

APPENDIX L

TRANSPORTATION MANAGEMENT PLAN



January 29, 2018

Mr. John Amberson
City of Oceanside
300 North Coast Highway
Oceanside, California 92054

LLG Reference: 3-16-2646

Subject: El Corazon Arena – Transportation Management Plan

Dear Mr. Amberson:

INTRODUCTION

El Corazon is a 465-acre parcel located in the center of the city of Oceanside, bounded by Rancho Del Oro Road on the east, Oceanside Boulevard on the south, El Camino Real on the west, and Mesa Drive on the north. Development of the parcel is ongoing and guided by the El Corazon Specific Plan, approved by the Oceanside City Council in 2009. One component of El Corazon is the 8,000 seat El Corazon “Arena” located in Parcel 4. It is bounded by Village Commercial Drive, “BB” Street, and “CC” Street.

Linscott, Law & Greenspan, Engineers (LLG) has prepared the following Transportation Management Plan (TMP) to determine measures that can be implemented to best manage parking, vehicular traffic, and pedestrian/bicycle traffic for the benefit of everyone affected by Arena events i.e., (event attendees, residential neighbors, and the community at large).

TRANSPORTATION MANAGEMENT PLAN OVERVIEW

To minimize the traffic impacts to the local streets and the internal street network during Arena events, the following TMP measures are recommended:

- Internal Circulation Improvements
- Signal Timing Plan Modifications
- Advanced Transportation Management System (ATMS) Monitoring
- Oceanside Police Traffic Control
- On-Site Traffic Control Personnel
- Event Wayfinding Signs
- Overlap Phasing for certain traffic Signals
- Designated pick-up / drop-off areas for Ridesourcing (Uber, Lyft, etc.)
- Senior Center Coordination
- Shuttle Service

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- Pedestrian and Bicycle Circulation Enhancements
- Transportation Demand Management (TDM) measures

The following 12 sections discuss each of these dozen items in more detail and several on-site recommendations are depicted in **Figure 1**.

Figure 2 and **Figure 3** depicts the TMP for before and after the event, respectively.

INTERNAL CIRCULATION IMPROVEMENTS

The following are recommended (**Figure 1**):

- Design the roundabout at the Village Commercial Drive / “CC” Street intersection to accommodate two circulatory travel lanes on the day of events.
- Provide a striped median (instead of a raised median) on “B” Street.
- Provide two 10’ travel lanes and one 10’ TWLTL on “CC” Street and “BB” Street.

It is recommended to provide a two-lane roundabout at the intersection of Village Commercial Drive Street and “B” street to properly accommodate the influx of event traffic, as well as the “ambient” traffic from residents and patrons of other land uses within El Corazon. In addition, it is recommended that a striped median, instead of a raised median, be provided on “B” Street. This would allow for flexibility for the median to be used as a travel lane during events to allow for enhanced traffic flow.

At the parking access driveway, it recommended that “CC” Street be blocked off by traffic cones to separate the southwest and northeast bound traffic access.

Event access for attendees coming from the north through Rancho Del Oro Drive will be via “B” Street. Attendees would enter through “B” Street, go through the roundabout, and access event parking through “CC” Street. It is recommended that “CC” Street have reduced travel lane widths of 10 feet and a 10-foot two way left turn lane . Through the use of traffic cones to delineate travel lanes during event times, the two way left turn lane of “CC” Street would be converted to a travel lane, and one northeast-bound (exiting) lane and two southwest-bound (entering) lanes will be provided. Prior to the event ending, the configuration would be switched to provide two outbound lanes and one inbound lane.

Event access for attendees coming from the south through Rancho Del Oro Drive and from the east and west through Oceanside Boulevard will be either via the Rancho Del Oro Drive / Senior Center Drive intersection or the Oceanside Boulevard /“AA” Street intersection. Attendees would enter through either one of these intersections and go through the Senior Center Drive and “AA” Street roundabout, head north on “AA” Street, turn left on “BB” street, and turn right onto “CC” street. Similar to the configuration above, CC” Street would be converted to one southwest-bound

(exiting) lane and two northeast-bound (entering) lanes and then switched to accommodate post event volumes.

SIGNAL TIMING MODIFICATIONS

It is recommended to make modifications to the signal timing to the following key access intersections:

- Rancho Del Oro Drive / “B” Street / Ocean Ranch Blvd
- Rancho Del Oro Drive / Senior Center Drive

In addition, it is recommended to include a special control plan for events when designing the traffic control plan for the following future intersection:

- Oceanside Boulevard / “AA” Street

ADVANCED TRANSPORTATION MANAGEMENT SYSTEM (ATMS) MONITORING

It is also recommended that the City’s Advanced Transportation Management System (ATMS) be utilized to monitor the real-time traffic conditions at the Rancho Del Oro Drive / Senior Center Way intersection and the Oceanside Boulevard / Rancho Del Oro Drive intersection. An ATMS is a system that enables real-time management of traffic signal controllers from a centralized traffic management center (TMC) through a variety of detectors, cameras, and high-tech communication networks. Through ATMS, traffic problems can be more quickly identified and subsequently addressed to maintain efficient traffic operations.

OCEANSIDE POLICE TRAFFIC CONTROL

It is recommended that Oceanside police officers be positioned at the intersections of Rancho Del Oro Drive / “B” Street / Ocean Ranch Boulevard and Rancho Del Oro Drive / Senior Center Drive and the future intersection of Oceanside Boulevard / “AA” Street to manually direct traffic before and after Arena events. Based on the input from the Oceanside Police Department, a manual traffic direction process should be developed and discussed with the City.

TRAFFIC CONTROL PERSONNEL

Traffic control personnel should be utilized at the locations depicted in **Figure 2** and **Figure 3**. Personnel shall be fully knowledgeable of key information such as parking and access routes to both the parking area and the arena. Personnel are especially critical at locations such as “AA” Street / “BB” Street and Village Commercial Drive / “B” Street where full access will be maintained for residential traffic, but event traffic will be directed towards the Arena and parking area.

Event personnel and flaggers are recommended to control traffic and parking within the project site. Event Personnel Guidelines are included in *Attachment A*. The document discusses the role, procedures and dress code of the personnel.

EVENT WAYFINDING SIGNS

On the day of the event, event wayfinding signs should be positioned at the access intersections of Rancho Del Oro / “B” Street / Ocean Ranch Boulevard, Rancho Del Oro / Senior Center Road and Oceanside Boulevard / “AA” Street. In addition, wayfinding signs should be placed along the routes within the internal street network of El Corazon to guide attendees to the parking area and to the arena. Wayfinding signs should also be placed at the Rancho Del Oro Transit Station and along Oceanside Boulevard and Rancho Del Oro to direct attendees who utilize the North County Transit District (NCTD) Sprinter and bus network.

OVERLAP SIGNALS

Right turn overlap signals for the eastbound right turn lane, and the southbound right turn lane are recommended to improve the circulation and reduce the queuing at the Rancho Del Oro Drive / Senior Center Drive intersection. A “No U-Turn” sign would need to be added to the existing signal mast arm on northbound Rancho Del Oro Drive at Senior Center Way that prohibits northbound u-turns to accommodate the proposed eastbound right-turn overlap signal. Eastbound right-turn overlap signal will allow the eastbound right turn traffic to continue flowing without yielding when the northbound left turn movement has the green. Similarly, a southbound right-turn overlap signal will allow the southbound right turn traffic to continue flowing without yielding while the eastbound left turn movement has the green.

Right turn overlap signals are also recommended for the Rancho Del Oro/ “B” Street and Oceanside Boulevard / “AA” Street intersections.

DESIGNATED PICK-UP / DROP-OFF AREAS FOR RIDESOURCING (UBER, LYFT, ETC.)

It is recommended that a pick-up and drop-off area be designated on-site for attendees who utilize ridesourcing applications such as Uber and Lyft. It is recommended to designate a pick-up and drop-off area at the Field of Dreams parking lot to minimize the impact on event traffic circulation, such as shown in **Figure 4**. Access for Ridesourcing users should be via Senior Center Drive, through the roundabout and then westbound to the parking lot. Wayfinding signs should have information regarding the designated area.

SHUTTLE

It is recommended to provide shuttle service to and from the Rancho Del Oro Transit Station an hour before and after the event. The transit station is about half a mile (about a 10-minute walk) from the arena. Although this is within the range of how far people are willing to walk, providing a shuttle will further encourage attendees to utilize transit.

The shuttle access and route is shown on **Figure 4**.

SENIOR CENTER COORDINATION

Events should be coordinated with the El Corazon senior center. As depicted in **Figure 2** and **Figure 3**, the northern driveway access to “BB” street should be restricted during events while full access at the eastern driveway should be maintained at all times.

PEDESTRIAN AND BICYCLE CIRCULATION

The proposed Parkway and Paved Multi-Use path along the internal circulation streets should be maintained and will greatly benefit the pedestrian circulation within site.

It is recommended to add a manned mid-block crosswalk on “CC” Street to provide a safe pedestrian crossing between the Arena and parking area. The exact location of the crosswalk will be determined based on the arena and parking area access. Traffic control personnel should be utilized at this location to ensure the crosswalk is cleared of vehicles at all times and that vehicles yield to crossing pedestrians.

At the time that this TMP was written, according to the Tentative Parcel Map, the five-foot area at both edges of the following roadways are designated as either a bike lane or shoulder:

- “AA” Street
- “BB” Street
- “CC” Street.

In the interest of bicycle circulation and accommodation, it is recommended that these areas of the roadway be designated as bike lanes. These roadways are an integral part of event access for all users and therefore should provide bike lanes. In addition, bicycle parking should be provided in close proximity to the Arena entrance.

TRANSPORTATION DEMAND MANAGEMENT (TDM) MEASURES

In addition to the TMP measures outlined above, the following Transportation Demand Management measures should also be implemented. TMP measures are designed to increase the capacity of the street network while TDM measures are

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designed to decrease vehicular traffic demand and maximize the utilization of the network. The following measures are recommended:

- Pre-event Communication: It is integral to communicate with event attendees ahead of the event to inform them of important details. Directions to the Arena and the access points should be communicated to attendees to avoid confusion on the day of the event and ensure traffic will flow smoothly. Attendees should also be informed of available alternative forms of transportation.
- Public Transit: Event attendees should be informed of public transit options. This can be accomplished using pre-event communication as outlined above. Attendees should be informed of locations where “Park and Ride” is available, and directions to and from the transit stations and bus stop. Additionally, incentives should be provided to attendees who utilize public transit such as discounted fares. Utilization of public transit by attendees will lower both the traffic and parking demand on-site.
- Provide bicycle parking: Parking is one of the main deterrents that discourages cyclists from biking to events. Plentiful bicycle parking should be provided in the vicinity of the Arena entrance.

Please do not hesitate to call if you have any questions.

Sincerely,

Linscott, Law & Greenspan, Engineers



John Boarman, P.E.

Principal

JB/wcs

cc:

File