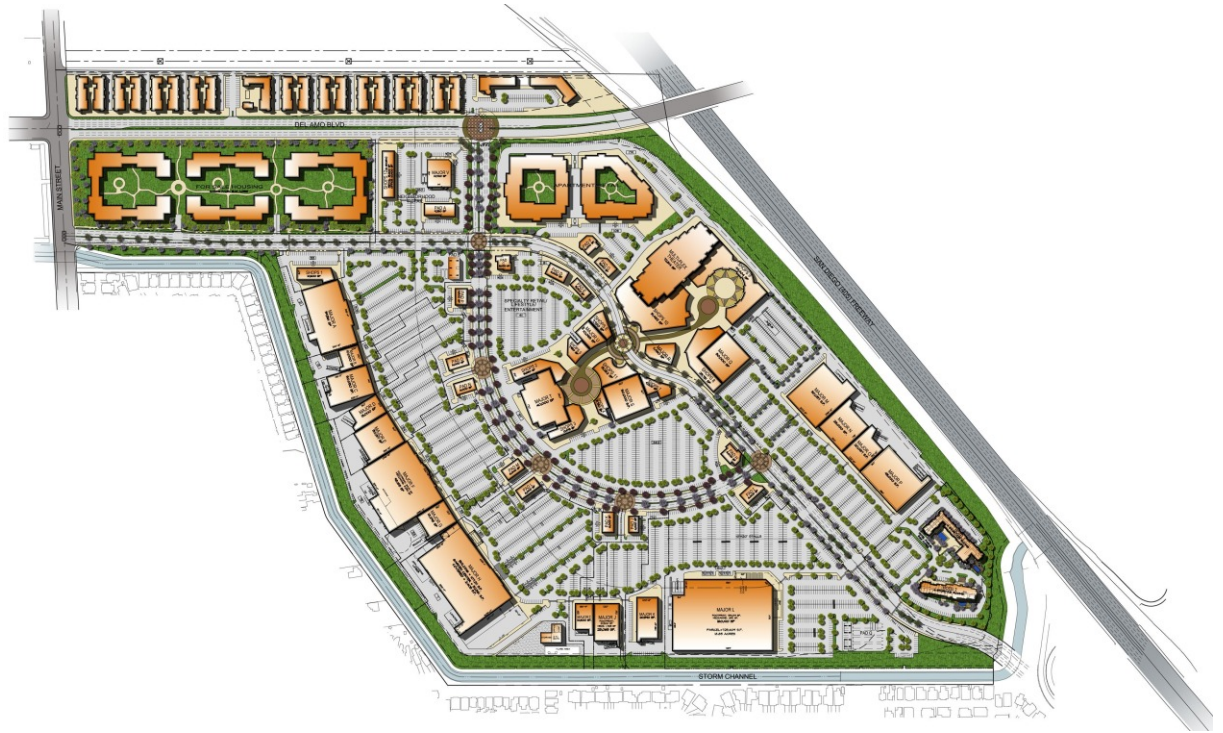




Traffic Control Plan



For

Avalon at South Bay
(Formerly Carson Marketplace)
Carson, California



February 29, 2008

Prepared by:

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348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408

Prepared for:

Carson Marketplace, LLC

4350 Von Karman Avenue, Suite 200
Newport Beach, California 92657

TRAFFIC CONTROL PLAN

FOR

**AVALON AT SOUTH BAY
(FORMERLY CARSON MARKETPLACE)
20300 MAIN STREET
CARSON, CA**

Prepared for:

Carson Marketplace, LLC
4350 Von Karman Avenue, Suite 200
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SECTION 1.0 BACKGROUND

1.1 Introduction

Carson Marketplace, LLC (Developer) has proposed to develop the Avalon at South Bay development project (Project), which was previously named Carson Marketplace. This proposed brownfield restoration project involves the development of the former Cal Compact landfill into multiple land uses, including commercial, recreation, entertainment, big-box retail stores, restaurants, hotels, and residential. The proposed Project site comprises approximately 168 acres of land located at 20300 Main Street in Carson, California. The property is bounded on the east/northeast by the San Diego Freeway (I-405), on the north by Del Amo Boulevard, on the west by Main Street and single family residences and mobile home development, and on the south by single family residences and mobile home development (Figure 1). A strip of vacant land to the north across Del Amo Boulevard, which comprises 11 acres, is also within the overall scope of the Project. This portion of the property was not part of the former landfill and therefore, no environmental remediation activities are needed prior to the commencement of the development activities planned for it.

The former Cal Compact landfill consists of five separate landfill cells numbered A1 through A5 separated by the site boundaries on the outer perimeter and by two interior roadways on the interior perimeter (Lenardo Drive and Stamps Drive). A Los Angeles County Flood Control channel (Torrance Lateral) is located adjacent to the south and west sides of the Project site and serves to separate the Project site from the adjacent residential neighborhood (Figure 2).

This Project involves the development of the former Cal Compact landfill into the following land uses: neighborhood commercial, regional commercial, commercial recreation/entertainment, big-box retail stores, restaurants, hotels, and residential (Figure 3). The construction phases of this Project will begin with mass grading of the former landfill area and removal of some of the clean soil covering the landfill cells. This will be done to establish a uniform grade and minimize the thickness of clean soil cover overlying the refuse material so that compaction of the landfill cells may commence. Clean soil removed in the grading process will be temporarily stockpiled onsite until it is reused. Compaction of refuse will be done using deep dynamic compaction (DDC) to consolidate the refuse and soil below future parking and open areas to minimize future settling. The refuse under future building locations will not be compacted. Once all compaction is complete, a landfill gas collection system with horizontal collection wells throughout the site and vertical gas collection wells below future building locations will be installed. This gas collection system will be connected to a gas flare treatment system with a landfill operations center which will have controls and integral monitoring to detect any leakage or system failure. The landfill cells and gas collection system will then have a multi-component landfill cap installed. The first layer of this cap will be the installation of a continuous layer of linear low density polyethylene (LLDPE) geomembrane which will serve as the primary impermeable layer of the cap system. This LLDPE geomembrane will then have drainage strips installed on top of it that will direct

water off of the landfill cap so that it does not accumulate. These drainage strips will be covered by a geotextile fabric layer to prevent the accumulation of silt and eventual clogging of the drainage system. This layer will then be covered with clean soil.

All future buildings will be supported on driven piles. Piles will be driven through the refuse until competent native soil is reached. Pile caps will be installed and the concrete building slabs will be poured on top. The LLDPE geomembrane will be sealed to the pile caps where they penetrate it using an expansion boot to allow expansion and movement while remaining sealed.

A building protection system will be installed below all building locations to serve as a backup in case of landfill cap or primary gas collection system failure. This system will include the installation of a membrane attached to the underside of the concrete slab. The space between this membrane and the LLDPE geomembrane will have a passive gas venting system installed and will also include methane detection sensors to provide notification of system failure. All buildings will be built aboveground.

The Project will also include the installation of a groundwater extraction and treatment system along the southern boundary of the Project site to contain and treat impacted groundwater underlying the Project. Some refuse materials in the landfill cells may need to be excavated and moved to facilitate the installation of site utilities and the landfill gas collection system. Tetra Tech, Incorporated (Tetra Tech) is the environmental engineer and general contractor responsible for the design and installation of these remedial systems. Tetra Tech is not, however, responsible for the design and installation of the driven piles, pile caps, and building slabs that make up the building foundations.

This Traffic Control Plan (Plan) serves to define the haul routes which will be utilized for trucks hauling materials both to and from the Project. Further, it will define those traffic control measures which will be utilized to prevent negative traffic impacts from occurring over the course of the project. Preparation of this plan is also required for compliance with the provisions of Mitigation Measure C-1 of the Mitigation Monitoring and Reporting Program developed as a part of the *Final Environmental Impact Report, Carson Marketplace (PCR Services 2006)* process.

This document and the selected haul routes shall be reviewed on an ongoing basis. The Plan and the haul routes will be revised as needed, and at a minimum of yearly, and again before vertical construction commences. Tetra Tech will review and revise this Plan whenever there are changes to personnel assignments, facility design, systems, or equipment and procedures that necessitate a change to either the truck haul routes or other traffic control methods defined in this Plan. Modifications or revisions to the Traffic Control Plan must be approved by the Project Manager, along with acceptance by DTSC, and City of Carson prior to implementation.

SECTION 2.0 SITE TRAFFIC SOURCES AND ROUTES

The City of Carson, City Engineer's office was consulted to determine the preferred hauling routes through the City. A map was supplied which detailed the approved truck haul routes (Appendix A). Tetra Tech utilized this map to determine the haul routes which will be used for vehicles to carry personnel, equipment, and materials to and from the Project. Activities conducted over the course of the Project will cause traffic from Project personnel vehicles and from trucks and other heavy vehicles. Consideration was given in the selection of the routes in order to minimize traffic on City streets. Because of the close proximity of the Project to both the I-110 and I-405 Freeways it is assumed that all traffic coming to and leaving from the site will travel on one of these two highways. The selected routes all take this into account, and are surface street routes which lead to and from the on and off ramps of the two highways. The selected haul routes for the Project are shown on Figure 4. The following sub-sections detail, in text form, the selected haul routes.

2.1 Ingress from Southbound I-110 and I-405

Vehicles traveling south on I-110 and I-405 will take the I-110 south of the I-110/ I-405 interchange and exit at the Torrance Boulevard Exit and turn right onto Hamilton Avenue. The vehicle will proceed to Del Amo Boulevard and turn right (east) and enter the Project by turning right (south) onto Stamps Drive at the north gate.

2.2 Ingress from Northbound I-405

Vehicles traveling north on I-405 will take the Main Street Exit and turn left (south) onto Main Street. They will then continue south on Main Street to Del Amo Boulevard and turn left (east) and enter the Project by turning right onto Stamps Drive at the north gate.

2.3 Ingress from Northbound I-110

Vehicles traveling north on I-110 will take the Torrance Boulevard Exit and turn left (north) on Figueroa Street. They will then proceed north on Figueroa Street to Del Amo Boulevard and turn right (east) and enter the Project by turning right onto Stamps Drive at the north gate.

2.4 Egress to Southbound I-405

Vehicles leaving the Project site towards the southbound I-405 will exit from the Lenardo Drive Gate and turn right (north) onto Main Street and continue to the I-405 entrance.

2.5 Egress to Northbound I-110 and I-405

Vehicles leaving the Project Site towards the northbound I-110 and I-405 will exit from the Lenardo Drive Gate and turn right (north) on Main Street and make a left (west) onto Del Amo Boulevard. At Figueroa Street the vehicle will make a left turn (south) and

continue to the I-110 Freeway on-ramp. After entering the freeway the drive may chose either to stay on the I-110 or to proceed to the I-405 at the interchange.

2.6 Egress to Southbound I-110

Vehicles leaving the Project towards the southbound Interstate 110 will exit from the Lenardo Drive Gate and turn right (north) onto Main Street and then turn left (west) onto Del Amo Boulevard. At Hamilton Avenue they will turn left (south) and continue to the I-110 south on-ramp.

SECTION 3.0 TRAFFIC CONTROL METHODS

The following are the general traffic control measures that will be implemented on the Project.

3.1 Driver Briefings

All drivers will be briefed on the proper haul route prior to their arrival on site. The drivers will again be reminded of the correct haul route to follow before they leave the site. Drivers will be instructed that they are to enter the site in an expeditious manner to avoid impacts to City traffic and are not to line up or queue on the City streets.

3.2 Scheduling

Phasing of mobilizations and deliveries will be done to minimize daily truck traffic. Truck traffic will be minimized by scheduling deliveries to maintain a maximum of twenty to twenty-five truck loads per hour, with most days much lower than this range. Any time more than one truck is scheduled to arrive at the site concurrently, personnel will be stationed at the site gates to keep traffic moving and not block City Streets. All driver and truck check-in activities and queuing of trucks will be done within the site to minimize the impact on local traffic.

3.3 Signage

Signage shall be placed along City streets in the vicinity of the Project entrances and exits to warn motorists, bicyclists and pedestrians of up coming construction traffic (Figure 5). Temporary lane closures will be required periodically and will be conducted utilizing procedures from the *Work Area Traffic Control Handbook (WATCH)* (BNi Publications 2006) as shown on Figure 6. Any city permits for lane closures will be obtained before proceeding with the activity requiring them.

3.4 Parking

The amount of personnel who will be on site at any given time over the course of the Project will vary by the tasks that are being performed. In the initial stages of the Project during the first year while initial grading and DDC are being performed, site personnel will number between 35 to 50 individuals. In the second year of the project, when the landfill gas system and landfill liner cap are being installed, site personnel will increase to approximately 50 to 100 individuals. In the third year of the project, when vertical construction commences on site, personnel will increase to approximately 200 individuals.

Throughout the Project all site traffic will park onsite. Site personnel will either park in the designated parking area adjacent to the site office trailers in the project support zone (Figure 7) or will park adjacent to the immediate work area in the interior of the site if

their vehicle is needed for support of the task they are performing. Trucks will not be allowed to line up or queue on local roads. Trucks will immediately proceed to the Project after exiting the adjacent Freeways and will immediately travel to the adjacent Freeways upon leaving the Project. Any manipulation, covering, or securing of loads will be completed on-site before the truck will be allowed exit onto City streets. Parking or storage of material, equipment, trucks, and personnel vehicles on City Streets will be prohibited.

3.5 Truck Staging and Loading Areas

Once trucks enter the site they will use the existing interior roads (Lenardo Drive, Stamps Drive, and several unnamed and unpaved access roads) to traverse the site. The main staging areas for trucks arriving on site will be Stamps Drive, immediately south of the North entrance gate which will be used to access the site. Trucks delivering materials to the site will either deliver them to the materials storage area of the support zone or transport the material directly to the usage area on the site interior. Trucks being loaded with materials to be hauled off-site will be loaded adjacent to the specific work area. The specific loading area will be chosen to locate it at a point that is still practical to the task yet as far away from the noise sensitive residential areas surrounding the site. The truck staging area for departing trucks will be on Lenardo Drive adjacent to the west site gate on Main Street. The truck staging areas are shown on Figure 7.

3.6 Noise Controls

Noise from site traffic will be monitored and controlled as detailed in the *Noise Management Plan, Avalon at South Bay Project (Tetra Tech, 2008b)* for the Project and are incorporated by reference into this document. Noise will be monitored at both the perimeter and within work areas to ensure that noise levels are below allowable thresholds. In the event that an activity causes these noise level thresholds to be exceeded, the activity will be halted and corrective actions applied to bring the noise levels back to allowable levels.

Noise controls specific to the trucking and materials hauling activities will include the following:

- Activity at the site will be limited to the hours of 7:00 AM and 8:00 PM from Monday through Saturday. Drivers will be instructed ahead of time that they are not allowed to arrive at the site outside of these hours.
- Drivers will be instructed to shut off vehicle engines if they are not in the process of moving the vehicle and remain stationary for a period longer than 5 minutes.
- Vehicle staging and loading areas will be located on the site as far as practicable from the noise sensitive residential receptors surrounding the site.

3.7 Street Cleaning

Control measures for the tracking of material onto local streets are covered in the *Fugitive Dust Control Plan, Avalon at South Bay Project (Tetra Tech 2008a)* and are incorporated by reference into this document. A street sweeper will be used to clean streets on an as needed basis throughout the Project.

3.8 Plan and Route Updates

This document and the selected haul routes shall be reviewed on an ongoing basis. The Plan and the haul routes will be reviewed and revised as needed, and at a minimum of yearly, and again before vertical construction commences.

SECTION 4.0 REFERENCES

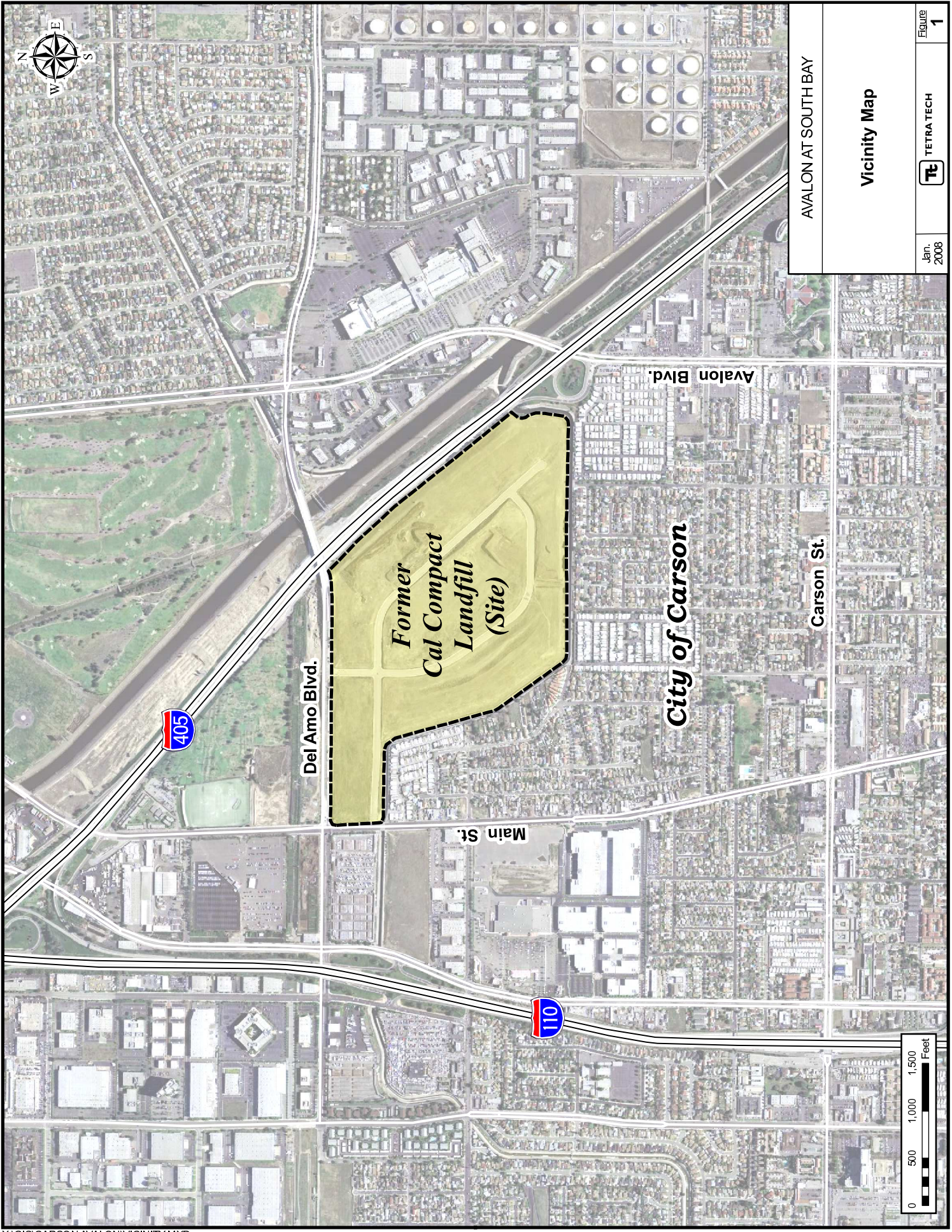
PCR Services 2006, *Final Environmental Impact Report, Carson Marketplace*; PCR Services Corporation; January 2006

Tetra Tech 2008a, *Fugitive Dust Control Plan, Avalon at South Bay Project*; Tetra Tech, Inc.; February 2008.

Tetra Tech 2008b, *Noise Management Plan, Avalon at South Bay Project*; Tetra Tech, Inc.; February 2008.

BNi 2006, *Work Area Traffic Control Handbook (WATCH)*, Tenth Edition; BNi Publications, 2006.

FIGURES



AVALON AT SOUTH BAY

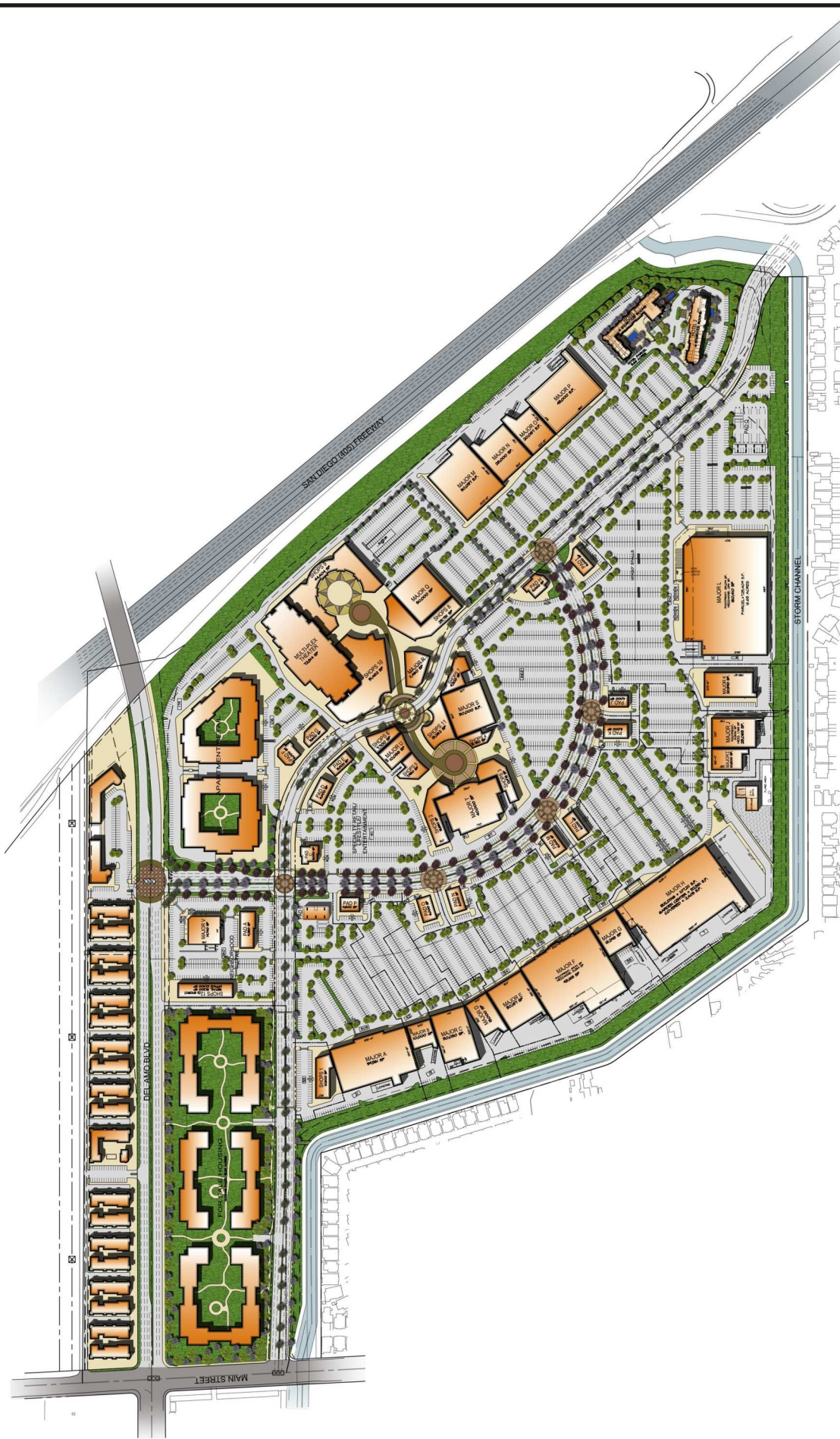
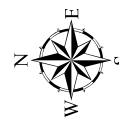
Vicinity Map

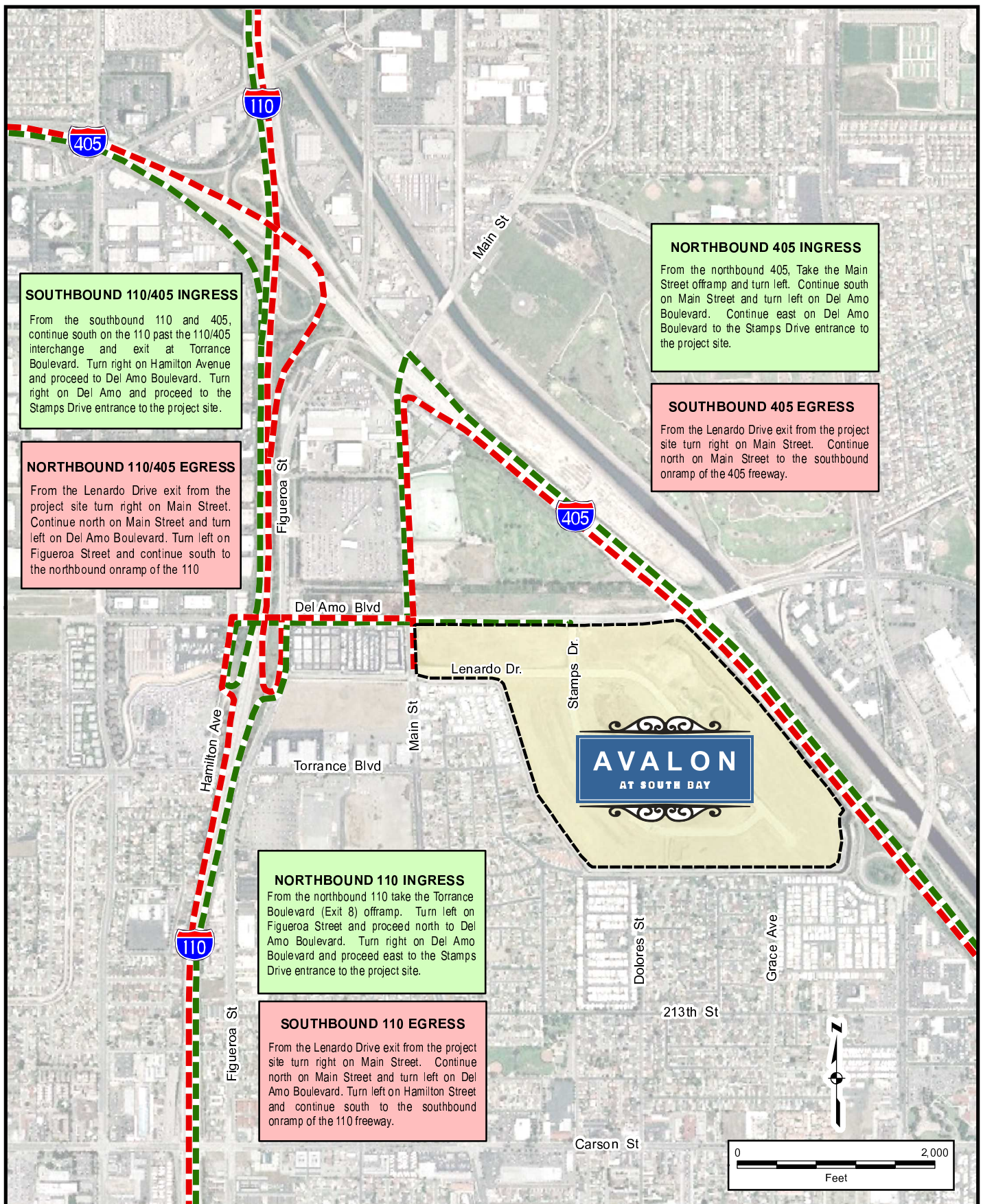


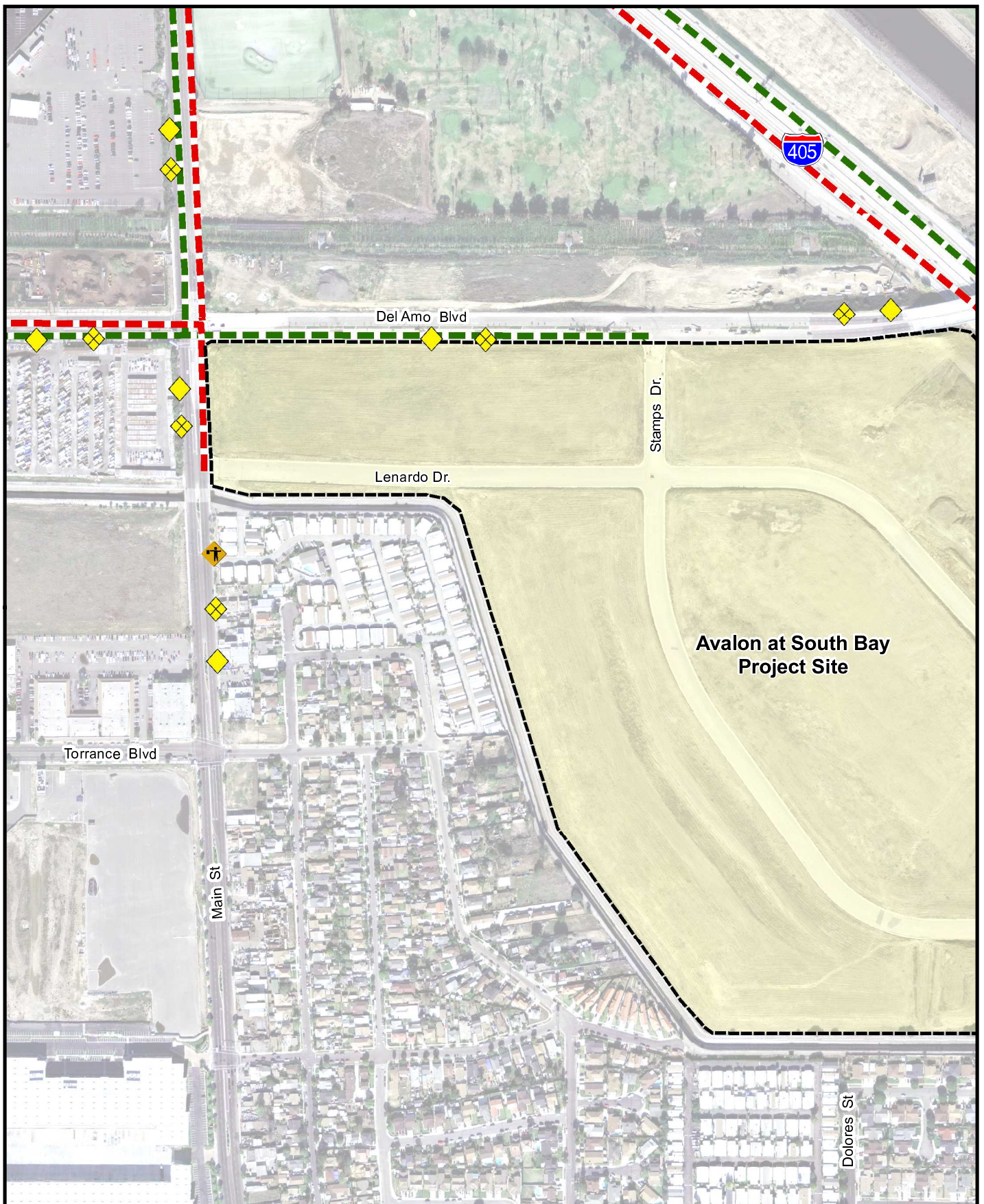
AVALON AT SOUTH BAY		
Site Map		
Jan. 2008	TETRA TECH	Figure 2

AVALON AT SOUTH BAY

Development Plan







LEGEND



Prepare to Stop



Truck Crossing



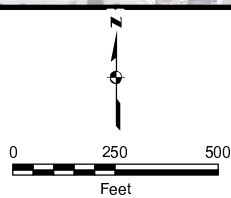
Flagman Ahead



Ingress Routes

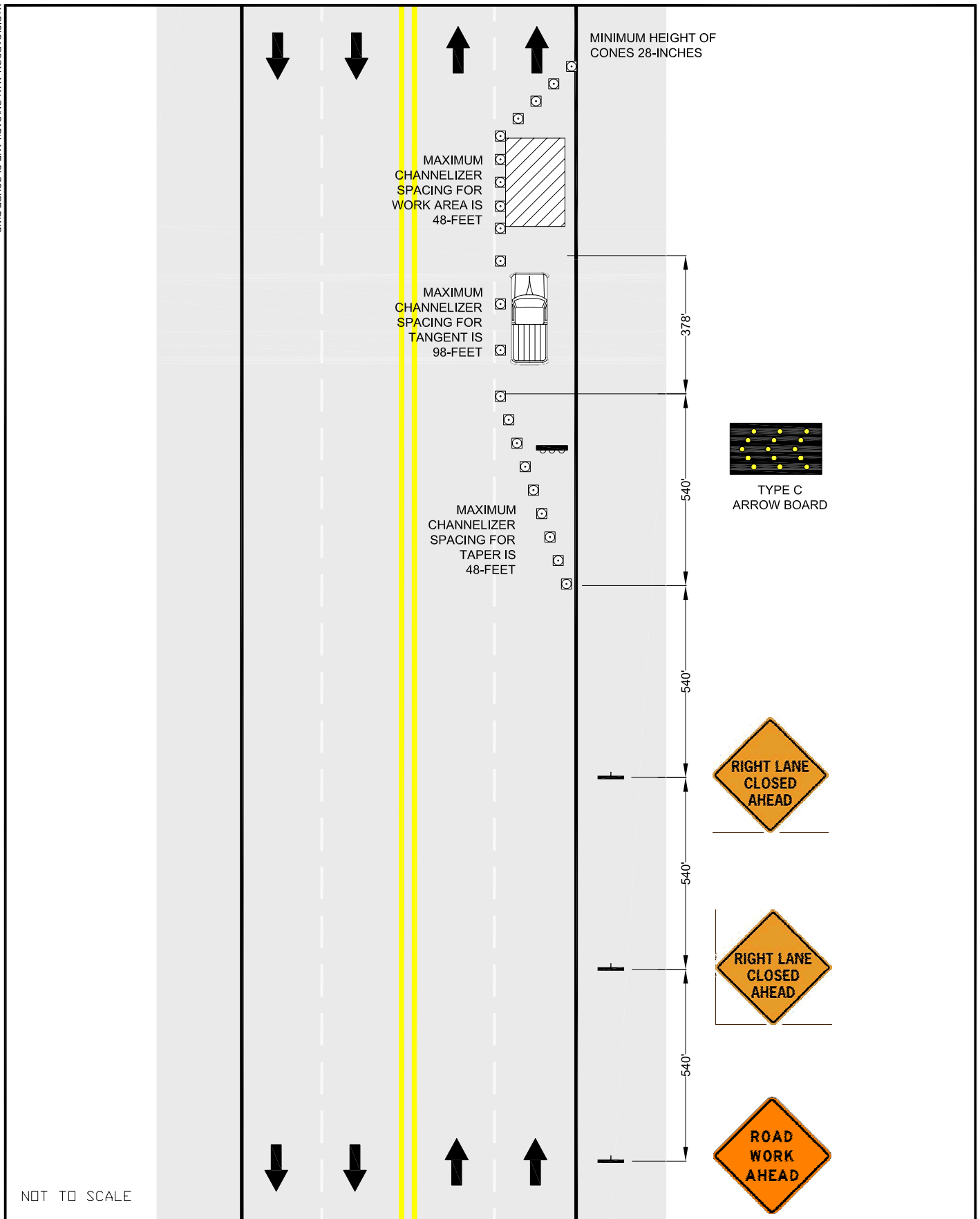


Egress Routes



AVALON AT SOUTH BAY

Figure 5
Traffic Control Signage



LEGEND

 Work Area



AVALON AT SOUTH BAY

Figure 6
Lane Closure Signage

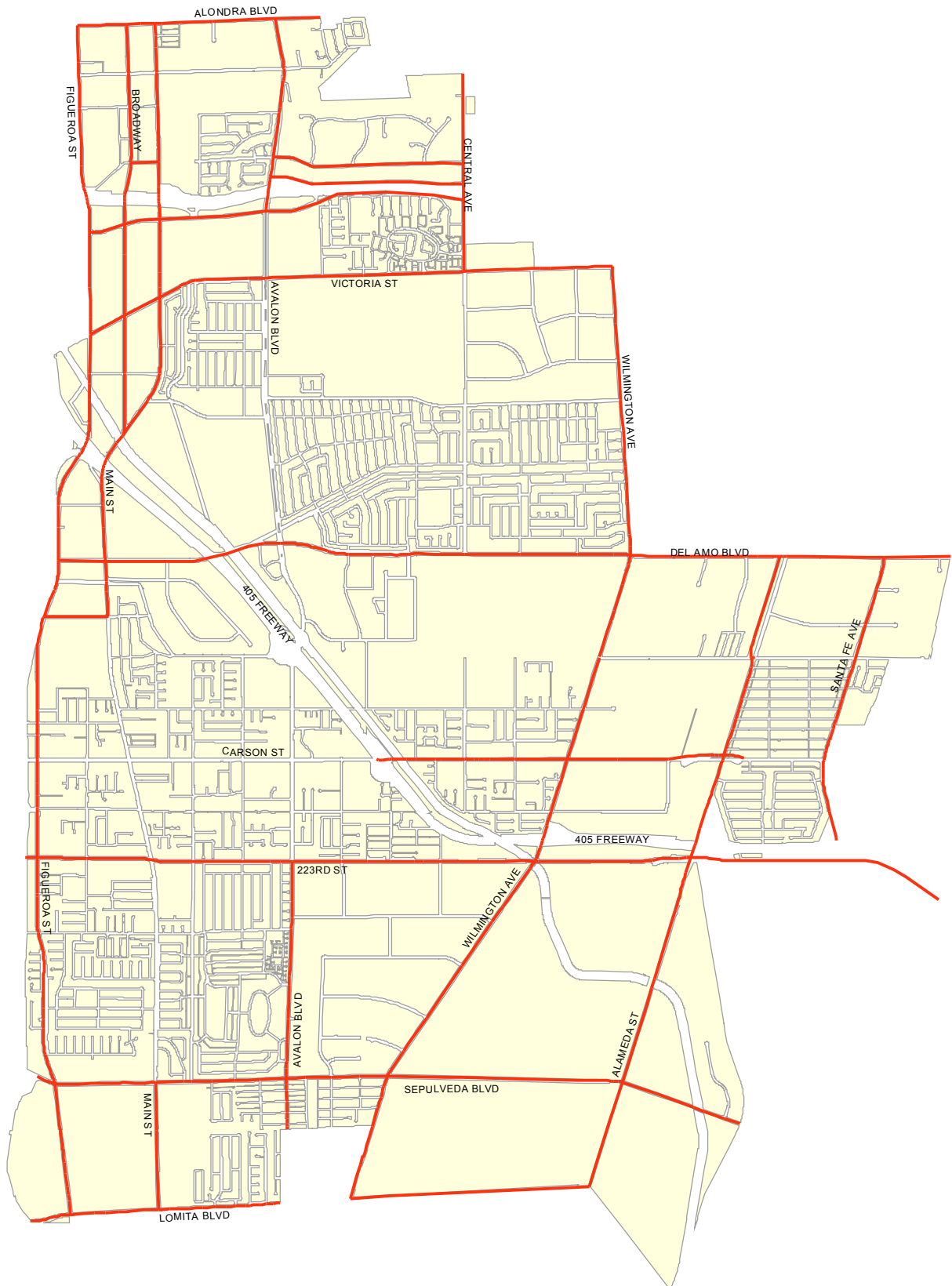


TETRA TECH <small>248 W. HOSPITALITY LN, SUITE 100 SAN JOSE, CALIFORNIA 95128 (909) 381-1674</small>		TC # 21888 1.1.01		AVALON AT SOUTH BAY	
		DRAWN BY:	SH	02/27/08	Figure 7 Truck Loading and Staging and Support Zone Location
CHECKED BY:					
APPROVED BY:					

LEGEND Project Location Incoming Truck Staging Area Outgoing Truck Staging Area	Support Zone
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APPENDIX A

City of Carson Supplied Truck Routes Map



City of Carson Truck Routes

Updated: 05/15/2007
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