028.3507	0.4289	0.2850	7,124.0014
Unmitigated	2.9657	3.1487	30.1239	0.0690	7.2552	0.0483	7.3035	1.9333	0.0449	1.9782		7,028.3507	7,028.3507	0.4289	0.2850	7,124.0014

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	906.25	1,007.77	777.50	3,083,507	3,083,507
Total	906.25	1,007.77	777.50	3,083,507	3,083,507

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.543401	0.061496	0.184986	0.128935	0.023820	0.006437	0.011961	0.008652	0.000812	0.000508	0.024540	0.000745	0.003706



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622
NaturalGas Unmitigated	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	5598.51	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622
Total		0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	5.59851	0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622
Total		0.0604	0.5159	0.2196	3.2900e-003		0.0417	0.0417		0.0417	0.0417		658.6482	658.6482	0.0126	0.0121	662.5622

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	35.4106	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805
Unmitigated	35.4106	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4513					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	32.4401	2.5688	62.9588	0.1606		9.4569	9.4569		9.4569	9.4569	1,159.6245	2,228.6118	3,388.2363	3.4582	0.0787	3,498.1478
Landscaping	0.3070	0.1176	10.2098	5.4000e-004		0.0566	0.0566		0.0566	0.0566		18.3915	18.3915	0.0177		18.8327
Total	35.4107	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.2122					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.4513					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	32.4401	2.5688	62.9588	0.1606		9.4569	9.4569		9.4569	9.4569	1,159.6245	2,228.6118	3,388.2363	3.4582	0.0787	3,498.1478
Landscaping	0.3070	0.1176	10.2098	5.4000e-004		0.0566	0.0566		0.0566	0.0566		18.3915	18.3915	0.0177		18.8327
Total	35.4107	2.6864	73.1686	0.1612		9.5135	9.5135		9.5135	9.5135	1,159.6245	2,247.0033	3,406.6278	3.4759	0.0787	3,516.9805

7.0 Water Detail

7.1 Mitigation Measures Water



Stanton Homes - South Coast Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

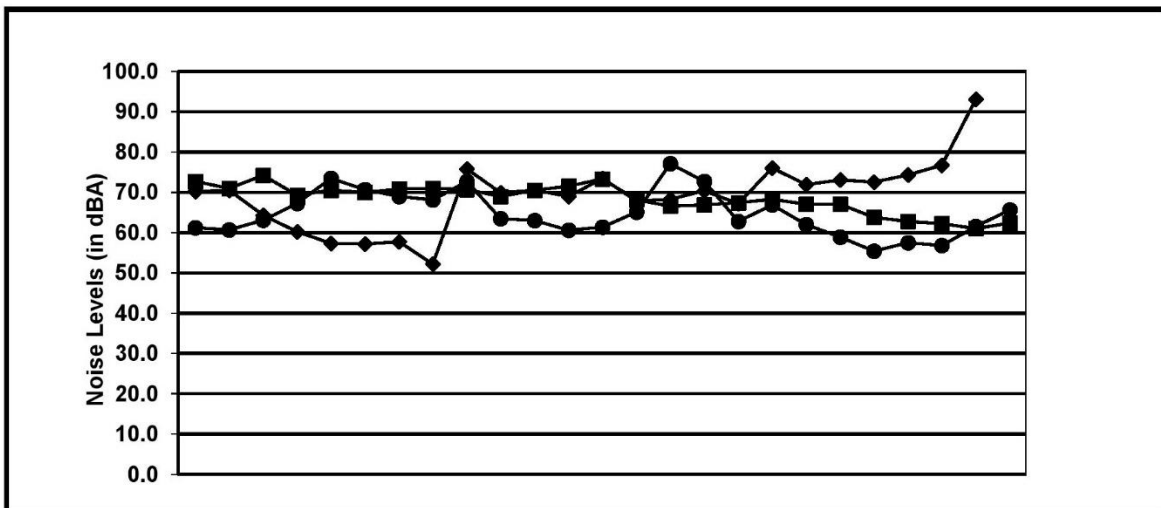
11.0 Vegetation



APPENDIX B – NOISE MEASUREMENTS



Actual Noise Levels During Measurement				Noise Measurement Results in Leq%				
1-25	26-50	51-75	76-100	L%	1-25	26-50	51-75	76-100
63.5	70.2	72.7	61.2	L ₉₉	72.7	93.1	74.2	77.1
61.9	70.5	71.0	60.7		72.4	76.7	73.3	73.5
62.1	64.3	74.2	63.1	L ₉₀	67.6	76.0	72.7	72.7
72.7	60.2	69.3	67.3		67.4	75.8	71.5	72.7
67.6	57.3	70.5	73.5		66.2	75.2	71.0	70.7
66.2	57.2	70.0	70.7		66.2	74.3	71.0	69.0
61.1	57.7	70.8	69.0		64.3	73.5	70.8	68.1
63.3	52.2	71.0	68.1		63.6	73.1	70.7	67.3
63.6	75.8	70.7	72.7		63.5	72.5	70.5	66.9
63.0	69.9	69.0	63.5		63.3	71.9	70.5	65.6
61.4	70.5	70.5	63.0		63.3	70.5	70.0	65.1
61.4	69.0	71.5	60.6	L ₅₀	63.3	70.5	69.3	63.5
60.8	73.5	73.3	61.4		63.0	70.4	69.0	63.1
60.7	67.8	68.1	65.1		63.0	70.2	68.3	63.0
63.3	68.3	66.6	77.1		62.5	69.9	68.1	62.8
63.0	70.4	66.9	72.7		62.4	69.0	67.4	62.0
62.5	67.2	67.4	62.8		62.1	68.3	67.0	61.5
63.3	76.0	68.3	66.9		61.9	67.8	67.0	61.4
66.2	71.9	67.0	62.0		61.4	67.2	66.9	61.2
67.4	73.1	67.0	58.9	L ₂₅	61.4	64.3	66.6	60.7
64.3	72.5	63.8	55.4		61.1	60.2	63.8	60.6
62.4	74.3	62.8	57.5		60.8	57.7	62.8	58.9
58.9	76.7	62.2	56.8	L ₁₀	60.7	57.3	62.4	57.5
59.2	93.1	61.0	61.5		59.2	57.2	62.2	56.8
72.4	75.2	62.4	65.6		58.9	52.2	61.0	55.4

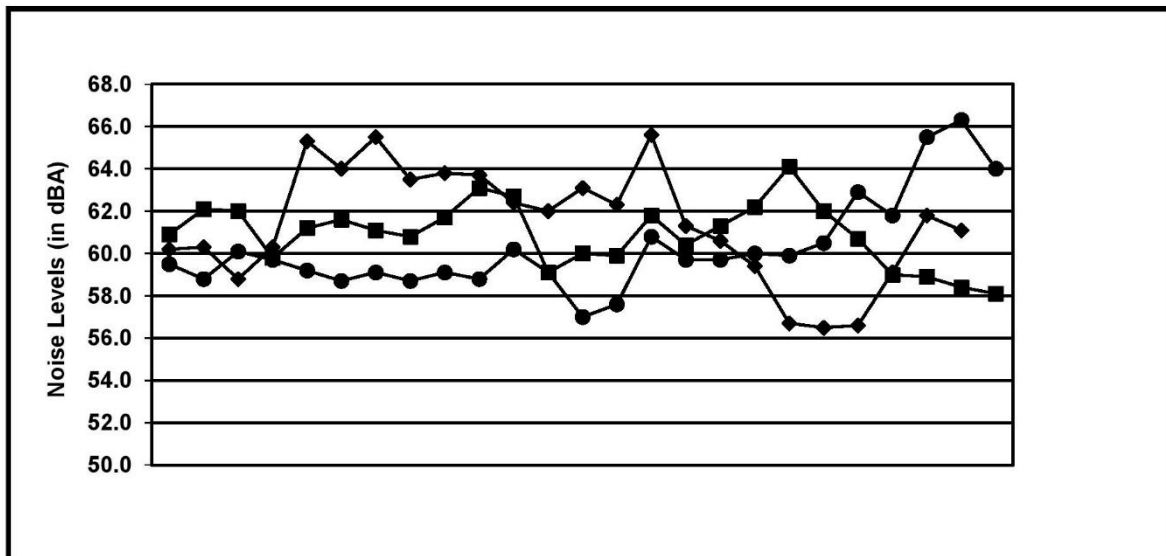


**Noise Measurements
 East side of Beach - Location 1**

Source: Blodgett Baylois Environmental Planning



Actual Noise Levels During Measurement				Noise Measurement Results in Leq%				
1-25	26-50	51-75	76-100	L%	1-25	26-50	51-75	76-100
63.0	60.2	60.9	59.5	L ₉₉	63.0	65.6	64.1	66.3
57.6	60.3	62.1	58.8		62.8	65.5	63.1	65.5
54.3	58.8	62.0	60.1	L ₉₀	62.7	65.3	62.7	64.0
54.4	60.3	59.8	59.7		61.7	64.0	62.2	62.9
54.7	65.3	61.2	59.2		61.6	63.8	62.1	61.8
55.5	64.0	61.6	58.7		61.6	63.7	62.0	60.8
61.7	65.5	61.1	59.1		61.4	63.5	62.0	60.5
60.8	63.5	60.8	58.7		61.1	63.1	61.8	60.2
60.6	63.8	61.7	59.1		61.0	62.4	61.7	60.1
60.1	63.7	63.1	58.8		60.8	62.3	61.6	60.0
61.6	62.4	62.7	60.2		60.8	62.0	61.3	59.9
61.4	62.0	59.1	59.1	L ₅₀	60.7	61.8	61.2	59.7
60.8	63.1	60.0	57.0		60.6	61.3	61.1	59.7
60.5	62.3	59.9	57.6		60.5	61.1	60.9	59.7
60.0	65.6	61.8	60.8		60.1	60.6	60.8	59.5
60.7	61.3	60.4	59.7		60.0	60.3	60.7	59.2
61.6	60.6	61.3	59.7		58.7	60.3	60.4	59.1
62.8	59.4	62.2	60.0		58.7	60.2	60.0	59.1
62.7	56.7	64.1	59.9		58.4	59.8	59.9	59.1
61.1	56.5	62.0	60.5	L ₂₅	58.0	59.4	59.8	58.8
58.4	56.6	60.7	62.9		57.6	59.1	59.1	58.8
58.7	59.1	59.0	61.8		55.5	58.8	59.0	58.7
58.0	61.8	58.9	65.5	L ₁₀	54.7	56.7	58.9	58.7
58.7	61.1	58.4	66.3		54.4	56.6	58.4	57.6
61.0	59.8	58.1	64.0		54.3	56.5	58.1	57.0



**Noise Measurements
 Center of Site - Location 2**

Source: Blodgett Baylosis Environmental Planning



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APPENDIX C – TRAFFIC STUDY



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TRAFFIC IMPACT STUDY AND VEHICLE MILES TRAVELLED (VMT) SCREENING

Stanton Townhome
12200 Beach Boulevard, Stanton

Date: June 30, 2021

Prepared For:

Bonanni Development
5500 Bolsa Ave, Suite 120
Huntington Beach, CA 92649

Prepared By:

K2 Traffic Engineering, Inc.
1442 Irvine Blvd, Suite 210
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Stanton Townhome
12200 Beach Blvd, Stanton

June 30, 2021
Traffic Impact Study And VMT Screening

Traffic Impact Study for Stanton Townhome
12200 Beach Boulevard, Stanton



Prepared under the supervision of

A handwritten signature in black ink, appearing to read "Jende Kay Hsu".

Jende Kay Hsu, P.E., T. E.

Lic. # T2285



EXECUTIVE SUMMARY

The purpose of this study is to evaluate traffic impact of the proposed townhome development located at 12200 Beach Boulevard in the City of Stanton. The proposed development includes 85 dwelling units, including 16 one-bedrooms, 9 two-bedrooms, and 60 three-bedrooms. All existing buildings will be demolished.

The project is expected to have a NET trip generation of 36 trips in the AM peak hour, including 6 inbound and 30 outbound trips, 43 trips in the PM peak hour, including 28 inbound and 15 outbound trips, and 589 daily trips. The project does not generate any significant impact and mitigation measure is not required.

Due to the absence of a median opening at the project access driveway, U-Turn traffic is expected to increase at adjacent intersections on Beach Boulevard at Park Plaza and Catherine Avenue. Queue analysis indicates that adequate pocket lengths are provided to accommodate these additional U-turn movements. The project should install a "RIGHT TURN ONLY" (R3-5R) signs at each proposed driveway and a "One Way Arrow" (W6-1R) sign on the raised median facing egress traffic.

This proposed project meets the High Quality Transit Area (HQTA) screening criteria for projects located within ½ mile of a Transit Priority Area (TPA) or a HQTA. The project is exempt from a VMT Analysis and can be presumed to have less than significant impact on transportation and circulation.



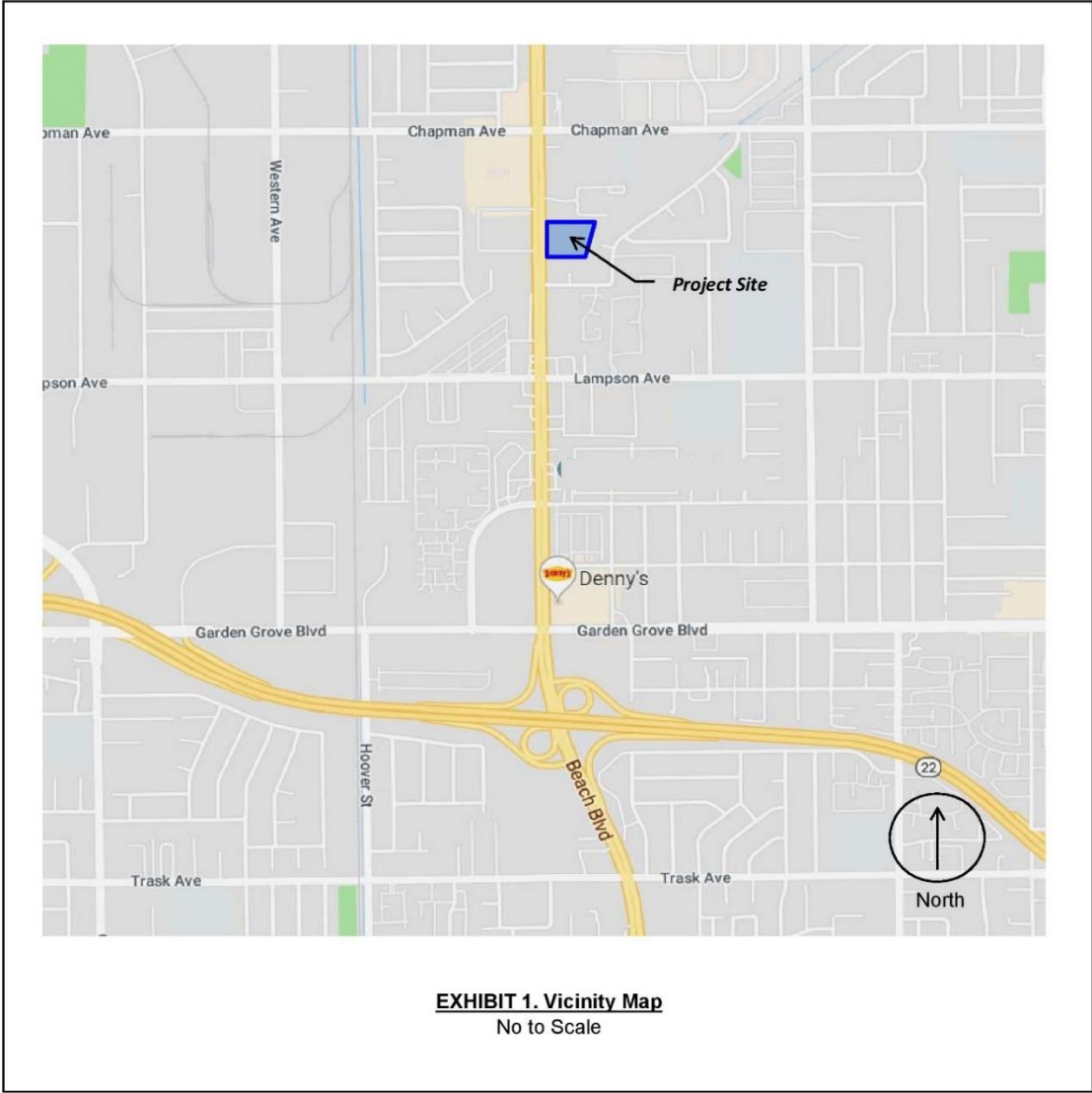
Stanton Townhome
12200 Beach Blvd, Stanton

June 30, 2021
Traffic Impact Study And VMT Screening

INTRODUCTION

The purpose of this study is to evaluate traffic impact of the proposed townhome development located at 12200 Beach Boulevard in the City of Stanton. Vicinity map is shown in **Exhibit 1**.

The project site is currently operated by a RV rental company named ShareMyCoach.com. All existing buildings (6,520 square feet) will be demolished to accommodate the proposed townhome with 85 dwelling units, including 16 one-bedrooms, 9 two-bedrooms, and 60 three-bedrooms. The proposed site plan is shown in **Exhibit 2**.



**INITIAL STUDY & MITIGATED NEGATIVE DECLARATION
STANTON TOWNHOMES • 12200 BEACH BOULEVARD
CITY OF STANTON, CALIFORNIA**



SITE PLAN SUMMARY
See Sheet CS2 for more information

Total Site Area:	3,546 Acres
Total Units:	85 Dwelling Units
1-Bedroom Units	16 Units (18.8%)
2-Bedroom Units	8 Units (9.4%)
3-Bedroom Units	61 Units (71.8%)
Unit 1A	8 Units
Unit 1B	8 Units
Unit 2B	9 Units
Unit 3A	28 Units
Unit 3B	31 Units

Density: Target: (SMC 20.30.050) (89 Units) 25 to 45 du/net ac
Provided: 23.97 du/acre

Parking: Required (SMC 20.30.050): 296 Spaces
1-Bed = 2 Space/Unit
2-Bed = 3 Space/Unit
3-Bed = 4 Space/Unit
Guest = 1 per 3 Units

Provided: 293 Spaces
Garage: 154 Spaces
Open (off-street): 49 Spaces
Required Accessible = 3 Spaces
Unassigned Open (49 x 5%)

Open Space: (SMC 20.30.050, 20.420.050 E): 68,691 S.F.
Total Open Space Provided: 46,341 S.F.
Required Accessible: 2,230 S.F.
Eligible Open Space Required: 21,230 S.F.

Total Open Space Provided:** 52,764 S.F.
Total Usable Common Open Space: 41,595 S.F.
Total Private Open Space: 11,169 S.F.
*See Sheets CS2 and L-9 for Open Space Calculations

Legend
Adaptable Unit Per CBC 1102A.3 (9 Units total)

SCALE 1" = 30'

N

WHA
ARCHITECTURE • PLANNING • CONSULTING

A1.10
SCHEMATIC DESIGN
2809101010 | 1/24/2020



**ARCHITECTURAL SITE PLAN
STANTON TOWNHOMES
12200 BEACH BOULEVARD
STANTON, CA**



EXHIBIT 2. SITE PLAN



STUDY SCENARIOS

According to the scoping agreement (see **Appendix A**), the following intersections are included in this study for level of service analysis to evaluate the potential traffic impacts:

1. Beach Boulevard at Chapman Avenue
2. Beach Boulevard at Park Plaza
3. Beach Boulevard at Catherine Avenue
4. Beach Boulevard at Lampson Avenue
5. Beach Boulevard at Project Driveway

The intersection of Beach Boulevard and Chapman Avenue (#1) is controlled by traffic signals. All other study intersections are currently controlled by stop signs on the minor streets.

For the signalized intersection, the Level of Service (LOS) analysis is based on Intersection Capacity Utilization (ICU). **Table 1** provides the definition for LOS associated with values of volume-to-capacity ratios (V/C).

Table 1. LOS Definitions – Signalized Intersections (ICU Analysis)

LOS	V/C Ratio
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91- 1.00
F	> 1.00

For non-signalized intersections or driveways, the LOS analyses are performed using SYNCHRO software based on the methodologies prescribed in the Highway Capacity Manual (HCM 2010). **Table 2** provides the definition for LOS associated with average control delay.



Table 2. LOS Definitions – Unsignalized Intersections (HCM Analysis)

LOS	Average Control Delay of Minor Approach (seconds/vehicle)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

In compliance with the *2019 Congestion Management Program (CMP)*, established by the Orange County Transportation Authority (OCTA), and the scoping agreement, the following scenarios are included in this analysis:

- i. Existing Conditions
- ii. Existing Conditions plus Project
- iii. Project Opening Year (2023) with Cumulative Developments
- iv. Project Opening Year (2023) with Cumulative Developments plus Project



EXISTING CONDITIONS

Project site is located on the east side of Beach Boulevard between Park Plaza and Catherine Avenue. Beach Boulevard is a north-south Principal Arterial that provides four lanes in each direction separated by raised medians and exclusive left-turn lanes at major intersections. The posted speed limit is 45 mph. On-street parking is prohibited along Beach Boulevard in the project vicinity.

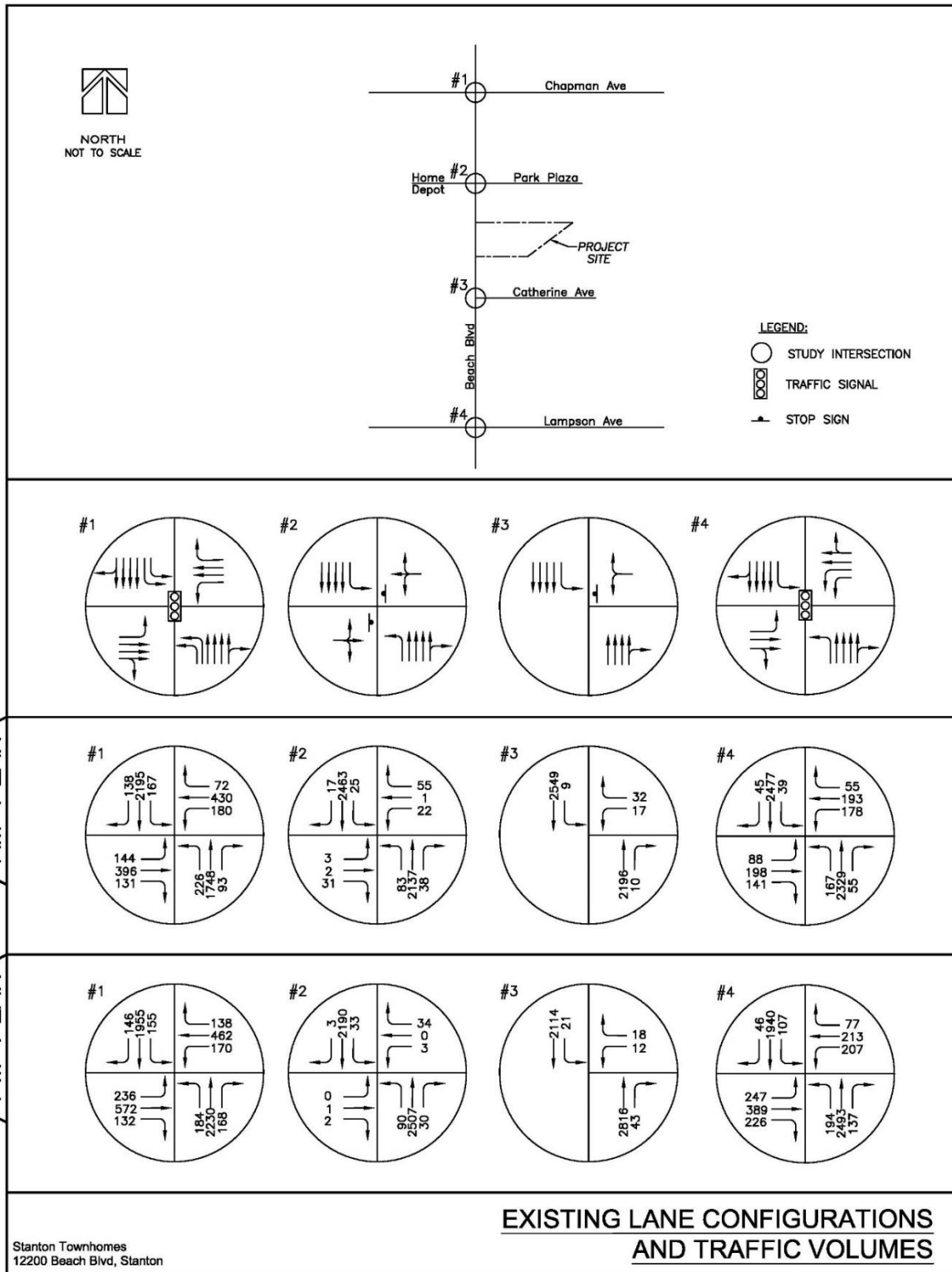
All traffic counts of AM and PM peak hour turning movements at study intersections were collected on Thursday, February 20, 2020, except intersection No.2 (Beach Boulevard at Park Plaza) which was collected on Thursday, October 15, 2020. It is noted that traffic volumes collected are relatively comparable with each other and do not require data adjustment. Lane configurations and traffic volumes at the study intersections are shown in **Exhibit 3**. Complete traffic data can be found in **Appendix B**.

Level of service (LOS) and V/C ratio for existing conditions are shown in **Table 3**. The analysis worksheets can be found in **Appendix C**. All study intersections operate at acceptable LOS D or better in the AM and PM peak hours under existing conditions.

Table 3. Existing Conditions

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	C	0.791	D	0.845
2. Beach Blvd at Park Plaza*	D	26.2	D	27.7
3. Beach Blvd at Catherine Ave*	C	22.4	D	30.8
4. Beach Blvd at Lampson Ave	C	0.801	D	0.877

*Stop controlled at minor approach with delay shown in seconds



K2 TRAFFIC ENGINEERING

EXHIBIT 3



Stanton Townhome
 12200 Beach Blvd, Stanton

June 30, 2021
 Traffic Impact Study And VMT Screening

TRIP GENERATION

Trip generation represents the amount of traffic attracted and produced by the project development. Based upon the recommendations from *Trip Generation, Tenth Edition*, published by the Institute of Transportation Engineers (ITE), applicable trip generation rates are shown in **Table 4**.

Table 4. Trip Generation Rate

Land Use (ITE Code)	Unit	Daily	AM Peak Hour			PM Peak Hour		
			Rate	In	Out	Rate	In	Out
Multifamily Housing (Low-Rise) (220)	Dwelling Unit	7.32	0.46	23%	77%	0.56	63%	37%
Recreational Vehicle Sales (842)	1,000 Sq. Ft.	5.00	0.46	85%	15%	0.77	31%	69%

Project trip generation were calculated and summarized in **Table 5**. The project is expected to have a NET trip generation of 36 trips in the AM peak hour, including 6 inbound and 30 outbound trips, 43 trips in the PM peak hour, including 28 inbound and 15 outbound trips, and 589 daily trips.

Table 5. Project Trip Generation

Land Use	Unit	Quantity	AM Peak Hour			PM Peak Hour			Daily
			Total	In	Out	Total	In	Out	
Proposed Use Multifamily Housing (Mid-Rise) (221)	Dwelling Unit	85	39	9	30	48	30	18	622
Existing-Use Credit Recreational Vehicle Sales (842)	1000 Sq. Ft.	-6.52	-3	-3	0	-5	-2	-3	-33
NET Trip Generation			36	6	30	43	28	15	589



Stanton Townhome
12200 Beach Blvd, Stanton

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TRIP DISTRIBUTION

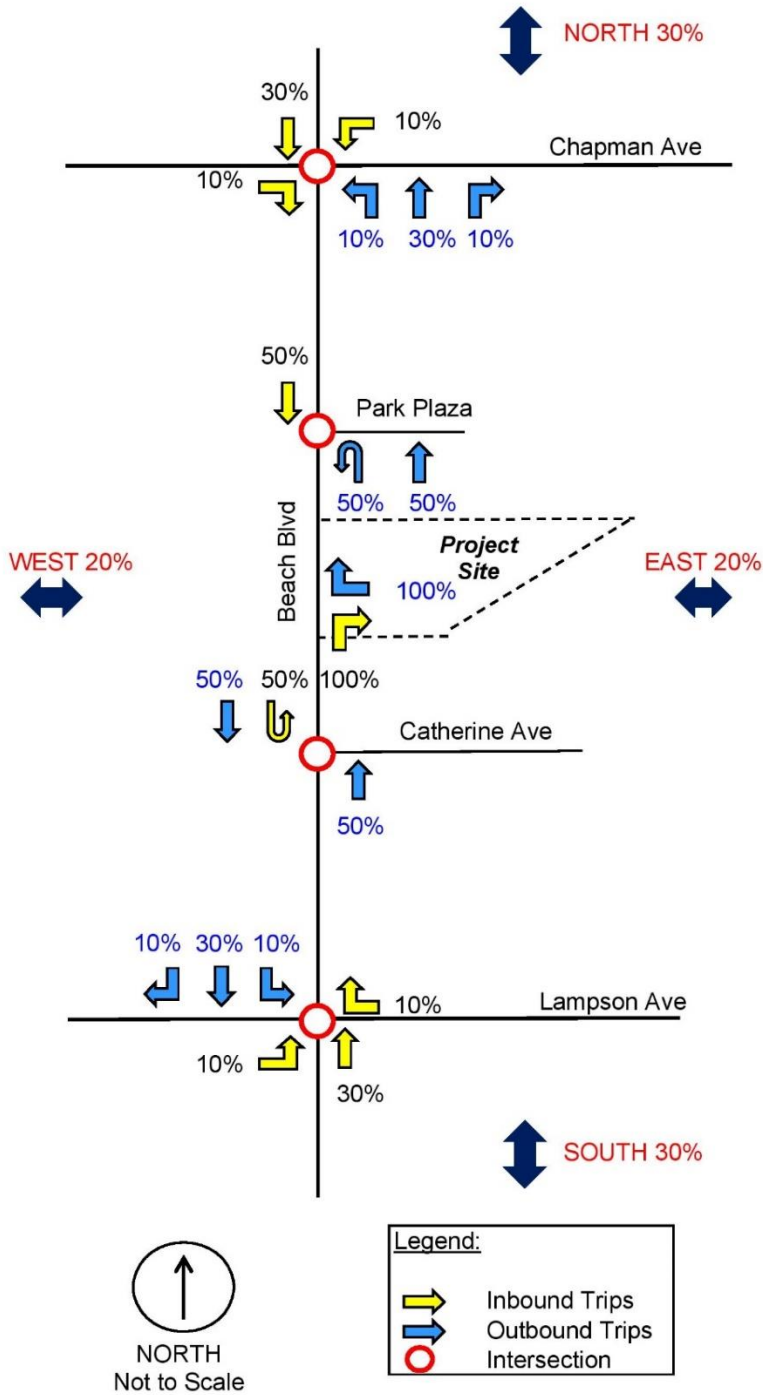
Trip distribution represents the directional orientation of traffic to and from the proposed project. Directional orientation is largely influenced by the geographical location of the site, among many other factors. The trip distribution pattern for the project is illustrated on **Exhibit 4**.

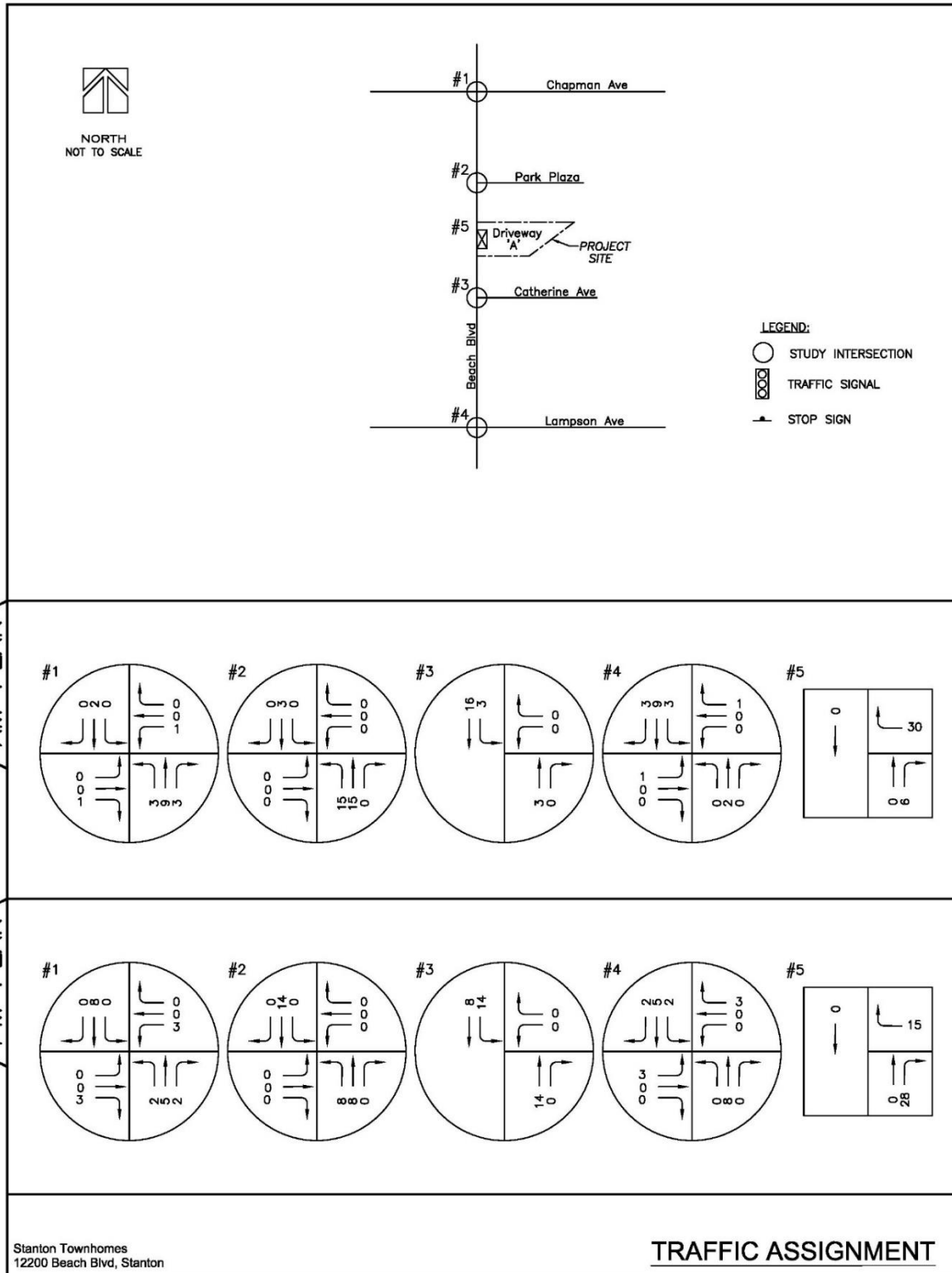
TRAFFIC ASSIGNMENT

The traffic assignment to and from the site has been based upon the results of trip generation, trip distribution, and access layouts. **Exhibit 5** illustrates the traffic assignment of the proposed project in the AM and PM peak hour.



EXHIBIT 4. TRIP DISTRIBUTION





K2 TRAFFIC ENGINEERING

EXHIBIT 5



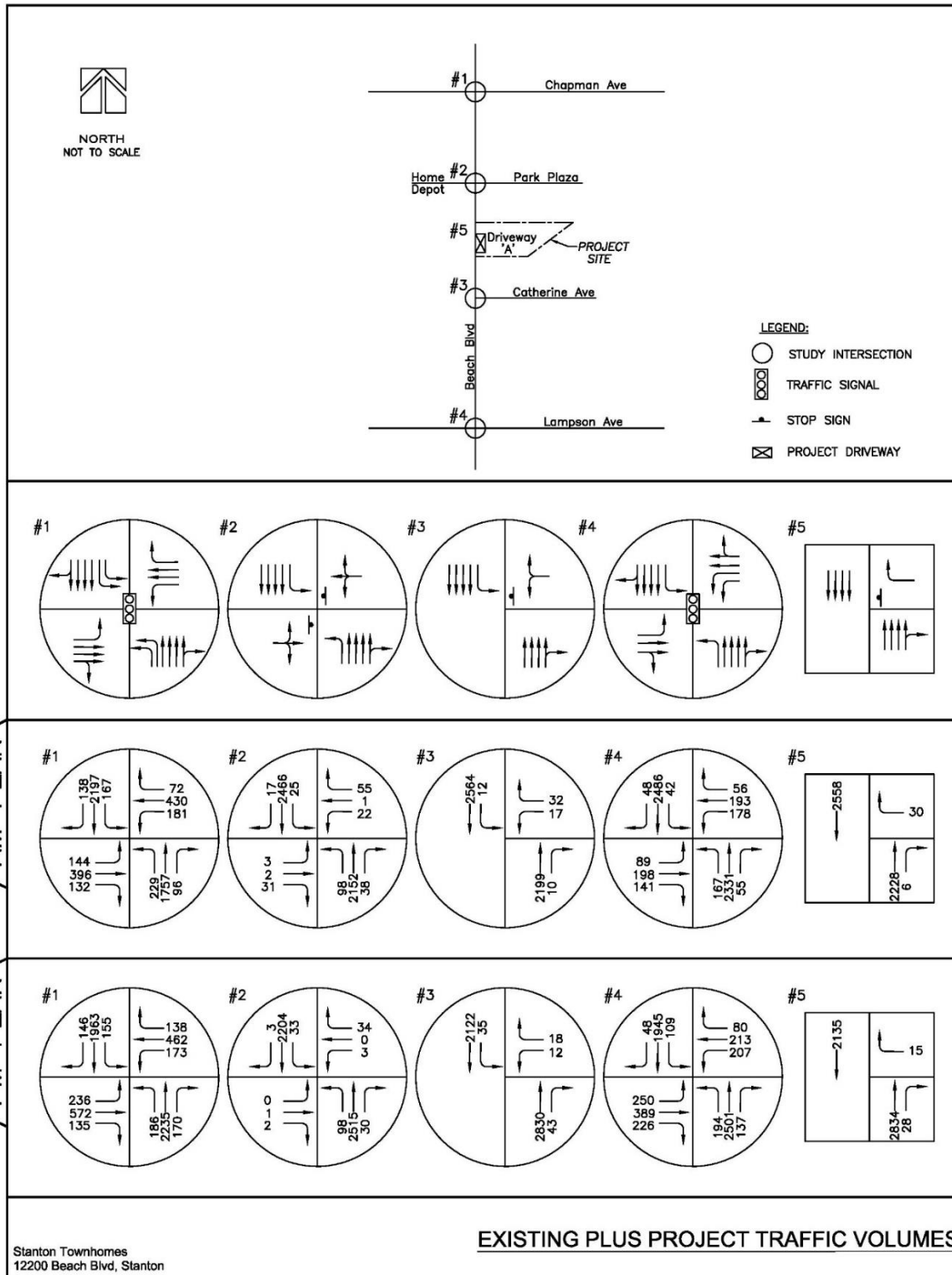
EXISTING CONDITIONS WITH PROJECT

Traffic volumes at the study intersections for existing conditions plus project are shown in **Exhibit 6**. The level of service and V/C ratios are shown in **Table 6**. All study intersections will operate at LOS D or better for the AM and PM peak hours in this scenario.

Table 6. Existing Conditions plus Project

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	C	0.793	D	0.847
2. Beach Blvd at Park Plaza	D	26.2	D	27.9
3. Beach Blvd at Catherine Ave	C	22.4	D	31.0
4. Beach Blvd at Lampson Ave	C	0.803	D	0.879
5. Beach Blvd at Project Driveway "A"	C	22.6	D	30.2

*Stop controlled at minor approach with delay shown in seconds





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CUMULATIVE DEVELOPMENTS

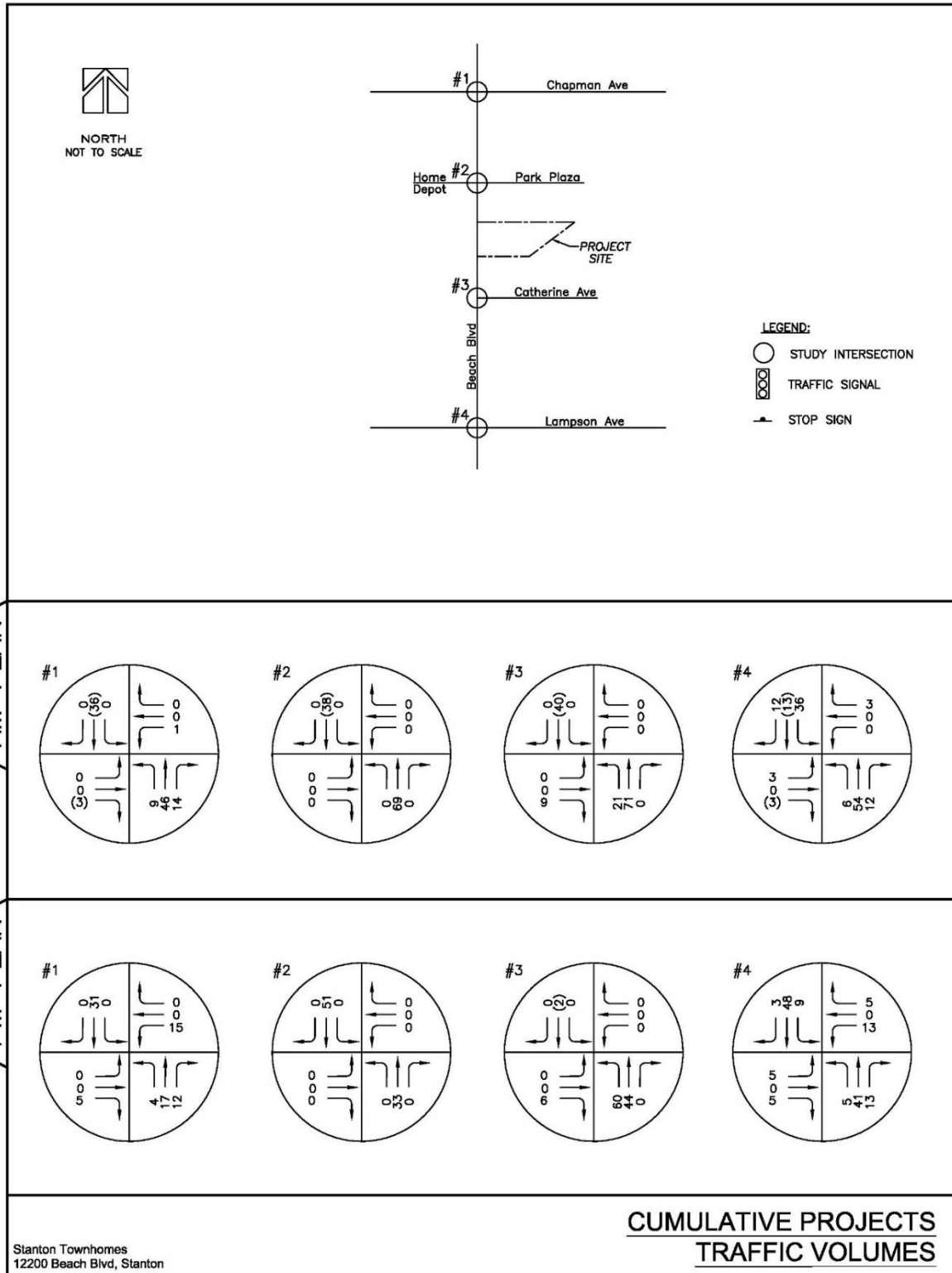
Based on the information provided by the Planning Department of the City of Stanton, the following cumulative developments are taken into consideration for analysis of the opening year conditions:

- Village Center and Village Center North: The development of Village Center includes 123 multi-family dwelling units and 105,000 square feet of commercial retail; The development of Village Center North includes 114 multi-family dwelling units.
- VRV Mixed-Use: The mixed-use development includes 300 apartment units and 6,200 square feet of retail uses.
- Cloud House Apartment: The development of 321 apartment units includes 41 studios, 196 one-bedroom, and 84 two-bedroom units.

Exhibit 7 illustrates the locations of the cumulative development project. **Exhibit 8** shows the traffic generated by this project at study intersections.



Exhibit 7. Location of Cumulative Projects
No to Scale



K2 TRAFFIC ENGINEERING

EXHIBIT 8



OPENING YEAR CUMULATIVE CONDITIONS

For project opening year 2023, the annual growth rate of two percent (2%) is used. This factor represents traffic increases resulting from regional growth. With proposed off-site improvement, lane configurations and traffic controls Traffic volumes for the project opening year with cumulative developments are illustrated in **Exhibit 9**.

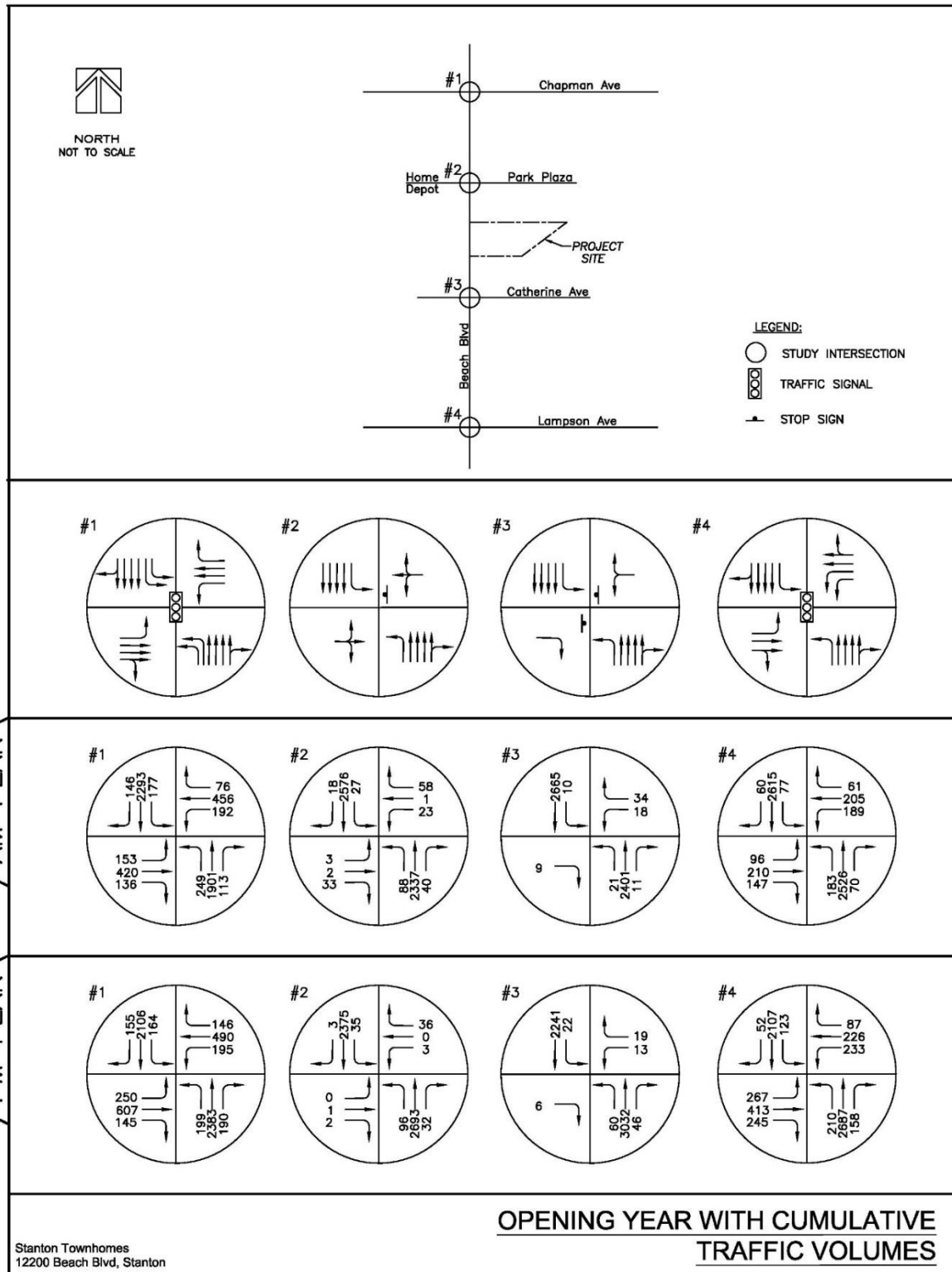
The project’s level of service under opening year with cumulative developments conditions are shown in **Table 7**. All study intersections operate at acceptable LOS E or better in the AM and PM peak hours except the following:

- Intersection #3, Beach Boulevard at Catherine Avenue: LOS E in the PM peak hours.
- Intersection #4, Beach Boulevard at Lampson Avenue: LOS E in the PM peak hours.

Table 7. Opening Year (2023) Cumulative Conditions - Without Project

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	D	0.833	D	0.899
2. Beach Blvd at Park Plaza	D	28.5	D	31.8
3. Beach Blvd at Catherine Ave	D	26.0	E	35.6
4. Beach Blvd at Lampson Ave	D	0.849	E	0.949

*Stop controlled at minor approach with delay shown in seconds



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EXHIBIT 9



OPENING YEAR CUMULATIVE CONDITIONS PLUS PROJECT

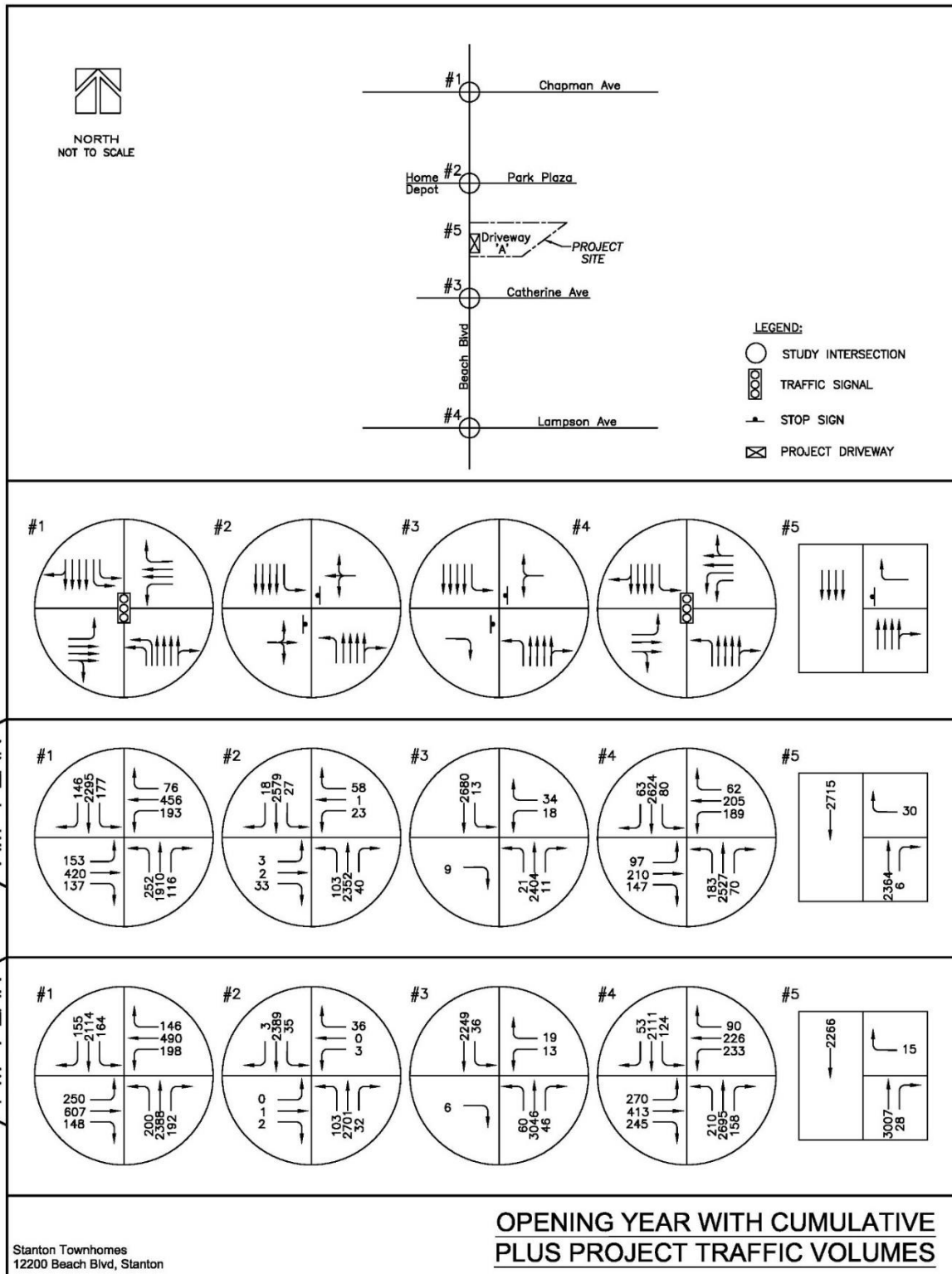
Traffic volumes for the project opening year with cumulative developments plus project traffic volumes are illustrated in **Exhibit 10**. The level of services and V/C ratios at study intersections under opening year cumulative plus project conditions are shown in **Table 8**. All study intersections operate at acceptable LOS D or better in the AM and PM peak hours except the following:

- Intersection #3, Beach Boulevard at Catherine Avenue: LOS E in the PM peak hours.
- Intersection #4, Beach Boulevard at Lampson Avenue: LOS E in the PM peak hours.

Table 8. Opening Year (2023) Cumulative Conditions plus Project

Intersection	AM Peak Hour		PM Peak Hour	
	LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)
1. Beach Blvd at Chapman Ave	D	0.835	D	0.900
2. Beach Blvd at Park Plaza	D	28.7	D	31.8
3. Beach Blvd at Catherine Ave	D	26.1	E	35.9
4. Beach Blvd at Lampson Ave	D	0.851	E	0.951
5. Beach Blvd at Project Driveway "A"	C	24.4	D	33.6

*Stop controlled at minor approach with delay shown in seconds



Stanton Townhomes
 12200 Beach Blvd, Stanton
K2 TRAFFIC ENGINEERING

EXHIBIT 10



THRESHOLD OF SIGNIFICANT IMPACT

According to the City of Stanton's standard, a significant impact occurs at a study intersection when the peak hour LOS falls below D and the intersection capacity utilization (ICU) increases by 0.03 or more. The City of Stanton is required to demonstrate compliance with 2019 Orange County Transportation Authority (OCTA) Congestion Management Plan (CMP) as Beach Boulevard is designated as Orange County CMP facility, the traffic impact is deemed significant and mitigation is required if both of the following conditions are met:

- I. The intersection operates at worse than LOS E, and
- II. The ICU increases by 0.10 or more.

The traffic impacts of the proposed project based on existing conditions are shown in **Table 9**. The project does not have a significant traffic impact and mitigation measure is, therefore, not required.



Stanton Townhome
 12200 Beach Blvd, Stanton

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Table 9. Project Intersection Impact Analysis - Existing Conditions

No.	Intersection	W/O Project		With Project		Increase	Significant Impact
		LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)		
AM PEAK							
1	Beach Blvd at Chapman Ave	C	0.791	C	0.793	0.002	No
2	Beach Blvd at Park Plaza*	D	26.2	D	26.2	0	No
3	Beach Blvd at Catherine Ave*	C	22.4	C	22.4	0	No
4	Beach Blvd at Lampson Ave	C	0.801	C	0.803	0.002	No
PM PEAK							
1	Beach Blvd at Chapman Ave	D	0.845	D	0.847	0.002	No
2	Beach Blvd at Park Plaza*	D	27.7	D	27.9	0.2 sec	No
3	Beach Blvd at Catherine Ave*	D	30.8	D	31.0	0.2 sec	No
4	Beach Blvd at Lampson Ave	D	0.877	D	0.879	0.002	No

* Stop controlled at minor approach with delay shown in seconds



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The traffic impacts of the proposed project based on the opening year (2021) conditions are shown in **Table 10**. The project does not have a significant traffic impact and mitigation measure is, therefore, not required.

Table 10. Project Intersection Impact Analysis - Opening Year (2023)

No.	Intersection	W/O Project		With Project		Increase	Significant Impact
		LOS	ICU/ Delay(s)	LOS	ICU/ Delay(s)		
AM PEAK							
1	Beach Blvd at Chapman Ave	D	0.833	D	0.835	0.002	No
2	Beach Blvd at Park Plaza*	D	28.5	D	28.7	0.2 sec	No
3	Beach Blvd at Catherine Ave*	D	26.0	D	26.1	0.1 sec	No
4	Beach Blvd at Lampson Ave	D	0.849	D	0.851	0.002	No
PM PEAK							
1	Beach Blvd at Chapman Ave	D	0.899	D	0.900	0.001	No
2	Beach Blvd at Park Plaza*	D	31.8	D	31.8	0	No
3	Beach Blvd at Catherine Ave*	E	35.6	E	35.9	0.3 sec	No
4	Beach Blvd at Lampson Ave	E	0.949	E	0.951	0.002 (<0.10)	No

*Stop controlled at minor approach with delay shown in seconds



SITE ACCESS

The main access is provided on Beach Boulevard at the south end of the site. Beach Boulevard has a raised median in the project vicinity and only right-in-right-out is allowed. A right-turn-only exit gate is located at the north end of the site for residents, emergency vehicles, and trash collections. The project should install a “RIGHT TURN ONLY” (R3-5R) signs at each proposed driveway and a “One Way Arrow” (W6-1R) sign on the raised median facing egress traffic.

Due to the absence of a median opening at the project access driveway, U-Turn traffic is expected to increase at adjacent intersections on Beach Boulevard at Park Plaza and Catherine Avenue. Queue analysis indicates that adequate pocket lengths are provided to accommodate these additional U-turn movements, as shown in **Table 11**. The analysis worksheets can be found in **Appendix D**.

Table 11. Queue Analysis for U-Turn at Adjacent Intersections

Time Period	Driveway Approach		Note	
	95% Queue	Pocket Length		
Int. #2 Northbound Left Turn at Park Plaza				
AM Peak Hour	6.8 car	136 feet	140 feet	OK
PM Peak Hour	5.3 car	106 feet	140 feet	OK
Int. #3 Southbound Left Turn at Catherine Avenue				
AM Peak Hour	0.4 car	8 feet	150 feet	OK
PM Peak Hour	2.6 car	52 feet	150 feet	OK

ON-SITE CIRCULATION

On-site circulation appears efficient and safe without unnecessary bottlenecks. The site plan is subject to review and final approval by the Fire Department, Planning Department and Traffic Engineer.



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12200 Beach Blvd, Stanton

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VEHICLE MILES TRAVELED (VMT)

Based on the County of Orange “2020 Updated Transportation Implementation Manual”, which was developed in accordance with Senate Bill (SB) 743, the High-Quality Transit Area (HQTA) screening criteria is applicable for land development projects located within 0.5 mile of a Transit Priority Area (TPA) or an HQTA.

The County of Orange Transit Priority Areas is shown in **Exhibit 11**. The proposed townhome development is located within one-half mile from the intersection of Beach Boulevard and Chapman Avenue, a major transit stop defined as an intersection of two major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak. Relevant bus schedules can be found in **Appendix E**.

The HQTA screening criteria is **NOT** appropriate to use if any of the following exclusionary conditions are applicable to the project:

- a) Is inconsistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
- b) Has a floor-to-area ratio (FAR) less than 0.75
- c) Provides an excessive amount of parking
- d) Reduces the number of affordable residential units

CONDITION (a): Is inconsistent with the RTP/SCS

This condition is **NOT** applicable. The project is situated within one-half mile from a major transit stop. The project is a high density residential development consistent with the RTP/SCS.

CONDITION (b): Has a floor-to-area ratio (FAR) less than 0.75

This condition is **NOT** applicable. The project’s FAR is 0.762.



Stanton Townhome
12200 Beach Blvd, Stanton

June 30, 2021
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CONDITION (c): Provides an excessive amount of parking

This condition is NOT applicable. The project is proposed to provide 203 parking spaces. According to Stanton Municipal Code (SMC), the project is required to provide 296 parking spaces. The project does not provide an excess of parking.

CONDITION (d): Reduces the number of affordable housing units

This condition is NOT applicable. The project does not reduce affordable housing in the area.

None of the exclusionary conditions are applicable; therefore the proposed project meets the High-Quality Transit Area (HQTA) screening criteria for land development projects located within ½ mile of a TPA or HQTA. The project is exempt from a VMT Analysis and can be presumed to have less than significant impact on transportation and circulation.



EXHIBIT 11. ORANGE COUNTY HIGH-QUALITY TRANSIT AREAS (HQTA)



Major Transit Stop:
 Beach Blvd at Chapman Ave,
 the intersection of two or
 more major bus routes with a
 frequency of service interval
 of 15 minutes or less

Project Site:
 12200 Beach Blvd, Stanton



LSA

LEGEND

- Unincorporated Areas of Orange County
- High Quality Transit Areas
- Unincorporated Areas within High Quality Transit Areas
- Transportation Centers
- Metrolink Station (with half-mile buffer)

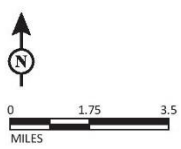


FIGURE 4
 Sheet 1 of 2

CEQA Transportation Thresholds of Significance Guide
 County of Orange Transit Priority Areas

SOURCE: OCPW (3/2020), SCAG (6/2019); OCTA (11/2019); Bing (2019)
 I:\OCY1701.19\GIS\MXD\HQTA.mxd (4/1/2020)



APPENDIX A
SCOPING AGREEMENT



Traffic Impact Study Scope

Project Names:	Stanton Townhomes	
Project Address:	12200 Beach Blvd, Stanton	
Project Description:	Development of new townhomes with 89 dwelling units with 10% Moderate Income Affordable, including 16 one-bedrooms, 15 two-bedrooms, and 58 three-bedrooms. See Exhibit 1 for Site Plan. All existing buildings (6,520 sq.ft.) for RV dealership will be demolished. See Exhibit 2 .	
	Consultant	Developer
Name	Kay Hsu, PE, TE K2 Traffic Engineering, Inc.	Chris Segesman Bonanni Development
Address	1442 Irvine Blvd, Ste 210 Tustin, CA 92780	5500 Bolsa Ave, Suite 120 Huntington Beach, CA 92649
Telephone	714-832-2116	562-537-6908
Email	khsu@k2traffic.com	chris@bonannidevelopment.com

A. Trip Generation

Proposed Land Use	Multifamily Housing (Low-Rise)
Reference	Trip Generation (10th Edition) by ITE

Net Trip Generation	Inbound	Outbound	Total
AM Peak Hour	-2	30	28
PM Peak Hour	27	7	34
Daily Trip	545	See Exhibit 3 for Trip Generation	

B. Trip Distribution Trip distribution is shown on **Exhibit 4**

C. Background Traffic

Project Opening Year	2023	Growth Rate	2% Annual
----------------------	------	-------------	-----------


D. Study Intersections

1. Beach Blvd at Chapman Ave	4. Beach Blvd at Lampson Ave
2. Beach Blvd at Park Plaza	5. Project Driveway at Beach Blvd
3. Beach Blvd at Catherine Ave	

E. Specific Issues to be addressed in the Study

1. Study scenarios: Existing Conditions, Existing Plus Project, Opening Year with Cumulative Projects, Opening Year with Cumulative Projects Plus Project. Each study scenario will include a description of impacts, if any, and mitigation measures.
2. Cumulative projects to be provided by Planning Dept. and attached hereon, if any.

Recommended by:

 9/1/2020
 Consultant Date
 Submitted on 9/1/2020

Approved by:

 City of Stanton Date
 Public Works Dept., Engineering Div.

**INITIAL STUDY & MITIGATED NEGATIVE DECLARATION
STANTON TOWNHOMES • 12200 BEACH BOULEVARD
CITY OF STANTON, CALIFORNIA**



SITE PLAN SUMMARY
See Sheet CS2 for more information

Total Site Area:	3,546 Acres
Total Units:	89 Dwelling Units
1-Bedroom Units	16 Units (18.0%)
Unit 1A	8 Units
Unit 1B	8 Units
2-Bedroom Units	15 Units (16.9%)
Unit 2B	15 Units
3-Bedroom Units	56 Units (67.1%)
Unit 3A	25 Units
Unit 3B	33 Units
(10% of Units will be Moderate Income Affordable per SMC 20.330.030)	

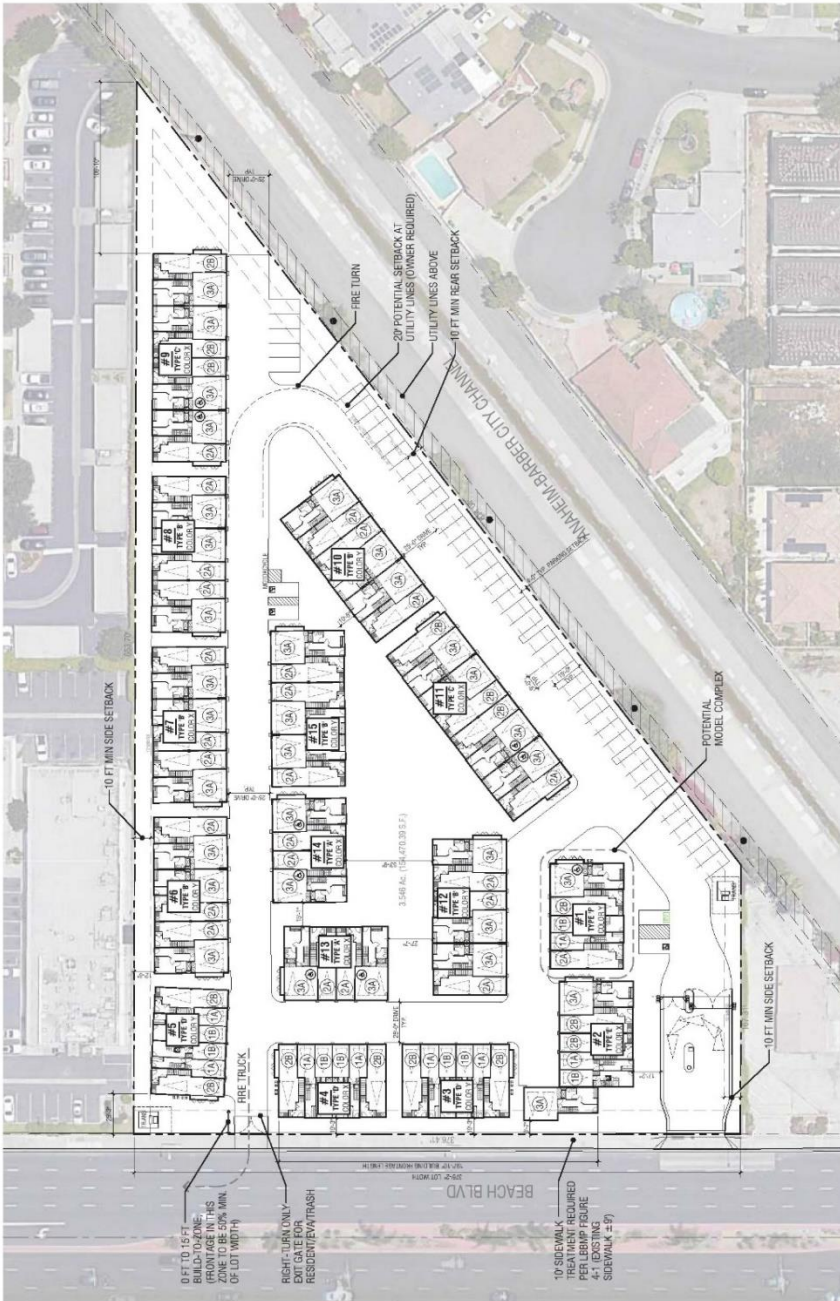
Density:
Target: (SMC 20.30.050) (89 Units) 25 to 45 du/net ac
Provided: 25.10 du/acre

Parking:
Required*:
1-Space/Unit
2-Bed = 2 Space/Unit
3-Bed = 3 Space/Unit
Guest = None Required
*(SMC 20.330.040, By-Right Reduction)

Provided:
Garage: 211 Spaces
Open (off-street): 162 Spaces
Required Accessible = 3 Spaces
Unassigned Open (49 X 3%) 49 Spaces

Open Space: (SMC 20.230.050, 20.420.050.E): 68,591 S.F.
Total Open Space Required: 68,591 S.F.
Total Open Space Provided: 34,381 S.F.
(Incentive Requested for Total Open Space Reduction)

Legend
Ⓢ Potential Adaptable Unit as Per CBC 1102A.3 (6 Units total)



**ARCHITECTURAL SITE PLAN
STANTON TOWNHOMES
12200 BEACH BOULEVARD
STANTON, CA**

DRAFT A1.10

WHA
ARCHITECTS - PLANNERS - DESIGNERS
SCHEMATIC DESIGN
20201101 | 07-25-2020

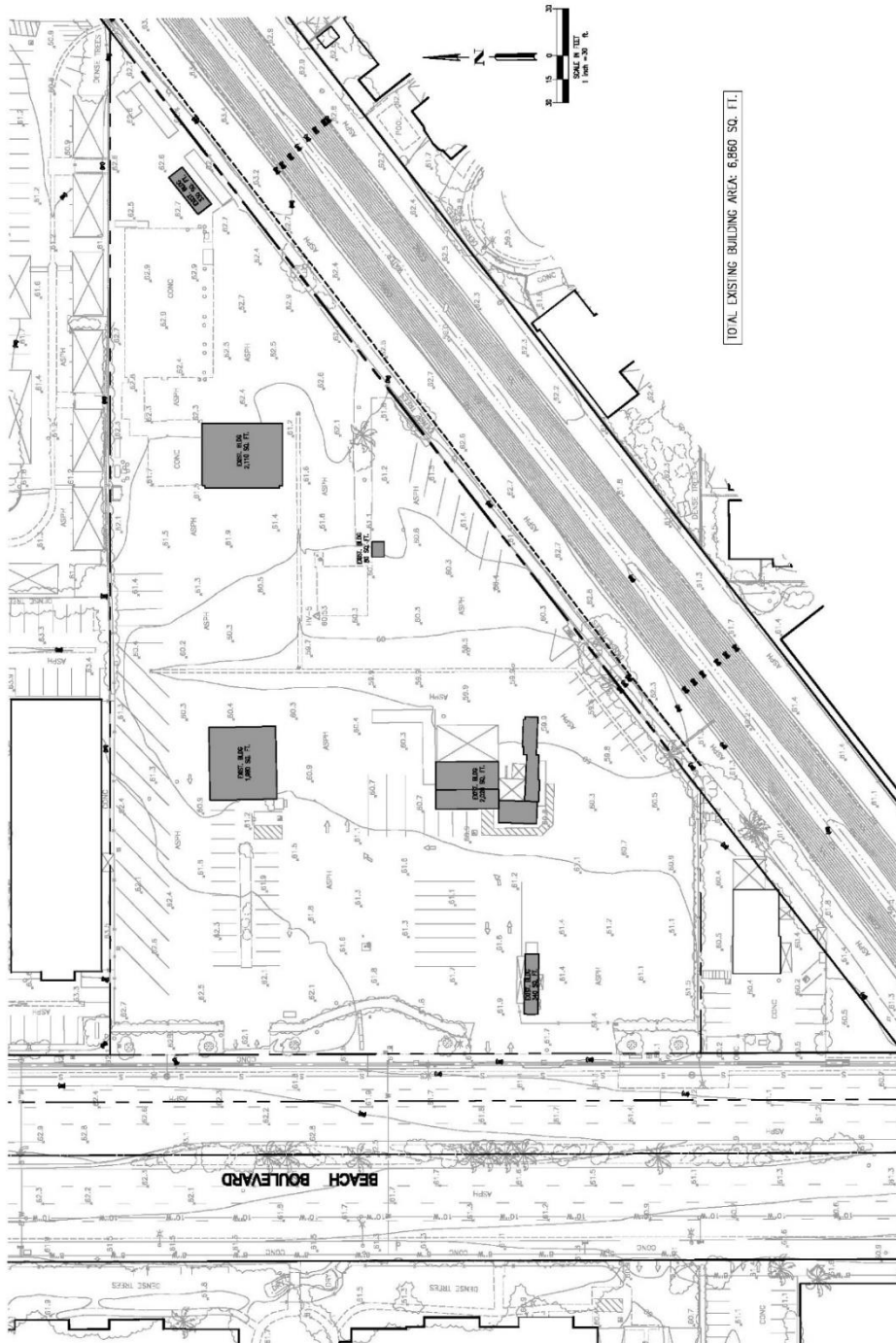
BONANNI DEVELOPMENT

EXHIBIT 1. SITE PLAN

NO. 11 1998 BRENDA AVENUE SUITE 100 | SANTA ANA, CALIFORNIA 92705
© 2020 WALTER BONDURANT ARCHITECTS, INC. DBA WHA



EXHIBIT 2. BUILDING DEMOLITION



EXISTING BUILDING AREA EXHIBIT
STANTON TOWNHOMES
 12200 BEACH BOULEVARD
 STANTON, CA



2009-949-001 | 06-31-2020



EXHIBIT 3. TRIP GENERATION

TABLE 1. TRIP GENERATION RATE (ITE)

Land Use	Unit	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Multifamily Housing (Low-Rise) (220)	Dwelling Unit	7.32	0.46	23%	77%	0.56	63%	37%
Recreational Vehicle Sales (842)	1000 Sq. Ft.	16.19	1.92	82%	18%	2.45	32%	68%

TABLE 2. NET TRIP GENERATION

LAND USE	UNIT	Quantity	AM Peak			PM Peak			Daily
			Total	IN	OUT	Total	IN	OUT	
Multifamily Housing (Low-Rise) (220)	Dwelling Unit	89	41	9	32	50	32	18	651
Recreational Vehicle Sales (842)	1000 Sq. Ft.	-6.520	-13	-11	-2	-16	-5	-11	-106
NET Trip Generation			28	-2	30	34	27	7	545



APPENDIX B
TURNING MOVEMENT COUNT DATA



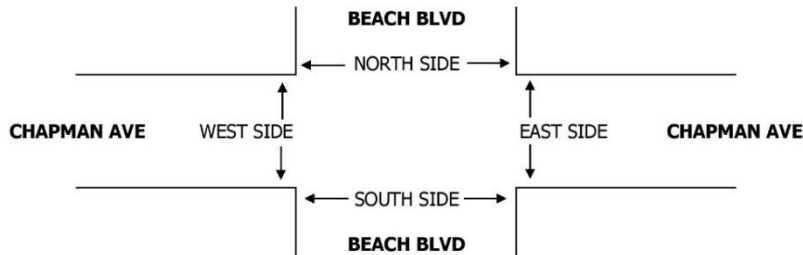
INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 2/20/20 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	STANTON BEACH BLVD CHAPMAN AVE	PROJECT #: LOCATION #: CONTROL:	1 SIGNAL
NOTES:				

LANES:	NORTHBOUND BEACH BLVD			SOUTHBOUND BEACH BLVD			EASTBOUND CHAPMAN AVE			WESTBOUND CHAPMAN AVE			TOTAL
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	

AM	7:00 AM	38	393	24	37	577	30	37	102	29	48	104	18	1,437
	7:15 AM	43	410	23	39	487	31	32	85	25	33	101	22	1,331
	7:30 AM	55	420	21	42	542	36	29	99	27	43	105	14	1,433
	7:45 AM	49	473	24	44	589	34	37	92	41	39	133	20	1,575
	8:00 AM	59	443	22	42	504	38	40	90	36	47	99	21	1,441
	8:15 AM	63	412	26	39	560	30	38	115	27	51	93	17	1,471
	8:30 AM	49	403	25	29	475	35	32	80	33	35	104	21	1,321
	8:45 AM	66	385	29	38	483	43	36	94	38	42	103	22	1,379
	VOLUMES	422	3,339	194	310	4,217	277	281	757	256	338	842	155	11,388
	APPROACH %	11%	84%	5%	6%	88%	6%	22%	59%	20%	25%	63%	12%	
APP/DEPART	3,955	/	3,775	4,804	/	4,811	1,294	/	1,261	1,335	/	1,541	0	
BEGIN PEAK HR	7:30 AM													
VOLUMES	226	1,748	93	167	2,195	138	144	396	131	180	430	72	5,920	
APPROACH %	11%	85%	4%	7%	88%	6%	21%	59%	20%	26%	63%	11%		
PEAK HR FACTOR	0.946													
APP/DEPART	2,067	/	1,964	2,500	/	2,506	671	/	656	682	/	794	0	
PM	4:00 PM	53	525	33	38	420	28	65	160	37	45	128	31	1,563
	4:15 PM	40	500	44	43	451	39	51	148	34	47	106	32	1,535
	4:30 PM	47	597	46	39	520	44	66	145	36	37	143	34	1,754
	4:45 PM	39	574	38	41	405	34	62	112	34	35	96	26	1,496
	5:00 PM	40	542	52	43	506	43	54	124	29	42	102	38	1,615
	5:15 PM	48	608	34	45	464	34	59	160	33	34	123	29	1,671
	5:30 PM	41	542	40	32	483	30	67	166	33	52	107	37	1,630
	5:45 PM	55	538	42	35	502	39	56	122	37	42	130	34	1,632
	VOLUMES	363	4,426	329	316	3,751	291	480	1,137	273	334	935	261	12,896
	APPROACH %	7%	86%	6%	7%	86%	7%	25%	60%	14%	22%	61%	17%	
APP/DEPART	5,118	/	5,167	4,358	/	4,358	1,890	/	1,782	1,530	/	1,589	0	
BEGIN PEAK HR	5:00 PM													
VOLUMES	184	2,230	168	155	1,955	146	236	572	132	170	462	138	6,548	
APPROACH %	7%	86%	7%	7%	87%	6%	25%	61%	14%	22%	60%	18%		
PEAK HR FACTOR	0.936													
APP/DEPART	2,582	/	2,604	2,256	/	2,257	940	/	895	770	/	792	0	



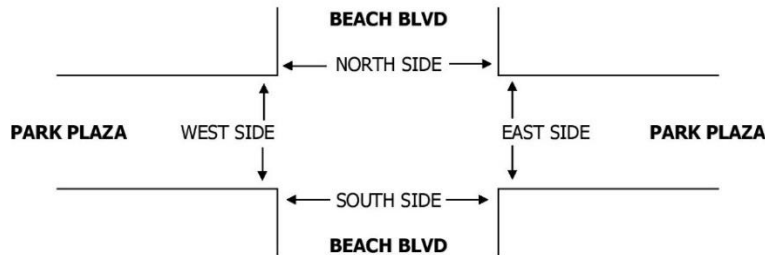


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 10/15/20 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	STANTON BEACH BLVD PARK PLAZA	PROJECT #: LOCATION #: CONTROL:	2 2-WAY STOP: EB, WB
NOTES:			AM PM MD OTHER OTHER	▲ N ◀ W E ▶ S ▼

LANES:	NORTHBOUND BEACH BLVD			SOUTHBOUND BEACH BLVD			EASTBOUND PARK PLAZA			WESTBOUND PARK PLAZA			TOTAL
	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	
7:00 AM	13	431	3	7	552	3	0	0	2	7	0	9	1,027
7:15 AM	14	486	5	3	609	1	0	3	11	12	1	13	1,158
7:30 AM	21	511	8	5	610	4	2	0	10	5	0	19	1,195
7:45 AM	20	568	11	8	618	2	0	1	6	4	0	12	1,250
8:00 AM	19	543	9	4	631	6	0	0	3	7	0	13	1,235
8:15 AM	23	515	10	8	604	5	1	1	12	6	1	11	1,197
8:30 AM	19	502	6	5	588	5	1	0	3	1	2	8	1,140
8:45 AM	18	428	7	9	561	2	0	0	1	2	1	12	1,041
VOLUMES	147	3,984	59	49	4,773	28	4	5	48	44	5	97	9,243
APPROACH %	4%	95%	1%	1%	98%	1%	7%	9%	84%	30%	3%	66%	
APP/DEPART	4,190	/	4,085	4,850	/	4,865	57	/	113	146	/	180	0
BEGIN PEAK HR	7:30 AM												
VOLUMES	83	2,137	38	25	2,463	17	3	2	31	22	1	55	4,877
APPROACH %	4%	95%	2%	1%	98%	1%	8%	6%	86%	28%	1%	71%	
PEAK HR FACTOR	0.942												
APP/DEPART	2,258	/	2,195	2,505	/	2,516	36	/	65	78	/	101	0
4:00 PM	27	524	11	6	440	4	0	0	1	0	0	6	1,019
4:15 PM	18	612	16	8	508	1	0	0	2	1	0	11	1,177
4:30 PM	15	572	8	6	530	0	1	0	1	3	0	7	1,143
4:45 PM	24	567	6	4	481	1	0	0	0	2	0	10	1,095
5:00 PM	21	724	4	11	548	0	0	1	1	0	0	7	1,317
5:15 PM	22	582	10	8	551	2	0	0	1	1	0	9	1,186
5:30 PM	23	634	10	10	610	0	0	0	0	0	0	8	1,295
5:45 PM	22	542	7	9	474	0	0	0	0	2	1	8	1,065
VOLUMES	172	4,757	72	62	4,142	8	1	1	6	9	1	66	9,297
APPROACH %	3%	95%	1%	1%	98%	0%	13%	13%	75%	12%	1%	87%	
APP/DEPART	5,001	/	4,824	4,212	/	4,157	8	/	135	76	/	181	0
BEGIN PEAK HR	4:45 PM												
VOLUMES	90	2,507	30	33	2,190	3	0	1	2	3	0	34	4,893
APPROACH %	3%	95%	1%	1%	98%	0%	0%	33%	67%	8%	0%	92%	
PEAK HR FACTOR	0.877												
APP/DEPART	2,627	/	2,541	2,226	/	2,195	3	/	64	37	/	93	0



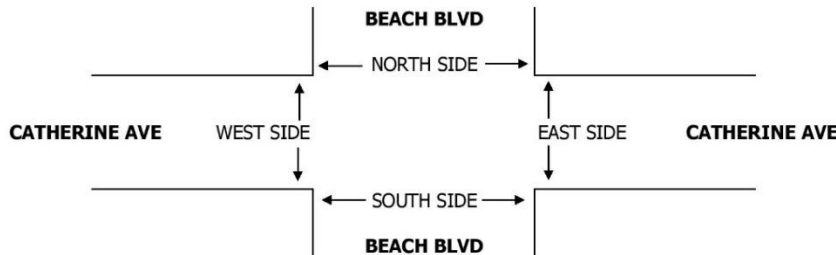


INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 2/20/20 THURSDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	STANTON BEACH BLVD CATHERINE AVE	PROJECT #: LOCATION #: 3 CONTROL: SIGNAL																		
NOTES:		<table border="1"> <tr> <td>AM</td> <td>▲</td> <td>N</td> </tr> <tr> <td>PM</td> <td>◀</td> <td>W</td> </tr> <tr> <td>MD</td> <td></td> <td></td> </tr> <tr> <td>OTHER</td> <td></td> <td></td> </tr> <tr> <td>OTHER</td> <td>S</td> <td>▶</td> </tr> <tr> <td></td> <td>▼</td> <td>E</td> </tr> </table>		AM	▲	N	PM	◀	W	MD			OTHER			OTHER	S	▶		▼	E
AM	▲	N																			
PM	◀	W																			
MD																					
OTHER																					
OTHER	S	▶																			
	▼	E																			

LANES:	NORTHBOUND BEACH BLVD			SOUTHBOUND BEACH BLVD			EASTBOUND CATHERINE AVE			WESTBOUND CATHERINE AVE			TOTAL	
	NL X	NT 4	NR 0	SL 1	ST 4	SR X	EL X	ET X	ER X	WL 0.5	WT X	WR 0.5		
AM	7:00 AM	476	2	3	581					3		0	1,065	
	7:15 AM	561	1	1	583					5		4	1,155	
	7:30 AM	529	3	2	629					3		8	1,174	
	7:45 AM	562	0	4	682					3		9	1,260	
	8:00 AM	540	5	2	606					11		6	1,170	
	8:15 AM	565	2	1	632					0		9	1,209	
	8:30 AM	540	3	6	591					4		10	1,154	
	8:45 AM	423	4	2	602					1		7	1,039	
	VOLUMES	0	4,196	20	21	4,906	0	0	0	30	0	53		9,226
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	36%	0%	64%		
APP/DEPART	4,216	/	4,249	4,927	/	4,936	0	/	41	83	/	0	0	
PM	BEGIN PEAK HR	7:30 AM												
	VOLUMES	0	2,196	10	9	2,549	0	0	0	17	0	32	4,813	
	APPROACH %	0%	100%	0%	0%	100%	0%	0%	0%	35%	0%	65%		
	PEAK HR FACTOR	0.973			0.932			0.000			0.721			0.955
	APP/DEPART	2,206	/	2,228	2,558	/	2,566	0	/	19	49	/	0	0
PM	4:00 PM	619	17	6	489					2		7	1,140	
	4:15 PM	598	8	6	492					4		9	1,117	
	4:30 PM	714	7	4	606					3		4	1,338	
	4:45 PM	690	11	7	498					3		4	1,213	
	5:00 PM	712	15	5	519					3		4	1,258	
	5:15 PM	700	10	5	491					3		6	1,215	
	5:30 PM	687	16	4	528					2		7	1,244	
	5:45 PM	631	13	4	530					3		5	1,186	
	VOLUMES	0	5,351	97	41	4,153	0	0	0	23	0	46	9,711	
	APPROACH %	0%	98%	2%	1%	99%	0%	0%	0%	33%	0%	67%		
APP/DEPART	5,448	/	5,397	4,194	/	4,176	0	/	138	69	/	0	0	
PM	BEGIN PEAK HR	4:30 PM												
	VOLUMES	0	2,816	43	21	2,114	0	0	0	12	0	18	5,024	
	APPROACH %	0%	98%	2%	1%	99%	0%	0%	0%	40%	0%	60%		
	PEAK HR FACTOR	0.983			0.875			0.000			0.833			0.939
APP/DEPART	2,859	/	2,834	2,135	/	2,126	0	/	64	30	/	0	0	

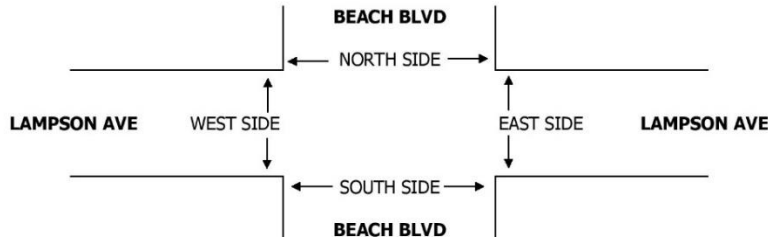




INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: PACIFIC TRAFFIC DATA SERVICES

DATE: 2/20/20 THURSDAY		LOCATION: NORTH & SOUTH: EAST & WEST:		STANTON BEACH BLVD LAMPSON AVE			PROJECT #: LOCATION #: CONTROL:			4 SIGNAL				
NOTES:										AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼			
	NORTHBOUND BEACH BLVD			SOUTHBOUND BEACH BLVD			EASTBOUND LAMPSON AVE			WESTBOUND LAMPSON AVE				
LANES:	NL 1	NT 4	NR 0	SL 1	ST 4	SR 0	EL 1	ET 2	ER 0	WL 2	WT 2	WR 0	TOTAL	
AM	7:00 AM	36	381	13	9	602	13	20	47	35	32	54	15	1,257
	7:15 AM	36	438	9	10	537	13	14	49	32	34	41	9	1,222
	7:30 AM	44	542	13	5	588	15	17	37	33	48	42	15	1,399
	7:45 AM	50	631	11	6	694	11	22	54	35	47	58	14	1,633
	8:00 AM	35	571	19	12	578	9	25	55	35	38	48	14	1,439
	8:15 AM	38	585	12	16	617	10	24	52	38	45	45	12	1,494
	8:30 AM	42	463	17	10	585	8	21	45	31	35	39	15	1,311
	8:45 AM	43	502	18	13	613	12	23	47	37	55	48	13	1,424
	VOLUMES	324	4,113	112	81	4,814	91	166	386	276	334	375	107	11,179
	APPROACH %	7%	90%	2%	2%	97%	2%	20%	47%	33%	41%	46%	13%	
APP/DEPART	4,549	/	4,386	4,986	/	5,424	828	/	579	816	/	790	0	
BEGIN PEAK HR		7:30 AM												
VOLUMES	167	2,329	55	39	2,477	45	88	198	141	178	193	55	5,965	
APPROACH %	7%	91%	2%	2%	97%	2%	21%	46%	33%	42%	45%	13%		
PEAK HR FACTOR		0.922			0.900			0.928			0.895		0.913	
APP/DEPART	2,551	/	2,472	2,561	/	2,796	427	/	292	426	/	405	0	
PM	4:00 PM	42	578	38	16	458	11	51	104	73	41	62	18	1,492
	4:15 PM	47	551	32	24	454	14	60	86	55	44	51	13	1,431
	4:30 PM	53	658	35	31	532	8	62	122	59	44	57	17	1,678
	4:45 PM	44	562	27	26	393	7	55	101	55	45	44	14	1,373
	5:00 PM	44	647	39	29	517	13	71	88	70	57	52	25	1,652
	5:15 PM	50	581	31	20	452	9	55	96	64	42	50	14	1,464
	5:30 PM	48	631	31	26	498	8	58	110	49	56	57	17	1,589
	5:45 PM	52	634	36	32	473	16	63	95	43	52	54	21	1,571
	VOLUMES	380	4,842	269	204	3,777	86	475	802	468	381	427	139	12,250
	APPROACH %	7%	88%	5%	5%	93%	2%	27%	46%	27%	40%	45%	15%	
APP/DEPART	5,491	/	5,456	4,067	/	4,626	1,745	/	1,275	947	/	893	0	
BEGIN PEAK HR		5:00 PM												
VOLUMES	194	2,493	137	107	1,940	46	247	389	226	207	213	77	6,276	
APPROACH %	7%	88%	5%	5%	93%	2%	29%	45%	26%	42%	43%	15%		
PEAK HR FACTOR		0.967			0.936			0.941			0.927		0.950	
APP/DEPART	2,824	/	2,817	2,093	/	2,373	862	/	633	497	/	453	0	





APPENDIX C LEVEL OF SERVICE ANALYSIS



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing**

Intersection # **1**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Chapman Ave**

Date: **12/21/20**

By: **KH**

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	2.0	1700	226	124	0.073	0.073	184	101	0.060	
Northbound :Thru	4.0	1700	1748	614	0.361		2230	799	0.470	0.470
Northbound Right:		1700	93				168			
Southbound :Left	2.0	1700	167	92	0.054		155	85	0.050	0.050
Southbound :Thru	4.0	1700	2195	778	0.457	0.457	1955	700	0.412	
Southbound Right:		1700	138				146			
Eastbound :Left	1.0	1700	144	144	0.085	0.085	236	236	0.139	0.139
Eastbound :Thru	3.0	1700	396	176	0.103		572	235	0.138	
Eastbound Right:		1700	131				132			
Westbound :Left	1.0	1700	180	180	0.106		170	170	0.100	
Westbound :Thru	2.0	1700	430	215	0.126	0.126	462	231	0.136	0.136
Westbound Right:	1.0	1700	72	72	0.042		138	138	0.081	
Sum of Critical V/C Ratios			0.741				0.795			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.791				0.845			
Level of Service (LOS)			C				D			

NOTES:

A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Project**

Intersection # **1**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Chapman Ave**

Date: 12/21/20

By: KH

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	2.0	1700	229	126	0.074	0.074	186	102	0.060	
Northbound :Thru	4.0	1700	1757	618	0.363		2235	802	0.472	0.472
Northbound Right:		1700	96				170			
Southbound :Left	2.0	1700	167	92	0.054		155	85	0.050	0.050
Southbound :Thru	4.0	1700	2197	778	0.458	0.458	1963	703	0.414	
Southbound Right:		1700	138				146			
Eastbound :Left	1.0	1700	144	144	0.085	0.085	236	236	0.139	0.139
Eastbound :Thru	3.0	1700	396	176	0.104		572	236	0.139	
Eastbound Right:		1700	132				135			
Westbound :Left	1.0	1700	181	181	0.106		173	173	0.102	
Westbound :Thru	2.0	1700	430	215	0.126	0.126	462	231	0.136	0.136
Westbound Right:	1.0	1700	72	72	0.042		138	138	0.081	
Sum of Critical V/C Ratios			0.743				0.797			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.793				0.847			
Level of Service (LOS)			C				D			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Growth + Cumulative**

Intersection # **1**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Chapman Ave**

Date: **12/21/20**

By: **KH**

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	2.0	1700	249	137	0.081	0.081	199	109	0.064	
Northbound :Thru	4.0	1700	1901	671	0.395		2383	858	0.505	0.505
Northbound :Right		1700	113				190			
Southbound :Left	2.0	1700	177	97	0.057		164	90	0.053	0.053
Southbound :Thru	4.0	1700	2293	813	0.478	0.478	2106	754	0.443	
Southbound :Right		1700	146				155			
Eastbound :Left	1.0	1700	153	153	0.090	0.090	250	250	0.147	0.147
Eastbound :Thru	3.0	1700	420	185	0.109		607	251	0.147	
Eastbound :Right		1700	136				145			
Westbound :Left	1.0	1700	192	192	0.113		195	195	0.115	
Westbound :Thru	2.0	1700	456	228	0.134	0.134	490	245	0.144	0.144
Westbound :Right	1.0	1700	76	76	0.045		146	146	0.086	
Sum of Critical V/C Ratios			0.783				0.849			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.833				0.899			
Level of Service (LOS)			D				D			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Growth + Cumulative + Project**

Intersection # **1**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Chapman Ave**

Date: **12/21/20**

By: **KH**

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	2.0	1700	252	139	0.082	0.082	201	111	0.065	
Northbound :Thru	4.0	1700	1910	675	0.397		2388	860	0.506	0.506
Northbound Right:		1700	116				192			
Southbound :Left	2.0	1700	177	97	0.057		164	90	0.053	0.053
Southbound :Thru	4.0	1700	2295	814	0.479	0.479	2114	756	0.445	
Southbound Right:		1700	146				155			
Eastbound :Left	1.0	1700	153	153	0.090	0.090	250	250	0.147	0.147
Eastbound :Thru	3.0	1700	420	186	0.109		607	252	0.148	
Eastbound Right:		1700	137				148			
Westbound :Left	1.0	1700	193	193	0.114		198	198	0.116	
Westbound :Thru	2.0	1700	456	228	0.134	0.134	490	245	0.144	0.144
Westbound Right:	1.0	1700	76	76	0.045		146	146	0.086	
Sum of Critical V/C Ratios			0.785				0.850			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.835				0.900			
Level of Service (LOS)			D				D			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



HCM 6th TWSC
 2: Beach Blvd & Home Depot/Park Plaza

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

10/30/2020

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↑↑↑		↗	↑↑↑	
Traffic Vol, veh/h	3	2	31	22	1	55	83	1603	38	25	1848	17
Future Vol, veh/h	3	2	31	22	1	55	83	1603	38	25	1848	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	2	34	24	1	60	90	1742	41	27	2009	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2949	4035	1014	2802	4024	892	2027	0	0	1783	0	0
Stage 1	2072	2072	-	1943	1943	-	-	-	-	-	-	-
Stage 2	877	1963	-	859	2081	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	16	3	203	~20	3	245	121	-	-	161	-	-
Stage 1	34	95	-	42	110	-	-	-	-	-	-	-
Stage 2	280	108	-	288	94	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	-	~1	203	-	~1	245	121	-	-	161	-	-
Mov Cap-2 Maneuver	-	~1	-	-	~1	-	-	-	-	-	-	-
Stage 1	9	79	-	~11	28	-	-	-	-	-	-	-
Stage 2	52	28	-	194	78	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26.2		24.4		4.5		0.4	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	121	-	-	203	245	161	-	-
HCM Lane V/C Ratio	0.746	-	-	0.166	0.244	0.169	-	-
HCM Control Delay (s)	92.7	-	-	26.2	24.4	31.8	-	-
HCM Lane LOS	F	-	-	D	C	D	-	-
HCM 95th %tile Q(veh)	4.2	-	-	0.6	0.9	0.6	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



HCM 6th TWSC
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12/21/2020

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Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↖			↖	↖	↖	↖	↖	↖	↖
Traffic Vol, veh/h	3	2	31	22	1	55	98	1614	38	25	1850	17
Future Vol, veh/h	3	2	31	22	1	55	98	1614	38	25	1850	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	2	34	24	1	60	107	1754	41	27	2011	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2990	4083	1015	2848	4072	898	2029	0	0	1795	0	0
Stage 1	2074	2074	-	1989	1989	-	-	-	-	-	-	-
Stage 2	916	2009	-	859	2083	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	15	~ 2	203	~ 18	3	242	121	-	-	159	-	-
Stage 1	34	95	-	39	105	-	-	-	-	-	-	-
Stage 2	265	102	-	288	94	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 2	0	203	~ 3	0	242	121	-	-	159	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 3	0	-	-	-	-	-	-	-
Stage 1	4	79	-	~ 5	12	-	-	-	-	-	-	-
Stage 2	21	12	-	194	78	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26.2		24.7		6.7		0.4	
HCM LOS	D		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	121	-	-	203	242	159	-	-
HCM Lane V/C Ratio	0.88	-	-	0.166	0.247	0.171	-	-
HCM Control Delay (s)	119.7	-	-	26.2	24.7	32.3	-	-
HCM Lane LOS	F	-	-	D	C	D	-	-
HCM 95th %tile Q(veh)	5.5	-	-	0.6	0.9	0.6	-	-

Notes
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Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗↗		↗	↗↗↗	
Traffic Vol, veh/h	3	2	33	23	1	58	88	1753	40	27	1932	18
Future Vol, veh/h	3	2	33	23	1	58	88	1753	40	27	1932	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	2	36	25	1	63	96	1905	43	29	2100	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3123	4308	1060	3018	4297	974	2120	0	0	1948	0	0
Stage 1	2168	2168	-	2119	2119	-	-	-	-	-	-	-
Stage 2	955	2140	-	899	2178	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	12	~ 2	189	~ 14	2	216	109	-	-	133	-	-
Stage 1	29	85	-	31	90	-	-	-	-	-	-	-
Stage 2	251	87	-	272	84	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	~ 2	0	189	~ 2	0	216	109	-	-	133	-	-
Mov Cap-2 Maneuver	~ 2	0	-	~ 2	0	-	-	-	-	-	-	-
Stage 1	~ 3	66	-	~ 4	11	-	-	-	-	-	-	-
Stage 2	19	10	-	167	66	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.5	28.4	6	0.5
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	109	-	-	189	216	133	-	-
HCM Lane V/C Ratio	0.878	-	-	0.19	0.292	0.221	-	-
HCM Control Delay (s)	128	-	-	28.5	28.4	39.6	-	-
HCM Lane LOS	F	-	-	D	D	E	-	-
HCM 95th %tile Q(veh)	5.2	-	-	0.7	1.2	0.8	-	-

Notes
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Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↑			↑	↑	↑↑↑		↑	↑↑↑	
Traffic Vol, veh/h	3	2	33	23	1	58	103	1764	40	27	1934	18
Future Vol, veh/h	3	2	33	23	1	58	103	1764	40	27	1934	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	2	36	25	1	63	112	1917	43	29	2102	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	3161	4354	1061	3063	4343	980	2122	0	0	1960	0	0
Stage 1	2170	2170	-	2163	2163	-	-	-	-	-	-	-
Stage 2	991	2184	-	900	2180	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	11	~2	189	~13	2	214	~108	-	-	131	-	-
Stage 1	29	84	-	29	85	-	-	-	-	-	-	-
Stage 2	238	83	-	271	83	-	-	-	-	-	-	-
Platoon blocked, %												
Mov Cap-1 Maneuver	-	0	189	-	0	214	~108	-	-	131	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	29	65	-	29	0	-	-	-	-	-	-	-
Stage 2	-	0	-	165	65	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.5	28.7	9.3	0.5
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	~108	-	-	189	214	131	-	-
HCM Lane V/C Ratio	1.037	-	-	0.19	0.295	0.224	-	-
HCM Control Delay (s)	171.5	-	-	28.5	28.7	40.2	-	-
HCM Lane LOS	F	-	-	D	D	E	-	-
HCM 95th %tile Q(veh)	6.7	-	-	0.7	1.2	0.8	-	-

Notes
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10/30/2020

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↘	↘	↘	↘	↘
Traffic Vol, veh/h	0	1	2	3	0	34	90	1881	30	33	1643	3
Future Vol, veh/h	0	1	2	3	0	34	90	1881	30	33	1643	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	2	3	0	37	98	2045	33	36	1786	3

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	- 4134	895 3045	- 1039 1789	0 0 2078 0 0
Stage 1	- 1860	- 2258	- - -	- - -
Stage 2	- 2274	- 787	- - -	- - -
Critical Hdwy	- 6.54	7.14 6.44	- 7.14 5.34	- - 5.34 - -
Critical Hdwy Stg 1	- 5.54	- 7.34	- - -	- - -
Critical Hdwy Stg 2	- 5.54	- 6.74	- - -	- - -
Follow-up Hdwy	- 4.02	3.92 3.82	- 3.92 3.12	- - 3.12 - -
Pot Cap-1 Maneuver	0 2	244 14	0 195 160	- - 114 - -
Stage 1	0 121	- 25	0 - -	- - -
Stage 2	0 75	- 319	0 - -	- - -
Platoon blocked, %				- - -
Mov Cap-1 Maneuver	- ~ 1	244 -	- 195 160	- - 114 - -
Mov Cap-2 Maneuver	- ~ 1	- -	- - -	- - -
Stage 1	- 83	- 10	- - -	- - -
Stage 2	- 29	- 213	- - -	- - -

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.9	27.7	2.6	1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	160	-	-	244	195	114	-	-
HCM Lane V/C Ratio	0.611	-	-	0.009	0.19	0.315	-	-
HCM Control Delay (s)	57.7	-	-	19.9	27.7	50.5	-	-
HCM Lane LOS	F	-	-	C	D	F	-	-
HCM 95th %tile Q(veh)	3.3	-	-	0	0.7	1.2	-	-

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12/21/2020

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↑			↑	↑↑↑	↑↑↑		↑	↑↑↑	
Traffic Vol, veh/h	0	1	2	3	0	34	98	1886	30	33	1653	3
Future Vol, veh/h	0	1	2	3	0	34	98	1886	30	33	1653	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	2	3	0	37	107	2050	33	36	1797	3

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	- 4168	900 3072	- 1042 1800	0 0 2083 0 0
Stage 1	- 1871	- 2281	- - -	- - - - -
Stage 2	- 2297	- 791	- - -	- - - - -
Critical Hdwy	- 6.54	7.14 6.44	- 7.14 5.34	- - 5.34 - -
Critical Hdwy Stg 1	- 5.54	- 7.34	- - -	- - - - -
Critical Hdwy Stg 2	- 5.54	- 6.74	- - -	- - - - -
Follow-up Hdwy	- 4.02	3.92 3.82	- 3.92 3.12	- - 3.12 - -
Pot Cap-1 Maneuver	0 2	242 13	0 194 158	- - 113 - -
Stage 1	0 120	- 24	0 - -	- - - - -
Stage 2	0 73	- 317	0 - -	- - - - -
Platoon blocked, %				- - - - -
Mov Cap-1 Maneuver	- 0	242 5	- 194 158	- - 113 - -
Mov Cap-2 Maneuver	- 0	- 5	- - -	- - - - -
Stage 1	- 82	- 8	- - -	- - - - -
Stage 2	- 24	- 211	- - -	- - - - -

Approach	EB	WB	NB	SB
HCM Control Delay, s	20	27.9	3.2	1
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	158	-	-	242	194	113	-	-
HCM Lane V/C Ratio	0.674	-	-	0.009	0.19	0.317	-	-
HCM Control Delay (s)	65.3	-	-	20	27.9	51	-	-
HCM Lane LOS	F	-	-	C	D	F	-	-
HCM 95th %tile Q(veh)	3.9	-	-	0	0.7	1.2	-	-



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10/30/2020

Intersection													
Int Delay, s/veh	3.1												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations			↗			↗	↘	↘	↘	↘	↘	↘	
Traffic Vol, veh/h	0	1	2	3	0	36	96	2020	32	35	1782	3	
Future Vol, veh/h	0	1	2	3	0	36	96	2020	32	35	1782	3	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	0	1	2	3	0	39	104	2196	35	38	1937	3	

Major/Minor	Minor2	Minor1		Major1		Major2					
Conflicting Flow All	- 4454	970	3273	- 1116	1940	0	0	2231	0	0	
Stage 1	- 2015	-	2422	-	-	-	-	-	-	-	
Stage 2	- 2439	-	851	-	-	-	-	-	-	-	
Critical Hdwy	- 6.54	7.14	6.44	- 7.14	5.34	-	-	5.34	-	-	
Critical Hdwy Stg 1	- 5.54	-	7.34	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	- 5.54	-	6.74	-	-	-	-	-	-	-	
Follow-up Hdwy	- 4.02	3.92	3.82	- 3.92	3.12	-	-	3.12	-	-	
Pot Cap-1 Maneuver	0 ~ 1	217	10	0 173	134	-	-	95	-	-	
Stage 1	0 101	-	19	0 -	-	-	-	-	-	-	
Stage 2	0 61	-	291	0 -	-	-	-	-	-	-	
Platoon blocked, %											
Mov Cap-1 Maneuver	- 0	217	~ 3	- 173	134	-	-	95	-	-	
Mov Cap-2 Maneuver	- 0	-	~ 3	-	-	-	-	-	-	-	
Stage 1	- 61	-	4	-	-	-	-	-	-	-	
Stage 2	- 14	-	170	-	-	-	-	-	-	-	

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.8	31.8	4.1	1.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	134	-	-	217	173	95	-	-
HCM Lane V/C Ratio	0.779	-	-	0.01	0.226	0.4	-	-
HCM Control Delay (s)	91.1	-	-	21.8	31.8	66.2	-	-
HCM Lane LOS	F	-	-	C	D	F	-	-
HCM 95th %tile Q(veh)	4.7	-	-	0	0.8	1.6	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



HCM 6th TWSC
 2: Beach Blvd & Home Depot/Park Plaza

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

12/21/2020

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↗↗↗		↗	↗↗↗	
Traffic Vol, veh/h	0	1	2	3	0	36	103	2026	32	35	1792	3
Future Vol, veh/h	0	1	2	3	0	36	103	2026	32	35	1792	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	250	-	-	170	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	2	3	0	39	112	2202	35	38	1948	3

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	- 4487	976	3300	- 1119 1951
Stage 1	- 2026	- 2444	- - -	- - -
Stage 2	- 2461	- 856	- - -	- - -
Critical Hdwy	- 6.54	7.14	6.44	- 7.14 5.34
Critical Hdwy Stg 1	- 5.54	- 7.34	- - -	- - -
Critical Hdwy Stg 2	- 5.54	- 6.74	- - -	- - -
Follow-up Hdwy	- 4.02	3.92	3.82	- 3.92 3.12
Pot Cap-1 Maneuver	0 ~ 1	215	9	0 173 132
Stage 1	0 100	- 18	0 - -	- - -
Stage 2	0 60	- 289	0 - -	- - -
Platoon blocked, %				- - -
Mov Cap-1 Maneuver	- 0	215	~ 2	- 173 132
Mov Cap-2 Maneuver	- 0	- ~ 2	- - -	- - -
Stage 1	- 60	- ~ 3	- - -	- - -
Stage 2	- 9	- 169	- - -	- - -

Approach	EB	WB	NB	SB
HCM Control Delay, s	21.9	31.8	5	1.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	132	-	-	215	173	95	-	-
HCM Lane V/C Ratio	0.848	-	-	0.01	0.226	0.4	-	-
HCM Control Delay (s)	105.7	-	-	21.9	31.8	66.2	-	-
HCM Lane LOS	F	-	-	C	D	F	-	-
HCM 95th %tile Q(veh)	5.3	-	-	0	0.8	1.6	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

10/30/2020

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑		↑	↑↑↑
Traffic Vol, veh/h	17	32	1647	10	9	1912
Future Vol, veh/h	17	32	1647	10	9	1912
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	35	1790	11	10	2078

Major/Minor	Minor1	Major1	Major2	Major3	Major4
Conflicting Flow All	2647	901	0	0	1801
Stage 1	1796	-	-	-	-
Stage 2	851	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	41	241	-	-	158
Stage 1	77	-	-	-	-
Stage 2	343	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	38	241	-	-	158
Mov Cap-2 Maneuver	38	-	-	-	-
Stage 1	72	-	-	-	-
Stage 2	343	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	241	158
HCM Lane V/C Ratio	-	-	0.144	0.062
HCM Control Delay (s)	-	-	22.4	29.3
HCM Lane LOS	-	-	C	D
HCM 95th %tile Q(veh)	-	-	0.5	0.2

Existing AM Peak Hour 03/12/2020

Synchro 10 Report
 Page 2



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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12/21/2020

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑		↑	↑↑↑
Traffic Vol, veh/h	17	32	1649	10	12	1923
Future Vol, veh/h	17	32	1649	10	12	1923
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	35	1792	11	13	2090

Major/Minor	Minor1	Major1	Major2	Minor2	Major3	Minor3
Conflicting Flow All	2660	902	0	0	1803	0
Stage 1	1798	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	41	241	-	-	157	-
Stage 1	77	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Platoon blocked, %						
Mov Cap-1 Maneuver	38	241	-	-	157	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	71	-	-	-	-	-
Stage 2	339	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	241	157
HCM Lane V/C Ratio	-	-	0.144	0.083
HCM Control Delay (s)	-	-	22.4	30
HCM Lane LOS	-	-	C	D
HCM 95th %tile Q(veh)	-	-	0.5	0.3



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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 was analyzed using three-lane geometry and the
 traffic volume has been adjusted based on the equal
 average traffic volume per lane.

10/30/2020

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↖			↖	↑↑↑	↑↑↑		↖	↑↑↑	
Traffic Vol, veh/h	0	0	9	18	0	34	21	1801	11	10	1999	0
Future Vol, veh/h	0	0	9	18	0	34	21	1801	11	10	1999	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	10	20	0	37	23	1958	12	11	2173	0
Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	1087	2901	-	985	2173	0	0	1970	0	0
Stage 1	-	-	-	2010	-	-	-	-	-	-	-	-
Stage 2	-	-	-	891	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	181	~ 17	0	212	102	-	-	130	-	0
Stage 1	0	0	-	38	0	-	-	-	-	-	-	0
Stage 2	0	0	-	275	0	-	-	-	-	-	-	0
Platoon blocked, %								-	-			
Mov Cap-1 Maneuver	-	-	181	~ 15	-	212	102	-	-	130	-	-
Mov Cap-2 Maneuver	-	-	-	~ 15	-	-	-	-	-	-	-	-
Stage 1	-	-	-	38	-	-	-	-	-	-	-	-
Stage 2	-	-	-	238	-	-	-	-	-	-	-	-
Approach	EB		WB		NB			SB				
HCM Control Delay, s	26		25.5		0.6			0.2				
HCM LOS	D		D									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT					
Capacity (veh/h)	102	-	-	181	212	130	-					
HCM Lane V/C Ratio	0.224	-	-	0.054	0.174	0.084	-					
HCM Control Delay (s)	50.2	-	-	26	25.5	35.2	-					
HCM Lane LOS	F	-	-	D	D	E	-					
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.6	0.3	-					
Notes												
-: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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 traffic volume has been adjusted based on the equal
 average traffic volume per lane.

12/21/2020

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↑↑↑	↑↑↑		↘	↑↑↑	
Traffic Vol, veh/h	0	0	9	18	0	34	21	1803	11	13	2010	0
Future Vol, veh/h	0	0	9	18	0	34	21	1803	11	13	2010	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	10	20	0	37	23	1960	12	14	2185	0

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	-	-	1093	2914
Stage 1	-	-	2012	-
Stage 2	-	-	902	-
Critical Hdwy	-	-	7.14	6.44
Critical Hdwy Stg 1	-	-	7.34	-
Critical Hdwy Stg 2	-	-	6.74	-
Follow-up Hdwy	-	-	3.92	3.82
Pot Cap-1 Maneuver	0	0	180	~ 17
Stage 1	0	0	38	0
Stage 2	0	0	271	0
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	-	-	180	~ 15
Mov Cap-2 Maneuver	-	-	~ 15	-
Stage 1	-	-	38	-
Stage 2	-	-	228	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	26.1	25.5	0.6	0.2
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	101	-	-	180	212	129	-
HCM Lane V/C Ratio	0.226	-	-	0.054	0.174	0.11	-
HCM Control Delay (s)	50.8	-	-	26.1	25.5	36.3	-
HCM Lane LOS	F	-	-	D	D	E	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.6	0.4	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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10/30/2020

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑↑		↑↑	↑↑↑
Traffic Vol, veh/h	12	18	2112	43	21	1586
Future Vol, veh/h	12	18	2112	43	21	1586
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	20	2296	47	23	1724

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	3056	1172	0 0 2343 0
Stage 1	2320	-	- - - -
Stage 2	736	-	- - - -
Critical Hdwy	5.74	7.14	- - 5.34 -
Critical Hdwy Stg 1	6.64	-	- - - -
Critical Hdwy Stg 2	6.04	-	- - - -
Follow-up Hdwy	3.82	3.92	- - 3.12 -
Pot Cap-1 Maneuver	24	159	- - 83 -
Stage 1	35	-	- - - -
Stage 2	395	-	- - - -
Platoon blocked, %			- - - -
Mov Cap-1 Maneuver	17	159	- - 83 -
Mov Cap-2 Maneuver	17	-	- - - -
Stage 1	25	-	- - - -
Stage 2	395	-	- - - -

Approach	WB	NB	SB
HCM Control Delay, s	30.8	0	0.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	- 159	83	-
HCM Lane V/C Ratio	-	- 0.123	0.275	-
HCM Control Delay (s)	-	- 30.8	64.1	-
HCM Lane LOS	-	- D	F	-
HCM 95th %tile Q(veh)	-	- 0.4	1	-

Existing PM Peak Hour 03/12/2020

Synchro 10 Report
 Page 2



HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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12/21/2020

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑↑	↑↑↑↑		↑↑	↑↑↑↑
Traffic Vol, veh/h	12	18	2123	43	35	1592
Future Vol, veh/h	12	18	2123	43	35	1592
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	20	2308	47	38	1730

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	3100	1178	0	0	2355
Stage 1	2332	-	-	-	-
Stage 2	768	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	23	158	-	-	82
Stage 1	35	-	-	-	-
Stage 2	380	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	~ 12	158	-	-	82
Mov Cap-2 Maneuver	~ 12	-	-	-	-
Stage 1	19	-	-	-	-
Stage 2	380	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31	0	1.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	158	82
HCM Lane V/C Ratio	-	-	0.124	0.464
HCM Control Delay (s)	-	-	31	82.3
HCM Lane LOS	-	-	D	F
HCM 95th %tile Q(veh)	-	-	0.4	1.9

Notes
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HCM 6th TWSC
 3: Beach Blvd & Catherine Ave

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10/30/2020

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↖			↖	↑↑↑	↑↑↑		↖	↑↑↑	
Traffic Vol, veh/h	0	0	6	13	0	19	60	2274	46	22	1682	0
Future Vol, veh/h	0	0	6	13	0	19	60	2274	46	22	1682	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	14	0	21	65	2472	50	24	1828	0

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	-	-	914	3406	-	1261	1828	0	0	2522	0	0
Stage 1	-	-	-	2627	-	-	-	-	-	-	-	-
Stage 2	-	-	-	779	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	7.14	6.44	-	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	-	-	-	7.34	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.92	3.82	-	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	0	0	237	~ 8	0	138	153	-	-	67	-	0
Stage 1	0	0	-	~ 13	0	-	-	-	-	-	-	0
Stage 2	0	0	-	322	0	-	-	-	-	-	-	0
Platoon blocked, %												
Mov Cap-1 Maneuver	-	-	237	~ 6	-	138	153	-	-	67	-	-
Mov Cap-2 Maneuver	-	-	-	~ 6	-	-	-	-	-	-	-	-
Stage 1	-	-	-	~ 13	-	-	-	-	-	-	-	-
Stage 2	-	-	-	201	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.6		35.6		1.1		1.1	
HCM LOS	C		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	153	-	-	237	138	67	-
HCM Lane V/C Ratio	0.426	-	-	0.028	0.15	0.357	-
HCM Control Delay (s)	45	-	-	20.6	35.6	86	-
HCM Lane LOS	E	-	-	C	E	F	-
HCM 95th %tile Q(veh)	1.9	-	-	0.1	0.5	1.3	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



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 3: Beach Blvd & Catherine Ave

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12/21/2020

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↑↑↑	↑↑↑		↘	↑↑↑	
Traffic Vol, veh/h	0	0	6	13	0	19	60	2285	46	36	1687	0
Future Vol, veh/h	0	0	6	13	0	19	60	2285	46	36	1687	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	-	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	7	14	0	21	65	2484	50	39	1834	0

Major/Minor	Minor2	Minor1	Major1	Major2
Conflicting Flow All	-	-	917 3451	- 1267 1834
Stage 1	-	-	2639	- - -
Stage 2	-	-	812	- - -
Critical Hdwy	-	-	7.14 6.44	- 7.14 5.34
Critical Hdwy Stg 1	-	-	7.34	- - -
Critical Hdwy Stg 2	-	-	6.74	- - -
Follow-up Hdwy	-	-	3.92 3.82	- 3.92 3.12
Pot Cap-1 Maneuver	0	0	236 ~7	0 137 152
Stage 1	0	0	~13	0 - -
Stage 2	0	0	307	0 - -
Platoon blocked, %				- - -
Mov Cap-1 Maneuver	-	-	236 ~4	- 137 152
Mov Cap-2 Maneuver	-	-	~4	- - -
Stage 1	-	-	~13	- - -
Stage 2	-	-	122	- - -

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.7	35.9	1.1	2.5
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	152	-	-	236	137	66	-
HCM Lane V/C Ratio	0.429	-	-	0.028	0.151	0.593	-
HCM Control Delay (s)	45.4	-	-	20.7	35.9	119.4	-
HCM Lane LOS	E	-	-	C	E	F	-
HCM 95th %tile Q(veh)	1.9	-	-	0.1	0.5	2.5	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing**

Intersection # **4**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Lampson Ave**

Date: 10/30/20

By: KH

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	1.0	1700	167	167	0.098	0.098	194	194	0.114	
Northbound :Thru	4.0	1700	2329	795	0.467		2493	877	0.516	0.516
Northbound Right:		1700	55				137			
Southbound :Left	1.0	1700	39	39	0.023		107	107	0.063	0.063
Southbound :Thru	4.0	1700	2477	841	0.495	0.495	1940	662	0.389	
Southbound Right:		1700	45				46			
Eastbound :Left	1.0	1700	88	88	0.052		247	247	0.145	
Eastbound :Thru	2.0	1700	198	170	0.100	0.100	389	308	0.181	0.181
Eastbound Right:		1700	141				226			
Westbound :Left	2.0	1700	178	98	0.058	0.058	207	114	0.067	0.067
Westbound :Thru	2.0	1700	193	124	0.073		213	145	0.085	
Westbound Right:		1700	55				77			
Sum of Critical V/C Ratios			0.751				0.827			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.801				0.877			
Level of Service (LOS)			C				D			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Project**

Intersection # **4**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Lampson Ave**

Date: **10/30/20**

By: **KH**

Movement	No. of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	1.0	1700	167	167	0.098	0.098	194	194	0.114	
Northbound :Thru	4.0	1700	2328	794	0.467		2501	879	0.517	0.517
Northbound Right:		1700	55				137			
Southbound :Left	1.0	1700	42	42	0.025		108	108	0.064	0.064
Southbound :Thru	4.0	1700	2486	845	0.497	0.497	1942	663	0.390	
Southbound Right:		1700	48				47			
Eastbound :Left	1.0	1700	88	88	0.052		250	250	0.147	
Eastbound :Thru	2.0	1700	198	170	0.100	0.100	389	308	0.181	0.181
Eastbound Right:		1700	141				226			
Westbound :Left	2.0	1700	178	98	0.058	0.058	207	114	0.067	0.067
Westbound :Thru	2.0	1700	193	124	0.073		213	147	0.086	
Westbound Right:		1700	55				80			
Sum of Critical V/C Ratios			0.753				0.829			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.803				0.879			
Level of Service (LOS)			D				D			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Growth + Cumulative**

Intersection # **4**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

Date: 10/30/20

East/West St: **Lampson Ave**

By: KH

Movement	No, of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	1.0	1700	183	183	0.108	0.108	211	211	0.124	
Northbound :Thru	4.0	1700	2526	865	0.509		2687	948	0.558	0.558
Northbound Right:		1700	70				158			
Southbound :Left	1.0	1700	77	77	0.045		123	123	0.072	0.072
Southbound :Thru	4.0	1700	2616	892	0.525	0.525	2107	720	0.423	
Southbound Right:		1700	60				52			
Eastbound :Left	1.0	1700	96	96	0.056		267	267	0.157	
Eastbound :Thru	2.0	1700	210	179	0.105	0.105	413	329	0.194	0.194
Eastbound Right:		1700	147				245			
Westbound :Left	2.0	1700	189	104	0.061	0.061	233	128	0.075	0.075
Westbound :Thru	2.0	1700	205	133	0.078		226	157	0.092	
Westbound Right:		1700	61				87			
Sum of Critical V/C Ratios			0.799				0.899			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.849				0.949			
Level of Service (LOS)			D				E			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors	
0.5 Lanes:	2.00
1 Lane:	1.00
1.5 Lanes:	0.67
2 Lanes:	0.50
2.5 Lanes:	0.40
3 Lanes:	0.33



K2 Traffic Engineering, Inc.

Intersection Capacity Utilization Analysis (ICU)

Traffic Scenario: **Existing + Growth + Cumulative + Project**

Intersection # **4**

Project: **Beach Boulevard Townhomes**

North/South St: **Beach Blvd**

East/West St: **Lampson Ave**

Date: **10/30/20**

By: **KH**

Movement	No, of Lanes	Critical Lane Capacity	A.M. Peak Hour				P.M. Peak Hour			
			Volumes				Volumes			
			Total	Critical Lane	V/C Ratio	Critical V/C	Total	Critical Lane	V/C Ratio	Critical V/C
Northbound :Left	1.0	1700	183	183	0.108	0.108	211	211	0.124	
Northbound :Thru	4.0	1700	2525	865	0.509		2695	951	0.559	0.559
Northbound Right:		1700	70				158			
Southbound :Left	1.0	1700	80	80	0.047		124	124	0.073	0.073
Southbound :Thru	4.0	1700	2625	896	0.527	0.527	2109	721	0.424	
Southbound Right:		1700	63				53			
Eastbound :Left	1.0	1700	96	96	0.056		270	270	0.159	
Eastbound :Thru	2.0	1700	210	179	0.105	0.105	413	329	0.194	0.194
Eastbound Right:		1700	147				245			
Westbound :Left	2.0	1700	189	104	0.061	0.061	233	128	0.075	0.075
Westbound :Thru	2.0	1700	205	133	0.078		226	158	0.093	
Westbound Right:		1700	61				90			
Sum of Critical V/C Ratios			0.801				0.901			
Adjustments for Lost Time			0.05				0.05			
Intersection Capacity Utilization (ICU)			0.851				0.951			
Level of Service (LOS)			D				E			

NOTES:

Level of Service (LOS)	
A	0.00 ~ 0.60
B	0.601 ~ 0.70
C	0.701 ~ 0.80
D	0.801 ~ 0.90
E	0.901 ~ 1.00
F	1.00+

Critical Lane Flow Factors		
0.5	Lanes:	2.00
1	Lane:	1.00
1.5	Lanes:	0.67
2	Lanes:	0.50
2.5	Lanes:	0.40
3	Lanes:	0.33



APPENDIX D
DRIVEWAY ANALYSIS



HCM 6th TWSC

5: Beach Blvd & Driveway 'A'

12/21/2020

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	30	1671	6	0	1919
Future Vol, veh/h	0	30	1671	6	0	1919
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	33	1816	7	0	2086

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	912	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-
Pot Cap-1 Maneuver	0	237	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %					
Mov Cap-1 Maneuver	-	237	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	237
HCM Lane V/C Ratio	-	-	0.138
HCM Control Delay (s)	-	-	22.6
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.5



HCM 6th TWSC
 5: Beach Blvd & Driveway 'A'

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

12/21/2020

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	30	1774	6	0	2036
Future Vol, veh/h	0	30	1774	6	0	2036
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	33	1928	7	0	2213

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	968	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-
Pot Cap-1 Maneuver	0	218	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %					
Mov Cap-1 Maneuver	-	218	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	218
HCM Lane V/C Ratio	-	-	0.15
HCM Control Delay (s)	-	-	24.4
HCM Lane LOS	-	-	C
HCM 95th %tile Q(veh)	-	-	0.5



HCM 6th TWSC
 5: Beach Blvd & Driveway 'A'

12/21/2020

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	15	2126	28	0	1602
Future Vol, veh/h	0	15	2126	28	0	1602
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	16	2311	30	0	1741
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	1171	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	159	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	-	159	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	30.2	0	0			
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT			
Capacity (veh/h)	-	-	159			
HCM Lane V/C Ratio	-	-	0.103			
HCM Control Delay (s)	-	-	30.2			
HCM Lane LOS	-	-	D			
HCM 95th %tile Q(veh)	-	-	0.3			



HCM 6th TWSC
 5: Beach Blvd & Driveway 'A'

Synchro cannot analyze four-lane geometry. Therefore, the northbound and southbound approach was analyzed using three-lane geometry and the traffic volume has been adjusted based on the equal average traffic volume per lane.

12/21/2020

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑	↑↑↑			↑↑↑
Traffic Vol, veh/h	0	15	2256	28	0	1700
Future Vol, veh/h	0	15	2256	28	0	1700
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	16	2452	30	0	1848
Major/Minor						
	Minor1	Major1	Major2			
Conflicting Flow All	-	1241	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	143	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	143	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach						
	WB	NB	SB			
HCM Control Delay, s	33.4	0	0			
HCM LOS	D					
Minor Lane/Major Mvmt						
	NBT	NBRWBLn1	SBT			
Capacity (veh/h)	-	-	143			
HCM Lane V/C Ratio	-	-	0.114			
HCM Control Delay (s)	-	-	33.4			
HCM Lane LOS	-	-	D			
HCM 95th %tile Q(veh)	-	-	0.4			



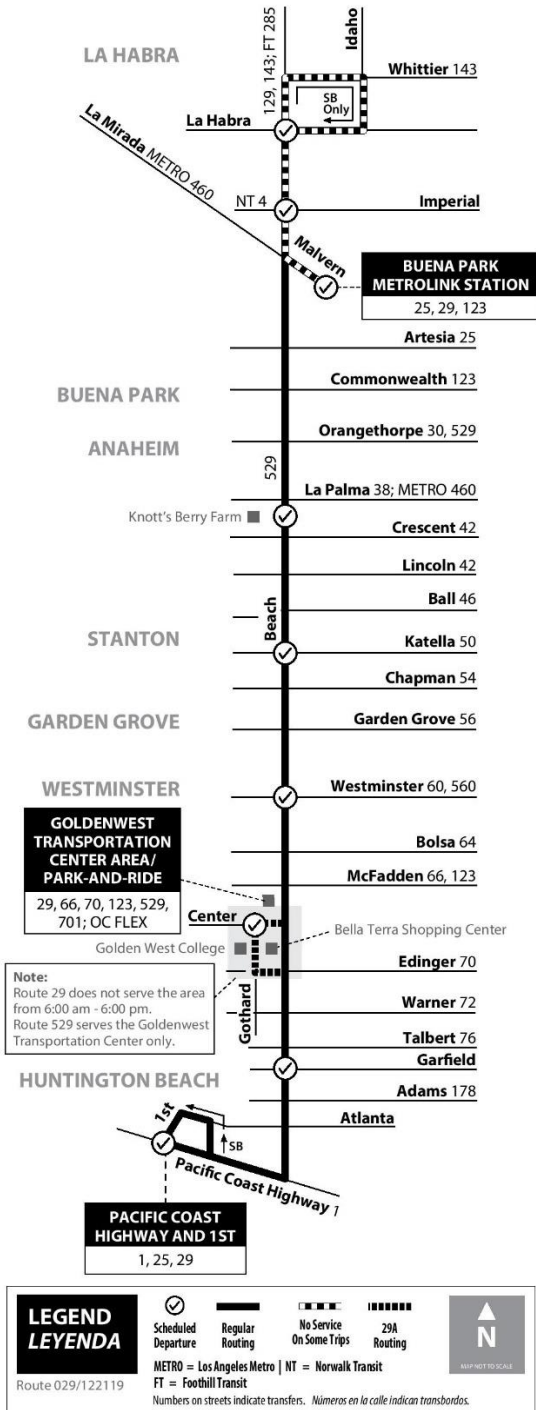
**APPENDIX E
BUS SCHEDULE**



29/A

La Habra to Huntington Beach via Beach Blvd

NOTE: TAP card only accepted from La Palma to Malvern.
 NOTA: Tarjeta TAP sólo aceptada de La Palma a Malvern.



Monday-Friday NORTHBOUND To: La Habra

	Pacific Coast Hwy & 1st	Beach & Garfield	Center & Gothard	Beach & Westminster	Beach & Katella	Knotts Berry Farm	Buena Park Metrolink Station	Beach & Imperial	Beach & La Habra
A	4:11	4:18	.....	4:35	4:45	4:54	.....	5:10	5:14
	4:46	4:53	5:05	5:15	5:25	5:34	5:49		
	5:28	5:36	.....	5:55	6:06	6:18	.....	6:36	6:41
A	5:42	5:53	6:08	6:15	6:26	6:39	6:54		
A	6:00	6:10	6:25	6:35	6:47	6:59	7:14		
A	6:20	6:30	6:45	6:55	7:07	7:19	7:34		
	6:46	6:56	.....	7:15	7:27	7:39	.....	7:58	8:04
A	7:10	7:20	7:35	7:45	7:57	8:09	8:24		
	7:43	7:53	.....	8:15	8:28	8:41	.....	9:01	9:06
A	8:06	8:16	8:33	8:45	8:59	9:12	9:29		
	8:42	8:52	.....	9:15	9:29	9:42	.....	10:02	10:07
A	8:58	9:09	9:30	9:45	9:58	10:11	10:28		
	9:26	9:37	.....	10:05	10:18	10:31	.....	10:52	10:58
A	9:41	9:52	10:13	10:26	10:39	10:52	11:07		
	10:08	10:19	.....	10:45	10:58	11:11	.....	11:31	11:36
A	10:18	10:29	10:50	11:03	11:16	11:29	11:44		
	10:44	10:56	.....	11:23	11:36	11:50	.....	12:13	12:20
A	10:55	11:07	11:30	11:42	11:55	12:09	12:24		
	11:20	11:32	.....	12:01	12:16	12:30	.....	12:50	12:57
A	11:29	11:41	12:04	12:19	12:34	12:48	1:05		
	11:58	12:10	.....	12:39	12:54	1:08	.....	1:28	1:35
A	12:08	12:20	12:43	12:58	1:13	1:27	1:44		
	12:38	12:50	.....	1:19	1:34	1:48	.....	2:08	2:15
A	12:49	1:01	1:24	1:39	1:54	2:08	2:25		
	1:16	1:29	.....	1:59	2:14	2:28	.....	2:49	2:57
A	1:27	1:40	2:04	2:19	2:34	2:48	3:04		
	1:57	2:10	.....	2:40	2:55	3:09	.....	3:30	3:38
A	2:08	2:20	2:44	2:59	3:15	3:28	3:42		
	2:37	2:49	.....	3:19	3:35	3:48	.....	4:08	4:15
A	2:50	3:02	3:25	3:39	3:55	4:07	4:22		
	3:18	3:30	.....	3:59	4:15	4:27	.....	4:47	4:54
A	3:28	3:41	4:04	4:18	4:33	4:46	5:03		
	3:56	4:10	.....	4:37	4:52	5:04	.....	5:25	5:31
A	4:02	4:12	4:34	4:47	5:02	5:14	5:30		
A	4:08	4:22	4:44	4:57	5:12	5:24	5:40		
A	4:17	4:31	4:53	5:07	5:22	5:34	5:50		
	4:36	4:50	.....	5:17	5:32	5:44	.....	6:05	6:11
A	4:43	4:57	5:23	5:37	5:51	6:03	6:21		
	5:15	5:29	.....	5:57	6:11	6:23	.....	6:44	6:50
A	5:26	5:41	6:05	6:17	6:30	6:43	7:01		
	5:58	6:13	.....	6:39	6:52	7:04	.....	7:24	7:31
A	6:17	6:30	6:50	7:02	7:15	7:25	7:40		
	6:57	7:08	.....	7:33	7:46	7:56	.....	8:12	8:19
A	7:19	7:30	7:50	8:02	8:15	8:25	8:40		
	7:55	8:06	.....	8:31	8:44	8:54	.....	9:10	9:17
A	8:18	8:29	8:49	9:01	9:14	9:24	9:39		
	8:55	9:06	.....	9:31	9:44	9:54	.....	10:10	10:17
A	9:22	9:33	9:50	10:01	10:13	10:24	10:39		
	9:58	10:09	.....	10:31	10:43	10:54	.....	11:10	11:16
A	10:25	10:36	10:51	11:01	11:13	11:23	11:38		
	11:00	11:11	.....	11:31	11:43	11:53	.....	12:09	12:15
A	11:25	11:36	11:51	12:01	12:13	12:23	12:38		
	12:00	12:11	.....	12:31	12:43	12:53	.....	1:09	1:15

A = These trips serve the Goldenwest Transportation Center.

Estos viajes se detienen en el Centro de Transporte Goldenwest.

Effective October 11, 2020 | www.octa.net



La Habra to Huntington Beach
 via Beach Blvd **29/A**

Monday-Friday
SOUTHBOUND To: Huntington Beach

	Buena Park Metrolink Station	Beach & La Habra	Beach & Imperial	Knotts Berry Farm	Beach & Katella	Beach & Westminster	Gothard & Center	Beach & Garfield	Pacific Coast Hwy & 1st
A		4:30	4:39	4:55	5:04	5:14	.....	5:29	5:41
A	5:22	.....	.....	5:35	5:44	5:54	6:01	6:14	6:26
A		5:43	5:53	6:11	6:22	6:34	.....	6:53	7:06
A	6:17	.....	.....	6:31	6:42	6:54	7:03	7:18	7:31
A	6:37	.....	.....	6:51	7:02	7:14	7:23	7:38	7:51
A	6:49	.....	.....	7:10	7:21	7:34	7:43	7:58	8:11
A		6:53	7:06	7:29	7:40	7:55	.....	8:16	8:30
A	7:39	.....	.....	7:58	8:09	8:24	8:35	8:50	9:04
A		7:46	7:59	8:22	8:36	8:52	.....	9:14	9:29
A	8:36	.....	.....	8:55	9:08	9:23	9:34	9:50	10:06
A		8:46	8:59	9:22	9:35	9:50	.....	10:11	10:27
A	9:24	.....	.....	9:43	9:56	10:10	10:21	10:37	10:50
A		9:24	9:37	10:01	10:15	10:30	.....	10:53	11:07
A	10:01	.....	.....	10:21	10:35	10:50	11:01	11:20	11:34
A		10:03	10:17	10:42	10:55	11:10	.....	11:36	11:52
A	10:40	.....	.....	11:00	11:15	11:30	11:42	12:08	12:23
A		10:41	10:55	11:20	11:35	11:50	.....	12:19	12:34
A	11:20	.....	.....	11:40	11:55	12:10	12:22	12:48	1:03
A		11:21	11:35	12:00	12:15	12:30	.....	12:59	1:14
A	11:56	.....	.....	12:16	12:32	12:48	1:02	1:28	1:45
A		11:58	12:13	12:40	12:55	1:10	.....	1:39	1:53
A	12:37	.....	.....	1:00	1:14	1:30	1:42	2:05	2:20
A		12:38	12:53	1:20	1:34	1:50	.....	2:17	2:32
A	1:17	.....	.....	1:40	1:54	2:10	2:22	2:45	3:00
A		1:17	1:32	1:59	2:14	2:30	.....	2:58	3:15
A	1:56	.....	.....	2:19	2:34	2:50	3:02	3:26	3:43
A		2:00	2:14	2:40	2:55	3:10	.....	3:37	3:53
A	2:37	.....	.....	2:59	3:14	3:29	3:41	4:04	4:20
A		2:40	2:54	3:20	3:33	3:48	.....	4:12	4:28
A	3:08	.....	.....	3:29	3:42	3:57	4:08	4:28	4:44
A	3:18	.....	.....	3:39	3:52	4:07	4:18	4:38	4:54
A	3:28	.....	.....	3:49	4:02	4:17	4:28	4:48	5:04
A		3:18	3:32	3:58	4:11	4:26	.....	4:50	5:06
A	3:58	.....	.....	4:19	4:32	4:45	4:55	5:13	5:30
A		3:58	4:12	4:38	4:51	5:04	.....	5:26	5:43
A	4:35	.....	.....	4:55	5:09	5:22	5:32	5:48	6:03
A		4:37	4:50	5:15	5:29	5:42	.....	6:03	6:18
A	5:15	.....	.....	5:35	5:49	6:02	6:12	6:28	6:43
A		5:16	5:29	5:55	6:09	6:22	.....	6:43	6:56
A	5:57	.....	.....	6:15	6:29	6:42	6:52	7:09	7:22
A		5:56	6:09	6:35	6:49	7:02	.....	7:23	7:36
A	6:37	.....	.....	6:55	7:09	7:22	7:32	7:49	8:02
A		6:36	6:49	7:15	7:29	7:42	.....	8:03	8:16
A	7:28	.....	.....	7:45	7:59	8:12	8:22	8:37	8:50
A		7:38	7:51	8:15	8:29	8:42	.....	9:02	9:15
A	8:28	.....	.....	8:45	8:59	9:12	9:22	9:37	9:50
A		8:44	8:56	9:18	9:30	9:42	.....	10:00	10:12
A	9:31	.....	.....	9:48	10:00	10:12	10:21	10:35	10:47
A		9:44	9:56	10:18	10:30	10:42	.....	11:00	11:12
A	10:29	.....	.....	10:46	10:58	11:10	11:19	11:33	11:45
A		10:44	10:56	11:18	11:30	11:42	.....	12:00	12:12
A	11:34	.....	.....	11:51	12:02	12:12	12:20	12:33	12:44
A		11:51	12:02	12:21	12:32	12:42	.....	12:58	1:09

Saturday
NORTHBOUND To: La Habra

	Pacific Coast Hwy & 1st	Beach & Garfield	Center & Gothard	Beach & Westminster	Beach & Katella	Knotts Berry Farm	Buena Park Metrolink Station	Beach & Imperial	Beach & La Habra
A	4:11	4:18	.....	4:35	4:45	4:54	.....	5:10	5:14
A	4:46	4:53	5:05	5:15	5:25	5:34	5:49	.....	.....
A	5:28	5:36	.....	5:55	6:06	6:18	.....	6:36	6:41
A	6:00	6:10	6:25	6:35	6:47	6:59	7:14	.....	.....
A	6:46	6:56	.....	7:15	7:27	7:39	.....	7:58	8:04
A	7:10	7:20	7:35	7:45	7:57	8:09	8:24	.....	.....
A	7:43	7:53	.....	8:15	8:28	8:41	.....	9:01	9:06
A	8:06	8:16	8:33	8:45	8:59	9:12	9:29	.....	.....
A	8:42	8:52	.....	9:15	9:29	9:42	.....	10:02	10:07
A	8:58	9:09	9:30	9:45	9:58	10:11	10:28	.....	.....
A	9:26	9:37	.....	10:05	10:18	10:31	.....	10:52	10:58
A	9:41	9:52	10:13	10:26	10:39	10:52	11:07	.....	.....
A	10:08	10:19	.....	10:45	10:58	11:11	.....	11:31	11:36
A	10:18	10:29	10:50	11:03	11:16	11:29	11:44	.....	.....
A	10:44	10:56	.....	11:23	11:36	11:50	.....	12:13	12:20
A	10:55	11:07	11:30	11:42	11:55	12:09	12:24	.....	.....
A	11:20	11:32	.....	12:01	12:16	12:30	.....	12:50	12:57
A	11:29	11:41	12:04	12:19	12:34	12:48	1:05	.....	.....
A	11:58	12:10	.....	12:39	12:54	1:08	.....	1:28	1:35
A	12:08	12:20	12:43	12:58	1:13	1:27	1:44	.....	.....
A	12:38	12:50	.....	1:19	1:34	1:48	.....	2:08	2:15
A	12:49	1:01	1:24	1:39	1:54	2:08	2:25	.....	.....
A	1:16	1:29	.....	1:59	2:14	2:28	.....	2:49	2:57
A	1:27	1:40	2:04	2:19	2:34	2:48	3:04	.....	.....
A	1:57	2:10	.....	2:40	2:55	3:09	.....	3:30	3:38
A	2:08	2:20	2:44	2:59	3:15	3:28	3:42	.....	.....
A	2:37	2:49	.....	3:19	3:35	3:48	.....	4:08	4:15
A	2:50	3:02	3:25	3:39	3:55	4:07	4:22	.....	.....
A	3:18	3:30	.....	3:59	4:15	4:27	.....	4:47	4:54
A	3:28	3:41	4:04	4:18	4:33	4:46	5:03	.....	.....
A	3:56	4:10	.....	4:37	4:52	5:04	.....	5:25	5:31
A	4:08	4:22	4:44	4:57	5:12	5:24	5:40	.....	.....
A	4:36	4:50	.....	5:17	5:32	5:44	.....	6:05	6:11
A	4:43	4:57	5:23	5:37	5:51	6:03	6:21	.....	.....
A	5:15	5:29	.....	5:57	6:11	6:23	.....	6:44	6:50
A	5:26	5:41	6:05	6:17	6:30	6:43	7:01	.....	.....
A	5:58	6:13	.....	6:39	6:52	7:04	.....	7:24	7:31
A	6:17	6:30	6:50	7:02	7:15	7:25	7:40	.....	.....
A	6:57	7:08	.....	7:33	7:46	7:56	.....	8:12	8:19
A	7:19	7:30	7:50	8:02	8:15	8:25	8:40	.....	.....
A	7:55	8:06	.....	8:31	8:44	8:54	.....	9:10	9:17
A	8:18	8:29	8:49	9:01	9:14	9:24	9:39	.....	.....
A	8:55	9:06	.....	9:31	9:44	9:54	.....	10:10	10:17
A	9:22	9:33	9:50	10:01	10:13	10:24	10:39	.....	.....
A	9:58	10:09	.....	10:31	10:43	10:54	.....	11:10	11:16
A	10:25	10:36	10:51	11:01	11:13	11:23	11:38	.....	.....
A	11:00	11:11	.....	11:31	11:43	11:53	.....	12:09	12:15
A	11:25	11:36	11:51	12:01	12:13	12:23	12:38	.....	.....
A	12:00	12:11	.....	12:31	12:43	12:53	.....	1:09	1:15

A = These trips serve the Goldenwest Transportation Center.
 Estos viajes se detienen en el Centro de Transporte Goldenwest.



29/A

La Habra to Huntington Beach via Beach Blvd

NOTE: TAP card only accepted from La Palma to Malvern.
 NOTA: Tarjeta TAP sólo aceptada de La Palma a Malvern.

Saturday SOUTHBOUND To: Huntington Beach

Sunday & Holiday NORTHBOUND To: La Habra

	Beach & La Habra	Beach & Imperial	Buena Park Metrolink Station	Knotts Berry Farm	Beach & Katella	Beach & Westminster	Gothard & Center	Beach & Garfield	Pacific Coast Hwy & 1st
A	4:30	4:39	5:22	4:55	5:04	5:14	6:01	5:29	5:41
A	5:43	5:53	6:37	6:11	6:22	6:34	7:23	6:53	7:06
A	6:53	7:06	7:39	7:29	7:40	7:55	8:35	8:16	8:30
A	7:46	7:59	8:36	8:22	8:36	8:52	9:14	9:29	9:29
A	8:46	8:59	9:24	9:22	9:35	9:50	10:11	10:27	10:27
A	9:24	9:37	10:01	10:01	10:15	10:30	10:53	11:07	11:07
A	10:03	10:17	10:40	10:42	10:55	11:10	11:36	11:52	11:52
A	10:41	10:55	11:20	11:20	11:35	11:50	12:19	12:34	12:34
A	11:21	11:35	11:56	12:00	12:15	12:30	12:59	1:14	1:14
A	11:58	12:13	12:37	12:40	12:55	1:10	1:39	1:53	1:53
A	12:38	12:53	1:17	1:20	1:34	1:50	2:17	2:32	2:32
A	1:17	1:32	1:56	1:59	2:14	2:30	2:58	3:15	3:15
A	2:00	2:14	2:37	2:40	2:55	3:10	3:37	3:53	3:53
A	2:40	2:54	3:18	3:20	3:33	3:48	4:12	4:28	4:28
A	3:18	3:32	3:58	3:58	4:11	4:26	4:50	5:06	5:06
A	3:58	4:12	4:35	4:38	4:51	5:04	5:26	5:43	5:43
A	4:37	4:50	5:15	5:15	5:29	5:42	6:03	6:18	6:18
A	5:16	5:29	5:57	5:55	6:09	6:22	6:43	6:56	6:56
A	5:56	6:09	6:37	6:35	6:49	7:02	7:23	7:36	7:36
A	6:36	6:49	7:28	7:15	7:29	7:42	8:03	8:16	8:16
A	7:38	7:51	8:28	8:15	8:29	8:42	9:02	9:15	9:15
A	8:44	8:56	9:31	9:18	9:30	9:42	10:00	10:12	10:12
A	9:44	9:56	10:29	10:18	10:30	10:42	11:00	11:12	11:12
A	10:44	10:56	11:34	11:18	11:30	11:42	12:00	12:12	12:12
A	11:51	12:02	12:21	12:21	12:32	12:42	12:58	1:09	1:09

	Pacific Coast Hwy & 1st	Beach & Garfield	Center & Gothard	Beach & Westminster	Beach & Katella	Knotts Berry Farm	Buena Park Metrolink Station	Beach & Imperial	Beach & La Habra
A	5:11	5:20	6:08	5:37	5:47	5:58	6:14	6:19	6:19
A	5:45	5:54	6:30	6:17	6:27	6:38	7:38	7:44	7:44
A	6:30	6:40	7:24	6:57	7:08	7:21	8:16	8:22	8:22
A	6:57	7:08	7:45	7:37	7:49	8:02	8:50	8:55	8:55
A	7:34	7:45	8:31	8:07	8:19	8:32	9:23	9:29	9:29
A	8:04	8:15	8:41	8:44	8:56	9:09	9:57	10:02	10:02
A	8:41	8:52	9:20	9:14	9:26	9:39	10:12	10:17	10:17
A	8:53	9:04	9:29	9:33	9:45	9:58	10:35	10:40	10:40
A	9:19	9:30	9:58	9:52	10:04	10:17	10:51	10:56	10:56
A	9:29	9:41	10:11	10:11	10:24	10:36	11:19	11:26	11:26
A	9:48	10:00	10:32	10:32	10:45	10:57	11:32	11:37	11:37
A	10:10	10:22	10:39	10:52	11:05	11:17	11:59	12:06	12:06
A	10:28	10:40	11:18	11:12	11:25	11:37	12:11	12:17	12:17
A	10:49	11:01	11:31	11:31	11:44	11:56	12:39	12:46	12:46
A	11:08	11:20	11:52	11:52	12:05	12:17	1:20	1:27	1:27
A	11:31	11:43	12:00	12:13	12:26	12:38	1:34	1:41	1:41
A	11:47	12:00	12:37	12:32	12:45	12:57	2:00	2:07	2:07
A	12:05	12:18	1:19	1:25	1:37	1:50	2:41	2:48	2:48
A	12:27	12:40	1:33	1:46	1:58	2:16	3:21	3:28	3:28
A	1:08	1:21	1:53	1:53	2:06	2:18	4:01	4:08	4:08
A	1:27	1:40	2:13	2:13	2:26	2:38	4:14	4:21	4:21
A	1:48	2:01	2:33	2:33	2:46	2:58	4:36	4:43	4:43
A	2:08	2:21	2:40	2:54	3:07	3:19	4:54	5:01	5:01
A	2:28	2:41	3:13	3:13	3:26	3:38	5:16	5:23	5:23
A	2:51	3:03	3:20	3:33	3:46	3:56	5:34	5:41	5:41
A	3:09	3:21	3:53	3:53	4:06	4:16	5:56	6:03	6:03
A	3:31	3:43	4:00	4:13	4:26	4:36	6:14	6:21	6:21
A	3:49	4:01	4:33	4:33	4:46	4:56	6:36	6:43	6:43
A	4:11	4:23	4:40	4:53	5:06	5:16	6:54	7:01	7:01
A	4:29	4:41	5:13	5:13	5:26	5:36	7:16	7:23	7:23
A	4:51	5:03	5:20	5:33	5:46	5:56	7:34	7:41	7:41
A	5:09	5:21	5:53	5:53	6:06	6:16	7:56	8:03	8:03
A	5:31	5:43	6:00	6:13	6:26	6:36	8:18	8:25	8:25
A	5:49	6:01	6:33	6:33	6:46	6:56	8:46	8:53	8:53
A	6:11	6:23	6:40	6:53	7:06	7:16	9:10	9:17	9:17
A	6:29	6:41	7:13	7:13	7:26	7:36	9:32	9:39	9:39
A	6:55	7:07	7:24	7:37	7:50	8:00	9:50	9:57	9:57
A	7:22	7:35	8:07	8:07	8:18	8:26	10:06	10:13	10:13
A	7:51	8:04	8:20	8:34	8:45	8:53	10:38	10:45	10:45
A	8:29	8:41	9:01	9:01	9:13	9:23	11:40	11:47	11:47
A	8:50	9:02	9:17	9:28	9:40	9:50	12:04	12:11	12:11
A	9:25	9:37	9:57	9:57	10:09	10:19	12:08	12:15	12:15
A	9:50	10:02	10:17	10:28	10:40	10:50	11:40	11:47	11:47
A	10:27	10:39	10:59	10:59	11:11	11:21	12:04	12:11	12:11
A	10:51	11:03	11:23	11:23	11:35	11:45	12:04	12:11	12:11

A = These trips serve the Goldenwest Transportation Center.
 Estos viajes se detienen en el Centro de Transporte Goldenwest.



29/A

La Habra to Huntington Beach

via Beach Blvd

Sunday & Holiday
SOUTHBOUND To: Huntington Beach

	Beach & La Habra	Beach & Imperial	Buena Park Metrolink Station	Knotts Berry Farm	Beach & Katella	Beach & Westminster	Gothard & Center	Beach & Garfield	Pacific Coast Hwy & 1st
A	5:12	5:21	.....	5:36	5:48	5:58	.....	6:15	6:29
A			6:02	6:17	6:29	6:39	6:47	7:01	7:15
A	6:30	6:40	.....	6:58	7:10	7:21	.....	7:39	7:53
A			7:22	7:37	7:49	8:00	8:10	8:24	8:38
A	7:37	7:47	.....	8:05	8:17	8:28	.....	8:46	9:00
A			8:17	8:33	8:45	8:56	9:06	9:20	9:34
A	8:26	8:38	.....	8:59	9:11	9:24	.....	9:45	10:00
A			9:08	9:24	9:36	9:49	9:59	10:16	10:31
A	9:11	9:23	.....	9:44	9:56	10:09	.....	10:30	10:45
A			9:48	10:04	10:16	10:29	10:39	10:56	11:11
A	9:51	10:03	.....	10:24	10:36	10:49	.....	11:10	11:25
A			10:27	10:42	10:55	11:09	11:20	11:38	11:51
A	10:28	10:40	.....	11:02	11:15	11:29	.....	11:51	12:04
A			11:01	11:18	11:32	11:47	11:59	12:20	12:37
A	11:03	11:17	.....	11:39	11:53	12:08	.....	12:32	12:49
A			11:42	11:59	12:13	12:28	12:40	1:01	1:18
A	11:43	11:57	.....	12:19	12:33	12:48	.....	1:12	1:29
A			12:22	12:39	12:53	1:08	1:20	1:41	1:58
A	12:25	12:39	.....	1:01	1:15	1:30	.....	1:54	2:11
A			1:05	1:22	1:36	1:51	2:03	2:24	2:41
A	1:06	1:20	.....	1:42	1:56	2:11	.....	2:35	2:52
A			1:45	2:02	2:16	2:31	2:43	3:04	3:21
A	1:46	2:00	.....	2:22	2:36	2:51	.....	3:15	3:32
A			2:25	2:42	2:56	3:11	3:23	3:44	4:01
A	2:26	2:40	.....	3:02	3:16	3:31	.....	3:55	4:12
A			3:05	3:22	3:36	3:51	4:03	4:24	4:41
A	3:09	3:23	.....	3:45	3:58	4:11	.....	4:33	4:48
A			3:47	4:05	4:18	4:31	4:42	5:00	5:15
A	3:48	4:02	.....	4:24	4:37	4:50	.....	5:12	5:27
A			4:25	4:43	4:56	5:09	5:20	5:38	5:53
A	4:27	4:41	.....	5:03	5:16	5:29	.....	5:51	6:06
A			5:10	5:27	5:38	5:49	5:59	6:15	6:29
A	5:14	5:27	.....	5:47	5:58	6:09	.....	6:29	6:43
A			5:49	6:06	6:17	6:28	6:38	6:54	7:08
A	5:54	6:07	.....	6:27	6:38	6:49	.....	7:09	7:23
A			6:30	6:47	6:58	7:09	7:19	7:35	7:49
A	6:34	6:47	.....	7:07	7:18	7:29	.....	7:49	8:03
A			7:10	7:27	7:38	7:49	7:59	8:15	8:29
A	7:24	7:37	.....	7:57	8:08	8:19	.....	8:39	8:53
A			8:10	8:27	8:38	8:49	8:59	9:15	9:29
A	8:26	8:37	.....	8:57	9:09	9:19	.....	9:35	9:49
A			9:12	9:27	9:39	9:49	9:58	10:10	10:24
A	9:26	9:37	.....	9:57	10:09	10:19	.....	10:35	10:49
A			10:17	10:32	10:44	10:54	11:03	11:15	11:29
A	10:31	10:42	.....	11:02	11:14	11:24	.....	11:40	11:54
A	11:06	11:17	.....	11:37	11:49	11:59	.....	12:15	12:29

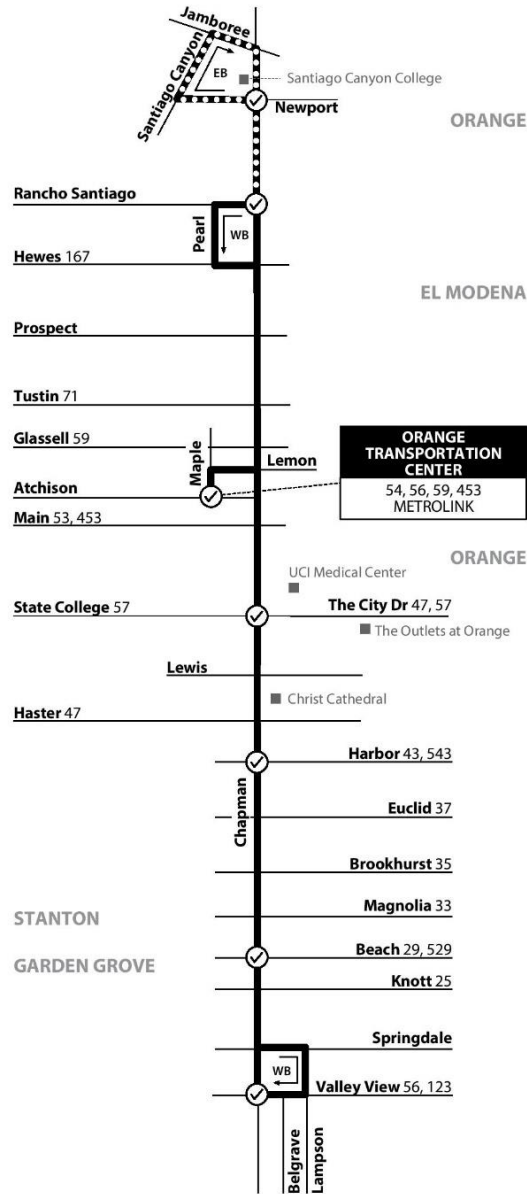
A = These trips serve the Goldenwest Transportation Center.
 Estos viajes se detienen en el Centro de Transporte Goldenwest.



NOTE: This route does not operate east of Rancho Santiago St. on Sundays.
 NOTA: Esta ruta no opera al este de Rancho Santiago St. los domingos.

Garden Grove to Orange
 via Chapman Ave

54



Monday-Friday
 EASTBOUND To: Orange

Chapman & Valley View	Chapman & Beach	Chapman & Brookhurst	Chapman & Harbor	Chapman & City Drive	Orange Transportation Center	Chapman & Rancho Santiago	Santiago Canyon College
6:15	6:22	6:30	6:39	6:46	6:57	7:13	7:23
6:45	6:52	7:00	7:09	7:16	7:27	7:43	7:53
7:15	7:22	7:30	7:39	7:46	7:57	8:13	8:23
7:45	7:52	8:00	8:09	8:16	8:27	8:43	8:53
8:15	8:22	8:30	8:39	8:46	8:57	9:13	9:23
8:45	8:52	9:00	9:09	9:16	9:27	9:43	9:53
9:14	9:21	9:29	9:39	9:46	9:59	10:16	10:26
9:44	9:51	9:59	10:09	10:16	10:29	10:46	10:56
10:11	10:19	10:27	10:39	10:47	10:59	11:16	11:26
10:41	10:49	10:57	11:09	11:17	11:29	11:46	11:56
11:11	11:19	11:27	11:39	11:47	11:59	12:16	12:26
11:41	11:49	11:57	12:09	12:17	12:29	12:46	12:56
12:11	12:19	12:27	12:39	12:47	12:59	1:16	1:26
12:40	12:49	12:58	1:09	1:17	1:29	1:48	1:58
1:10	1:19	1:28	1:39	1:47	1:59	2:18	2:28
1:40	1:49	1:58	2:09	2:17	2:29	2:48	2:58
2:10	2:19	2:28	2:39	2:47	2:59	3:18	3:28
2:40	2:49	2:58	3:09	3:17	3:29	3:48	3:58
			3:25	3:33	3:46		
3:10	3:19	3:28	3:39	3:47	3:59	4:18	4:28
			3:55	4:03	4:16		
3:40	3:49	3:58	4:09	4:17	4:29	4:48	4:58
4:11	4:20	4:28	4:39	4:47	4:59	5:18	5:28
			4:44	4:52	5:04		
4:41	4:50	4:58	5:09	5:17	5:29	5:48	5:58
5:12	5:20	5:28	5:39	5:47	5:59	6:18	6:28
5:42	5:50	5:58	6:09	6:17	6:29	6:48	6:58
6:12	6:20	6:28	6:39	6:47	6:59	7:18	7:28
6:45	6:52	6:59	7:09	7:16	7:27	7:42	7:50
7:15	7:22	7:29	7:39	7:46	7:57	8:12	8:20
7:45	7:52	7:59	8:09	8:16	8:27	8:42	8:50
8:15	8:22	8:29	8:39	8:46	8:57	9:12	9:20
9:00	9:07	9:14	9:24	9:31	9:42	9:57	10:05

SERVICE TO / SERVICIO A

El Modena Orange	Stanton Garden Grove
- El Modena High School	- Christ Cathedral
- Santiago Canyon College	- Garden Grove Resort District
- Orange Public Library	- Izaak Walton Intermediate School
- Orange Civic Center	- Dr. Walter C. Ralston Intermediate School
- Orange Transportation Center (Metrolink)	- Alamitos Intermediate School
- The Plaza	- Garden Grove Promenade
- The Outlets at Orange	- Chapman Library
- UCI Medical Center	- Garden Grove West Library
- Lamoreaux Justice Center	- Pacifica High School
- Portola Middle School	- Hilton D. Bell Intermediate School

LEGEND
LEYENDA

Scheduled Departure
 Regular Routing
 Monday-Saturday Only

METRO = Los Angeles Metro | RTA = Riverside Transit Agency
 LBT = Long Beach Transit | ART = Anaheim Resort Transit

Numbers on streets indicate transfers. Números en la calle indican transbordos.



54

Garden Grove to Orange via Chapman Ave

NOTE: This route does not operate east of Rancho Santiago St. on Sundays.
 NOTA: Esta ruta no opera al este de Rancho Santiago St. los domingos.

Monday-Friday

WESTBOUND To: Garden Grove

Santiago Canyon College	Chapman & Rancho Santiago	Orange Transportation Center	Chapman & City Drive	Chapman & Harbor	Chapman & Brookhurst	Chapman & Beach	Chapman & Valley View
6:00	6:05	6:22	6:32	6:38	6:45	6:51	7:00
6:16	6:22	6:40	6:51	6:58	7:08	7:16	7:27
6:46	6:52	7:10	7:21	7:28	7:38	7:46	7:57
7:16	7:22	7:40	7:51	7:58	8:08	8:16	8:27
7:46	7:52	8:10	8:21	8:28	8:38	8:46	8:57
8:16	8:22	8:40	8:51	8:58	9:08	9:16	9:27
8:46	8:52	9:10	9:21	9:28	9:38	9:46	9:57
9:12	9:18	9:38	9:50	9:58	10:08	10:17	10:28
9:42	9:48	10:08	10:20	10:28	10:38	10:47	10:58
10:12	10:18	10:38	10:50	10:58	11:08	11:17	11:28
10:42	10:48	11:08	11:20	11:28	11:38	11:47	11:58
11:12	11:18	11:38	11:50	11:58	12:08	12:17	12:28
11:42	11:48	12:08	12:20	12:28	12:38	12:47	12:58
12:12	12:18	12:38	12:50	12:58	1:08	1:17	1:28
12:41	12:47	1:07	1:19	1:28	1:38	1:48	1:59
1:11	1:17	1:37	1:49	1:58	2:08	2:18	2:29
1:41	1:47	2:07	2:19	2:28	2:38	2:48	2:59
2:11	2:17	2:37	2:49	2:58	3:08	3:18	3:29
2:41	2:47	3:07	3:19	3:28	3:38	3:48	3:59
3:10	3:17	3:36	3:49	3:58	4:09	4:18	4:28
3:40	3:47	4:06	4:19	4:28	4:39	4:48	4:58
4:10	4:17	4:36	4:49	4:58	5:09	5:18	5:28
4:40	4:47	5:06	5:19	5:28	5:39	5:48	5:58
5:10	5:17	5:36	5:49	5:58	6:09	6:18	6:28
5:45	5:51	6:09	6:21	6:28	6:38	6:47	6:57
6:15	6:21	6:39	6:51	6:58	7:08	7:17	7:27
6:45	6:51	7:09	7:21	7:28	7:38	7:47	7:57
7:15	7:21	7:39	7:51	7:58	8:08	8:17	8:27
7:45	7:51	8:09	8:21	8:28	8:38	8:47	8:57
8:30	8:36	8:54	9:06	9:13	9:23	9:32	9:42

Saturday

EASTBOUND To: Orange

Chapman & Valley View	Chapman & Beach	Chapman & Brookhurst	Chapman & Harbor	Chapman & City Drive	Orange Transportation Center	Chapman & Rancho Santiago	Santiago Canyon College
6:15	6:22	6:30	6:39	6:46	6:57	7:13	7:23
6:45	6:52	7:00	7:09	7:16	7:27	7:43	7:53
7:15	7:22	7:30	7:39	7:46	7:57	8:13	8:23
7:45	7:52	8:00	8:09	8:16	8:27	8:43	8:53
8:15	8:22	8:30	8:39	8:46	8:57	9:13	9:23
8:45	8:52	9:00	9:09	9:16	9:27	9:43	9:53
9:14	9:21	9:29	9:39	9:46	9:59	10:16	10:26
9:44	9:51	9:59	10:09	10:16	10:29	10:46	10:56
10:11	10:19	10:27	10:39	10:47	10:59	11:16	11:26
10:41	10:49	10:57	11:09	11:17	11:29	11:46	11:56
11:11	11:19	11:27	11:39	11:47	11:59	12:16	12:26
11:41	11:49	11:57	12:09	12:17	12:29	12:46	12:56
12:11	12:19	12:27	12:39	12:47	12:59	1:16	1:26
12:40	12:49	12:58	1:09	1:17	1:29	1:48	1:58
1:10	1:19	1:28	1:39	1:47	1:59	2:18	2:28
1:40	1:49	1:58	2:09	2:17	2:29	2:48	2:58
2:10	2:19	2:28	2:39	2:47	2:59	3:18	3:28
2:40	2:49	2:58	3:09	3:17	3:29	3:48	3:58
3:10	3:19	3:28	3:39	3:47	3:59	4:18	4:28
3:40	3:49	3:58	4:09	4:17	4:29	4:48	4:58
4:11	4:20	4:28	4:39	4:47	4:57	5:14	5:24
4:41	4:50	4:58	5:09	5:17	5:27	5:44	5:54
5:12	5:20	5:28	5:39	5:47	5:58	6:15	6:24
5:42	5:50	5:58	6:09	6:17	6:28	6:45	6:54
6:12	6:20	6:28	6:39	6:47	6:58	7:15	7:24
6:45	6:52	6:59	7:09	7:16	7:27	7:42	7:50
7:15	7:22	7:29	7:39	7:46	7:57	8:12	8:20
7:45	7:52	7:59	8:09	8:16	8:27	8:42	8:50
8:15	8:22	8:29	8:39	8:46	8:57	9:12	9:20
9:00	9:07	9:14	9:24	9:31	9:42	9:57	10:05



NOTE: This route does not operate east of Rancho Santiago St. on Sundays.
 NOTA: Esta ruta no opera al este de Rancho Santiago St. los domingos.

Garden Grove to Orange **54**
 via Chapman Ave

Saturday
WESTBOUND To: Garden Grove

Santiago Canyon College	Chapman & Rancho Santiago	Orange Transportation Center	Chapman & City Drive	Chapman & Harbor	Chapman & Brookhurst	Chapman & Beach	Chapman & Valley View
6:00	6:05	6:22	6:32	6:38	6:45	6:51	7:00
6:16	6:22	6:40	6:51	6:58	7:08	7:16	7:27
6:46	6:52	7:10	7:21	7:28	7:38	7:46	7:57
7:16	7:22	7:40	7:51	7:58	8:08	8:16	8:27
7:46	7:52	8:10	8:21	8:28	8:38	8:46	8:57
8:16	8:22	8:40	8:51	8:58	9:08	9:16	9:27
8:46	8:52	9:10	9:21	9:28	9:38	9:46	9:57
9:12	9:18	9:38	9:50	9:58	10:08	10:17	10:28
9:42	9:48	10:08	10:20	10:28	10:38	10:47	10:58
10:12	10:18	10:38	10:50	10:58	11:08	11:17	11:28
10:42	10:48	11:08	11:20	11:28	11:38	11:47	11:58
11:12	11:18	11:38	11:50	11:58	12:08	12:17	12:28
11:42	11:48	12:08	12:20	12:28	12:38	12:47	12:58
12:12	12:18	12:38	12:50	12:58	1:08	1:17	1:28
12:41	12:47	1:07	1:19	1:28	1:38	1:48	1:59
1:11	1:17	1:37	1:49	1:58	2:08	2:18	2:29
1:41	1:47	2:07	2:19	2:28	2:38	2:48	2:59
2:11	2:17	2:37	2:49	2:58	3:08	3:18	3:29
2:41	2:47	3:07	3:19	3:28	3:38	3:48	3:59
3:10	3:17	3:36	3:49	3:58	4:09	4:18	4:28
3:40	3:47	4:06	4:19	4:28	4:39	4:48	4:58
4:10	4:17	4:36	4:49	4:58	5:09	5:18	5:28
4:40	4:47	5:06	5:19	5:28	5:39	5:48	5:58
5:10	5:17	5:36	5:49	5:58	6:09	6:18	6:28
5:45	5:51	6:09	6:21	6:28	6:38	6:47	6:57
6:15	6:21	6:39	6:51	6:58	7:08	7:17	7:27
6:45	6:51	7:09	7:21	7:28	7:38	7:47	7:57
7:15	7:21	7:39	7:51	7:58	8:08	8:17	8:27
7:45	7:51	8:09	8:21	8:28	8:38	8:47	8:57
8:30	8:36	8:54	9:06	9:13	9:23	9:32	9:42

Sunday & Holiday
EASTBOUND To: Orange

Chapman & alley View	Chapman & Beach	Chapman & Brookhurst	Chapman & Harbor	Chapman & City Drive	Orange Transportation Center	Rancho Santiago & Chapman
6:57	7:04	7:11	7:21	7:28	7:39	7:51
7:28	7:35	7:42	7:52	7:59	8:10	8:22
7:59	8:06	8:13	8:23	8:30	8:41	8:53
8:23	8:32	8:42	8:54	9:02	9:14	9:28
8:54	9:03	9:13	9:25	9:33	9:45	9:59
9:26	9:35	9:45	9:57	10:05	10:17	10:31
9:57	10:06	10:16	10:28	10:36	10:48	11:02
10:30	10:38	10:47	10:59	11:07	11:19	11:33
11:03	11:11	11:20	11:32	11:40	11:52	12:09
11:34	11:42	11:51	12:03	12:11	12:23	12:40
12:06	12:14	12:23	12:35	12:43	12:55	1:12
12:41	12:49	12:57	1:08	1:16	1:28	1:45
1:10	1:18	1:26	1:37	1:45	1:57	2:14
1:43	1:51	1:59	2:10	2:18	2:30	2:47
2:17	2:25	2:33	2:44	2:52	3:04	3:21
2:49	2:57	3:05	3:16	3:24	3:36	3:52
3:22	3:30	3:38	3:48	3:56	4:07	4:23
3:51	3:59	4:07	4:17	4:25	4:36	4:52
4:24	4:32	4:40	4:50	4:58	5:09	5:25
4:58	5:06	5:14	5:24	5:32	5:43	5:59
5:28	5:35	5:43	5:53	6:00	6:11	6:24
5:59	6:06	6:14	6:24	6:31	6:42	6:55
6:27	6:34	6:42	6:52	6:59	7:10	7:23
6:57	7:04	7:12	7:22	7:29	7:40	7:53
7:31	7:38	7:46	7:56	8:03	8:14	8:27
8:31	8:38	8:46	8:56	9:03	9:14	9:27
9:31	9:38	9:46	9:56	10:03	10:14	10:27

Sunday & Holiday
WESTBOUND To: Garden Grove

Rancho Santiago & Chapman	Orange Transportation Center	Chapman & City Drive	Chapman & Harbor	Chapman & Brookhurst	Chapman & Beach	Chapman & Valley View
6:29	6:45	6:55	7:02	7:10	7:17	7:26
7:06	7:22	7:34	7:42	7:52	8:01	8:11
7:36	7:52	8:04	8:12	8:22	8:31	8:41
8:06	8:22	8:34	8:42	8:52	9:01	9:11
8:37	8:53	9:05	9:13	9:23	9:32	9:42
9:08	9:24	9:36	9:44	9:54	10:03	10:13
9:43	9:59	10:11	10:19	10:29	10:38	10:48
10:14	10:30	10:42	10:50	11:00	11:09	11:19
10:44	11:02	11:14	11:22	11:32	11:41	11:51
11:17	11:35	11:47	11:55	12:05	12:14	12:24
11:48	12:06	12:18	12:26	12:36	12:45	12:55
12:21	12:39	12:51	12:59	1:09	1:18	1:28
12:55	1:13	1:25	1:33	1:43	1:52	2:02
1:28	1:45	1:57	2:05	2:15	2:24	2:34
2:00	2:17	2:29	2:37	2:47	2:57	3:07
2:29	2:46	2:58	3:06	3:16	3:26	3:36
3:02	3:19	3:31	3:39	3:49	3:59	4:09
3:37	3:53	4:05	4:13	4:23	4:32	4:42
4:08	4:24	4:36	4:44	4:54	5:03	5:13
4:39	4:55	5:07	5:15	5:25	5:34	5:44
5:08	5:23	5:35	5:43	5:52	6:01	6:10
5:40	5:55	6:07	6:15	6:24	6:33	6:42
6:14	6:29	6:41	6:49	6:58	7:07	7:16
6:39	6:54	7:06	7:14	7:23	7:32	7:41
7:10	7:25	7:37	7:45	7:54	8:03	8:12
7:38	7:53	8:05	8:13	8:22	8:31	8:40
8:38	8:53	9:05	9:13	9:22	9:31	9:40
9:38	9:53	10:05	10:13	10:22	10:31	10:40