

Table 4-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Implementation Phase ¹	Monitoring Phase ¹	Monitoring/Enforcement Agency	Verification of Compliance		
				Initial	Date	Remarks
CULTURAL RESOURCES						
The City will be responsible for providing an archaeological monitor during excavation. If any cultural resources are found during site excavation and other ground-disturbing activities, work shall be halted in the area immediately until the resource can be assessed by a qualified archaeologist and recommendations for treatment can be made.	Construction	Construction	City of Torrance Public Works Department			
In the event that archaeological artifacts are recovered, the disposition of those artifacts will be undertaken in consultation with culturally affiliated Native Americans.	Construction	Construction	City of Torrance Public Works Department			
In the event that human remains are found during the excavation process, the City shall immediately halt all excavation and comply with the provisions of Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98, which mandates the process to be followed in the event of an accidental discovery of human remains in a location other than a dedicated cemetery.	Construction	Construction	City of Torrance Public Works Department			
<p>¹ The Implementation and Monitoring phases are broken down into four categories: Final Plans and Specifications, Construction, Pre-Operation, and Operation. “Final Plans and Specifications” indicates that the mitigation measure must be incorporated into the final approved plans and specifications for the project. “Construction” refers to all aspects of the roadway construction, including, but not limited to, site preparation, pavement/concrete removal, material hauling, and paving of the roadway. “Pre-Operations” includes measures that are required to be completed prior to operation of the project. “Operations” includes all measures that must be implemented as permanent features.</p>						
BIOLOGICAL RESOURCES						
All tree and shrub removal shall occur outside of the nesting bird season (April 1-October 1) for migratory nongame native bird species, in accordance with the federal Migratory Bird Treaty Act. If	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			

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nesting season cannot be avoided, a pre-construction nesting bird survey shall be conducted to determine the presence/absence of nesting birds. Any positive findings of presence of nesting birds shall be followed by consultation with the California Department of Fish and Game.						
Landscaping shall be provided along the Del Amo Boulevard extension, including the median and parkway. Landscaping design will be consistent with the City General Plan and applicable City design guidelines. Low-water use or drought tolerant plants shall be used together with water efficient irrigation systems.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
TRANSPORTATION/CIRCULATION						
<p>Over the next 20 years it is possible that other projects that have been identified to mitigate traffic impacts associated with the Del Amo Boulevard extension could be constructed. The implementation of a proposed future project would be dependent on actual need, as compared to other citywide needs, and the availability of funding. If implemented, the following projects would help to alleviate future traffic congestion in the project vicinity:</p> <ul style="list-style-type: none"> • <i>Van Ness Avenue at 190th Street</i> – The southbound approach should be modified to add one left-turn lane. • <i>Western Avenue at 190th Street</i> – The eastbound approach should be modified to add one right-turn lane. • <i>Hawthorne Boulevard at Del Amo Boulevard</i> – The eastbound approach shall be modified to add one 	Final Plans and Specifications	Varies according to project	City of Torrance, Public Works Department			

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<p>through lane to create two left-turn lanes and two through lanes (this mitigation measure was constructed in spring 2003).</p> <ul style="list-style-type: none"> • <i>Crenshaw Boulevard at Del Amo Boulevard</i> –The westbound approach should be modified to add one through lane to create two left-turn lanes, two through lanes, and one right-turn lane. • <i>Van Ness Avenue at Del Amo Boulevard</i> – The eastbound approach should be modified to add one through lane and one left-turn lane. Additionally, the southbound approach shall be modified to add one right-turn lane. • <i>Western Avenue at Del Amo Boulevard</i> – The eastbound approach should be modified to add one left-turn lane. The southbound approach should be modified to add one free right-lane. Additionally, the eastbound approach should be converted to four lanes with split phasing east of Western Avenue. • <i>Anza Avenue at Torrance Boulevard</i> – The eastbound approach should be modified by removing the defacto right-turn lane to add a second left-turn lane. 						
Construction related truck trips on State highways shall be limited to off-peak	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department and California Highway Patrol			

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commute periods. Transport of over-size or over-weight vehicles on State highways will need a Transportation Permit from the California Department of Transportation.						
Concerns were voiced at public hearings regarding traffic speed and volume, and pedestrian crossing safety at various locations along Del Amo Boulevard, if the proposed project were constructed. These locations are not currently within the proposed construction limits; however, would potentially be impacted after construction. If approval is given to proceed to the design phase, the City will prepare a Vehicle/Pedestrian/Bicycle Circulation and Management Study. The study would investigate traffic speed and volume, pedestrian crossings, and several other elements of the existing and proposed circulation for the three distinct travel modes. As part of preparing the study, the City would conduct a series of public workshops with the surrounding community to identify specific, relevant issues, and agree on mitigation measures that are mutually beneficial.	Final Plans and Specifications	Pre-Operation	City of Torrance, Public Works Department and Community Development Department			
AIR QUALITY						
Gasoline fuel instead of diesel fuel shall be used to power heavy construction equipment, whenever feasible.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
All equipment shall be properly tuned and maintained.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
General contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			

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construction, trucks and vehicles in loading or unloading queues shall have their engines off, when not in use, to reduce vehicle emissions.						
Construction activities shall be phased and scheduled to avoid emissions peaks and shall be discontinued during second-stage smog alerts.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Land disturbance shall be minimized to the extent feasible.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Haul trucks shall be covered when loaded with fill.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Surface of dirt piles shall be stabilized if not removed immediately.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Paved streets shall be swept at least once per day where there is evidence of dirt that has been carried onto the roadway.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Disturbed areas that will not be paved as part of the proposed action shall be revegetated to prevent soil erosion.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Cease all earth moving activities or apply water to soil not more than 15 minutes prior to moving such soil.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
For disturbed surfaces to be left inactive for several days apply water with a chemical stabilizer diluted to not less than 1/20 of the concentration required to maintain a stabilized surface for a period of six months; or apply chemical stabilizers prior to wind event; or apply water to all unstabilized disturbed areas 3 times per day; or utilize a combination of these actions.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
For unpaved roads, apply chemical stabilizers prior to wind event, or apply water once per hour during active	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			

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operation, or stop all vehicular traffic.						
For open storage piles, apply water once per hour, or install temporary coverings.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
For paved road track-out, cover all haul vehicles, or comply with vehicle freeboard requirements of Section 23114 of the California Vehicle Code for both public and private roads.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
NOISE						
Staging areas for the storage and maintenance of construction equipment shall be arranged so that the noisiest activities will be located at the furthest practicable distance from residences. Where feasible, stockpiled materials should be located to provide noise barriers between noisy activities and nearby residential receptors. Equipment maintenance and other noisy activities shall not be undertaken in staging areas near residential receptors.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Contractors shall comply with Caltrans Standard Specifications Sections 7 and 42 and Standard Special Provisions for limits on construction noise levels.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Contractors shall comply with all local noise level standards, regulations, and ordinances that apply to any work performed pursuant to the contract.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
Each internal combustion engine shall be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine shall be operated on the project without said muffler.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
GEOLOGY AND SOILS						
A professional civil/geotechnical engineer shall prepare a geotechnical report for the proposed project. The report, to be	Pre-Construction; Final Plans and Specifications	Construction	City of Torrance, Public Works Department			

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submitted to the Public Works Director prior to design approval, shall examine the type and degree of earthwork required for the project. This report shall concentrate on issues of geologic stability and may include but is not limited to determining the presence, depth, and texture of unconsolidated sediments. The geotechnical report shall include analysis to determine the presence, depth, and lateral extent of expansive soils at the site, and recommend techniques for reducing the impact of expansive soils. If expansive soils are encountered, mitigation measures may include excavation and replacement of expansive soils, lime-stabilization, or other proven engineering practices.						
The final design of the proposed roadway shall be approved by a professional civil/geotechnical engineer prior to construction, to ensure that it meets all state and city specifications applicable to the project site, including but not limited to local grading standards, engineering codes, and Title 24 of the California Building Code requirements.	Pre-Construction; Final Plans and Specifications	Construction	City of Torrance, Public Works Department and Building and Safety Department			
The MSE retaining walls shall be constructed in accordance with applicable Caltrans requirements. In particular, design and construction of the roadway shall conform with the Caltrans' Division of Structures' Mechanically Stabilized Embankment Details No. 1 through 9.	Pre-Construction; Final Plans and Specifications	Construction	City of Torrance, Public Works Department and Building and Safety Department			
HAZARDS AND HAZARDOUS MATERIALS						
The City shall prepare and implement a soil remediation plan for the project. This plan shall incorporate the results and recommendations provided in the Phase II Soil Investigation Report prepared for this EIR/EA. The plan shall characterize the extent of	Final Plans and Specifications; Pre-Construction	Construction	City of Torrance, Public Works Department			

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soil contamination in the project area and identify appropriate methods for on-site remediation and/or removal and disposal of contaminated soil. Additional testing may be required to determine the extent of contamination within the areas of excavation. In areas of suspected contamination, surface samples shall be analyzed using appropriate collection and sampling techniques. During excavation, soils shall be segregated, sampled, and tested to determine the appropriate disposal and treatment options. If the soils exceed the applicable screening criteria established by the RWQCB or are classified as hazardous (according to Resource Conservation and Recovery Act [RCRA] and Cal. Code Regs. Title 22), soils shall be hauled to a Class I landfill or other appropriate soil treatment and recycling facility.						
Soil remediation and the costs associated on the land dedicated by the Exxon Mobil Corporation will be the responsibility of Exxon Mobil, as stated in a Memorandum of Understanding dated May 11, 1999 between the City of Torrance and the Exxon Mobil Corporation (formerly Mobil Oil Corporation).	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
The City shall enter into an agreement with both Dow Chemical and Exxon-Mobil regarding disposal of any contaminated soil encountered prior to the City's acquisition of the road right-of-way. This agreement shall be included in the ROW agreement for the project.	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			
The construction contractor shall hire a certified industrial hygienist to prepare a worker health and safety plan for the project. This plan must conform to U.S. Occupational Health and Safety	Final Plans and Specifications; Construction	Construction	City of Torrance, Public Works Department			

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Administration (OSHA) requirements for construction sites with hazardous materials present during construction. An independent consultant shall be hired to monitor compliance with the plan.						
No Loitering signs shall be installed on the southern fenceline of the Exxon-Mobil Refinery; sign posting shall require permission from and coordination with Exxon-Mobil.	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			
Traffic signalization for the proposed roadway, or equivalent safety measure, shall be implemented so that traffic, even during rush hour, is not backed up and "stalled" at the point closest to the elevated flare towers and the LPG storage area.	Final Plans and Specifications; Operation	Operation	City of Torrance, Public Works Department			
The frequency of testing and inspection of equipment in the LPG storage area shall be increased to further minimize the likelihood of a potential hydrocarbon release.	Final Plans and Specifications	Operation	City of Torrance, Public Works Department			
Ambient hydrocarbon detectors shall be installed on the southern perimeter of the South Oil Movements LPG Storage Area. A total of four detectors, the exact locations to be determined by the Exxon-Mobil Refinery, shall be installed.	Final Plans and Specifications	Operation	City of Torrance, Public Works Department			
Fire hydrants shall be required every 300 feet along the proposed Del Amo Boulevard extension.	Final Plans and Specifications	Construction	City of Torrance, Public Works Department			
Sidewalks or bicycle paths shall not be permitted on the north side of Del Amo Boulevard between Crenshaw Boulevard and Maple Avenue.	Final Plans and Specifications	Construction	City of Torrance, Public Works Department			
Signage shall be placed along both ends of the Del Amo Boulevard extension suggesting that motorists focus on their driving, even while a flaring event is in progress.	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			

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A brief article regarding the proposed project shall be prepared and presented in the Community Report prepared by Exxon-Mobil. The article, meant to minimize the potential for driver distraction, shall inform the community of the potential for flaring events to occur while driving on the new roadway segment.	Pre-Operation	Pre-Operation	City of Torrance, Public Works Department and Exxon-Mobil			
Remotely operated physical barriers (e.g., crossing gates) shall be constructed on both ends of the Del Amo Boulevard extension. The operation of these barriers shall be integrated with the operation of the existing barrier on Crenshaw Boulevard south of 190 th Street. The City and Exxon-Mobil shall prepare a joint activation protocol for the barriers.	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			
Traffic signalization shall include emergency traffic light sequencing capabilities for Del Amo Boulevard.	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			
A median break similar to the ones installed on Crenshaw Boulevard between Del Amo Boulevard and 190 th Street shall be provided in the final design of the roadway improvements.	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			
The traffic flow diagrams in the Safety Advisor's Evaluation of Traffic Control Systems shall be updated to include the Del Amo Boulevard extension. Familiarization training shall be provided to Torrance Police Department personnel regarding the changes in traffic flow and the project's safety features (e.g., remotely operated barriers, etc.).	Final Plans and Specifications; Construction	Operation	City of Torrance, Public Works Department			
A physical barrier shall be considered along the north side of the proposed roadway to resist the potential overpressure from an explosion and to mitigate potential radiation from such an explosion and flares.	Final Plans and Specifications; Construction	Operation	City of Torrance, Building and Safety Division			

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PUBLIC SERVICES AND UTILITIES						
Prior to excavation activities, a detailed utility relocation plan shall be prepared by a Registered Civil Engineer, which outlines the proposed relocation of all utilities along the roadway alignment. This plan shall be submitted to the City Fire Department, Public Works Department, and other City departments for review and approval. All utility relocation activities will be undertaken in accordance with the approved plan prior to construction of the Del Amo Boulevard extension.	Pre-Construction; Construction	Construction	City of Torrance, Public Works Department			
Prior to construction, the construction contractor shall coordinate with all utility providers and provide advance notice to adjacent property owners to minimize disruptions to utility services from utility relocations.	Pre-Construction; Construction	Construction	City of Torrance, Public Works Department			
Solid waste shall be disposed of at recycling facilities and certified landfills, at the discretion of the hired contractor. The project specifications and special provisions shall include guidelines for asphalt and concrete materials to be sent to an appropriate recycling facility and, for proper disposal of non-recyclable solid waste generated during project construction.	Pre-Construction; Construction	Construction	City of Torrance, Public Works Department			