

4.2 TRAFFIC AND CIRCULATION

Austin-Foust Associates, Inc., (AFA) evaluated the project's short-term construction traffic impacts and the operational traffic impacts associated with the proposed project. The analysis presented below provides a summary of the findings and recommendations of the "Aerie Corona Del Mar Condominium Project Traffic Access Assessment (March 4, 2009) prepared by AFA. This Assessment is included as Appendix C.

4.2.1 Existing Conditions

The subject property is located in the residential oriented Corona del Mar neighborhood and is bounded by Carnation Avenue and Ocean Boulevard. Principal access into the neighborhood is from West Coast Highway via Marguerite Avenue. Except for West Coast Highway, none of these streets are on the City's Master Plan of Streets and Highways and they are considered local streets. Traffic counts on Carnation Avenue were conducted between 7:00 a.m. and 5:45 p.m. on September 18, 2008 and included in the Traffic Access Assessment prepared by AFA. This period represents a typical operating condition (e.g., schools are in session). At the present time, Carnation Avenue carries approximately 24 vehicles per hour (vph) and 22 vph on average during the a.m. and p.m. peak hours, respectively. The midday peak hour, beginning at 12:00 p.m. averages 29 vph. The local streets serve the residential neighborhoods within Corona del Mar.

The subject property is currently developed with a 14-unit apartment complex and one single-family residential dwelling unit. Only three of the 15 dwelling units are occupied, generating an estimated 23 trips per day. If all of the dwelling units were occupied, it is estimated that they would generate up to 104 trips per day, including eight trips during the a.m. peak hour and 10 trips during the p.m. peak hour.

4.2.2 Significance Criteria

Implementation of the proposed project would result in a significant adverse environmental impact if any of the following occurs as a result of project implementation.

- The project will generate an increase in traffic at intersections in the City of Newport Beach that results in an Intersection Capacity Utilization (ICU) change of 0.01 or more and the resulting ICU is 0.91 (LOS E) or greater.
- The project will generate an increase in traffic at a Congestion Management Program (intersection resulting in a Level of Service (LOS) F, or if a Congestion Management Program intersection maintains an existing LOS F and an increase in traffic results in an ICU change beyond 0.10.
- The project will result in inadequate access or parking capacity.

4.2.3 Standard Conditions

SC 4.2-1 On-site parking shall comply with the Newport Beach Zoning Code requirements.

SC 4.2-2 Sight distance at the project accesses shall comply with City of Newport Beach standards.

4.2.4 Potential Impacts

4.2.4.1 Short-Term Construction Impacts

Construction Traffic

During the construction phases, there will be periods of time when a substantial volume of heavy truck traffic hauling export soils and materials and equipment would occur. Table 4.2-1 reflects the potential peak volumes of truck trips at different construction phases required by the proposed project.

**Table 4.2-1
 Potential Construction-Related Project Trip Generation**

| Phase | Task | Estimated Number of Trips |
|--|--|--|
| Phase I | Demolition | Demolition activities would occur for approximately 6 days. It is anticipated an average of 10 trucks trips/ day would occur daily during the 6 days of demolition. |
| | 38 Caissons Installation for Row A | 117 cement trucks total. Caisson installation would occur for approximately 13 days with an average of 9 cement trucks per day. |
| | <u>Excavation - Segment No. 1</u> Excavation to an Elevation of 50 feet and removal of 13,000 cubic yards of dirt. | 1,084 truck trips total. Excavation to this depth would take approximately 41 days with an average of 27 truck trips/ day. |
| | 23 Caissons Installation for Row B | 72 cement trucks total. Caisson installation would occur for approximately 6 days with an average of 12 cement trucks per day. |
| | <u>Excavation - Segment No. 2</u> Excavation to an Elevation of 40 feet and removal of 7,000 cubic yards of dirt. | 584 truck trips total. Excavation to this depth would take approximately 21 days with an average of 28 truck trips/ day. |
| | <u>Excavation - Segment No. 3</u> Excavation to an Elevation of 28 feet and removal of 5,240 cubic yards of dirt. | 437 truck trips total. Excavation to this depth would take approximately 15 days with an average of 29 truck trips/ day. |
| Phase 2 | Building Construction | 622 Cement trucks total. There will be approximately 12 concrete pour events during Phase II and each would take 30 to 40 days. Concrete formwork would consist of 90% of the duration and 3 to 5 days for concrete pouring. There would be about 20 to 25 cement trucks trip per day during the concrete pouring and there will be an average of 1 month between each concrete pouring event. |
| SOURCE: Brion Jeannette Architecture; Construction Management Plan (February 23, 2009) | | |

Implementation of the proposed project will require the exportation of more than 25,000 cubic yards of earth material to the Brea Olinda Landfill, resulting in the generation of approximately 2,105 heavy truck trips over the 5-month grading and excavation phase. Grading and excavation necessary to implement the proposed project will be scheduled to occur after the summer months to avoid truck traffic impacts during that already congested time period. Although a maximum of up to 44 haul truck trips per day (based on a 15-minute discharge rate from the site) could be generated by the daily grading activities, the Construction Management Plan limits the number of heavy truck trips to 27 to 29 trips per day during the three excavation “segments” as indicated in Table 4.2-1. Other construction-related heavy truck trips generated by the proposed project are those related to concrete pouring, which will account for a total of 622 trips in 12 concrete pour events that would take 30 to 40 days each within the 18-month Phase II period. Concrete truck traffic would be generated on only three to five days during each concrete pour event. In addition, truck traffic is that related to material delivery to the site (i.e., material deliveries) would average two to four heavy trucks per week during the final nine months of the construction phase.

The Construction Management Plan has incorporated several measures to ensure that the construction traffic would not result in significant impacts in the residential neighborhood. Specifically, the CMP includes the following:

- The project's haul route shall follow the route depicted in the CMP. Specifically, dump trucks, concrete mixers, deliveries, and shuttles for off-site parking will access the site via East Coast Highway and travel south on Marguerite Avenue, west on Seaview Avenue, and south on Carnation Avenue to the site. The trucks and construction vehicles will exit by driving east on Ocean Boulevard, north on Marguerite Avenue, and back to East Coast Highway.
- Dirt will be hauled to Olinda Alpha Sanitary Landfill in the City of Brea (or a closer site/location if available at the time grading occurs) . Dump trucks leaving from East Coast Highway will travel north on MacArthur Boulevard to SR-73, and continuing northbound on SR-55 to the I-5 northbound and to SR-57 northbound. Grading and dirt hauling shall occur only between Labor Day and Memorial Day.
- All deliveries will use the designated haul route once they enter the neighborhood starting from Marguerite Avenue.
- The contractor will also request an encroachment permit for a temporary staging area during construction , as described and illustrated in the CMP. Loading and unloading of all construction materials/equipment and/or construction vehicles will take place on-site or within the staging area. Loading and unloading will be managed by the construction valet team and will be overseen by the contractor. Dump trucks, cement trucks, etc., will arrive at the site with no greater frequency than the discharge rate by the contractor so that no more than one truck is on-site at one time and that trucks will not queue on Carnation Avenue. Once the delivery is complete, the trucks will exit the project area via the haul route identified above. All trucks (except cement trucks) will be required to shut off their engines during the loading/off-loading process.
- To prevent obstruction of through traffic lanes adjacent to the site, a flag person will be retained to maintain safety adjacent to the existing roadways.
- Traffic control will be coordinated with the Police Department and Public Works Department, Traffic and Development Services Division, so that street traffic is not obstructed.

Potential construction-related traffic impacts, which could include slowing of local traffic and impeding turning movements at private driveways would be avoided through the implementation of the measures prescribed in the CMP. To ensure that this project's construction traffic does not result in adverse traffic congestion impacts, and to avoid impacts along local residential streets, especially narrower streets, the Construction Management Plan has addressed all aspects of the construction phase, including traffic control and haul routes by regulating the number of haul trucks accessing and leaving the site, for instance. The construction traffic (i.e., a maximum of four trips per hour) would not adversely affect any intersection operations during either the a.m. or p.m. peak hours; therefore, no significant traffic impacts would occur as a result of project implementation. In addition, construction of the replacement dock will not generate additional traffic because both materials and equipment will be delivered to the site on a barge to the dock location.

The proposed Construction Management Plan is enforceable through monitoring, which will be the responsibility of the contractor. Additional restrictions may be imposed by the Public Works Department in the event traffic congestion problems arise.

Construction Parking

The total construction period is estimated to extend approximately 32 months over four phases that vary in duration from five to 18 months. During these construction phases, the daily construction employee work force will vary from phase to phase, depending on the construction activity. Nonetheless, it is estimated that an average of 25 workers will be at the job site each day during Phase I and 45 workers each day during Phase II. During Phases III and IV, when work will mostly occur indoors, an average of 60 to 80 workers would be expected to be on-site on a daily basis.

In order to ensure that adequate employee parking is provided to workers during each phase of construction, the CMP includes a detailed parking management plan. This plan mandates the following:

- Construction workers are prohibited from parking on Carnation Avenue and Ocean Boulevard (or any residential street in the neighborhood). In stead, the applicant will secure one or more binding off-site parking agreements to accommodate the varying number of workers needed for each construction phase. The off-site parking location(s) will be located within a five-mile radius of the site. The off-site parking agreement shall be presented to the City prior to the issuance of permits required for the phase of construction that will require the off-site parking. The agreement will also ensure that one of the off-site parking locations will: (1) commit a sufficient number of parking spaces to Aerie construction workers during the relevant term, and (2) the off-site location possesses the proper permits and authority to rent the subject spaces.
- Shuttles will transfer construction workers from the remote parking locations to the project site. Specifically, two 10-passenger shuttle vans will run up to eight trips each morning and evening and up to five trips at lunch, assuming that some workers will remain at the jobsite during lunch. Carpooling among construction workers will also be encouraged throughout the duration of the construction phases.
- Once vehicular elevators are installed, workers will be permitted to park in the completed on-site garages. It is anticipated that approximately 31 cars will be able to park on-site once the parking garage is completed. Personnel will be provided to assist in parking the construction workers on-site.

- As previously indicated, construction workers will be prohibited from parking on Carnation Avenue and Ocean Boulevard. Compliance with this prohibition will be monitored daily by the construction valet and flagmen team. However, this prohibition shall not apply to short-term visitors to the site such as City inspectors, City staff, architects, and consultants. Carpooling will also be encouraged among professionals.

4.2.4.2 Long-Term Operational Impact

The net changes in trip generation, which are summarized in Table 4.2-2, assume that only three of the units are occupied, consistent with the “baseline” condition. As indicated in the table, project implementation represents an increase of 24 trips per day, including 2 a.m. peak hour trips and 2 p.m. peak hour trips. When compared to the potential occupancy of the 15 dwelling units that exist on the site, the project would generate 57 fewer daily trips and 4 fewer a.m. peak hour trips and 6 fewer p.m. peak hour trips.

**Table 4.2-2
 Net Change in Traffic Generation**

| Land Use | Dwelling Units | Daily ADT | AM Peak ADT | PM Peak ADT |
|---|----------------|-----------|-------------|-------------|
| Potential Occupancy ¹ | 15 | 104 | 8 | 10 |
| Baseline ² | 3 | 23 | 2 | 2 |
| Proposed | 8 | 47 | 4 | 4 |
| Net Change from Baseline | 5 | 24 | 2 | 2 |
| ¹ Assumes all units are occupied. ² “Baseline” conditions reflects 3 units currently occupied, including the SFD home and two apartments. SOURCE: Institute of Transportation Engineers | | | | |

The City requires that a traffic analysis be prepared for projects that generate 300 or more trips per day. As indicated in Table 4.2-2, the proposed project does not reach the minimum threshold; therefore, a traffic analysis was not required. Although the assessment of traffic impacts considered the decrease in total dwelling units, it likely does not reflect the potential increase in traffic generated by the proposed dwelling units adjusted for possible lifestyle factors associated with extremely affluent households, which could generate a small number of additional traffic attributable to domestic employees, pool and spa maintenance workers, etc. However, even with such additional traffic, project implementation would not result in an increase in either peak hour traffic volumes or total daily traffic in excess of established thresholds. Therefore, future traffic generated by the proposed project would not result in any significant long-term traffic impacts. No mitigation measures are required.

Parking Ingress/Egress

The project proposes a unique access plan that includes a four-level parking garage with a total of 25 parking spaces for the 8 condominiums, not including the six private auto lifts. These spaces include 16 for residents, eight visitor spaces, and one service vehicle space; two parking spaces have also been provided for golf carts. In addition, the garage is also equipped with mechanical vehicle lifts in six of the residential parking

spaces, which can be used by the residents themselves to increase their own parking from two spaces per unit to three per unit.

Access to the parking garage is proposed to be via a driveway on Carnation Avenue, which leads directly to/from vehicle elevators located at the face of the building. Two vehicular elevators will be used to accommodate residents' parking within the structure. The two on-site vehicular elevators will serve the private garages of seven of the units and overflow guest parking spaces that are located in the subterranean garage. Parking for the eighth unit and the required guest parking spaces are located four feet below street level and do not take access via the proposed elevators. The East (i.e., right side) elevator is designated for entrance and West (i.e., left side) elevator is designated for exiting. Access control panels are located adjacent to the elevator (on driver's side) on each floor; residents of the units will have a remote control similar to a garage door controller that can activate the elevator through the touch of a button.

Lighting signals are located on top of the elevator opening on each floor that indicate the elevator position or if it is currently in use. The entrance elevator will be programmed for "destination dispatch" so that it is automatically recalled to the street level when it is not in use. Therefore, the driver can access the elevator immediately upon entering the site when it is not in use, thus minimizing the potential for creating a vehicle queue.

Inside the elevator, another keypad is located on the driver's side of the wall; a lighting signal indicates the designation (i.e., floor) of the elevator. Once the elevator has reached its designated level, ample turnaround space is available for the car to maneuver into the private garages. The elevators will always be used by a car pulling into and out of it in a forward direction.

The interior cab size of the elevator is approximately 10' x 20' with an 8' high ceiling. It takes the elevator approximately eight seconds to travel from floor to floor and a maximum of approximately one minute round trip back to the street. Furthermore, an emergency generator will be provided so that in the event of a power outage, the generator will automatically activate to operate the elevator, allowing residents to exit the building safely. This safety feature will also send the cabs to the recall position at street level. In addition, a fire service switch will be provided that allows fire department to access the elevators in case of emergency.

Two spaces designed for golf cart sized vehicles are proposed. These spaces are within the three sub-basement levels of the structure with the lower levels accessed by vehicle elevators large enough and with sufficient capacity to accommodate vehicles and vans. The Newport Beach Zoning Code requires attached single family residential projects to provide 1 covered and 1 uncovered space per dwelling unit. Additionally, 0.5 space per dwelling unit is required for guests. The project would require a total of 16 spaces for residents and 4 spaces for guests for a total of 20 spaces for the proposed 8-unit project. As indicated in Table 4.2-3, the project proposes 25 parking spaces for residents and guests, exceeding the minimum 20 off-street parking spaces required by the Municipal Code. Six additional parking spaces are also provided for six of the units by employing the use of the lifts.

**Table 4.2-3
 Proposed Off-Street Parking Requirements**

| Type | Code Requirement | No. of Required Parking Spaces | No. of Parking Spaces Provided |
|--|----------------------------|--------------------------------|--------------------------------|
| Multi-Family Residential (4 or more DUs) | 2 Spaces/Unit ¹ | 16 | 23 ² |
| Guests | 0.5/Space/unit | 4 | 8 |
| Total | | 20 | 31³ |

¹Includes one (1) covered parking space.
²Includes 17 “at-grade” parking spaces and 6 “lift” parking (i.e., parking spaces located above surface parking spaces requiring the use of a lift).
³Total parking does not include two (2) golf cart parking spaces and bicycle parking spaces also provided. All parking spaces are covered.

SOURCE: Newport Beach Municipal Code (Section 20.66.030)
 Brion Jeannette Architecture

Finally, the length of the curb cut, which provides vehicular access to the site, has been substantially reduced, which results in the creation of three (3) additional on-street public parking spaces. The addition of these on-street parking spaces is considered a beneficial impact, particularly during the peak summer/tourist season.

The approaches to/from the doors are designed such that motorists drive straight in and straight out of the elevators. Exiting vehicles proceed when the door opens and do not face another entering vehicle. A driver wishing to exit the garage utilizes the “exit” elevator, which is adjacent to, but does not conflict with the “entry” elevator. The entire elevator loading, elevator motion and unloading procedure requires between one and one and one half minutes.

The AFA analysis investigated three condominium complexes with similar characteristics located in the immediate vicinity of the project to conduct counts and evaluate the potential for circulation conflicts. The study was conducted in order to evaluate the potential for ingress/egress queuing at the property. Traffic counts taken by AFA included minute-by-minute observation of the arrivals and departures from the three condominium complexes (8, 15, and 42 units) during the a.m., noon, and p.m. peak two hour periods. Based on those observations, only during one minute did the arrival rate reach as high as three vehicles per minute and that was only one time for the 15-unit condominium project. On six occasions, two vehicles per minute arrived at the same time; however, that was associated with the 42-unit complex. Based on the actual field-measured arrival rates, it is estimated that rarely, if ever, will the queue of waiting vehicles at the entry of the 8-unit project (only seven of which will utilize the elevators) back out onto Carnation Avenue.

Although a vehicle back-up onto Carnation Avenue is expected to be a rare occurrence due to the proximity of the elevators to Carnation Avenue, the question of safety was also examined by AFA and documented in the study prepared for the proposed project. Existing traffic counts on Carnation Avenue are modest; the traffic volumes observed were 24 during the a.m. peak hour and 22 during the p.m. peak hour. These figures equate to less than one vehicle every three to four minutes. The elevators can completely cycle in less than two to three minutes.

The parking garage design is not limited to the access via vehicle elevator rather than ramps. As previously indicated, the garage is also proposed to be equipped with mechanical vehicle lifts in six of the residential spaces. The lifts will be used by the residents to increase their own parking from two spaces per unit to three spaces per unit (for six of the eight units). The lift operation requires the lower space to be vacant before the lift is either raised or lowered. Review of the floor plans revealed that there is available space behind the lifts to back a vehicle off or pull another on, then raise the left to open up the lower space. Therefore, in order to have three spaces per unit, the vehicle in the lower space must be moved elsewhere (e.g., perhaps out of the garage itself) while the lift is being operated.

The AFA analysis concluded that the garage access design, which utilizes two vehicle elevators would not create any substantial vehicle queuing onto Carnation Avenue. This is particularly true for the project because only seven of the eight units will utilize the vehicle elevators. With one vehicle lift for each of six units combined with single car elevators, evacuation of all vehicles from the garage could be difficult in an emergency situation and both elevators may need to be operated as exit only in such a case.

Circulation Element Consistency

Table 4.1-1 In Section 4.1 (Land Use and Planning) summarizes the relationship of the proposed project with the applicable policies adopted with the Circulation Element. In addition, Table 4.1-2 in Section 4.1 provides a summary of the relationship of the proposed project with the relevant policies in the Coastal Land Use Plan. As revealed in the analysis presented in those tables, the proposed project is consistent with the relevant policies in the Circulation Element and the CLUP. In addition, the proposed project is also consistent with the applicable goals and policies articulated in the Regional Comprehensive Plan and Guide adopted by SCAG, as reflected in Table 4.1-3 in Section 4.1.

Public Transportation

There are no transit facilities or service either on or along the frontage of this site (i.e., Ocean Boulevard and Carnation Avenue); however, public transit service is provided along West Coast Highway and other arterial streets within the City. This project will not necessitate the realignment of any existing streets or the construction of new public transportation facilities in the vicinity. Project implementation would not create a significant demand for public transit due to the reduction in the number of dwelling units on the site. No significant impacts are anticipated and no mitigation measures are required.

4.2.5 Mitigation Measures

All of the potential construction traffic impacts will be avoided through the implementation of the measures identified in Section 4.2.4.1 and prescribed in the CMP for the proposed project. Furthermore, no significant long-term impacts (e.g., queuing, congestion, etc.) are anticipated; no mitigation measures are required.

4.2.6 Level of Significance After Mitigation

Implementation of the standard conditions identified in Section 4.2.3 and the measures prescribed in the Construction Management Plan will ensure that potentially significant traffic impacts will be reduced to a less than significant level; no mitigation measures are required. No significant unavoidable traffic impacts would occur as a result of project implementation.